

Social Selection on the Map

The geography of secondary school admissions

Carl Cullinane

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Key findings

- Schools in the North East have the highest levels of socio-economic segregation in England, with Newcastle-upon-Tyne, Stockton-on-Tees, and North Tyneside in the top ten most segregated local authorities. The North West has the second highest levels of segregation.
- In the most segregated area in England, Solihull, you would need to redistribute 32% of pupils across schools in order to achieve an even spread of disadvantaged pupils. In the least segregated area, Torbay, this is just 6%.
- London, the West Midlands and the South West have lower levels of segregation on average.
- Areas with more faith schools have more segregation, particularly Catholic schools. Areas with higher proportions of English as an additional language pupils have lower segregation. Rural areas have lower segregation than urban areas.
- Local Authorities with high levels of segregation have larger attainment gaps between disadvantaged and non-disadvantaged pupils. Areas with the highest segregation have gaps in the rate of passes in English and maths 27% higher than areas with low segregation.
- Grammar schools contribute particularly strongly to segregation in areas with high levels of academic selection.

Introduction

Earlier this year, the Sutton Trust published [Selective Comprehensives 2024](#), the most recent entry in a series of reports looking at socio-economic selectivity in the comprehensive system in England. It showed that selectivity at high performing schools remains high. The top performing schools ranked by pupil progress had average Free School Meal (FSM) rates almost 5 percentage points lower than the typical school, and 4.3 percentage points lower than the level in their own catchment. It showed little improvement since our previous report in 2017, and some signs that things had got worse. The gap in FSM rates between the top schools on Progress 8 and the average school had widened from 1.6 percentage points, to 4.9 percentage points. It also showed that high performing schools in the North East and North West were the most socially selective.

This piece looks beyond just high performing schools, and digs deeper into the geographical patterns of socio-economic segregation in the comprehensive system as a whole, showing the wider impacts of selection. Together with the accompanying publication of [an interactive map](#), it provides unprecedented insight into the dynamics of secondary school admissions in England. This research brief gives an overview of the geographical analysis conducted, including local authority-level analysis of school segregation. The interactive map provides, for the first time, school-level information about how the socio-economic profile of school intakes reflect their local area, for almost every state secondary school in England.

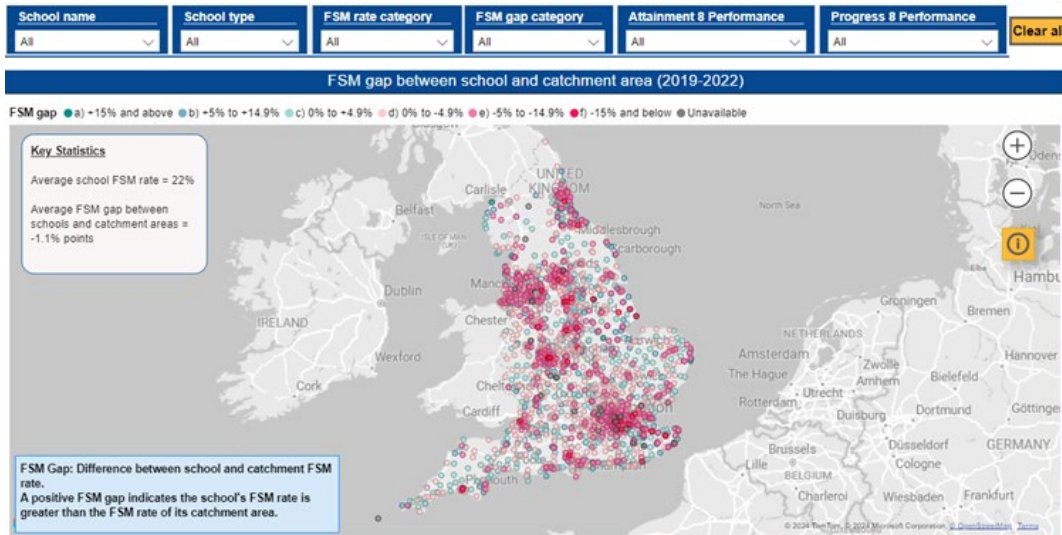
“Together with the interactive map, it provides unprecedented insight into the dynamics of secondary school admissions in England.”

Mapping selection

The map, which can be accessed [here](#), shows FSM levels in the Year 7 intake of every school over three years, as well as the gap with the neighbourhoods from which they draw their students. These ‘catchment areas’ are created using the location of the pupils who attended those schools over a three-year period (2019-2022). A full explanation of the methodology is included in Appendix A.

The colour of the school’s marker reflects their FSM gap with their catchment. Shades of teal represent ‘positive gaps’, i.e. they take more FSM pupils than live in their catchment area. Shades of red/pink represent ‘negative gaps’, i.e. they take fewer FSM pupils than live in their catchment area.

Interactive map – available on Sutton Trust website



It can be filtered by school type, GCSE performance measures Progress 8 and Attainment 8, and there is a quick search function to find individual schools. Depending on the level of zoom, it can show overall national patterns, as well as detail on the dynamics in intakes at a local level.

The map is drawn from the same data as 'Selective Comprehensives 2024', and reflects its findings. Figure 1 shows the overall breakdown in categories. About half of schools take in fewer FSM pupils than their local area, with about a third of schools having a small negative gap, 17% with a larger gap, and about 1% having a gap of 15 percentage points or more. 29% of schools have a small positive gap with their area, 20% a larger positive gap, and 2% have FSM levels more than 15 percentage points higher than their area.

Figure 1. Distribution of positive and negative FSM gaps

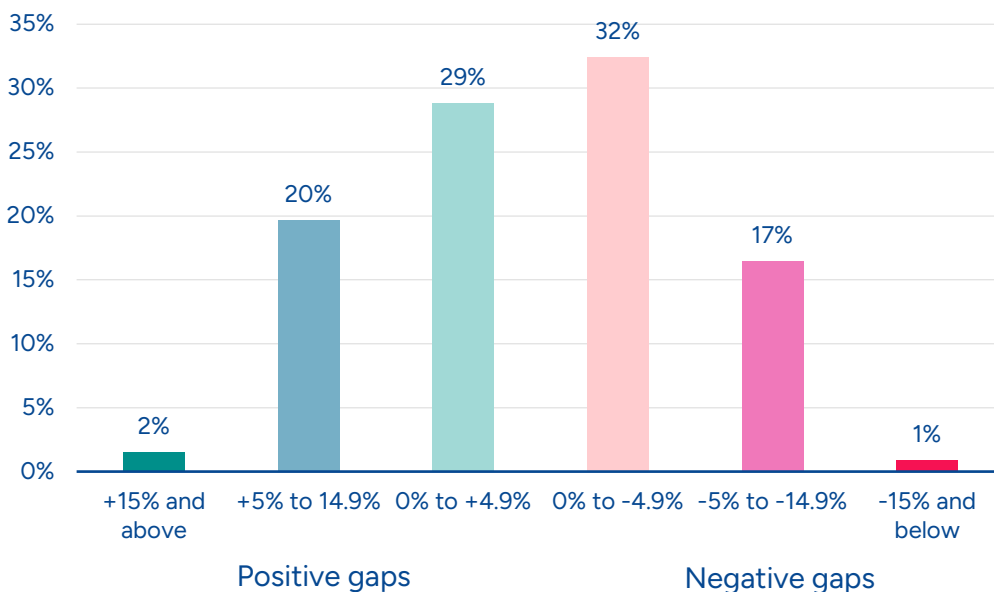


Figure 2 below shows the national map of schools in the top fifth of performance for student progress, as well as the bottom fifth. Darker shades of red/pink show schools with the biggest negative FSM gaps with their catchment area, while darker shades of teal show schools with the largest positive FSM gaps. The pattern is markedly different between the left and right panels, with most of the top schools showing signs of social selection, while most of the lowest performing schools take in higher levels of FSM than the average in their neighbourhood. Patterns using absolute grade levels (Attainment 8 score) are even more pronounced.

Figure 2. Top schools v bottom by Progress 8 performance

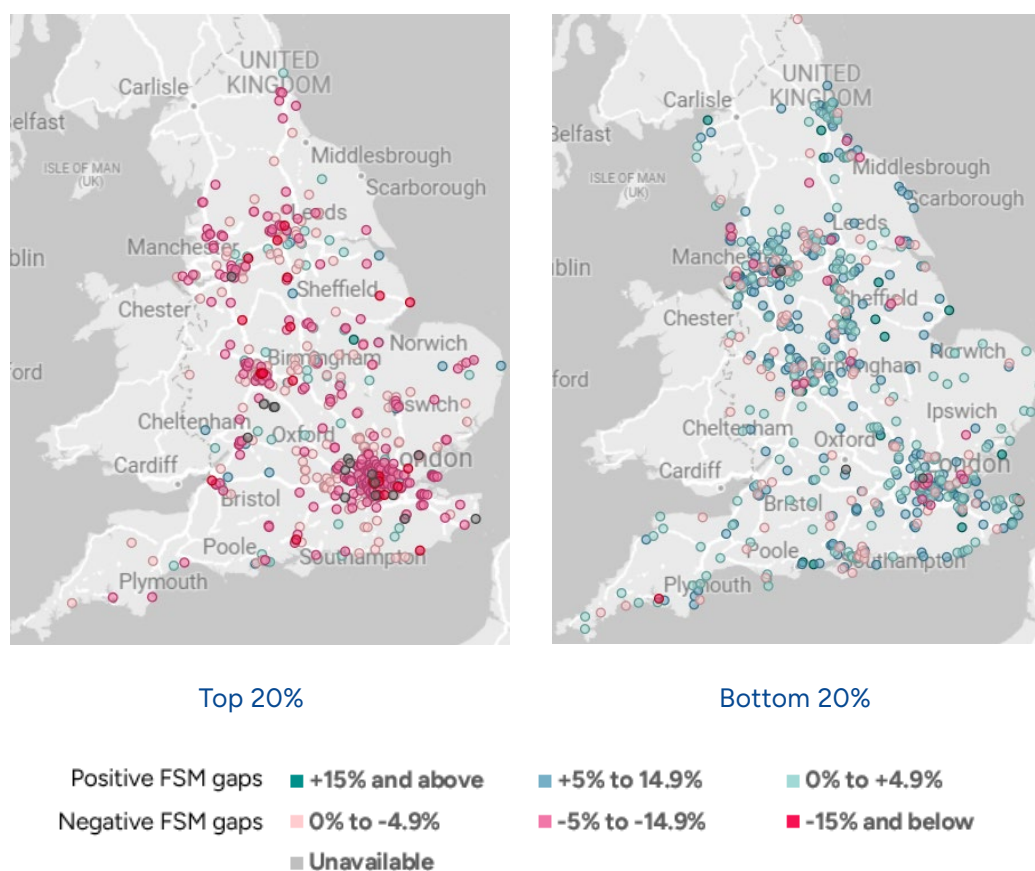
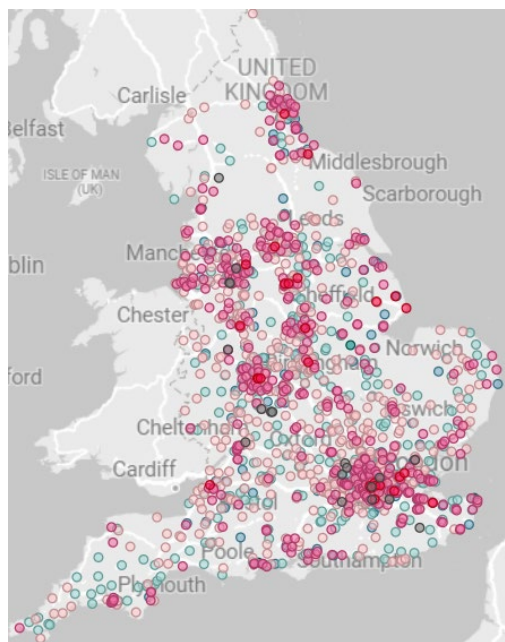
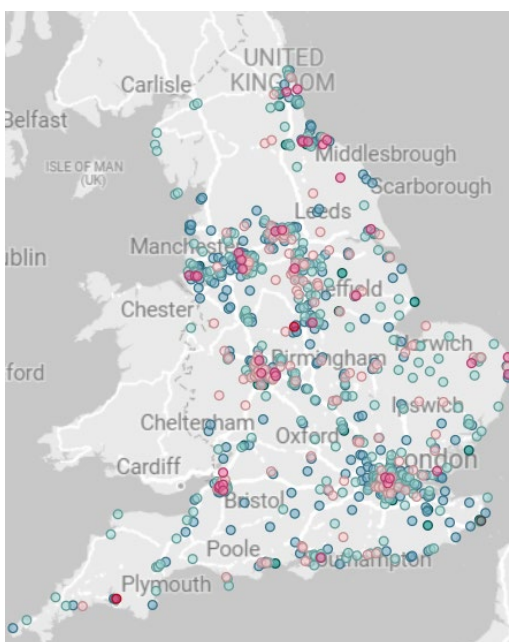


Figure 3 shows patterns by school type. Academy converters are shown to be one of the most socially selective types, while sponsored academies tend to take much higher levels of FSM than live in their catchment areas. Local authority maintained schools contain a mix of schools across the spectrum, while voluntary aided schools, which are mostly faith schools, are more limited in number, but highly socially selective.

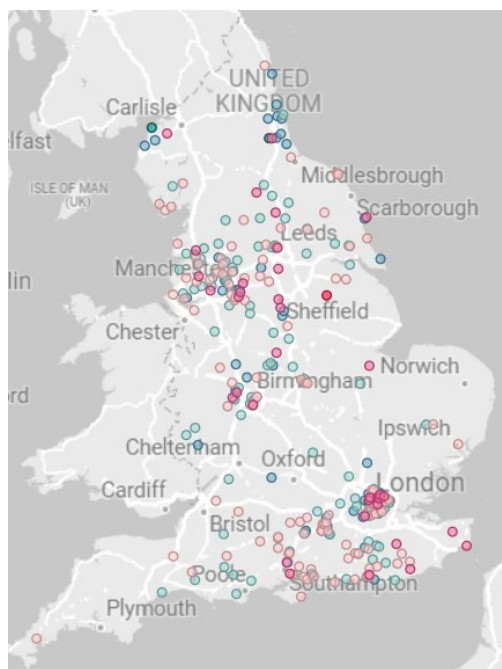
Figure 3. School type



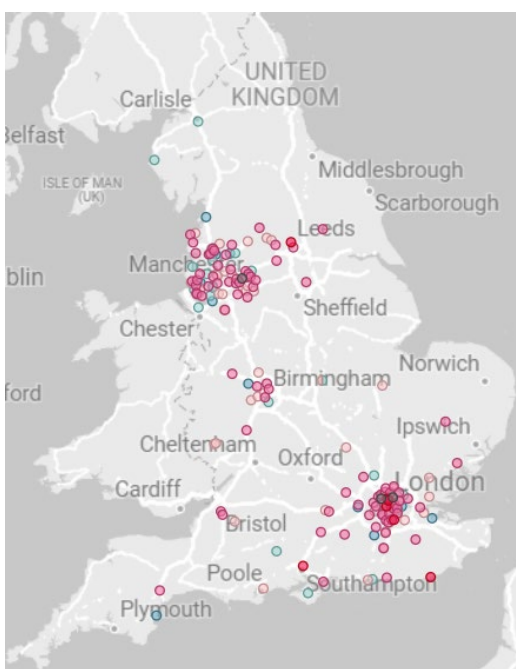
Converter academies



Sponsored academies



Local authority controlled

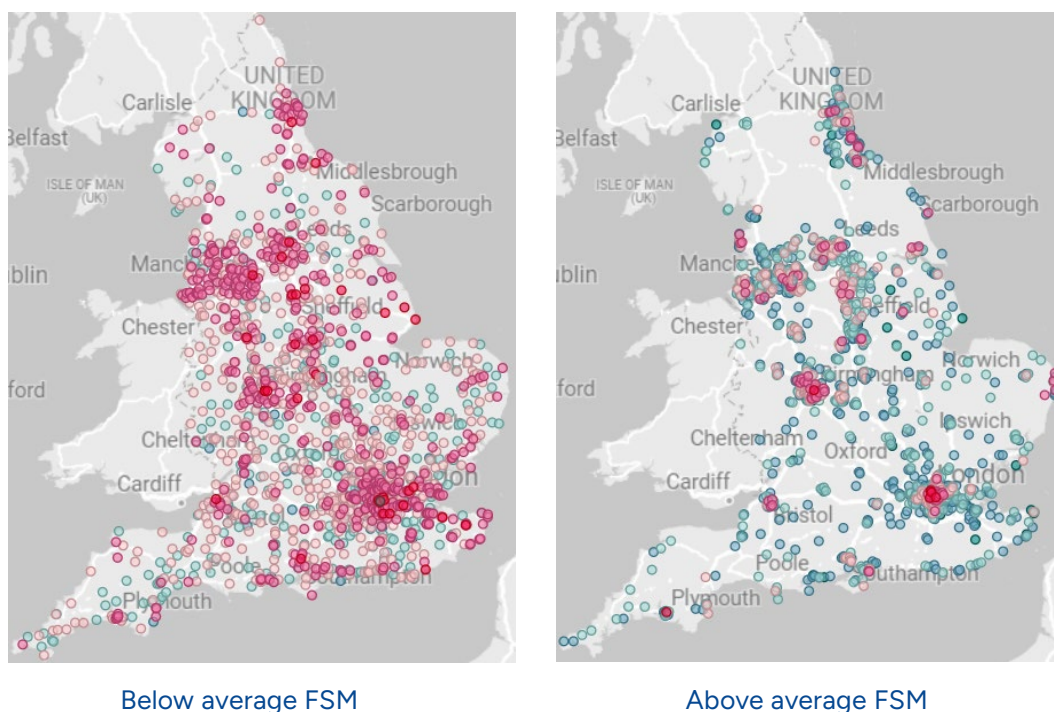


Voluntary aided (faith schools)

“Academy converters are shown to be one of the most socially selective types, while sponsored academies tend to take much higher levels of FSM than live in their catchment areas.”

Figure 4 shows how local selectivity relates to overall levels of FSM. The left-hand panel shows that the majority of schools with below average levels of FSM also have lower levels of FSM than their catchment area. It is therefore not just because they are located in areas with less disadvantage. Not all such schools fit this pattern, however, with the teal dots in this map representing schools with low levels of FSM overall, but that reflect or exceed the levels of FSM in their area. The right-hand panel shows schools with above average levels of FSM. One immediately striking feature is that these are more geographically concentrated, particularly in urban areas. Many of the schools in less urban areas take significantly higher numbers of FSM pupils than their locality. However, there are some patches of pink/red, particularly in London and Birmingham, of schools with above average FSM levels, but which still don't reflect their locality.

Figure 4. Overall levels of FSM eligibility in schools



The geography of social segregation

Beyond the map, this dataset also allows us to look at intakes at a local level; in this case at a local authority level. In particular, it allows us to look at levels of social segregation – that is, the extent to which pupils from different socio-economic backgrounds are schooled separately, or mixed together. Eligibility for Free School Meals is again used as the indicator of socio-economic status. Segregation here is measured by the Index of Dissimilarity, a widely used

method.¹ This measures how evenly groups are spread across units in a wider population. In this case, looking at how disadvantaged and non-disadvantaged pupils are spread across schools in a local authority. It produces a score of between 0 and 1, where 0 means no segregation – that is, all schools have the same rate of disadvantaged pupils in the local authority. A score of 1 would mean all disadvantaged pupils go to one set of schools, all non-disadvantaged pupils attend a different set of schools, with no mixing. A simple interpretation of the score is that it represents the proportion of pupils who would need to move schools in order to achieve an even spread of the groups. So, a score of 0.33 would mean that 33% of pupils would need to move schools.

This approach was used in a paper examining differing levels of segregation between English and Scottish schools last year.² It found that housing segregation between the two countries was similar, with 31% of Scottish families needing to move neighbourhoods to achieve an even spread, compared to 29% in England. However, segregation in English schools was higher than Scotland, with 22% of pupils needing to move schools to achieve an equal distribution, compared to 17% in Scotland.

This brief is primarily interested in segregation within the comprehensive system, a system in which segregation, in theory, should be low. Private schools, which largely cater to the economically well-off, contribute significantly to segregation overall, but are outside of the scope of this piece. Grammar schools, which are selective on academic ability, and have also been shown to be significantly socially selective,³ are excluded from the main analysis for consistency, but examined separately below.

The average index of dissimilarity score in our data is 0.21, meaning that 21% of pupils in a local authority would need to be re-distributed to achieve parity. With grammar schools included, it rises to 0.22, matching the IFS study. There is substantial variation between areas however. In Solihull, the area with the highest level of segregation, 32% of pupils would need to move school to ensure an even spread of disadvantaged pupils. In Torbay, this is just 6%. In Knowsley, it is just below 8%. While Torbay is unusual for reasons discussed in the grammar school section below, the typical comprehensive there has an FSM intake 3 percentage points different from the overall FSM average in the

¹ Duncan, O. D. & Duncan, B. (1955). A methodological analysis of segregation indexes, *American Sociological Review*, 20, 210–17. <http://www.jstor.org/stable/2088328>.

² Drayton, E. Greaves, E & Rossi, G. (2023). *School and Neighbourhood Segregation in Scotland and England*. IFS Report R276. Institute for Fiscal Studies. <https://ifs.org.uk/sites/default/files/2023-10/School-and-neighbourhood-segregation-in-Scotland-and-England.pdf>

³ Cullinane, C. (2016). *Research Brief: Gaps in Grammar*. The Sutton Trust. https://www.suttontrust.com/wp-content/uploads/2019/12/Gaps-in-Grammar_For-website.pdf

local authority (28%). In Solihull, this is 12 percentage points (with an overall FSM rate of 24%). In Newcastle upon Tyne, the average deviation is 15 percentage points. On average, the most segregated authorities have deviations of over 10 percentage points. In the least segregated, it is 5 percentage points.

Tables 1 and 2 show the most and least segregated council areas. The top 10 includes 3 councils in the North East, and 3 in the North West. In contrast the least segregated areas include 3 from London, and 2 each from the South West and West Midlands.

Table 1: Top 10 most segregated councils (comprehensive schools only)

Rank	Local authority	Region	Index of Dissimilarity	FSM rate	Deviation from average
1	Solihull	West Midlands	0.32	24.1%	12.0pp
2	Warrington	North West	0.32	17.9%	10.1pp
3	Newcastle upon Tyne	North East	0.32	39.1%	15.1pp
4	North East Lincolnshire	Yorkshire and the Humber	0.31	27.5%	12.6pp
5	Stockton-on-Tees	North East	0.31	25.4%	13.5pp
6	North Tyneside	North East	0.30	23.2%	12.0pp
7	Hammersmith and Fulham	London	0.30	22.2%	10.4pp
8	Liverpool	North West	0.30	30.9%	13.5pp
9	Plymouth	South West	0.29	25.6%	11.0pp
10	Trafford	North West	0.29	19.4%	9.9pp

Table 2: Top 10 least segregated councils (comprehensive schools only)

Rank	Local authority	Region	Index of Dissimilarity	FSM rate	Deviation from average
151	Torbay	South West	0.06	28.5%	3.1pp
150	Knowsley	North West	0.08	46.5%	3.7pp
149	Barking and Dagenham	London	0.08	26.2%	3.4pp
148	Newham	London	0.10	29.6%	4.7pp
147	Cornwall	South West	0.12	19.2%	4.0pp
146	Rutland	East Midlands	0.12	9.6%	2.0pp
145	Stoke-on-Trent	West Midlands	0.12	30.9%	5.3pp
144	Isle of White	South East	0.12	21.5%	4.3pp
143	Waltham Forest	London	0.12	24.1%	4.5pp
142	Shropshire	West Midlands	0.13	15.9%	3.5pp

Segregation by area characteristics

In general, the North East is a regional outlier when it comes to segregation, with an average of 26% of pupils needing to be reallocated to achieve parity. Previous work showed that the North East has the most selective high performing schools. The North West is next most segregated, at 23%. The South West is the least segregated region, at 19%. Just below the West Midlands and London. High performing schools in London are the least socially selective in England.

26%

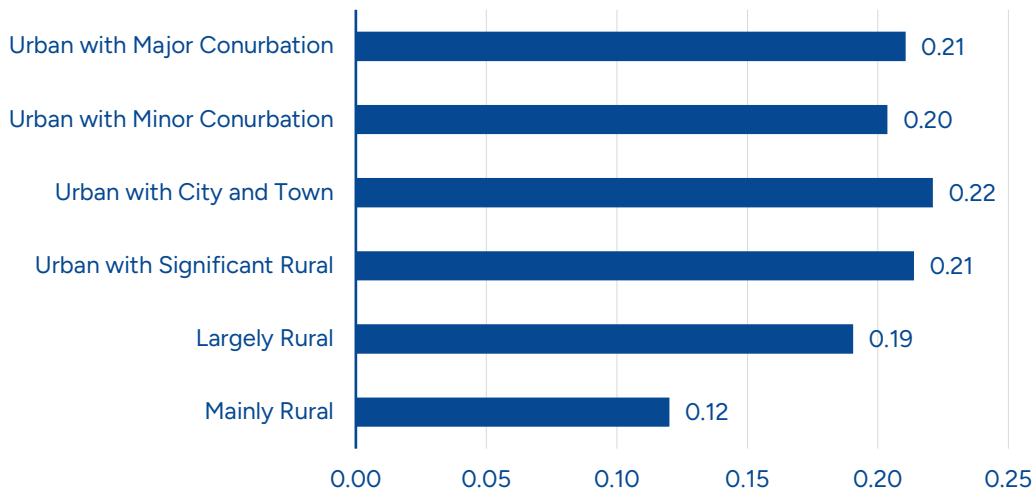
of pupils in the North East would need to move school in order to achieve an equal distribution of disadvantage across schools.

Figure 5. Dissimilarity Index by Region



How does population density impact segregation? One might expect that the concentration of schools and the distances between them would have an impact. Rural local authorities tend to have slightly lower levels of segregation. Major cities have a segregation index of 0.21, whereas mainly rural areas have an index of 0.12, and largely rural 0.19. This may be due to travel times and a lack of options limiting the operation of school choice in rural areas, but may also reflect lower levels of residential segregation in rural areas.

Figure 6. Dissimilarity Index by urban/rural profile of local authority



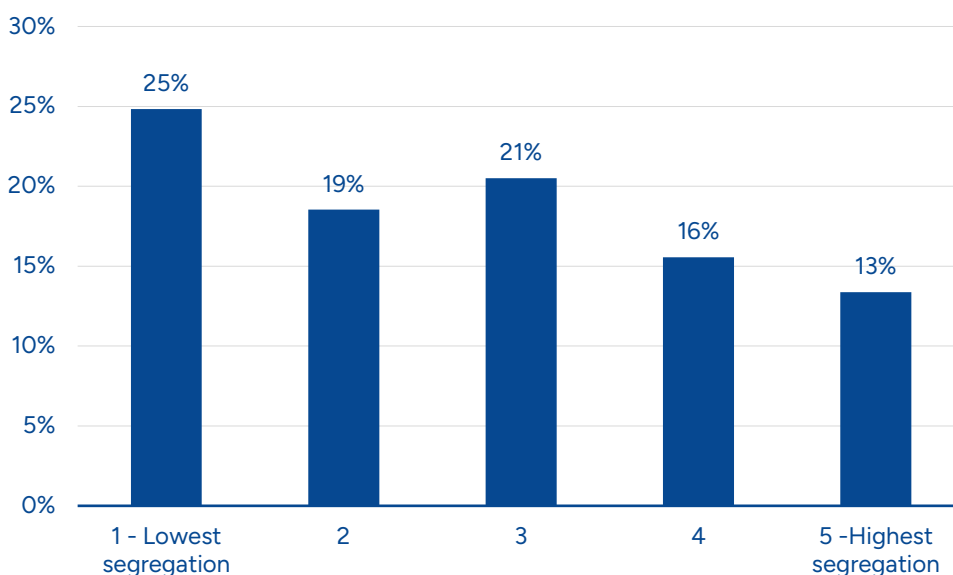
Looking at the school composition of the area, the type of schools in a local authority were not strongly predictive of segregation. The number of faith schools in an area has a closer relationship, particularly Catholic schools, reflecting findings from the Selective Comprehensives report that faith schools are the most socially selective. This has an impact on the schools around them.

In the areas with the highest segregation, around 24% of schools were classed as faith schools, compared to around 20% in the least segregated.

In terms of academisation, the most segregated areas have 92% of schools academised, compared to 86% in the least segregated areas. However, the association is a weak one, partly due to the overall levels of academisation in the secondary school system.

One interesting association is with levels of English as an additional language, an indicator of ethnic diversity in an area. The least segregated areas have the highest levels of EAL, and the most segregated areas have the lowest levels of EAL. This perhaps reflects London, which has high levels of ethnic diversity, and lower than average levels of socio-economic segregation. Given that the performance of FSM pupils from ethnic minority backgrounds is higher, this is a finding of interest.

Figure 7. English as an Additional Language % by level of segregation

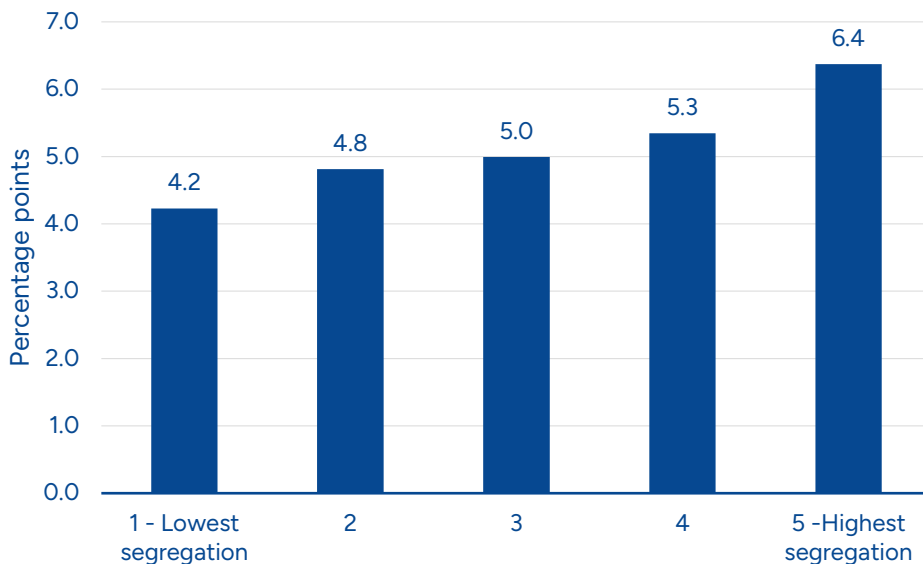


In general, areas with higher levels of deprivation tend to have lower levels of segregation. The most deprived councils by IMD have average dissimilarity scores of 0.19, compared to 0.22 in the least deprived. However, it is the councils with medium levels of deprivation that have the highest, at just under 0.23.

When a wide variety of potentially explanatory factors are taken into account using multivariate analysis, the strongest predictors of segregation in an area are a) the level of residential segregation, and b) the level of selection occurring within catchment areas. Figure 8 shows that the average FSM gap with catchment areas was 4.2 percentage points in the areas with the lowest

segregation. In the areas with the highest, this is 6.4 pp. This shows the impact that selectivity has on the school system more generally. Areas with more selective schools have higher levels of segregation.

Figure 8. Social selectivity (FSM gap) by level of segregation

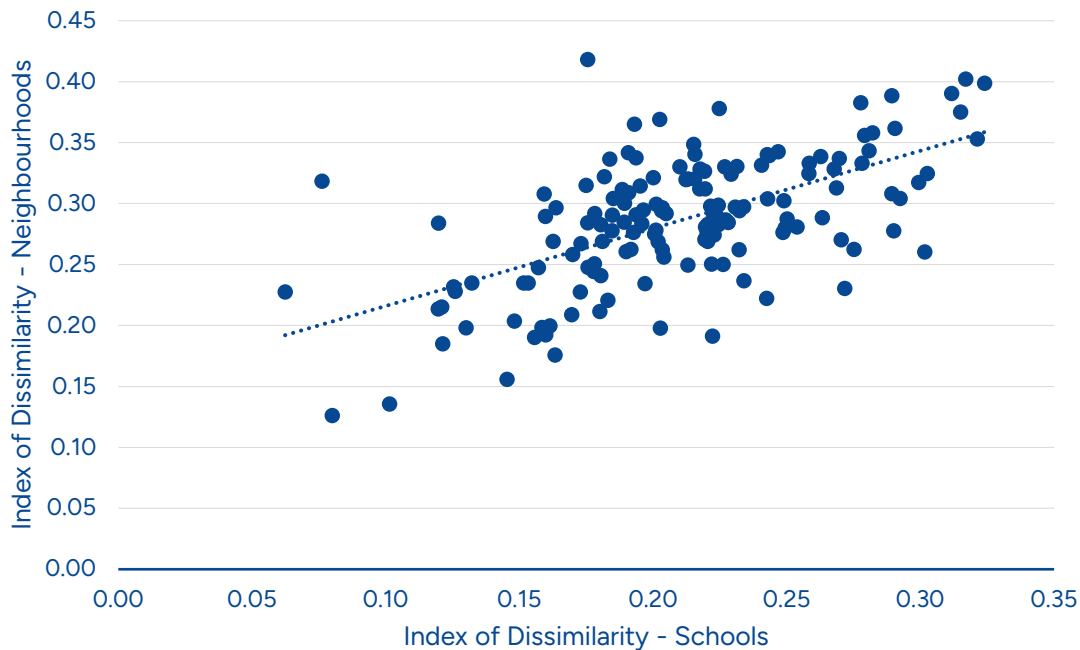


Residential segregation was measured using the index created by Drayton et al (2023)⁴ based on differences in deprivation levels in Lower Super Output Areas (small areas which typically comprise 400-1200 households). As Figure 9 shows, residential and school segregation are strongly correlated. The areas of lowest school segregation have the lowest neighbourhood segregation, and vice versa.

One additional point of note from the multivariate analysis was that, when residential segregation is controlled for, the number of private schools in an area (proxied by the number of private school pupils) was associated with lower levels of segregation within the state system. This would stand to reason, with more wealthy parents opting out of the state system, this would leave the state system more equal. Though this is somewhat illusory given that segregation levels overall are likely to be much higher in areas with more private schools.

⁴ Drayton, E. Greaves, E & Rossi, G. (2023). *School and Neighbourhood Segregation in Scotland and England*. IFS Report R276. Institute for Fiscal Studies. <https://ifs.org.uk/sites/default/files/2023-10/School-and-neighbourhood-segregation-in-Scotland-and-England.pdf>

Figure 9. Scatterplot of school segregation v residential segregation



Segregation and attainment

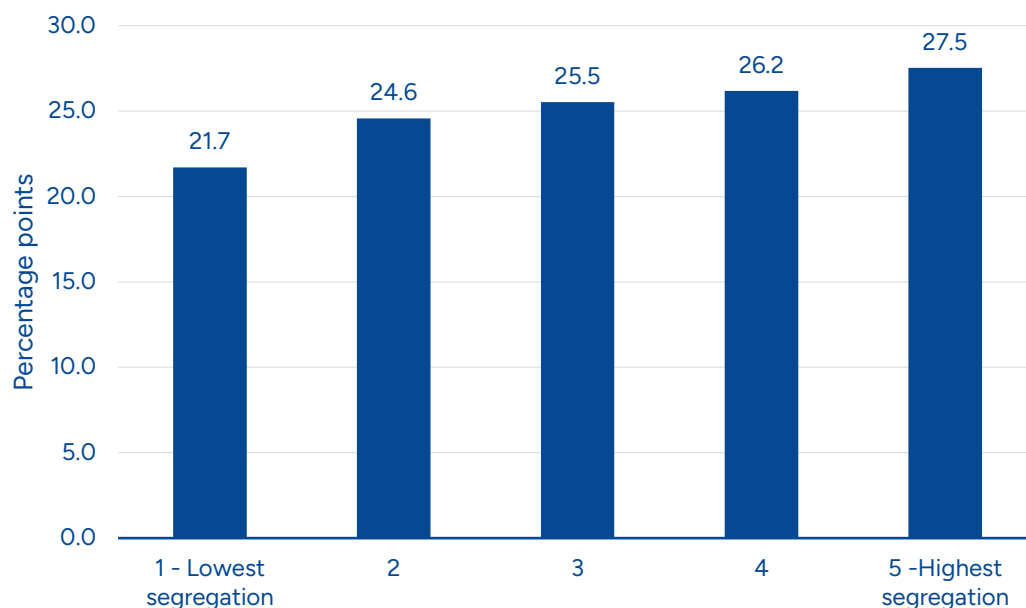
Does segregation impact on average levels of performance in a local authority?

Levels of socio-economic segregation in an area were not found to be significantly associated with overall attainment, either in terms of Progress 8 scores, Attainment 8 scores, or GCSE pass rates in English and maths. This suggests that moving to more mixed intakes would not have a negative impact on performance in an area.

However, higher levels of segregation *are* correlated with higher attainment gaps. Looking at the rate of strong passes in GCSE English and maths, the average local authority has a 25 percentage point gap between disadvantaged and non-disadvantaged pupils in their area. However, in the least segregated areas this is below 22 percentage points, and in the most segregated areas it is 27.5 percentage points. This is, in the main, driven by lower pass rates for FSM pupils in more segregated areas, rather than higher rates for non-FSM pupils.

This correlation between segregation and attainment gaps was found even when controlling for a number of demographic, geographic and school characteristics through multivariate analysis.

Figure 10. Attainment gaps (Grade 5 or above in English and maths at GCSE) by level of segregation



Similarly, looking at attainment across a range of subjects through Attainment 8 scores, the average gap in the areas with lowest segregation is 11. In the highest, it is 12.3, though these figures are an average across schools, rather than an overall local authority figure.

Grammar schools

Analysis so far has focused on comprehensive schools only, but how does the inclusion of grammar schools change the picture?

The changes are largest in the so-called “highly selective” local authorities, where 25% or more of pupils attend grammar schools: Bexley, Buckinghamshire, Kent, Lincolnshire, Medway, Slough, Southend-on-Sea, Sutton, Torbay, Trafford, and Wirral.

Trafford (0.39), Southend-on-Sea (0.37), Bexley (0.35) and Wirral (0.34) occupy the top 4 positions in the list of most segregated areas when grammars are taken into account, and all have higher index scores than the most segregated authority in the comprehensive-only analysis. Solihull, which doesn't have grammars, retains its position in the top 5. Torbay, the least segregated authority when you look at comprehensives only, jumps 127 positions in the list when you take its grammars into account (see Case Study 5). Slough, Medway and Buckinghamshire similarly jump from the bottom to the top, with moves of around 100 places in the rankings. Whereas Trafford, Bexley and Southend-on-sea have high levels of segregation within their comprehensive schools also. The highly selective group show increased segregation scores by an average of

0.12 when their grammars were taken into account. The extent of socio-economic selection in grammar school intakes means they have a dramatic effect on social segregation in schools in the areas where they exist.

Because grammar schools are not evenly distributed across the country, taking grammars into account changes the regional picture slightly. The North East and North West remain the most segregated, but the South East moves into third place. The South West, the least segregated in the comprehensives only list, moves up several places. The bottom 3 including grammars are now East Midlands, West Midlands, and London.

In order to illustrate how selection and segregation plays out at a local level, the next section turns to a series of case study local authorities, some with high levels of segregation and some with low.

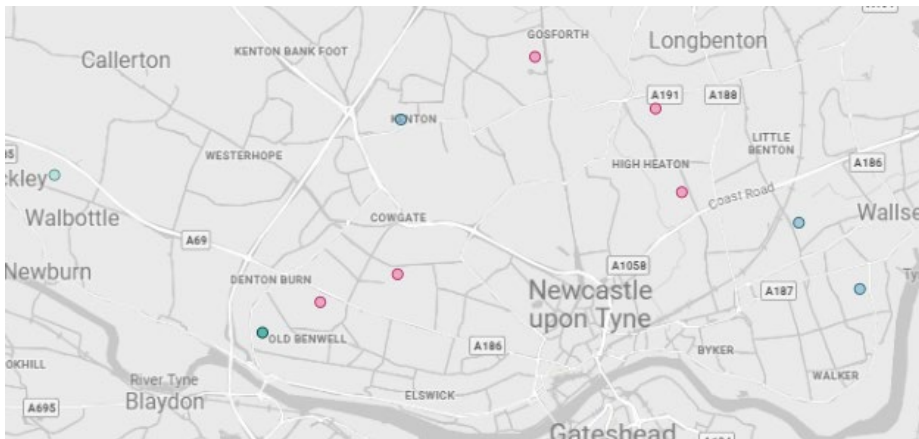
Local Authorities: In Focus

Case Study 1. Redcar and Cleveland: High segregation



Redcar and Cleveland is a small local authority with 10 mainstream secondary schools included in the data, which have an FSM rate of 28%, slightly above the national average. None of the schools have admissions run by the local authority. The average school has an FSM rate 12 percentage points away from the local authority average, and 8 percentage points away from their catchment. This is driven by three schools with FSM rates around 50%, two Outwood Academies and St Peter's Catholic College, all of which take in more FSM pupils than live in their local area (shown in teal). On the other hand, there are three schools that take in significantly lower levels of FSM than their local area: Nunthorpe Academy (FSM gap of -15 percentage points), Sacred Heart Catholic Secondary (FSM gap of -10pp) and Huntcliff School (FSM gap of -9pp). These schools are among the higher performers in the local authority. Nonetheless, the highest performing school in the area by Progress 8 is Freebrough Academy, which has an FSM rate of 35% and a positive FSM gap of +8pp. Just two schools have FSM rates that match their catchment areas (within 5 percentage points).

Case Study 2. Newcastle upon Tyne: High residential segregation, high selectivity



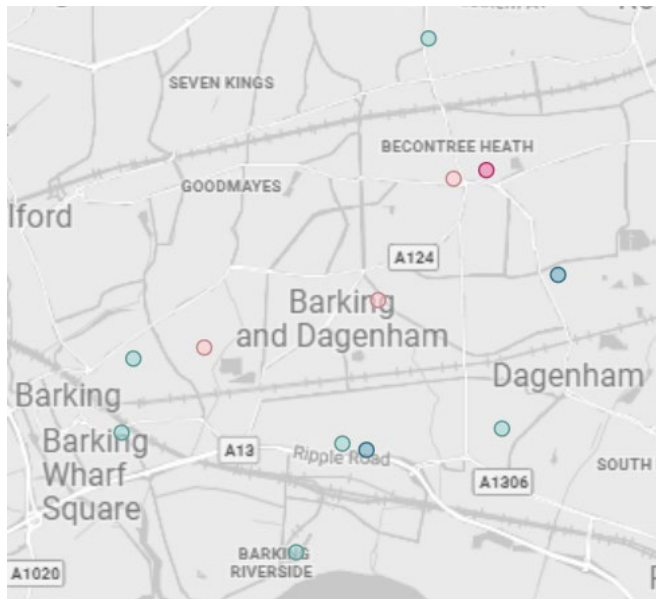
Newcastle-upon-Tyne is an urban constituency with 10 schools, with high FSM levels (39%) and levels of deprivation. All schools are academies, the majority of which are converters. The typical school differs by over 15 percentage points from the local authority average FSM rate. Residential segregation is very high, but is also combined with schools differing substantially even from their catchment (an average of 10 percentage points, the third highest). It has a high socio-economic attainment gap in GCSE English and maths.

“St Cuthbert’s High School and Excelsior Academy sit beside each other in the bottom left corner of the map. Yet the former has 31% FSM pupils, and the latter 61%.”

St Cuthbert’s High School and Excelsior Academy sit beside each other in the bottom left corner of the map and are illustrative of many of the issues highlighted in this, and previous reports. The former has 31% FSM pupils and an above average Progress 8 score, and the latter 61% and a Progress 8 score below average. St Cuthbert’s FSM gap is -10pp, while Excelsior takes in almost 20pp more FSM students than live in its catchment. Sacred Heart Catholic High School, another faith school just to the east, has a 28% FSM rate, the biggest FSM gap in the area, at -14 percentage points, and the highest results by both Progress 8 and Attainment 8 in the local authority.

This pattern is replicated in the east of the city. Jesmond Park Academy has an FSM rate of about half its neighbour Benfield, and takes in 10 percentage points fewer FSM students than live in its catchment. While the city has high segregation in terms of where people live, it is clear that this is exacerbated in schools.

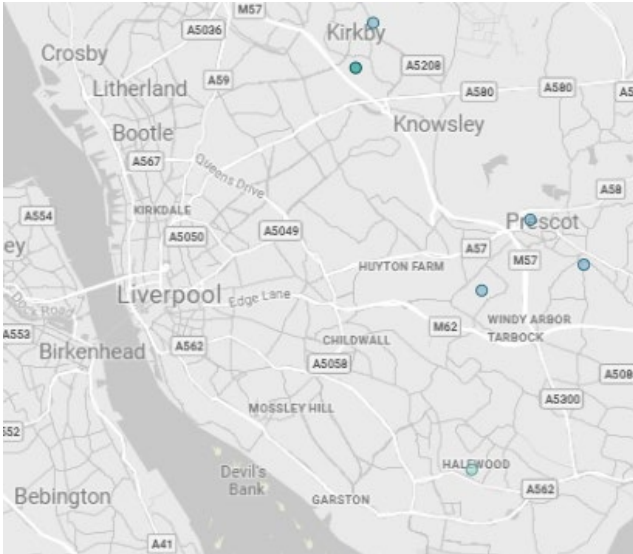
Case Study 3. Barking and Dagenham: Low residential and school segregation



In contrast, Barking and Dagenham is an urban borough in London with 12 secondary schools, a slightly above average FSM rate of 26% and high levels of deprivation. Residential segregation is low, with the majority of the local authority comprising areas of high deprivation.

The average deviation from the local authority FSM rate is just 3 percentage points. And most schools are very reflective of their local catchment. Of its 12 schools, only 3 have FSM catchment gaps of more than 5 percentage points. Eastbrook and Goresbrook schools take more FSM pupils than live in their areas, while All Saints Catholic School, a neighbour of Eastbrook, takes 8 percentage points fewer. The highest performing schools in the area, Goresbrook and Riverside, both have positive FSM gaps, and above average FSM rates. Barking and Dagenham's schools are also above average in their performance, and have a smaller than average attainment gap in English and maths.

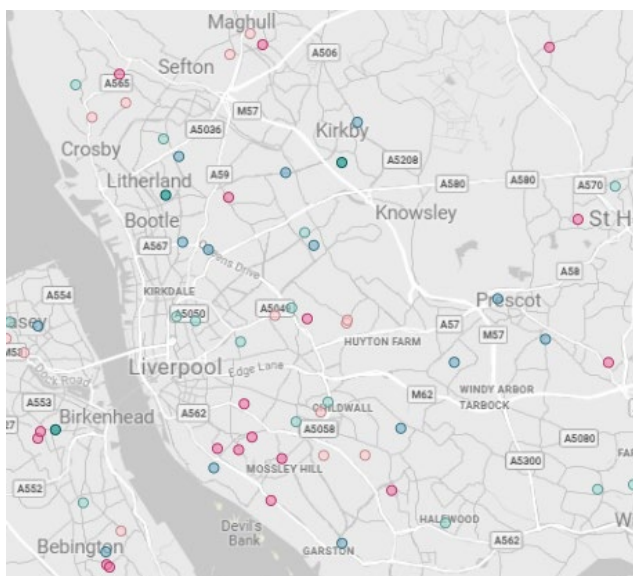
Case Study 4. Knowsley and Liverpool: the impact of neighbours



In this dataset Knowsley has the highest average FSM level in the country, at 46%, but is also the second least segregated, with all of its six schools having similar FSM rates, between 41% and 55%, and an average deviation of less than 4 percentage points. As the above map shows, Knowsley also has the distinction of all of its schools having positive FSM gaps, with every school taking at least 5 percentage points more FSM pupils than live in their catchment. Kirkby High school in particular takes 19 percentage points more. All Knowsley schools have significantly below average Progress 8 scores, and the council has the second lowest average score in the country, just above Blackpool.

“Knowsley also has the distinction of all of its schools having positive FSM gaps, with every school taking at least 5 percentage points more FSM pupils than live in their catchment.”

However, local authorities are also shaped by their surroundings. In this case, the city of Liverpool to the east, as well as Sefton to the north.



Liverpool is the 8th most segregated local authority in the country, with high levels of FSM and deprivation, and an average deviation from the local authority average of 13 percentage points. 30% of Liverpool's pupils would need to be moved in order to achieve parity across schools.

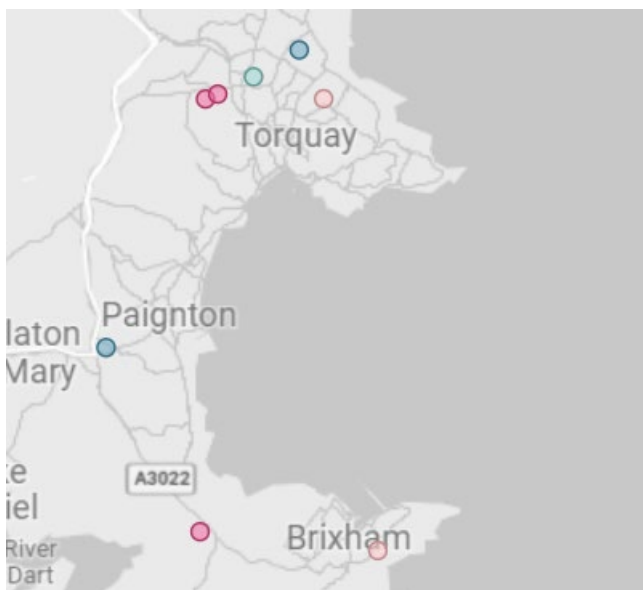
Sefton also has higher levels of segregation, with 24% of its pupils needing to be moved to achieve parity. Just north of Kirkby, Maricourt High School in Sefton has an FSM rate of 19%, 6pp below its catchment, part of a band of 6 schools that are socially selective from Maghull to Crosby.

Archbishop Beck school to the north west of the city, close to Knowsley has an FSM rate of 22% (-11pp below catchment), and further south, around West Derby, there is a cluster of schools with negative FSM gaps, including St Edwards College 10% (-6pp), Broughton Hall and Cardinal Heenan (both -3pp). This compares to 50% (133pp above catchment at nearby De La Salle Academy, and 45% (10pp above catchment) at Lord Derby Academy in Huyton.

Further away from Knowsley there is a particular cluster of socially selective schools with above average Progress 8 scores in the south of the city near Toxteth and Sefton Park, in particular Archbishop Blanch High School (-14pp gap).

It is likely that the high levels of selectivity in schools bordering Knowsley significantly contribute to the concentrated levels of disadvantage seen in the local authority's schools, and shows how neighbouring local authorities can inter-relate.

Case Study 5. Torbay: The impact of grammars

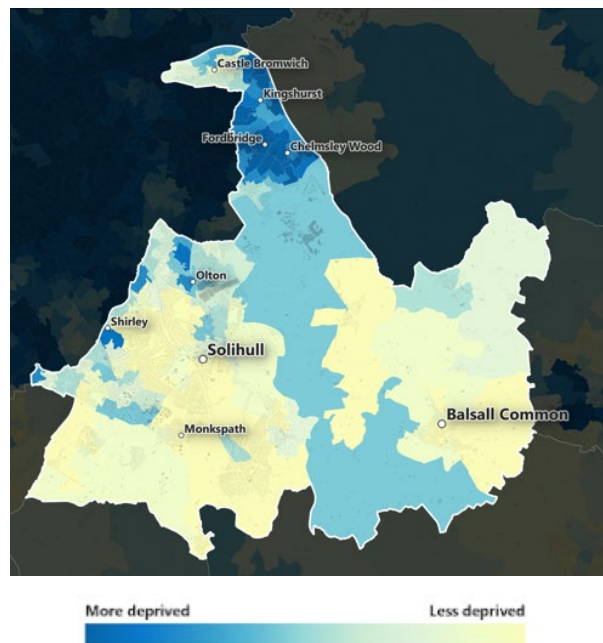
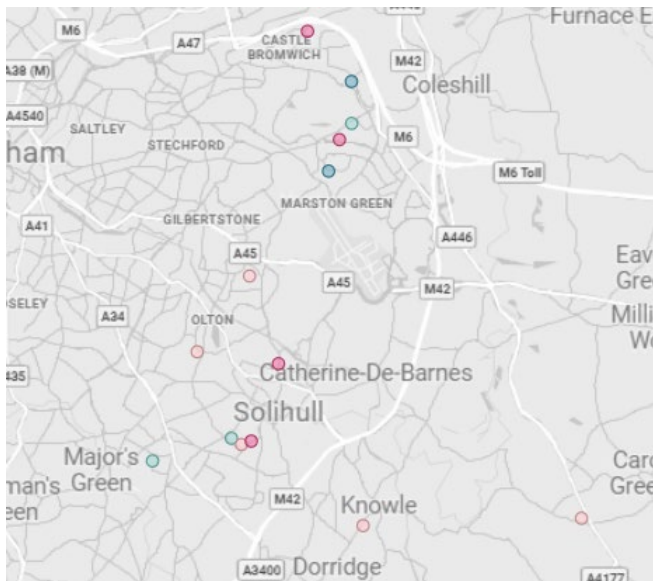


Torbay has five comprehensive schools in the data, which rank as the least segregated of any local authority in England. It also has relatively low levels of residential segregation. Of the five schools, three have positive FSM gaps, in particular St Cuthbert Mayne School in Torquay with an FSM rate of 37% and a positive gap of 9pp. The other four schools all have FSM rates between 22% and 28%, with small gaps with their catchment.

However this doesn't tell the full story, because there are three grammar schools in the local authority (all in pink in the map); two in Torquay and one near Brixham, with FSM rates of 3.8%, 4.7% and 5.8%, and gaps with their catchment areas of between 12 and 14 percentage points. In reality, with the grammars' intakes taken into account, there is significant segregation. While only 6% of pupils would need to be reallocated to achieve parity across the five comprehensives, this rises to 28% once grammars are included. While this is the most dramatic illustration of this dynamic, it is replicated in several other highly academically selective local authorities, including Slough and Medway.

“While only 6% of pupils would need to be reallocated to achieve parity across the five comprehensives, this rises to 28% once grammars are included.”

Case Study 6. Solihull: The impact of residential segregation



Solihull's comprehensive schools are the most segregated in England, with an index of 0.32. However, the average FSM gap in the local authority is 4.1 percentage points, towards the lower end of the spectrum. It has the third highest level of residential segregation in England, as can be seen in the accompanying map of the Index of Multiple Deprivation. The council has an area of high deprivation in the north (in blue), and a group of schools with high levels of FSM, including Smith's Wood Academy (51% FSM) and Tudor Grange Academy Kingshurst (46% FSM), both of which take more FSM pupils than live in the area and have low attainment. However, nearby John Henry Newman Catholic College has an FSM rate of 35%, but has an almost 6pp negative FSM gap, and better grades. Grace Academy Solihull (44% FSM) just north of Marston Green, has both a positive FSM gap and a solid Progress 8 score.

The south of the local authority has much less deprivation and school FSM rates mostly below 20%, with some; Tudor Grange Academy Solihull and Arden, as low as 6% and 9% respectively. Most schools have small FSM gaps, apart from Lode Heath School (-7pp) and St Peter's Catholic School (-7pp). Just south of Solihull itself, Alderbrook School (16% FSM) sits in a cluster with two other schools, yet has an FSM rate 10 percentage points higher than Tudor Grange and 5 percentage points higher than St Peter's.

Nonetheless, while there are signs of social selection both in the north and south of the local authority, much of the variation is being driven by the concentration of deprivation in the north, and affluence in the south.

Discussion

While previous Sutton Trust research in this area has focused on social selectivity in high performing schools, widening the lens allows us to see the broader picture across mainstream schools in the state system. For every school taking fewer disadvantaged pupils than their catchment area, there is a school which takes in more. In some areas this leads to high levels of socio-economic segregation. This is bad for social cohesion, and leads to a self-fulfilling prophecy of middle class parents and more experienced teachers being attracted to higher performing schools with less challenging intakes. Previous Sutton Trust research has shown that disadvantaged pupils with high potential perform better when in schools with more mixed intakes.⁵ And in this research we see that while greater segregation is not associated with higher levels of performance at a local authority level, it *is* associated with larger attainment gaps. This highlights the urgency of the need for change.

School segregation of course reflects levels of residential segregation, a much wider issue. But a recent IFS report showed that in England, just 28% of variation in school segregation is explained by residential segregation.⁶ In contrast, in Scotland, where schools more closely reflect their local communities, around half of school segregation was explained by residential segregation. However, overall levels of school segregation in Scotland are lower, suggesting that the additional dynamics in the English system, particularly around school choice, are driving much of the segregation. England's academically selective grammar schools clearly play a role in this also.

“While greater segregation is not associated with higher levels of performance, it is associated with larger attainment gaps.”

Segregation is not merely an artefact of residential segregation that can only be fixed by ‘bussing’ disadvantaged pupils long distances. While achieving complete parity would likely require a total overhaul of school transport and admissions systems, it is clear that there is significant room for improvement without such radical change. Not least because segregation is at its highest in cities and towns, where distances between schools are lower.

Change can be achieved in several ways. With their increased levels of autonomy, schools and Multi Academy Trusts can work to become more inclusive and representative of their local communities. The Sutton Trust’s [Fair School Admissions Pledge](#) programme is helping schools across the country to

⁵ Holt-White, E. & Cullinane, C. (2023). *Social Mobility: The Next Generation: Lost potential at age 16*. The Sutton Trust. <https://www.suttontrust.com/wp-content/uploads/2023/06/Social-Mobility-The-Next-Generation-Lost-Potential-Age-16.pdf>

⁶ Drayton, E. Greaves, E & Rossi, G. (2023). *School and Neighbourhood Segregation in Scotland and England*. IFS Report R276. Institute for Fiscal Studies. <https://ifs.org.uk/sites/default/files/2023-10/School-and-neighbourhood-segregation-in-Scotland-and-England.pdf>

do just that, giving practical advice on fair admissions reviews, data collection, parent consultations and admissions policy change. Many schools have shown already what can be done in this area when a light is shone on the problem, from prioritising disadvantaged applicants, to fair ballots or banding, to tackling the high costs of uniforms.

However, to achieve more broad-based change, there needs to be national action. Changing the school admissions code to require schools to prioritise Pupil Premium eligible applicants would be a start. Widening the intakes of the most oversubscribed schools would have a cascading impact on other schools in the area, and create a more balanced system overall. The new Labour government has also promised to give more power over admissions to local authorities.⁷ It is vital that these powers include taking into account socio-economic inclusion, tackling school segregation and ensuring the needs of local communities are considered and met by the schools that serve them.

Reform of accountability mechanisms is also needed. Schools with more disadvantaged pupils tend to have lower Ofsted ratings and scores in exam league tables, which discourages inclusion. Ofsted inspections should include an element recognising fair admissions and inclusion of the local community, and schools doing excellent jobs with disadvantaged intakes should be celebrated more. Parents are also an essential component of change, with higher segregation coming in areas where there is greater choice. Parents from lower socio-economic classes are less likely to engage with rankings and Ofsted reports,⁸ so better information is needed, as well as better outreach from oversubscribed schools to primary schools with higher levels of disadvantage, along with tackling the extra costs of school.

The full set of policy recommendations for government and schools is outlined in the '[Selective Comprehensives 2024](#)' report. Recent work by Brighton and Hove council, as well as the response to the Sutton Trust's Fair Admissions Pledge and Award, has shown there is appetite for change in this area. Now is the time to build on that to deliver a truly comprehensive school system.

“Recent work by Brighton and Hove council, as well as the response to the Sutton Trust’s Fair Admissions Pledge and Award, has shown there is appetite for change in this area.

Now is the time to build on that to deliver a truly comprehensive school system.”

⁷ Roberts, J. (2024, July 5). Labour’s education policy: what schools can expect. *Tes Magazine*. <https://www.tes.com/magazine/news/general/labour-education-policy>

⁸ Montacute, R & Cullinane C. (2018). *Parent Power 2018: How parents use financial and cultural resources to boost their children’s chances of success*. The Sutton Trust. <https://www.suttontrust.com/wp-content/uploads/2019/12/Parent-Power-2018.pdf>

Appendix A - Methodology

The analysis in this report is based on a school-level dataset created for the Selective Comprehensives 2024 report by researchers at NFER, using the National Pupil Database. Data is available for England only. Analysis is focused on mainstream comprehensive schools, with special schools and pupil referral units not included, and grammars analysed separately.

Free School Meal eligibility is the primary measure of the socio-economic background of the pupils attending a school. The social composition of a school was measured by calculating the proportion of pupils in its entry cohort (generally Year 7) in the three most recent academic years (2021/22, 2020/21 and 2019/20) who were eligible for FSM.

School 'catchment areas' were determined using the same approach used in the Selective Comprehensives 2017 report, based on the areas schools draw their pupils from.⁹ This involved consideration of which Lower Layer Super Output Areas (LSOA) pupils in the three most recent intake years (2021/22, 2020/21, 2019/20) lived. An LSOA was included in a school's catchment area if at least five pupils from that area over the last three intakes attended that school. These catchment areas, as defined here, do not cover all of the geographical areas where pupils reside. This is because some pupils in a school's intake will come from LSOAs where less than five pupils from that area attended the school across the last three intake years. However, on average, 81 per cent of pupils in the three most recent intakes came from their catchment area, as defined in this study. This is a similar proportion to that found in the 2017 report (80 per cent).

To gain an understanding of whether a school's intake is representative of its local geographical area in terms of socio-economic disadvantage, the FSM rate in the school's intake is compared to that of its catchment area. *The 'FSM gap'* is the difference between the proportion of FSM pupils in the school's last three intake years and the proportion of FSM pupils in a school's catchment area in those intakes. Where there is no difference, the school's intake is considered to be representative of the area it serves. Where the difference is positive, the school has a higher proportion of FSM pupils in its intake than is found in its catchment area. Conversely, schools which have a negative FSM gap have fewer FSM pupils in their intake than might have been expected given their

⁹ Cullinane, C. Hillary, J. Andrade, J. & McNamara, S. (2017). *Selective Comprehensives 2017: Admissions to high-attaining non-selective schools for disadvantaged pupils*. The Sutton Trust. <https://www.suttontrust.com/wp-content/uploads/2019/12/Selective-Comprehensives-2017.pdf>

catchment area. The more negative the FSM gap, the less representative the school's intake is in terms of socio-economic disadvantage.

This report adds additional analysis on *area-level segregation*. This is measured by the Index of Dissimilarity at a local authority level.¹⁰ This measures how evenly groups are spread across units in a wider population. In this case, looking at how disadvantaged and non-disadvantaged pupils are spread across schools in a local authority. It produces a score of between 0 and 1. A score of 0 would mean no segregation, that is all schools have the same rate of disadvantaged pupils in the local authority. A score of 1 would mean all disadvantaged pupils go to one set of schools, all non-disadvantaged pupils attend a different set of schools, with no mixing. A simple interpretation of the score is that it represents the proportion of pupils who would need to move schools in order to achieve an even spread of the groups. So a score of 0.33 would mean that 33% of pupils would need to move schools.

The *local authority attainment gap* was calculated as the difference between the proportion of disadvantaged pupils attending a school in the local authority achieving a 'strong pass' (grades 9-5) in both English and maths at GCSE, and the proportion of non-disadvantaged pupils doing so. This was preferred to Attainment 8 and Progress 8 as it could be aggregated over all pupils in the local authority, rather than being an average of school scores. This data was drawn from DfE performance tables for the 2021/22 school year. 'Disadvantage' uses the official departmental definition, encompassing Free School Meal eligibility at any point in the previous 6 years.

This work is derived from statistical data from ONS which is Crown Copyright. The use of the ONS statistical data in this work does not imply the endorsement of the ONS in relation to the interpretation or analysis of the statistical data. This work uses research datasets which may not exactly reproduce National Statistics aggregates. Initial analysis was carried out in the Secure Research Service, part of the Office for National Statistics, by the National Foundation for Educational Research.

¹⁰ Duncan, O. D. & Duncan, B. (1955). A methodological analysis of segregation indexes, *American Sociological Review*, 20, 210–17. <http://www.jstor.org/stable/2088328>.

Appendix B – Full list of local authorities

Rank	Local authority	Region	Index of Dissimilarity	FSM rate	FSM gap	Attainment gap (English & maths pass rate)	Rank with grammar schools included
1	Solihull	West Midlands	0.32	24.1%	4.1pp	30pp	5
2	Warrington	North West	0.32	17.9%	5.9pp	26pp	9
3	Newcastle upon Tyne	North East	0.32	39.1%	10pp	31pp	10
4	North East Lincolnshire	Yorkshire and the Humber	0.31	27.5%	7pp	19pp	11
5	Stockton-on-Tees	North East	0.31	25.4%	7.4pp	28pp	13
6	North Tyneside	North East	0.30	23.2%	7pp	32pp	15
7	Hammersmith and Fulham	London	0.30	22.2%	8.1pp	26pp	16
8	Liverpool	North West	0.30	30.9%	6.6pp	29pp	14
9	Plymouth	South West	0.29	25.6%	6.5pp	23pp	7
10	Trafford	North West	0.29	19.4%	6.3pp	27pp	1
11	Hertfordshire	East of England	0.29	12.6%	4.6pp	34pp	20
12	Sheffield	Yorkshire and the Humber	0.29	28.4%	6pp	31pp	22
13	Southend-on-Sea	East of England	0.29	22.7%	7.9pp	22pp	2
14	Redcar and Cleveland	North East	0.28	27.7%	7.8pp	25pp	26
15	Northumberland	North East	0.28	20.5%	5.6pp	30pp	28
16	Cheshire West & Chester	North West	0.28	18.3%	5pp	34pp	29

17	North Somerset	South West	0.28	13.7%	2.7pp	31pp	31
18	Leeds	Yorkshire and the Humber	0.28	24.2%	5.5pp	28pp	32
19	South Tyneside	North East	0.28	27.8%	8.2pp	27pp	33
20	Barnet	London	0.27	16.8%	5.3pp	23pp	23
21	Bracknell Forest	South East	0.27	11.9%	4.1pp	27pp	35
22	Bromley	London	0.27	16.4%	5pp	28pp	18
23	Salford	North West	0.27	32.9%	8.3pp	21pp	36
24	Derby	East Midlands	0.27	24.1%	7.1pp	29pp	37
25	Merton	London	0.26	22.5%	6.6pp	26pp	38
26	Lancashire	North West	0.26	21.7%	5.8pp	27pp	30
27	Bristol, City of	South West	0.26	26.4%	7.4pp	30pp	39
28	Blackpool	North West	0.26	43.4%	8.9pp	26pp	41
29	Surrey	South East	0.25	11.2%	4pp	36pp	42
30	Bexley	London	0.25	21.1%	6.5pp	21pp	3
31	Reading	South East	0.25	20.9%	6.1pp	27pp	12
32	Hampshire	South East	0.25	15.3%	4.3pp	34pp	43
33	Hartlepool	North East	0.25	36.9%	11.5pp	24pp	44
34	Havering	London	0.25	19.2%	4.4pp	27pp	45
35	Stockport	North West	0.25	19.1%	4.3pp	34pp	47
36	Wigan	North West	0.24	22.7%	6.3pp	28pp	49
37	Telford and Wrekin	West Midlands	0.24	25.6%	5pp	22pp	25
38	Sefton	North West	0.24	23.8%	5.1pp	25pp	50
39	Southwark	London	0.24	31.6%	7pp	21pp	51

40	St. Helens	North West	0.24	23.2%	5.2pp	30pp	52
41	Haringey	London	0.23	23.1%	4.2pp	27pp	55
42	East Sussex	South East	0.23	19.9%	4pp	27pp	56
43	Essex	East of England	0.23	16.3%	3.9pp	27pp	48
44	Wandsworth	London	0.23	25.5%	5.7pp	26pp	59
45	Kingston Upon Hull, City of	Yorkshire and the Humber	0.23	29.5%	5.5pp	23pp	60
46	Walsall	West Midlands	0.23	33%	7.4pp	24pp	46
47	East Riding of Yorkshire	Yorkshire and the Humber	0.23	19.5%	3.8pp	30pp	61
48	Milton Keynes	South East	0.23	19.1%	4.4pp	24pp	62
49	Warwickshire	West Midlands	0.23	18.9%	4.4pp	30pp	40
50	Cumberland	North West	0.23	20.3%	4.9pp	26pp	63
51	Bournemouth, Christchurch and Poole	South West	0.23	19.5%	6.1pp	24pp	34
52	Wirral	North West	0.22	33.6%	6.3pp	16pp	4
53	Brighton and Hove	South East	0.22	20.4%	4.8pp	33pp	64
54	Kent	South East	0.22	24.2%	6.5pp	18pp	6
55	Suffolk	East of England	0.22	19%	3.8pp	27pp	65
56	Cambridgeshire	East of England	0.22	16.6%	3.6pp	32pp	66
57	Blackburn with Darwen	North West	0.22	23.7%	6.3pp	27pp	67
58	Brent	London	0.22	17.6%	4.4pp	21pp	68
59	Croydon	London	0.22	29.7%	7.1pp	23pp	69

60	Derbyshire	East Midlands	0.22	21.8%	4pp	30pp	70
61	Sunderland	North East	0.22	31.7%	7.4pp	26pp	71
62	Gateshead	North East	0.22	26%	6.4pp	29pp	72
63	Tameside	North West	0.22	25.6%	6.7pp	24pp	73
64	Oxfordshire	South East	0.22	13.6%	3.2pp	34pp	74
65	York	Yorkshire and the Humber	0.22	14.1%	4.7pp	32pp	75
66	Richmond upon Thames	London	0.22	13.2%	2.4pp	32pp	76
67	Swindon	South West	0.22	19.4%	4pp	22pp	77
68	Oldham	North West	0.22	27.4%	5.1pp	21pp	78
69	Kirklees	Yorkshire and the Humber	0.22	26.6%	5.2pp	25pp	58
70	Cheshire East	North West	0.22	14.2%	4.8pp	36pp	79
71	West Northamptonshire	East Midlands	0.22	14.5%	3.3pp	23pp	80
72	Darlington	North East	0.22	24.7%	6.7pp	33pp	81
73	North Northamptonshire	East Midlands	0.21	17.6%	4.8pp	25pp	82
74	Leicester	East Midlands	0.21	24.5%	5.4pp	18pp	83
75	Bury	North West	0.21	22.1%	5.4pp	22pp	84
76	Westmorland & Furness	North West	0.21	13.6%	3.1pp	24pp	57
77	Birmingham	West Midlands	0.20	36.7%	5.8pp	19pp	53
78	Thurrock	East of England	0.20	19.9%	4.3pp	26pp	87
79	South Gloucestershire	South West	0.20	14.2%	3.8pp	30pp	90

80	Windsor and Maidenhead	South East	0.20	11.4%	2.7pp	27pp	91
81	Bedford	East of England	0.20	17.6%	4pp	28pp	93
82	Harrow	London	0.20	17.7%	4.9pp	28pp	94
83	Westminster	London	0.20	33.8%	6.6pp	15pp	95
84	Norfolk	East of England	0.20	20%	3.8pp	25pp	96
85	Staffordshire	West Midlands	0.20	16.9%	4.1pp	26pp	97
86	County Durham	North East	0.20	28.4%	6.7pp	26pp	98
87	Camden	London	0.20	39.6%	9.4pp	23pp	99
88	Bradford	Yorkshire and the Humber	0.20	28.3%	4.8pp	21pp	100
89	Hillingdon	London	0.20	19.6%	4.7pp	22pp	102
90	Doncaster	Yorkshire and the Humber	0.20	25.9%	5.1pp	26pp	103
91	Sutton	London	0.20	19.6%	5.3pp	23pp	19
92	Dudley	West Midlands	0.20	22.3%	4.6pp	25pp	104
93	Bath and North East Somerset	South West	0.19	14.8%	4.7pp	33pp	105
94	Bolton	North West	0.19	24.6%	5.6pp	25pp	106
95	Middlesbrough	North East	0.19	39.2%	5.1pp	28pp	107
96	Lincolnshire	East Midlands	0.19	24.5%	5.9pp	19pp	21
97	West Sussex	South East	0.19	12.5%	2.9pp	30pp	108
98	Nottinghamshire	East Midlands	0.19	19%	5pp	30pp	109
99	Halton	North West	0.19	37%	6.4pp	24pp	110
100	Wokingham	South East	0.19	8.7%	1.6pp	30pp	111

101	North Yorkshire	Yorkshire and the Humber	0.19	15.1%	3.8pp	29pp	89
102	Portsmouth	South East	0.19	29.4%	5.6pp	21pp	112
103	Worcestershire	West Midlands	0.19	16.4%	5pp	30pp	113
104	Buckinghamshire	South East	0.19	14.6%	4.4pp	23pp	8
105	Nottingham	East Midlands	0.18	35.1%	6.9pp	22pp	114
106	Southampton	South East	0.18	30.7%	6.7pp	28pp	115
107	Calderdale	Yorkshire and the Humber	0.18	24.5%	5.2pp	27pp	85
108	Ealing	London	0.18	23%	5pp	17pp	116
109	Coventry	West Midlands	0.18	26%	4.4pp	20pp	117
110	Peterborough	East of England	0.18	24.1%	4.4pp	19pp	119
111	Wakefield	Yorkshire and the Humber	0.18	21.6%	4.6pp	30pp	120
112	Enfield	London	0.18	26.7%	4.1pp	17pp	92
113	Lambeth	London	0.18	32.6%	4.8pp	15pp	121
114	Gloucestershire	South West	0.18	17%	3.5pp	28pp	54
115	Wolverhampton	West Midlands	0.18	36.7%	6.7pp	21pp	88
116	Wiltshire	South West	0.18	14.5%	3pp	29pp	101
117	Leicestershire	East Midlands	0.18	13.4%	2.9pp	30pp	122
118	Medway	South East	0.18	25.3%	5.8pp	15pp	17
119	Kensington and Chelsea	London	0.18	34%	7.7pp	19pp	123
120	Rotherham	Yorkshire and the Humber	0.17	24.2%	4.4pp	26pp	124
121	Barnsley	Yorkshire and the Humber	0.17	26.5%	3.7pp	25pp	125

122	Herefordshire, County of	West Midlands	0.17	15.2%	3.9pp	27pp	126
123	Somerset	South West	0.17	17.7%	3.3pp	28pp	127
124	Greenwich	London	0.17	23.6%	4.3pp	20pp	128
125	Manchester	North West	0.16	39.5%	5.6pp	21pp	129
126	Hackney	London	0.16	41.4%	4.1pp	18pp	130
127	Central Bedfordshire	East of England	0.16	11.7%	2.8pp	26pp	131
128	Redbridge	London	0.16	18.1%	3.1pp	20pp	118
129	Lewisham	London	0.16	28.2%	5.6pp	23pp	132
130	North Lincolnshire	Yorkshire and the Humber	0.16	24.3%	3.3pp	24pp	133
131	Rochdale	North West	0.16	28.8%	5.4pp	20pp	134
132	Tower Hamlets	London	0.16	39.1%	7.1pp	10pp	135
133	West Berkshire	South East	0.16	12.7%	3.1pp	35pp	136
134	Islington	London	0.16	41%	8.1pp	22pp	137
135	Dorset	South West	0.15	19.4%	2.7pp	24pp	138
136	Luton	East of England	0.15	23%	4.4pp	18pp	139
137	Hounslow	London	0.15	23.6%	4.6pp	18pp	141
138	Slough	South East	0.15	20.6%	5pp	16pp	27
139	Kingston upon Thames	London	0.13	14%	3.5pp	24pp	86
140	Sandwell	West Midlands	0.13	29.9%	4pp	19pp	143
141	Devon	South West	0.13	17.4%	3.1pp	28pp	142
142	Shropshire	West Midlands	0.13	15.9%	2.6pp	24pp	144
143	Waltham Forest	London	0.12	24.1%	3.8pp	19pp	145



The Sutton Trust
9th Floor
Millbank Tower
21–24 Millbank
London, SW1P 4QP

T: 020 7802 1660

F: 020 7802 1661

W: www.suttontrust.com

Twitter/X: [@suttontrust](https://twitter.com/suttontrust)