Foster Cost Adjustment to the Formula for Children's Social Services

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Executive Summary

The principal aim of this part of the study was to estimate an extra cost of foster care over and above the variations in the general costs of children's social services between local authorities. Based on a literature review, a number of factors associated with the children were identified that were thought to be related to the costs of individual foster care. These included age, disability and special needs. However, these characteristics do not vary much between local authorities, and it seems unlikely that they would account for variations in the costs of foster care between local authorities. Ethnicity was another characteristic that was identified as possibly contributing to costs, although the evidence shows that ethnic status does not add to cost, once the overall cost of local services has been controlled for.

A survey of the heads of local authority foster teams in England was subsequently conducted to see if they could identify factors influencing the costs of foster care. Fifty-three percent of local authorities sent a reply to the questionnaire. Local authorities could accurately identify whether their own foster costs were above or below average relative to all local authorities. The two features consistently identified as making children difficult to place in foster care, and more expensive to foster, were older children and children with emotional and behavioural problems. Ethnicity was regarded as a factor affecting difficulty of placement (13.8%) but not in cost. This finding agreed with the findings of the literature review.

Analysis of data from the Children in Need census 2003 supported the view that individual characteristics affect the cost of fostering. These included sex (males being more expensive), age (older children being more expensive) and special needs. However, these characteristics did not vary between local authorities in a way that could account for differences in foster costs between authorities. The analysis found that ethnicity was a contributor to cost, with white children, on average, being less expensive. However, the data were explained by minority ethnic children living in areas with higher overall costs for children's social services, rather than being a factor contributing to cost.

Sub-LA analysis of these data was conducted, using postcode districts as the level of analysis. Data on labour market and related effects that might influence the unit cost of fostering were derived from the 2001 census and linked to the data on costs. However, none of the tested variables were significantly related. In the multilevel analysis, differences between local authorities accounted for far more variance than did the differences between children, although even the local authority differences only accounted for 5.6 percent of the variance.

Another method was therefore needed to relate the costs of foster care to the socioeconomic characteristics of the area. This was done using data from the SSDA903 return. The average foster costs within a local authority were calculated, based on age, sex and ethnicity. These averages were then applied to the volume of care provided by local authorities, using SSDA903 data. Several models were fitted using a range of socio-economic indicators derived from the census. The recommended models 3 and 4 include just four or five census variables (all expressed as percentages), in order of significance:

Model 3	Model 4
People in Other ethnic groups	Females 16-74: Looking after home/family
People in Mixed ethnic groups	People 16-74: Qualifications level _
People aged 16-74 with level 1-2 qualifications	Females 16-74: Associate professional occupations
People aged 16-74 with level 4-5 qualifications	People in Other ethnic groups
Women aged 16-74 looking after home	

Factors Accounting for Variations in Foster Costs

1. Introduction and Analytic Approach

Current Adjustment

The current foster cost adjustment - taking account of differences in social class and ethnicity - is based on regression analysis of past unit costs of foster care at Local Authority level. In such an analysis, the associations between various 'need' factors and variations in spending on foster care may simply reflect differences in policy and efficiency as well as in need. In particular, as residential care and foster care are, at least in some cases, possible substitutes, variations in the use of fostering may be a consequence of the availability, and relative price, of residential care places. Any improvement on the current adjustment will therefore have to distinguish between the influences of various supply and demand factors on costs,

Original Design for New Research

The original plan was to collect data not only on costs (of both foster and residential care) but also on the different supply factors (relative to need), including:

- the extent and type of residential care available in each Local Authority compared to the children that might be considered suitable for residential care
- the extent and nature of potential foster families when compared to the children that might be considered for fostering

However, it was not possible to collect these new data, as data collection would have had to take place in the preparatory period for the Children in Need Census (CiN) 2005. It was felt to be an unacceptable burden on Social Services Departments to provide extra data during this period. Consequently we were obliged to rely almost exclusively on secondary analysis of existing data. Initial work, based on CiN 2003, set out to identify authorities with high unit costs for fostering, authorities where there is a low level of fostering (perhaps indicating difficulties of finding carers) and authorities with high proportions of ethnic minorities. The intention was to combine data on needs drivers from the census etc, with supply variables (including alternative supply) in order to develop preliminary hypotheses about the factors associated with the difficulty of fostering and with high foster costs.

Based on this analysis, a questionnaire was to be developed to collect information from foster teams about the factors they thought were influencing supply of foster carers and about the costs for children from different ethnic groups. The additional information from this small survey would enable us to reanalyse the full CiN 2003 dataset with the aim of identifying factors associated both with difficulties of fostering and with high costs.

Final Approach

In practice, the initial analysis of the CiN dataset did not yield any unambiguous conclusions about differences between authorities or about the characteristics of the children. The approach to developing the formula has therefore been to examine four sets of evidence: analyses of literature; a questionnaire to heads of foster teams; analysis of the subset of the CiN 203 dataset; and analysis of SSDA903 returns.

In the quantitative analysis, apart from cross-tabulations, both multiple regression and multilevel modelling have been used. Both have already been used for the current formulae. The latter (multilevel modelling) is most suitable when conducting analysis of a data set on several levels for example, individuals residing in postcode districts nested within Local Authorities or regions.

Criteria for Assessing Appropriateness of Statistical Models

Variables are assessed first for their plausibility as factors that could be used to alter allocations both in terms of their nature and the availability of reliable data for the factor that can be collected routinely. When entered into statistical models however, they may demonstrate a 'perverse' effect, i.e. an effect opposite to that which was expected. This can arise because of high levels of inter-correlations or the specific nature of the joint distribution of the dependent and independent variables. When this happens, the variable is dropped from the equation because the resulting formula will not be transparent.

Models that are plausible in terms of the nature and sign of the variables are examined for their statistical properties. This includes what is called a specification test and the size of their R-squared statistic.

Specification tests are intended to test whether or not there are any variables that have been omitted from the model and whether the functional form is appropriate. No one statistical test covers both these issues comprehensively. The one used here is the original Ramsey Reset test which involves including the square of the predicted value from the original model as an independent variable. It was emphasised that neither of these specification tests should be treated as the sole or unique criterion. Indeed there are several examples of models which fail this criterion being used successfully for resource allocation.

The R squared value measures the proportion of variance in the dependent variable that has been accounted for by the variables that have been included in the model. Once again, it was emphasised that this value should not be treated as the sole or unique criterion and it could be argued that at least as much attention should be given to the plausibility of the variables.

2.   Variations in LA foster care costs - Literature Review

Introduction

Each year, the UK central government assesses the relative need of English local authorities in respect of local services, including personal social services for children, which includes foster care. There are wide unexplained variations in expenditure on fostering services, both in terms of total expenditure and average costs per placement.

Latest figures show that on 31st March 2004 there were 41,600 looked after children in foster placements in England[1], representing 68% of all children looked after on that date; of these 7,600 were placed with a relative or friend, 26,700 were with a foster carer provided by the Local Authority, and 7,300 were in a foster placement provided by an independent agency (DfES, 2005). The number of children looked after in foster placements has increased by 32% since 1994 when foster placements accounted for 64% (n=31,500) of children looked after.

Not only has the size of the fostering service increased dramatically, but, during the last 30 years or so, the nature of fostering has changed. Fostering used to provide long-term homes to children whose parents could not look after them, whilst children identified as 'maladjusted', along with older children and those exhibiting difficulties were considered unsuitable for fostering and placed in residential care (Hutchinson, 2003). Since the 1970s there has been a trend to place more children in foster homes, and fostering is now the first choice for looked after children, many of whom have often serious abuse or neglect and have significant emotional and behavioural difficulties, which implies many more movements for the children.

Costs of fostering services

A literature search, conducted on a number of databases, including Medline, ASSIA, Caredata, EconLit and the Social Sciences Citations Index, revealed very little literature relating to the cost of fostering services in the UK. The main source of cost data is provided by local authority returns to the Department of Health which collects annual expenditure and activity data on personal social services (Form PSS EX1). These are published annually by CIPFA as 'Personal Social Services Statistics [relevant year] Actuals'.

The net total cost of the fostering service in England for 2003-04 was £802 million, out of a total expenditure on looked after children of £1,776 million (CIPFA, 2005). Data from 2003-04 (CIPFA, 2005) show variations in expenditure and activity patterns in respect of Children's and Families' Services and foster services in different Local Authorities (Appendix 1). The gross cost per week for foster care (including children placed for adoption, respite and short-term placement) provided by the local authority ranged from a mean of £250 in Metropolitan Districts to £336 in Outer London. Where placement is provided by another agency the range is from £737 in English Unitary Authorities to £812 In Outer London. These costs include both foster placement payments made to foster carers or agencies and an amount to cover Social Services Management and Support Services expenditure. The method for allocating SSMSS expenditure is not specified in the DH Guidance, and this element of cost may not be equivalent across local authorities.

Expenditure on children's social services is also recorded in the Children in Need surveys which take place periodically, the latest being in 2003 (DfES, 2004). The survey covered all Children in Need who received a service from the LA and all activity recorded in a census

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[1] Unless otherwise stated figures in this paper refer to England and English Local authorities

week in February 2003. All activity was costed and all expenditure made to or on behalf of the child in the census week was included. Expenditure included costed staff or centre time, or in terms of payments for placements or other services received by the child. The census covered all provision paid for by Local Authority Social Services on behalf of Children in Need, whoever provided the service, i.e. whether the service was provided directly by the Local Authority, or by the private or voluntary sector under commissioning arrangements.

The average cost per child looked after in the survey was £590, of which £410 was accounted for by ongoing costs, i.e. placement costs, fostering costs, adoption costs. This figure was increased by 44% when the costs of social services staff and centre time was included, as well as one-off costs (Table 1).

Analysing the CiN 2000 data, Beecham et al. (2001) found that there were regional variations in the cost of additional support for CLA, ranging from a mean cost of £97 in the North East to £146 in the East of England.

Table 1 - Average cost (£ per week) per children looked after receiving a service based on a sample week in February 2003 (England)

	£
Costed staff/centre time	170
Ongoing costs e.g. placement costs	410
One-off costs	10
Total costs	590

As well as variations in costs of care in individual cases, there are regional variations in overall cost: expenditure on Children's and Families' Services represented 30.2% of the Personal Services Gross Total Costs in Inner London authorities, compared with 19.7% in the English Counties (CIPFA, 2005). Activity rates varied also. The number of children looked after at 31 March 2004 averaged 55 per 10,000 children aged under 18 in England as a whole, but ranged from 75 per 10,000 in London to 42 in the East Midlands and the South East. At the authority level, the range was even greater: 15 per 10,000 in Wokingham and 23 in Windsor and Maidenhead to 137 in Manchester (DfES, 2005). A 'census' of children looked after in Wales in February 2000 (Pithouse and Crowley, 2001) also found significant differences in the rates of children being looked after, ranging from 26 per 10,000 in a rural mid-Wales county to 97 per 10,000 in a south east valley authority.

Some of these variations are generated through the application of different accountancy rules so that different elements are used in the calculations. Although this can be addressed on an Authority by Authority basis, there is no systematic effect that could be taken into account in resource allocation. Similarly, there are other well-known reasons for differences in unit costs such as rates of pay of social service personnel and the proportion of agency staff employed. These in part reflect differing costs due to geographical location, which are already accounted for by the area cost adjustment.

Characteristics of children looked after

There are no published demographic statistics for children who are in foster care. Of the 41,600 children being looked after at 31st March 2004, 55% were boys, compared with 51% of children and young people aged under 20 at the 2001 Census (Table 2). Children in the age range 10-15 years were highly over-represented in the children looked after group, 43% of CLA were in this age range, compared with 26% of those aged under 20 years in the Census

data. In respect of ethnicity 80% of CLA were defined as white compared with 87% in the Census population, 8% of CLA were mixed ethnicity, compared with 3% in the general population.

Table 2 - Socio-demographic characteristics of children being looked after at 31 March 2004, compared with general population Census 2001

	Children looked after [1]	General population [2]
	%	%
Gender		
Male	55	51
Female	45	49
Age		
Under 5	19	24
5-9	21	25
10-15	43	26
16+/16-19	17	25
Ethnic Group		
White	80	87
Mixed race	8	3
Asian or Asian British	2	6
Black or Black British	8	3
Other	2	<1

Source: [1] Children looked after by Local Authorities Year Ending 31 March 2004, National Statistics, DFES, March 2005; [2] www.statistics.gov.uk/statbase/Expodata/Spreadsheet/D7547.xls

A recent survey carried out in seven local authorities found that out of 533 children in foster care, 54% were male, 84% white and 9% 'dual heritage' (Sinclair, Wilson and Gibbs, 2005). These figures correspond closely to those of the CLA data. However the age distribution of the children in foster care differed, with approximately one-quarter of the sample being in each age range: under 5, 5-10, 11-15, 16+. This discrepancy may be due to the sample included in the survey or it may reflect a real difference between children looked after in general and children who are in foster placements in particular.

Children who are looked after often have complex and severe needs and significant levels of mental health problems. 62% of looked after children at 31 March 2004 had experienced abuse or neglect and a further 10% were being looked after due to family dysfunction (DfES, 2005). A recent study of children who were looked after on 31 March 2001, found that among young people aged 5-17 years looked after by local authorities, 45% were assessed as having a mental health disorder, 37% had clinically significant conduct disorder, 12% were assessed as having emotional disorders (including anxiety and depression) and 7% were rated as hyperactive (Meltzer et al., 2003).

Owen et al. (2000) found ethnicity to be correlated with the cost of foster care, in that LAs with higher foster care costs, Inner London and Outer London, also had a higher percentage of CLA of minority ethnic origin, and specifically children of mixed ethnic origin. However, they emphasised that a causal relation could not be presumed, since it is quite plausible that black children and children of mixed ethnic origin live in areas where the cost of foster care are higher for other reasons.

Analysis of the CiN 2003 data (see below) supports the widespread assumption that ethnic minority group clients are more costly to place in fostering than white clients. Average costs for white clients are £287 compared with £346 for Asian and Asian British and £365 for Black and Black British. These differences persist after controlling for age and special needs.

However, the respondents to our survey (see below) did not identify ethnicity as a cause of higher costs. This interpretation is supported by Bebbington and Beecham's analysis of the Children in Need 2001 survey data. Although the CiN 2001 figures confirmed the finding of the 2000 Census that the average expenditure during the census week on black Caribbean, black African, mixed race and some Asian children was higher than average, when they compared the mean expenditure on each child to the mean expenditure on white British children in the same area they found that 'once allowance is made for the high costs of some areas, then expenditure on mixed race and black children does not appear to be particularly high' (Bebbington and Beecham, 2003, p 5).

This discussion suggests that characteristics of individual children do not account for geographic variations in costs of fostering. However there is research suggesting that socio-demographic factors are associated with a higher risk of admission into care - see the main report: *Options for the Formula for Children's Social Services*, section II – and, of course, Authorities may have different policies in terms of how they place children (and specifically in terms of the use of foster care) which will affect the relative prices of different types of placement *within* any one Authority.,

Foster carer shortages

Survey respondents also highlighted the high costs associated with Independent Fostering Agencies (IFAs). It has been estimated that approximately 11% of all foster placements in England and Wales in 2000 were made through IFAs (Sellick and Connolly, 2002). The rise in IFAs during the 1990s reflects (and in the view of some has caused) shortages of local authority foster placements.

The Fostering Network has recently suggested that there is a current shortage of at least 10,000 foster carers across the UK (Tapsfield and Collier, 2005) and local authorities report problems in recruiting sufficient carers. However precise figures for the number of foster carers are not available and it is not clear how the figure of 10,000 was derived. Official statistics give the number of children fostered and the number of days of foster placements, but do not report the number of carers, or of new recruits or those ceasing to care. Sinclair et al. (2004) estimate that there are approximately 25,000 foster carers in England, suggesting an average of 1.7 children placed with each foster carer unit. This compares with an average of 1.4 children per carer unit according to Waterhouse's figures for 1994/6 (Waterhouse, 1997).

Research suggests that shortages in foster carers are more serious in some areas than in others. Tresiliotis, Borland and Hill (2000) found that in Scotland the more serious shortages were urban authorities: seven out of ten Scottish authorities had some foster carer shortages, two had serious shortages and only one had a surplus. In particular there were difficulties in the placement of older children. Pithouse and Crowley (2001) undertook a survey of all local authority placements in Wales and whilst there were enough places available for all the children in foster care they identified a 'mismatch' between availability and demand. Comparing the number of children in foster care with the number of local authority foster places, they found that eight authorities were in balance and five had a modest surplus of places, however there were five authorities with deficits ranging from 13 to 81 fostering places, which were covered either by using independent fostering agencies, using residential care or having a higher than average placements at home or with relatives. Overall, the

children placed with local authority foster carers took up three-quarters of the officially available places; whilst most placements were age-appropriate there were shortages of placements for those aged 16 plus and few authorities had vacant placements that could support children or young people with particularly challenging behaviours, e.g. those likely to abuse other children. There were also shortages of placement vacancies for sibling groups of three or more. It was also found that in large rural areas the geography of children needing placements rarely corresponded with the locations of foster carers.

One consequence of the shortage of foster carers is that placement choice is rarely an option, and Sinclair (2004) reported that some foster carers felt that they were pressured into taking in children whom they thought unsuitable for their family.

Foster carer characteristics

Bebbington and Miles (1990) found that compared to the general population, foster care families are more likely to involve two parents, only one of whom goes out to full-time work, they are less likely to have two or more children under five and more likely to contain a woman aged between 30 and 55. The supply of foster carers will be higher in authorities that have many families of this kind, than in those that do not. Moralee (1999) found a relationship between levels of female employment and the number of foster carers; areas where there is high female employment provide fewer carers. There may also be an association between housing stock and foster care: areas with higher occupation levels and without spare rooms may provide fewer placements.

Foster families differ from the other families in the general population in significant ways which may have an impact on the supply for foster carers. In a survey of foster families undertaken in 1987, Bebbington and Miles found that foster families differed from a sample of families drawn from the General Household Survey. They found that the archetypal foster family has two adults, one and only one of whom is in full-time employment, children of their own, but none under five, the mother aged between 31 and 55 and in a home with three or more bedrooms. 30% of foster families fit this description, compared with 8% in the general population (Bebbington and Miles, 1990). More recent work has supported these general findings (Pithouse and Lowe, 2004; Sinclair et al., 2004).

These characteristics of foster families suggest that the supply of foster carers is likely to change with changing socio-economic circumstances: increased female employment, rising divorce rates and more single-parent households, together with smaller modern town houses may affect the number of families coming forward to foster. Since socio-economic factors are subject to regional variation they may contribute towards variations in costs of services, with increasing costs being associated with shortages of local authority foster carers.

Foster carers' remuneration

There is no national standard foster allowance and a significant proportion of local authorities still pay their foster carers an allowance that is lower than the Fostering Network's recommended rate. A variety of payment schemes currently operate, including a payment for skills (which can be paid at various levels), a fee according to the type of service being provided (e.g. foster carers may be paid an additional fee if they can guarantee being available during the day for a child who requires active caring during the day), or simply a flat rate fee paid to all foster carers within an authority (Tapsfield and Collier, 2005). There is therefore considerable variation in foster fees paid both within and between local authorities, and little explanation as to the causes for these variations. A recent review of foster care payments (Kirton et al., 2003) found that weekly placement fees were typically in the range of £100 to

£200, and that age-related maintenance payments ranged from £65 to £130 per week for the youngest children and from £110 to £205 for the oldest.

Recent research of foster carers in Scotland (Triseliotis, Borland and Hill, 2000) found that the majority of carers thought that the present levels of allowances/pay were too low and were in support of a salaried or part-salaried service. Carers who were paid a fee were more satisfied than the rest with the operation of the fostering services, more likely to attend training and support group meetings. Those who did not support the idea of a salaried service tended to be those who did not attend training or support groups. None of the carers who gave up fostering gave financial considerations as a reason. Similarly Sinclair et al. found there no significant relationship between those who continued fostering during the course of their study and those who ceased fostering and their views of payments for foster carers. However, there was evidence that those receiving a larger income were more likely to stay fostering.

Independent Fostering Agencies (IFAs)

Shortfalls in local authority foster placements lead to increased dependence on IFA placements with associated higher costs. The rapid growth in the number of IFAs in the 1990s, from 11 in 1993 to an estimated 120 in 2001 (Sellick and Connolly, 2001) has been blamed for the difficulties local authorities have in recruiting sufficient foster carers; IFAs have been accused of 'poaching' foster carers by offering higher payments and have been condemned for being profit-making organisations. However, Sellick and Connolly's national survey of IFAs found that only 20% of IFAs were private agencies, the rest being not-for-profit agencies or charitable organisations (Sellick and Connolly, 2001). Of the 1963 IFA foster carers in the study, only 651 (33%) had moved from local authority fostering service, 46% were reported to have had no previous fostering experience. Some of the remainder had been local authority foster carers who had become inactive.

A major concern about the IFAs is that their fees are substantially higher than placement fees paid to foster carers. This fails to recognise the additional services which IFAs provide as part of their placement package. Sellick and Connolly reported that the IFAs in their survey offer a full range of services as well as foster placements and social work, including health services and therapy, education and schooling, transport facilities and support centres. In addition every agency in the survey reported that its foster carers receive training and 24-hour support and respite care arrangements. IFAs provide specialist placements for children for whom local authority placements are lacking. In a sample of children who had been placed with an IFA in the previous 12 months, the primary reasons for placement were found to be no local authority placement (37%), sibling group (20%), specialist services (10%), ethnicity matching (10%) (Sellick and Connolly, 2002).

In the Welsh study, Pithouse and Crowley (2001) found that 6.2% of all foster care places in use were reported as being provided by IFAs, but rates ranged as high as 10-27% in three authorities in South Wales. Placements included the provision of crisis accommodation and specialist support for children with complex needs, disabilities and challenging behaviours. Pithouse and Crowley found that authorities had concerns about the costs of using IFA placements but commented that:

> "Whether the unit costs of independent care were actually higher than those of the local authority was never properly tested by respondents who typically price their services only in relation to monies paid to carers and neglected the 'hidden' costs of social work support and related administrative/legal overheads." (p. 55)

They also considered concerns about 'poaching' of local authority carers were over-exaggerated given the relatively small scale of the IFA sector in Wales.

3. Questionnaire

After consultation with the Department, a questionnaire was developed to collect information from foster teams about the factors they thought were influencing the supply of foster carers and what they thought about the costs for children from different ethnic groups (Appendix 2). This was mailed out to the (named) heads of all 150 foster teams in England. Those who did not reply were contacted by telephone to encourage them to complete the questionnaire or to reply over the telephone. Eventually 80 questionnaires were returned, amounting to a response rate of 53 percent.

The additional information from this small survey will enable us to reanalyse the full CiN 2003 dataset and should lead us to identify factors that are associated both with difficulties of fostering and high costs.

Return rates

Overall the response rate was 53.3 percent. The rate varied between types of authority: it was highest for unitary (60.9 percent) and outer London authorities (60.0 percent), and lowest for inner London authorities (23.1 percent).

Table 3 - Return rates by type of local authority

			Questionnaire returned		Total
			No	Yes	
Type of local authority	County	Count	15	20	35
		Percent	42.9	57.1	100
	Unitary	Count	18	28	46
		Percent	39.1	60.9	100
	Metropolitan	Count	19	17	36
		Percent	52.8	47.2	100
	Inner London	Count	10	3	13
		Percent	76.9	23.1	100
	Outer London	Count	8	12	20
		Percent	40.0	60.0	100
Total		Count	70	80	150
		Percent	46.7	53.3	100

The response rates also varied by Government Office Region. The response rate was highest in the East Midlands (77.8 percent) and lowest East of England (30.0 percent).

Table 4 - Return rates by Government Office Region

			Questionnaire returned		Total
			No	Yes	
Government Office Region	North East	Count	7	5	12
		Percent	58.3	41.7	100
	North West	Count	10	12	22
		Percent	45.5	54.5	100
	Yorkshire and the Humber	Count	5	10	15
		Percent	33.3	66.7	100
	East Midlands	Count	2	7	9
		Percent	22.2	77.8	100
	West Midlands	Count	6	8	14
		Percent	42.9	57.1	100
	East of England	Count	7	3	10
		Percent	70.0	30.0	100
	London	Count	19	14	33
		Percent	57.6	42.4	100
	South East	Count	9	10	19
		Percent	47.4	52.6	100
	South West	Count	5	11	16
		Percent	31.3	68.8	100
Total		Count	70	80	150
		Percent	46.7	53.3	100

Foster care expensive

Question 1 asked if foster care in the authority was particularly expensive relative to others. Twenty-three (29 percent) thought it was. The answers were compared with the PAF indicator B10 for 2002-03, the weekly cost of placing a child in foster care (from the DH Key Indicators Graphical System: see Appendix 1). This shows that, on average, those authorities who thought they were more expensive were in fact so: the average weekly cost of placing a child in foster care in 2002-03 for those authorities who thought they were particularly expensive was £398, and for those authorities who did not think they were particularly expensive the weekly cost was £335. The average cost for non-responding authorities was intermediate, £366.

Table 5 - Actual weekly foster costs

		Weekly cost (£)	Number of authorities	Standard Deviation
Particularly Expensive	Yes	398	23	128
	No	335	55	109
	Total	354	78	118
Non-respondents		366	69	105
Total		360	147	112

Questionnaire responses

When asked the reasons for the high costs, most respondents mentioned competition from independent fostering agencies (IFAs) and difficulties of recruitment as the main reasons. Some also mentioned increasing professionalisation amongst foster carers requiring higher fees.

Authorities were asked which children were particularly difficult to place, had more changes of foster placement, or were more likely to be placed with IFAs. They were asked to tick the two most important factors from a list or to write in other factors. They were also asked whether these factors were thought to contribute to the costs. The results are shown in Table 6. The table shows those characteristics of children that local authorities thought contributed to costs because these children were difficult to place (question 3), required more changes of placement (question 4) and required more use of independent foster agencies (question 5). (Percentages do not add to 100 percent as respondents could tick more than one factor.) Consistently, the two factors which were selected most often were children with emotional and behavioural problems and older children. The most common written answer was sibling groups. Ethnicity as a factor was infrequently ticked.

Table 6 - Features contributing to difficulty and cost

	3. Difficult to place		4. More changes of placement		5. Independent foster agencies	
	N	%	N	%	N	%
Older children	58	72.5	63	78.8	58	72.5
Certain ethnic groups	11	13.8	1	1.3	6	7.5
Learning difficulties	6	7.5	4	5.0	4	5.0
Emotional and behavioural problems	64	80.0	72	90.0	61	76.3
Physical disabilities	12	15.0	1	1.3	6	7.5
Other	19	23.8	4	5.0	20	25.0

Authorities were asked the extent to which they tried to match the ethnic background of the foster carer with that of the child. All replied that this was a high priority. Comments included 'Would always try to achieve this match, where possible', 'First priority', 'We always try'. Some problems were noted: 'We always try, but don't always manage a satisfactory match', 'We make every effort where possible. Do not always have available in-house foster cover of same ethnicity but we are actively recruiting more Asian carers', 'We always seek appropriate placement but this usually means identifying out-of-Borough provision'. However, the difficulties were not always as might be expected: 'We only place Asian children with Asian carers. We have however, due to shortage of carers placed white children with Asian carers'.

Authorities were also asked whether ethnic matching added to the cost of foster care. A slight majority said it did add to costs (45, 56.3 percent); the rest said it did not add to costs, or only minimally (35, 43.8 percent). Of these who thought ethnic matching did add to costs, 16 (20.0

percent) explicitly mentioned the costs being associated with the use of IFAs or other out of area placements as contributing to costs. Only one mentioned extra costs of supporting foster carers 'to meet child's ethnic, cultural, dietary, religious and linguistic needs'.

Conclusions from the questionnaire

The analysis of the questionnaire responses suggests that the extra costs of foster care are not strongly associated with providing for children from minority ethnic backgrounds, although there is some suggestion that there are some extra costs associated with 'matching'. Instead, the factors most strongly identified as being linked to costs are the use of IFAs, placing children with emotional and behavioural difficulties and placing older children.

The next stage, therefore, was to identify factors associated these features, to be used in modelling costs. Data from the SSDA903 dataset were supplied to the team, as these include data on the use of IFAs, emotional and behavioural difficulties and age, as well as ethnicity. We have received 84,573 individual child records for the year 2003-04. These children had an average length of time in care of 563 days.

The use of IFAs would seem to be related to the lack of sufficient carers being recruited locally. This was also noted in the literature review. The best proxy for this would seem to be female employment rates (from the census). We used this as well as other census data to model costs. Unit costs were derived from the CiN 2003 and the characteristics of the children and young people cared for were derived from the SSDA903 data.

4. Data on foster costs from the CiN 2003 Census

This section reports on analyses of the foster cost data available in the CiN 2003 Census. All costs are reported in cash terms, without applying an area cost adjustment.

The dataset

The CiN census dataset for 2003 is unique amongst the official datasets on fostering in containing the cost of fostering for individual clients. Moreover, it includes some data on the characteristics of individual clients, such as age, sex, ethnicity and need group. However it has some limitations for the present purposes:

- the cost only relates to the daily cost in the census week - and is therefore unsuitable for analysing differences between clients over longer periods

- the dataset does not include information on long-term patterns of placements - for example, the number of placements a client may have had in the previous year

- there is no information on the socio-economic characteristics of the client and their originating family

- the area code (postcode district) in each record refers to an originating, pre-foster, address, so there is no sub-LA code in the dataset that could be used to analyse variations in placement cost at sub-LA level.

There are 37,567 clients in the 2003 dataset for whom fostering was the main form of care during the census week. Of these, approximately 18.5% were in minority ethnic groups (Table 7).

Table 7 - Numbers of clients fostered (by ethnic group)

	Frequency	Percent
Asian or Asian British	816	2.17
Black or Black British	2566	6.83
Mixed	2934	7.81
Not Stated	565	1.50
Other ethnic groups	580	1.54
White	30106	80.14
Total	37567	100

Cost per week varied from £0 to £5,000, with a mean of approximately £275 per week. (These are actual costs: no area cost adjustment has been applied.) These are the daily ongoing costs of the placement only and do not include other cost elements in the census week such as social worker and day centre input. (The average weekly costs for all children looked after were shown in Table 1.) Figure 1 shows the distribution of ongoing costs up to £1,200 per week and Figure 2 the costs above £1200. There are about 500 cases under £50 a week and a similar number with costs above £1,200 (both extremes constituting less than 1.5% of all cases). Some of both the very low and very high values may represent data entry

errors - e.g. where a nil entry has been made or where weekly rates have been entered for every day in the census week.

Figure 1 - Costs of fostering (up to £1200 per week)

Std. Dev = 209.36
Mean = 274.1
N = 37044.00

COST_ONGOING
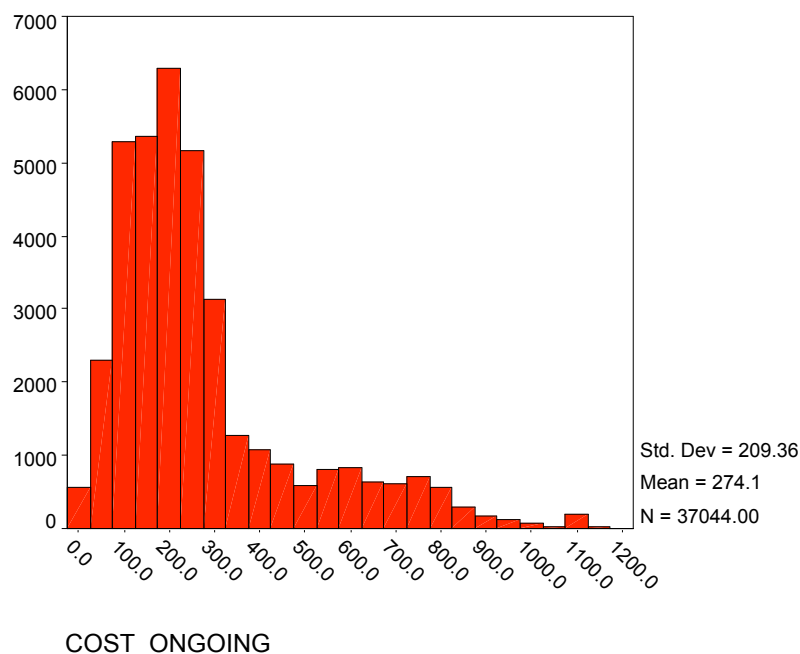
Figure 2 - Costs of Fostering (£1200 per week and over)

Std. Dev = 757.38
Mean = 1913.1
N = 523.00

COST_ONGOING
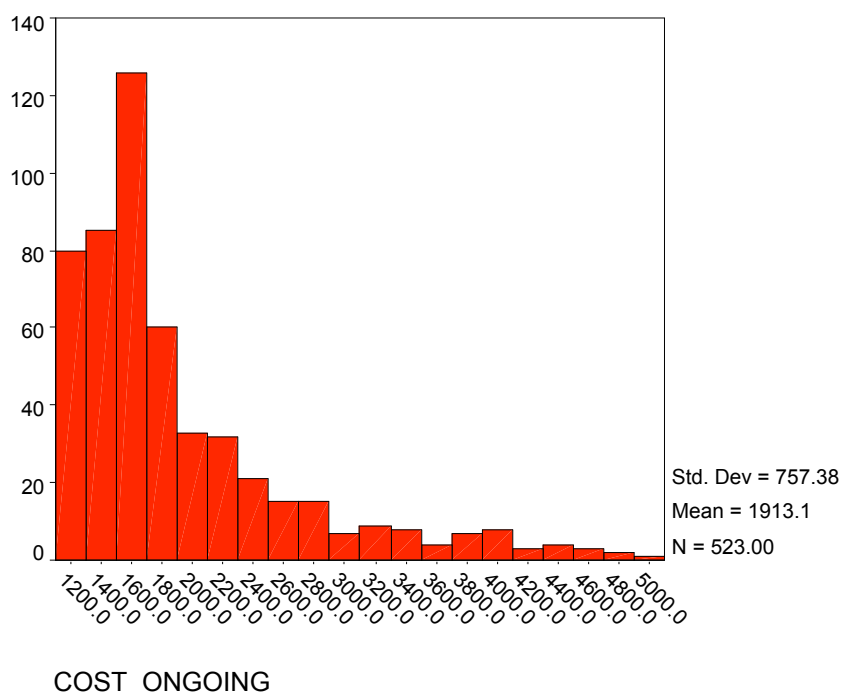
More detailed examination shows that there is some clustering by Local Authority. Thus, four of the Local Authorities (107, 306, 313 and 406) account for 733 of the 2485 cases with foster costs under £100 a week or 29.5%; and two of those (107 and 313) for 240 out of the 665 cases with foster costs under £50 a week) or 36.1%. None of the Local Authorities had more than 5% of the cases with foster costs more than £1,200 a week Nevertheless, there is clearly

some concentration at the bottom end of the costs scale but not as much as with the CiN 2001 data set where nearly all the cases with foster costs under £50 a week were concentrated in just 6 Local Authorities. The judgement was that this was not a sufficiently serious bias as to affect the analysis.

Client characteristics and costs of fostering

Variations in cost may be due to individual client characteristics. Factors cited have included: ethnicity, sex, age and special needs. We find all of these have some effect. In Table 8 we see that average cost increases from £230 to £343 with increasing client age. Table 9 shows that, on average, male clients are more costly to maintain in fostering than females (£309 vs. £284) and that this difference holds for all age groups. The cost difference between those with, and without, special needs is greater than that between the sexes: a weekly average of £331 compared with £294 (Table 10). Again, this difference holds for all age groups.

Table 8 - Age and weekly fostering cost

AGE	Average cost	N
0-4	£229.96	7,502
5-9	£272.70	9,013
10-14	£325.03	13,178
15-19	£342.77	7,802
Total	£297.12	37,495

Table 9 - Sex and age and weekly fostering cost

AGE	Females		Males	
	Av cost	N clients	Av cost	N clients
0-4	£225.92	3,481	£233.46	4,021
5-9	£260.30	4,056	£282.85	4,957
10-14	£304.62	5,997	£342.08	7,181
15-19	£329.36	3,749	£355.17	4,053
Total	£283.73	17,283	£308.57	20,212

Table 10 - Special needs and age and fostering cost

AGEBAND1	No special needs		Special needs	
	Av cost	N	Av cost	N
0-4	£228.04	7,155	£269.50	347
5-9	£269.97	8,142	£298.23	871
10-14	£321.04	11,754	£357.99	1,424
15-19	£342.58	7,042	£344.53	760
Total	£293.77	34,093	£330.66	3,402

These data also support the widespread assumption that ethnic minority group clients are more costly to place in fostering that white clients. Average costs for white clients are £287 compared with £346 for Asian and Asian British and £365 for Black and Black British (Table 11). These differences persist after controlling for age (Table 12) and special needs (Table

13). However, these costs are confounded with the local authority overall costs: as Bebbington and Beacham (2003) found, foster children from minority ethnic areas tend to live in local authorities with higher than average overall costs. This is confirmed in our regression analysis (below), where adding ethnicity variables to the local authority dummies adds almost no further explanatory power (see Table 14). This is also consistent with the questionnaire responses, where ethnicity was not identified as a factor contributing to cost.

Table 11 - Weekly foster costs by ethnic group

ETHNIC_GROUP	Av cost	N
Asian or Asian British	£346.00	816
Black or Black British	£364.88	2566
Mixed	£321.15	2934
Not Stated	£271.87	565
Other ethnic groups	£365.12	580
White	£286.62	30106
Total	£296.94	37567

Table 12 - Weekly foster costs by ethnic group and age

Ethnic group		Age group				
		0-4	5-9	10-14	15-19	Total
Asian or Asian British	Average cost	£226.87	£279.98	£397.60	£437.20	£346.62
	N	191	150	252	221	814
Black or Black British	Average cost	£316.02	£339.40	£370.99	£402.23	£365.19
	N	435	516	797	812	2,560
Mixed	Average cost	£270.77	£331.63	£328.75	£370.97	£321.21
	N	773	761	910	486	2,930
Other ethnic groups	Average cost	£252.80	£308.97	£410.47	£386.07	£365.59
	N	70	87	172	249	578
White	Average cost	£215.68	£261.93	£319.28	£328.16	£286.76
	N	5,840	7,415	10,855	5,949	30,059
Not Stated	Average cost	£299.51	£229.37	£270.20	£263.51	£273.19
	N	193	84	192	85	554

Table 13 - Weekly foster costs by ethnic group and special needs

ETHNIC_GROUP	No special need		Special need		All	
	Average cost	N	Average cost	N	Average Cost	N
Asian or Asian British	£345.35	728	£351.40	88	£346.00	816
Black or Black British	£360.38	2413	£435.76	153	£364.88	2,566
Mixed	£320.40	2746	£332.08	188	£321.15	2,934
Not Stated	£254.54	547	£798.50	18	£271.87	565
Other ethnic groups	£356.60	540	£480.18	40	£365.12	580
White	£283.10	27187	£319.42	2919	£286.62	30,106

Local authority influences on costs

The above tabulations take no account of cost variations between local authorities: they do not apply an area cost adjustment, nor do they control for the average local cost. While local cost variations are unlikely to have a major effect on the cost variations associated with client age and sex, they may well influence the relation of cost to ethnicity - as ethnic minority clients are more often found in metropolitan areas where overall fostering costs are higher (e.g. Bebbington and Beecham, 2003).

The possible relation between age, sex, ethnicity, special needs and cost has been modelled with individual client data and dummy variables to remove local authority effects. Five models are generated. The first only contains the local authority dummy variables. The client variables: age, sex, ethnicity and special need are then entered in the order of their explanatory power to give models 2-5 (Table 14 and Table 15).

The LA dummies only model explains 20.2% of the overall variance. Adding age increases this to 21.6%. (Table 14) Adding the remaining three variables only increases this to 21.9%. However the variables in the final models are significant with coefficients in the predicted direction (See Table 15). (Sex M=0 F=1; Ethnicity White or not stated=0 all other groups=1; special needs 0=none 1=one or more)

Table 14 - Individual client data models (with unit cost of fostering as dependent)

Model		R	R Square	Adjusted R Square	Std. Error of the Estimate
1	LA dummies only	0.453	0.205	0.202	265.0
2	plus age	0.468	0.219	0.216	262.8
3	plus sex	0.469	0.220	0.217	262.5
4	plus special needs	0.470	0.221	0.218	262.4
5	plus ethnicity	0.471	0.222	0.219	262.3

Table 15 - Individual client data models (with unit cost of fostering as dependent)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	271.705	7.683		35.366	0.000
	143 LA dummies					
2	(Constant)	208.467	8.012		26.018	0.000
	143 LA dummies					
	Age	6.884	0.271	0.118	25.442	0.000
3	(Constant)	218.809	8.108		26.987	0.000
	143 LA dummies					
	Age	6.911	0.270	0.118	25.560	0.000
	Sex	-21.948	2.726	-0.037	-8.052	0.000
4	(Constant)	218.118	8.104		26.916	0.000
	143 LA dummies					
	Age	6.792	0.271	0.116	25.080	0.000
	Sex	-20.931	2.728	-0.035	-7.672	0.000
	Special need	32.870	4.839	0.032	6.792	0.000
5	(Constant)	226.381	8.224		27.526	0.000
	143 LA dummies					
	Age	6.782	0.271	0.116	25.054	0.000
	Sex	-20.896	2.727	-0.035	-7.663	0.000
	Special need	32.123	4.839	0.031	6.638	0.000
	Ethnicity	-23.007	3.963	-0.030	-5.806	0.000

Summary of Individual Analyses

Analysis of the CiN dataset for 2003 supports the view that characteristics of individual clients affect the cost of fostering. Average cost increases from £230-£343 with increasing client age (Table 8). On average male clients are more costly to maintain in fostering than females (£309 vs. £284) (Table 9) and this difference holds for all age groups. The cost difference between those with, and without, special needs is greater than that between the sexes, a weekly average of £331 compared with £294 (Table 10). Again, this holds for all age groups.

However, although this analysis suggests that individual characteristics affect costs, there is no evidence that these factors would explain variations in costs between local authorities, since there are unlikely to be geographical variations associated with client age, sex or special needs.

There is very little difference between different regions and types of local authority, with the exception of London, which has a higher proportion of young people aged 16 and over being looked after. The London boroughs also report a lower proportion of children being looked after due to abuse or neglect and a higher proportion where the main category of need is absent parenting. However, these figures reflect the relatively high number of unaccompanied asylum seeking children in London (n = 2,000) compared with the regions (ranging from 130

in the North to 460 in the South East); 1,700 of the unaccompanied asylum seeking children were aged 16 and over, which contributed towards the higher proportion of old children in the London boroughs. In fact, costs relating to unaccompanied asylum seeking children under the age of 18 are picked up by a Home Office grant to LAs.

Overall, we conclude that there is little difference between regions or different types of local authority in terms of the age distribution of children in their care or in terms of the main category of need, and that these factors do not explain variations in costs between authorities.

Postcode district analyses

In theory, the CiN2003 has the potential to explore sub-LA effects by using postcode districts as the level of analysis (as in small area modelling). However, as previously noted, the postcode districts in the dataset are not those where the client is fostered, but the code of an originating address.

The purpose of a sub-LA analysis would be to try to investigate labour market and related effects that may influence the unit cost of fostering, over and above any effects due to the policies or effectiveness of individual local authorities. We looked at one group of labour market variables, all relating to the employment status of women. The postcode district level correlations between the unit cost of fostering and these variables are shown in Table 16. The two strongest correlations are with the proportion of economically active women working full-time and the proportion of women who are in managerial, professional and skilled technical employment.

Table 16 - Postcode district level correlation of female employment variables with unit fostering cost

Proportion of:	Pearson Correlation	Sig. (2-tailed)
All women who are economically active	0.0710	0.0022
Economically active who are employed	0.0188	0.4173
Women aged 24-49 who are economically active	-0.0256	0.2687
Economically active women aged 24-49 who are employed	-0.0131	0.5733
Economically active women working part-time	-0.1635	0.0000
Economically active women working full-time	0.1635	0.0000
Women who are managers and senior officials	0.1452	0.0000
Women who are managers etc and professionals	0.1282	0.0000
Women who are managers, professionals and assoc profs and technical	0.1464	0.0000

N=1862

The same variables were entered in a regression analysis with local authority dummies. The dummies are highly significant with postcode district data (explaining 62% of the variance). However, none of the variables listed in Table 16 are significant in the regression, nor are any of the usual set of socio-economic descriptors. The problem, of course, with attempting to analyse variations in the cost of fostering, which depends on characteristics and circumstances of the foster carers, at the postcode district level is that the costs are related to the originating

not the foster address. Postcode districts in the CiN 2003 dataset are therefore not an appropriate level at which to examine variations in foster costs.

At the same time, differences in unit costs of fostering vary massively between local authorities (see Table 18 and Table 19); much more than can be explained by the ethnic mix and needs of their clients. The next step was to attempt multilevel modelling of individual client data introducing labour market costs and other variables at the local authority level in place of dummies. In this way we hoped to be able to separate the effects of client characteristics from labour market effects, although we cannot isolate the labour market effects from variations due to differences in local authority policy and effectiveness in relation to fostering.

There were 81,434 foster cases in the CiN 2003 dataset. The results of these analyses are shown in Table 17. The problem here, however, was that the individual characteristics explained so little of the variance that the analysis was essentially being conducted at local authority level. Moreover, although the local authority level variables explained twice as much of the variance again, the overall explanatory power of the model, at 8.4%, is insufficient to provide the basis for allocations.

Table 17 - Explanatory Power of Multilevel Analyses of Cost of Fostering

	Null model	Individual characteristics	Local Authority variables
Level I (Individual)	1,618	1,624	1,057
Level II (Local Authority)	8,537	8,240	8,240
Total Variance	10,155	9,864	9,297
Pseudo R squared		2.8%	8.4%

With these rather disappointing results, we abandoned the attempt to assess the power of labour market variables through the CiN dataset and turned to the SSDA903 returns made by Social Service Departments to the Department.

Table 18 - Average unit weekly cost of fostering (72 LAs with lowest costs)

LA name	Average cost	N clients	LA name	Average cost	N clients
Wigan	£23.71	317	York	£212.78	138
Trafford	£31.30	50	Rochdale	£214.01	194
Newcastle Upon Tyne	£47.97	282	Cambridgeshire	£216.21	231
Brent	£71.48	217	Leicestershire	£216.83	242
Lincolnshire	£87.09	214	Bury	£220.53	163
Northumberland	£97.21	189	North Lincolnshire	£222.09	113
Halton	£112.79	106	Wakefield	£225.25	331
Liverpool	£125.53	281	Blackburn With Darwen	£228.60	174
Rotherham	£131.20	266	Bath & North East Somers	£234.97	160
Warrington	£133.58	139	Isle Of Wight	£238.02	126
Barnsley	£133.66	143	Hartlepool	£238.15	87
Wiltshire	£133.71	178	Blackpool	£238.58	142
Swindon	£138.69	147	Leicester	£240.52	362
Doncaster	£140.40	240	Hertfordshire	£241.15	546
Rutland	£141.75	8	Worcestershire	£242.11	383
Kingston Upon Hull	£142.38	424	Sandwell	£244.64	378
Bolton	£146.07	273	Gateshead	£245.68	183
Lancashire	£148.17	623	East Riding Of Yorkshire	£248.32	158
Shropshire	£153.64	170	Stockton On Tees	£248.99	112
Sunderland	£156.84	309	Medway Towns	£250.11	244
Sefton	£158.91	223	Middlesbrough	£252.25	158
Stockport	£167.83	274	East Sussex	£252.65	328
Calderdale	£169.43	98	Wirral	£252.96	341
Wokingham	£173.17	71	North Tyneside	£253.49	165
Leeds	£176.03	858	Peterborough	£255.87	284
Thurrock	£178.20	141	Dorset	£259.03	200
Cornwall	£180.42	437	Brighton & Hove	£261.00	219
Kirklees	£184.16	139	Oldham	£263.04	72
Knowsley	£186.24	170	Manchester	£264.34	914
Suffolk	£194.69	481	West Sussex	£264.36	408
North Yorkshire	£199.62	277	Northamptonshire	£264.41	471
Plymouth	£202.38	426	Durham	£266.11	345
Bristol	£204.55	473	St Helens	£266.29	135
Nottinghamshire	£206.55	359	Derby	£266.64	297
Salford	£207.31	363	Buckinghamshire	£267.01	168
Essex	£211.21	749	Redcar & Cleveland	£271.63	94

Table 19 - Average unit weekly cost of fostering (73 LAs with highest costs)

LA name	Average cost	N clients	LA name	Average cost	N clients
Birmingham	£271.71	1190	Reading	£380.13	93
Milton Keynes	£273.12	128	Warwickshire	£381.95	289
Darlington	£275.00	79	Waltham Forest	£383.79	178
Stoke-On-Trent	£277.38	296	Bexley	£386.95	176
North Somerset	£277.78	153	Slough	£387.42	112
Sheffield	£281.81	541	Bedfordshire	£389.01	233
Wandsworth	£282.61	270	Surrey	£403.82	444
Wolverhampton	£282.80	250	Richmond Upon Thames	£407.55	71
Southwark	£282.84	379	Hackney	£415.00	266
Staffordshire	£285.27	413	Windsor & Maidenhead	£416.62	26
Dudley	£289.65	209	Ealing	£424.52	220
Bournemouth	£296.89	126	West Berkshire	£425.00	69
Total	£296.94	37567	Harrow	£437.14	104
Bracknell Forest	£300.12	43	South Gloucestershire	£445.20	92
Tameside	£300.95	149	Redbridge	£445.44	102
Bradford	£301.01	577	Kensington & Chelsea	£447.75	159
Herefordshire	£305.67	147	Hillingdon	£456.31	336
Nottingham	£309.44	351	Coventry	£472.28	394
North East Lincolnshire	£318.59	194	Lambeth	£472.41	360
Tower Hamlets	£319.82	198	Haringey	£473.91	323
Hammersmith & Fulham	£323.03	375	Kent	£488.51	390
Telford & Wrekin	£325.80	145	Croydon	£499.25	451
Gloucestershire	£328.16	356	Kingston Upon Thames	£534.51	65
Cheshire	£329.92	381	City Of London	£535.50	4
Oxfordshire	£329.99	287	Lewisham	£536.80	257
Luton	£335.26	287	Havering	£539.48	111
Walsall	£337.13	290	Bromley	£553.92	165
Merton	£338.92	90	Hounslow	£568.13	215
Solihull	£341.40	141	Camden	£576.62	168
Portsmouth	£347.13	211	Islington	£583.23	253
Westminster	£349.70	224	Norfolk	£597.35	462
Torbay	£351.70	172	Newham	£620.40	421
Derbyshire	£352.21	464	Barnet	£628.38	262
Southampton	£356.35	287	Enfield	£684.51	285
Poole	£357.38	106	Somerset	£705.68	273
Hampshire	£360.34	669	Barking & Dagenham	£728.82	165
Southend	£360.90	214			

Foster Cost Using SSDA903

Introduction

Several datasets have been combined to identify the characteristics of local authorities that contribute to the cost of foster care:
- Individual episode data for all children in the SSDA903 for 2003/04
- Individual cost data for all fostered children in the Children in Need census 2003
- Local authority data from the Department of Health KIGS database
- Local authority census data from ONS Key Statistics

A short description of each dataset is given in Appendix 3.

Care episodes and costs

To examine the influence of variations in episodes of foster care and the average cost, the SSDA903 and CiN datasets were combined. Since the SSDA903 data did not include costs, it was necessary to impute costs from the CiN data. The average costs within each LA were calculated for each combination of sex, age and ethnic group. These values were then matched with all the children in the SSDA903 with the appropriate combination of LA and demographic characteristics.

Those children with at least one episode of foster care in the year were selected (62,542). To control for length of care, only children who had been looked after for all of the 12 months covered by the SSDA903 were included (20,264). There were six different types of foster episode coded. In each case the distributions are extremely skewed, with most children having zero episodes of each type or one. Each type was recoded to occurring or not during the year for each child and analysis of variance conducted for imputed cost by episode type. The results are shown below.

Table 20 - Average care cost in pounds per week by presence of episode type

Episode	Present	Absent	Sig.	Eta squared
F1: Foster with relative or friend, lives in LA	400.45	441.53	<.001	.010
F2: Other foster via council, lives in LA	418.74	449.77	<.001	.010
F3: Other foster via agency, lives in LA	544.28	431.83	<.001	.012
F4: Foster with relative or friend, lives outside LA	437.18	434.33	.56	.001
F5: Other foster via council, lives outside LA	447.53	432.61	<.001	.001
F6: Other foster via agency, lives outside LA	504.29	423.83	<.001	.030

These costs are the average costs for a child who has at least one episode of the specified type: they are *not* the weekly costs for episodes of that type. As can be seen, all but one (Foster with relative or friend, lives outside LA) are highly statistically significant. This is not

surprising given the very large sample sizes. Perhaps more informative are the eta-squared figures: this is a measure of explained variance, comparable to the R-square in regression. These figures are all very small. The largest is for 'Other foster via agency, lives outside LA' (.030). This applies to 13.4 percent of the sample. The next highest figure is for 'Other foster via agency, lives in LA' (.012), which applies to 2.4 percent of the sample. That the use of agencies to place foster children, especially placements outside the LA area, is particularly expensive had been indicated by the survey of LAs.

The average cost by ethnic group was also calculated. This is shown below:

Table 21 - Average cost in LA by ethnic group

Ethnic group	Mean	N	Std. Deviation
White	424.94	15937	148.03
Mixed	453.67	1592	186.39
Asian	522.75	454	324.58
Black	468.03	1560	134.09
Other	521.18	336	179.09
Total	434.48	19879	158.73

These figures differ from those quoted above from the CiN dataset. Those figures applied to all children looked after in the census week, regardless of how long they were being looked after. The above figures apply only to children who had been looked after for the full 12 months of the SSDA903 collection. These figures show that Asian children were the most expensive, closely followed children from other ethnic groups. All minority ethnic children cost more to foster per week than did white children.

Variations in cost between LAs

In principle, the effect of LA characteristics on the cost of foster care would be examined after controlling for individual characteristics of the fostered children. Although data are available for important individual factors (sex, age, ethnicity), these cannot be used in this analysis because the dependent cost variable has been imputed based on those same variables (see section 2). However, there is one SSDA903 variable which is exogenously determined, and that is 'F6: Other foster via agency lives outside LA'.

Before examining the impact of any census variables, dummies were generated for LAs. There were 143 dummy variables (150 LAs less six with no data less one for the degrees of freedom). Just fitting these dummies gives a regression with an R-square of .667. It is this variation between LAs that the analysis is trying to account for with census data. It is for the same reason that multilevel modelling is inappropriate in this context, because the variables of interest are all at the LA level.

Having shown that individual weekly foster costs vary to some extent by type of episode and by the ethnicity of the child, the task remained of accounting for variation in costs between local authorities. The approach taken here was to regress the average weekly cost of foster care, based on cost data from the CiN 2003 and the numbers - and demographics - of looked after children from the SSDA903 2003-04 on a number of census variables. The choice of variables to consider was based on what factors have in the past been found to predict foster costs and on factors found to contribute to the total cost of children's services. The starting

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variables are described in Appendix 4. All variables are derived from ONS Key Statistics datasets.

The first step was to enter all the census variables (see Appendix 4) into a regression for the individual cost data. Also included, as a control variable, was the most significant variable from the SSDA903 analysis, 'F6: Other foster via agency, lives outside LA'. This was a total of 22 variables. Unfortunately, in the regression only one variable (Females 16-74: Long-term unemployed) was *not* significantly related to costs. However, three of the standardised coefficients (beta) for the other variables were very small: these were 'Females 16-74: Looking after home/family' (.033), the SSDA903 variable 'F6: Other foster via agency lives out LA' (beta=.044), and 'Females 16-74: Service/less skilled' (-.093). However, even this model was very poorly specified, and the R-square was .223. The results for this model are shown in Appendix 5.

Running this as a stepwise model only eliminated the one non-significant variable. This model is not acceptable as it clearly contains too many variables.

To try to reduce the number of variables, all the variables from a single census table (see Appendix 4) were entered into a regression for the individual cost data. That indicated the variables from each block with the strongest relationship to cost. These variables are marked with an asterisk in Appendix 4. A second regression was run with just those variables. The results for that model are shown below as Model 1 (Table 22):

Table 22 - Model 1: Variables with strongest relationship within each group

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	979.348	14.661		66.799	.000
F6 Other foster via agency lives outside LA	17.742	1.123	.051	15.792	.000
Other ethnic group %	41.526	1.010	.281	41.120	.000
Females 16-74: Service/less skilled	-11.623	.265	-.304	-43.888	.000
People 16-74: Qualification level 4/5	-7.858	.165	-.403	-47.760	.000
Females 16-74: Permanently sick	-38.258	.994	-.420	-38.489	.000
Households: with limiting long-term illness	1.207	.417	.038	2.891	.004

Whilst this model has fewer variables, it is also poorly specified and the R-square is lower, at .182. Moreover, three of the signs for the coefficients are negative, indicating factors which might reduce foster costs when the model should identify factors that increase costs.

A third set of models was run, replacing the negatively signed variables with others from their group. The model below includes a small number of variables, and all have positive signs. However, the R-square is .170. This is shown as Model 2 (Table 23).

Table 23 - Model 2: Variables with positive coefficients, one from each group

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-367.414	10.227		-35.924	.000
F6 Other foster via agency lives out LA	17.888	1.134	.051	15.778	.000
Other ethnic group %	37.520	.986	.254	38.035	.000
Females 16-74: Professional/managerial	8.179	.177	.263	46.144	.000
People 16-74: Qualifications level 1/2	8.900	.172	.290	51.685	.000
Females 16-74: Looking after home/family	23.728	.371	.240	63.908	.000
Female lone parent households	1.027	.406	.012	2.527	.011

An alternative approach was tried, using all the census variables, entered stepwise but discarding variables with negative signs. This process of deleting variables was continued until a series of models was generated with only positive coefficients. The model with five variables had an R-square of .182 and that with six had .183, so that very little was added by including the sixth variable. The model with five variables is shown below as Model 3:

Table 24 - Model 3: Variables with positive coefficients, stepwise

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-481.458	8.315		-57.899	.000
Other ethnic group %	14.741	1.130	.100	13.046	.000
People 16-74: Qualifications level _	14.005	.169	.457	82.849	.000
Mixed ethnic group %	33.885	.864	.251	39.220	.000
Females 16-74: Looking after home/family	19.976	.373	.202	53.570	.000
People 16-74: Qualification level 4/5	6.141	.123	.315	49.754	.000

This is a fairly parsimonious model, with all positive signs and accounts for almost as much variance as the model with all the census variables. Nevertheless, it has the unsatisfactory

feature of having more than one variable from some groups: there are two ethnicity variables and two qualification variables.

A final sequence of models was generated with the same restriction on positive signs but only allowing one variable from each census group to enter, and including the SSDA903 variable 'F6 Other foster via agency lives outside LA'. The most variables that can be included in this model is four (any more give negative signs). This model has an R-square of .169. It is shown as Model 4 (Table 25):

Table 25 - Model 4: Variables with positive coefficients only, one from each census group

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-392.150	7.897		-49.659	.000
Other ethnic group %	37.558	.959	.254	39.145	.000
People 16-74: Qualifications level _	9.170	.155	.299	59.015	.000
Females 16-74: Looking after home/family	24.552	.372	.249	65.992	.000
Females 16-74: Associate professional	21.919	.387	.276	56.702	.000

Conclusions

The aim of this analysis was to search for local authority characteristics that might account for variations in foster costs over and above that due to the sex, age and ethnicity of the foster children.

Combining cost data from CiN 2003 and SSDA903 for 2003/04 with ONS Census data, it proved possible to account for some of the between authority variation. However, none of these models accounting for variations in the weekly cost of foster care are well specified, nor do they account for very large amounts of the variance between LAs. Nevertheless, it is possible to model foster costs with a small number of census variables. A number of models can be recommended: each has different strengths and weaknesses. In order of preference, based on models having positive coefficients and a spread of census variables that are plausibly related to variations in cost, they would be:

- Model 4: includes a range of census areas; all variables have positive coefficients; relatively low[2] R-square
- Model 1: includes a range of census areas; uses variables with the strongest relationship within their group; some negative signs; some relationships counter-intuitive; relatively high R-square
- Model 3: restricted range of census variables; all variables have positive coefficients; relatively high R-square

Postscript

Model 1 proved unacceptable, because of the negative coefficients. Models 3 and 4 were replicated using the most recent area cost adjustments. This made little difference to the coefficients, but these are more accurate for the purpose of predictions. They are shown as Model 3 revised and Model 4 revised below. Model 3 revised has the better fit to the data, with an R-square of 0.183, but has the disadvantage of including two qualifications variables and two ethnicity variables. Model 4 revised has a lower R-square, of 0.171, but has the advantage of including just one census variable from each of the four areas. Whilst the proportion of the Local Authority variance that has been accounted for remains small, no other variables have been suggested as possible factors; so either model could be used for the foster cost adjustment.

---

[2] The terms relatively low and relatively high refer to the differences between 0.16 and 0.22.

Table 26 - Model 3 revised: Variables with positive coefficients, stepwise

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-486.416	8.337		-58.344	.000
Other ethnic group %	14.459	1.133	.097	12.763	.000
People 16-74: Qualifications level _	14.062	.169	.457	82.974	.000
Mixed %	34.342	.866	.253	39.647	.000
Females 16-74: Looking after home/family	20.171	.374	.204	53.953	.000
People 16-74: Qualification level 4/5	6.211	.124	.318	50.190	.000

Table 27 - Model 4 revised: Variables with positive coefficients only, one from each census group

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-396.488	7.918		-50.075	.000
Other ethnic group %	37.491	.962	.253	38.972	.000
People 16-74: Qualifications level _	9.164	.156	.298	58.821	.000
Females 16-74: Looking after home/family	24.831	.373	.251	66.565	.000
Females 16-74: Associate professional	22.224	.388	.279	57.339	.000

Updating the Formula

It is recognised that *all* these values are low relative to the 0.667 when all the LA dummies are included (cf. p. 24 above) and that the models are poorly specified. Nevertheless, as already mentioned, they are the best available in terms of factors that one would reasonably expect to influence variations in costs between Authorities.

It also has to be recognised that the factors proposed for the formula are entirely dependent on Census data which become progressively out-of-date. In addition, there will be difficulties in recalibrating the formula if the Children in Need survey is not repeated. Indeed, given the problems we have encountered in deriving an adjustment for foster costs, it would be preferable if it were possible to attach costs directly or indirectly to the SSAD03 returns.

5. References

Bebbington AC and Beecham J (2003) *Children in Need 2001 Ethnicity and Service Use* PSSRU University of Kent.

Bebbington A and Miles J (1990) 'The supply of Foster Families for Children in Care' *British Journal of Social Work*, 20; 283-307.

Beecham J, Rowlands J, Barker M, Lyon J, Stafford M and Lunt R (2001) 'Child care costs in social services' In *Unit Costs of Health and Social Care 2001*. Eds Netten, A.; Rees, T.; Harrison, G. University of Kent, Personal Social Services Research Unit.

CIPFA (2005) *Personal Social Services Statistics 2003-04 Actuals* Chartered Institute of Public Finance and Accountancy, London.

Department for Education and Skills (2004) Children in Need in England: Results of a survey of activity and expenditure as reported by Local Authority Social Services: Children and Families Teams for a survey week in February 2003: Local Authority tables and further national analysis. Issue No vweb01-2004.

Department for Education and Skills (2005) Statistics of Education: Children Looked after by Local Authorities Year Ending 31 March 2004. Volume 1: Commentary and National Tables National Statistics, London.

Hutchinson B, Asquith J and Simmond J (2003) 'Skills protects' Towards a professional foster care service. *Adoption and Fostering,* 27: 8 -13.

Kirton D, Beecham J and Ogilivie K (2003) Remuneration and Performance in Foster Care Final Report to Department of Health, University of Kent, (unpublished).

Meltzer H, Corbin T, Gatward R, Goodman R and Ford T (2003) The mental health of young people looked after by local authorities in England. Summary report. Office for National Statistics, London.

Owen C, Simon A and Storey P (2002) *Demand and Supply of Foster Care.* FRG(02)78 London: Department of Health.

Pithouse A and Crowley A (2001) The placement of looked after children in Wales A 'top-down' perspective *Adoption & Fostering*, 25: 47-58.

Pithouse A and Lowe K (2004) 'Foster carers who care for children with challenging behaviour A total population study' *Adoption & Fostering*, 28: 20 -30.

Sellick C and Connolly J (2002) 'Independent fostering agencies uncovered: the findings of a national study' *Child and Family Social Work,* 7: 107-120.

Sinclair I, Gibbs, I and Wilson K (2004) *Foster Carers: Why They Stay and Why They Leave.* London, Jessica Kingsley Publishers

Sinclair I, Wilson K and Gibbs I (2005) *Foster Placements: Why They Succeed and Why They Fail.* London, Jessica Kingsley Publishers

Tapsfield R and Collier F (2005) The cost of foster care Investing in our children's future. British Association for Adoption & Fostering and The Fostering Network
London.

Triseliotis J, Borland M and Hill M (2000) Delivering Foster Care. British Agencies for Adoption and Fostering, London.

Waterhouse (1997) The Organisation of Fostering Services A study of the arrangements for delivery of fostering services by local authorities in England. National Foster Care Association, London.

Appendix 1 - Children's and Families Services: 2003-04

	% of Personal Social Services Gross Total Cost	Net total cost of fostering services	No. of days that CLA spent in foster placements	% of foster placements own provision	Gross Cost per week including foster placements, placed for adoption, respite and short-term placement	
		£ '000			Own provision	Provision by others
Inner London	30.2	86,212	1,154,887	62	300	770
Outer London	25.5	100,763	1,317,659	67	336	812
Greater London	27.6	186,975	2,472,546	65	319	791
Metropolitan Districts	26.7	211,398	4,256,350	87	250	753
English Unitaries	25.1	147,131	2,914,520	87	258	737
English Counties	19.7	256,376	4,917,149	62	274	811
Total	23.8	801,880	14,560,565	84	269	777

Source: CIPFA, Statistical Information Service (2005). *Personal Social Services Statistics 2003-04 Actuals*, CIPFA, London.

Appendix 2 - Local Authority Questionnaire and Covering Letters

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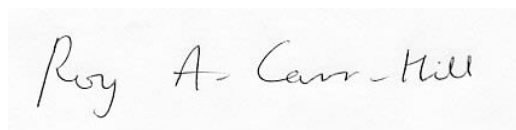
27th January 2005

Dear

We are conducting some research for the Department of Health as part of a review of the children's social services funding formula. The attached letter, sent on 19th October 2004, to your Director explains the background.

In particular, we have been asked to review the foster cost adjustment, which is intended to take account of unavoidable variations across the country in the costs associated with fostering children. We are interested in the factors that influence variations in the costs of care.

We would, therefore, be grateful if you could answer a few questions from the perspective of your local authority. All answers are strictly confidential: no individual or authority will be identified in any publication and names will not be disclosed to the Department of Health. The information will only ever be used in an aggregated and anonymised form

Thanking you for your cooperation. If you need any more information, please ring me on 01904 321 405, or perhaps better e-mail on irss23@york.ac.uk

Yours sincerely

Roy Carr-Hill
Professor of health and Social Statistics

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Dear *Director of Social Services*

Studies of Relative Need for Social Care

As you may know, the Department of Health has recently commissioned work to produce updated formulae for distributing resources to local authorities for personal social services (PSS).

There are three formulae for PSS covering services for: children, younger adults (aged 18-64) and older people. Each formula is being reviewed as a separate project led respectively by teams from the University of York, Secta Consulting, and PSSRU at the University of Kent. Most of the fieldwork for all three projects is being conducted by National Opinion Polls.

The work on the formula for children's services is jointly commissioned by the Department for Education and Skills (with the Department of Health) and all three projects are overseen by a Steering Group comprising members of both departments, the Office of the Deputy Prime Minister, academics and representatives of local authorities. The Association of Directors of Social Services have been informed of the work and in August this year the Research Group of the Association decided to recommend the projects to social services departments.

The projects are being overseen jointly in order to coordinate both data collection and contact with local authorities. We hope that these arrangements, and the use of a single research contractor (NOP) for all three pieces of work, will minimise any additional load on the service.

The researchers will be contacting you separately in order to explain what the research is likely to involve and how your authority may be able to help.

In the meantime, we do hope that you will be able to support this important work.

Yours sincerely

Becky Sandhu
Economic Advisor
Email address: becky.sandhu@dh.gsi.gov.uk

SHORT QUESTIONNAIRE ON DIFFICULTIES OF FOSTERING AND IMPLICATIONS FOR COSTS

QUESTION 1 - Do you see foster care in your authorities *as particularly expensive* relative to other authorities or relative to other forms of care in your authority?
> ***If not, please go to Question 3***

If yes, is this mainly because of:

the lack of foster carers	
the difficulty of placing specific children	
Other factors	

Please explain

_____

_____

QUESTION 2 - What is about the factors that you have identified that contribute to higher fostering costs in your area?

_____

_____

QUESTION 3 - Do you find *some children particularly difficult to place with foster carers*? For example, older children, children belonging to certain ethnic groups, those with learning difficulties, those with emotional and behavioural problems, those with physical disabilities?

(a) Please tick the two most important factors:

older children	
children belonging to certain ethnic groups if yes, please state which	
those with learning difficulties	
those with emotional and behavioural problems	
those with physical disabilities	
other category, please specify	

(b) If yes, does this lead to higher overall cost for those children? In what ways? For example, lack of suitable foster carers, longer assessment for foster carer suitability, extra training needed for foster carers, use of more expensive temporary care, etc.?

_____

_____

QUESTION 4 - Do some children have more changes of foster placement? For example, older children, children belonging to certain ethnic groups, those with learning difficulties, those with emotional and behavioural problems, those with physical disabilities?

(a) Please tick the two most important factors:

older children	
children belonging to certain ethnic groups if yes, please state which	
those with learning difficulties	
those with emotional and behavioural problems	
those with physical disabilities	
Other category, please specify	

(b) Does this lead to higher overall cost for those children and in what ways??

_____

_____

QUESTION 5 - Are some children more likely to be placed with independent foster agencies or out of area? For example, older children, children belonging to certain ethnic groups, those with learning difficulties, those with emotional and behavioural problems, those with physical disabilities?

(a) Please tick the two most important factors:

older children	
children belonging to certain ethnic groups if yes, please state which	
those with learning difficulties	
those with emotional and behavioural problems	
those with physical disabilities	
Other category, please specify	

(b) Does this lead to higher overall cost for these groups of children and in what ways?

_____

_____

QUESTION 6 - To what extent do you try to match the ethnic background of the foster carer with that of the child?

_____

_____

    (a)   Does this create difficulties? Please explain

_____

_____

    (b)   Does this contribute to cost? If so, in what ways

_____

_____

QUESTION 7 - Do you use friends and family (kinship) care for some children?

        Yes _____   No _____

        (a) Is this less expensive than standard foster placements?

        Yes _____   No _____

        (b) Are some children more likely to be placed with friends or family for fostering? For example, older children, children belonging to certain ethnic groups, those with learning difficulties, those with emotional and behavioural problems, those with physical disabilities?

        Yes _____   No _____

(c) Please tick the two most important factors:

older children	
children belonging to certain ethnic groups if yes, please state which	
those with learning difficulties	
those with emotional and behavioural problems	
those with physical disabilities	
Other category, please specify	

QUESTION 8 - Do you record (or can you find) the weekly cost of foster care for each child?

Always _____   Mostly _____   No _____

QUESTION 9 - Are there particular problems with recruiting suitable foster carers in your area?

Yes _____   No _____

(a) What are problems?

_____

_____

(b) Why do you think that might be? Does your area have any characteristics that make it difficult to find suitable people to foster?

_____

_____

(c) Do these problems contribute to cost? If so, in what ways

_____

_____

Appendix 3 - Data definitions

Individual episode data for all children in the SSDA903 for 2003/04

These data consist of a record of each change of placement for all looked after children in the year ending 31 March 2004. We have summarised the data to the child level, generating counts for each type of episode: for example, the number of times in the year that a child was fostered with friends or relatives within the local authority area. There are records for 84,561 children in the dataset. Of these, 66,179 (75.7 percent) had at least one foster placement in the year. The total number of episodes a child had in one year ranged from one to 70, with a mean of 1.72: 61.5 percent had just one episode in a year (i.e. no changes of placement). The number of foster placements (for those with at least one foster placement) ranged from 1 to 70 with a mean of 1.54: 67.1 percent had just one foster placement. This dataset includes the demographic details of children but contains no data on cost. These data were linked with the next dataset to examine which features of episodes were related to the cost of foster care.

Individual cost data for all fostered children in the Children in Need census 2003

The data from the Children in Need (CiN) census give the costs of care in the census week for each child. They include demographic data on the children. The average costs of foster care were calculated for each local authority, stratified by the children's sex, age (0-9, 10-19) and ethnic group (white, mixed, Asian, black and other). (No data were supplied for five local authorities: Cumbria, South Tyneside, Greenwich, Sutton and Devon; data for the Isles of Scilly were combined with those for Cornwall.) The costs have been adjusted by the area cost adjustment. These costs, averaged across local authorities, are shown below:

Table 22 - Average cost in LA by sex

Sex	Mean	N	Std. Deviation
Female	450.25	1728	120.08
Male	471.85	1728	151.48
Total	461.05	3456	137.09

Table 23 - Average cost in LA by age band

Age band	Mean	N	Std. Deviation
0-9	459.46	1728	122.57
10-19	462.64	1728	150.23
Total	461.05	3456	137.09

Table 24 - Average cost in LA by ethnic group

Ethnic group	Mean	N	Std. Deviation
White	453.43	576	160.82
Mixed	480.65	576	167.14
Asian	468.14	576	157.22
Black	478.68	576	95.41
Other	493.50	576	95.96
Not known	391.89	576	97.20
Total	461.05	3456	137.09

Local authority data from the Department of Health KIGS database

The DH Key Indicators Graphical System (KIGS) includes an estimate of the weekly cost of foster care: this is PAF indicator B10. The most recent figure available was for 2003. This is an average figure, not related to features either of the child or of the placement. However, it can be compared to the LA average calculated from the CiN and SSDA903 data. Data are missing for three LAs: Isles of Scilly, Lincolnshire and Wirral. The mean cost is shown below (this does not include the area cost adjustment):

Table 25 - PAF B10: Weekly cost of placing a child in foster care: 2002-03

	N	Minimum	Maximum	Mean	Std. Deviation
PAF B10: Weekly cost of placing a child in foster care: 2002-03	147	170.28	740.69	359.56	112.05

The relationship of the PAF variable to the average cost data from CiN and SSDA903 is shown in Appendix 6.

Local authority census data from ONS Key Statistics

A number of tables from the census 2001 were downloaded from the ONS Key Statistics web site:
http://www.statistics.gov.uk/statbase/explorer.asp?CTG=3&SL=4696&D=4697&DCT=0&DT=32#4697
These tables were chosen in preference to other formats because of their easy accessibility. Details of the tables and the derived variables are shown in Appendix 4. All derived variables were calculated as percentages.

Appendix 4 - Census variables used in regressions

Table KS06 Ethnic group: People in ethnic groups

	Name	Numerator	Denominator
	Mixed	Sum of F: Mixed: White and Black Caribbean, G: Mixed: White and Black African, H: Mixed: White and Asian and I: Other Mixed	B: All people
	Asian	Sum of J: Indian, K: Pakistani, L: Bangladeshi and M: Other Asian	B: All people
	Black	Sum of N: Black Caribbean, O: Black African and P: Other Black	B: All people
*	Other	Sum of Q: Chinese and R: Other ethnic group	B: All people

Table KS09c Economic activity (Females 16-74)

	Name	Numerator	Denominator
	femptime	C: Employees part-time	B: All females aged 16-74
	femftime	D: employees full-time	B: All females aged 16-74
	femlah	J: Looking after home/family	B: All females aged 16-74
*	femsick	K: Permanently sick/disabled	B: All females aged 16-74
	femnev	O: Unemployed who have never worked	B: All females aged 16-74
	femltu	Long-term unemployed	B: All females aged 16-74

Table KS12c Occupation groups (Females 16-74 in employment)

	Name	Numerator	Denominator
	femog123	Sum of C: Managers and senior officials, D: Professional occupations and E: Associate professional and technical occupations	KS09c: B: All females aged 16-74
	femog4	F: Administrative and secretarial occupations	KS09c: B: All females aged 16-74
*	femog59	Sum of G: Skilled trades occupations, H: Personal service occupations, I: Sales and customer service occupations, J: Process, plant and machine operatives and K: Elementary occupations	KS09c: B: All females aged 16-74

Table KS13 Qualifications and Students (All people aged 16-74)

	Name	Numerator	Denominator
	noqual1674	C: No qualifications	B: All people aged 16-74
	qu11674	D: Highest qualification attained level 1	B: All people aged 16-74
	qu21674	E: Highest qualification attained level 2	B: All people aged 16-74
	qu121674	Sum of D: Highest qualification attained level 1 and E: Highest qualification attained level 2	B: All people aged 16-74
	qu31674	F: Highest qualification attained level 3	B: All people aged 16-74
*	qu41674	G: Highest qualification attained level 4/5	B: All people aged 16-74

Table KS21 Households with limiting long-term illness and dependent children

	Name	Numerator	Denominator
	hodc	E: Households with dependent children: all ages	B: All households
*	holli	G: Households with one or more person with a limiting long-term illness	B: All households

Table KS22 Lone parent households with dependent children

	Name	Numerator	Denominator
	femalone	F: Female lone parent	KS21: B: All households

* Variable from group with strongest relationship with dependent variable, adjusted mean foster cost

Appendix 5 - Model with all census variables

	Unstandardized Coefficients		Standardized Coeff's	t	Sig.
	B	Std. Error	Beta		
(Constant)	3536.380	149.979		23.579	.000
F6 Other foster via agency lives out LA	15.221	1.101	.044	13.819	.000
Mixed %	25.967	1.796	.192	14.455	.000
Asian %	-3.027	.182	-.144	-16.639	.000
Black %	-4.578	.338	-.175	-13.534	.000
Other ethnic group %	22.709	1.468	.154	15.465	.000
Females 16-74: Professional/managerial	-18.641	1.117	-.600	-16.684	.000
Females 16-74: Associate professional	22.562	2.035	.284	11.089	.000
Females 16-74: Service/less skilled	-3.547	.493	-.093	-7.196	.000
People 16-74: No qualifications	-26.772	1.556	-1.044	-17.203	.000
People 16-74: Qualification level 1	-25.770	2.082	-.458	-12.379	.000
People 16-74: Qualification level 2	-18.622	1.610	-.310	-11.568	.000
People 16-74: Qualification level 3	-41.936	1.448	-.510	-28.964	.000
People 16-74: Qualification level 4/5	-21.009	1.590	-1.078	-13.212	.000
Females 16-74: Employees: Part-time	-24.789	.878	-.654	-28.244	.000
Females 16-74: Employees: Full-time	-6.776	.514	-.183	-13.178	.000
Females 16-74: Looking after home/family	3.264	.774	.033	4.216	.000
Females 16-74: Permanently sick	-63.151	1.952	-.693	-32.345	.000
Females 16-74: Never worked	-175.131	11.404	-.251	-15.357	.000
Females 16-74: Long-term unemployed	-.511	5.172	-.001	-.099	.921
Households: With dependent children	7.940	.478	.147	16.605	.000
Households: with limiting long-term illness	5.290	.653	.165	8.102	.000
Female lone parent households	13.042	1.032	.150	12.632	.000

Appendix 6 - Variations in reported costs

Since LAs already report average weekly costs for foster care, it was decided to compare the costs reported in the PAF return (for 2003) with those estimated from the CiN data. The results are rather different. The means differ: taking just those 142 LAs who reported both sorts of data, the CiN data give a mean weekly foster cost of £452, whereas the PAF figures give £359. The correlation between the two measures is high (0.59), but not considering they are meant to be parallel measures. The scatterplot below shows which LAs have the largest deviation from the diagonal indicating the biggest disagreements between the CiN and PAF figures: the most striking are Somerset with a CiN figure of over £800 and a PAF figure of only just over £200; and Brent with a CiN figure of about £400 but a PAF figure of over £700.

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