

**RAND**

*An Analysis of the Child and Adult  
Care Food Program in Child Care  
Centers*

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**PREFACE**

This report uses the Cost, Quality and Child Outcomes study to analyze the characteristics of three types of child care centers -- (1) centers that choose to participate in the Child and Adult Care Food Program (CACFP); (2) centers that are eligible for CACFP but do not participate; and (3) centers that are not eligible for CACFP. The report also develops a model of center participation in CACFP.

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## SUMMARY

The Food and Nutrition Service administers the Child and Adult Care Food Program (CACFP) that provides healthy meals and snacks in child and adult day care facilities. This report analyzes the characteristics of three types of child care centers -- (1) centers that choose to participate in CACFP; (2) centers that are eligible for CACFP but do not participate; and (3) centers that are not eligible for CACFP. Furthermore, this report analyzes centers' propensity to participate in CACFP conditional on being eligible. The analysis is conducted using the Cost, Quality and Child Outcomes study of 1993 -- a four state survey of child care centers.

The results show that centers that incorporate programmatic features that benefit low-income children are more likely to be eligible for CACFP and to participate in CACFP. Non-participating centers tend to offer fewer services, and therefore, appear not to be designed to help needy children. Furthermore, the predicted probability of participation for ineligible centers, calculated using the multivariate model estimates, is only 27 percent. This suggests that even if ineligible centers were made eligible, their propensity to participate in CACFP may be low. The results show large state differences in CACFP eligibility. Conditional on CACFP eligibility, CACFP participation also varies dramatically by state. State regulations and variations in meal costs by state may contribute to this large differential. Therefore, any federal policy that seeks to expand participation among for-profit centers must take account of existing state policies.

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Several RAND colleagues contributed to this report. RAND's data and reference librarians, Susan Adler and Rebecca Andrade, provided invaluable assistance. Jacob Klerman, the Director of the RAND Component of CNAP, and Lynn Karoly, the Director of the Labor and Population program provided valuable input. Nora Wolverton, Rose Marie Vigil, Tracy Jenkins, Pamela Thompson and Natasha Kostan provided excellent secretarial assistance.

**ABBREVIATIONS AND ACRONYMS**

<b>Symbol</b>	<b>Definition</b>
USDA	United States Department of Agriculture
FNS	Food and Nutrition Service
CACFP	Child and Adult Care Food Program
CQCO	Cost, Quality and Child Outcomes



## 1. INTRODUCTION

The Food and Nutrition Service (FNS) administers the Child and Adult Care Food Program (CACFP) that provides healthy meals and snacks in child and adult day care facilities. The CACFP reimburses participating day care facilities for their meal costs and provides them with USDA commodity food and nutrition education materials. The program operates in child care centers, outside-school-hours care centers, family and group day care homes, and some adult day care centers.

The FNS needs information on demographic and income profiles of children in attendance and information on the characteristics of child care centers. Since any proposed expansion in CACFP eligibility criteria will result in previously ineligible centers becoming eligible, it is important to determine the characteristics of currently ineligible centers and to analyze the propensity with which centers participate in CACFP when they are eligible. Hence, FNS requires information on three types of child care centers: (1) centers that choose to participate in CACFP; (2) centers that are eligible for CACFP but do not participate; and (3) centers that are not eligible for CACFP.

In this report, we present a descriptive profile of child care centers. Furthermore, we analyze centers' propensity to participate in CACFP conditional on being eligible. The analysis is conducted using the Cost, Quality and Child Outcomes study of 1993. This data set is used since it has an adequate sample size and design, and an appropriate survey content for the study of CACFP eligibility and participation. In addition, this data set is the most current available that is suitable for this analysis.

## 2. BACKGROUND

The Food and Nutrition Service (FNS) administers the nutrition assistance programs of the U.S. Department of Agriculture (USDA). The FNS's aim is to improve the diet of children and needy families through food assistance programs and nutrition education efforts. In fiscal year 1998, Congress appropriated \$37.2 billion for FNS programs.<sup>1</sup> As part of these efforts, the FNS administers the CACFP, which provides healthy meals and snacks in child and adult day care facilities.

### AN OVERVIEW OF CACFP

All public or private nonprofit child care centers that serve meals are eligible for CACFP. However, eligibility for for-profit centers is more complicated. To be eligible for CACFP, a for-profit center must receive compensation from Title XX of the Social Security Act for a quarter of enrolled children or a quarter of licensed capacity, whichever is less. Title XX authorizes block grants to states for social services such as child care. States may choose to allocate Title XX funds to child care directly to needy children or to child care providers. Since Title XX administration varies by state, in certain states such as California and Connecticut, for-profit centers are ineligible for CACFP.

CACFP providers must serve meals that meet federal guidelines; in addition, they must offer free or reduced-price meals to eligible individuals. Most child and adult care centers simply include meals as a part of their fees<sup>2</sup>. Centers that participate in CACFP are reimbursed

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<sup>1</sup>Data obtained from USDA FNS web site (<http://www.fns.usda.gov>)

<sup>2</sup>Information obtained from USDA FNS web site (<http://www.fns.usda.gov>).

for meals based on whether the children or adults in their care are eligible for free or reduced-price meals or whether they pay the full price. A child's qualification for subsidized meals is based on family income--those from families with incomes at or below 130 percent of the poverty level qualify for free meals; those from families with income between 130 percent and 185 percent of the poverty level qualify for reduced-price meals; those from families with income above 185 percent of the poverty level must pay full price.

The CACFP originated as a pilot program in 1968, then called the Child Care Food Program. In 1978, it became a permanent program, and its name was changed in 1989 to reflect the eligibility of adult care programs.<sup>3</sup> While CACFP is administered at the Federal level, state agencies or FNS regional offices oversee the program at the local level.<sup>4</sup>

In March 1998, CACFP provided meals to 2.6 million children and 58,000 adults. Congress appropriated \$1.5 billion for the CACFP for fiscal year 1998. By contrast, in 1990, 1.5 million children and 18,000 adults participated in the program, at a cost of \$812.9 million.

The Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996 aimed to better target Federal child nutrition support to low-income children. While welfare reform substantially restructured the reimbursement system for family day care homes that participate in CACFP, the impact on child care centers was comparatively small. Welfare reform amended the rounding conventions associated with reimbursement and also restricted reimbursement to 2 meals and 1 snack.

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<sup>3</sup>For further details on the history of the CACFP, see Gordon and Piper (1995), Kisker and Piper (1993), and the USDA FNS web site (<http://www.fns.usda.gov>).

<sup>4</sup>Virginia's CACFP program is run by the FNS' regional office; all other states run their own CACFP programs.

Prior to welfare reform, child care centers were reimbursed for 2 meals and 2 snacks or 3 meals and 1 snack.

#### **LITERATURE REVIEW**

The research literature on CACFP participation in child care centers is limited by the shortage of relevant, comprehensive, and up-to-date data sources. Kisker and Piper (1993) and Gordon and Piper (1995) are the only studies that analyze CACFP eligibility and participation in child care centers and family child care homes. These studies use data from the Profile of Child Care Settings (PCCS) conducted in 1989 and 1990.<sup>5</sup> Kisker and Piper (1993) conduct a detailed descriptive analysis comparing the characteristics of CACFP participating centers with non-participating centers and all centers. Their data show that only half of all eligible centers participate in CACFP. Participation rates are higher among centers that serve low-income families, offer full-time care, are non-profit, or are large. Gordon and Piper (1995) also use the PCCS to estimate a multivariate model of participation among eligible centers.<sup>6</sup> The multivariate results support many of the findings from the descriptive statistics. The results show that for-profit centers and part-time centers are less likely to participate in CACFP, whereas, centers serving low-income or minority children are more likely to participate in CACFP.

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<sup>5</sup>There have been a number of other studies using the PCCS that do not directly address CACFP eligibility and participation issues. For instance, Hagy (1997) estimates a model of child care fees with CACFP participation as an independent variable, and finds a negative but statistically insignificant effect. A study conducted by the General Accounting Office (1995) also reported some tabulations of CACFP participation and meal provision in centers with different legal statuses.

<sup>6</sup>See page 100 in Gordon and Piper(1995).

While the following studies do not focus on CACFP eligibility and participation among child care centers, they are briefly reviewed here since they provide information that is relevant to the study of CACFP participation.

The Early Childhood and Child Care Study (1995) and The Child Care Food Program Study (1986) were conducted under contract for the FNS (Glantz, 1988, 1997). The primary limitation of these studies is that the sampling frame is restricted to centers that participate in CACFP, limiting any potential center-based analysis on eligibility and participation in CACFP. However, these studies provide detailed information about meals served, the proportion of children receiving free and reduced price CACFP meals, CACFP sponsors' relationship with centers, and administrative details associated with the CACFP program.

In the final report for the Cost, Quality and Child Outcomes in Child Care Centers study, Helburn et. al. (1995) do not perform any tabulations or analysis based directly on CACFP eligibility and participation. The report states that CACFP revenue accounts for 3% of the revenue generated for nonprofit centers, 0.62% of the revenue generated by for-profit centers, and 1.81% of the revenue generated by all centers.<sup>7</sup>

The National Study of Before and After School Programs was conducted in 1991 by Mathematica Policy Research, Inc. The final report for the survey does contain some descriptive information of relevance to the study of CACFP. The report shows that 50% of all programs, 47% of public programs, 64% of private nonprofit programs, and 37% of for-profit programs participate in CACFP. Furthermore, of those programs with government funding, lower-income programs are more likely to

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<sup>7</sup>Table 8.1, page 186 in Helburn(1995).

receive funds from CACFP (59 percent versus 37 percent of the higher-income programs).<sup>8</sup> However, the report does not conduct any detailed analysis of CACFP eligibility and participation.

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<sup>8</sup>Page 52: Seppanen, Love, et. al. (1993).

### 3. COST, QUALITY AND CHILD OUTCOMES STUDY

The Cost, Quality and Child Outcomes in Child Care Centers study (CQCO) was conducted by Suzanne Helburn and others in 1993 and 1994 at the University of Colorado, Denver.<sup>9</sup> The study aimed to examine the relationships among child care costs, child care experiences, and child outcomes. The data set has a sample size of 401 child care centers. The study covers child care centers in four states: California, Colorado, Connecticut, and North Carolina. The sample was selected using a stratified random sample of 100 programs in each state, with an equal number of for-profit and nonprofit organizations. The response rates for the study varied from state to state. Of those centers eligible for inclusion in the study, 44% agreed to participate in California, 68% agreed in Colorado and Connecticut, and 41% agreed in North Carolina.<sup>10</sup>

Only programs that were listed as child care facilities by state licensing agencies were included. Note that this feature of the sampling is quite restrictive since licensing regulations vary by state. For example, church nonprofits in North Carolina are not required to be licensed. Therefore, we would expect an under-sampling of these centers in the CQCO data. The sample was also restricted to institutions that served infants, toddlers, and/or preschoolers. No programs that served only school-aged children or only disabled children were included. The sample was further restricted to programs that operated for over 30 hours per week and 11 or more months a year. Therefore, Head Start centers that did not provide "wrap-around" care were eliminated from the sampling. Also, the centers were primarily English speaking and had to be in operation for over a year.

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<sup>9</sup>For detailed information on this study, see Helburn(1995).

The CQCO data were collected using several instruments, including an interview with the center director, observing individual classrooms in the center, and surveying parents of children in the center. Most of the data analyzed in this report originated from the interview with the center director. We describe in detail the files used for this report and the creation of individual variables in the Data Appendix.

To our knowledge, this is the first study that analyzes CACFP eligibility and participation using the CQCO study. The CQCO final report also contains descriptive statistics on a number of center and child characteristics, tabulated by for-profit and nonprofit center status (Helburn, 1995). However, the final report does not tabulate CACFP eligibility and participation. The CQCO data also have the advantage of being more current than the Profile of Child Care Settings Data and the National Study of Before and After School Programs.

#### **DEFINING CACFP ELIGIBILITY AND PARTICIPATION**

To develop the descriptive profiles of interest, it is necessary to determine if a center is eligible for CACFP. However, the Cost, Quality and Child Outcomes survey does not have data items that indicate if centers are eligible for CACFP. Therefore, it is necessary to impute child care centers' eligibility for CACFP. Imputation of CACFP eligibility is straightforward for public or private nonprofit child care centers since, in general, all such centers that serve meals are eligible for CACFP.<sup>11</sup> Therefore, all public and private nonprofit

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<sup>10</sup>See page 37 in Helburn (1995).

<sup>11</sup>In states where licensing is required, child care centers must be licensed in order to be eligible for CACFP. However, if licensing is not available, child care centers may demonstrate compliance with applicable state or local child care standards or CACFP child care standards to the state CACFP-administering agency to gain CACFP eligibility. Following



centers that serve meals are assumed to be eligible for CACFP—all centers in this survey are licensed. However, eligibility for for-profit centers is more complicated. To be eligible for CACFP, a for-profit center must receive compensation from Title XX of the Social Security Act for a quarter of enrolled children or a quarter of licensed capacity, whichever is less. The imputation of eligibility for CACFP in the Cost, Quality and Child Outcomes study can be based on several variables. The Cost, Quality and Child Outcomes data set has data on the number of full time equivalent children funded (partially or fully) by state or county program, the number of full time equivalent enrolled children at the time of the survey, and the licensed number of full time equivalent children. Therefore, following the method used by Kisker and Piper (1993) to impute eligibility for for-profit centers, we will assume that if a quarter or more of the centers' children receive government funding,<sup>12</sup> for-profit centers that serve meals are eligible for CACFP. Since this method of imputing eligibility is based on any government funding receipt, rather than only Title XX fund receipt, it may overestimate eligibility for CACFP for for-profit centers.<sup>13</sup> Note that an over-estimate of eligibility may in turn lead to an under-estimate of the propensity of for-profit centers to participate in CACFP.

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Kisker and Piper (1993), we will impute eligibility to all public and private nonprofit centers.

<sup>12</sup>We will compute this proportion for both the licensed capacity and the number of enrolled children, and consistent with CACFP eligibility rules, we will use the lesser of the two capacities to determine eligibility.

<sup>13</sup>Kisker and Piper (1993) note that FNS allowed for-profit centers to participate in CACFP if at least 25 percent of enrolled children were subsidized from state funds, and if centers received some Title XX funds. Therefore, in practice, imputed CACFP eligibility using the percent of subsidized children is likely to be a good proxy for true CACFP eligibility.

The way states implemented Title XX programs turned out to be an important factor in states' utilization of the CACFP. We contacted the administrator of the CACFP child food program in each of the four states in our sample to ascertain whether any state-level policies impact the state's use of CACFP. We learned that two of the four states in our data, California and Connecticut, do not distribute Title XX resources to individual children. Since no children in for-profit centers in these states would receive Title XX funds, for-profit centers in these states are never eligible for CACFP. In other words, the eligibility criteria for the CACFP and the way these states implement Title XX preclude for-profit centers in these states from qualifying for CACFP. Hence, we assumed that all for-profit centers in California and Connecticut in our data were not eligible for the CACFP.

Determining if a center participates in CACFP is straightforward -- a center participates in the program if it reports receipt of revenue from CACFP. We checked our imputation methodology by confirming that virtually all participating centers were imputed to be eligible.

#### **LIMITATIONS OF THE DATA**

While these data are the best data available for examining CACFP eligibility and participation, the data are not without weaknesses. One obvious weakness is that the data only represent four states. To the extent that these states have unusual regulations, cost environments, or other features that distinguish them from other states, the results of this report may not generalize to the entire country. We consulted several sources to consider whether these states were unusual in some relevant regard. We examined state-level child care regulations, maternal labor force participation, whether any state policies may influence CACFP use, and other potential state-level factors. We find

that these four states do have licensing regulations, licensing fees, and fines that are not representative of all states. For example, certain religious centers in Colorado and all religious centers in North Carolina are exempt from licensing. Furthermore, licensing costs and/or fines in California, Colorado, and Connecticut are rather high.

Note, that in terms of demographic characteristics, these states are not necessarily representative. For instance, at the time of the CQCO study, California had a higher percentage of immigrants than in any other state; Colorado and Connecticut had the sixth and seventh highest median household income, respectively, among states in the U.S.; and North Carolina was only one of five states in which less than half the citizens lived in urban areas (U.S. Bureau of the Census, 1997). In summary, the legislative environment and the demographic composition of these four states are not representative of the rest of the country, and therefore, the results from this study cannot be generalized without caution.

Another important weakness of these data is that the sample size is relatively small. Given that we have data on only 401 centers, we often do not have sufficient statistical power to undertake some analyses that involve subgroup comparisons. For example, the small sample size inhibits cross-state comparisons of some measures and reduces the likelihood that we would identify significant variables in the regression analysis.

#### 4. RESULTS

The goal of this analysis is to generate a descriptive profile of three types of child care centers (1) centers that choose to participate in CACFP; (2) centers that are eligible for CACFP but do not participate; and (3) centers that are not eligible for CACFP.

It is meaningful to compare the characteristics of these three groups of centers in order to determine if CACFP is being offered to and utilized by its target population.

Our descriptive profile compares the characteristics of centers of the following types:

- Centers that are eligible versus centers that are not eligible to participate in CACFP: *Eligible/Ineligible comparisons.*
- Eligible centers that participate versus eligible centers that do not participate: *Participating/Non-participating comparisons.*
- Non-profit versus for-profit centers: *Non-Profit/For-Profit comparisons.*

We generate a descriptive profile of these three types of centers using two methods of analysis. First, we compare the means of characteristics of these types of centers. Second, we examine whether the characteristics of centers predict whether eligible centers participate in CACFP.

In the comparison of means, we examine four types of variables, which we now describe in more detail.

- *Characteristics of Center Care and Services.* These variables report the programmatic and curriculum features of the centers in the data. These include variables such as whether or not the centers provide meals or snacks, whether the centers are

open during the evening and on weekends, whether the center provides any transportation, and whether the center has a bilingual program. These characteristics are interesting to examine because it may be the case that service offerings at centers are correlated -- that is, centers that provide other special services are also more likely to participate in CACFP. Certainly, it is plausible that the decision to offer meals or snacks is endogenous, being determined in conjunction with the decision to participate in CACFP.

- *Financial Variables.* Financial variables include not only monthly fees for children of different ages, but also the cost of food services, whether mechanisms exist to help low-income children pay fees, and other cost and revenue information for the centers. Examining the degree to which CACFP eligibility or participation is related to these variables will indicate whether centers that attempt to ease costs for low-income families also participate in CACFP. Also, we can examine whether CACFP eligibility or participation is related to cost or revenue structures of centers.
- *Other Center Characteristics.* These characteristics include the state in which the centers are located, the legal status of the centers, the number of children enrolled in the centers, the teacher to child ratios, and other non-programmatic features of the centers.
- *Characteristics of Enrolled Children.* The children's characteristics we examine are race and ethnicity, what fraction of children have special needs, and the percent of children who have subsidized tuition.

In the second analysis, which identifies predictors of CACFP participation, we include only a subset of these variables. We did not include variables that were likely to be redundant with other variables in the model. For example, whether the center provided *evening care* and whether the center provided *24-hour care* are two variables that are

likely to provided similar information. In addition, we included variables that are related to one or more of the following hypotheses regarding participation in the program:

- Centers that are open more are more likely to participate.
- Centers with financial structures more oriented toward low-income children would be more likely to participate.
- Higher food preparation costs may increase a program's incentive to seek government funding via CACFP.
- Centers that provide services to more disadvantaged or minority children would be more likely to participate. Since CACFP reimburses child care providers for meals served to mentally or physically handicapped children as old as 18 years if the majority of enrolled children are 18 or younger, the percent of special needs children may have an impact on a center's propensity to participate in CACFP.
- Legal status, state, center age and center size may have an impact on the organization's know-how, ability to apply for government programs, and other regulations specific to its location or organizational form.

#### **COMPARING MEANS OF DIFFERENT TYPES OF CENTERS**

The first analysis we present investigates whether the mean characteristics are different for centers of the three types described above. We present means for all variables by eligibility status and participation in Table 1. Each of the four panels of Table 1 presents one of the sets of characteristics listed above. In order to formally test whether the means are different across types of centers, we present t-tests of the differences in means for *Eligible/Ineligible Centers* in table 2. In table 3, we present t-tests of the differences in means for *Participating/Non-Participating Centers*.

As mentioned earlier, the CQCO data report information on 401 centers. The means presented in the tables, including those for

*Characteristics of Enrolled Children*, are unweighted by center enrollment, since the focus in this analysis is on presenting a center-based descriptive profile. When we report statistics for all centers, observations that have missing values for a particular variable are not included in the mean for that variable.<sup>14</sup> The exception to this rule is the construction of the race characteristics of the children enrolled in centers. Data on the racial groups are presented only for those centers where the sum of the percentage of children in all racial groups is approximately 100 percent. When we report means for eligible centers or ineligible centers, we only include means for observations that have non-missing data for the *Meals or Snacks provided* variable. In Table 1, we report means for 172 eligible centers and 204 ineligible centers.

#### **Comparing Eligible and Ineligible Centers**

For the first set of variables, *Characteristics of Center Care and Services*, reported in the first panel of Table 2, we find that eligible centers tend to provide more social services than ineligible centers. Eligible centers more often offer vision/hearing/dental/speech screening, counseling services, and bilingual programs. The other difference between eligible centers and ineligible centers that we observe in the first panel is that the operating schedules differ. The ineligible centers are more likely to provide part-day/part week programs and extended care to preschool children than the eligible centers. By definition, all eligible centers provide meals. Forty-four percent of ineligible centers also provide meals.

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<sup>14</sup>The following variables have missing values for approximately half the sample: fees for infants, toddlers, and school-aged children, child to FTE teacher director ratio, child to FTE teacher administrator ratio. The variable that measures the wage for food preparation staff

We find differences between the means for eligible and ineligible centers for almost every variable in the second set of variables, *Financial Variables*. We report these means in the second panel of Table 2. In general, the eligible centers have lower average fees and are more likely to have sliding fees or other mechanisms to help low-income children. Eligible centers are also more likely to have donated center space or discounted rent than ineligible centers. Furthermore, eligible centers have higher average costs per enrolled student for food services than ineligible centers.

Centers' legal status, affiliation, and state differ by eligibility, as we report in the third panel of Table 2, which reports means for *Other Center Characteristics*. A higher percentage of eligible centers are non-profit, fewer are part of a chain, and more are affiliated with a church. Among the four states represented in our data, centers in Colorado and North Carolina were more often eligible than centers in California and Connecticut. Below, we discuss how policy differences across these states may explain these differences. We found very little variation in the number of enrolled children and the various ratios by eligibility status.

In the final panel of Table 2, we report means of *Characteristics of Enrolled Children* by eligibility status. Eligible centers report a much higher fraction of children have tuition subsidized by the government or another agency. Note that the imputation of eligibility relies on the variable that measures subsidized children, therefore, to some extent, this pattern is definitional. We find that eligible centers enroll a greater percentage of non-white children.

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is non-missing for only 15 percent of the sample. Therefore, these variables should be interpreted with caution.



### **Comparing Participating and Non-Participating Centers**

Next, in Table 3, we compare the mean characteristics of eligible centers that participate in CACFP and those who do not participate in CACFP. In general, we find fewer significant differences between the characteristics of participating and non-participating centers than we did for characteristics of eligible and ineligible centers. It is important to note that the relatively small sample size may contribute to a lack of statistical power in these analyses. The first panel, which presents t-test results for *Characteristics of Care*, shows that only three variables have significantly different means. First, we find that more non-participating centers (77 percent) offer a part-day part-week program than participating centers (61 percent). Second, more participating centers provide social services to parents (35 percent) than non-participating centers (18 percent). Finally, more participating centers have Head Start sponsored part-day programs (8 vs. 0 percent).

The second panel of Table 3 reports the t-tests for differences in means of *Financial Variables*. A much higher fraction of participating centers had sliding scale fees (42 percent) than non-participating centers (13 percent). As expected, the proportion of total revenue from CACFP for non-participating centers is zero, whereas it is seven percent for participating centers. The other difference between participating centers and non-participating centers was that food preparation wages per enrolled student and the cost of food services per enrolled student were much higher in participating centers.

Again, we find relatively few significantly different means in the third panel of Table 3, which reports results for *Other Center Characteristics*. Centers that did not participate were more often affiliated with a church (42 percent) than were participating centers

(19 percent). Location was another significant factor that differed by participation status: centers in California were less likely to participate while centers in Connecticut were more likely to participate.

We found only one significant difference between means for participating and non-participating centers in the last panel of Table 3, which reports *Characteristics of Enrolled Children*. Half as many children had subsidized tuition in non-participating centers (28 percent) as in participating centers (56 percent).

#### **Comparing For-Profit and Non-Profit Centers**

Next, we examine whether the characteristics of centers vary by legal status. To accomplish this, we compare the means of variables in for-profit centers to the means of variables in non-profit centers. Tables 4a and 4b present the means of all variables by legal status and Table 5 reports the results of t-tests of the differences in means of these two groups.

The first panel of Table 5 tests for differences in the means of *Characteristics of Care*. For-profit centers were open significantly more and offered more options in terms of part-time programs: a higher percentage provide after-school and before-school care for school-aged children and preschoolers, and they operated more months per year and more hours per day. The other variables for which there were significant differences between the two groups were for variables that indicated types of services provided. While a higher percentage of for-profit centers provide transportation (49 percent versus 28 percent), a higher percentage of non-profit centers provide counseling services for children and parents (41 percent versus 24 percent). Non-profit centers were also more likely to have a Head Start sponsored program.

Next we compare the *Financial Variables* for for-profit and non-profit centers in the second panel of Table 5. As might be expected, we find large and significant differences in the means of many of these types of variables. Non-profit centers were nearly four times as likely to offer fees on a sliding scale (31 percent versus 7 percent) and over twice as likely to have other mechanisms to help low-income children (39 percent versus 18 percent). While non-profit centers had donated or discounted space a majority of the time (62 percent), only 6 percent of for-profit centers did. The value of food donated to non-profit centers was also a great deal higher (949) than the value of food donated to for-profit centers (120). Despite the large values of donated space and food for non-profit centers, their costs of food service per enrolled student were higher (220) than that for for-profit centers (164).

The next panel of Table 5 examines differences in means *for Other Center Characteristics*. In these tests, the percentage in each state was not significantly different. This result is simply an artifact of the sampling design of the CQCO, which mandated that an equal number of for-profit and non-profit centers from each state be sampled. The mean age of non-profit centers was significantly higher at almost 16 years than the mean age of for-profit centers, which was 10 years. Except for the number of preschool children enrolled, all the variables that indicated the number of children in different age groups had significantly different means between the two groups. For-profit centers had greater numbers of children enrolled on average. The differences in all the ratio variables were significant, but the type of center with the highest ratio depends on the ratio examined. For-profit centers had lower mean child to full-time equivalent (FTE) teacher ratios, but non-profit centers had lower ratios for all the other variables.

In the last panel of Table 5, we report mean differences for *Characteristics of Enrolled Children*. Non-profit centers register three times the percent of children with special needs (9 percent) as in for-profit centers (3 percent). Non-profit centers also have about three times the percent of children who have tuition subsidies (35 percent versus 13 percent). Finally, non-profit centers enroll a much higher fraction of non-white children (42 percent) than do for-profit centers (25 percent).

In appendix tables, we provide additional descriptive profiles that we do not discuss here. These tables provide means tabulated individually for each state (Table A1), for centers that have mechanisms to help low income families vs. centers that do not have such mechanisms (Table A2), and t-tests for eligible centers vs. ineligible centers, calculated by legal status (Tables A3 and A4).

#### **PREDICTING CENTER PARTICIPATION**

The above means provide an overview of the characteristics of various types of centers. However, since these characteristics may be correlated with each other, it is useful to calculate conditional means as well. In other words, it is useful to determine the sole impact of each center and child characteristic on CACFP participation after purging the effect of all other correlated characteristics. For example, the means show that Californian centers are less likely to participate; however Californian centers are also less likely to provide before and after school care. As shown earlier, before and after school care offering is correlated with participation in CACFP. To determine the conditional mean of participation in California, controlling for the impact of before and after school program offering, it is necessary to estimate a multivariate model.

We estimate a probit model of participation using these data on the sample of eligible centers.<sup>15</sup> We include only those explanatory variables in the model that have sufficient variation relative to the dependent variable. The results from this model are presented in Table 6.

The results show that non profit centers are 44 percentage points more likely to participate in CACFP than for profit centers - this is a large and statistically significant effect. The results also show that centers with a higher proportion of subsidized children are more likely to participate in CACFP.<sup>16</sup> It is interesting to note that, despite the addition of numerous control variables, the probability of participating varies dramatically between states, with Colorado, Connecticut and North Carolina centers being significantly more likely to participate in CACFP than Californian centers, the omitted category in the model.

Since any proposed expansion in CACFP eligibility criteria will result in previously ineligible centers becoming eligible, it is interesting to determine the propensity with which previously ineligible centers would participate in CACFP if they were eligible. Unfortunately, these data are not rich enough to allow us to conduct realistic policy simulations. However, it is worth noting that using the current model estimates to predict participation, we calculate that

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<sup>15</sup> Since eligibility for CACFP is determined by variables such as meal provision and legal status, CACFP participation could be modeled jointly with these choice variables. The decision to provide meals is arguably most likely to be jointly determined with CACFP participation. As a specification check, we estimated a joint model (bivariable probit) of meal provision and CACFP participation. We found that the CACFP participation model estimates did not change. Furthermore we were able to reject the hypothesis that the two equations were inter-dependent.

<sup>16</sup>Imputation error in CACFP eligibility may result in an upward bias on the estimate for this variable. The percentage of subsidized children is likely to be correlated with the probability of being eligible for CACFP, and therefore participating in CACFP.

for the sample of currently ineligible centers, only 27% would participate if they were eligible. Note that this calculation is merely suggestive, since it assumes that the model estimates obtained for the sample of eligible centers apply to ineligible centers.

## 5. SUMMARY AND IMPLICATIONS

This report uses the Cost, Quality and Child Outcomes study to analyze the characteristics of three types of child care centers -- (1) centers that choose to participate in CACFP; (2) centers that are eligible for CACFP but do not participate; and (3) centers that are not eligible for CACFP. We construct descriptive profiles of these three types of centers and conduct multivariate analyses of the probability that a center eligible for CACFP participates in the program.

In general, the results from the two analyses corroborate each others' findings. There are several interesting implications from these analyses.

The results show that centers that incorporate programmatic features that benefit low-income children are more likely to be eligible for CACFP and to participate in CACFP. Non-participating centers tend to offer fewer services, and therefore, appear not to be designed to help needy children. Furthermore, the predicted probability of participation for ineligible centers, calculated using the multivariate model estimates, is only 27 percent. This suggests that even if ineligible centers were made eligible, few would participate. These results suggest that the program is likely to be reaching its target audience.

In examining the differences between for profit and non profit centers, we find large differences in center amenities, child characteristics, and cost. Compared to for profit centers, non profit centers appear to focus more on philanthropic goals -- maintaining lower costs, enrolling more special needs children, and providing social services to families.

We also find that there are large state differences in CACFP eligibility and participation. State variations in the implementation of Title XX are at least partly responsible for the variation in CACFP eligibility by state. For example, state Title XX administration precludes for-profit centers in California and Connecticut from being eligible for CACFP. Therefore, any federal policy that seeks to expand participation among for-profit centers must take account of existing state policies. Conditional on CACFP eligibility, we find that CACFP participation also varies dramatically by state. State regulations and variations in meal costs by state may contribute to this large differential. Determining the importance of these factors is an area for future research.



**Table 1**  
**Descriptive Profiles for Child Care Centers (Cost, Quality and Child Outcome Data Set)**  
**Characteristics of Center Care and Services**

Variables	Centers Eligible for CACFP			Centers Ineligible for CACFP	All Centers
	Non-Participating Centers	Participating Centers	All Eligible Centers		
Total Centers by Category	62	110	172	207	401
<i>Characteristics of Center Care and Services</i>					
Meals or Snacks provided	100%	100%	100%	45%	70%
Provides After-School & Before-School Care for school-agers	58%	55%	56%	64%	60%
Full day program, g.t 30 hrs/wk & at least 5 days/wk	100%	99%	99%	100%	100%
Part-day/Part week program (e.g. preschool)	77%	61%	67%	88%	79%
Part day extended care (before, during, or after pre-school program)	40%	42%	42%	67%	56%
Number of months per year in operation	11.90	11.94	11.93	11.94	11.94
Hours of operation during week-days	11.13	11.22	11.18	11.12	11.12
Number of days open	5.00	5.05	5.03	5.02	5.02
Week-end care	3%	4%	4%	2%	3%
Evening care	6%	7%	7%	2%	4%
Sick care	3%	4%	4%	1%	2%
24 hour care	3%	0%	1%	0%	1%
Center provides transportation services	39%	46%	44%	38%	38%
Center provides any of these screening: vision/hearing/dental/speech	71%	77%	75%	62%	67%
Center provides developmental assessments	71%	74%	73%	65%	69%
Center provides counseling services for children and parents	35%	40%	38%	28%	32%
Center provides social services to parents	18%	35%	28%	21%	24%
Head Start sponsored part-day program	0%	8%	5%	0%	2%
Public Schools sponsored part-day program	3%	10%	8%	6%	6%
Bilingual program	19%	16%	17%	7%	12%

**Table 1—Continued**  
**Descriptive Profiles for Child Care Centers (Cost, Quality and Child Outcome Data Set)**  
**Financial Variables**

Variables	Centers Eligible for CACFP			Centers Ineligible for CACFP	All Centers
	Non-Participating Centers	Participating Centers	All Eligible Centers		
Total Centers by Category	62	110	172	207	401
<i>Financial Variables</i>					
Monthly fees for infants (in dollars)	412	360	379	502	451
Monthly fees for toddlers (in dollars)	383	357	367	472	430
Monthly fees for pre-schoolers (in dollars)	331	332	332	397	372
Monthly fees for school age children (in dollars)	214	198	204	252	234
Fees on sliding scale for low-income children	13%	42%	32%	10%	19%
Other mechanisms to help low income children	39%	33%	35%	24%	28%
Center space donated or rent discounted	47%	50%	49%	22%	33%
Revenue from CACFP, as a percentage of all revenue	0%	7%	4%	0%	2%
Wages for food preparation staff (in dollars)	9317	12246	11566	11798	11434
Food preparation wages, as a percentage of total wages	6%	8%	8%	11%	8%
Food preparation wages per enrolled student (in dollars per student)	114	248	217	259	228
Cost of food services (in dollars)	14326	18443	16959	9027	12384
Cost of food services per enrolled student (in dollars per student)	228	294	270	137	192
Value of donated food (in dollars)	554	1245	993	169	542
Value of donated food per enrolled student (in dollars per student)	9	21	16	5	10

**Table 1—Continued**  
**Descriptive Profiles for Child Care Centers (Cost, Quality and Child Outcome Data Set)**  
**Other Center Characteristics**

Variables	Centers Eligible for CACFP			Centers Ineligible for CACFP	All Centers
	Non-Participating Centers	Participating Centers	All Eligible Centers		
Total Centers by Category	62	110	172	207	401
<i>Other Center Characteristics</i>					
Center’s legal status is for-profit	26%	15%	19%	74%	50%
Center’s legal status is non-profit/public	74%	85%	81%	26%	50%
Center is for-profit and independently operated	11%	8%	9%	47%	31%
Center is for-profit and part of a chain	15%	6%	9%	25%	18%
Center is non-profit, and affiliated with a church	42%	19%	27%	14%	19%
Center is located in CA	24%	10%	15%	31%	25%
Center is located in CO	24%	36%	32%	19%	25%
Center is located in CT	10%	21%	17%	31%	25%
Center is located in NC	42%	33%	36%	18%	25%
Center owned or sponsored by another organization	92%	86%	88%	85%	86%
Center accredited by NAEYC	5%	6%	6%	7%	6%
Age of Center	14.8	16.0	15.6	11.1	13.1
Number of enrolled children	72.8	66.2	68.6	67.0	67.5
Number of enrolled infants/toddlers	13.5	13.4	13.5	14.2	13.4
Number of enrolled pre-school children	43.7	39.3	40.9	38.3	39.3
Number of enrolled school-aged children/kindergarden	15.0	13.2	13.9	14.9	14.7
Child to FTE Teacher Ratio	11.7	13.1	12.6	10.0	11.2
Child to FTE Teacher Aid Ratio	34.8	23.9	27.4	43.1	36.7
Child to FTE Teacher-Director Ratio	66.0	58.1	60.9	61.1	60.9
Child to FTE Teacher-Administrator Ratio	73.3	65.1	68.2	76.1	71.7
Child to FTE Teacher/Director/Administrator Ratio	53.3	47.6	49.7	55.0	52.1

**Table 1—Continued**  
**Descriptive Profiles for Child Care Centers (Cost, Quality and Child Outcome Data Set)**  
**Characteristics of Enrolled Children**

Variables	Centers Eligible for CACFP			Centers Ineligible for CACFP	All Centers
	Non-Participating Centers	Participating Centers	All Eligible Centers		
Total Centers by Category	62	110	172	207	401
<i>Characteristics of Enrolled Children</i>					
Special needs	8%	11%	10%	3%	6%
Tuition subsidized by government or other agency	28%	56%	46%	7%	24%
White, non-Hispanic	57%	47%	51%	78%	67%
African-American/non- Hispanic	25%	33%	31%	9%	18%
Hispanic	11%	17%	15%	6%	10%
Asian/Pacific Islander, non-Hispanic	4%	2%	2%	5%	4%
Other (includes Native-American) , non-Hispanic	2%	1%	1%	2%	2%

**Table 2**  
**T-Test Results for Eligible vs. Ineligible Centers**  
**Characteristics of Care**

Variables	Eligible Centers		Ineligible Centers		Difference of Means+	Standard Error
	Mean+	Standard Deviation	Mean+	Standard Deviation		
Total Centers by Category	172		204			
<i>Characteristics of Care</i>						
Meals or Snacks provided	100%	0%	45%	50%	-55%	3%**
Provides After-School & Before-School Care for school-agers	56%	50%	64%	48%	8%	5%
Full day program, g.t 30 hrs/wk & at least 5 days/wk	99%	8%	100%	0%	1%	1%
Part-day/Part week program (e.g. preschool)	67%	47%	88%	32%	22%	4%**
Part day extended care (before, during, or after pre-school program)	42%	49%	67%	47%	25%	5%**
Number of months per year in operation	11.93	0.37	11.94	0.29	0.01	0.03
Hours of operation during week-days	11.18	1.33	11.13	0.87	-0.05	0.12
Number of days open	5.03	0.23	5.02	0.17	-0.01	0.02
Week-end care	4%	18%	2%	14%	-2%	2%
Evening care	7%	26%	2%	14%	-5%	2%*
Sick care	4%	18%	1%	10%	-3%	2%
24 hour care	1%	11%	0%	0%	-1%	1%
Center provides transportation services	44%	50%	38%	49%	-5%	5%
Center provides any of these screening: vision/hearing/dental/speech	75%	44%	62%	49%	-13%	5%**
Center provides developmental assessments	73%	45%	65%	48%	-8%	5%
Center provides counseling services for children and parents	38%	49%	28%	45%	-11%	5%*
Center provides social services to parents	28%	45%	21%	41%	-8%	4%
Head Start sponsored part-day program	5%	22%	0%	0%	-5%	2%**
Public Schools sponsored part-day program	8%	27%	6%	24%	-2%	3%
Bilingual program	17%	38%	7%	25%	-10%	3%**

\*\* Indicates significance at the 0.01 level.

\* Indicates significance at the 0.05 level.

+ Where applicable, this column contains a percentage rather than a mean.

**Table 2—Continued**  
**T-Test Results for Eligible vs. Ineligible Centers**  
**Financial Variables**

Variables	Eligible Centers		Ineligible Centers		Difference of Means+	Standard Error
	Mean+	Standard Deviation	Mean+	Standard Deviation		
Total Centers by Category	172		204			
<i>Financial Variables</i>						
Monthly fees for infants (in dollars)	379	149	501	163	122	24**
Monthly fees for toddlers (in dollars)	367	144	472	156	105	20**
Monthly fees for pre-schoolers (in dollars)	332	113	397	103	65	11**
Monthly fees for school age children (in dollars)	204	98	252	110	48	14**
Fees on sliding scale for low-income children	32%	47%	10%	30%	-22%	4%**
Other mechanisms to help low income children	35%	48%	24%	43%	-12%	5%*
Center space donated or rent discounted	49%	50%	22%	42%	-27%	5%**
Revenue from CACFP, as a percentage of all revenue	4%	5%	0%	1%	-4%	0%**
Wages for food preparation staff (in dollars)	11565	6924	11798	21893	233	5927
Food preparation wages, as a percentage of total wages	8%	4%	11%	21%	3%	6%
Food preparation wages per enrolled student (in dollars per student)	217	180	259	485	42	116
Cost of food services (in dollars)	16959	15114	9027	10337	-7932	1363**
Cost of food services per enrolled student (in dollars per student)	271	165	137	126	-133	15**
Value of donated food (in dollars)	993	5862	169	522	-824	467
Value of donated food per enrolled student (in dollars per student)	16	67	5	18	-11	6*

\*\* Indicates significance at the 0.01 level.

\* Indicates significance at the 0.05 level.

+ Where applicable, this column contains a percentage rather than a mean.

**Table 2—Continued**  
**T-Test Results for Eligible vs. Ineligible Centers**  
**Other Center Characteristics**

Variables	Eligible Centers		Ineligible Centers		Difference of Means+	Standard Error
	Mean+	Standard Deviation	Mean+	Standard Deviation		
Total Centers by Category	172		204			
<i>Other Center Characteristics</i>						
Center’s legal status is for-profit	19%	39%	74%	44%	55%	4%**
Center’s legal status is non-profit/public	81%	39%	26%	44%	-55%	4%**
Center is for-profit and independently operated	9%	29%	47%	50%	37%	4%**
Center is for-profit and part of a chain	9%	29%	25%	43%	16%	4%**
Center is non-profit, and affiliated with a church	27%	45%	14%	35%	-13%	4%**
Center is located in CA	15%	36%	31%	47%	16%	4%**
Center is located in CO	32%	47%	19%	39%	-13%	5%**
Center is located in CT	17%	38%	31%	47%	15%	4%**
Center is located in NC	36%	48%	18%	39%	-18%	5%**
Center owned or sponsored by another organization	88%	32%	85%	36%	-3%	4%
Center accredited by NAEYC	6%	23%	7%	26%	1%	3%
Age of Center	15.6	14.5	11.0	10.1	-4.6	1.3**
Number of enrolled children	68.6	43.3	67.4	46.2	-1.1	4.6
Number of enrolled infants/toddlers	13.5	15.9	14.2	15.4	0.7	1.6
Number of enrolled pre-school children	40.9	27.9	38.3	30.5	-2.6	3.0
Number of enrolled school-aged children/kindergarden	13.9	18.3	14.9	19.6	1.0	2.0
Child to FTE Teacher Ratio	12.6	4.9	10.0	3.9	-2.6	0.5**
Child to FTE Teacher Aide Ratio	27.4	35.2	43.1	70.8	15.7	6.5*
Child to FTE Teacher-Director Ratio	60.9	37.4	61.1	41.8	0.2	6.1
Child to FTE Teacher-Administrator Ratio	68.2	37.9	76.1	43.8	7.9	5.6
Child to FTE Teacher/Director/Administrator Ratio	49.7	31.4	55.0	38.7	5.3	4.1

\*\* Indicates significance at the 0.01 level.

\* Indicates significance at the 0.05 level.

+ Where applicable, this column contains a percentage rather than a mean.

**Table 2—Continued**  
**T-Test Results for Eligible vs. Ineligible Centers**  
**Characteristics of Enrolled Children**

Variables	Eligible Centers		Ineligible Centers		Difference of Means+	Standard Error
	Mean+	Standard Deviation	Mean+	Standard Deviation		
Total Centers by Category	172		204			
<i>Characteristics of Enrolled Children</i>						
Special needs	10%	19%	3%	4%	-7%	2%**
Tuition subsidized by government or other agency	46%	38%	7%	10%	-39%	3%**
White, non-Hispanic	51%	37%	78%	24%	27%	3%**
African-American/non-Hispanic	31%	36%	9%	17%	-22%	3%**
Hispanic	15%	25%	6%	11%	-9%	2%**
Asian/Pacific Islander, non-Hispanic	2%	8%	5%	11%	2%	1%*
Other (includes Native-American), non-Hispanic	1%	4%	2%	5%	1%	0%

\*\* Indicates significance at the 0.01 level.

\* Indicates significance at the 0.05 level.

+ Where applicable, this column contains a percentage rather than a mean.



**Table 3**  
**T-Test Results for Eligible Participating vs. Non-Participating Centers**  
**Characteristics of Care**

Variables	Non-Participating		Participating		Difference of Means+	Standard Error
	Mean+	Standard Deviation	Mean+	Standard Deviation		
Total Centers by Category	110		62			
<i>Characteristics of Care</i>						
Meals or Snacks provided	100%	0%	100%	0%		
Provides After-School & Before-School Care for school-agers	58%	50%	55%	50%	3%	8%
Full day program, g.t 30 hrs/wk & at least 5 days/wk	100%	0%	99%	10%	1%	1%
Part-day/Part week program (e.g. preschool)	77%	42%	61%	49%	17%	7%*
Part day extended care (before, during, or after pre-school program)	40%	49%	42%	50%	-2%	8%
Number of months per year in operation	11.90	0.43	11.94	0.33	-0.04	0.06
Hours of operation during week-days	11.13	1.22	11.22	1.39	-0.09	0.20
Number of days open	5.00	0.00	5.05	0.28	-0.05	0.03
Week-end care	3%	18%	4%	19%	0%	3%
Evening care	6%	25%	7%	26%	-1%	4%
Sick care	3%	18%	4%	19%	0%	3%
24 hour care	3%	18%	0%	0%	3%	2%
Center provides transportation services	39%	49%	46%	50%	-8%	8%
Center provides any of these screening: vision/hearing/dental/speech	71%	46%	77%	42%	-6%	7%
Center provides developmental assessments	71%	46%	74%	44%	-3%	7%
Center provides counseling services for children and parents	35%	48%	40%	49%	-5%	8%
Center provides social services to parents	18%	39%	35%	48%	-17%	7%*
Head Start sponsored part-day program	0%	0%	8%	28%	-8%	3%**
Public Schools sponsored part-day program	3%	18%	10%	30%	-7%	4%
Bilingual program	19%	40%	16%	36%	4%	6%

\*\* Indicates significance at the 0.01 level.

\* Indicates significance at the 0.05 level.

+ Where applicable, this column contains a percentage rather than a mean.

**Table 3—Continued**  
**T-Test Results for Eligible Participating vs. Non-Participating Centers**  
**Financial Variables**

Variables	Non-Participating		Participating		Difference of Means+	Standard Error
	Mean+	Standard Deviation	Mean+	Standard Deviation		
Total Centers by Category	110		62			
<i>Financial Variables</i>						
Monthly fees for infants (in dollars)	412	173	360	131	52	37
Monthly fees for toddlers (in dollars)	383	145	357	143	26	29
Monthly fees for pre-schoolers (in dollars)	331	101	332	119	-1	18
Monthly fees for school age children (in dollars)	214	111	198	90	16	22
Fees on sliding scale for low-income children	13%	34%	42%	50%	-29%	6%**
Other mechanisms to help low income children	39%	49%	33%	47%	6%	8%
Center space donated or rent discounted	47%	50%	50%	50%	-3%	8%
Revenue from CACFP, as a percentage of all revenue	0%	0%	7%	5%	-7%	0%**
Wages for food preparation staff (in dollars)	9317	6878	12246	6897	-2929	2484
Food preparation wages, as a percentage of total wages	6%	5%	8%	4%	-2%	2%
Food preparation wages per enrolled student (in dollars per student)	114	74	248	191	-133	41**
Cost of food services (in dollars)	14326	11090	18443	16833	-4117	2135
Cost of food services per enrolled student (in dollars per student)	228	158	294	165	-66	25*
Value of donated food (in dollars)	554	1490	1245	7270	-691	749
Value of donated food per enrolled student (in dollars per student)	9	23	21	83	-12	9

\*\* Indicates significance at the 0.01 level.

\* Indicates significance at the 0.05 level.

+ Where applicable, this column contains a percentage rather than a mean.

**Table 3—Continued**  
**T-Test Results for Eligible Participating vs. Non-Participating Centers**  
**Other Center Characteristics**

Variables	Non-Participating		Participating		Difference of Means+	Standard Error
	Mean+	Standard Deviation	Mean+	Standard Deviation		
Total Centers by Category	62		110			
<i>Other Center Characteristics</i>						
Center’s legal status is for-profit	26%	44%	15%	35%	11%	7%
Center’s legal status is non-profit/public	74%	44%	85%	35%	-11%	7%
Center is for-profit and independently operated	11%	32%	8%	28%	3%	5%
Center is for-profit and part of a chain	15%	36%	6%	25%	8%	5%
Center is non-profit, and affiliated with a church	42%	50%	19%	39%	23%	7%**
Center is located in CA	24%	43%	10%	30%	14%	6%*
Center is located in CO	24%	43%	36%	48%	-12%	7%
Center is located in CT	10%	30%	21%	41%	-11%	5%*
Center is located in NC	42%	50%	33%	47%	9%	8%
Center owned or sponsored by another organization	92%	27%	86%	35%	6%	5%
Center accredited by NAEYC	5%	22%	6%	25%	-2%	4%
Age of Center	14.8	9.6	16.0	17.0	-1.2	2.0
Number of enrolled children	73.8	45.4	66.2	42.1	6.6	7.0
Number of enrolled infants/toddlers	13.5	14.4	13.4	16.7	0.1	2.4
Number of enrolled pre-school children	43.7	29.9	39.3	26.6	4.4	4.6
Number of enrolled school-aged children/kindergarden	15.0	20.9	13.2	16.8	1.8	3.1
Child to FTE Teacher Ratio	11.7	4.6	13.1	5.0	-1.4	0.8
Child to FTE Teacher Aide Ratio	34.8	47.8	23.9	26.8	10.9	7.6
Child to FTE Teacher-Director Ratio	66.0	7.7	58.1	35.7	7.9	9.1
Child to FTE Teacher-Administrator Ratio	73.3	35.8	65.1	38.9	8.2	7.0
Child to FTE Teacher/Director/Administrator Ratio	53.3	29.3	47.6	32.6	5.7	5.1

\*\* Indicates significance at the 0.01 level.

\* Indicates significance at the 0.05 level.

+ Where applicable, this column contains a percentage rather than a mean.

**Table 3—Continued**  
**T-Test Results for Eligible Participating vs. Non-Participating Centers**  
**Characteristics of Enrolled Children**

Variables	Non-Participating		Participating		Difference of Means+	Standard Error
	Mean+	Standard Deviation	Mean+	Standard Deviation		
Total Centers by Category	62		110			
<i>Characteristics of Enrolled Children</i>						
Special needs	8%	19%	11%	20%	-3%	3%
Tuition subsidized by government or other agency	28%	33%	56%	38%	-28%	6%**
White, non-Hispanic	57%	36%	47%	37%	10%	6%
African-American/non- Hispanic	25%	31%	33%	37%	-8%	6%
Hispanic	11%	22%	17%	26%	-6%	4%
Asian/Pacific Islander, non-Hispanic	4%	13%	2%	4%	2%	2%
Other (includes Native-American), non-Hispanic	2%	5%	1%	2%	2%	1%*

\*\* Indicates significance at the 0.01 level.

\* Indicates significance at the 0.05 level.

+ Where applicable, this column contains a percentage rather than a mean.

**Table 4a**  
**Descriptive Profiles for Child Care Centers – Stratified by Legal Status**  
**(Cost, Quality and Child Outcome Data Set)**  
**Characteristics of Center Care and Services**

Variables	Centers Eligible for CACFP						
	All Eligible	Participating			Non-Participating		
		For Profit	Non Profit	All	For Profit	Non Profit	All
Total Centers by Category	172	16	94	110	16	46	62
<i>Characteristics of Center Care and Services</i>							
Meals or Snacks provided	100%	100%	100%	100%	100%	100%	100%
Provides After-School & Before-School Care for school-agers	56%	88%	49%	55%	94%	46%	58%
Full day program, g.t 30 hrs/wk & at least 5 days/wk	99%	100%	99%	99%	100%	100%	100%
Part-day/Part week program (e.g. preschool)	67%	94%	55%	61%	88%	74%	77%
Part day extended care (before, during, or after pre-school program)	42%	69%	38%	42%	31%	43%	40%
Number of months per year in operation	11.93	12.00	11.93	11.94	12.00	11.87	11.90
Hours of operation during week-days	11.18	12.19	11.05	11.22	11.44	11.02	11.13
Number of days open	5.03	5.06	5.04	5.05	5.00	5.00	5.00
Week-end care	4%	6%	3%	4%	13%	0%	3%
Evening care	7%	13%	6%	7%	19%	2%	6%
Sick care	4%	0%	4%	4%	13%	0%	3%
24 hour care	1%	0%	0%	0%	13%	0%	3%
Center provides transportation services	44%	81%	40%	46%	75%	26%	39%
Center provides any of these screening: vision/hearing/dental/speech	75%	75%	77%	77%	56%	76%	71%
Center provides developmental assessments	73%	44%	79%	74%	69%	72%	71%
Center provides counseling services for children and parents	38%	0%	47%	40%	31%	37%	35%
Center provides social services to parents	28%	13%	38%	35%	19%	17%	18%
Head Start sponsored part-day program	5%	0%	10%	8%	0%	0%	0%
Public Schools sponsored part-day program	8%	6%	11%	10%	0%	4%	3%
Bilingual program	17%	6%	17%	16%	13%	22%	19%

**Table 4a—Continued**  
**Descriptive Profiles for Child Care Centers – Stratified by Legal Status**  
**(Cost, Quality and Child Outcome Data Set)**  
**Financial Variables**

Variables	Centers Eligible for CACFP						
	All Eligible	Participating			Non-Participating		
		For Profit	Non Profit	All	For Profit	Non Profit	All
Total Centers by Category	172	16	94	110	16	46	62
Financial Variables							
Monthly fees for infants (in dollars)	380	365	359	360	305	488	412
Monthly fees for toddlers (in dollars)	367	343	361	357	323	421	383
Monthly fees for pre-schoolers (in dollars)	332	305	337	332	291	346	331
Monthly fees for school age children (in dollars)	204	189	200	198	174	246	214
Fees on sliding scale for low-income children	32%	6%	48%	42%	6%	16%	13%
Other mechanisms to help low income children	35%	19%	35%	33%	19%	47%	39%
Center space donated or rent discounted	49%	0%	60%	50%	0%	65%	47%
Revenue from CACFP, as a percentage of all revenue	4%	8%	6%	7%	0%	0%	0%
Wages for food preparation staff (in dollars)	11565	3687	12513	12246	5944	10160	9317
Food preparation wages, as a percentage of total wages	8%	3%	8%	8%	4%	6%	6%
Food preparation wages per enrolled student (in dollars per student)	217	31	255	248	54	129	114
Cost of food services (in dollars)	16959	19208	18313	18443	13335	14671	14326
Cost of food services per enrolled student (in dollars per student)	270	228	305	294	201	238	228
Value of donated food (in dollars)	993	129	1410	1245	137	687	554
Value of donated food per enrolled student (in dollars per student)	16	4	23	21	2	11	9

**Table 4a—Continued**  
**Descriptive Profiles for Child Care Centers – Stratified by Legal Status**  
**(Cost, Quality and Child Outcome Data Set)**  
**Other Center Characteristics**

Variables	Centers Eligible for CACFP						
	All Eligible	Participating			Non-Participating		
		For Profit	Non Profit	All	For Profit	Non Profit	All
Total Centers by Category	172	16	94	110	16	46	62
<i>Other Center Characteristics</i>							
Center is located in CA	15%	0%	12%	10%	0%	33%	24%
Center is located in CO	32%	69%	31%	36%	25%	24%	24%
Center is located in CT	17%	0%	24%	21%	0%	13%	10%
Center is located in NC	36%	31%	33%	33%	75%	30%	42%
Center owned or sponsored by another organization	88%	75%	88%	86%	94%	91%	92%
Center accredited by NAEYC	6%	0%	7%	6%	6%	4%	5%
Age of Center	15.6	7.0	17.6	16.0	12.4	15.6	14.8
Number of enrolled children	68.6	94.7	61.4	66.2	77.0	71.4	72.8
Number of enrolled infants/toddlers	13.5	21.3	12.1	13.4	17.6	12.1	13.5
Number of enrolled pre-school children	40.9	46.2	38.2	39.3	36.3	46.3	43.7
Number of enrolled school-aged children/kindergarten	13.9	27.2	10.9	13.2	23.1	12.2	15.0
Child to FTE Teacher Ratio	12.6	12.3	13.2	13.1	9.9	12.3	11.7
Child to FTE Teacher Aide Ratio	27.4	36.2	22.3	23.9	51.7	30.6	34.8
Child to FTE Teacher-Director Ratio	60.9	112.2	49.5	58.1	87.7	57.3	66.0
Child to FTE Teacher-Administrator Ratio	68.2	88.5	61.1	65.1	94.4	67.3	73.3
Child to FTE Teacher/Director/Administrator Ratio	49.7	62.5	45.5	47.6	56.4	52.5	53.3

**Table 4a—Continued**  
**Descriptive Profiles for Child Care Centers – Stratified by Legal Status**  
**(Cost, Quality and Child Outcome Data Set)**  
**Characteristics of Enrolled Children**

Variables	Centers Eligible for CACFP						
	All Eligible	Participating			Non-Participating		
		For Profit	Non Profit	All	For Profit	Non Profit	All
Total Centers by Category	172	16	94	110	16	46	62
<i>Characteristics of Enrolled Children</i>							
Special needs	10%	3%	12%	11%	5%	9%	8%
Tuition subsidized by government or other agency	46%	40%	59%	56%	41%	24%	28%
White, non-Hispanic	51%	65%	45%	47%	50%	59%	57%
African-American/non-Hispanic	31%	24%	35%	33%	44%	19%	25%
Hispanic	15%	8%	18%	17%	5%	13%	11%
Asian/Pacific Islander, non-Hispanic	2%	1%	2%	2%	0%	5%	4%
Other (includes Native-American), non-Hispanic	1%	1%	1%	1%	0%	3%	2%



**Table 4b**  
**Descriptive Profiles for Child Care Centers – Stratified by Legal Status**  
**(Cost, Quality and Child Outcome Data Set)**  
**Characteristics of Center Care and Services**

Variables	All Centers		
	For Profit	Non Profit	All
Total Centers by Category	201	200	401
<i>Characteristics of Center Care and Services</i>			
Meals or Snacks provided	68%	72%	70%
Provides After-School & Before-School Care for school-agers	72%	47%	60%
Full day program, g.t 30 hrs/wk & at least 5 days/wk	100%	100%	100%
Part-day/Part week program (e.g. preschool)	87%	70%	79%
Part day extended care (before, during, or after pre-school program)	68%	44%	56%
Number of months per year in operation	11.98	11.90	11.94
Hours of operation during week-days	11.31	10.94	11.12
Number of days open	5.02	5.02	5.02
Week-end care	3%	2%	3%
Evening care	4%	4%	4%
Sick care	2%	2%	2%
24 hour care	1%	0%	1%
Center provides transportation services	49%	28%	38%
Center provides any of these screening: vision/hearing/dental/speech	65%	70%	67%
Center provides developmental assessments	66%	72%	69%
Center provides counseling services for children and parents	24%	41%	32%
Center provides social services to parents	20%	28%	24%
Head Start sponsored part-day program	0%	5%	2%
Public Schools sponsored part-day program	5%	7%	6%
Bilingual program	10%	15%	12%

**Table 4b—Continued**  
**Descriptive Profiles for Child Care Centers – Stratified by Legal Status**  
**(Cost, Quality and Child Outcome Data Set)**  
**Financial Variables**

Variables	All Centers		
	For Profit	Non Profit	All
Total Centers by Category	201	200	401
<i>Financial Variables</i>			
Monthly fees for infants (in dollars)	462	435	451
Monthly fees for toddlers (in dollars)	442	411	430
Monthly fees for pre-schoolers (in dollars)	384	358	372
Monthly fees for school age children (in dollars)	244	217	234
Fees on sliding scale for low-income children	7%	31%	19%
Other mechanisms to help low income children	18%	39%	28%
Center space donated or rent discounted	6%	62%	33%
Revenue from CACFP, as a percentage of all revenue	1%	3%	2%
Wages for food preparation staff (in dollars)	10544	11847	11434
Food preparation wages, as a percentage of total wages	9%	8%	8%
Food preparation wages per enrolled student (in dollars per student)	234	225	228
Cost of food services (in dollars)	11731	13045	12384
Cost of food services per enrolled student (in dollars per student)	163	220	192
Value of donated food (in dollars)	120	949	542
Value of donated food per enrolled student (in dollars per student)	3	17	10

**Table 4b—Continued**  
**Descriptive Profiles for Child Care Centers – Stratified by Legal Status**  
**(Cost, Quality and Child Outcome Data Set)**  
**Other Center Characteristics**

Variables	All Centers		
	For Profit	Non Profit	All
Total Centers by Category	201	200	401
<i>Other Center Characteristics</i>			
Center is located in CA	24%	26%	25%
Center is located in CO	25%	25%	25%
Center is located in CT	26%	25%	25%
Center is located in NC	25%	25%	25%
Center owned or sponsored by another organization	84%	88%	86%
Center accredited by NAEYC	6%	7%	6%
Age of Center	10.2	15.9	13.1
Number of enrolled children	74.8	60.3	67.5
Number of enrolled infants/toddlers	16.1	10.8	13.4
Number of enrolled pre-school children	39.9	38.6	39.3
Number of enrolled school-aged children/kindergarden	18.8	10.6	14.7
Child to FTE Teacher Ratio	10.5	11.9	11.2
Child to FTE Teacher Aide Ratio	49.1	25.4	36.7
Child to FTE Teacher-Director Ratio	74.2	48.9	60.9
Child to FTE Teacher-Administrator Ratio	90.5	60.2	71.7
Child to FTE Teacher/Director/Administrator Ratio	61.5	45.7	52.1

**Table 4b—Continued**  
**Descriptive Profiles for Child Care Centers – Stratified by Legal Status**  
**(Cost, Quality and Child Outcome Data Set)**  
**Characteristics of Enrolled Children**

Variables	All Centers		
	For Profit	Non Profit	All
Total Centers by Category	201	200	401
<i>Characteristics of Enrolled Children</i>			
Special needs	3%	9%	6%
Tuition subsidized by government or other agency	13%	35%	24%
White, non-Hispanic	77%	57%	67%
African-American/non-Hispanic	13%	23%	18%
Hispanic	5%	14%	10%
Asian/Pacific Islander, non-Hispanic	4%	4%	4%
Other (includes Native-American), non-Hispanic	2%	2%	2%

**Table 5**  
**T-Test Results for Non-Profit vs. For-Profit Centers**  
**Characteristics of Care**

Variables	For-Profit		Non-Profit		Difference of Means+	Standard Error
	Mean+	Standard Deviation	Mean+	Standard Deviation		
Total Centers by Category	201		200			
<i>Characteristics of Care</i>						
Meals or Snacks provided	68%	47%	72%	45%	-4%	5%
Provides After-School & Before-School Care for school-agers	72%	45%	47%	50%	25%	5%**
Full day program, g.t 30 hrs/wk & at least 5 days/wk	100%	0%	100%	7%	1%	1%
Part-day/Part week program (e.g. preschool)	87%	34%	70%	46%	17%	4%**
Part day extended care (before, during, or after pre-school program)	68%	47%	44%	50%	24%	5%**
Number of months per year in operation	11.98	0.16	11.90	0.43	0.08	0.03*
Hours of operation during week-days	11.31	0.06	10.94	1.30	0.37	0.11**
Number of days open	5.02	0.19	5.02	0.20	0.00	0.02
Week-end care	3%	18%	2%	12%	2%	2%
Evening care	4%	21%	4%	18%	1%	2%
Sick care	2%	14%	2%	14%	0%	1%
24 hour care	1%	10%	0%	0%	1%	1%
Center provides transportation services	49%	50%	28%	45%	21%	5%**
Center provides any of these screening: vision/hearing/dental/speech	65%	48%	70%	46%	-6%	5%
Center provides developmental assessments	66%	48%	72%	45%	-6%	5%
Center provides counseling services for children and parents	24%	43%	41%	49%	-17%	5%**
Center provides social services to parents	20%	40%	28%	45%	-9%	4%
Head Start sponsored part-day program	0%	0%	5%	21%	-5%	1%*
Public Schools sponsored part-day program	5%	23%	7%	26%	-2%	2%
Bilingual program	10%	30%	15%	35%	-5%	3%

\*\* Indicates significance at the 0.01 level.

\* Indicates significance at the 0.05 level.

+ Where applicable, this column contains a percentage rather than a mean.

**Table 5—Continued**  
**T-Test Results for Non-Profit vs. For-Profit Centers**  
**Financial Variables**

Variables	For-Profit		Non-Profit		Difference of Means+	Standard Error
	Mean+	Standard Deviation	Mean+	Standard Deviation		
Total Centers by Category	201		200			
<i>Financial Variables</i>						
Monthly fees for infants (in dollars)	462	166	435	174	27	26
Monthly fees for toddlers (in dollars)	442	150	411	173	31	22
Monthly fees for pre-schoolers (in dollars)	384	102	358	123	26	12
Monthly fees for school age children (in dollars)	244	107	217	114	27	15
Fees on sliding scale for low-income children (in dollars)	7%	26%	31%	46%	-24%	4%**
Other mechanisms to help low income children	18%	38%	39%	49%	-22%	4%**
Center space donated or rent discounted	6%	23%	62%	49%	-57%	4%**
Revenue from CACFP, as a percentage of all revenue	1%	3%	3%	5%	-2%	0%**
Wages for food preparation staff (in dollars)	10544	20244	11846	6961	-1302	4770
Food preparation wages, as a percentage of total wages	9%	20%	8%	4%	2%	5%
Food preparation wages per enrolled student (in dollars per student)	234	461	225	180	9	112
Cost of food services (in dollars)	11731	12799	13045	15067	-1314	1399
Cost of food services per enrolled student (in dollars per student)	163	134	220	178	-57	16**
Value of donated food (in dollars)	120	375	949	5447	-829	400*
Value of donated food per enrolled student (in dollars per student)	3	14	17	64	-14	5

\*\* Indicates significance at the 0.01 level.

\* Indicates significance at the 0.05 level.

+ Where applicable, this column contains a percentage rather than a mean.

**Table 5—Continued**  
**T-Test Results for Non-Profit vs. For-Profit Centers**  
**Other Center Characteristics**

Variables	For-Profit		Non-Profit		Difference of Means	Standard Error
	Mean+	Standard Deviation	Mean+	Standard Deviation		
Total Centers by Category	201		200			
<i>Other Center Characteristics</i>						
Center is located in CA	24%	43%	26%	44%	-1%	4%
Center is located in CO	25%	43%	25%	43%	0%	4%
Center is located in CT	26%	44%	24%	43%	1%	4%
Center is located in NC	25%	43%	25%	43%	0%	4%
Center owned or sponsored by another organization	84%	36%	88%	33%	-4%	3%
Center accredited by NAEYC	6%	24%	7%	25%	-1%	2%
Age of Center	10.2	8.6	15.9	14.7	-5.7	1.2**
Number of enrolled children	74.8	49.2	60.3	39.9	14.5	4.5**
Number of enrolled infants/toddlers	16.1	15.3	10.8	15.1	5.3	1.5**
Number of enrolled pre-school children	39.9	30.9	38.6	27.3	1.2	2.9
Number of enrolled school-aged children/kindergarten	18.8	22.1	10.6	17.4	8.3	2.0**
Child to FTE Teacher Ratio	10.5	4.5	11.9	4.7	-1.4	0.5**
Child to FTE Teacher Aid Ratio	49.1	73.7	25.4	31.6	23.7	6.6**
Child to FTE Teacher-Director Ratio	74.2	48.2	48.9	30.2	25.3	6.2**
Child to FTE Teacher-Administrator Ratio	90.5	46.4	60.2	34.4	30.4	5.8**
Child to FTE Teacher/Director/Administrator Ratio	61.5	39.7	45.7	30.6	15.9	4.1**

\*\* Indicates significance at the 0.01 level.

\* Indicates significance at the 0.05 level.

+ Where applicable, this column contains a percentage rather than a mean.

**Table 5—Continued**  
**T-Test Results for Non-Profit vs. For-Profit Centers**  
**Characteristics of Enrolled Children**

Variables	For-Profit		Non-Profit		Difference of Means+	Standard Error
	Mean+	Standard Deviation	Mean+	Standard Deviation		
Total Centers by Category	201		200			
<i>Characteristics of Enrolled Children</i>						
Special needs	3%	4%	9%	18%	-6%	1%**
Tuition subsidized by government or other agency	13%	17%	35%	40%	-22%	3%**
White, non-Hispanic	77%	25%	57%	37%	20%	3%**
African-American/non-Hispanic	13%	21%	23%	33%	-11%	3%**
Hispanic	5%	10%	14%	23%	-9%	2%**
Asian/Pacific Islander, non-Hispanic	4%	9%	4%	10%	0%	1%
Other (includes Native-American), non-Hispanic	2%	5%	2%	5%	0%	0%

\*\* Indicates significance at the 0.01 level.

\* Indicates significance at the 0.05 level.

+ Where applicable, this column contains a percentage rather than a mean.



**Table 6**

**Participation Model for CACFP: Dependent Variable is 1 if Center Participates in CACFP  
(Cost, Quality, and Child Outcomes Data – Sample Restricted to All Eligible Centers)**

Explanatory Variables	Marginal Effect	Standard Error
Number of Observations = 171		
Provides After-School & Before-School Care for school-agers	0.091	0.108
Provides any mechanism to assist low income children	0.023	0.090
Cost of food services per enrolled student (in logarithms)	0.022	0.051
Value of donated food (in logarithms)	-0.007	0.019
Center's legal status is non-profit	0.437	0.128**
Center is non-profit, and affiliated with a church	-0.203	0.114
Center is located in CO	0.413	0.097**
Center is located in CT	0.327	0.077**
Center is located in NC	0.298	0.111*
Age of Center (in decades)	-0.028	0.035
Number of enrolled infants/toddlers (in thousands)	2.287	2.885
Number of enrolled pre-school children (in thousands)	-0.226	1.620
Number of enrolled school-aged children/kindergarden (in thousands)	1.237	2.626
Percent of enrolled children that have special needs	-0.263	0.238
Percent of enrolled children that have tuition subsidized by government or other agency	0.445	0.165**
Percent of enrolled children that are white	-0.001	0.002

\*\* Indicates significance at the 0.01 level.

\* Indicates significance at the 0.05 level.

Appendix

A. APPENDIX TABLES

Table A1a -

Descriptive Profiles For Child Care Centers - Stratified by State  
(Eligible Participating Centers)

**Table A1a**  
**Descriptive Profiles For Child Care Centers—Stratified by State**  
**(Cost, Quality and Child Outcome Data Set)**  
**Characteristics of Center Care and Services**

Variables	All Eligible	Eligible Participating Centers				
		CA	CO	NC	CT	All Participating
Total Centers by Category	172	11	40	36	23	110
<i>Characteristics of Center Care and Services</i>						
Meals or Snacks provided	100%	100%	100%	100%	100%	100%
Provides After-School & Before-School Care for school-agers	56%	30%	70%	50%	48%	55%
Full day program, g.t 30 hrs/wk & at least 5 days/wk	99%	100%	100%	97%	100%	99%
Part-day/Part week program (e.g. preschool)	67%	50%	78%	44%	61%	61%
Part day extended care (before, during, or after pre-school program)	42%	40%	65%	22%	35%	42%
Number of months per year in operation	11.93	11.77	12.00	11.97	11.87	11.94
Hours of operation during week-days	11.18	10.84	11.58	11.58	10.18	11.22
Number of days open	5.03	5.00	5.08	5.06	5.00	5.05
Week-end care	4%	10%	5%	3%	0%	4%
Evening care	7%	10%	8%	11%	0%	7%
Sick care	4%	0%	10%	0%	0%	4%
24 hour care	1%	0%	0%	0%	0%	0%
Center provides transportation services	44%	18%	58%	50%	35%	46%
Center provides any of these screening: vision/hearing/dental/speech	75%	64%	79%	89%	61%	77%
Center provides developmental assessments	73%	64%	73%	78%	74%	74%
Center provides counseling services for children and parents	38%	27%	35%	44%	48%	40%
Center provides social services to parents	28%	9%	35%	33%	48%	35%
Head Start sponsored part-day program	5%	0%	10%	14%	0%	8%
Public Schools sponsored part-day program	8%	10%	23%	3%	0%	10%
Bilingual program	17%	60%	25%	3%	0%	16%

**Table A1a—Continued**  
**Descriptive Profiles For Child Care Centers—Stratified by State**  
**(Cost, Quality and Child Outcome Data Set)**  
**Financial Variables**

Variables	All Eligible	Eligible Participating Centers				
		CA	CO	NC	CT	All Participating
Total Centers by Category	172	11	40	36	23	110
<i>Financial Variables</i>						
Monthly fees for infants (in dollars)	380	125	415	285	621	360
Monthly fees for toddlers (in dollars)	367	272	356	277	644	357
Monthly fees for pre-schoolers (in dollars)	332	344	311	248	494	332
Monthly fees for school age children (in dollars)	204	253	194	133	296	198
Fees on sliding scale for low-income children	32%	64%	40%	19%	70%	42%
Other mechanisms to help low income children	35%	30%	25%	44%	30%	33%
Center space donated or rent discounted	49%	36%	37%	54%	76%	50%
Revenue from CACFP, as a percentage of all revenue	4%	9%	7%	8%	3%	7%
Wages for food preparation staff (in dollars)	11565	18788	14836	10069	11320	12246
Food preparation wages, as a percentage of total wages	8%	7%	12%	8%	6%	8%
Food preparation wages per enrolled student (in dollars per student)	217	215	288	169	289	248
Cost of food services (in dollars)	16959	19453	17228	22969	12989	18443
Cost of food services per enrolled student (in dollars per student)	270	303	274	316	289	294
Value of donated food (in dollars)	993	1100	593	2364	619	1245
Value of donated food per enrolled student (in dollars per student)	16	16	15	26	23	21

**Table A1a—Continued**  
**Descriptive Profiles For Child Care Centers—Stratified by State**  
**(Cost, Quality and Child Outcome Data Set)**  
**Other Center Characteristics**

Variables	All Eligible	Eligible Participating Centers				
		CA	CO	NC	CT	All Participating
Total Centers by Category	172	11	40	36	23	110
<i>Other Center Characteristics</i>						
Center's legal status is for-profit	19%	0%	28%	14%	0%	15%
Center's legal status is non-profit/public	81%	100%	73%	86%	100%	85%
Center is for-profit and independently operated	9%	0%	15%	8%	0%	8%
Center is for-profit and part of a chain	9%	0%	13%	6%	0%	6%
Center is non-profit, and affiliated with a church	27%	9%	20%	22%		19%
Center owned or sponsored by another organization	88%	91%	80%	89%	91%	86%
Center accredited by NAEYC	6%	0%	3%	6%	17%	6%
Age of Center	15.6	15.0	15.2	12.4	23.7	16.0
Number of enrolled children	68.6	72.3	64.8	79.3	45.2	66.2
Number of enrolled infants/toddlers	13.5	6.9	11.6	22.8	5.1	13.4
Number of enrolled pre-school children	40.9	51.2	36.0	45.6	29.7	39.3
Number of enrolled school-aged children/kindergarden	13.9	14.2	16.7	10.9	10.4	13.2
Child to FTE Teacher Ratio	12.6	14.5	12.9	13.0	12.9	0.09
Child to FTE Teacher Aide Ratio	27.4	30.3	24.9	26.8	16.2	0.06
Child to FTE Teacher-Director Ratio	60.9	53.9	57.4	74.9	32.9	0.01
Child to FTE Teacher-Administrator Ratio	68.2	64.0	69.4	74.5	45.7	0.01
Child to FTE Teacher/Director/Administrator Ratio	49.7	44.0	44.7	56.7	40.4	0.03

**Table A1a—Continued**  
**Descriptive Profiles For Child Care Centers—Stratified by State**  
**(Cost, Quality and Child Outcome Data Set)**  
**Characteristics of Enrolled Children**

Variables	All Eligible	Eligible Participating Centers				
		CA	CO	NC	CT	All Participating
Total Centers by Category	172	11	40	36	23	110
<i>Characteristics of Enrolled Children</i>						
Special needs	10%	10%	14%	8%	11%	11%
Tuition subsidized by government or other agency	46%	73%	55%	47%	64%	56%
White, non-Hispanic	51%	21%	54%	49%	46%	47%
African-American/non-Hispanic	31%	33%	13%	50%	44%	33%
Hispanic	15%	38%	30%	1%	9%	17%
Asian/Pacific Islander, non-Hispanic	2%	6%	2%	0%	1%	2%
Other (includes Native-American), non-Hispanic	1%	1%	1%	0%	1%	1%

**Table A1b**  
**Descriptive Profiles For Child Care Centers—Stratified by State**  
**(Cost, Quality and Child Outcome Data Set) Characteristics of Center Care and Services**

Variables	All Eligible	Eligible Non- Participating Centers				All Eligible Non- Participating
		CA	CO	NC	CT	
Total Centers by Category	172	15	15	26	6	62
<i>Characteristics of Center Care and Services</i>						
Meals or Snacks provided	100%	100%	100%	100%	100%	100%
Provides After-School & Before-School Care for school-agers	56%	27%	73%	77%	17%	58%
Full day program, g.t 30 hrs/wk & at least 5 days/wk	99%	100%	100%	100%	100%	100%
Part-day/Part week program (e.g. preschool)	67%	87%	93%	62%	83%	77%
Part day extended care (before, during, or after pre-school program)	42%	67%	67%	8%	50%	40%
Number of months per year in operation	11.93	11.67	12.00	12.00	11.83	11.90
Hours of operation during week-days	11.18	10.87	11.68	11.13	10.38	11.13
Number of days open	5.03	5.00	5.00	5.00	5.00	5.00
Week-end care	4%	0%	7%	4%	0%	3%
Evening care	7%	0%	13%	8%	0%	6%
Sick care	4%	0%	0%	8%	0%	3%
24 hour care	1%	0%	7%	4%	0%	3%
Center provides transportation services	44%	13%	47%	58%	0%	39%
Center provides any of these screening: vision/hearing/dental/speech	75%	80%	73%	69%	50%	71%
Center provides developmental assessments	73%	87%	80%	62%	50%	71%
Center provides counseling services for children and parents	38%	40%	40%	35%	17%	35%
Center provides social services to parents	28%	27%	20%	12%	17%	18%
Head Start sponsored part-day program	5%	0%	0%	0%	0%	0%
Public Schools sponsored part-day program	8%	7%	7%	0%	0%	3%
Bilingual program	17%	53%	20%	0%	17%	19%

**Table A1b—Continued**  
**Descriptive Profiles For Child Care Centers—Stratified by State**  
**(Cost, Quality and Child Outcome Data Set)**  
**Financial Variables**

Variables	All Eligible	Eligible Non-Participating Centers				All Eligible Non-Participating
		CA	CO	NC	CT	
Total Centers by Category	172	15	15	26	6	62
<i>Financial Variables</i>						
Monthly fees for infants (in dollars)	380	649	551	284	590	412
Monthly fees for toddlers (in dollars)	367	477	450	282	576	383
Monthly fees for pre-schoolers (in dollars)	332	379	397	250	425	331
Monthly fees for school age children (in dollars)	204	354	221	145	279	214
Fees on sliding scale for low-income children	32%	21%	7%	8%	33%	13%
Other mechanisms to help low income children	35%	36%	60%	27%	50%	39%
Center space donated or rent discounted	49%	62%	50%	42%	33%	47%
Revenue from CACFP, as a percentage of all revenue	4%	0%	0%	0%	0%	0%
Wages for food preparation staff (in dollars)	11565	9290	12355	7411	6000	9317
Food preparation wages, as a percentage of total wages	8%	2%	6%	10%	3%	6%
Food preparation wages per enrolled student (in dollars per student)	217	61	136	141	131	114
Cost of food services (in dollars)	16959	7888	17978	15395	16663	14326
Cost of food services per enrolled student (in dollars per student)	270	138	233	257	318	228
Value of donated food (in dollars)	993	450	908	417	524	554
Value of donated food per enrolled student (in dollars per student)	16	5	20	4	10	9



**Table A1b—Continued**  
**Descriptive Profiles For Child Care Centers—Stratified by State**  
**(Cost, Quality and Child Outcome Data Set)**  
**Other Center Characteristics**

Variables	All Eligible	Eligible Non-Participating Centers				All Eligible Non-Participating
		CA	CO	NC	CT	
Total Centers by Category	172	15	15	26	6	62
Other Center Characteristics						
Center's legal status is for-profit	19%	0%	27%	46%	0%	26%
Center's legal status is non-profit/public	81%	100%	73%	54%	100%	74%
Center is for-profit and independently operated	9%	0%	13%	19%	0%	11%
Center is for-profit and part of a chain	9%	0%	13%	27%	0%	15%
Center is non-profit, and affiliated with a church	27%	40%	40%	38%	67%	42%
Center owned or sponsored by another organization	88%	87%	80%	100%	100%	92%
Center accredited by NAEYC	6%	7%	13%	0%	0%	5%
Age of Center	15.6	16.1	10.7	15.9	16.9	14.8
Number of enrolled children	68.6	74.3	78.2	73.6	52.3	72.8
Number of enrolled infants/toddlers	13.5	8.2	17.7	14.3	12.7	13.5
Number of enrolled pre-school children	40.9	51.9	41.4	42.2	35.5	43.7
Number of enrolled school-aged children/kindergarden	13.9	14.2	16.4	17.1	4.1	15.0
Child to FTE Teacher Ratio	12.6	13.1	10.0	11.3	13.8	11.7
Child to FTE Teacher Aide Ratio	27.4	36.7	37.9	40.0	7.4	34.8
Child to FTE Teacher-Director Ratio	60.9	46.6	52.9	90.3	42.7	66.0
Child to FTE Teacher-Administrator Ratio	68.2	66.3	81.7	78.9	47.5	73.3
Child to FTE Teacher/Director/Administrator Ratio	49.7	57.2	48.6	56.1	45.9	53.3

**Table A1b—Continued**  
**Descriptive Profiles For Child Care Centers—Stratified by State**  
**(Cost, Quality and Child Outcome Data Set)**  
**Characteristics of Enrolled Children**

Variables	All Eligible	Eligible Non-Participating Centers				All Eligible Non-Participating
		CA	CO	NC	CT	
Total Centers by Category	172	15	15	26	6	62
<i>Characteristics of Enrolled Children</i>						
Special needs	10%	12%	4%	8%	5%	8%
Tuition subsidized by government or other agency	46%	45%	14%	27%	26%	28%
White, non-Hispanic	51%	22%	86%	64%	63%	57%
African-American/non-Hispanic	31%	31%	4%	34%	22%	25%
Hispanic	15%	31%	8%	1%	6%	11%
Asian/Pacific Islander, non-Hispanic	2%	12%	2%	1%	2%	4%
Other (includes Native-American), non-Hispanic	1%	5%	1%	1%	7%	2%

**Table A1c**  
**Descriptive Profiles for Child Care Centers – Stratified by State**  
**(Cost, Quality and Child Outcome Data Set)**  
**Characteristics of Center Care and Services**

Variables	Centers Ineligible for CACFP				
	CA	CO	NC	CT	All Ineligible
Total Centers by Category	68	39	38	62	207
<i>Characteristics of Center Care and Services</i>					
Meals or Snacks provided	31%	72%	82%	18%	44%
Provides After-School & Before-School Care for school-agers	42%	92%	76%	63%	64%
Full day program, g.t 30 hrs/wk & at least 5 days/wk	100%	100%	100%	100%	100%
Part-day/Part week program (e.g. preschool)	89%	97%	61%	98%	88%
Part day extended care (before, during, or after pre-school program)	63%	90%	32%	77%	67%
Number of months per year in operation	11.95	11.97	12.00	11.87	11.94
Hours of operation during week-days	11.29	11.58	11.53	10.43	11.13
Number of days open	5.00	5.00	5.05	5.03	5.02
Week-end care	0%	0%	8%	2%	2%
Evening care	2%	8%	0%	0%	2%
Sick care	0%	3%	3%	0%	1%
24 hour care	0%	0%	0%	0%	0%
Center provides transportation services	22%	79%	53%	21%	38%
Center provides any of these screening: vision/hearing/dental/speech	70%	56%	74%	48%	62%
Center provides developmental assessments	58%	62%	55%	81%	65%
Center provides counseling services for children and parents	23%	21%	32%	34%	28%
Center provides social services to parents	13%	21%	24%	27%	21%
Head Start sponsored part-day program	0%	0%	0%	0%	0%
Public Schools sponsored part-day program	8%	10%	3%	3%	6%
Bilingual program	12%	10%	0%	3%	7%

**Table A1c—Continued**  
**Descriptive Profiles for Child Care Centers – Stratified by State**  
**(Cost, Quality and Child Outcome Data Set)**  
**Financial Variables**

Variables	Centers Ineligible for CACFP				
	CA	CO	NC	CT	All Ineligible
Total Centers by Category	68	39	38	62	207
<i>Financial Variables</i>					
Monthly fees for infants (in dollars)	545	490	316	640	502
Monthly fees for toddlers (in dollars)	458	426	310	637	472
Monthly fees for pre-schoolers (in dollars)	389	362	281	494	396
Monthly fees for school age children (in dollars)	322	225	150	300	249
Fees on sliding scale for low-income children	14%	14%	3%	6%	9%
Other mechanisms to help low income children	29%	26%	5%	26%	23%
Center space donated or rent discounted	27%	11%	13%	29%	22%
Revenue from CACFP, as a percentage of all revenue	0%	0%	0%	0%	0%
Wages for food preparation staff (in dollars)	7634	26638	4724	1872	11351
Food preparation wages, as a percentage of total wages	6%	3%	6%	1%	10%
Food preparation wages per enrolled student (in dollars per student)	136	480	56	39	199
Cost of food services (in dollars)	9949	12096	12607	4237	9143
Cost of food services per enrolled student (in dollars per student)	132	162	163	113	138
Value of donated food (in dollars)	40	443	13	258	169
Value of donated food per enrolled person (in dollars per student)	1	7	0	10	5

**Table A1c—Continued**  
**Descriptive Profiles for Child Care Centers – Stratified by State**  
**(Cost, Quality and Child Outcome Data Set)**  
**Other Center Characteristics**

Variables	Centers Ineligible for CACFP				
	CA	CO	NC	CT	All Ineligible
Total Centers by Category	68	39	38	62	207
<i>Other Center Characteristics</i>					
Center’s legal status is for-profit	63%	87%	87%	68%	74%
Center’s legal status is non-profit/public	37%	13%	13%	32%	26%
Center is for-profit and independently operated	38%	44%	53%	53%	47%
Center is for-profit and part of a chain	23%	44%	34%	11%	25%
Center is non-profit, and affiliated with a church	25%	3%	13%	11%	14%
Center owned or sponsored by another organization	82%	73%	92%	90%	85%
Center accredited by NAEYC	3%	10%	0%	15%	7%
Age of Center	13.9	10.2	9.2	9.9	11.1
Number of enrolled children	70.6	81.8	91.8	42.1	68.0
Number of enrolled infants/toddlers	8.6	13.7	26.4	13.3	14.3
Number of enrolled pre-school children	50.0	40.2	45.1	21.7	38.6
Number of enrolled school-aged children/kindergarden	12.0	27.9	20.2	7.1	15.1
Child to FTE Teacher Ratio	10.5	11.4	10.5	8.3	10.0
Child to FTE Teacher Aide Ratio	44.3	30.6	104.0	22.8	43.5
Child to FTE Teacher-Director Ratio	49.7	84.6	84.7	36.4	61.9
Child to FTE Teacher-Administrator Ratio	75.7	89.1	112.7	45.2	77.3
Child to FTE Teacher/Director/Administrator Ratio	54.2	60.0	82.6	36.8	55.7

**Table A1c—Continued**  
**Descriptive Profiles for Child Care Centers – Stratified by State**  
**(Cost, Quality and Child Outcome Data Set)**  
**Characteristics of Enrolled Children**

Variables	Centers Ineligible for CACFP				
	CA	CO	NC	CT	All Ineligible
Total Centers by Category	68	39	38	62	207
<i>Characteristics of Enrolled Children</i>					
Special needs	2%	2%	2%	5%	3%
Tuition subsidized by government or other agency	3%	8%	9%	8%	7%
White, non-Hispanic	63%	87%	79%	87%	78%
African-American/non-Hispanic	8%	4%	18%	7%	9%
Hispanic	13%	7%	1%	3%	6%
Asian/Pacific Islander, non-Hispanic	12%	2%	0%	2%	5%
Other (includes Native-American), non-Hispanic	4%	0%	1%	1%	2%

**Table A1d**  
**Descriptive Profiles for Child Care Centers – Stratified by State**  
**(Cost, Quality and Child Outcome Data Set)**  
**Characteristics of Center Care and Services**

Variables	All Centers				
	CA	CO	NC	CT	All Centers
Total Centers by Category	100	100	100	101	401
<i>Characteristics of Center Care and Services</i>					
Meals or Snacks provided	51%	88%	93%	46%	70%
Provides After-School & Before-School Care for school-agers	35%	78%	67%	57%	60%
Full day program, g.t 30 hrs/wk & at least 5 days/wk	100%	100%	99%	100%	100%
Part-day/Part week program (e.g. preschool)	85%	87%	55%	87%	79%
Part day extended care (before, during, or after pre-school program)	64%	75%	22%	64%	56%
Number of months per year in operation	11.89	11.98	11.99	11.88	11.94
Hours of operation during week-days	11.11	11.56	11.44	10.38	11.12
Number of days open	5.00	5.03	5.04	5.02	5.02
Week-end care	1%	3%	5%	1%	3%
Evening care	2%	8%	6%	0%	4%
Sick care	0%	5%	3%	0%	2%
24 hour care	0%	1%	1%	0%	1%
Center provides transportation services	19%	61%	53%	21%	38%
Center provides any of these screening: vision/hearing/dental/speech	70%	69%	78%	52%	67%
Center provides developmental assessments	64%	69%	65%	78%	69%
Center provides counseling services for children and parents	26%	30%	37%	36%	32%
Center provides social services to parents	14%	27%	24%	32%	24%
Head Start sponsored part-day program	0%	4%	5%	0%	2%
Public Schools sponsored part-day program	7%	14%	2%	2%	6%
Bilingual program	25%	19%	1%	4%	12%

**Table A1d—Continued**  
**Descriptive Profiles for Child Care Centers – Stratified by State**  
**(Cost, Quality and Child Outcome Data Set)**  
**Financial Variables**

Variables	All Centers				
	CA	CO	NC	CT	All Centers
Total Centers by Category	100	100	100	101	401
<i>Financial Variables</i>					
Monthly fees for infants (in dollars)	545	469	297	631	451
Monthly fees for toddlers (in dollars)	459	404	292	628	430
Monthly fees for pre-schoolers (in dollars)	386	348	261	489	372
Monthly fees for school age children (in dollars)	326	211	144	306	234
Fees on sliding scale for low-income children	20%	23%	10%	23%	19%
Other mechanisms to help low income children	28%	32%	25%	29%	28%
Center space donated or rent discounted	30%	31%	35%	37%	33%
Revenue from CACFP, as a percentage of all revenue	1%	3%	3%	1%	2%
Wages for food preparation staff (in dollars)	9271	17487	8569	10318	11434
Food preparation wages, as a percentage of total wages	4%	14%	8%	6%	8%
Food preparation wages per enrolled student (in dollars per student)	130	309	142	301	228
Cost of food services (in dollars)	11072	14513	17062	6891	12384
Cost of food services per enrolled student (in dollars per student)	145	215	243	165	192
Value of donated food (in dollars)	210	650	987	351	542
Value of donated food per enrolled student (in dollars per student)	3	14	11	13	10



**Table A1d—Continued**  
**Descriptive Profiles for Child Care Centers – Stratified by State**  
**(Cost, Quality and Child Outcome Data Set)**  
**Other Center Characteristics**

Variables	All Centers				
	CA	CO	NC	CT	All Centers
Total Centers by Category	100	100	100	101	401
<i>Other Center Characteristics</i>					
Center's legal status is for-profit	49%	50%	50%	51%	50%
Center's legal status is non-profit/public	51%	50%	50%	49%	50%
Center is for-profit and independently operated	29%	26%	28%	41%	31%
Center is for-profit and part of a chain	19%	24%	22%	8%	18%
Center is non-profit, and affiliated with a church	23%	17%	23%	15%	19%
Center owned or sponsored by another organization	81%	79%	93%	92%	86%
Center accredited by NAEYC	3%	7%	2%	13%	6%
Age of Center	14.7	11.9	12.1	13.5	13.1
Number of enrolled children	72.4	72.1	82.5	43.5	67.5
Number of enrolled infants/toddlers	7.6	13.3	22.0	10.9	13.4
Number of enrolled pre-school children	50.6	37.6	44.5	24.5	39.3
Number of enrolled school-aged children/kindergarden	14.1	20.6	16.1	8.1	14.7
Child to FTE Teacher Ratio	11.6	11.6	11.6	10.0	11.2
Child to FTE Teacher Aide Ratio	43.1	30.3	57.7	22.1	36.7
Child to FTE Teacher-Director Ratio	54.2	64.8	83.3	35.4	60.9
Child to FTE Teacher-Administrator Ratio	75.1	75.3	84.7	45.9	71.7
Child to FTE Teacher/Director/Administrator to Ratio	54.3	49.5	64.7	39.0	52.1

**Table A1d—Continued**  
**Descriptive Profiles for Child Care Centers – Stratified by State**  
**(Cost, Quality and Child Outcome Data Set)**  
**Characteristics of Enrolled Children**

Variables	All Centers				
	CA	CO	NC	CT	All Centers
Total Centers by Category	100	100	100	101	401
<i>Characteristics of Enrolled Children</i>					
Special needs	4%	7%	6%	6%	6%
Tuition subsidized by government or other agency	17%	28%	27%	23%	24%
White, non-Hispanic	52%	73%	65%	77%	67%
African-American/non-Hispanic	14%	7%	33%	16%	18%
Hispanic	18%	16%	1%	4%	10%
Asian/Pacific Islander, non-Hispanic	11%	2%	0%	1%	4%
Other (includes Native-American), non-Hispanic	4%	1%	1%	1%	2%

**Table A2a**  
**Descriptive Profiles for Child Care Centers – Stratified by Mechanisms in Place to Help Low-Income Families**  
**(Cost, Quality and Child Outcome Data Set)**  
**Characteristics of Center Care and Services**

Variables	Centers Eligible for CACFP						
	All Eligible	Participating Centers			Non-Participating Centers		
		Help for Low Income Families			Help for Low Income Families		
		Yes	No	All Participating	Yes	No	All Non-Participating
Total Centers by Category	172	65	45	110	28	34	62
<i>Characteristics of Center Care and Services</i>							
Meals or Snacks provided	100%	100%	100%	100%	100%	100%	100%
Provides After-School & Before-School Care for school-agers	56%	52%	60%	55%	57%	59%	58%
Full day program, g.t 30 hrs/wk & at least 5 days/wk	99%	98%	100%	99%	100%	100%	100%
Part-day/Part week program (e.g. preschool)	67%	56%	67%	61%	82%	74%	77%
Part day extended care (before, during, or after pre-school program)	42%	39%	47%	42%	46%	35%	40%
Number of months per year in operation	11.93	11.90	12.00	11.94	11.93	11.88	11.90
Hours of operation during week-days	11.18	10.96	11.58	11.22	10.75	11.43	11.13
Number of days open	5.03	5.06	5.02	5.05	5.00	5.00	5.00
Week-end care	4%	3%	4%	4%	7%	0%	3%
Evening care	7%	5%	11%	7%	7%	6%	6%
Sick care	4%	5%	2%	4%	4%	3%	3%
24 hour care	1%	0%	0%	0%	7%	0%	3%
Center provides transportation services	44%	31%	69%	46%	32%	44%	39%
Center provides any of these screening: vision/hearing/dental/speech	75%	75%	80%	77%	82%	62%	71%
Center provides developmental assessments	73%	77%	69%	74%	75%	68%	71%
Center provides counseling services for children and parents	38%	49%	27%	40%	36%	35%	35%
Center provides social services to parents	28%	42%	24%	35%	25%	12%	18%
Head Start sponsored part-day program	5%	11%	4%	8%	0%	0%	0%
Public Schools sponsored part-day program	8%	13%	7%	10%	7%	0%	3%
Bilingual program	17%	19%	11%	16%	32%	9%	19%

**Table A2a—Continued**

**Descriptive Profiles for Child Care Centers – Stratified by Mechanisms in Place to Help Low-Income Families  
(Cost, Quality and Child Outcome Data Set)  
Financial Variables**

Variables	Centers Eligible for CACFP						
	All Eligible	Participating Centers			Non-Participating Centers		
		Help for Low Income Families			Help for Low Income Families		
		Yes	No	All Participating	Yes	No	All Non-Participating
Total Centers by Category	172	65	45	110	28	34	62
<i>Financial Variables</i>							
Monthly fees for infants (in dollars)	379	356	364	360	476	392	412
Monthly fees for toddlers (in dollars)	367	369	345	357	442	366	383
Monthly fees for pre-schoolers (in dollars)	332	348	311	332	351	315	331
Monthly fees for school age children (in dollars)	203	203	189	197	221	209	214
Fees on sliding scale for low-income children	32%	71%	0%	42%	29%	0%	13%
Other mechanisms to help low income children	35%	56%	0%	33%	86%	0%	39%
Center space donated or rent discounted	49%	58%	40%	50%	52%	44%	47%
Revenue from CACFP, as a percentage of all revenue	4%	7%	6%	7%	0%	0%	0%
Wages for food preparation staff (in dollars)	11565	15162	8747	12246	7944	11375	9317
Food preparation wages, as a percentage of total wages	8%	9%	7%	8%	6%	5%	6%
Food preparation wages per enrolled student (in dollars per student)	217	308	175	248	100	136	114
Cost of food services (in dollars)	16959	17721	19485	18443	13282	15186	14326
Cost of food services per enrolled student (in dollars per student)	270	305	277	294	241	218	228
Value of donated food (in dollars)	993	458	2397	1245	1007	160	554
Value of donated food per enrolled student (in dollars per student)	16	12	32	21	16	3	9

**Table A2a—Continued**

**Descriptive Profiles for Child Care Centers – Stratified by Mechanisms in Place to Help Low-Income Families  
(Cost, Quality and Child Outcome Data Set)  
Other Center Characteristics**

Variables	Centers Eligible for CACFP						
	All Eligible	Participating Centers			Non-Participating Centers		
		Help for Low Income Families			Help for Low Income Families		
		Yes	No	All Participating	Yes	No	All Non-Participating
Total Centers by Category	172	65	45	110	28	34	62
<i>Other Center Characteristics</i>							
Center's legal status is for-profit	19%	6%	27%	15%	11%	38%	26%
Center's legal status is non-profit/public	81%	94%	73%	85%	89%	62%	74%
Center is for-profit and independently operated	9%	2%	18%	8%	7%	15%	11%
Center is for-profit and part of a chain	9%	5%	9%	6%	4%	24%	15%
Center is non-profit, and affiliated with a church	27%	14%	27%	19%	46%	38%	42%
Center is located in CA	15%	14%	4%	10%	25%	24%	24%
Center is located in CO	32%	31%	44%	36%	32%	18%	24%
Center is located in CT	17%	28%	11%	21%	18%	3%	10%
Center is located in NC	36%	28%	40%	33%	25%	56%	42%
Center owned or sponsored by another organization	88%	91%	80%	86%	93%	91%	92%
Center accredited by NAEYC	6%	8%	4%	6%	7%	3%	5%
Age of Center	15.6	18.8	11.9	16.0	16.3	13.5	14.8
Number of enrolled children	68.6	60.6	74.3	66.2	71.5	73.9	72.8
Number of enrolled infants/toddlers	13.4	10.6	17.5	13.4	6.8	19.0	13.5
Number of enrolled pre-school children	40.9	38.7	40.2	39.3	47.4	40.6	43.7
Number of enrolled school-aged children/kindergarten	13.9	11.3	16.1	13.2	15.9	14.3	15.0
Child to FTE Teacher Ratio	12.6	12.4	14.1	13.1	12.8	10.7	11.7
Child to FTE Teacher Aide Ratio	27.4	19.8	30.4	23.9	26.0	44.1	34.8
Child to FTE Teacher-Director Ratio	60.9	48.1	72.4	58.1	50.5	79.4	66.0
Child to FTE Teacher-Administrator Ratio	68.2	62.4	68.0	65.1	72.7	73.8	73.3
Child to FTE Teacher/Director/Administrator Ratio	49.7	43.3	53.3	47.6	53.4	53.2	53.3

**Table A2a—Continued**

**Descriptive Profiles for Child Care Centers – Stratified by Mechanisms in Place to Help Low-Income Families  
(Cost, Quality and Child Outcome Data Set)  
Characteristics of Enrolled Children**

Variables	Centers Eligible for CACFP						
	All Eligible	Participating Centers			Non-Participating Centers		
		Help for Low Income Families			Help for Low Income Families		
		Yes	No	All Participating	Yes	No	All Non-Participating
Total Centers by Category	172	65	45	110	28	34	62
<i>Characteristics of Enrolled Children</i>							
Special needs	10%	12%	10%	11%	13%	3%	8%
Tuition subsidized by government or other agency	46%	64%	45%	56%	32%	25%	28%
White, non-Hispanic	51%	42%	55%	47%	54%	59%	57%
African-American/non-Hispanic	31%	36%	29%	33%	21%	28%	25%
Hispanic	15%	18%	14%	17%	16%	8%	11%
Asian/Pacific Islander, non-Hispanic	2%	2%	1%	2%	6%	3%	4%
Other (includes Native-American), non-Hispanic	1%	1%	1%	1%	3%	2%	2%

**Table A2b**  
**Descriptive Profiles for Child Care Centers – Stratified by Mechanisms in Place to Help Low-Income Families**  
**(Cost, Quality and Child Outcome Data Set)**  
**Characteristics of Center Care and Services**

Variables	Centers Ineligible for CACFP			All Centers		
	Help for Low Income Families			Help for Low Income Families		All Centers
	Yes	No	All Ineligible	Yes	No	
Total Centers by Category	57	150	207	156	245	401
<i>Characteristics of Center Care and Services</i>						
Meals or Snacks provided	33%	49%	45%	75%	67%	70%
Provides After-School & Before-School Care for school-agers	65%	64%	64%	57%	61%	60%
Full day program, g.t 30 hrs/wk & at least 5 days/wk	100%	100%	100%	99%	100%	100%
Part-day/Part week program (e.g. preschool)	91%	87%	88%	75%	81%	79%
Part day extended care (before, during, or after pre-school program)	70%	65%	67%	54%	58%	56%
Number of months per year in operation	11.96	11.93	11.94	11.92	11.94	11.94
Hours of operation during week-days	10.93	11.19	11.12	10.92	11.25	11.12
Number of days open	5.04	5.01	5.02	5.04	5.01	5.02
Week-end care	2%	2%	2%	3%	2%	3%
Evening care	0%	3%	2%	3%	4%	4%
Sick care	0%	1%	1%	3%	2%	2%
24 hour care	0%	0%	0%	1%	0%	1%
Center provides transportation services	28%	42%	38%	29%	44%	38%
Center provides any of these screening: vision/hearing/dental/speech	51%	66%	62%	67%	68%	67%
Center provides developmental assessments	72%	63%	66%	75%	65%	69%
Center provides counseling services for children and parents	30%	27%	28%	39%	28%	32%
Center provides social services to parents	26%	19%	21%	33%	19%	24%
Head Start sponsored part-day program	0%	0%	0%	5%	1%	2%
Public Schools sponsored part-day program	9%	5%	6%	10%	4%	6%
Bilingual program	7%	7%	7%	17%	9%	12%

**Table A2b—Continued**  
**Descriptive Profiles for Child Care Centers – Stratified by Mechanisms in Place to Help Low-Income Families**  
**(Cost, Quality and Child Outcome Data Set)**  
**Financial Variables**

Variables	Centers Ineligible for CACFP			All Centers		
	Help for Low Income Families			Help for Low Income Families		All Centers
	Yes	No	All Ineligible	Yes	No	
Total Centers by Category	57	150	207	156	245	401
<i>Financial Variables</i>						
Monthly fees for infants (in dollars)	533	495	501.4	434	458	451
Monthly fees for toddlers (in dollars)	512	461	472	438	427	430
Monthly fees for pre-schoolers (in dollars)	429	385	397	379	367	372
Monthly fees for school age children (in dollars)	272	246	252	231	236	234
Fees on sliding scale for low-income children	36%	0%	10%	49%	0%	19%
Other mechanisms to help low income children	88%	0%	24%	74%	0%	28%
Center space donated or rent discounted	29%	20%	22%	46%	25%	33%
Revenue from CACFP, as a percentage of all revenue	0%	0%	0%	3%	1%	2%
Wages for food preparation staff (in dollars)	18000	11384	11798	13543	9928	11434
Food preparation wages, as a percentage of total wages	11%	11%	11%	8%	8%	8%
Food preparation wages per enrolled student (in dollars per student)	162	265	259	252	210	228
Cost of food services (in dollars)	654	9955	9027	12307	12433	12384
Cost of food services per enrolled student (in dollars per student)	113	146	137	215	177	192
Value of donated food (in dollars)	220	149	169	509	564	542
Value of donated food per enrolled student (in dollars per student)	6	5	5	11	10	10



**Table A2b—Continued**  
**Descriptive Profiles for Child Care Centers – Stratified by Mechanisms in Place to Help Low-Income Families**  
**(Cost, Quality and Child Outcome Data Set)**  
**Other Center Characteristics**

Variables	Centers Ineligible for CACFP			All Centers		
	Help for Low Income Families			Help for Low Income Families		All Centers
	Yes	No	All Ineligible	Yes	No	
Total Centers by Category	57	150	207	156	245	401
<i>Other Center Characteristics</i>						
Center’s legal status is for-profit	59%	79%	74%	28%	64%	50%
Center’s legal status is non-profit/public	40%	21%	26%	72%	36%	50%
Center is for-profit and independently operated	49%	46%	47%	21%	37%	31%
Center is for-profit and part of a chain	11%	31%	25%	6%	26%	18%
Center is non-profit, and affiliated with a church	21%	11%	14%	23%	17%	19%
Center is located in CA	40%	28%	31%	26%	24%	25%
Center is located in CO	21%	18%	19%	29%	22%	25%
Center is located in CT	33%	31%	31%	28%	24%	25%
Center is located in NC	5%	23%	18%	18%	29%	25%
Center owned or sponsored by another organization	89%	83%	85%	90%	84%	86%
Center accredited by NAEYC	7%	7%	7%	7%	6%	6%
Age of Center	13.5	10.0	11.1	16.0	11.2	13.1
Number of enrolled children	57.2	71.3	67.4	60.6	72.0	67.5
Number of enrolled infants/toddlers	9.0	16.2	14.2	9.3	16.0	13.4
Number of enrolled school-aged children/kindergarden	34.6	39.7	38.3	38.2	40.0	39.3
Number of enrolled pre-school children	13.6	15.4	14.9	12.9	15.8	14.7
Child to FTE Teacher Ratio	10.2	9.9	10.0	11.5	11.0	11.2
Child to FTE Teacher Aide Ratio	36.8	45.4	43.1	29.5	41.8	36.7
Child to FTE Teacher-Director Ratio	52.2	65.9	61.1	49.9	69.5	60.9
Child to FTE Teacher-Administrator Ratio	66.0	79.2	76.1	65.0	75.9	71.2
Child to FTE Teacher/Director/Administrator Ratio	39.7	61.2	55.0	43.8	57.8	52.1

**Table A2b—Continued**  
**Descriptive Profiles for Child Care Centers – Stratified by Mechanisms in Place to Help Low-Income Families**  
**(Cost, Quality and Child Outcome Data Set)**  
**Characteristics of Enrolled Children**

Variables	Centers Ineligible for CACFP			All Centers		
	Help for Low Income Families			Help for Low Income Families		All Centers
	Yes	No	All Ineligible	Yes	No	
Total Centers by Category	57	150	207	156	245	401
<i>Characteristics of Enrolled Children</i>						
Special needs	3%	3%	3%	9%	4%	6%
Tuition subsidized by government or other agency	7%	7%	7%	35%	16%	24%
White, non-Hispanic	78%	78%	78%	59%	72%	67%
African-American/non-Hispanic	7%	9%	9%	22%	15%	18%
Hispanic	7%	6%	6%	14%	8%	10%
Asian/Pacific Islander, non-Hispanic	7%	4%	5%	4%	3%	4%
Other (includes Native-American), non-Hispanic	1%	2%	2%	1%	2%	2%

**Table A3**  
**T-Test Results for Eligible vs. Ineligible Non-Profit Centers Characteristics of Care**

Variables	Eligible		Ineligible		Difference of Means+	Standard Error
	Mean+	Standard Deviation	Mean+	Standard Deviation		
Total Centers by Category	140		54			
<i>Characteristics of Care</i>						
Meals or Snacks provided	100%	0%	0%	0%	100%	0%
Provides After-School & Before-School Care for school-agers	48%	50%	43%	50%	-6%	8%
Full day program, g.t 30 hrs/wk & at least 5 days/wk	99%	1%	100%	0%	1%	1%
Part-day/Part week program (e.g. preschool)	61%	41%	93%	26%	31%	5%**
Part day extended care (before, during, or after pre-school program)	40%	49%	52%	50%	12%	8%
Number of months per year in operation	11.91	0.41	11.86	0.48	-0.05	0.07
Hours of operation during week-days	11.04	1.37	10.67	0.93	-0.37	0.17*
Number of days open	5.03	0.24	5.00	0.00	-0.03	0.02
Week-end care	2%	15%	0%	0%	-2%	1%
Evening care	5%	22%	0%	0%	-5%	2%**
Sick care	3%	17%	0%	0%	-3%	1%*
24 hour care	0%	0%	0%	0%	0%	0%
Center provides transportation services	36%	48%	11%	32%	-25%	6%**
Center provides any of these screening: vision/hearing/dental/speech	77%	42%	53%	50%	-24%	8%**
Center provides developmental assessments	76%	43%	60%	49%	-16%	8%*
Center provides counseling services for children and parents	44%	50%	34%	48%	-10%	8%
Center provides social services to parents	31%	47%	21%	41%	-11%	7%
Head Start sponsored part-day program	7%	2%	0%	0%	-7%	2%**
Public Schools sponsored part-day program	9%	28%	4%	19%	-5%	4%
Bilingual program	19%	39%	4%	19%	-15%	4%**

\*\* Indicates significance at the 0.01 level.

\* Indicates significance at the 0.05 level.

+ Where applicable, this column contains a percentage rather than a mean.

**Table A3—Continued**  
**T-Test Results for Eligible vs. Ineligible Non-Profit Centers**  
**Financial Variables**

Variables	Eligible		Ineligible		Difference of Means+	Standard Error
	Mean+	Standard Deviation	Mea+	Standard Deviation		
Total Centers by Category	140		54			
<i>Financial Variables</i>						
Monthly fees for infants (in dollars)	399	166	563	151	164	45**
Monthly fees for toddlers (in dollars)	381	163	507	179	126	43**
Monthly fees for pre-schoolers (in dollars)	340	121	404	121	64	20**
Monthly fees for school age children (in dollars)	214	113	241	128	27	37
Fees on sliding scale for low-income children (in dollars)	37%	49%	17%	38%	-21%	7%**
Other mechanisms to help low income children	39%	49%	38%	49%	-1%	8%
Center space donated or rent discounted	61%	49%	64%	48%	28%	8%
Revenue from CACFP, as a percentage of all revenue	4%	5%	0%	0%	-4%	0%**
Wages for food preparation staff (in dollars)	12043	6934	4000	.	-8043	.
Food preparation wages as a percentage of all wages	8%	4%	3%	.	-5%	.
Food preparation wages per enrolled student (in dollars per student)	229	28	62	.	-168	.
Cost of food services (in dollars)	17116	16230	3504	3037	-13612	1434**
Cost of food services per enrolled student (in dollars per student)	283	174	75	61	-208	17**
Value of donated food (in dollars)	1169	6421	311	774	-858	570
Value of donated food per enrolled student (in dollars per student)	19	74	10	24	-9	7

\*\* Indicates significance at the 0.01 level.

\* Indicates significance at the 0.05 level.

+ Where applicable, this column contains a percentage rather than a mean.

**Table A3—Continued**  
**T-Test Results for Eligible vs. Ineligible Non-Profit Centers**  
**Other Center Characteristics**

Variables	Eligible		Ineligible		Difference of Means+	Standard Error
	Mean+	Standard Deviation	Mean+	Standard Deviation		
Total Centers by Category	140		54			
<i>Other Center Characteristics</i>						
Center is located in CA	19%	39%	44%	50%	26%	8%**
Center is located in CO	29%	45%	9%	29%	-19%	6%**
Center is located in CT	21%	41%	37%	49%	16%	7%*
Center is located in NC	32%	47%	9%	29%	-23%	6%**
Center owned or sponsored by another organization	89%	31%	85%	36%	-4%	5%
Center accredited by NAEYC	6%	25%	7%	26%	1%	4%
Age of Center	16.9	15.5	14.0	12.5	-2.9	2.1
Number of enrolled children	64.6	42.4	60.0	32.8	-13.7	5.7*
Number of enrolled infants/toddlers	12.1	16.5	7.7	10.4	-4.4	2.0*
Number of enrolled pre-school children	40.8	28.7	34.5	23.7	-6.4	4.0
Number of enrolled school-aged children/kindergarten	11.3	17.6	8.8	17.3	-2.5	2.8
Child to FTE Teacher Ratio	12.9	4.9	9.5	3.5	-3.4	0.6**
Child to FTE Teacher Aide Ratio	24.8	33.2	23.9	20.5	-0.9	4.5
Child to FTE Teacher-Director Ratio	51.9	31.8	42.6	27.0	-9.3	6.8
Child to FTE Teacher-Administrator Ratio	63.3	36.7	53.6	28.4	-9.7	5.9
Child to FTE Teacher/Director/Administrator Ratio	47.9	32.5	41.6	25.8	-6.3	4.6

\*\* Indicates significance at the 0.01 level.

\* Indicates significance at the 0.05 level.

+ Where applicable, this column contains a percentage rather than a mean.

**Table A3—Continued**  
**T-Test Results for Eligible vs. Ineligible Non-Profit Centers**  
**Characteristics of Enrolled Children**

Variables	Eligible		In-Eligible		Difference of Means+	Standard Error
	Mean+	Standard Deviation	Mean+	Standard Deviation		
Total Centers by Category	140		54			
<i>Characteristics of Enrolled Children</i>						
Special needs	11%	21%	4%	4%	-7%	2%**
Tuition subsidized by government or other agency	47%	42%	5%	10%	-42%	4%**
White, non-Hispanic	49%	38%	73%	27%	23%	5%**
African-American/non-Hispanic	30%	37%	8%	16%	-22%	4%**
Hispanic	17%	26%	10%	13%	-7%	3%*
Asian/Pacific Islander, non-Hispanic	3%	9%	7%	13%	4%	2%*
Other (includes Native-American), non-Hispanic	1%	4%	3%	6%	2%	1%

\*\* Indicates significance at the 0.01 level.

\* Indicates significance at the 0.05 level.

+ Where applicable, this column contains a percentage rather than a mean.

**Table A4**  
**T-Test Results for Eligible vs. Ineligible For-Profit Centers Characteristics of Care**

Variables	Eligible		Ineligible		Difference of Means+	Standard Error
	Mean+	Standard Deviation	Mean+	Standard Deviation		
Total Centers by Category	32		153			
<i>Characteristics of Care</i>						
Meals or Snacks provided	100%	0%	61%	50%	-4%	4%**
Provides After-School & Before-School Care for school-agers	91%	30%	72%	45%	-19%	6%**
Full day program, g.t 30 hrs/wk & at least 5 days/wk	100%	0	100%	0%	0%	0%
Part-day/Part week program (e.g. preschool)	91%	30%	86%	35%	-4%	6%
Part day extended care (before, during, or after pre-school program)	50%	51%	71%	45%	21%	10%*
Number of months per year in operation	12.00	0.00	11.97	0.18	-0.03	0.01*
Hours of operation during week-days	11.81	0.90	11.28	0.80	-0.53	0.17**
Number of days open	5.03	0.18	5.03	0.20	0.01	0.04
Week-end care	9%	30%	3%	16%	-7%	5%
Evening care	16%	37%	3%	16%	-13%	7%
Sick care	6%	25%	1%	11%	-5%	4%
24 hour care	6%	25%	0	0	-6%	4%
Center provides transportation services	78%	42%	47%	50%	-31%	8%**
Center provides any of these screening: vision/hearing/dental/speech	65%	48%	65%	48%	-1%	9%
Center provides developmental assessments	56%	50%	67%	47%	11%	10%
Center provides counseling services for children and parents	16%	37%	25%	44%	10%	7%
Center provides social services to parents	16%	37%	21%	41%	5%	7%
Head Start sponsored part-day program	0%	0%	0%	0%	0%	
Public Schools sponsored part-day program	3%	18%	7%	25%	3%	4%
Bilingual program	9%	30%	8%	28%	-1%	6%

\*\* Indicates significance at the 0.01 level.

\* Indicates significance at the 0.05 level.

+ Where applicable, this column contains a percentage rather than a mean.

**Table A4—Continued**  
**T-Test Results for Eligible vs. Ineligible For-Profit Centers**  
**Financial Variables**

Variables	Eligible		Non-Profit		Difference of Means+	Standard Error
	Mean+	Standard Deviation	Mean+	Standard Deviation		
Total Centers by Category	32		153			
<i>Financial Variables</i>						
Monthly fees for infants (in dollars)	334	81	490	164	156	25**
Monthly fees for toddlers (in dollars)	333	72	465	152	132	20**
Monthly fees for pre-schoolers (in dollars)	298	53	395	97	97	12**
Monthly fees for school age children (in dollars)	181	40	253	109	72	13**
Fees on sliding scale for low-income children	6%	25%	7%	26%	1%	5%
Other mechanisms to help low income children	19%	40%	19%	39%	0%	8%
Center space donated or rent discounted	0%	0%	7%	26%	7%	2%**
Revenue from CACFP, as a percentage of all revenue	4%	5%	0%	1%	-4%	1%**
Wages for food preparation staff (in dollars)	5191	1961	12319	22560	7126	5934
Food preparation wages, as a percentage of total wages	3%	1%	11%	22%	8%	6%
Food preparation wages per enrolled student (in dollars per student)	46	14	272	499	225	129
Cost of food services (in dollars)	16271	8846	10940	12254	-5331	1809**
Cost of food services per enrolled student (in dollars per student)	214	98	158	136	-56	21*
Value of donated food (in dollars)	133	408	118	386	-15	85
Value of donated food per enrolled student (in dollars per student)	3	8	3	15	1	2

\*\* Indicates significance at the 0.01 level.

\* Indicates significance at the 0.05 level.

+ Where applicable, this column contains a percentage rather than a mean.



**Table A4—Continued**  
**T-Test Results for Eligible vs. Ineligible For-Profit Centers**  
**Other Center Characteristics**

Variables	Eligible		Ineligible		Difference of Means+	Standard Error
	Mean+	Standard Deviation	Mean+	Standard Deviation		
Total Centers by Category	32		153			
<i>Other Center Characteristics</i>						
Center is located in CA	0%	0%	27%	44%	27%	4%**
Center is located in CO	47%	51%	22%	42%	-25%	10%*
Center is located in CT	0%	0%	29%	46%	29%	4**
Center is located in NC	53%	51%	22%	41%	-32%	10%**
Center owned or sponsored by another organization	84%	37%	85%	36%	0%	7%
Center accredited by NAEYC	3%	18%	7%	26%	4%	4%
Age of Center	9.7	6.0	10.0	8.9	0.3	1.3
Number of enrolled children	85.8	43.8	73.2	48.9	-12.7	8.7
Number of enrolled infants/toddlers	19.4	11.2	16.5	16.3	-2.9	2.4
Number of enrolled pre-school children	41.3	24.2	39.7	32.5	-1.6	5.0
Number of enrolled school-aged children/kindergarten	25.1	17.1	17.0	20.0	-8.1	3.4*
Child to FTE Teacher Ratio	11.1	5.0	10.2	4.0	-0.9	0.9
Child to FTE Teacher Aide Ratio	43.1	43.0	49.4	79.9	6.3	12.2
Child to FTE Teacher-Director Ratio	99.1	36.4	68.0	44.4	-31.1	10.9*
Child to FTE Teacher-Administrator to Ratio	91.3	35.3	89.9	46.1	-1.3	9.7
Child to FTE Teacher/Director/Administrator Ratio	59.4	23.0	62.0	42.5	2.6	6.4

\*\* Indicates significance at the 0.01 level.

\* Indicates significance at the 0.05 level.

+ Where applicable, this column contains a percentage rather than a mean.

**Table A4—Continued**  
**T-Test Results for Eligible vs. Ineligible For-Profit Centers**  
**Characteristics of Enrolled Children**

Variables	Eligible		Ineligible		Difference of Means+	Standard Error
	Mean+	Standard Deviation	Mean+	Standard Deviation		
Total Centers by Category	32		153			
<i>Characteristics of Enrolled Children</i>						
Special needs	4%	6%	3%	4%	-1%	1%
Tuition subsidized by government or other agency	40%	17%	8%	10%	-33%	3%**
White, non-Hispanic	58%	28%	80%	23%	22%	5%**
African-American/non-Hispanic	34%	31%	9%	17%	-24%	6%**
Hispanic	7%	11%	5%	10%	-2%	2%
Asian/Pacific Islander, non-Hispanic	1%	1%	4%	10%	3%	1%**
Other (includes Native-American), non-Hispanic	1%	3%	2%	5%	1%	1%

\*\* Indicates significance at the 0.01 level.

\* Indicates significance at the 0.05 level.

+ Where applicable, this column contains a percentage rather than a mean.

## B. DATA APPENDIX

A cornerstone of good science is replicability. So that others may be able replicate the results in this study, we present detailed information about which files we processed from the CQCO, how we created specific variables, and some inconsistencies we observed in the data.

### DATAFILES USED

For this project, we processed three data files from the Cost and Quality in Child Care Centers (CQCO) data: the Director Interview file (DIRINT), the Director's Interview on Room-Level Enrollment and Staffing (A16), and Director' Interview on Staff Characteristics (SECTC). While the unit of observation in DIRINT is the childcare center, the unit of observation for A16 is the classroom of each center and the unit of observation for SECTC is the staff-member who works directly with children at the center.

We utilized those variables from DIRINT which addressed the characteristics of the care provided by the center; financial information on fees charged, mechanisms to help the disadvantaged, expenditures on food preparation and value of donated food; characteristics about the center such as its auspice, location, its ownership and accreditation; and the characteristics of the children attending the center.

The files A16 and SECTC deal with staffing and enrollment. As we were interested only in the aggregate staffing and enrollment data for each center, we retained from A16 those variables that provided this information. We used the following staffing variables from this file: the number of full-time equivalent (FTE) teachers and FTE aids. We retained the following enrollment-related variables: total licensed

capacity; preferred total capacity; total FTE enrollment total FTE enrollment observed at time of survey; FTE enrollment for infants and toddlers, FTE enrollment for pre-schoolers, FTE enrollment for kindergarten and school-aged children. As we also required data on the number of administrative-directors and teacher-directors, we aggregated individual staff-level data to obtain total numbers of these staff positions for each center. The aggregated center-level obtained from A16 and SECTC were merged with the center-level data from DIRINT. The resultant data-file was used for the data processing described herein and the subsequent analysis.

#### **VARIABLE CREATION**

##### **Enrollment to Staff Ratios**

To analyze staffing resources across centers, we created several ratios. Where possible, ratios were constructed using data obtained exclusively from A16 as these data were collected in a most comparable manner. The following ratios were constructed from A16: total enrollment to total FTE teachers, total enrollment to total FTE aids. As A16 did not include data on administrator-directors and teacher administrators, the following ratios were constructed using total enrollment data from A16 and staffing data from SECTC: total enrollment to FTE teacher-directors, total enrollment to FTE administrative-directors, total enrollment to the sum of all teacher-directors and administrative-directors.

##### **Standardizing Food Costs Variables**

We calculated two variables using the total annual wages for all food preparation staff. The first variable was the ratio of wages for food preparation staff to the amount spent on all staff's pre-tax wages.

We also generated the ratio of these food preparation wages to the total enrollment of the center to generate a per-child expenditure on food preparation wages. Note that only 60 centers reported their food staff wage costs. We were also interested in the total food service costs. This variable included all costs of food service over the fiscal year, excluding personnel costs. To obtain per-child, non-wage food preparation costs, we divided these total costs by total enrollment. Similarly, we generated the ratio of the value of donated food to total enrollment to obtain a per child estimate of donated food value.

### **Child Characteristics**

We manipulated several child-characteristics variables. Whereas DIRINT provided a variable for the number of children with special needs, we were interested in the percent of children at the center with such needs. Thus, we generated this percent by dividing the number of children with special needs by the total enrollment. We also generated the percentage of FTE subsidized children by dividing the number of FTE children subsidized from all sources by the total enrollment or total capacity, whichever is less. As the CQCO data do not specify Title XX subsidies from other sources of subsidy, our estimate is likely to be upward biased. This variable for the percentage of subsidized children was used in the eligibility imputation for for-profit centers, as described elsewhere in this report.

Using the race variable in DIRINT, we constructed the following percentage variables indicating race or ethnic origin: white, non-Hispanic; African-American, non-Hispanic; Hispanic (African American or White); Asian/Pacific Islander, non-Hispanic; non-Hispanic other, including Native American. Data for percentage of children in centers that were Hispanic, Asian, or Other race were missing for 88, 129, and

193 centers respectively. To address this missing data problem, we did the following: (a) If only one race category was missing, we replaced the missing race category with the difference between 100 percent and the sum of the rest of the race categories. This race category was set to 0 if the imputation resulted in a negative percentage; (b) If the non-missing race categories summed to between 98 and 102 percent, all missing race categories were set to 0.

#### **DATA INCONSISTENCIES**

There were four centers for which the total capacity and total enrollment observed on the day of the survey were reported to be zero. As this seemed implausible, we changed these observations to missing.

There were three centers that reported receiving CACFP funds although we imputed them to be ineligible. We reasoned that if these centers received CACFP funds they must be eligible and changed our eligibility variable for these centers. Additionally, there were two for-profit centers in Connecticut and one in California that reported receiving CACFP funds. However, as discussed in California and Connecticut, for-profit centers can not participate because of the way in which Title XX funds are utilized in those states. Thus, the participation variable for these centers was changed to reflect non-participation.

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