



Department  
for Education

Research Report DFE-RR235

# **Pupils not claiming free school meals**

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The views expressed in this report are the authors' and do not necessarily reflect those of the Department for Education.

The aim of this paper is to present estimates of the numbers and proportions of pupils who are **entitled** to receive free school meals (FSM) but are not currently **claiming**.

## **Key findings**

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- Benefits data from Her Majesty's Revenue and Customs (HMRC) suggests that around 1.4 million (21%) of children aged 4-15 in England are entitled to receive FSM.
- School Census data shows that around 1.2 million (18%) of 4-15 year old pupils in maintained schools are registered to claim FSM.
- Therefore around 200,000 pupils (**3% of all pupils aged 4-15**) appear to be entitled but are not **claiming FSM**.
- This means **14% of pupils entitled to FSM are not claiming them**.
- In the South East and East of England nearly one quarter of entitled pupils are not claiming FSM, which contrasts sharply with the North East where the equivalent figure is 2%.
- At local authority (LA) level under-registration rates range between 0% and 33%. LAs with the highest under-registration rates are Buckinghamshire and Richmond (both 33%), and Suffolk and Surrey (32%).
- The proportion of pupils entitled to FSM decreases with age: 24 % of 5 year olds are entitled compared to 18% of 15 year olds.
- Of those pupils entitled to FSM, the proportion not claiming FSM is the same for both primary school and secondary school aged pupils.
- Analysis using survey data suggests that pupils with the following characteristics, which are not directly linked to the FSM criteria, have lower likelihoods of claiming FSM. This is after other characteristics have been taken into account:
  - pupils living in a less deprived area;
  - pupils attending schools with a lower school FSM rate;
  - pupils from families with higher status occupations (i.e. professional rather than routine occupations);
  - pupils living in a family with higher parental qualifications; and
  - pupils of Chinese ethnic origin.
- There is some evidence to suggest that families entitled to FSM while in some part-time work are less likely to claim FSM than those on out-of-work benefits.

## **Terminology - see section 1 for full details**

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- **Entitled to FSM** – Pupils are entitled to receive FSM if they live in households claiming qualifying benefits
- **Registered and claiming FSM** – This relates to those who meet the entitlement criteria and register at the school to claim FSM. This is what is reported by the School Census and described in DfE publications as “known to be eligible for and claiming FSM”
- **Taking FSM** – This relates to how many of the pupils registered to claim FSM actually take the meal on any given day

## Contents

<b>Key findings .....</b>	<b>1</b>
<b>Terminology - see section 1 for full details.....</b>	<b>1</b>
<b>1. Overview .....</b>	<b>3</b>
1.1 FSM criteria .....	3
<b>2. Patterns of FSM claiming rates.....</b>	<b>4</b>
2.1 Latest FSM claiming rates at England level.....	5
2.2 Time series of FSM claiming rates.....	5
2.3 FSM claiming rates by age.....	6
2.4 FSM claiming rates by cohort.....	7
2.5 What do we know about pupils coming on and off FSM? .....	8
2.6 Early years and post-16 pupils .....	8
2.7 FSM taken by those claiming .....	10
<b>3. How many entitled pupils are not claiming FSM?.....</b>	<b>10</b>
3.1 Overall FSM registration rates at England level.....	11
3.2 Pupils entitled to FSM, and under-registration rates, by age.....	11
3.3 Under-registration rates at regional level.....	12
3.4 Under-registration rates at local authority level .....	13
<b>4. Factors associated with pupils not claiming FSM.....</b>	<b>17</b>
4.1 Modelling the impact of pupil characteristics on the odds of claiming FSM .....	17
4.2 The impact of being on out-of-work rather than other benefits.....	21
<b>5. Note outlining the differences between the estimates in this paper and earlier estimates.....</b>	<b>23</b>
<b>6. References .....</b>	<b>23</b>
<b>Annex .....</b>	<b>24</b>

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## 1. Overview

The main objective of this research report is to present estimates of the numbers and proportions of pupils who are **entitled** to receive free school meals (FSM) but are not **claiming**. This is new analysis carried out using Her Majesty's Revenue and Customs (HMRC) Tax Credits and Benefits data alongside information from the Department for Education's School Census. In order to put these new figures in context, the report begins by drawing together relevant existing statistics from the School Census on patterns of pupils claiming FSM. This is followed by the new analysis looking at the proportion of entitled pupils who are claiming FSM (the registration rate), how this varies by age, and highlighting regions and local authorities (LAs) where under-registration rates are high. The paper ends with a look at some of the pupil characteristics of those not claiming FSM.

### 1.1 FSM criteria

In England, pupils in state-funded schools are **entitled to receive** FSM if their parents are in receipt of any of the following benefits:

- Income Support
- Income-based Job Seekers' Allowance
- Income-related Employment and Support Allowance
- Support under Part VI of the Immigration and Asylum Act 1999
- the Guaranteed element of State Pension Credit
- Child Tax Credit, provided they are not also entitled to Working Tax Credit and have an annual gross income of no more than £16,190, as assessed by HMRC<sup>1</sup>

Children who receive a qualifying benefit in their own right are also entitled to receive FSM.

In order to **claim FSM**, families who meet the entitlement criteria outlined above have to register for FSM via schools or LAs. Some LAs have online forms which allow parents to apply quickly through their website. Other LAs will ask parents to complete a hand written form, or ask them to contact their child's school directly. Pupils at Academies apply for free school meals via the Academy. This could be online or by completing an application form.

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<sup>1</sup> Where a parent is entitled to Working Tax Credit run on – the payment someone receives for a further four weeks after they stop qualifying for Working Tax Credit - their children are entitled to free school meals.

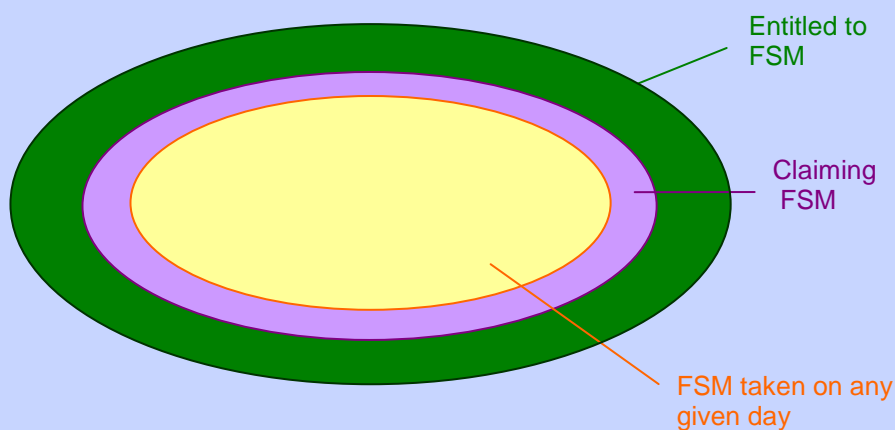
## Key definitions

**Entitled to FSM** –Pupils are entitled to receive FSM if they live in households claiming qualifying benefits (outlined in the section above). Not all families entitled to receive FSM, go on to claim them. The School Census does not collect information on pupils entitled to receive FSM, only those registered to claim them.

**Registered and claiming FSM** – This relates to those who meet the entitlement criteria and register at the school to claim FSM. This is what is recorded by the School Census. This is also what is published in the Department’s Statistical Releases, where it is referred to as “Number known to be eligible for and claiming free school meals”.

**Taking FSM** – This relates to how many of the pupils registered to claim FSM actually take the meal on any given day. The total number of those taking FSM on a snapshot date is recorded on the School Census.

The following diagram illustrates the hierarchy of these three definitions. This diagram will be used throughout the note to help visualise which definition is being referred to, and will be populated with corresponding numbers and proportions throughout the paper.

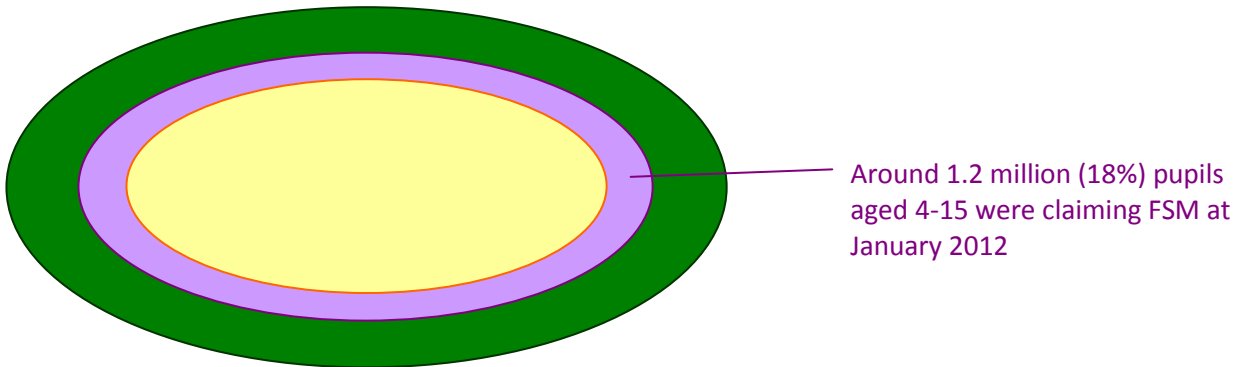


## 2. Patterns of FSM claiming rates

This section focuses on pupils registered to claim FSM according to the Schools Census. The FSM claiming rate is pupils claiming FSM as a proportion of all pupils of the same age. Data for previous years is readily available, allowing a comprehensive historical picture.

## 2.1 Latest FSM claiming rates at England level

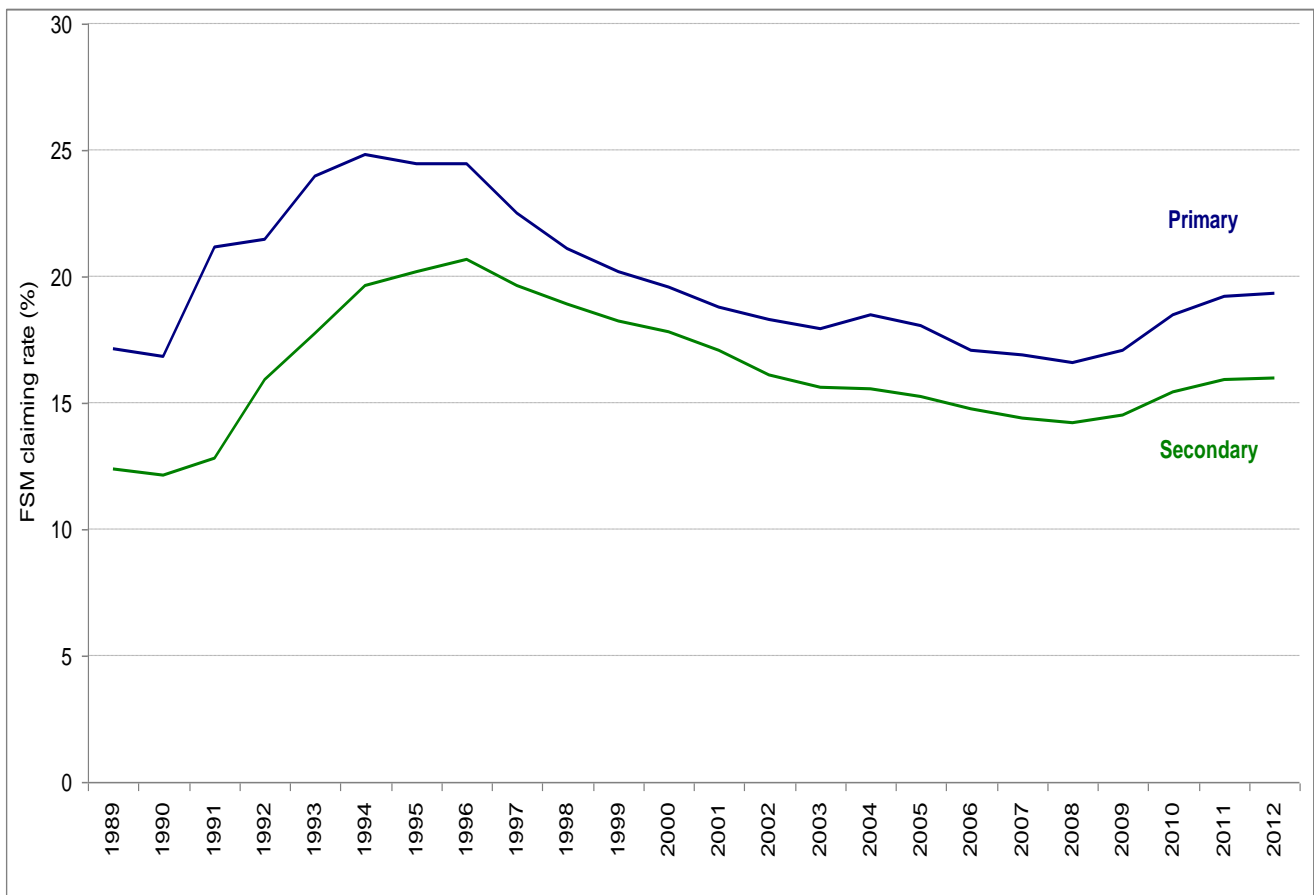
At January 2012, around 1.2 million 4-15 year old school pupils in maintained schools were registered as claiming FSM, equating to approximately 18% of all pupils of the same age.



## 2.2 Time series of FSM claiming rates

FSM claiming rates have varied over time. As shown in Chart 1 below, FSM rates rose in the early 1990s but then fell steadily from 1996 until about 2008. Since then rates have increased, however they still remain substantially (around 5 percentage points) lower than the peak in the mid 90s.

**Chart 1: Time series of FSM claiming rates (i.e. pupils claiming as a proportion of the whole cohort), by primary and secondary school aged pupils.**



**Source: School Census 1989 – 2012.**

Rates are on the same basis as the current performance tables. This includes (i) pupils aged 5-15 who have full-time or part-time attendance (ii) full-time under 5's. Figures between 1989 – 2006 have been approximated onto that basis.

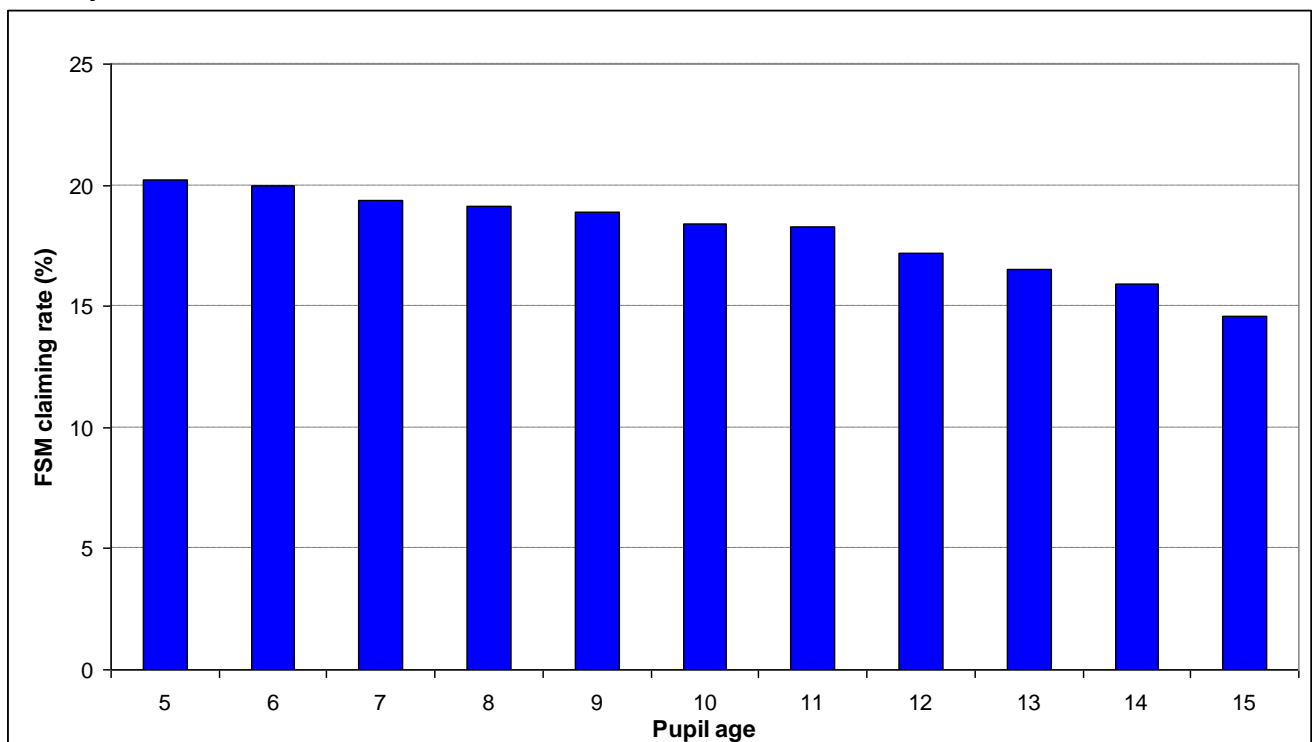
The changing FSM claiming rate is partly linked to the economy. As outlined in section 1, FSM entitlement is based on families being in receipt of certain benefits, some of which are out-of-work benefits. For those families qualifying for FSM through being in receipt of benefits linked to being currently unemployed but seeking employment, the economic climate is an important factor in their chances of finding work. So as would be expected, FSM rates began rising during the early 90s recession, and had been falling through to 2008 but have risen over the last few years in line with the economic climate.

However, there are other pupils who qualify through their families being in receipt of other benefits such as Income Support (e.g. paid to lone parents who have a child aged under 5), Pension Credit or sickness/disability benefits. These families are less likely to be seeking employment and therefore are less affected by the economic climate.

### 2.3 FSM claiming rates by age

Chart 1 above shows the FSM claiming rate is higher in primary schools (19.3% as at January 2012) compared to secondary schools (16.0% as at January 2012). Chart 2 below provides FSM claiming rates for pupils of different ages. This shows there is a gradual decrease in claiming rates the older the age group, with FSM rates tapering off more substantially between ages 11 – 16. This is revisited in section 3.2, which compares these claiming rates with the proportion of pupils entitled to FSM by age.

**Chart 2: FSM claiming rates (i.e. pupils claiming FSM as a proportion of the total cohort) by age at January 2012**



Source: School Census 2012



## 2.4 FSM claiming rates by cohort.

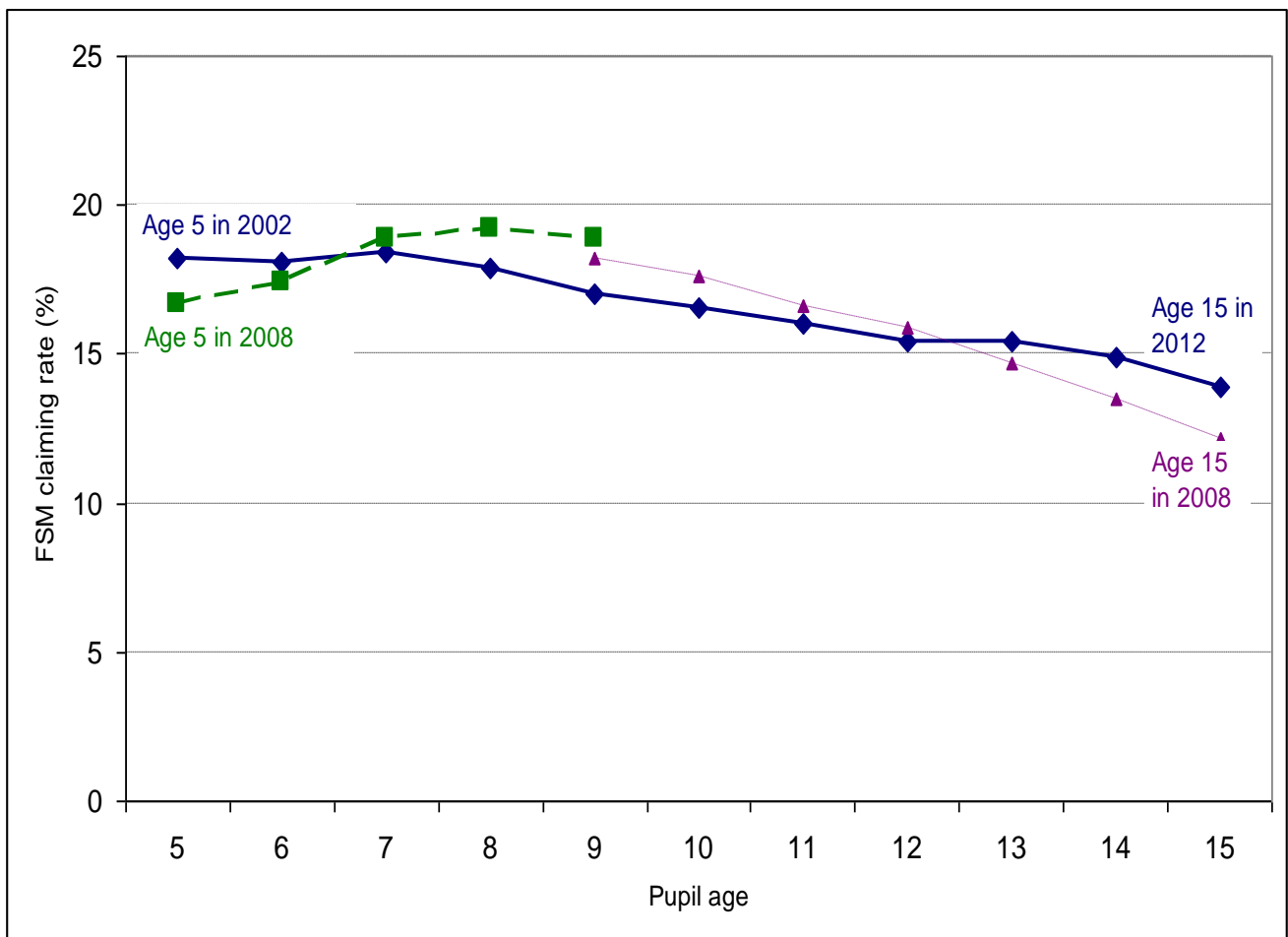
This paper has shown that the overall proportion of pupils registered to claim FSM fluctuates over time, and it also declines as pupils get older. This section looks at these two factors together by following individual cohorts over time.

In chart 3 below, the blue solid line follows the cohort who were aged 5 in 2002 through to 2012 when they were 15. The proportion of the cohort registered to claim FSM initially declined as the cohort got older. But it flattened out in the latter years, at the point where the overall FSM rates were increasing as the recession took effect.

The purple dotted line follows an older cohort; from 2002 when they were aged 9 through to age 15 in 2008 (the age of FSM claimants was not collected before 2002). Overall FSM rates were falling throughout this period resulting in a steep decline for this cohort.

Finally, the green dashed line follows a younger cohort who started school at the beginning of the recession in 2008. In contrast to the usual pattern of FSM claiming rates declining by age, the claiming rate increased year-on-year as the cohort got older, with only a small drop in 2012 at age 9.

**Chart 3: FSM claiming rates (i.e. pupils claiming FSM as a proportion of the total cohort) by different cohorts over time**



Source: School Census 2002 - 2012

This means that when looking at a snapshot across the same time period as we did in section 2.3, and thereby comparing pupils under a similar economic climate and benefits rules, there is a reduction in

FSM claiming rates by age. However, this section shows that we cannot assume that the FSM rate will drop for each cohort as they get older, as the actual FSM rate for each age is affected by the specific time period.

## 2.5 What do we know about pupils coming on and off FSM?

The cohort analysis in the section above shows how the proportion of pupils who are claiming FSM changes over time. As the analysis is based on snapshot data at January of each year it does not provide any indication of how frequently pupils come on or off FSM. It is possible to follow the registration status of the exact same pupils by linking termly school census records. Estimates derived by doing this linking show that on average from one term to the next, 8% of pupils registered to claim FSM come off FSM, a further 6% come off by the next term, followed by a further 5% the term after. This gives a yearly churn rate of around 20%, meaning 1 in 5 pupils who were claiming FSM at the beginning of the year were no longer claiming FSM by the end of the year. These pupils are replaced by a similar number of new pupils claiming FSM.

## 2.6 Early years and post-16 pupils

The figures presented so far have focussed on pupils aged 4-15 (i.e. those in reception to year 11). For pupils outside the 4-15 age range, the number of pupils claiming FSM is collected via the School Census, however it is not possible to estimate the numbers entitled to receive FSM. This is because entitlement depends not only on household benefits status but also on whether individuals are in full-time schooling and the type of institution they attend, explained further below. It is therefore not possible to estimate the under-registration rate (i.e. the number of pupils not claiming FSM as a proportion of those entitled) for pupils outside the 4-15 age range.

### Early years

Nursery aged children can receive FSM if they attend a maintained nursery school or nursery class and they attend before and after lunch sessions. Around 19,600 under fours were recorded as claiming FSM at January 2012, this equates to 6% of the under-four school population.

### Post-16 pupils

FSM is available to pupils who attend sixth forms attached to a maintained school, as long as the course of study began before the pupil reached age 18. Pupils who study in sixth form colleges, Further Education colleges or other providers are not entitled to FSM.

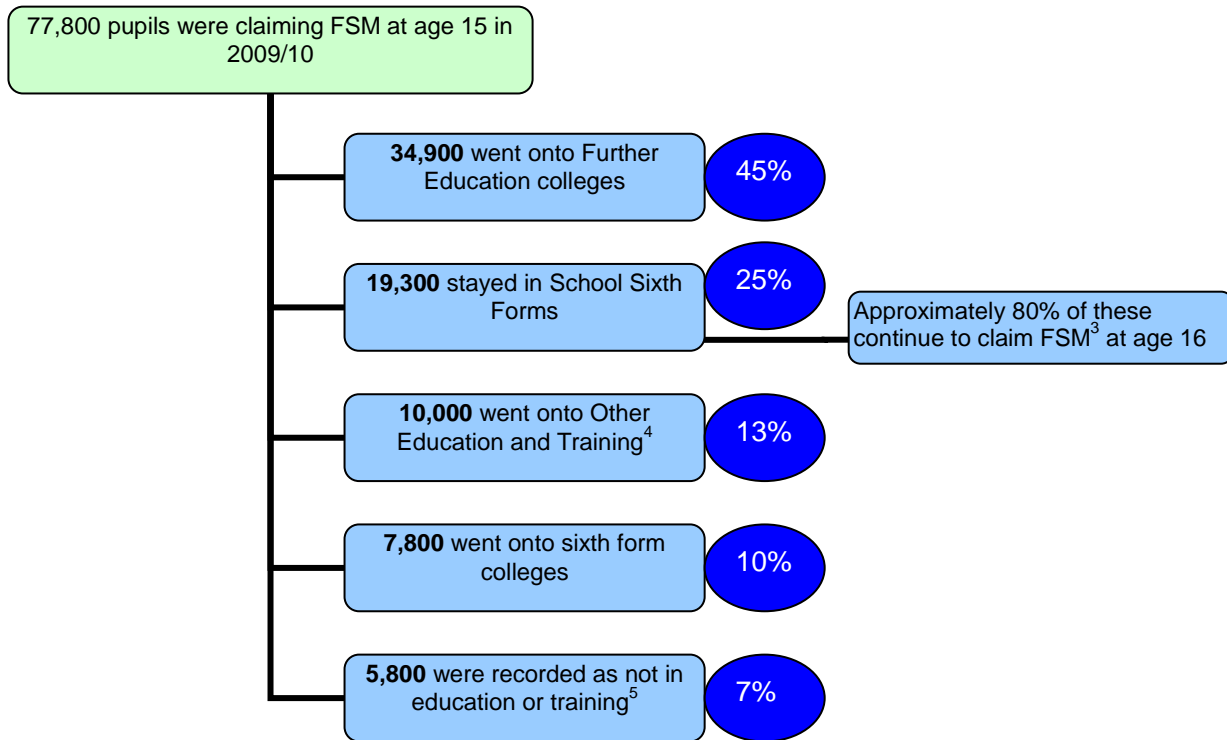
At January 2012, there were 33,250 post-16 pupils claiming FSM in school sixth forms. Analysis has been carried out to examine the number of pupils who were claiming FSM at age 15, and if and where they went on to study at age 16 (Figure 1). This shows that nearly half went on to study at further education colleges, and so were not entitled to FSM. A quarter went to school sixth form and consequently were entitled to FSM (assuming the benefits their parents received remain the same). Interestingly about 20% of these entitled pupils at age 15 did not continue to claim at age 16. It is unknown how many of these pupils might have lost entitlement due to family circumstances, however this is a steeper drop than generally seen year on year.

**Figure 1: Education at age 16 for pupils who were claiming FSM at age 15<sup>1,2</sup>**

Key

= Pupils claiming FSM at age 15 in 2009/10, using matched spring 2010 census

= Education at age 16 in 2010/11 based on DfE matched administrative data



**Notes to accompany the post-16 figures**

<sup>1</sup> These data are not the source of the official 16-18 participation estimates, but have been used in this instance because the DfE Matched Administrative Data has information on Free School Meal (FSM) status and allows tracking across academic years. The matched administrative data links several sources that cover learner attainment and participation, and tracks pupils aged 16 in 2011 back to their secondary school to determine their FSM status. This is only available for pupils in state schools.

<sup>2</sup> There are some pupils for whom FSM status at age 15 could not be established. In many instances this will be because they were in an independent school at age 15 and no FSM status is available for these pupils. The rest will include, amongst others, those who had been in Pupil Referral Units at 15 (whose FSM status has only recently been collected and is not in the data used for this analysis), incoming migrants, or home-educated pupils. It might also reflect a matching issue - young people in school sixth forms generally stayed within the same institution so their administrative data is more likely to be successfully matched.

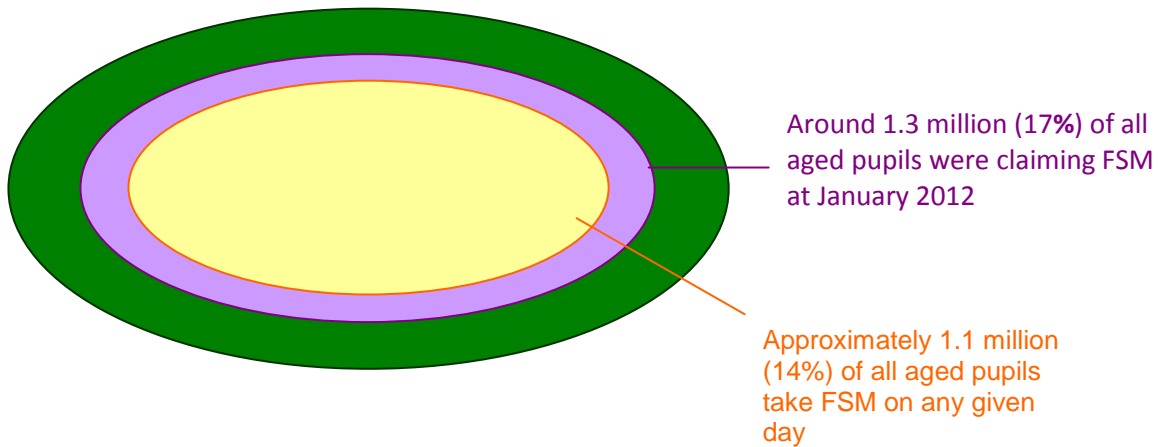
<sup>3</sup> Estimated by looking the number of 16 years olds in maintained mainstream schools who had claimed FSM at age 15, compared to how many claimed at age 16, using the school census. It is not known if the 20% drop off is because these pupils have decided not to continue claiming FSM, or because their parents' circumstances have changed so that they are no longer entitled to FSM. In addition there will be some pupils entering and leaving sixth forms, as the two censuses provide snapshot information, rather than tracking individual pupils.

<sup>4</sup> Mainly consists of Apprenticeships, Independent Training Providers and Special Schools.

<sup>5</sup> Assumed not to be in education or training as they could not be found in the matched administrative data.

### 2.7 FSM taken by those claiming

Not everyone who claims FSM takes the meal on any given day. This could be because of pupils being absent from the school on the census date, as well as other reasons.



At January 2012, of those who were registered to claim FSM, 83% took up the meal on any given day. This rose from 82% in 2009 to 83% in 2010 and then stayed static in 2011 and 2012.

The meal taken rate is higher for primary aged pupils with 85% of claiming pupils taking the meal, compared to 80% of secondary aged pupils at January 2012.

### 3. How many entitled pupils are not claiming FSM?

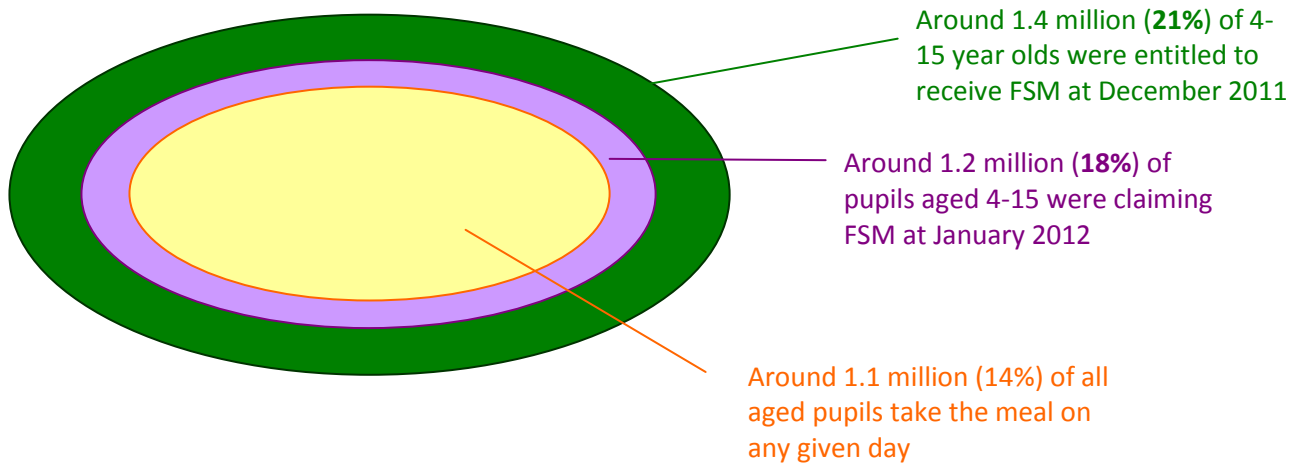
Up to this point the figures presented are from the School Census detailing how many pupils are claiming FSM and taking up the free meal. What this does not show is how many pupils meet the FSM entitlement criteria. This is important if we want to know how many more children could be claiming FSM. This is addressed in this section.

We have used HMRC tax credit and benefit data to estimate the number of pupils who are entitled to receive FSM. Combining this with the number of pupils actually claiming FSM from the School Census allows us to estimate the FSM registration rate.

$$\text{FSM registration rate} = \frac{\text{Number of pupils registered to claim FSM (using School Census)}}{\text{Number of pupils entitled to FSM (using HMRC benefits data)}}$$

### 3.1 Overall FSM registration rates at England level

Benefits data from HMRC suggests that around 1.4 million (21%) of pupils aged 4-15 in England are entitled to receive FSM. This compares to 1.2 million (18%) of pupils aged 4-15 recorded by maintained schools as claiming FSM. Therefore around 200,000 pupils (**3% of all pupils aged 4-15**) appear to be entitled but are not registered to claim FSM. This means **14% of pupils entitled** to FSM are not claiming them.



### 3.2 Pupils entitled to FSM, and under-registration rates, by age

It is known that FSM claiming rates decline by age (as shown in section 2.3), however up until now it has not been known if this is because of older pupils preferring not to claim FSM or because they are less likely to be entitled to FSM through differences in family circumstances. This recent analysis answers this question.

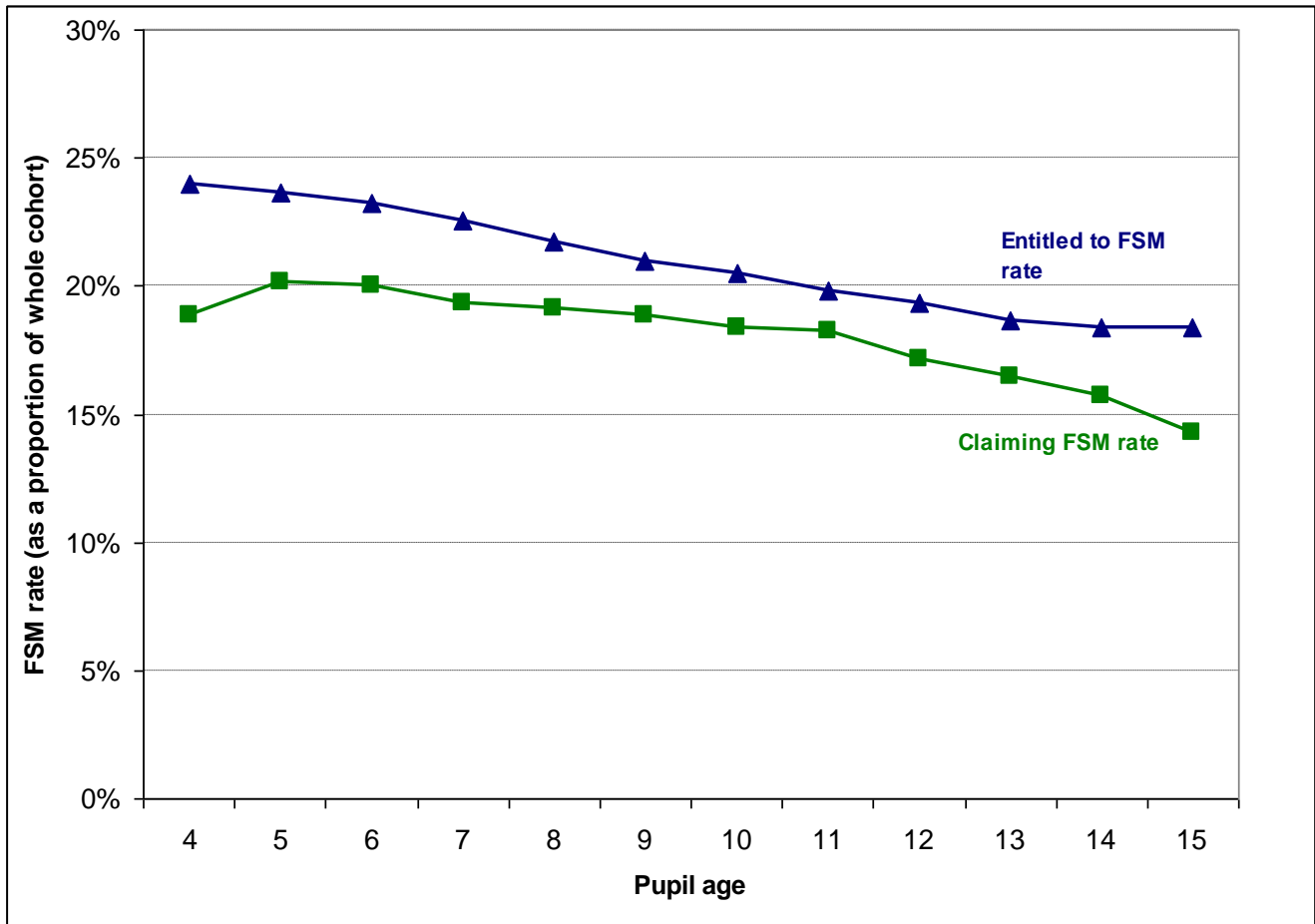
Chart 4 below illustrates that the proportion of pupils entitled to FSM steadily declines by age: 24% of 5 year olds are entitled to FSM compared to 18% of 15 year olds. This is broadly in line with the decline in pupils claiming FSM, which indicates that the reduction seen in older pupils claiming FSM is a result of these pupils not being entitled to FSM anymore. Interestingly, the under-registration rate for primary and secondary aged pupils is the same, therefore demonstrating that there is not an FSM issue in terms of older pupils not wanting to claim FSM. The exception to this is pupils aged 15, where there is a bigger disparity between entitled and claiming FSM pupils, with 20% of pupils entitled to FSM not registering to claim, the highest amongst all age groups. This might be the start of the drop off which was shown earlier between pupils claiming FSM aged 15 compared to at age 16, which again was around 20% (section 2.6). The under-registration rate for 4 year olds is also above average. This is likely to be because some entitled 4 year olds will be attending school part-time at the January census date and therefore unable to claim FSM. Table 1 shows the under-registration rate for all ages.

**Table 1: Under-registration rate (i.e. pupils not claiming FSM as a proportion of entitled pupils), by age**

Under-registration rate:	Age													Total
	4	5	6	7	8	9	10	11	12	13	14	15		
	21%	15%	14%	14%	12%	10%	10%	8%	11%	12%	15%	22%	14%	

Source: HMRC benefits data Dec 2011 & School Census January 2012

**Chart 4: The proportion of pupils entitled to FSM, compared to the proportion claiming FSM, by age**



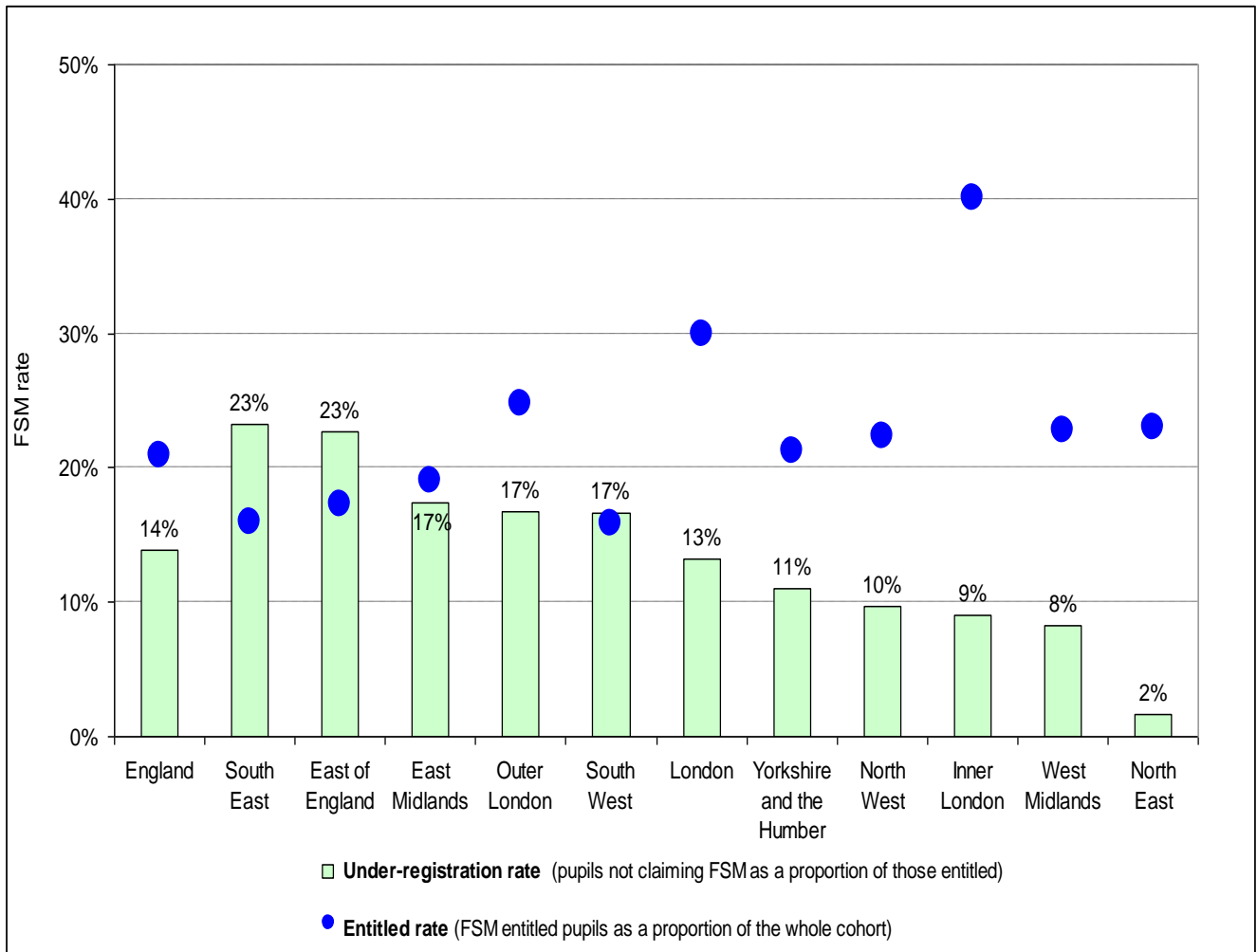
Source: HMRC benefits data December 2011 & School Census January 2012

### 3.3 Under-registration rates at regional level

There is a wide variation in entitlement and registration rates between regions, as shown in Chart 5. The South East has the highest under-registration rate, with nearly one quarter of those entitled not claiming. This compares to only 2% in the North East.

The entitlement rates (i.e. pupils entitled as a proportion of the whole cohort) are shown as blue dots on chart 5. There is a pattern between entitlement to FSM and under-registration rates; the three regions with the highest proportion of entitled pupils not claiming FSM are amongst those with the lowest proportion of all pupils being entitled to FSM. This could be suggesting that families living in areas with low overall entitlement rates are less likely to claim FSM. However, this is a broad pattern and does not apply to all regions. Inner London, for example, has the highest proportion of all pupils entitled to FSM, but has a lower proportion of those entitled claiming than two other regions. Also, the South West is shown to have one of the lowest entitlement rates, similar to South East and East of England, but its registration rate is considerably higher.

**Chart 5: FSM entitlement and under-registration rates by region.**



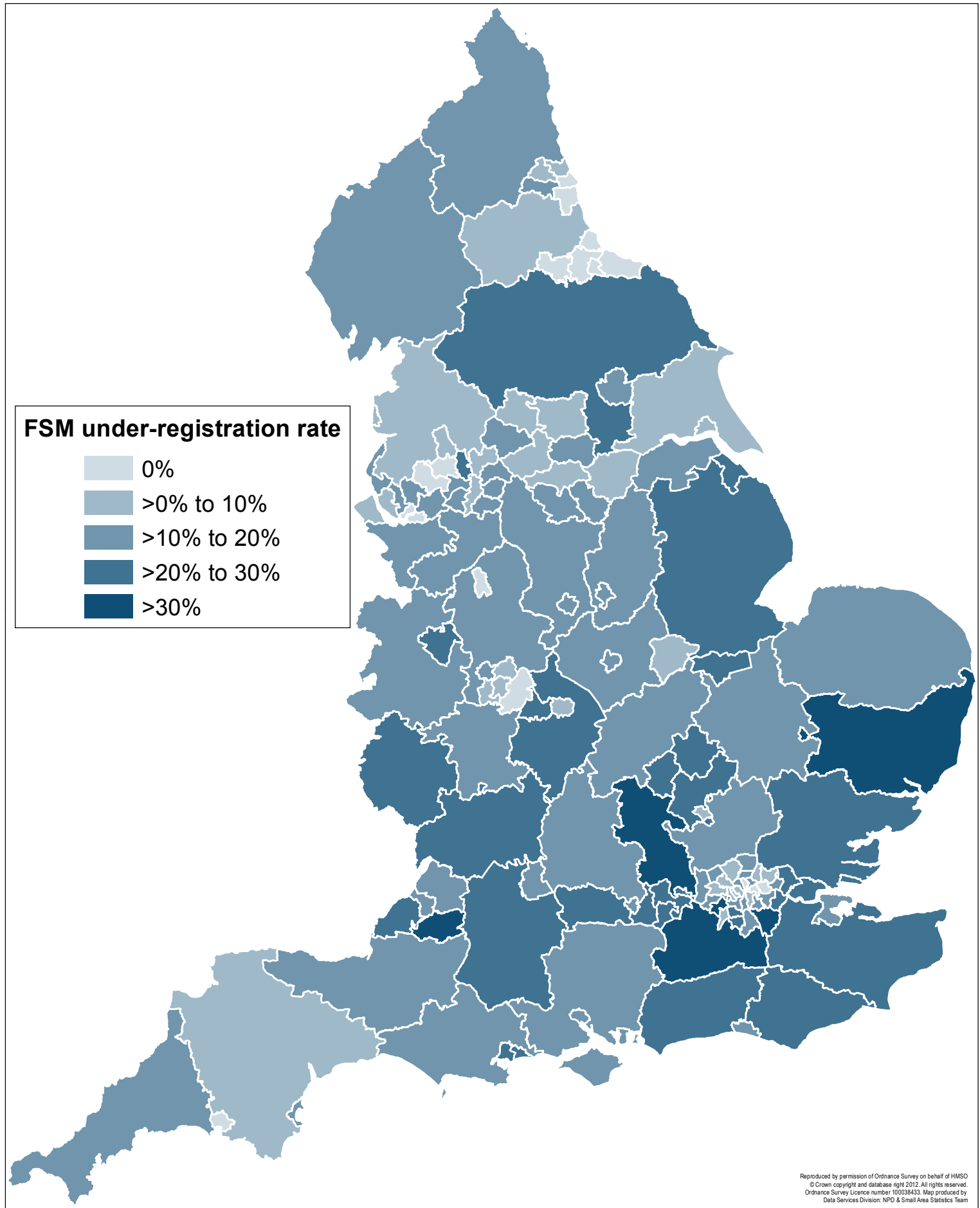
Source: HMRC benefits data December 2011 & School Census January 2012

### 3.4 Under-registration rates at local authority level

HMRC data can be disaggregated down to local levels, based on claimant home addresses, to calculate entitlement rates at local authority level. These can be compared with claiming rates from the school census. For this purpose these have also been calculated on a residence basis rather than where pupils attend school.

The variation at LA level ranges from under-registration rates of 0% (so all entitled pupils appearing to be registered) to a third (33%) of entitled pupils not claiming FSM. The map below illustrates the wide variation across LAs and within regions.

Map 1: Geographical distribution of under-registration rates (i.e. pupils not claiming FSM as a proportion of those entitled) by local authority.



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Ordnance Survey Licence number 100038433. Map produced by  
Data Services Division: NPD & Small Area Statistics Team

Source: HMRC benefits data December 2011 & Schools Census January 2012



Most LAs have around 10-20% of pupils entitled pupils not claiming. There are 6 LAs with more than 30% of entitled pupils not claiming FSM.

In contrast there are 16 LAs with apparently zero under-registration. From this analysis it is not possible to conclude that in these LAs all entitled pupils are claiming FSM. To recap, the data used to produce these estimates comes from two separate sources: (i) HMRC benefits data showing the number of pupils entitled to FSM; (ii) School Census data showing the number of pupils registered to claim FSM. These two datasets are not linked at individual level, so it is not possible to say that every pupil who appears on the HMRC entitlement data has registered to claim according to the School Census, nor vice versa. If schools or LAs do not monitor whether claiming pupils are actually still entitled to FSM, via the online eligibility checking system (ECS) or otherwise, it is possible that pupils who are not currently entitled to FSM may show up as claiming FSM. This would have the effect of inflating the registration rate. Several of the LAs appearing to have full registration do not use the ECS, which could make it more difficult to monitor FSM entitlement. However, there are other LAs not using the ECS that do not show 100% registration rates.

High registration rates might also be because of LA initiatives. For example, Newham LA participated in a pilot from 2009-2011 that gave universal FSM to all primary school pupils, and increased the claiming rate among entitled pupils. Table 2 below picks out the 10 LAs with the highest under-registration rates and table 3 displays LAs with zero estimated under-registration. The annex contains a full LA level list.

**Table 2: The 10 LAs with highest under-registration rates\***

LA	Under registration rate
Buckinghamshire	33%
Richmond upon Thames	33%
Suffolk	32%
Surrey	32%
Bath and North East Somerset	31%
Bromley	30%
Poole	30%
Milton Keynes	30%
Bracknell Forest	30%
Bournemouth	29%

\* Figures are rounded to the nearest percentage

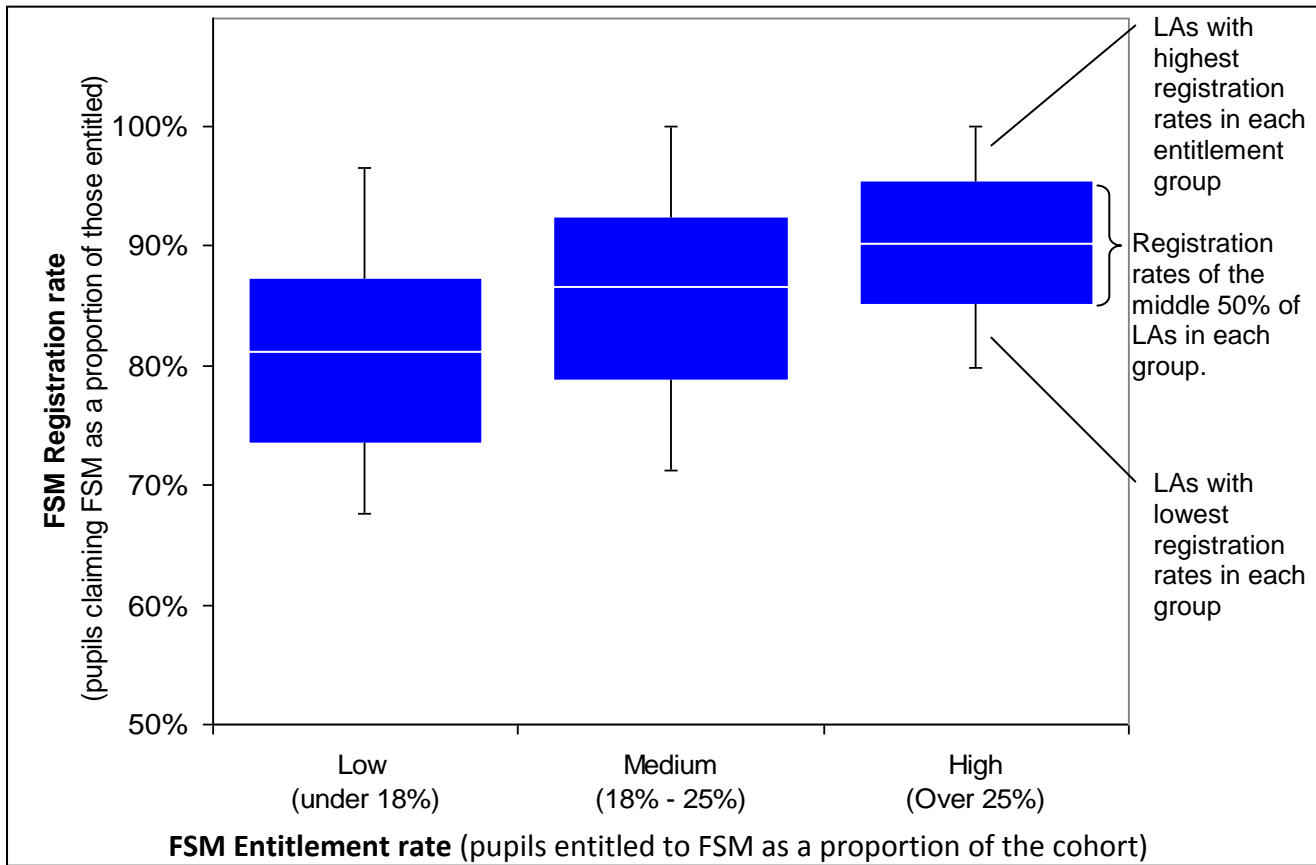
Source: HMRC benefits data December 2011  
& School Census January 2012

**Table 3: LAs showing full registration**

LAs showing full registration
Birmingham
Bolton
Darlington
Halton
Hartlepool
Islington
Middlesbrough
Newham
Plymouth
Redcar and Cleveland
South Tyneside
Stockton-on-Tees
Stoke-on-Trent
Sunderland
Tower Hamlets
Wigan

The following box-plot (chart 6) shows there is a relationship between entitlement rates (pupils entitled to FSM as a proportion of all pupils) and registration rates (pupils claiming FSM as a proportion of the cohort). LAs with a lower proportion of entitled FSM pupils, have on average lower registration rates. This could be due to pupils in areas of low entitlement being less likely to claim FSM. However, it is worth noting that in areas with low entitlement rates, a high under-registration rate may represent only a small proportion of pupils not registering. For example the 32% under-registration rate in Surrey is based on 12% of pupils being entitled to FSM and 8% claiming, so the proportion of the cohort who are not claiming is 4%, which is only marginally higher than the national average. Section 4 explores some of the reasons associated with pupils not claiming FSM.

**Chart 6: Box-plot showing the relationship between FSM entitled rates and registration rates at LA level**



Source: HMRC benefits data December 2011 & School Census January 2012

**Notes on the entitlement and registration figures in this note:**

- (i) The data are from two different periods: the data from HMRC used to estimate entitlement to FSM is as at December 2011 whereas figures for pupils claiming FSM have been taken from the January 2012 schools census.
- (ii) Both datasets are based on where claimants/pupils are living; pupils may be attending school in one LA but living in another.
- (iii) The age range for both the HMRC and School Census data has been restricted to 4-15, however the HMRC data is for all children in this age range and living in families entitled to the relevant benefits whereas the School Census only includes pupils in state-funded schools. The analysis assumes that children in independent schools or not in education would not be entitled to FSM. This means that the entitlement and claiming rates in LAs with substantial numbers of pupils in independent schools may be slightly overstated, but the registration rates are unaffected.
- (iv) The HMRC data is based on a 10% sample of records so the local level figures have been rounded to the nearest 100. Any percentages derived from the HMRC figures are also based on these rounded figures.
- (v) The HMRC data only counts those families who claim the qualifying benefits and therefore meet the entitlement criteria for FSM. It does not count families who do not take up the qualifying benefits to which they are entitled.
- (vi) The entitled to FSM group is under-counted in some ways and over-counted in other respects (however, the impact of this is estimated to be minimal due to small numbers):
  - Those pupils in families on pension credits are missed out unless also claiming Child Tax Credit;
  - Children living in families on contributory Job Seekers Allowance are included because they cannot be separated out.
- (vii) Isles of Scilly and City of London local authorities have not been included due to small numbers.

## 4. Factors associated with pupils not claiming FSM

### 4.1 Modelling the impact of pupil characteristics on the odds of claiming FSM

As the HMRC entitlement data can only be matched to School Census information at area level, it is not possible to identify which specific pupils are entitled to FSM but not registered to claim. However in-depth survey datasets can be used to provide an understanding of the characteristics of pupils who are more or less likely to claim. This section reports an analysis of the Longitudinal Study of Young People (LSYPE), which interviewed a cohort of secondary school pupils and their parents in 2004 when they were in Year 9. It is worth highlighting that the patterns shown here may not apply at other ages such as primary school aged pupils.

This analysis is also based on 2004 data and therefore is prior to the introduction of the Pupil Premium, which provides schools with additional funding for any children claiming FSM now or within the past 6 years, which might affect the composition of pupils who claim FSM.

#### Outline of the analysis

Using the Longitudinal Survey of Young People in England (LSYPE), analysis was carried out to assess the relative importance of different characteristics in predicting whether a pupil claims FSM.

The analysis modelled the characteristics most associated with claiming FSM using logistic regression. This is a statistical method which can look at the separate impact of each characteristic, after holding other characteristics constant and equal. Income and employment status are clearly related to claiming FSM, as entitlement is based on being in receipt of income-related or out of work benefits. However, this model allows the assessment of whether there are characteristics which are not directly related to the entitlement criteria that make a pupil more or less likely claiming FSM when compared to a pupil who is identical in all of the other characteristics.

The three following charts show the effect of each characteristic on the odds of claiming FSM, once all of the other factors in the model have been taken into account. The odds ratio is a measure of effect size, describing the strength of association between the characteristics and, in this case, the chance of claiming FSM. The effects shown are all relative to a pupil with the following characteristics (these are shown on the charts with the effect on the odds equal to one):

- English as a first language (non-EAL);
- No identified special education need (SEN);
- The least deprived quartile using the Income Deprivation Affecting Children Index (IDACI);
- Family occupation status is routine, based on the National Statistics Socio-Economic Classification (NS-SEC);
- Neither parent has any qualifications;
- Lives with a married couple;
- At least one parent in the household works;
- Household income is above £36,000;
- An only child;
- Attends school with FSM rate of 1-5%;
- White British;

## Results from the model

The strongest positive relationships are seen with parental employment, which is not surprising given the link between the rules for FSM entitlement and out-of-work benefits. A pupil who lives with a lone parent, who does not work, has 10 times the odds of claiming FSM compared to a pupil who is identical except for the fact that at least one parent works in their household. However, a pupil who lives with two parents but neither works has 25 times the odds claiming FSM as a pupil with at least one employed parent in their household.

Household income also has a strong relationship with claiming FSM: the odds of claiming FSM fall with rising income, although the lowest income band shows an anomalous pattern. Again the overall finding that income is a strong indicator of claiming FSM is not unexpected given the FSM entitlement criteria.

Of more interest are the following factors, which are not directly related to the FSM criteria, but which are linked to lower likelihoods of claiming FSM:

- the least deprived IDACI quartile (i.e. the least deprived 25% of local areas);
- lower school FSM rate;
- being from families with higher NS-SECs (i.e. professional rather than routine occupations);
- living in a family with higher parental qualifications; and
- Chinese pupils.

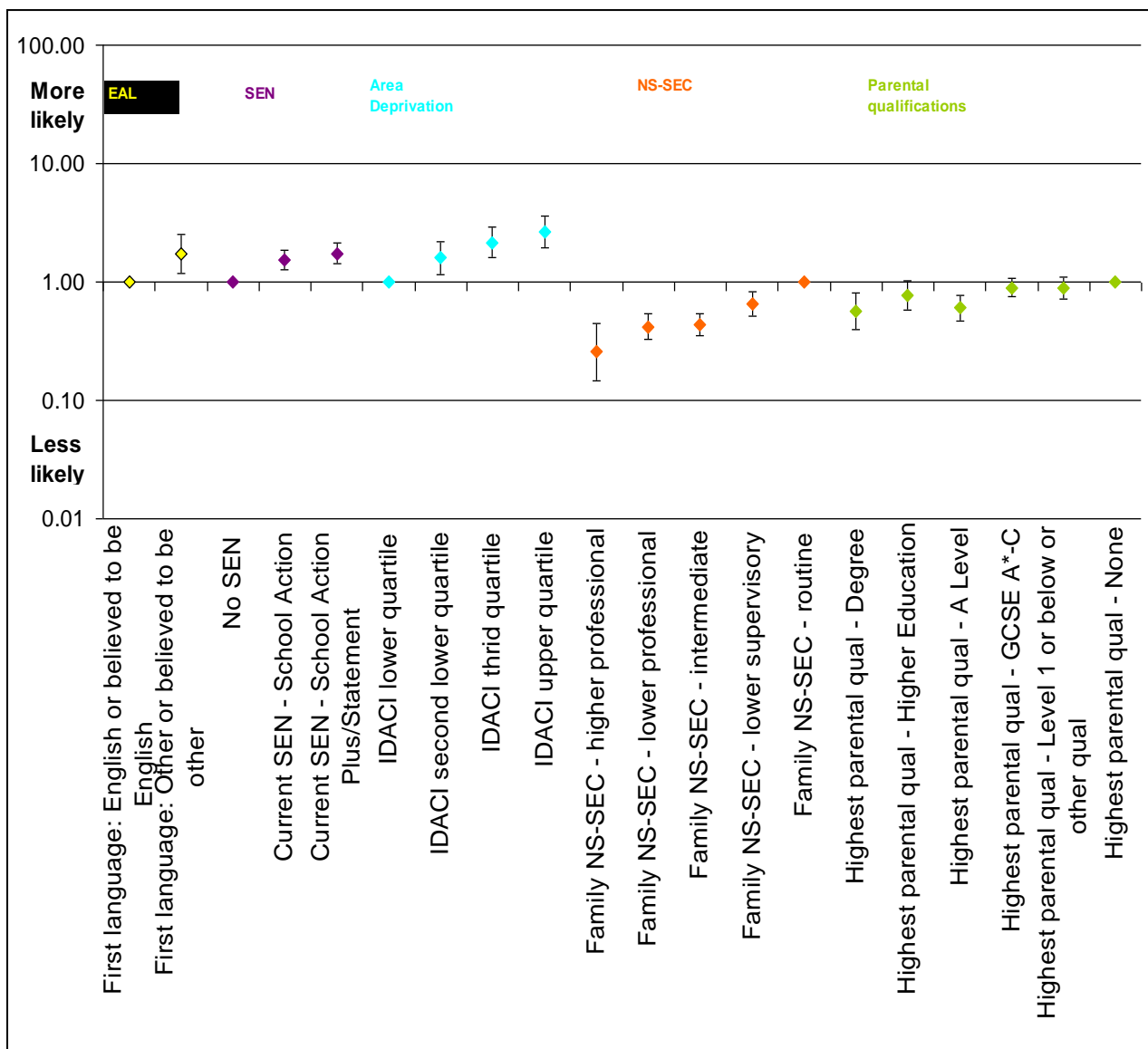
Conversely:

- Pupils with EAL and/or SEN are more likely to claim FSM than other pupils;
- Pupils in larger families with younger siblings are also more likely to claim FSM.

Chart 7 shows the effect of various pupil characteristics on the odds of claiming FSM, for pupils aged 14. When interpreting the chart, an odds effect of greater than one implies an increased likelihood of a pupil with that particular characteristic claiming FSM, all other characteristics being equal. A value of less than one implies a reduced likelihood of the pupil claiming FSM.

In addition, small sample numbers mean that some of estimated effects of characteristics have quite high degrees of uncertainty, represented by error bars in chart 7: this is particularly the case for the minority ethnicities. In some of these cases the effects of the characteristics are not statistically significant, shown where the error bar crosses 1, even though the odds effects produced in the model may be quite large. See the results for pupils of Gypsy/Roma background (chart 7iii) for an example of this.

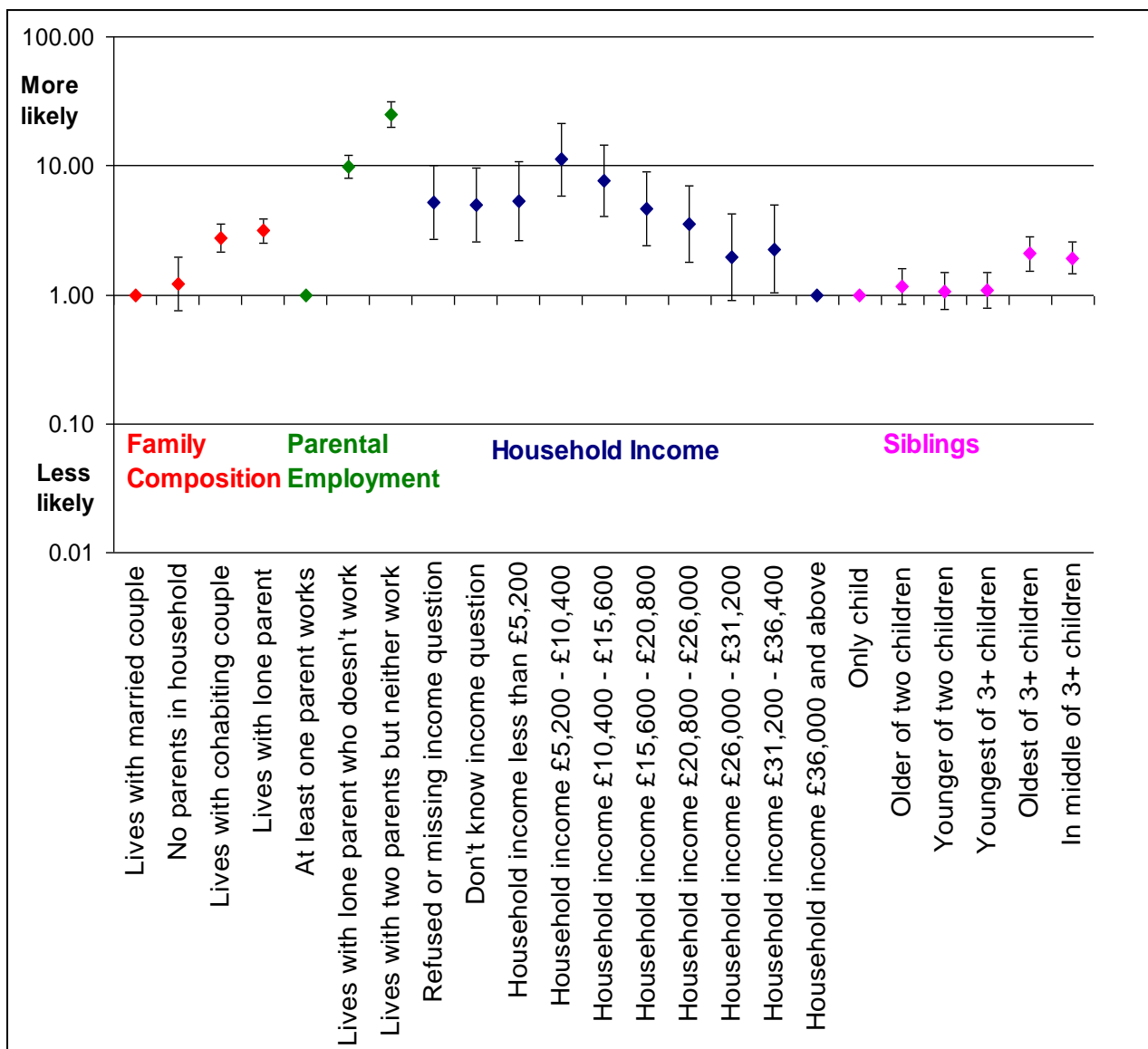
**Chart 7 (i): The effect of various pupil characteristics on the odds of claiming FSM, for pupils aged 14**



Source: Longitudinal Study of Young People in England 2004

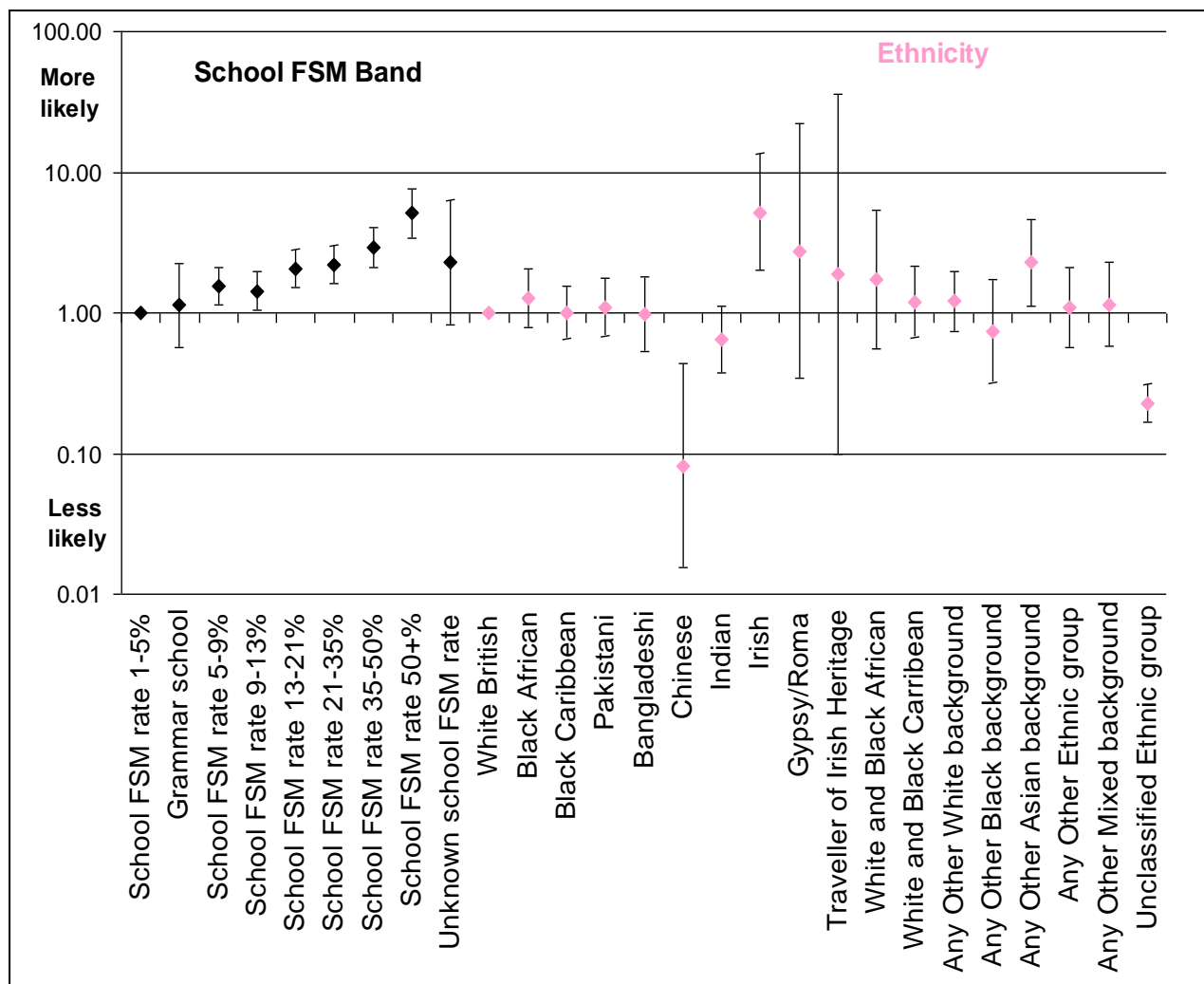
The chart above shows that, for example, the odds of a pupil with EAL claiming FSM are 1.7 times as high as a pupil who is identical in all other ways except for having English as a first language.

**Chart 7 (ii): The effect of various pupil characteristics on the odds of claiming FSM, for pupils aged 14**



Source: Longitudinal Study of Young People in England 2004

**Chart 7 (iii): The effect of various pupil characteristics on the odds of claiming FSM, for pupils aged 14**



Source: Longitudinal Study of Young People in England 2004

#### 4.2 The impact of being on out-of-work rather than other benefits.

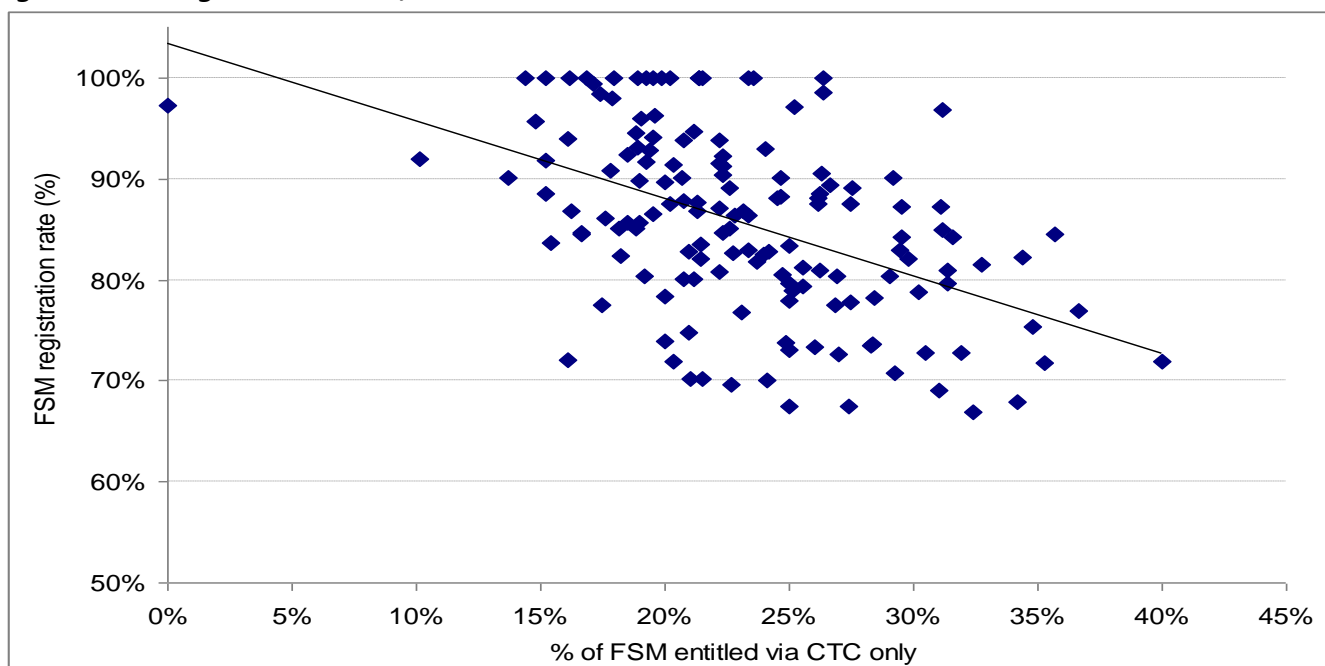
As previously mentioned, pupils are entitled to receive FSM if their families are in receipt of certain benefits. Most of these are out-of-work benefits, including Income Support, Jobseekers' Allowance and Employment and Support Allowance. In-work families who work a sufficient number of hours per week are entitled to Working Tax Credit (WTC), which disqualifies them from claiming FSM. This leaves a group of families who are working too few hours to qualify for WTC, but who are not receiving out of work benefits. These families can claim FSM provided they are eligible for Child Tax Credit (CTC) and have an income below a set threshold (currently £16,190). The majority of this group will be families in some part-time work (fewer than 16 hours in a lone parent household and 24 hours per week for couples). HMRC entitlement data separately identifies families in receipt of out-of-work benefits and this latter group, here referred to as "lower earning part-time workers". This section looks at whether the qualifying benefit, and thereby whether families are working some hours, has any impact on claiming FSM. A regression model was used to address this.

Analysis looking at the relationship between the FSM claiming rate and the qualifying benefits found that the FSM claiming rate in each LA is very strongly linked to the proportion of children on out-of-work benefits but less strongly linked to the extent of part-time low earners. The results suggest that on average the part-time low earners are less likely to claim FSM than those on out- of- work benefits. The patterns of LA FSM rates, on average, match what we might expect to see if all of the families on out-of-work benefits registered to claim FSM, while around half of the low earning part-time working families registered. This is a broad pattern only, with wide variation across LAs, and more detailed data would be required to provide

accurate estimates. However this gives an initial indication that there is some relationship between benefit status and claiming FSM, where families working some hours may be less inclined to register for FSM than those out-of-work.

The following chart provides further support for this preliminary finding. The chart plots, at LA level, the proportion of pupils entitled to FSM because they are part-time low earners (i.e. in receipt of child tax credits only) against registration rates. This shows a negative relationship between the two, so LAs with a high proportion of entitled pupils qualifying through being low earning part-time workers, tend to have lower registration rates. Again the chart shows this to be a broad pattern only, and there are a number of LAs where this pattern does not hold. A good example is the LAs with 100% registration rates: within this group there is wide range in the proportion of FSM entitled pupils qualifying via CTC only, ranging from 15% to 26%.

**Chart 8: Pupils qualifying for FSM through being part-time workers as a proportion of all entitled pupils against FSM registration rates, at LA level.**



Source: HMRC benefits data December 2011 & School Census January 2012



## 5. Note outlining the differences between the estimates in this paper and earlier estimates.

The last report on FSM under-registration was carried out by London Economics in 2008 for the School Food Trust. This used the Labour Force Survey (LFS) to estimate that approximately 24% of entitled pupils did not register to claim. Being derived from a sample survey, this figure was subject to a margin of error. It was also potentially inaccurate because the questions in the survey could not exactly replicate benefits entitlement rules, particularly as these changed over time. These caveats were spelled out in section 2.4 of the London Economics report. The report also could not make any allowance for families who may have appeared to meet the entitlement criteria for FSM through their income and working patterns, but who had not claimed the qualifying benefit and whose children were not therefore entitled to FSM.

In this current paper we have used administrative data from HMRC benefit records to show that 14% of entitled pupils have not registered to claim FSM. The HMRC administrative data provides very much more accurate estimates because it is based on a much larger sample, and because it also relates directly to the benefits which confer FSM entitlement.

It is therefore not possible to deduce any trend in FSM registration rates over time by comparing these two figures – the apparent reduction in the numbers not registering may simply reflect the improved quality of the most recent estimate.

The move to use of administrative data has the further benefit of allowing a more detailed breakdown of figures. Consequently, this report provides information down to LA level, whereas previous figures could only be quoted at regional level.

## 6. References

Department for Education (2012). Schools, Pupils and their Characteristics, January 2012 (Statistical Release ID 10/2012). <http://www.education.gov.uk/rsgateway/DB/SFR/s001071/sfr10-2012.pdf>

London Economics (2008). Assessing Current and Potential Provision of Free School Meals, June 2008 (Research report prepared for School Food Trust by London Economics). [http://www.schoolfoodtrust.org.uk/download/documents/pdf/sft\\_fsm\\_report\\_june08.pdf](http://www.schoolfoodtrust.org.uk/download/documents/pdf/sft_fsm_report_june08.pdf)

## Annex

### FSM under-registration rates at Local Authority level

Local Authority of residence	Pupils <sup>1</sup> on roll	Pupils <sup>1</sup> entitled to FSM as at Dec 2011...	...as a proportion of those on roll	Pupils <sup>1</sup> claiming FSM as at Jan 2012...	...as a proportion of those on roll	Entitled pupils <sup>1</sup> not claiming	Under-registration rate
<b>ENGLAND</b>	<b>6,783,300</b>	<b>1,423,000</b>	<b>21%</b>	<b>1,225,300</b>	<b>18%</b>	<b>197,700</b>	<b>14%</b>
Barking and Dagenham	33,000	11,500	35%	10,200	31%	1,300	11%
Barnet	42,800	9,000	21%	8,200	19%	800	8%
Barnsley	30,800	7,200	23%	7,100	23%	100	1%
Bath and North East Somerset	19,800	2,900	15%	2,000	10%	900	31%
Bedford	21,500	4,300	20%	3,200	15%	1,100	25%
Bexley	33,800	6,300	19%	4,600	14%	1,700	27%
Birmingham	166,200	54,700	33%	55,000	33%	0	0%
Blackburn with Darwen	23,800	5,700	24%	5,200	22%	500	10%
Blackpool	18,800	5,600	30%	5,300	28%	300	6%
Bolton	40,200	8,500	21%	8,600	21%	0	0%
Bournemouth	18,000	4,100	23%	2,900	16%	1,200	29%
Bracknell Forest	14,900	1,900	13%	1,300	9%	600	30%
Bradford	83,300	20,600	25%	19,000	23%	1,600	8%
Brent	40,000	12,100	30%	10,900	27%	1,200	10%
Brighton and Hove	27,900	5,900	21%	4,800	17%	1,100	18%
Bristol, City of	48,900	13,300	27%	11,500	24%	1,800	13%
Bromley	39,600	7,500	19%	5,200	13%	2,300	30%
Buckinghamshire	67,100	7,100	11%	4,800	7%	2,400	33%
Bury	25,700	5,100	20%	4,000	15%	1,100	22%
Calderdale	29,100	5,700	20%	4,900	17%	800	14%
Cambridgeshire	74,300	10,300	14%	8,300	11%	2,000	19%
Camden	17,600	7,900	45%	7,000	40%	900	11%
Central Bedfordshire	34,800	4,600	13%	3,400	10%	1,200	27%
Cheshire East	45,000	5,800	13%	4,700	10%	1,100	19%
Cheshire West and Chester	41,200	6,500	16%	5,700	14%	800	13%
Cornwall	65,000	10,500	16%	8,800	14%	1,700	16%
Coventry	44,200	11,300	26%	10,300	23%	1,000	9%
Croydon	49,700	13,500	27%	10,900	22%	2,600	19%
Cumbria	60,700	9,100	15%	7,500	12%	1,600	17%
Darlington	14,000	2,400	17%	2,800	20%	0	0%
Derby	34,200	8,200	24%	7,100	21%	1,100	13%
Derbyshire	97,100	17,100	18%	14,100	15%	3,000	18%
Devon	88,600	10,900	12%	10,600	12%	300	3%
Doncaster	40,100	9,400	23%	8,600	21%	800	9%
Dorset	48,300	6,400	13%	5,300	11%	1,100	18%
Dudley	42,100	8,500	20%	7,700	18%	800	10%
Durham	64,500	13,700	21%	13,000	20%	700	5%
Ealing	43,500	11,100	26%	10,300	24%	800	7%
East Riding of Yorkshire	40,600	4,800	12%	4,300	11%	500	10%
East Sussex	61,700	11,600	19%	9,100	15%	2,500	21%
Enfield	47,300	16,200	34%	13,500	29%	2,700	16%

1. Numbers have been rounded to the nearest one hundred.

Continued overleaf

Source: HMRC benefits data December 2011 & School Census January 2012

Local Authority of residence	Pupils <sup>1</sup> on roll	Pupils <sup>1</sup> ...as a		Pupils <sup>1</sup> ...as a		Entitled pupils <sup>1</sup> not claiming	Under-registration rate
		entitled to FSM as at Dec 2011...	proportion of those on roll	claiming FSM as at Jan 2012...	proportion of those on roll		
Essex	182,800	31,000	17%	22,900	13%	8,100	26%
Gateshead	23,600	5,800	25%	5,000	21%	800	14%
Gloucestershire	73,900	10,900	15%	8,500	12%	2,400	22%
Greenwich	34,400	11,800	34%	9,400	27%	2,400	20%
Hackney	28,600	13,700	48%	11,300	40%	2,400	18%
Halton	17,900	5,200	29%	5,600	31%	0	0%
Hammersmith and Fulham	14,300	5,900	41%	5,400	38%	500	8%
Hampshire	164,400	20,700	13%	16,800	10%	3,900	19%
Haringey	31,300	12,000	38%	10,100	32%	1,900	16%
Harrow	30,400	6,100	20%	5,300	17%	800	13%
Hartlepool	13,100	3,300	25%	3,600	27%	0	0%
Havering	32,400	6,000	18%	4,700	14%	1,300	22%
Herefordshire	21,200	3,000	14%	2,300	11%	700	23%
Hertfordshire	149,000	21,000	14%	16,900	11%	4,100	20%
Hillingdon	38,400	8,600	22%	7,100	19%	1,500	17%
Hounslow	33,100	8,400	25%	6,900	21%	1,500	18%
Isle of Wight	16,200	3,000	19%	2,700	17%	300	11%
Islington	19,500	8,800	45%	9,100	46%	0	0%
Kensington and Chelsea	8,100	2,800	34%	2,700	34%	100	2%
Kent	190,900	35,400	19%	27,900	15%	7,500	21%
Kingston upon Hull, City of	34,200	10,900	32%	10,700	31%	200	2%
Kingston upon Thames	18,600	2,100	11%	2,000	11%	100	4%
Kirklees	60,000	11,100	19%	10,800	18%	300	3%
Knowsley	21,700	7,400	34%	6,400	30%	1,000	13%
Lambeth	32,000	14,100	44%	11,300	35%	2,800	20%
Lancashire	152,800	26,600	17%	24,700	16%	1,900	7%
Leeds	93,900	21,200	23%	19,900	21%	1,300	6%
Leicester	47,600	13,800	29%	11,700	25%	2,100	15%
Leicestershire	82,000	9,400	11%	7,700	9%	1,700	18%
Lewisham	36,300	12,100	33%	10,200	28%	1,900	15%
Lincolnshire	89,400	15,000	17%	11,000	12%	4,000	27%
Liverpool	55,400	19,100	34%	17,500	32%	1,600	8%
Luton	33,000	8,100	25%	7,300	22%	800	10%
Manchester	64,900	24,400	38%	23,100	36%	1,300	5%
Medway	37,400	8,200	22%	6,600	18%	1,600	20%
Merton	23,400	5,200	22%	3,800	16%	1,400	27%
Middlesbrough	20,300	6,900	34%	7,300	36%	0	0%
Milton Keynes	37,800	7,900	21%	5,500	15%	2,400	30%
Newcastle upon Tyne	31,700	8,800	28%	8,400	27%	400	4%
Newham	48,000	15,600	33%	16,300	34%	0	0%
Norfolk	100,200	18,000	18%	14,900	15%	3,100	17%
North East Lincolnshire	21,600	6,200	29%	4,500	21%	1,700	28%
North Lincolnshire	22,000	4,200	19%	3,700	17%	500	12%
North Somerset	26,100	4,100	16%	3,200	12%	900	23%
North Tyneside	25,500	4,600	18%	4,400	17%	200	4%
North Yorkshire	71,600	8,600	12%	6,800	10%	1,800	20%

1. Numbers have been rounded to the nearest one hundred.

Continued overleaf

Source: HMRC benefits data December 2011 & School Census January 2012

Local Authority of residence	Pupils <sup>1</sup> on roll	Pupils <sup>1</sup> entitled to FSM as at Dec 2011...	...as a proportion of those on roll	Pupils <sup>1</sup> claiming FSM as at Jan 2012...	...as a proportion of those on roll	Entitled pupils <sup>1</sup> not claiming	Under-registration rate
Northamptonshire	97,100	15,900	16%	14,000	14%	1,900	12%
Northumberland	39,100	6,900	18%	6,100	16%	800	12%
Nottingham	36,900	13,500	37%	11,600	31%	1,900	14%
Nottinghamshire	98,900	18,000	18%	14,600	15%	3,400	19%
Oldham	35,600	9,500	27%	8,500	24%	1,000	10%
Oxfordshire	77,200	10,400	13%	8,400	11%	2,000	20%
Peterborough	27,500	6,800	25%	5,400	20%	1,400	20%
Plymouth	32,000	6,200	19%	6,400	20%	0	0%
Poole	17,300	2,900	17%	2,000	12%	900	30%
Portsmouth	23,700	6,000	25%	5,200	22%	800	14%
Reading	19,200	4,400	23%	3,600	19%	800	17%
Redbridge	41,000	9,000	22%	8,400	21%	600	6%
Redcar and Cleveland	18,100	3,900	22%	4,100	23%	0	0%
Richmond upon Thames	18,500	2,800	15%	1,900	10%	900	33%
Rochdale	31,500	8,100	26%	7,500	24%	600	8%
Rotherham	36,100	8,400	23%	7,200	20%	1,300	15%
Rutland	3,800	300	8%	300	8%	0	3%
Salford	28,800	8,900	31%	7,800	27%	1,100	13%
Sandwell	47,000	13,500	29%	12,300	26%	1,200	9%
Sefton	34,300	7,000	20%	5,800	17%	1,200	16%
Sheffield	67,800	15,900	23%	14,000	21%	1,900	12%
Shropshire	34,900	4,500	13%	3,900	11%	600	13%
Slough	22,000	5,400	25%	3,900	18%	1,500	28%
Solihull	28,200	4,700	17%	3,700	13%	1,000	21%
Somerset	65,300	9,300	14%	7,900	12%	1,400	15%
South Gloucestershire	35,000	3,800	11%	3,200	9%	600	16%
South Tyneside	18,800	5,100	27%	5,100	27%	0	0%
Southampton	27,400	7,200	26%	6,300	23%	900	13%
Southend-on-Sea	23,000	5,500	24%	4,300	19%	1,200	22%
Southwark	32,700	12,300	38%	11,600	35%	700	6%
St. Helens	23,500	6,000	26%	5,100	22%	900	15%
Staffordshire	105,600	14,900	14%	13,300	13%	1,600	11%
Stockport	35,800	6,000	17%	5,000	14%	1,000	17%
Stockton-on-Tees	26,000	5,400	21%	5,600	21%	0	0%
Stoke-on-Trent	34,200	8,900	26%	8,900	26%	0	0%
Suffolk	88,600	15,700	18%	10,600	12%	5,100	32%
Sunderland	35,600	8,500	24%	9,600	27%	0	0%
Surrey	129,100	16,100	12%	10,900	8%	5,200	32%
Sutton	26,200	5,000	19%	3,700	14%	1,300	26%
Swindon	29,600	5,200	18%	4,300	15%	900	17%
Tameside	30,600	7,500	25%	6,600	21%	900	12%
Telford and Wrekin	23,700	6,300	27%	4,900	21%	1,400	23%
Thurrock	24,300	5,200	21%	4,000	16%	1,200	23%
Torbay	16,000	3,500	22%	3,100	20%	400	10%
Tower Hamlets	33,300	15,800	48%	16,500	50%	0	0%

1. Numbers have been rounded to the nearest one hundred.

Continued overleaf

Source: HMRC benefits data December 2011 & School Census January 2012

Local Authority of residence	Pupils <sup>1</sup> on roll	Pupils <sup>1</sup> entitled to FSM as at Dec 2011...	...as a proportion of those on roll	Pupils <sup>1</sup> claiming FSM as at Jan 2012...	...as a proportion of those on roll	Entitled pupils <sup>1</sup> not claiming	Under-registration rate
Trafford	30,800	4,400	14%	3,800	12%	600	13%
Wakefield	42,900	9,300	22%	7,500	17%	1,800	19%
Walsall	39,500	10,500	27%	10,400	26%	100	1%
Waltham Forest	36,700	10,400	28%	9,500	26%	900	8%
Wandsworth	25,100	7,700	31%	6,600	26%	1,100	15%
Warrington	28,000	4,000	14%	3,500	13%	500	12%
Warwickshire	67,100	10,500	16%	7,600	11%	2,900	27%
West Berkshire	20,000	2,300	11%	1,700	9%	600	25%
West Sussex	97,600	13,400	14%	9,900	10%	3,500	26%
Westminster	15,500	7,300	47%	6,600	43%	700	10%
Wigan	42,400	7,600	18%	7,600	18%	0	0%
Wiltshire	59,700	7,200	12%	5,200	9%	2,000	27%
Windsor and Maidenhead	16,600	1,700	10%	1,200	7%	500	28%
Wirral	43,000	9,800	23%	9,100	21%	700	7%
Wokingham	20,700	1,500	7%	1,100	5%	400	28%
Wolverhampton	34,800	10,800	31%	9,300	27%	1,500	14%
Worcestershire	70,300	10,300	15%	9,100	13%	1,200	11%
York	21,100	2,800	13%	2,400	11%	400	15%
North East	330,500	76,100	23%	74,900	23%	1,200	2%
North West	932,200	208,800	22%	188,600	20%	20,200	10%
Yorkshire and the Humber	695,000	147,600	21%	131,300	19%	16,300	11%
East Midlands	586,900	111,600	19%	92,200	16%	19,400	17%
West Midlands	758,900	173,100	23%	158,800	21%	14,300	8%
East of England	758,900	131,000	17%	101,300	13%	29,700	23%
London	1,005,300	301,300	30%	261,600	26%	39,700	13%
South East	1,071,800	171,600	16%	131,700	12%	39,900	23%
South West	643,800	102,000	16%	85,000	13%	17,000	17%
Inner London	342,400	137,100	40%	124,800	36%	12,300	9%
Outer London	662,900	164,300	25%	136,800	21%	27,500	17%
<b>ENGLAND</b>	<b>6,783,300</b>	<b>1,423,000</b>	<b>21%</b>	<b>1,225,300</b>	<b>18%</b>	<b>197,700</b>	<b>14%</b>

1. Numbers have been rounded to the nearest one hundred.

Source: HMRC benefits data December 2011 & School Census January 2012

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