# **Assessing Current and Potential Provision of Free School Meals**

## **Economic Research on Free School Meals Entitlement and Exchequer Costs**

Final Report prepared for

**The School Food Trust** 

## Prepared by

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C	Cont	tents	Page
1	Intro	oduction	8
	1.1	Number of school children in England	8
	1.2	Current entitlement criteria for Free School Meals	9
	1.3	Current take-up of all school meals by Government Office Region	9
	1.4	Information on Free School Meals by GOR	11
	1.5	Aim of this study	14
2	Met	hodology	16
	2.1	Key data sources	16
	2.2	Variables selected for analysis	16
	2.3	Current charge-out rates	17
	2.4	Caveats associated with the analysis	18
3	Find	lings	21
	3.1	Number of entitled children under current entitlement criteria	21
	3.2	Number of entitled children under alternative entitlement criteria	<b>2</b> 3
	3.3	Relative impact of alternative policies on primary- and secondary-level entitlement	29
	3.4	Exchequer cost of alternative entitlement criteria	30
	3.5	Potential costs of universal provision of FSM	33
4	Fun	ding and practical considerations	36
	4.1	Basis on which funds flow to local authorities	36
	4.2	Basis on which funds flow to schools	37
	4.3	Ease of applying for FSMs under alternative entitlement criteria	38
A	nnex	1 Data Sources	39
A	nnex	2 Detailed methodology	44
A	nnex crite	3 Findings at GOR level under alternative entitlement	46

Tables & Figures	Page
Table 1: Charge-out rates per FSM, by GOR, 2007 (£ per meal)	18
Table 2: Cost to Exchequer of universal provision of FSMs with sensitivity analysis	35
Figure 1: Number of school children on school roll, 2008	8
Figure 2: Number of school meals taken per day, 2008	10
Figure 3: Take-up rates at primary and secondary schools, by GOR, 2008	11
Figure 4: Number of school children registered to receive FSM, 2008	12
Figure 5: Number of school children consuming FSMs per day, 2008	13
Figure 6: FSM take-up rates at primary and secondary schools, by GOR, 2008	14
Figure 7: Number of school children entitled to FSMs under current criteria, 2008	22
Figure 8: Number of school children entitled to FSMs under alternative criteria (benefit-receipt-based), 2008	26
Figure 9: Number of school children entitled to FSMs under alternative criteria (directly income-based), 2008	28
Figure 10: Exchequer cost of providing FSMs under alternative criteria (benefit-receipt based), 2008	31
Figure 11: Exchequer cost of providing FSMs under alternative criteria (directly income-based), 2008	33
Figure 12: Number of school children entitled to FSMs under current criteria with extension to any Tax Credit, 2008	46
Figure 13: Number of school children entitled to FSMs under current criteria with expansion to Housing Benefit, 2008	47
Figure 14: Number of school children entitled to FSMs under current criteria with expansion to Council Tax benefit, 2008	48
Figure 15: Number of school children entitled to FSMs under current criteria with expansion to Housing Benefit and/or Council Tax benefit, 2008	49
Figure 16: Number of school children entitled to FSMs if criteria were changed to (any) Tax Credit only, 2008	50
Figure 17: Number of school children entitled to FSMs if criteria were changed to Housing Benefit only, 2008	51
Figure 18: Number of school children entitled to FSMs if criteria were changed to Council Tax benefit only, 2008	52
Figure 19: Number of school children entitled to FSMs if criteria were changed to either Housing Benefit and/or Council Tax benefit, 2008	53

Tables & Figures	Page
Figure 20: Number of school children entitled to FSMs if criterion were family income (before housing costs) below 60% of median income (i.e., below £12,300), 2008	54
Figure 21: Number of school children entitled to FSMs if criterion were family income (before housing costs) below median income (i.e., below £20,500), 2008	55
Figure 22: Number of school children entitled to FSMs if criterion were family income (before housing costs) below £8,000, 2008	56
Figure 23: Number of school children entitled to FSMs if criterion were family income (before housing costs) below £10,000, 2008	57
Figure 24: Number of school children entitled to FSMs if criterion were family income (before housing costs) below £12,000, 2008	58
Figure 25: Number of school children entitled to FSMs if criterion were family income (before housing costs) below £14,000, 2008	59
Figure 26: Number of school children entitled to FSMs if criterion were family income (before housing costs) below £16,000, 2008	60
Figure 27: Number of school children entitled to FSMs if criterion were family income (before housing costs) below £18,000, 2008	61
Figure 28: Number of school children entitled to FSMs if criterion were family income (before housing costs) below £20,000, 2008	62
Figure 29: Exchequer cost of providing FSMs under current criteria with extension to any Tax Credit, 2008	63
Figure 30: Exchequer cost of providing FSMs under current criteria with expansion to Housing Benefit, 2008	64
Figure 31: Exchequer cost of providing FSMs under current criteria with expansion to Council Tax benefit, 2008	65
Figure 32: Exchequer cost of providing FSMs under current criteria with expansion to Housing Benefit and/or Council Tax benefit, 2008	66
Figure 33: Exchequer cost of providing FSMs if criteria were changed to (any) Tax Credit only, 2008	67
Figure 34: Exchequer cost of providing FSMs if criteria were changed to Housing Benefit only, 2008	68
Figure 35: Exchequer cost of providing FSMs if criteria were changed to Council Tax benefit only, 2008	69
Figure 36: Exchequer cost of providing FSMs if criteria were changed to either Housing Benefit and/or Council Tax benefit, 2008	70
Figure 37: Exchequer cost of providing FSMs if criterion were family income (before housing costs) below 60% of median income (i.e., below £12,300), 2008	71
Figure 38: Exchequer cost of providing FSMs if criterion were family income (before housing costs) below median income (i.e., below £20,500), 2008	72

Tables & Figures					
Figure 39: Exchequer cost of providing FSMs if criterion were family income (before housing costs) below £8,000, 2008	73				
Figure 40: Exchequer cost of providing FSMs if criterion were family income (before housing costs) below £10,000, 2008	74				
Figure 41: Exchequer cost of providing FSMs if criterion were family income (before housing costs) below £12,000, 2008	75				
Figure 42: Exchequer cost of providing FSMs if criterion were family income (before housing costs) below £14,000, 2008	76				
Figure 43: Exchequer cost of providing FSMs if criterion were family income (before housing costs) below £16,000, 2008	77				
Figure 44: Exchequer cost of providing FSMs if criterion were family income (before housing costs) below £18,000, 2008	78				
Figure 45: Exchequer cost of providing FSMs if criterion were family income (before housing costs) below £20,000, 2008	79				

## **Glossary**

#### Terminology and abbreviations

DCSF Department for Children, Schools and Families

DSG Designated School Grant

FSM Free School Meals

GHS General Household Survey

HMRC Her Majesty's Revenue and Customs

QLFS Quarterly Labour Force Survey

SFT School Food Trust

Take-up rate Number of children eating meals as a proportion of the

number of children

FSM take-up rate Number of children eating Free School Meals as a

proportion of the number of children (registered as)

entitled to receive Free School Meals

Charge-out rate Unit price assigned to a Free School Meal

## **Executive Summary**

The School Food Trust commissioned London Economics to conduct an analysis of the current level of entitlement of school children to free school meals in England, and investigate the potential impact on numbers and the cost to the Exchequer of using alternative entitlement criteria.

#### **Current registrations**

There are 1.075 million children in England registered as entitled to receive Free School Meals. Of these, 642,000 children are in primary schools and 433,000 are in secondary schools. At primary level, this corresponds to a registration rate of approximately 15.5%, while at secondary level the proportion of children registered for Free School Meals stands at 13.1%. Approximately 59% of children registered as entitled to Free School Meals are in primaries (versus a share of 56% in all school children), implying that the current Free School Meal system is inclined to help families with younger children. We have estimated that the current cost to the Exchequer of providing meals for those registered and taking up their free school meal entitlement is approximately £273 million per annum.

#### **Current entitlement**

Based on our analysis of a number of data sources, we estimate that, under the current criteria, there are approximately 1.409 million children entitled to Free School Meals in England, of which 833,000 are in primary school and 575,000 are in secondary school. This corresponds to 19% of all school children and implies that 24% of children who are entitled to Free School Meals (334,000) are not currently registered.

Assuming the same take up and charge-out rates as is currently the case, the total cost to the Exchequer associated with the provision of Free School Meals to those entitled to them stands at £358 million per annum. This implies that if all children that were currently entitled to Free School Meals actually registered, the Exchequer would be required to provide and additional £85 million per annum.

The current set of entitlement criteria is approximately equivalent to setting a family income threshold of £10,000 per annum, whereas the relative poverty income threshold is just over £12,000 per annum.

#### Extending current entitlement criteria

Extending the list of criteria to include Housing Benefit or Council Tax Benefit increases the pool of entitled children from the current level of 1.409 million by about 160,000 and 190,000, respectively. Extending the criteria to

include both expands the pool by 220,000 children (an increase of about 3% of the total number of school children).

If the current entitlement criteria were extended to include Housing Benefit only, then the total cost to the Exchequer would be £399 million per annum. Extending the criteria such that the entitlement criteria include those in receipt of Council Tax benefit only would increase the cost to the Exchequer to £407 million per annum. If the entitlement criteria were extended to include those in receipt of either Housing Benefit or Council Tax benefit, the total cost to the Exchequer would be £416 million per annum (an increase of approximately £58 million per annum compared to those currently entitled and an increase of £127 million per annum compared to those currently registered).

If the entitlement criteria were set to include all those children in relative poverty (household income of approximately £12,000 per annum), we estimate the total cost of providing Free School Meals to be £460 million per annum, which represents an increase of £187 million per annum over those currently registered and £102 million over those entitled under the current criteria.

#### **Universal provision**

Universal provision would entail 7.422 million children being entitled to receive Free School Meals. Assuming that there were no change to current take-up rates and charge-out rates, we estimate that just fewer than 6 million meals would be provided to children on a daily basis. The cost to the Exchequer of providing Free School Meals would be £1,884 million per annum (£1,068 million at primary level and £816 million at secondary level). This represents a £853 million per annum increase over those currently entitled at primary school and £673 million at secondary level.

There is a trade off to the Exchequer between extending entitlement (and increasing take-up rates) and possible savings that might be achieved from lower free school meal charge-out rates (resulting from the economies of scale from increased provision). For instance, we estimate that an increase of 8% in the Free School Meals take-up rate within each Government Office Region, along with a reduction in the charge-out rate of 15p (equivalent to 9%) would result in the total cost to the Exchequer barely changing (£1,886 million versus £1,884 million).

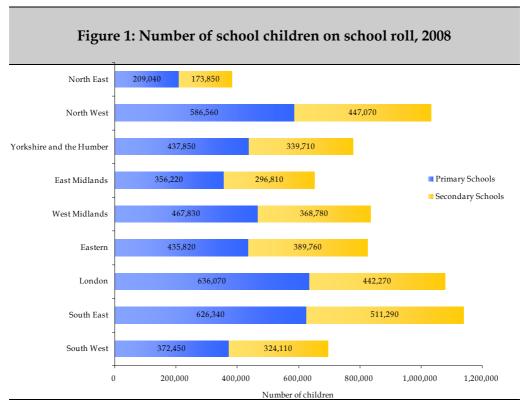
#### 1 Introduction

The School Food Trust has commissioned London Economics to conduct an analysis of the current level of entitlement of school children to Free School Meals in England, and investigate the potential impact on numbers and the cost to the Exchequer of using alternative entitlement criteria.

## 1.1 Number of school children in England

There are 7.422 million children in England on the school roll, according to provisional data from the Department for Children, Schools and Families (January 2008). Of these, there are 4.128 million children are in primary schools, and 3.294 million in secondary schools. The South East, North West and London are the most populous Government Office Regions (GORs) as measured by the number of school children.

Approximately 56% of school children in England are in primary schools, with 44% in secondary schools. The distributions across each Government Office Region vary little, with the share of primary school children ranging between 53% and 57%, except in London, where there is a greater proportion of primary school children relative to the total population of school children (59% to 41%). This is presented in Figure 1 below.



Source: Department for Children, Schools and Families Pupils in England

## **1.2** Current entitlement criteria for Free School Meals

The Free School Meal (FSM) system in England operates on the basis of the registration of school children as entitled to receive Free School Meals. There is an important distinction between entitlement and registration. An individual pupil may be theoretically entitled to Free School Meals; however, may not be registered to receive those meals. The statistics published by central government annually in relation to the proportion of children at Local Authority or Government Office Region who are eligible for Free School Meals actually refers to those children that are **both** entitled and registered. Throughout this analysis, we clearly differentiate between those that are theoretically entitled to the receipt of Free School Meals and those that are actually registered.

There are currently five criteria by which school children may be entitled to Free School Meals.

Specifically, parents do not have to pay for school lunches if they receive any of the following<sup>1</sup>:

- Income Support;
- income-based Jobseeker's Allowance;
- support under Part VI of the Immigration and Asylum Act 1999;
- Child Tax Credit, provided they are not entitled to Working Tax Credit and have an annual income (as assessed by HM Revenue & Customs) that does not exceed £15,575<sup>2</sup>; or
- the Guarantee element of State Pension Credit.

In addition to this, children who receive Income Support or income-based Job Seeker's Allowance in their own right also qualify for Free School Meals.

# 1.3 Current take-up of all school meals by Government Office Region

Approximately 2.947 million children in England take school meals on a daily basis (either paid-for or Free School Meals), based on London Economics' calculations of DCSF school roll data for 2008 and SFT take-up rate data from

London Economics on behalf of the School Food Trust June 2008

http://www.direct.gov.uk/en/Parents/Schoolslearninganddevelopment/SchoolLife/DG\_4016089? cids=Google\_PPC&cre=Education\_Learning\_Franchise (downloaded on 22 April 2008)

<sup>&</sup>lt;sup>2</sup> This applies to incomes assessed in tax year 2008/09. The corresponding figure was £14,495 in 2007/08, £14,155 in 2006/07 and £13,910 in 2005/06.

2006/07<sup>3</sup>. Of these, 1.705 million children are in primary schools, and 1.242 million are in secondary schools. This corresponds to an average take-up rate of school meals of 41% in primary schools and 38% in secondary schools (both paid and unpaid). Figure 2 presents the total number of children taking up meals, while Figure 3 provides information on the take up rate by Government Office Region.

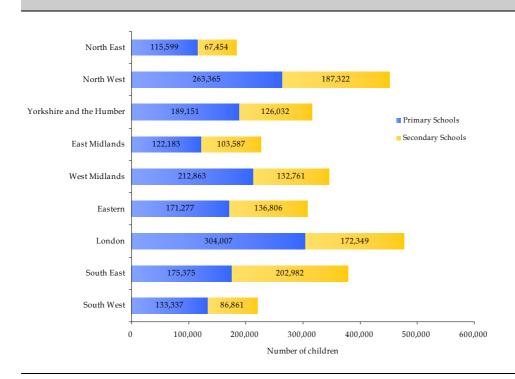


Figure 2: Number of school meals taken per day, 2008

 $Source: London\ Economics'\ calculations\ based\ on\ DCSF\ and\ SFT\ data$ 

The rate of take-up varies much more across Government Office Region in primary schools than it does across secondary schools and some Government Office Regions stand out from the national average in each category.

According to information from the School Food Trust, there is a particularly low take-up rate of meals in the South West compared to the national average in primary and, in particular, secondary schools. The other major deviations from the average take-up rate also relate to primary schools with the North East posting a higher than average take up and the South East a lower than average take up. However, given the significantly higher take-up rate of school meals by those that are registered for Free School Meals compared to

<sup>&</sup>lt;sup>3</sup> School Food Trust (2007) Second annual survey of school meal take up in England

those that are not and the variation in the proportions of children registered for Free School Meals across regions, in some respects, take-up rates do reflect the socio-economic characteristics of the particular regions.

Specific comparisons across Government Office Region should be made carefully, with the realisation that these take-up rates are based on survey responses<sup>4</sup> and as such dependent on the (sometimes small) sample sizes in particular Government Office Regions. It is possible that the sample may provide a slightly skewed reflection of the true picture in each of the regions.

60% 55% 50% 45% FSM take-up rate (%) 40% 35% 30% 25% 20% North East North West Yorkshire East West East of London South East South West and the Midlands Midlands England Humber Primary Schools: England average -Secondary Schools: England average

Figure 3: Take-up rates at primary and secondary schools, by GOR, 2008

Source: London Economics' calculations based on SFT data

## 1.4 Information on Free School Meals by GOR

### 1.4.1 Registrations of entitlement for Free School Meals

Recent information from the Department for Children, Schools and Families (January 2008) indicates that there are 1,075,000 children in England registered to receive Free School Meals (corresponding to 14% of all school children). Of these, 642,000 children are in primary schools and 433,000 are in

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 $<sup>^4</sup>$  School Food Trust (2007) "Second annual survey of school meal take up in England"

secondary schools. At primary level, this corresponds to a registration rate of approximately 15.5%, while at secondary level the proportion of children registered for Free School Meals stands at 13.1%.

Approximately 59% of children registered as entitled to Free School Meals are in primaries (versus a share of 56% in all school children), implying that the current Free School Meal system is inclined to help families with younger children. The share of those registered for Free School Meals attending primary school ranges between 58% and 61% of the total population of children registered in all Government Office Regions. This is presented in Figure 4 below, where the percentages in parentheses represent the share of the total number of school children in each Government Office Region and schooling level registered for Free School Meals.

North East 26,860 North West 107,000 (18% | 16%) Yorkshire and the Humber (15% | 14%) ■ Primary Schools Secondary Schools East Midlands 29,190 (12% | 10%) West Midlands (18% | 15%) 33,220 (11% | 9%) Eastern 154,380 99,390 (24% | 22%) London South East 27,140 (10% | 8%) South West 50.000 100.000 150,000 200,000 250,000 300,000 Number of children

Figure 4: Number of school children registered to receive FSM, 2008

Source: London Economics' calculations based on DCSF data

#### 1.4.2 Free School Meals take-up rate

Not all children who are registered to receive Free School Meals actually avail of the option. Information from the Department for Children, School and Families indicates that approximately 865,000 children registered for Free School Meals (out of a total of 1,075,000) actually take up Free School Meals, which is equivalent to just over 80% in aggregate. At primary level, 538,000 registered children take up Free School Meals (out of a total of 642,000),

which is equivalent to just under 84%. At secondary level, 326,000 registered pupils take up Free School Meals (out of a total of 433,000), which is equivalent to 75%.

This means that 210,000 children (103,000 in primary schools and 107,000 in secondary schools) are currently registered to receive Free School Meals, but do not take them.

North East 35,100 18,810 North West 90,150 55,530 Yorkshire and the Humber Primary Schools East Midlands 21,690 Secondary Schools West Midlands 43,070 Eastern 77,830 131,750 South East South West 32,370 19,980 50,000 100,000 150,000 200,000 250,000 Number of children

Figure 5: Number of school children consuming FSMs per day, 2008

Source: London Economics' calculations based on DCSF data

In Figure 6 overleaf, we present information on variation in the Free School Meals take-up rate between Government Office Region at primary and secondary level. There appears to be relatively little variation in take up amongst those registered for Free School Meals by Government Office Region at primary level while there seems to be greater variation in Free School Meals take up at secondary level. This probably reflects the option of many secondary school pupils to consume lunch off the premises and greater number of outside options available to older pupils.

90% 85% SM take-up rate (%) 80% 70% 65% North East North West Yorkshire West East of South East South West East London and the Midlands Midlands England Humber Primary Schools Secondary Schools Primary Schools: England average - Secondary Schools: England average

Figure 6: FSM take-up rates at primary and secondary schools, by GOR, 2008

Source: London Economics' calculations on DCSF data

### 1.4.3 Cost to the Exchequer of providing Free School Meals

Based on information relating to the take up and charge-out rates associated with Free School Meals, we estimate the current cost to the Exchequer of providing meals for those registered and taking up their free school meal entitlement to be approximately £273 million per annum.

### 1.5 Aim of this study

Against this background, London Economics have investigated the number of children who would be entitled to Free School Meals under alternative entitlement criteria, and estimate the number of Free School Meals that might be taken up under a range of assumptions, along with the cost to the Exchequer associated with the alternative entitlement criteria. To achieve this, we have used centrally collected survey data including the Quarterly Labour Force Survey, the General Household Survey and Family Resources Survey, as well as information from the School Food Trust and Department for Children, Schools and Families.

We have also presented some information on the alternative criteria that might be adopted to assess entitlement in the future and in particular considered the ease of administration of alternative criteria. We have also attempted to assess the incentives that may face schools in relation to Free School Meals and in particular the fact that there may be considerable incentives to ensure as many pupils as possible are registered for Free School Meals but few incentives in relation to encouraging pupils to take up Free School Meals once registered.

## 2 Methodology

### 2.1 Key data sources

Throughout this analysis, we estimate both the number and the *proportion* of school children entitled to Free School Meals, under a variety of criteria, based on survey data from the Office for National Statistics. We use the Quarterly Labour Force Survey (QLFS) for estimates relating to entitlement according to benefits and Tax Credits received, and the General Household Survey (GHS) for entitlement criteria based on income levels.

To ensure consistency in the final analysis presented, we have rebased all these proportional estimates to the total number of children on the school roll using information from the DCSF Annual School Census. This has been done to ensure an appropriate comparison with the numbers of children currently on the school roll and registered for Free School Meals. We have used information from the School Food Trust on Free School Meals take-up rates and charge-out rates to estimate the number of school meals taken and the subsequent Exchequer cost for each of the Government Office Regions.

### 2.2 Variables selected for analysis

Throughout this analysis, we assess free school meal entitlement at the family unit level, and count the number of children that are reported as dependent for each family unit.

We estimate the number of children if entitlement for Free School Meals was based on the following selection of criteria:

- Current criteria;
- Only families receiving housing benefit;
- Only families receiving council tax benefit;
- Only families receiving housing benefit or council tax benefit;
- Only families receiving any form of Tax Credit;
- Current criteria and/or families receiving housing benefit;
- Current criteria and/or families receiving council tax benefit;

Section 2 Methodology

 Current criteria and/or families receiving housing benefit or Council Tax benefit

- Current criteria and/or families receiving any form of Tax Credit;
  and
- Family income below each of the following income thresholds:
  - a) 60% of UK median income (approximately £12,300 per annum);
  - b) UK median income (approximately £20,500 per annum);
  - c) £8,000 per annum;
  - d) £10,000 per annum;
  - e) £12,000 per annum;
  - f) £14,000 per annum;
  - g) £16,000 per annum;
  - h) £18,000 per annum; and
  - i) £20,000 per annum.

In the following section, we present the number of children currently entitled to Free School Meals, in order to illustrate the comparison with the number of children currently registered and currently taking up meals. After this, we present the results for alternative entitlement criteria in England at primary and secondary school levels in the main part of this report, with a geographical breakdown by Government Office Region provided in Annex 3.

### 2.3 Current charge-out rates

The data for charge-out rates comes from the second annual survey of school meal take up undertaken by the School Food Trust in April 2007. As might be expected, the nominal charge-out rate at secondary school is greater then the free school meal charge-out rate at primary school. This is true at both a national and regional level. The average charge-out rate in England was £1.62 per meal at primary school level, and £1.73 at secondary school level. There is considerable variation in charge-out rates across the Government Office Region, with a difference of more than 20p between the cheapest and most expensive at both primary and secondary school levels. This is presented in Table 2 overleaf.

Table 1: Charge-out rates per FSM, by GOR, 2007 (£ per meal)								
Government Office Region	Primary schools	Secondary schools						
North East	1.54	1.58						
North West	1.63 1.68							
Yorkshire and the Humber	1.50	1.64						
East Midlands	1.71	1.81						
West Midlands	1.63	1.78						
East of England	1.70	1.80						
London	1.59	1.73 1.69						
South East	1.58							
South West	1.66	1.77						
England	1.62	1.73						

Source: London Economics' calculations on SFT data.

### 2.4 Caveats associated with the analysis

For the purposes of this type of analysis, the Quarterly Labour Force Survey is generally considered to have the greatest coverage of households in the United Kingdom combined with sufficient level of detail in relation to the income levels and extent of receipt on various forms of Tax Credit or benefit. However; despite this, it is important to remember that when considering a combination of criteria to assess entitlement for Free School Meals from a single dataset, proper treatment of the interaction of criteria needs to be allowed for. However, due to considerations of privacy and disclosure made by the data issuer, there are some limitations to how the data can be manipulated.

Therefore, to complement the estimates from the QLFS, we have replicated the analysis, where possible, using two other datasets. The datasets that we have used as a check on the validity of our assumptions are the General Household Survey and the Family Resources Survey. We found that the estimates generated from these alternative data sources supported the estimates based on the QLFS.

#### **Double Counting**

The main caveat associated with using QLFS data is that it is not possible to group together members of the same family unit, which implies that if we count the number of dependent children as reported by adults in the QLFS, there is a possibility of double-counting since children belonging to a couple who live together would be reported twice. Double-counting is only a

potential issue when there is a partnership in the family, because we count the children reported by both the head of the family and their partner.

Our solution to this is to look solely at the characteristics of the head of the family. This avoids double-counting, but may result in an underestimation of the number of children entitled to Free School Meals if the head of the family does not receive a particular benefit but their partner does. The restriction has no effect on the number of children counted in lone-parent families, but does influence the number of children reported by couples living together.

The impact of double-counting appears to be greater than the impact of under-estimation in most instances, based on comparative data from other sources. This could be because the claims under most of the current criteria would be made by individuals, so both individuals in a partnership may each be claiming the same benefit separately. An exception to this may be receipt of any form of Tax Credit, since this is a benefit claimed by the family as a whole, but paid to only one member of that family. However, there is still a chance that in responding to a survey, both partners indicate they receive the benefit, regardless of who actually receives the payment.

#### Specificity and complexity of entitlement criteria

A further complication arises in the very specific nature of some of the Free School Meals entitlement criteria. This particularly holds for the rules pertaining to Child Tax Credit and to Pension Credit. In both instances, there are qualifications to the receipt of these that are not simple to estimate from the specific questions asked in the surveys available.

To form our estimates for these, assumptions have to be made to generate or simulate the same restrictions. Although the restrictions are not perfect representations of the circumstances in which children may be entitled under these criteria, they are the closest achievable with the data available. Again, based on the available supporting information, our estimates appear to mimic the administrative information produced by central government.

For Child Tax Credit, there are two additional qualifications. Firstly, that the family is not receiving Working Tax Credit, and secondly, that the family is not earning more than £15,575. In practice, this equates to ruling out any families that have an adult working more than 16 hours a week. This is the restriction that we can place on the QLFS data to arrive at an estimate.

For Pension Credit, children would only be entitled if the Guarantee element of Pension Credit is received by their carer. This is dependent on the age and the income of the carer (or couple, if the carer is living with someone). Here, we are forced to use income-related restrictions. Our first problem is that we cannot analyse joint income, so are forced to take just the income of the head of the family. Our second problem is that the rate of income-reporting in QLFS is relatively low (only 40% of the sample is asked income related

Section 2 Methodology

questions but are weighted to reflect the population generally), so there may be greater uncertainty around the estimates of the number of entitled children. In mitigation of this, the proportion of children for whom entitlement depends on their carer receiving the Guarantee element of Pension Credit is likely to be small in comparison to all entitled children, so the effect on overall estimates will be low.

## 3 Findings

In this section, we present the number of children entitled to Free School Meals using a range of alternative criteria, and estimate the number of Free School Meals that will be taken annually, along with the theoretical cost to the Exchequer associated with each of the alternative criteria. Our estimates are based on the data in the QLFS, which means that they do not include children entitled because their carers receive support under Section VI of the Immigration and Asylum Act 1999. However, the omission of children in such a position does not substantially affect our results; the additional number of children and costs associated with Free School Meals would be in the order of 0.5% of our estimates.

Specifically, the number of dependent children supported in such a way was 7,775 in 2006<sup>5</sup>. The number of children entitled to Free School Meals in England will be slightly less than this for two reasons. Firstly, the number quoted is for all dependent children (not just those of school-age) and secondly, the estimate relates to the whole of the United Kingdom (not just England). Overall, the number of children entitled to Free School Meals under this criterion is relatively small.

## 3.1 Number of entitled children under current entitlement criteria

In Section 1 of this report, we presented information from the Department for Children, Schools and Families (January 2008) indicating that there are 1,075,000 children in England registered to receive Free School Meals (14% of the total number of pupils on the school roll). Of these, 642,000 children are in primary schools (15.5% of primary total) and 433,000 are in secondary schools (13% of secondary total).

Based on our analysis of the various data sources, we estimate that, under the current criteria, there are 1.409 million children entitled to Free School Meals in England (19%), of which 833,000 are in primary school (20%) and 575,000 are in secondary school (17%).

This implies that 24% (334,000) of children who are entitled to Free School Meals are not currently registered, although we are aware that significant work is being undertaken by the School Food Trust, DCSF and Local Authorities to raise the registration rate beyond its current level of 76%.

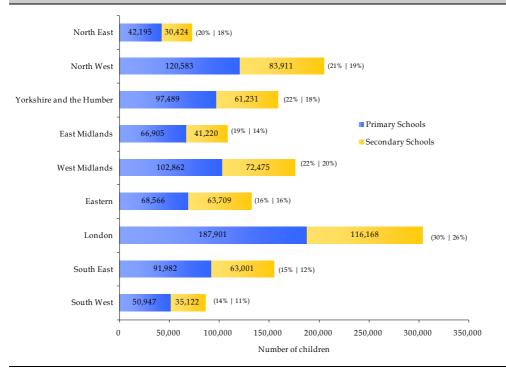
Download from www.homeoffice.gov.uk/rds/pdfs07/hosb1407.pdf on 13th March 2008

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<sup>&</sup>lt;sup>5</sup> Bennett, K., Heath, T. & Jeffries, R. (2007) Home Office Statistical Bulletin, 14/07: Asylum Statistics United Kingdom 2006 (3<sup>rd</sup> edition), 21<sup>st</sup> August 2007.

In Figure 7 below, we present the total numbers of children entitled to receive free school meals at primary and secondary level. We also present the proportion of the relevant school population that are entitled to free school meals by region. For instance, the information presented indicates that 30% of primary school children in London are entitled to free school meals though only 22% are registered, while 26% of secondary school pupils are entitled to receive free school meals while only 22% currently registered (see Figure 4).

Figure 7: Number of school children entitled to FSMs under current criteria, 2008



Source: London Economics' calculations based on Quarterly Labour Force Survey, Department for Children, Families and Schools and School Food Trust data. We have not included children entitled to Free School Meals attending Special Schools in the figure above.

As before, the share of primary school children amongst all those children entitled to Free School Meals is relatively consistent across Government Office Region, ranging between 58% and 62%, with the exception of the Eastern Region, where the proportion stands at 52%.

## 3.2 Number of entitled children under alternative entitlement criteria

The fundamental aim of the Free School Meals initiative is to provide financial support to children in the least well-off families. The essence of the current criteria is the recognition that the families of those children that are entitled to Free School Meals are on relatively low incomes. Entitlement is determined indirectly by income, since all the criteria relate to the receipt of some form of income-related benefit.

Under the current system, the proportion of entitled school children not registered to receive Free School Meals is 24%. The finding that not everyone at whom the policy is aimed at is availing of the benefit suggests that adjustments could be made to the system that would lead to more children benefiting.

#### Improving the registration rate

Increasing the number of children receiving Free School Meals could be achieved by some combination of raising the registration rate based on the current entitlement criteria, or increasing the size of the entitlement pool.

Increasing awareness might assist in moving the numbers currently registered for Free School Meals towards the total population that are entitled. However, it is also the case that the current criteria (and the interaction between the criteria) are not straightforward and as such the use of alternative criteria might make it easier for some parents to register their children for Free School Meals.

A second point in relation to the gap between entitlement and registrations is that free school meal entitlement is managed at Local Authority level. For this reason, there are additional administrative complexities that may contribute to a relatively low level of registrations<sup>6</sup>. In general terms, it is certainly the case that individuals do apply for a range of benefits that may make their children entitled to Free School Meals; however unless the Local Authority operates some form of integrated data management and benefits system, then it is possible that individual claimants are not alerted to the fact that their children are indeed entitled to Free School Meals.

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<sup>&</sup>lt;sup>6</sup> For example, it might be the case that a child is resident in one Local Authority and their carer receives a number of benefits based on residency in that Local Authority. However if the child attends school in another Local Authority, then this may result with the carer needing to apply to another Local Authority for registration.

#### Adjusting entitlement criteria

One option for increasing the number of children actually registered for Free School Meals is to continue to use indirect measures of income, but extending the current list of criteria with some additional entitlement criteria, or by replacing the current set with another set of criteria. Generally speaking, an overhaul may be desirable to simplify the system, but there may be a number of practical issues associated with the implementation of alternative entitlement criteria.

An alternative option is to base entitlement for Free School Meals directly on income. However, the level of administration in providing and verifying proof of income may be no less costly, and will probably be more so, than using indirect means.

From the data collected in the QLFS, we can estimate the effect on the number of entitled children using Housing Benefit, Council Tax benefit or any form of Tax Credit (rather than the restricted form that is currently used), either on their own or in combination with the current criteria.

#### 3.2.1 Tax Credits

Extending the current list of criteria to include any form of Tax Credit increases the pool of entitled children to 5.428 million (where the current number of children entitled to Free School Meals stands at 1.409 million). Replacing the current criteria to include those individuals in receipt of any form of Tax Credit would increase the current pool of entitled children to 4.885 million.

However, it is important to note that basing free school meal entitlement on Tax Credits **solely** (irrespective of the amount) may not result in the most targeted use of resources and may be only partially successful in helping poor families. This is because Child Tax Credit is available to families with gross incomes up to £55,000 (in 2007/08).

According to the QLFS data, there are some families that would not qualify for Free School Meals if the current entitlement criteria were changed to just receiving any form of Tax Credit. It would be highly unlikely that anyone qualifying by virtue of receiving income support, income-based jobseeker's allowance or the Guarantee element of Pension Credit would be ineligible for any form of Tax Credit, since the income threshold for Child Tax Credit is so high. Thus, the discrepancy would appear most likely to be because those families have not applied for Tax Credits, which in turn could be because these families are unaware of their entitlement or because they receive other forms of benefit and perceive that their overall income will be lower if they were to claim Tax Credits.

The overall effect of the current criterion regarding Child Tax Credit is to give free school meal entitlement to children in families in which there is no adult working full time. This is an explicit decision by the government<sup>7</sup>. The current criterion precludes children in families receiving Working Tax Credit from receiving Free School Meals, subject also to an upper income bound of £15,575. The purpose of the link to Child Tax Credit appears to be for proving entitlement, since all families with incomes less than £15,575 would qualify for Child Tax Credit in any case. Excluding Working Tax Credit from the criterion prevents entitlement to Free School Meals being based directly on income.

We consider the effect of loosening the restriction to include any form of Tax Credit but retaining the income threshold later on in this section. It is not possible using the QLFS dataset to estimate this directly. However, given that Tax Credits are essentially available to any family with an income below that threshold, the looser criterion is equivalent to setting the income threshold as a criterion by itself.

#### 3.2.2 Council Tax and Housing Benefit

Extending the list of criteria to include Housing Benefit or Council Tax benefit increases the pool of entitled children from the current level of 1.409 million by about 160,000 and 190,000, respectively. Extending the criteria to include both expands the pool by 220,000 children to 1.630 million (equivalent to approximately 22% of school children in England).

There would be a significant decrease in the total number of entitled children if only one of Council Tax benefit or Housing Benefit were used as criteria on their own, or in conjunction, replacing the current set of criteria.

If entitlement was based solely on receiving Housing Benefit, there would be approximately 1.027 million entitled children, which is approximately 50,000 fewer children than those currently **registered** or 382,000 fewer than those currently entitled.

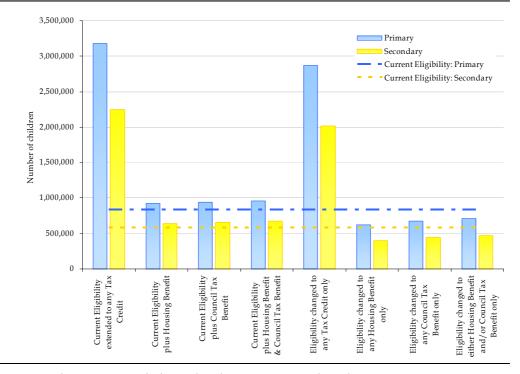
There would be about 1.116 million entitled children if Free School Meal entitlement was based on receipt of Council Tax benefit which is 293,000 fewer than those currently entitled. For the most part, there is overlap between recipients of Council Tax benefit and Housing Benefit: there would be 1.177 million entitled children (16%) if the criteria were receipt of either

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<sup>&</sup>lt;sup>7</sup> A written response to a question to the Secretary of State for Education and Skills on 6 Mar 2007 by the Government states "The Government's working tax credit provides additional financial support to all 'working families' that have low incomes. We believe that free school meals should be available to 'non-working' families, who we consider are most in need of this additional help." (Hansard, 6 March 2007: Column 1894W).

Housing Benefit or Council Tax benefit or both. This information is presented in Figure 8 below.

Figure 8: Number of school children entitled to FSMs under alternative criteria (benefit-receipt-based), 2008



 $Source: London\ Economics'\ calculations\ based\ on\ QLFS,\ DCSF\ and\ SFT\ data$ 

#### 3.2.3 Income Based entitlement

Basing entitlement directly on income contrasts starkly with entitlement based on the receipt of various benefits. It is analytically simple and easy for users to understand; these traits cannot be claimed by the current set of criteria. However, the administration of such a system may be greater in that providing evidence of income, and verifying that evidence, is more complex than providing and verifying evidence of benefit receipt.

Figure 9 shows the number of children entitled to Free School Meals if entitlement were to be based on family income, for a range of income thresholds. There is a government-defined measure of relative poverty, which is income less than 60% of the median income in the country. This equates to a family income of less than £12,300 per annum.

We show in Figure 9 the number of children entitled to Free School Meals if resources were directed at children in relative poverty, at families with below median income and at families with incomes below £8,000 to £20,000 (in steps of £2,000).

The information presented indicates that if children in families with incomes of £8,000 or less were entitled to Free School Meals, then approximately **1.162 million** children (16%) would be entitled (an increase of approximately 87,000 on current registrations, though 247,000 fewer than with the current entitlement criteria).

Income levels are not normally distributed in a statistical sense (lognormal distribution), which means that for every incremental increase in income threshold a slightly different number of children would become entitled to Free School Meals.

With a single criterion of an income threshold of £10,000, the number of children entitled to Free School Meals would be 1.463 million (812,000 in primary schools and 651,000 in secondary schools). This is very similar to the numbers entitled to free school meals based on current eligibility criteria.

Moving from £10,000 to £12,000 would add 298,000 children into the pool (to 1.761 million). Each subsequent incremental increase in income would add 250,000, 240,000, 268,000 and 166,000 into the pool of entitled children (respectively), with the last increment raising the total pool of entitled children to 2.685 million (an increase of 1.610 million children from the current level of registrations and corresponding to 36% of all school children).

The number of children entitled to Free School Meals with an income threshold of £16,000 is approximately equivalent to using the criteria of receiving any form of Tax Credit, but maintaining the income threshold set at £15,575 that is currently in use. If this were the sole criterion, the number of children entitled for free school meals would be 2.251 million (approximately 30% of school children).

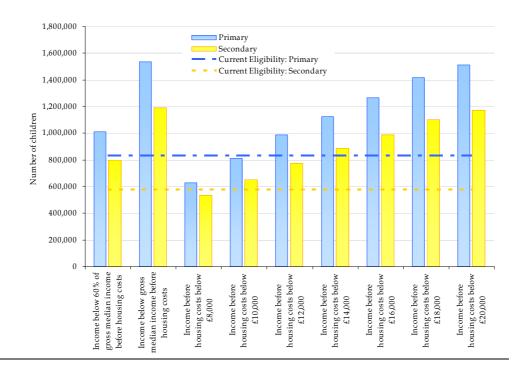
Note that at median income (which is approximately £20,500 per annum), 2.727 million children would be entitled for free school meals, while at the current standard measure of poverty (households on 60% of median income), approximately 1.810 million children would be entitled, which is 735,000 greater than the current number of children registered and 401,000 greater than the number of children we have estimated to be entitled under the current criteria.

This is an important finding. To reiterate, we illustrate that the current number of children entitled to Free School Meals (1.409 million) is lower than the number of children entitled if the income threshold adopted was equivalent to the relative poverty line (1.810 million). The current set of entitlement criteria is approximately equivalent to setting a family income

threshold of £10,000 per annum, whereas the relative poverty income threshold is just over £12,000 per annum.

If Free School Meals are aimed at low-income families and designed to help children in the least well off families, this suggests that the FSM programme should be expanded to include these children.

Figure 9: Number of school children entitled to FSMs under alternative criteria (directly income-based), 2008



Source: London Economics' calculations based on QLFS, DCSF and SFT data

# 3.3 Relative impact of alternative policies on primary- and secondary-level entitlement

One consideration in choosing entitlement criteria could be to place greater importance on the availability of Free School Meals to primary school children. In simple terms, this can be measured by the number of primary school children entitled to Free School Meals as a proportion of all entitled school children.

The share of all school children at primary level in England is 56%. Any set of criteria resulting in a higher proportion than this among children entitled to Free School Meals would be classed as one that places emphasis on Free School Meals for primary school children.

Of the criteria explored above, it appears that the criteria involving Housing Benefit or Council Tax benefit, or a combination of the two, are the policies that are most favourable for primary school children. The proportion of all children entitled to Free School Meals accounted for by primary school entitled children would range between 59% and 61% if based on one of these criteria.

This is only marginally different to the current share of entitlement accounted for by primary school children under current criteria (59%). However, 60% of the current registrations for Free School Meals are accounted for by primary school pupils, which implies that of those entitled to Free School Meals, primary school children are slightly more likely to be registered (and have a greater propensity to take up Free School Meals, as illustrated in Figure 6 earlier).

The share of entitlement accounted for by primary school children is less than population of school children if the criteria are based directly on income. For most levels of income, the share of entitlement accounted for by primary school children would remain at 56% for most incomes and even falling below 56% if the criterion is set to particularly low incomes (54% in the income threshold was £8,000 per annum).

<sup>8</sup> However, it is important to note that the effect is not uniform across Government Office Region. Specifically, including housing benefit as an eligibility criterion would bias the flow of resources associated with free school meal provision towards London. This information is presented in greater detail in Annex 3.

## 3.4 Exchequer cost of alternative entitlement criteria

The cost to the Exchequer of providing Free School Meals depends on the set of entitlement criteria, the Free School Meals take-up rates and the charge-out rates. In comparing the cost of alternative criteria, we compare them using the observed Free School Meals take-up rates and charge-out rates from DCSF and SFT data.

As a result, our estimates of the relative cost to the Exchequer of alternative criteria versus current criteria follow essentially the same pattern as that of the numbers of entitled children. There is a relative increase in the impact associated with secondary school meals, since the charge-out rate of secondary school meals is higher than that of primary school meals; however, this is a relatively small effect.

We have assessed the cost to the Exchequer the provision of Free School Meals to those children registered, as well as under the current entitlement criteria (if all children were automatically registered).

Assuming that there are 190 catering days per annum, and using information from the School Food Trust 2<sup>nd</sup> Annual Survey on charge out and take-up rates by Government Office Region at primary and secondary level, we have estimated that the total cost of school meal provision to those currently registered for Free School Meals stands at £273 million per annum (£166 million per annum at primary level and £107 million per annum at secondary level)

Assuming the same take up and charge-out rates, the total cost to the Exchequer associated with the provision of Free School Meals to those entitled stands at £358 million per annum (£216 million per annum at primary level and £142 million per annum at secondary level). This implies that if all individuals that were currently entitled to Free School Meals were registered, the Exchequer would be required to provide and additional £85 million per annum.

Figure 10 shows the total expected Exchequer cost for the alternative entitlement criteria examined in Figure 8.

£1,600m Tota1 Current Eligibility: Secondary £1,380n ■ Current Eligibility: Primary Tota1 £1,400m Secondary £1.242m Primary £1,200m £1.000m £500m Exchequer cost £800m £600m Total Tota1 Tota1 £407m £416m £399m Tota1 Total Tota1 £400m £824m £299m £284m £742m £167m £163m £159m £117m £110m £200m £240m £244m £249m £183m £174m £162m £0m Current Eligibility extended to any Tax plus Housing Benefit & Council Tax Benefit Eligibility changed to Eligibility changed to Eligibility changed to either Housing Benefit plus Housing Benefit Current Eligibility any Housing Benefit and/or Council Tax Eligibility changed to plus Council Tax Current Eligibility any Tax Credit only Current Eligibility any Council Tax Benefit only Benefit Benefit only Credit

Figure 10: Exchequer cost of providing FSMs under alternative criteria (benefit-receipt based), 2008

Source: London Economics' calculations based on QLFS, DCSF and SFT data

If the current entitlement criteria were extended to include Housing Benefit only, then the total cost to the Exchequer would be £399 million per annum (an increase of approximately £41 million per annum compared to those entitled and £126 million compared to those currently registered). Extending the criteria such that the entitlement criteria include those in receipt of Council Tax benefit only would increase the cost to the Exchequer to £407 million per annum.

If the current entitlement criteria were extended to include those in receipt of either Housing Benefit or Council Tax benefit, the total cost to the Exchequer would be £416 million per annum (an increase of approximately £58 million per annum compared to those entitled and an increase of £127 million compared to those currently registered).

If the current entitlement criteria were replaced by those in receipt of Housing Benefit only, then the total cost to the Exchequer would be £261 million per annum (a reduction of approximately £97 million per annum compared to those entitled and £12 million compared to those currently registered).

Replacing the current entitlement criteria with those in receipt of Council Tax benefit only would increase the cost to the Exchequer by approximately £10 million per annum.

If the current entitlement criteria were replaced with those in receipt of either Housing Benefit or Council Tax benefit, the total cost to the Exchequer would be approximately £299 million per annum (approximately £59 million per annum less compared to those entitled and £26 million more compared to the cost associated with those currently registered).

## 3.4.1 Cost to the Exchequer of alternative income based measures

We have also assessed the Exchequer cost using alternative income thresholds.

Assuming that the current entitlement criteria were replaced with a household income threshold of £8,000 per annum, the total cost to the Exchequer would stand at £295 million per annum, which is £21 million per annum greater than the current cost associated with the provision of Free School Meals to those currently registered. As before, the total number of additional children becoming entitled as the income threshold increases is not linear; however each £2,000 increment to the threshold (up to £18,000) increases the total cost to the Exchequer by approximately £70-75 million per annum.

To make appropriate comparisons with the current entitlement criteria and definitions of relative poverty, if the income threshold was set to £10,000 (the closest income analogy to the current definition), we have estimated that the cost to the Exchequer would be approximately £371 million per annum.

If the entitlement criteria was set to include all those children in relative poverty (household income of approximately £12,000 per annum), we estimate the total cost of providing Free School Meals to be £460 million per annum, which represents an increase of £187 million per annum over those currently registered and £102 million over those entitled under the current criteria.

Allowing all recipients of tax credits with incomes below £15,575 would result in an Exchequer cost of approximately £572 million per annum (using an income threshold of £16,000).

The replacement to the current criteria with an income threshold of median income (£20,500) would result in an annual Exchequer cost of £693 million, which corresponds to an increase of £419 million compared to the cost of providing Free School Meals to those currently registered.

This information is presented in Figure 11 overleaf.

£800m Tota1 Total Current Eligibility: Secondary £693m £682m Tota1 ■ Current Eligibility: Primary £700m Secondary Total Primary £572m £600m Total £511m Total £295m £291m Tota1 £460m £272m £500m Exchequer cost Tota1 £244m £371m £400m £220m £198m £192m £295m £300m £161m £133 m £200m £398m £391m £367m £328m £290m £262m £255m £210m £100m £162m £0m Income below 60% of gross median income median income before income before housing before housing costs income before housing income before housing below gross costs below £16,000 costs below £20,000 costs below £10,000 costs below £12,000 costs below £14,000 costs below £18,000 costs below £8,000 Income

Figure 11: Exchequer cost of providing FSMs under alternative criteria (directly income-based), 2008

 $Source: London\ Economics'\ calculations\ based\ on\ QLFS,\ DCSF\ and\ SFT\ data$ 

## 3.5 Potential costs of universal provision of FSM

Universal provision would entail 7.422 million children being entitled to receive Free School Meals. In our analysis below, we consider several different take-up rates, since it may be that some children would choose not to exercise this option. We also consider different charge-out prices, since such a large increase in the levels of provision are likely to affect the costs of production.

Assuming that there were no change to current take-up rates and charge-out rates, we estimate that just fewer than 6 million meals would be provided to children on a daily basis and the cost to the Exchequer of providing Free School Meals would be £1,884 million per annum (£1,068 million at primary level and £816 million at secondary level). This represents a £853 million per annum increase over those currently entitled at primary school and £673 million at secondary level. This is presented in Table 2 overleaf as the point of intersection between the blue row and blue column.

However, it seems likely that the charge-out rate would be lower than is currently the case, since there would be significant economies of scale achievable in producing more meals. It is uncertain whether there would be an overall increase in take-up rates amongst those newly entitled to Free School Meals to the current levels (approximately 84% at primary level and 75% at secondary level). Therefore, we have modelled a number of alternative scenarios that incorporate different assumptions relating to take-up rates and charge-out rates.

There is a trade off to the Exchequer between extending entitlement (and increasing take-up rates) and possible savings that might be achieved from lower free school meal charge-out rates (resulting from the economies of scale from increased provision). For instance, we estimate that an increase of 8% in the Free School Meals take-up rate within each Government Office Region, along with a reduction in the charge-out rate of 15p (approximately 9% of the current average charge-out rate) would result in the cost to the Exchequer barely changing (£1,886m versus £1,884m)<sup>9</sup>.

<sup>&</sup>lt;sup>9</sup> An indication of the overall effect on take-up rates can be gleaned from the findings of a pilot scheme introduced by Hull City Council in 2004. It lasted for three years and offered universal Free School Meals in primary schools within the local authority. The take-up rate for school meals rose from 36% to 64% within the first two years (Hull University's Centre for Education Studies).

Table 2: Cost to Exchequer of universal provision of FSMs with sensitivity analysis

		Take-up rate, based on DCSF data by GOR										
		8% less	6% less	4% less	2% less	DCSF take-up rates	2% more	4% more	6% more	8% more	10% more	12% more
	35p less	£1,340m	£1,377m	£1,414m	£1,452m	£1,489m	£1,526m	£1,563m	£1,601m	£1,638m	£1,675m	£1,712m
_	30p less	£1,391m	£1,429m	£1,468m	£1,507m	£1,545m	£1,584m	£1,623m	£1,661m	£1,700m	£1,739m	£1,777m
y GOR	25p less	£1,442m	£1,482m	£1,522m	£1,562m	£1,602m	£1,642m	£1,682m	£1,722m	£1,762m	£1,802m	£1,842m
data by	20p less	£1,493m	£1,534m	£1,575m	£1,617m	£1,658m	£1,700m	£1,741m	£1,783m	£1,824m	£1,866m	£1,907m
SFT	15p less	£1,543m	£1,586m	£1,629m	£1,672m	£1,715m	£1,758m	£1,801m	£1,844m	£1,886m	£1,929m	£1,972m
no pası	10p less	£1,594m	£1,639m	£1,683m	£1,727m	£1,771m	£1,816m	£1,860m	£1,904m	£1,949m	£1,993m	£2,037m
ate, ba	5p less	£1,645m	£1,691m	£1,736m	£1,782m	£1,828m	£1,874m	£1,919m	£1,965m	£2,011m	£2,056m	£2,102m
Charge-out rate, based	SFT charge-out rates	£1,696m	£1,743m	£1,790m	£1,837m	£1,884m	£1,931m	£1,979m	£2,026m	£2,073m	£2,120m	£2,167m
	5p more	£1,747m	£1,795m	£1,844m	£1,892m	£1,941m	£1,989m	£2,038m	£2,086m	£2,135m	£2,183m	£2,232m
	10p more	£1,798m	£1,848m	£1,898m	£1,947m	£1,997m	£2,047m	£2,097m	£2,147m	£2,197m	£2,247m	£2,297m

## 4 Funding and practical considerations

#### 4.1 Basis on which funds flow to local authorities

Although the provision of schooling is generally undertaken at Local Authority level, the funding of schooling in England is primarily financed out of central government taxation revenue. The money intended for schools is divided into numerous grants (based on different criteria and designated for different purposes) and the effect has been to increasingly limit the Local Authority's freedom over the Schools Budget.

The largest grant made to schools via Local Authorities is the Designated Schools Grant (DSG)<sup>10</sup> (accounting for £28.3 billion of the total planned spending on schools in 2007/08 and used to cover recurrent expenditure in schools). The DSG is 'ring-fenced', meaning that local authorities must spend it on pupil provision as part of their Schools Budget. They cannot spend DSG funds on their own administration costs or on the provision of services not related to education. There are a number of other Grants made to schools via Local Authorities (such as the School Standards Grant, the School Standards (personalisation) Grant and School Development Grant, all of which are ring fenced for a particular purpose and in some cases paid directly to schools.

From the multiple grants earmarked by central government, Local Authorities then set the Schools Budget from which resources are allocated to individual schools (Individual Schools Budget) and retained for the provision of central services (on average 12%) within the Local Authority

Individual Schools Budgets are allocated by local authorities using a local 'fair funding formula' <sup>11</sup>, created by the local authority itself but subject to a number of constraints. Funding schools according to a formula is intended to ensure that, within a local authority, schools with the same characteristics and the same numbers of pupils receive the same amount of funding.

The recent changes to education funding has had the effect of increasing the degree of delegation of funding decisions to schools and increasing the extent of ring fencing of central government resources. The Local Authority has seen

<sup>10</sup> The DSG is a multi year award and calculated based on the previous years resources received plus extra elements based on ministerial priorities ('spend-plus')

<sup>&</sup>lt;sup>11</sup> Local Authorities must allocate at least 75% of funding based on pupil numbers; schools are guaranteed (by central government) a minimum increase in their per-pupil funding, meaning that the local authority's funding formula will be overruled if it prescribes a funding increase below the minimum guarantee; and several other grants must be paid directly and in full to schools (School Standards Grant)

its degree of influence fall within the school finding system; however, Local authorities do have discretion in how they allocate the level of their Schools Budget to individual schools (through the funding formula).

Using the fair funding formula, Local Authorities make allocations to schools based on factors including pupil numbers, indicators of social deprivation (including Free School Meal registrations), Special Educational Needs and school specific factors (such as size of site). On average, schools tend to receive around 85% of their income from the Local Authority's formula.

In aggregate, a large amount of funding appears to be directed towards social deprivation. Estimates from the Institute for Fiscal Studies (2008)<sup>12</sup> indicate that pupils who are eligible for FSM attract over 70% more income to the school than pupils who are not eligible for FSM (equivalent to £1,531 and £2,404 at primary and secondary level in 2006/07) and that FSM premiums have grown over time<sup>13</sup>. This extra funding comes both from local authorities' formulae and from direct payments and grants from central government. However, the research shows that Local Authorities only allocate around 40–50% of the extra funding they receive for pupils who are FSM-eligible towards the schools these pupils attend. The FSM premium would be more than doubled in primary schools and 50% higher in secondary schools if Local Authorities did not 'flatten' out their resources at all.

It is important to note that the additional funding that is received by schools based on Free School Meal eligibility is not necessarily connected to the provision of school meals *per se*. In particular, the FSM variable acts as a proxy for social deprivation and the deprivation premiums allocated to schools based on FSM eligibility are intended to provide wider education services across the school setting.

#### 4.2 Basis on which funds flow to schools

With the introduction of Designated School Grants and Individuals School Budgets, there has been a fundamental change in the way in which schools are funded via local authorities. The analysis of the funding flows between central and local government show that schools receive a significant level of additional resource based on the number of registrations for Free School Meals (though this is intended to counteract social and educational deprivation more generally).

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 $<sup>^{12}\</sup> Institute\ for\ Fiscal\ Studies\ (2008),\ Level\ Playing\ Field?\ The\ Implications\ of\ School\ Funding,\ June\ 2008$ 

<sup>&</sup>lt;sup>13</sup> In 2006-07, primary and secondary schools received £3,470 and £4,300 per pupil, respectively, excluding per pupil capital expenditure. The 'base amount' per pupil (according to IFS estimates) stood at £2,141 and £3,118 per annum at primary and secondary school respectively.

However, as far as we are aware, it is also the case that the resource associated with the specific provision of Free School Meals is not ring fenced for catering purposes, leaving the school with ultimate discretion on how to use those resources. In an economic sense therefore, schools have an incentive to ensure that as many children that are known to be entitled are actually registered for Free School Meals; however, there is no incentives in place to ensure that schools ensure that those children registered for Free School Meals take up their entitlement. In fact, the incentives actually discourage schools from improving take-up rates amongst those registered to receive Free School Meals.

## 4.3 Ease of applying for FSMs under alternative entitlement criteria

Since children must be registered to receive Free School Meals, a consideration in any proposal to change the entitlement criteria must be the practicalities of registration. A system that simplifies the process of registration is preferable, since it should increase the rate of registration relative to the entitled group. However, such systems are costly to set up, and there is no guarantee that it will lower the administrative cost associated with the programme.

The ease of application will vary according to the geographical location of a child's family. Local authorities each determine the manner in which registrations for Free School Meals take place, and this in turn affects the complexity of administration. At one end of the spectrum, we are aware that some local authorities use an integrated benefits system so that when their main carer applies for and is granted receipt of the free school meal qualifying benefit, they are automatically informed of the entitlement to Free School Meals and their child(ren) is automatically registered. At the other end of the spectrum, where the Local Authority benefits system are not fully integrated, it is probable that some parents/carers are simply unaware and not informed of their entitlement, especially when the school that their child attends is in a different Local Authority to the one in which they reside.

However, given the caveats in relation to Local Authorities' administrative processes, it has been suggested that the most straightforward extension of the current criteria would be to augment the current entitlement criteria with the inclusion of those children whose parents are in receipt of Housing Benefit and/or Council Tax Benefit, as well as raising the income threshold associated with the receipt of Tax Credits.

#### **Annex 1 Data Sources**

The following descriptions of the data sources we used are taken from website of the Office for National Statistics. Sources are acknowledged in footnotes, and further information can be found by accessing the corresponding links.

For the purposes of this analysis, we have used three surveys: the Quarterly Labour Force Survey, the General Household Survey and the Family Resources Survey.

We used the latest releases available for each of the surveys at the time of analysis. The speed with which the surveys are released varies between surveys, so they do not all cover the same time period. The Quarterly Labour Force Survey data are for October to December 2007, the General Household Survey is for the calendar year 2006 and the Family Resources Survey is for financial year 2005/06.

### A1.1 Quarterly Labour Force Survey<sup>14</sup>

#### Key facts:

Survey coverage: Great Britain;

Set sample size: 60,000 addresses;

Response rate: 79%;

- Type of survey: Face-to-face first interview, then predominantly by telephone for subsequent waves; and
- Fieldwork dates: Continuously in quarterly waves, with each address being interviewed for five consecutive waves.

The Labour Force Survey (LFS) is carried out for ONS Labour Market Division. The LFS is a continuous, household survey, which provides a wide range of data on labour market statistics and related topics such as training, qualifications, income and disability. The data from the survey are used extensively both within and outside government. The LFS has been running since spring 1992 in its present form although a LFS has been carried out in the UK since 1973. Between 1973 and 1983 a biennial survey was carried out

<sup>&</sup>lt;sup>14</sup> The following information is from the Office for National Statistics website, from the following webpage: http://www.statistics.gov.uk/ssd/surveys/labour\_force\_survey.asp (Downloaded on 7 May 2008)

during the spring. In 1984 the survey became annual. As well as ONS, government users include the Department for Education and Skills and the Department for Trade and Industry.

The UK is required by European Union Regulation to carry out a labour force survey annually. Results from the spring quarter of the LFS are supplied to Eurostat each year to meet this requirement.

#### Survey methodology

The survey sample of addresses is taken from the Postcode Address File. In addition, a small sample of addresses of NHS and Health Trust accommodation is included in the survey and anyone aged 16 or over and at boarding school or living in a hall of residence is included in their parent's household. The survey has a stratified random sample and within any continuous thirteen week period every postcode sector is sampled. This feature allows representative results to be produced for any thirteen week period and has been utilised in the ONS new First Release on Labour Market Statistics. From April 1998 the LFS figures have provided headline UK unemployment and employment figures each month for the preceding quarter.

The survey has a panel design where each sampled address is interviewed for five waves. Interviews take place at three month intervals with the fifth interview at an address taking place a year after the first.

All first interviews (with the exception of a very small sample located north of the Caledonian Canal) are carried out by a team of face-to-face interviewers who work exclusively on the LFS. Subsequent interviewers are carried out, where the informant is willing, by telephone. Over 60% of all LFS interviews are conducted by telephone.

A similar quarterly survey is conducted in Northern Ireland by the Central Survey Unit of the Northern Ireland Statistics Research Agency. Social Survey Division processes results from this survey for the Department of Economic Development. The results are combined with those from the Great Britain survey to produce UK figures.

### A1.2 General Household Survey<sup>15</sup>

#### Key facts:

- Survey coverage: Great Britain;
- Set sample size: 13,250 addresses;
- Response rate: 72%;
- Type of survey: Face-to-face interview; and
- Fieldwork dates: Calendar year, annually.

The General Household Survey (GHS) is a multi-purpose continuous survey carried out by the Social Survey Division of the Office for National Statistics (ONS) which collects information on a range of topics from people living in private households in Great Britain. The survey started in 1971 and has been carried out continuously since then, except for breaks in 1997/98 (when the survey was reviewed) and 1999/2000 when the survey was re-developed.

Since April 1994, the GHS had been conducted on a financial year basis, with fieldwork spread evenly across the year April-March. However, in 2005 the survey period reverted to a calendar year and the whole of the annual sample was dealt with in the nine months April to December 2005. From 2006, the GHS runs from January to December.

The main aim of the survey is to collect data on a range of core topics, comprising:

- household and family information;
- housing tenure and household accommodation;
- consumer durables including vehicle ownership;
- employment;
- education;
- health and use of health services;
- smoking and drinking;

<sup>15</sup> The following information is from the Office for National Statistics website, from the following webpage: http://www.statistics.gov.uk/ssd/surveys/general\_household\_survey.asp (Downloaded on 7 May 2008)

- family information including marriage, cohabitation and fertility;
- income; and
- demographic information about household members including migration.

The information is used by government departments and other organisations for planning, policy and monitoring purposes, and to present a picture of households, families and people in Great Britain.

The GHS has documented the major changes in households, families and people which have occurred over the last 30 years. These include the decline in average household size and the growth in the proportion of the population who live alone, the increase in the proportion of families headed by a lone parent and in the percentage of people who are cohabiting. It has also recorded changes in housing, such as the growth of home ownership, and the increasing proportion of homes with household facilities and goods such as central heating, washing machines, microwave ovens and home computers. The survey also monitors trends in the prevalence of smoking and drinking.

#### Survey methodology

Fieldwork for the GHS is conducted on a calendar year basis, with interviewing taking place continuously throughout the year. A sample of approximately 13,000 addresses is selected each year from the Postcode Address File. All adults aged 16 and over are interviewed in each responding household. Demographic and health information is also collected about children in the household.

All interviews since 1994 have been conducted using Computer Assisted Interviewing - the questionnaire being programmed in Blaise software.

### A1.3 Family Resources Survey<sup>16</sup>

#### Key facts:

Geographical coverage: United Kingdom;

Set sample size: 42,200 households;

Response rate: 65% (2002/2003);

London Economics on behalf of the School Food Trust June 2008

<sup>&</sup>lt;sup>16</sup> The following information is from the Office for National Statistics website, from the following webpage: http://www.statistics.gov.uk/ssd/surveys/survey\_family\_resources.asp (Downloaded on 7 May 2008)

- Type of survey: Face-to-face interview; and
- Fieldwork dates: April March (financial year), annually.

The Family Resources Survey (FRS) is a continuous survey of private households and was commissioned by the Department for Work and Pensions (DWP). The survey was launched in October 1992 to meet the specific information requirements of DWP. Traditionally the Department had relied upon other government surveys, in particular the Family Expenditure Survey and General Household Survey. However, these surveys have relatively small sample sizes and therefore did not provide sufficiently reliable information on groups of particular interest to DWP. As the target number of fully co-operating households on the FRS is approximately 24,000 per annum, comprehensive information can be produced providing statistical data on benefit uptake and financial status of specific groups, often at regional level.

Adults eligible for inclusion in the survey are asked a wide range of questions about their circumstances including: income and state support, tenure and housing costs, assets and savings, occupation and employment, health and ability to work, pensions and insurance, and childcare and carers. Although some of the information collected is available elsewhere, the FRS provides new or more comprehensive information in a number of areas and brings some topics together on one survey for the first time. The sample size allows more confidence in the analyses of smaller sub groups, including, for example, regional breakdowns and recipients of certain benefits.

#### Survey methodology

The FRS aims to cover all private households in the United Kingdom and the FRS sample is drawn from the small user Postcode Address File (PAF). All adults in selected households are eligible for inclusion in the survey. Face to face interviews are carried out by fully trained interviewers who key responses directly onto laptop computers.

In 2002-2003 the response rate was 65%. A report on the Family Resources Survey (Great Britain), 2001-2002 was published by DWP in May 2003. Fieldwork for the survey is carried out jointly by the Office for National Statistics and by the National Centre for Social Research. (Fieldwork in Northern Ireland is conducted by the Northern Ireland Statistics and Research Agency.)

## **Annex 2 Detailed methodology**

With each of the datasets, we used the same procedure to generate estimates of the proportion of children entitled to Free School Meals under the various sets of criteria. We then applied these proportions to the school roll numbers (published by the Department for Children, Schools and Families) to make the estimates consistent for comparison purposes.

Firstly, we are interested in the characteristics of the head of the family unit (and their partner if applicable) to determine whether any children they are responsible for would be entitled to Free School Meals. We identify whether the family unit fits the various criteria, such as receiving income support, for instance. We create a set of variables that specify 'yes' or 'no' for each criterion.

Secondly, we need to establish the number of dependent children for whom that family unit is responsible and the ages of those children.

We combine these two strands of information to get estimates, on a family unit basis, of the number of children that would be entitled to Free School Meals under each set of criteria (split by age groups).

We then apply the weights supplied as part of the datasets to rescale these figures from sample size to population size.

We group the number of children to primary and secondary schools based on their ages. The age groups in the datasets do not directly match the age groups applicable to primary and secondary schools. For example, children aged 10 to 15 years include both primary and secondary school children. We apportion the numbers assuming that there is an even distribution in each year. In the case given, we assign one-fifth to primary schools and the rest to secondary schools.

On a region-by-region basis, for the nine Government Office Regions of England, we use the total number of dependent children in the population to calculate the percentage of children entitled to Free School Meals (split by age groups).

We apply these percentages to the school roll numbers on a region-by-region basis, and then add up the resulting numbers to arrive at total numbers of children for England.

#### A2.1 Notes on the use of the datasets

The three surveys broadly cover the same topics, but each does so in its own way. In this report, the differences were such that sometimes one dataset was appropriate, and, in other cases, another was.

Each of the datasets contains some way to look at collective units. In the Quarterly Labour Force Survey (QLFS) and the General Household Survey, (GHS) we can analyse at the family unit level. Whereas the GHS allows analysis specifically on family-level characteristics, privacy considerations mean that the QLFS only allows analysis at the individual level. However, we can isolate heads of family units, which gives us our basis for analysis. The Family Resources Survey (FRS) only allows analysis at household level, which is slightly less useful, in that there could be several family units within one household. For this reason, we concentrate our primary analysis on the QLFS and GHS, using the FRS as a secondary reference point.

The QLFS is particularly well-suited to analysing benefit receipt, since it allows us to isolate the receipt of each benefit separately. The detail is not at as such a fine level for Tax Credits, in that it does not distinguish between Child Tax Credit and Working Tax Credit. Furthermore, the QLFS does not have a very high response rate for income questions, which, combined with the difficulty of assessing family income, make it less useful for this purpose.

The GHS contains data specifically on family income, and does have information on most benefits, but not in the same level of detail or as broad coverage as the QLFS. This makes it less useful in analysing sets of criteria as it is not possible to incorporate the interactions such as a family receiving income support and also housing benefit.

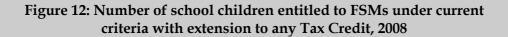
In relation to family income levels, the count of children estimated using the FRS is surprisingly low. One good comparison is looking at the measure of relative poverty, meaning those in homes on less than 60% of median income before housing costs. Department for Work and Pensions data for 2005/06 counted 2.8 million children in relative poverty in the United Kingdom<sup>17</sup>. The numbers from the FRS were just under 800,000. This could be in part due to the analysis being limited to household level rather than family level, but it seems unlikely that this is the only reason. In the GHS, it was 3.1 million children (excluding Northern Ireland). Given this discrepancy, we were unwilling to use the FRS as a primary dataset for analysis.

Households Below Average Income figures for 2005/2006, available at http://www.dwp.gov.uk/asd/hbai/hbai2006/pdf\_files/chapters/chapter\_4\_hbai07.pdf (downloaded on 8 May 2008).

# Annex 3 Findings at GOR level under alternative entitlement criteria

This annex contains charts describing the number of children that would be entitled to Free School Meals under alternative criteria, and the expected associated cost to the Exchequer based on current Free School Meals take-up rates. The data are presented at Government Office Region level, and thus represent geographical breakdowns of the national data, presented for numbers of children in Figure 8 and Figure 9, and for Exchequer cost in Figure 10 and Figure 11.

## A3.1 Number of entitled children by GOR under alternative entitlement criteria



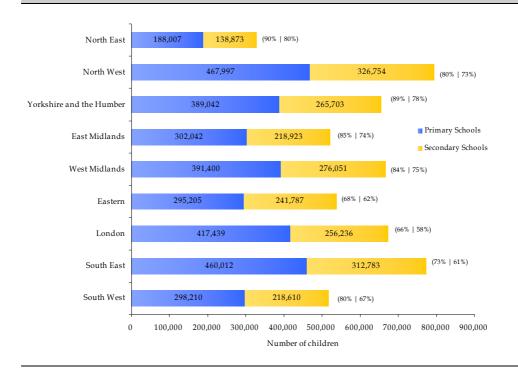


Figure 13: Number of school children entitled to FSMs under current criteria with expansion to Housing Benefit, 2008

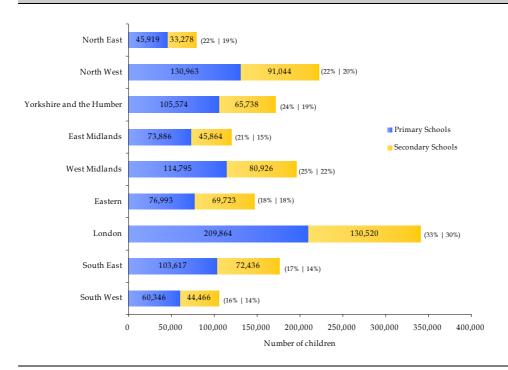


Figure 14: Number of school children entitled to FSMs under current criteria with expansion to Council Tax benefit, 2008

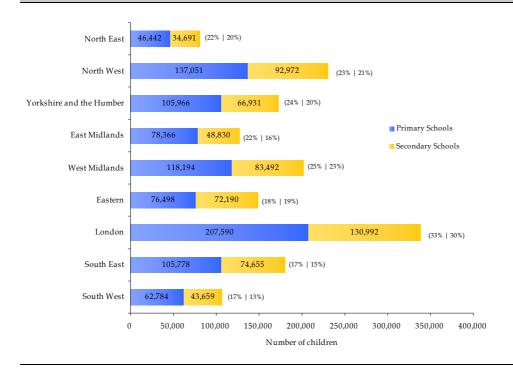


Figure 15: Number of school children entitled to FSMs under current criteria with expansion to Housing Benefit and/or Council Tax benefit, 2008

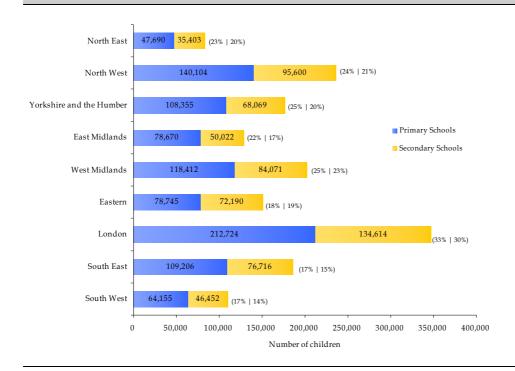


Figure 16: Number of school children entitled to FSMs if criteria were changed to (any) Tax Credit only, 2008

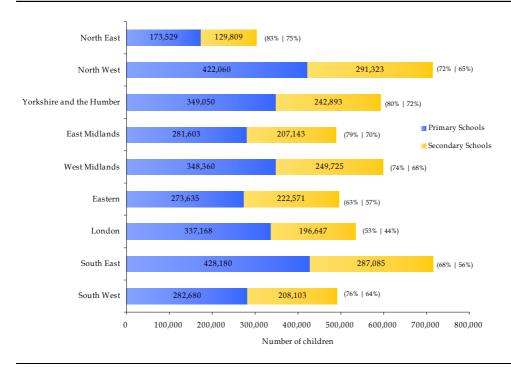


Figure 17: Number of school children entitled to FSMs if criteria were changed to Housing Benefit only, 2008

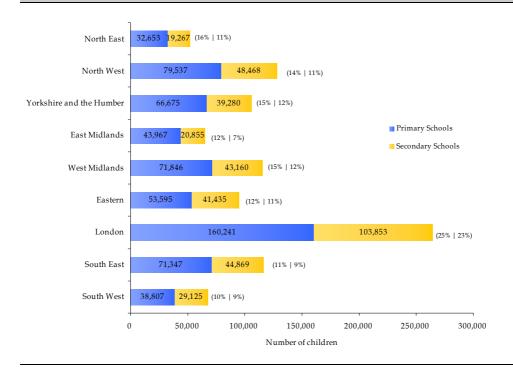


Figure 18: Number of school children entitled to FSMs if criteria were changed to Council Tax benefit only, 2008

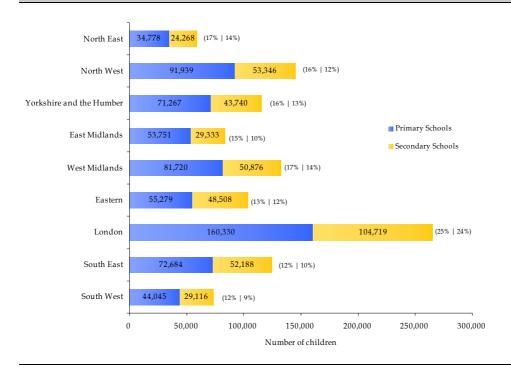


Figure 19: Number of school children entitled to FSMs if criteria were changed to either Housing Benefit and/or Council Tax benefit, 2008

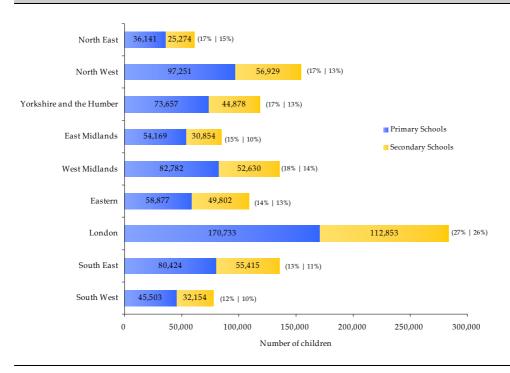


Figure 20: Number of school children entitled to FSMs if criterion were family income (before housing costs) below 60% of median income (i.e., below £12,300), 2008

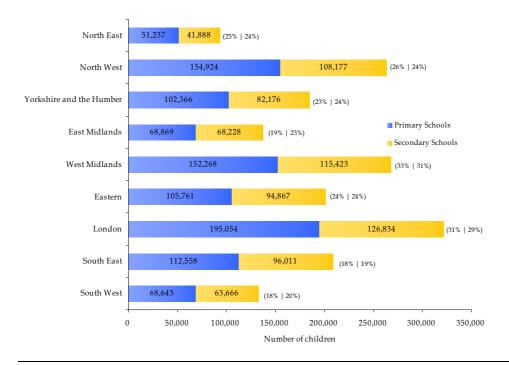


Figure 21: Number of school children entitled to FSMs if criterion were family income (before housing costs) below median income (i.e., below £20,500), 2008

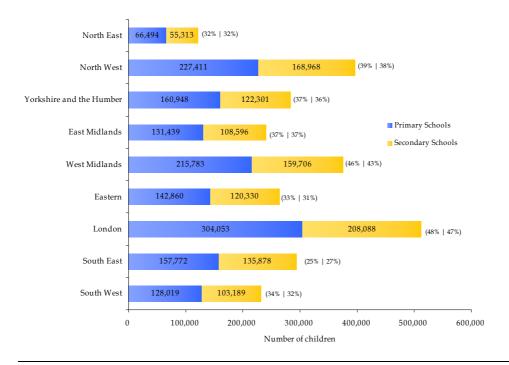


Figure 22: Number of school children entitled to FSMs if criterion were family income (before housing costs) below £8,000, 2008

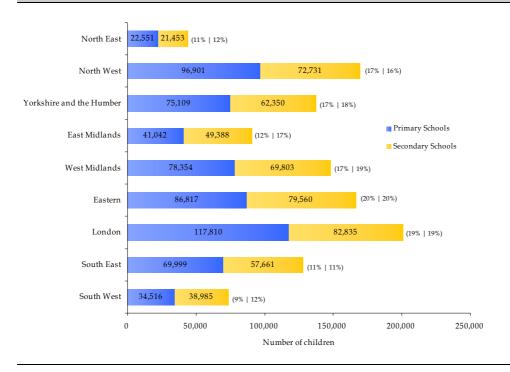


Figure 23: Number of school children entitled to FSMs if criterion were family income (before housing costs) below £10,000, 2008

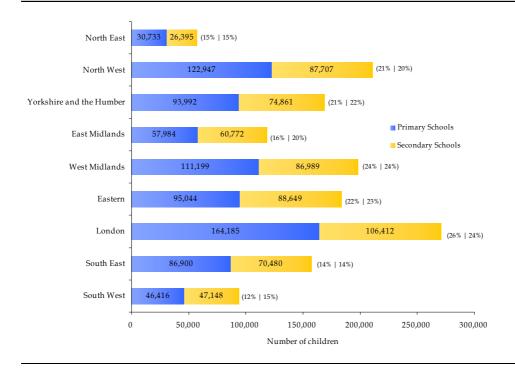


Figure 24: Number of school children entitled to FSMs if criterion were family income (before housing costs) below £12,000, 2008

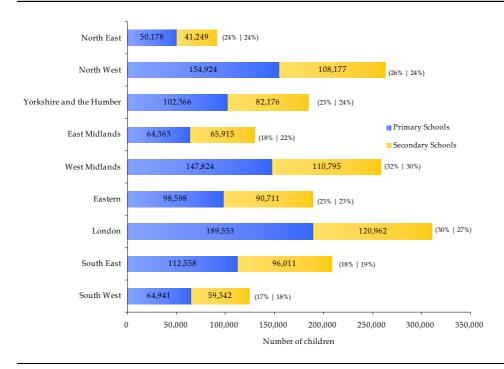


Figure 25: Number of school children entitled to FSMs if criterion were family income (before housing costs) below £14,000, 2008

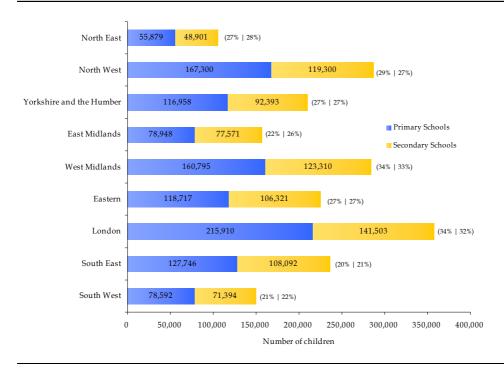


Figure 26: Number of school children entitled to FSMs if criterion were family income (before housing costs) below £16,000, 2008

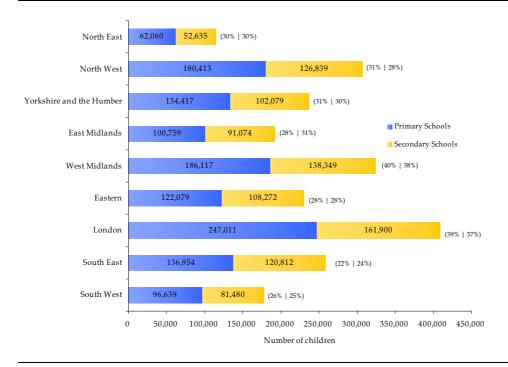


Figure 27: Number of school children entitled to FSMs if criterion were family income (before housing costs) below £18,000, 2008

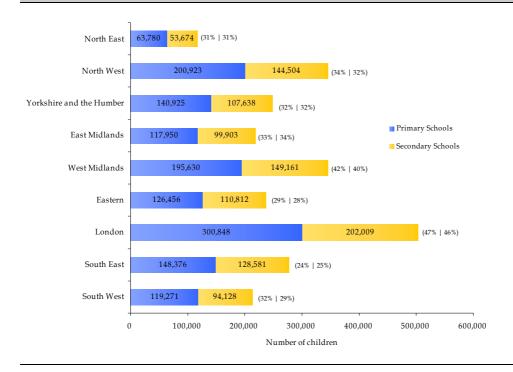
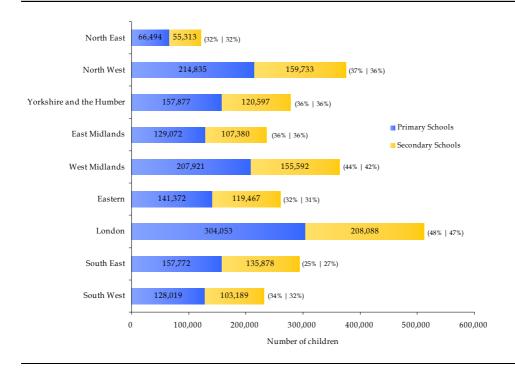


Figure 28: Number of school children entitled to FSMs if criterion were family income (before housing costs) below £20,000, 2008



## A3.2 Cost to the Exchequer by GOR under alternative entitlement criteria

Figure 29: Exchequer cost of providing FSMs under current criteria with extension to any Tax Credit, 2008

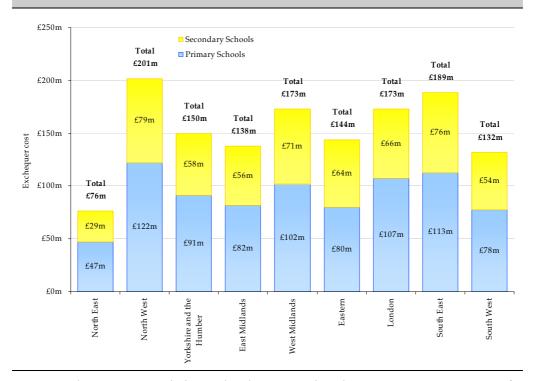


Figure 30: Exchequer cost of providing FSMs under current criteria with expansion to Housing Benefit, 2008

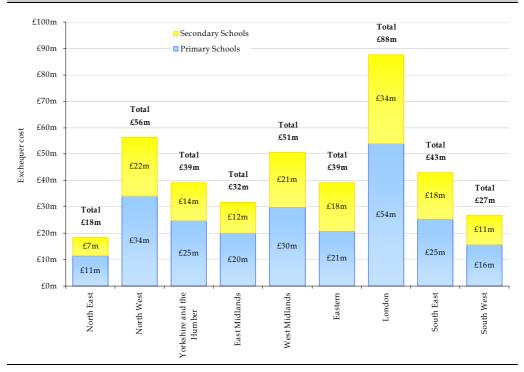


Figure 31: Exchequer cost of providing FSMs under current criteria with expansion to Council Tax benefit, 2008

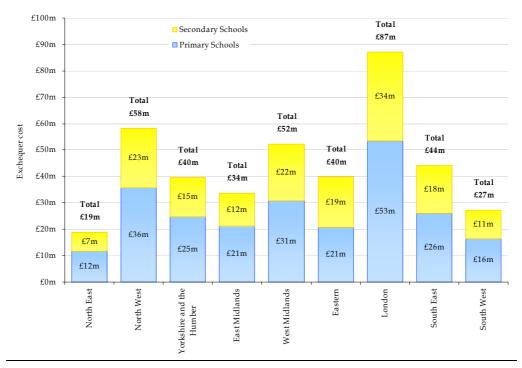


Figure 32: Exchequer cost of providing FSMs under current criteria with expansion to Housing Benefit and/or Council Tax benefit, 2008

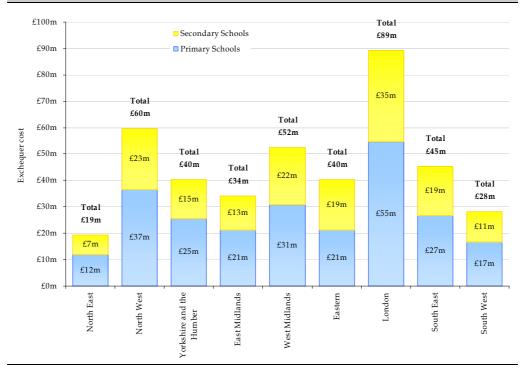


Figure 33: Exchequer cost of providing FSMs if criteria were changed to (any) Tax Credit only, 2008

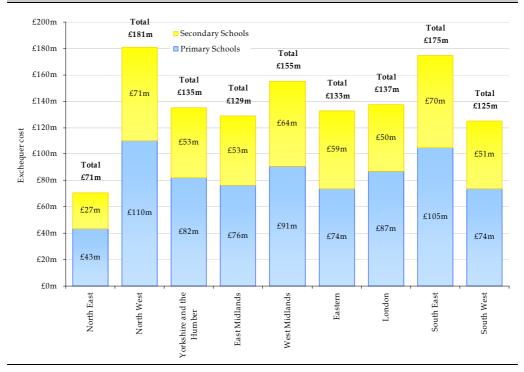


Figure 34: Exchequer cost of providing FSMs if criteria were changed to Housing Benefit only, 2008

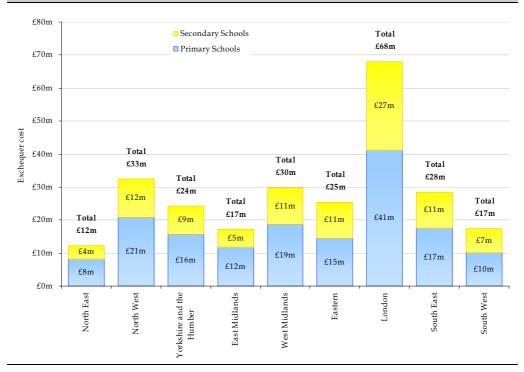


Figure 35: Exchequer cost of providing FSMs if criteria were changed to Council Tax benefit only, 2008

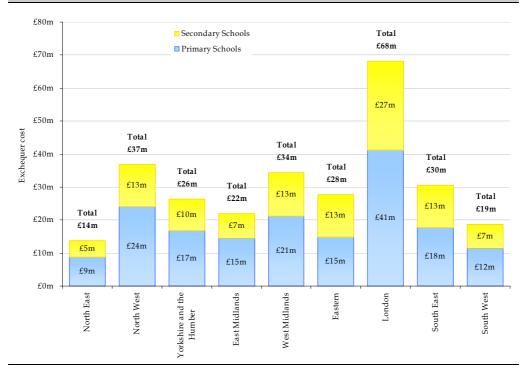


Figure 36: Exchequer cost of providing FSMs if criteria were changed to either Housing Benefit and/or Council Tax benefit, 2008

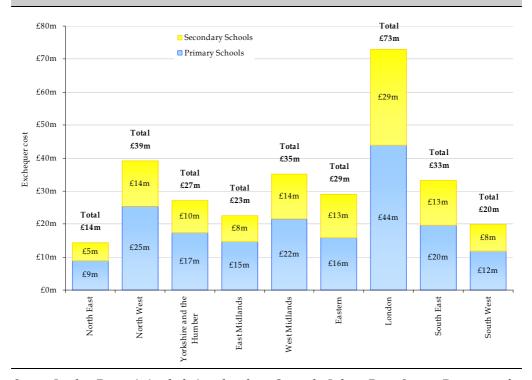


Figure 37: Exchequer cost of providing FSMs if criterion were family income (before housing costs) below 60% of median income (i.e., below £12,300), 2008

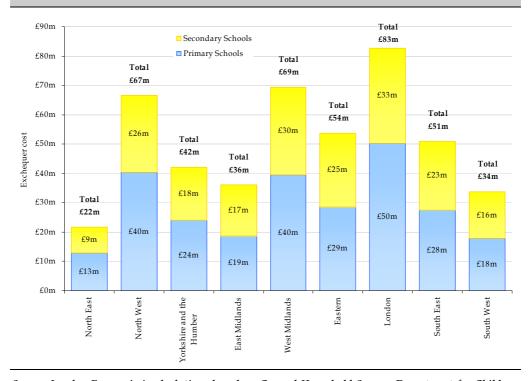


Figure 38: Exchequer cost of providing FSMs if criterion were family income (before housing costs) below median income (i.e., below £20,500), 2008

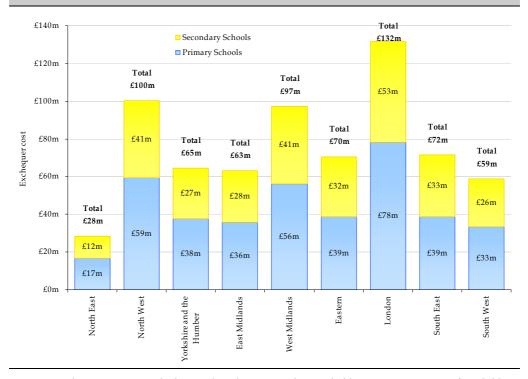


Figure 39: Exchequer cost of providing FSMs if criterion were family income (before housing costs) below £8,000, 2008

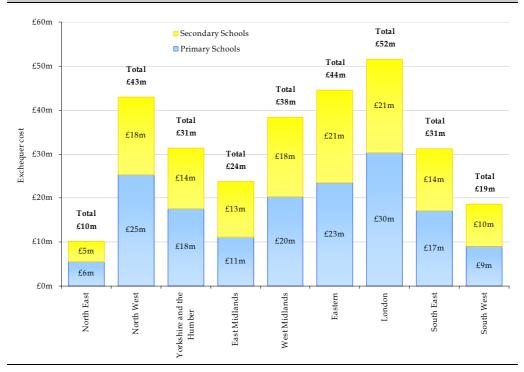


Figure 40: Exchequer cost of providing FSMs if criterion were family income (before housing costs) below £10,000, 2008

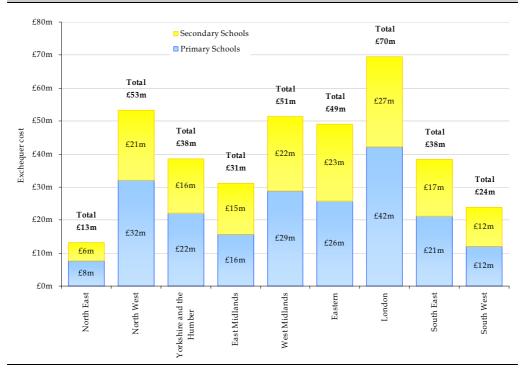


Figure 41: Exchequer cost of providing FSMs if criterion were family income (before housing costs) below £12,000, 2008

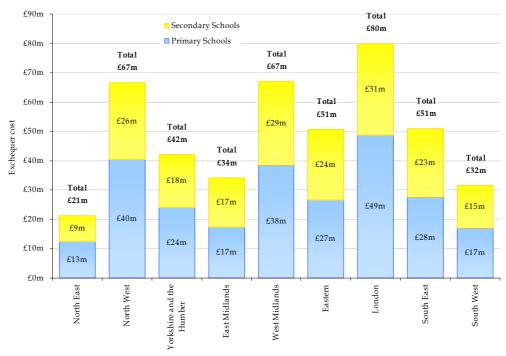


Figure 42: Exchequer cost of providing FSMs if criterion were family income (before housing costs) below £14,000, 2008

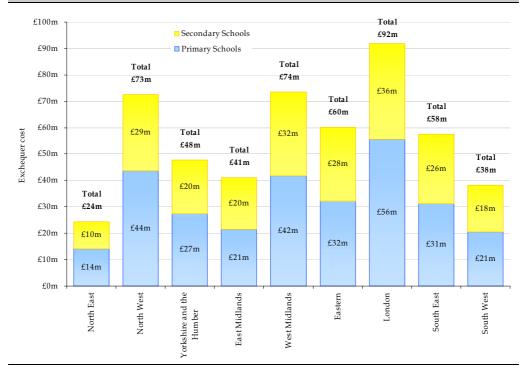


Figure 43: Exchequer cost of providing FSMs if criterion were family income (before housing costs) below £16,000, 2008

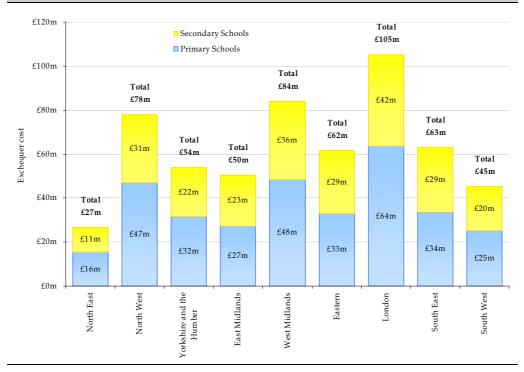


Figure 44: Exchequer cost of providing FSMs if criterion were family income (before housing costs) below £18,000, 2008

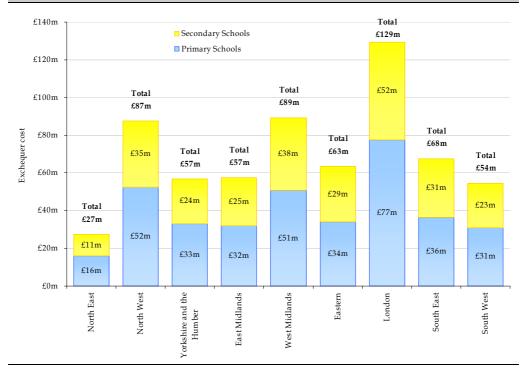
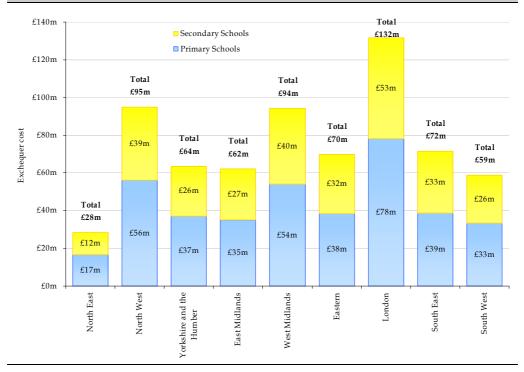


Figure 45: Exchequer cost of providing FSMs if criterion were family income (before housing costs) below £20,000, 2008



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