



United States Department of Agriculture

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*Child and Adult Care Food Program  
(CACFP): Assessment of Sponsor Tiering  
Determinations*

*2013 Final Report*

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United States Department of Agriculture

Food and Nutrition Service, Office of Policy Support

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## Executive Summary

The Improper Payments Information Act of 2002 (Public Law 107-300, or IPIA) requires all Federal agencies to identify programs and activities that may be susceptible to erroneous payments and to annually estimate and report to Congress the value of erroneous payments.<sup>1</sup> This assessment examines the accuracy of the classification of Family Day Care Homes (FDCHs) participating in the U.S. Department of Agriculture's (USDA) Child and Adult Care Food Program (CACFP) for 48 contiguous continental states (i.e., excluding AK and HI) and DC – hereafter, nationwide or national means this limited coverage area. The assessment provides estimates for Program Year (PY) 2013 of the number of FDCHs misclassified by sponsoring agencies into the wrong tier, and the resulting erroneous payments for meals and snacks reimbursed at the wrong rate.<sup>2</sup> The assessment does not attempt to measure other types of erroneous payments in the CACFP, such as meal claiming errors by FDCHs.

### CACFP Background

Meals served in CACFP FDCHs are reimbursed according to a two-tiered rate structure: Tier I and Tier II. Sponsoring agencies are responsible for determining the appropriate tier for each of their participating FDCHs. FDCHs are eligible for reimbursement at the higher Tier I rates for all eligible meals if they satisfy either of two conditions: geographic eligibility or provider income eligibility.

- **Geographic Eligibility:** the FDCH is located in a low-income area. Geographic eligibility is determined by a home being located: a) in the attendance area of a school in which at least 50 percent of the children enrolled are certified eligible for free or reduced-price (F/RP) meals; or b) in a census block group (CBG) in which at least 50 percent of the children live in households with incomes at or below 185 percent of the Federal poverty guidelines (FPG). In addition, the Census Bureau has provided annual updates based on 5-year average data coming from the American Community Survey since February, 2012.
- **Provider Income Eligibility:** the family day care provider certifies by application that she or he has a household income at or below 185% of the FPG or is categorically eligible because of being certified for the Supplemental Nutrition Assistance Program (SNAP) or another means-tested program with income limits of no more than 185% of the FPG.

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<sup>1</sup> OMB guidance defines significant erroneous payments as annual erroneous payments in the program exceeding both 2.5 % of program payments and \$10 million (OMB Circular A-123, Appendix C, August 10, 2006). The terms “improper” and “erroneous” have the same meaning within the OMB guidance. We Use the term “erroneous” in this report.

<sup>2</sup> Eight previous reports provide estimates of erroneous CACFP payments due to errors in sponsor tiering determinations for Program Years 2005-2012. Program Year 2013 covers the twelve months from August 2012 through July 2013.

FDCHs that meet geographic or income eligibility criteria are classified as "Tier I," and those that do not are classified as "Tier II." In Tier II FDCHs, meals served to children who qualify as low-income are reimbursed at the Tier I rates; all other meals are reimbursed at the lower Tier II rates.<sup>3</sup>

During PY 2013, there were 123,017 family day care homes participating in the CACFP in the contiguous United States (the sampling universe for this Assessment), including 103,050 Tier I FDCHs and 19,967 Tier II FDCHs (Table ES-1).<sup>4</sup> The CACFP provided reimbursements to FDCHs for 551 million meals, at a total cost of \$777.2 million.

**Table ES-1. Contiguous United States FDCH totals for PY2013**

	<b>Tier I</b>	<b>Tier II</b>
<b>Number of FDCHs</b>	<b>103,050</b>	<b>19,967</b>
<b>Number of meals</b>	<b>470 million</b>	<b>81 million</b>
<b>Reimbursements</b>	<b>\$710.3 million</b>	<b>\$66.9 million</b>

Source: FNS National Data Bank totals for contiguous US (sample universe for the assessment).

### Assessment Methods and Sample Results

For this Assessment, we attempted to verify sponsors' determinations of tiering status for a sample of 660 FDCHs, selected from the lists of 56 sponsors located in 14 States. All of the FDCHs in the final sample were reimbursed by CACFP for meals at some time between August 2012 and July 2013. We first attempted to independently verify Tier I eligibility for all sampled FDCHs using matches with school and Census data. Tier I FDCHs were verified without any additional data collection if all three of the nearest elementary schools (by straight-line distance) or the two closest schools for each secondary grade were area-eligible (i.e., at least 50 percent of students were approved for F/RP meals), or if the FDCH was located in a CBG that was area-eligible.<sup>5</sup> If some but not all of the nearest schools were area-eligible we contacted school districts or used their websites to determine the correct school attendance area for the FDCH, and then determined whether this school was area-eligible. Using these methods, we verified sponsors' determinations for 503 Tier I FDCHs, 87.8 percent of the Tier I sample.

<sup>3</sup> Although the CACFP regulations differentiate between meals (breakfasts, lunches, and suppers) and snacks, we use the term "meals" alone in this report for simplicity.

<sup>4</sup> The FDCH counts are averages calculated from four counts in September 2012, December 2012, March 2013, and June 2013.

<sup>5</sup> We did not include a second or third school if it was located more than 5 miles away from the FDCH and it was more than twice as far away as another school. This eliminated additional processing resulting from inclusion of schools in rural areas that could be more than a dozen miles away from a FDCH with nearby schools.

For Tier I FDCHs not verified through data matching we reviewed sponsors' documentation of tiering determinations. These documents confirmed the sponsors' determinations for an additional 49 Tier I FDCHs. The assessment was completed for 100 percent of the sample. We identified 21 misclassified Tier I FDCHs and 1 misclassified Tier II FDCH.

### National Estimates of Misclassification Errors and Costs

**FDCHs.** Using sample data and sampling weights, we estimated that, nationwide, 2.98 percent of Tier I FDCHs and 1.22 percent of Tier II FDCHs were misclassified in PY2013. In total, there were an estimated 3,342 misclassified FDCHs, 2.72 percent of all FDCHs. The percentage estimates and the associated 90 percent confidence intervals are shown in Table ES-2.

**Table ES-2. Estimated misclassification rates by tiering status in PY2013**

Tier as Determined by Sponsor	Percentage of FDCHs Misclassified (90% Confidence Interval)	Number of FDCHs Misclassified (90% Confidence Interval)
Tier I	2.98% (1.79% to 4.93%)	3,114 (1,870 to 5,144)
Tier II	1.22% (0.25% to 5.67%)	229 (48 to 1,060)
All	2.72% (1.62% to 4.53%)	3,342 (1,990 to 5,570)

Source: Weighted estimates from 2013 sample data.

**Meals.** For misclassified FDCHs, the number of meals reimbursed in error is the difference between the number actually reimbursed at each tiering rate and the number that would have been reimbursed at those rates if they had been correctly classified. Meals reimbursed at Tier I rates that should have been reimbursed at Tier II rates result in overpayments; meals reimbursed at Tier II rates that should have been reimbursed at Tier I rates result in underpayments. The erroneous payment for a meal reimbursed at the wrong rate is the difference between the Tier I and Tier II rates, which ranged from \$0.52 for snacks to \$0.94 for lunches and suppers (under rates effective from July 1, 2012 through June 30, 2013).

We estimate that, as a result of misclassifications, 2.16 percent of meals served at FDCHs classified as Tier I were reimbursed at the higher Tier I rate when they should have been at the lower Tier II rate, and 0.70 percent of meals served by FDCHs misclassified as Tier II were reimbursed at the Tier II rate instead of the higher Tier I rate for which they were eligible. Overall, 1.98 percent of

FDCH meals – a total of 10.73 million meals this year – were reimbursed at the incorrect rate. (See Table ES-3 for estimated percentages and their 90 percent confidence intervals.) The estimates for Tier I FDCHs are computed using State percentages of meals in Tier II FDCHs reimbursed at Tier I rates, since we do not know the actual number of Tier I-eligible children in FDCHs misclassified as Tier I.

**Table ES-3. National estimates of meals claimed in error, PY2013**

<b>Tier as Determined by Sponsor</b>	<b>Percentage of Meals Claimed in Error Due to Misclassification of FDCHs (90% CI)</b>	<b>Millions of Meals Claimed in Error Due to Misclassification of FDCHs (90% CI)</b>
Tier I	2.16% (1.01% to 3.25%)	10.16 (5.03 to 15.29)
Tier II	0.70% (0.00% to 1.90%)	0.56 (0.00 to 1.54)
All	1.98% (0.99% to 2.97%)	10.73 (5.51 to 15.95)

Table ES-4 shows that the estimated costs of misclassification errors were overpayments of 1.08 percent to Tier I FDCHs and 0.69 percent underpayments to Tier II FDCHs. Overall the erroneous payment rate was 1.05 percent, with a 90 percent confidence interval from 0.51 percent to 1.59 percent. This corresponds to a best estimate of \$7.65 million overpayment, with a confidence interval ranging from \$3.70 to \$11.61 million, and 0.46 million underpayment, with a confidence interval ranging from \$0 to \$1.26 million.

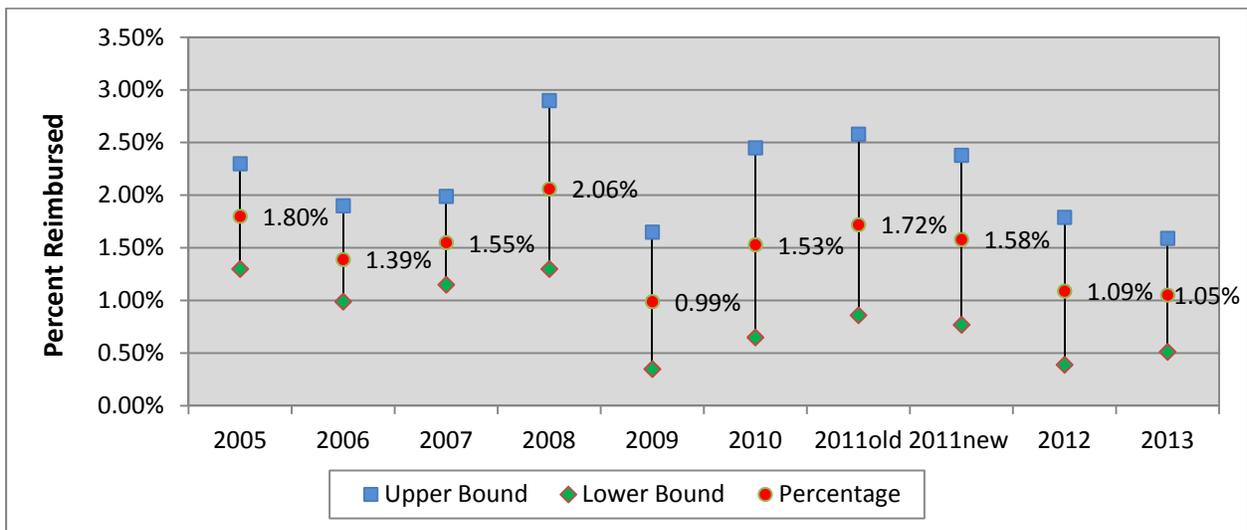
The total estimated cost of misclassification errors (overpayments plus underpayments) is equal to the \$8.18 million with a confidence interval ranging from \$3.99 to \$12.37 million.

**Table ES-4. National estimates of the percentage of costs and total costs of misclassifications, PY2013**

<b>Tier as Determined by Sponsor</b>	<b>Percentage of Reimbursements Paid in Error Due to Misclassification of FDCHs (90% CI)</b>	<b>Millions of \$ in Reimbursements Paid in Error Due to Misclassification of FDCHs (90% CI)</b>
Tier I	1.08% (0.52% to 1.63%)	\$7.65 (\$3.70 to \$11.61)
Tier II	0.69% (0.00% to 1.89%)	\$0.46 (\$0.00 to \$1.26)
All	1.05% (0.51% to 1.59%)	\$8.18 (\$3.99 to \$12.37)

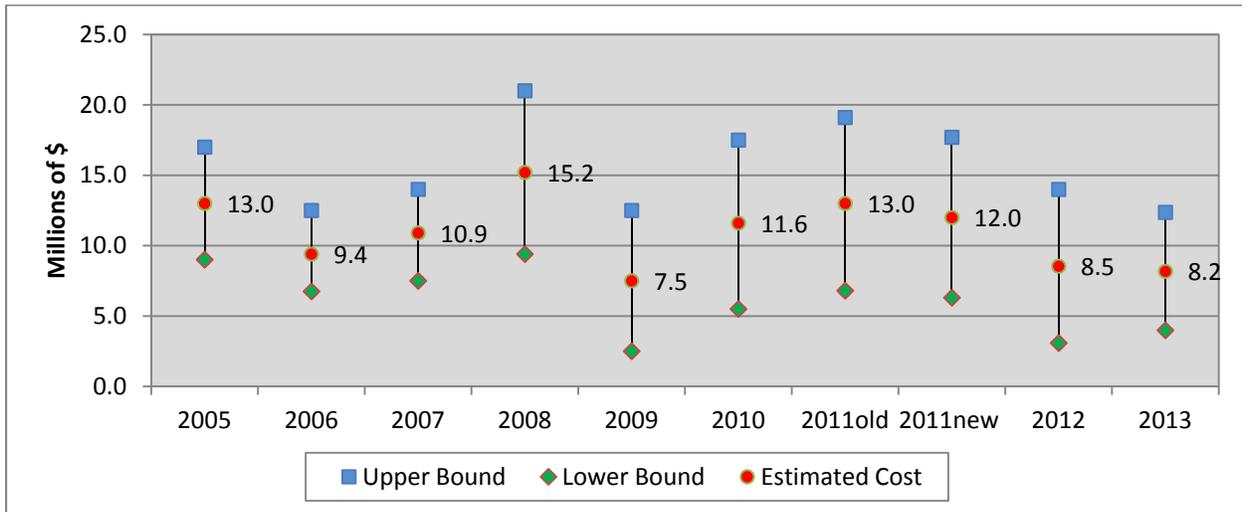
The estimates of misclassification rates and the cost of misclassification for PY2013 are slightly smaller than estimates for PY2012, but they are consistent with those observed over the last eight years (see Figures ES-1 and ES-2). The fluctuations in estimates of misclassification errors for the nine years of assessments are consistent with what we would expect in the presence of sampling error.

**Figure ES-1. Estimated misclassification as a percentage of reimbursements: 2005 through 2013**



Note: 2011old and 2011new refer to the Tier I eligibility criteria before and after the effective date of the HHPK Act of 2010.

**Figure ES-2. Estimated cost of misclassification 2005 through 2013 (\$million)**



Note: 2011old and 2011new refer to the Tier I eligibility criteria before and after the effective date of the HRFK Act of 2010.

### Implications of the Assessment Process and Results

This Assessment met FNS' requirements to provide estimates of misclassification rates for FDCHs in the CACFP and the resulting erroneous payments, within the standards of precision set by OMB. The 2013 Assessment produced results comparable to those of previous assessments.

The assessment confirms that the vast majority (98 percent) of tiering determinations were accurate. At the same time, the document review indicates that determinations based on income are more error-prone than other determinations, particularly income determinations without tax return documents.

Determinations based on income or program eligibility must be repeated every year by the sponsor. On the other hand, determinations based on geography remain valid for five years. In conducting this assessment we noticed that, while 92 of the sampled Tier I FDCHs were determined by sponsors to be eligible based on income or program eligibility, 50 of them were also eligible by geography. Therefore, the time sponsors spend determining eligibility could be substantially reduced if they first verified tiering status based on geography. This would not only reduce the burden placed on sponsors, it would also improve the accuracy of the determinations.

Finally, in considering the implications of this assessment, it is important to acknowledge that tiering determinations are only one of several potential causes of improper payments in the CACFP. If

tiering determinations were the sole source of improper payments, the CACFP would fall below the IPIA's reporting threshold, which mandates reports for programs with improper payments that exceed both \$10 million per year and 2.5 percent of total payments. The CACFP has several other potential sources of erroneous payments to FDCHs, including errors in determining eligibility of children in Tier II FDCHs for Tier I meals, meal claiming errors by providers, and meal claims processing errors by sponsors. Furthermore, this assessment does not address erroneous payments to child care centers or adult day care programs. Thus, the estimates of this assessment understate the full extent of improper payments in the CACFP.

The 2013 *CACFP Assessment of Sponsor Tiering Determinations* was conducted by Westat for the USDA Food and Nutrition Service (FNS). This Assessment is intended to provide FNS with national estimates of the percentage of Child and Adult Care Food Program (CACFP) family day care homes (FDCHs) that were misclassified as Tier I or Tier II in Program Year (PY) 2013, and the associated erroneous payments. FNS is required by the Improper Payments Information Act of 2002 (P.L. 107-300) to report these estimates annually to the Congress.

## 1.1 The Child and Adult Care Food Program

The Child and Adult Care Food Program (CACFP) provides reimbursements for nutritious meals and snacks served in family day care homes, child care centers, and other participating facilities and programs. In PY2013, the CACFP provided almost \$3 billion in reimbursements for 1.96 billion meals served to an average of 3.67 million participants. About 82 percent of CACFP meals were served to low-income participants eligible for free or reduced-price meals.<sup>6</sup> Ninety-six percent of meals were served to children, with 28 percent of children's meals served in family day care homes.

A FDCH is a private residence where day care is provided to nonresident children. In PY2013, there were 123,017 approved family day care homes participating in the CACFP.<sup>7</sup> To participate in the CACFP, a FDCH must meet program requirements and be approved by a sponsoring agency. FDCH providers are required to log meals served to each child on a daily basis. Each month, FDCHs submit meal claims to sponsors to obtain reimbursement for meals served. Sponsors act as fiscal intermediaries, receiving claims from family day care homes and disbursing USDA funds for meal reimbursements.

In PY2013 there were 855 sponsoring organizations for family day care homes in the United States. According to a survey of sponsors in 20 states, about 69 percent of sponsors in the year 2000 were

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<sup>6</sup> Program statistics as of March 27, 2014 were obtained from the FNS National Databank, accessed May 2014.

<sup>7</sup> This figure is the average of counts in September 2012, December 2012, March 2013, and June 2013. Source: FNS National Databank, accessed March 2014.

private nonprofit agencies, 10 percent were public agencies, 13 percent were military organizations, and 8 percent were identified as "other" organizations (such as schools or churches).<sup>8</sup>

### **CACFP Reimbursement for Meals Served in Family Day Care Homes (FDCHs)**

Meals served in participating FDCHs are reimbursed according to a two-tiered rate structure (Tier I or Tier II).

- Tier I rates are higher and apply to all meals served in FDCHs that are located in low-income areas (geographic eligibility) or operated by providers whose own household income is at or below 185 percent of the Federal poverty guidelines (FPG) (income eligibility) or already participate in a poverty food program (categorical eligibility). FDCHs that meet the geographic or provider income criteria for Tier I rates are classified as Tier I FDCHs. Those that do not meet Tier I criteria are classified as Tier II FDCHs.<sup>9</sup>
- Tier II homes may receive reimbursement at Tier I rates for meals served to children that have been determined by the sponsor to be categorically eligible or have a household income at or below 185 percent of the FPG.
- Tier II rates are lower and apply to meals served to children in Tier II FDCHs that do not qualify for Tier I rates.

Within each reimbursement tier, there are different rates for breakfast, lunch and supper, and snacks. FDCHs may claim up to two snacks and one meal (breakfast, lunch, or supper) or two meals and one snack each day for each participating child. The rates in effect in PY2013 for all States except Alaska and Hawaii are shown in Table 1-1.<sup>10</sup>

**Table 1-1. CACFP reimbursement rates for meals served in family day care homes**

Type of Meal Served	July 1, 2012-June 30, 2013		July 1, 2013-June 30, 2014	
	Tier I Rate	Tier II Rate	Tier I Rate	Tier II Rate
Breakfast	\$1.27	\$0.46	\$1.28	\$0.47
Lunch and Supper	\$2.38	\$1.44	\$2.40	\$1.45
Snack	\$0.71	\$0.19	\$0.71	\$0.19

\*Note: Higher rates apply in Alaska and Hawaii.

<sup>8</sup> The type of agency for sponsors is not routinely collected. The most recent data are for 2000 from Bernstein, Lawrence S. and William L. Hamilton, 'Sponsoring Organizations' and the CACFP: Administrative Effects of Reimbursement Tiering. E-FAN-02-003. U.S. Department of Agriculture, Economic Research Service, April 2002. Available at: <http://www.ers.usda.gov/publications/efan02003>.

<sup>9</sup> Providers must meet Tier I income eligibility criteria to obtain Tier I reimbursement rates for meals served to their own children.

<sup>10</sup> The CACFP rates are revised effective July 1 of each year. Thus, the rates in effect during PY 2013 (August 1, 2012 through July 31, 2013) included the 2012-2013 rates and the 2013-2014 rates announced in July 2013.

In addition to the Tier I and Tier II classification of FDCHs, Tier II homes are classified into three groups, depending on the income-eligibility status of the participating children:

- Tier II high: all children approved for free/reduced-price meals, all eligible meals reimbursed at Tier I rates;
- Tier II mixed: some but not all children approved for free/reduced-price meals, eligible meals reimbursed at a combination of Tier I and Tier II rates;
- Tier II low: no children approved for free/reduced-price meals, all eligible meals reimbursed at Tier II rates.

In PY2013, 84 percent of CACFP family day care homes in the United States were approved as Tier I. Table 1-2 shows the total number and distribution of FDCHs in PY2013, and the distribution among Tier II homes.

**Table 1-2. Number and distribution of FDCHs by reimbursement tier, PY2013**

<b>Tier</b>	<b>Number of FHCDs</b>	<b>Percent of All FDCHs</b>	<b>Percent of Tier II FDCHs</b>
Tier I	103,050	84%	–
Tier II, High	1,976	2%	10%
Tier II, Mixed	3,921	3%	20%
Tier II, Low	14,070	12%	70%
<b>Total</b>	<b>123,017</b>	<b>100%</b>	

Definitions: Tier II, High – all meals at Tier I rates; Tier II, Mixed – combination of Tier I and Tier II meals; Tier II, Low – all meals at Tier II rates.

Note: Numbers may not add to totals due to rounding.

Source: FNS National Databank, PY2013, accessed March 2014.

## 1.2 Classification of Family Day Care Homes

Sponsors are responsible for determining the appropriate tiering levels (Tier I or Tier II) of each of their participating FDCHs. FDCHs that meet the criteria for Tier I reimbursement are designated Tier I FDCHs, while all others are designated Tier II.

### Criteria for Tier I Eligibility

Eligibility for higher Tier I rates is based on geographic eligibility or provider income eligibility:

- Geographic Eligibility -the FDCH is located in a low-income area, defined in one of two ways:
  - **School boundary area** — FDCH is located in the attendance area of any school (covering at least one of the grades 1-12) in which at least 50 percent of the children enrolled qualify for free or reduced-price (FR/P) meals in the National School Lunch Program (NSLP), see Section 1.3 for more details<sup>11</sup>; or
  - **Census block group (CBG)** — FDCH is located in a CBG in which at least 50 percent of children at or below age 12 live in households with incomes below 185 percent of the FPG.
- Provider Income Eligibility - the family day care provider is low income or is categorically eligible.
  - **Income eligibility** — Provider must have household income below 185 percent of the FPG.
  - **Categorical eligibility** — Provider receives benefits from the Supplemental Nutrition Assistance Program (SNAP) (formerly the Food Stamp Program), the Food Distribution Program on Indian Reservations (FDPIR), certain State programs for Temporary Assistance to Needy Families (TANF), or other means-tested program designated by the State.<sup>12</sup>

CACFP sponsors are required to evaluate geographic eligibility for Tier I for any FDCH that requests a determination. To do this, they are assisted by other agencies that supply data needed to assess geographic eligibility.

- **School boundary area** – State agencies administering the NSLP are required to provide the State CACFP agency with a list of all schools in the State participating in the NSLP in which 50 percent or more of enrolled children have been determined eligible for free or reduced price meals as of the last operating day of the previous October, or other month specified by the State agency. Lists must be provided by February 15 of each year; or, if data are based on a month other than October, within 90 calendar days following the end of the month designated by the State agency. (7 CFR 210.19)
- **Census block groups** – The Census Bureau created for FNS a special tabulation of the 2000 decennial Census tabulation providing for each CBG the percentage of children at or below age 12 in households with incomes below 185 percent of FPG. In addition, the Census Bureau has provided annual updates based on 5-year average data coming from the American Community Survey since February, 2012. These data are available

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<sup>11</sup> Eligibility can be based on either the school attended by operator's children or the local attendance zone school. For the assessment, we consider only the local attendance zone school.

<sup>12</sup> Individual States may designate additional means-tested programs for categorical eligibility, provided that the program has an income limit of no more than 185 percent of the FPG. For example, one State's guardianship assistance program may be used to establish categorical eligibility.

in spreadsheet format from State CACFP agencies or through an interactive mapping program on the CACFP Mapper website.<sup>13</sup>

Providers that are not geographically eligible for Tier I may apply for Tier I on the basis of income by completing an Income Eligibility Statement (IES) and providing appropriate documentation.<sup>14</sup>

Tier I determinations are valid for a specified time period, depending on the basis of determination:

- Geographic eligibility determined by school data is valid for 5 years;
- Geographic eligibility determined by 2000 Census data is valid for 5 years; and
- Income and programmatic eligibility for Tier I must be reviewed annually.

Family day care homes that do not meet the criteria for Tier I homes are designated as Tier II homes.

### **Tier I Documentation Requirements**

Each Tier I classification must be documented in accordance with FNS guidance.<sup>15</sup> Documentation of geographic eligibility must verify the FDCH location within the specified school or CBG boundary area, and document the eligibility of the area. Income and categorical eligibility must be verified through supporting documentation from the provider or documented collateral contacts. Sponsors are required to hold documentation on file for as long as the classification is in effect plus three fiscal years. As discussed in Chapter 3, FNS guidance for documentation provides the basis for review of sponsor tiering documents and verification of FDCH classification.

## **1.3 Healthy Hunger Free Kids Act of 2010**

The Healthy Hunger Free Kids Act (HHFKA) of 2010 expanded the eligibility of FDCHs to qualify as Tier I. Effective retroactive to October 1, 2010, family and group day care homes may be

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<sup>13</sup> The CACFP Mapper website was developed by FairData in association with the Food Research and Action Center, and is available at: <http://www.fairdata2000.com/CACFP/>.

<sup>14</sup> The Income Eligibility Statement (IES) is similar to an application for free or reduced-price school meals, eliciting information about household members and categorical eligibility or income received by each household member. Unlike the school meals application, the IES for the CACFP must be accompanied by documentation of income.

<sup>15</sup> USDA. Food and Nutrition Service. The Child and Adult Care Food Program (CACFP): Eligibility Guidance for Family Day Care Homes, issued 1997 and subsequently revised. Hard copy provided by FNS.

classified as Tier I for purposes of reimbursement under CACFP if the home is located in an area served by *any* public school (covering any of grades 1-12) in which at least 50 percent of the enrolled children are certified eligible for free and reduced-price school meals. This allows a FDCH to qualify based on secondary school catchment area as well as elementary school.

Direct comparisons can be made for current estimates against the 2012 estimates (Marker et al, 2013) and against the 2011 estimates that are referred to that evaluation (Marker et al., 2012) as the “new rule.” Historical comparisons to years preceding the expanded eligibility of the HHFKA can also be made, but one must recognize that the HHFKA introduces a source of potential discontinuity. Graphs of historical estimates in Chapter 4 and the Executive Summary provide estimates for 2011 using both the current “new” rule and the “old” rule that existed prior to the HHFKA.

## **1.4 Organization of the Report**

The purpose of this Assessment is to identify FDCHs that were misclassified as Tier I or Tier II, and estimate the dollar value of erroneous payments associated with those misclassifications. Chapter 2 of this report provides an overview of the methodology for identifying misclassifications, and presents the sampling design and data collection procedures used for the assessment. Chapter 3 describes the detailed methodology for assessing sponsor tiering determinations and identifying misclassifications. Chapter 3 also presents the results of each stage of the assessment for the study sample. Nationally representative (weighted) estimates of FDCH misclassifications and erroneous payments are presented in Chapter 4 and Chapter 5 concludes the report. Appendix A provides supplementary information on sampling, weighting, and estimation. Appendix B provides the forms used for recruiting sponsors and data collection.

The purpose of this Assessment is to identify family day care home tiering classification errors; i.e., homes classified by sponsors as Tier I that should have been classified as Tier II, and homes classified by sponsors as Tier II that should have been classified as Tier I. For each of these misclassifications, we then estimate the value of erroneous payments due to misclassifications. This chapter has three sections: (1) an overview of the methodology used for verifying sponsor tiering determinations and the key differences from the methodology for the previous Assessments; (2) a description of the sampling design and recruitment of sponsors; and (3) a description of the data collection procedures.

## 2.1 Overview of the Assessment of Sponsor Tiering Determinations

The assessment of sponsor tiering determinations used two primary methods to validate those determinations:

- Independent verification of geographic eligibility for Tier I by matching FDCHs with school and Census data.
- Review of sponsor tiering determination documents for all Tier I FDCHs not independently verified as geographically eligible for Tier I and for all Tier II FDCHs that appeared to be area-eligible for Tier I based on school or Census data.

The approach was specifically designed to minimize the burden on sponsors and the cost to FNS of doing the assessment. To this end, we used a set of rules for estimating geographic eligibility for Tier I based on the nearest schools. The FNS rules for school-based geographic eligibility require the FDCH to be located within the attendance area of a school where at least half of the students are approved for F/RP school meals. However, there are no national databases that can be used to identify the exact school attendance area for FDCHs. Instead, we identified the nearest schools to each FDCH (i.e., those with minimum distance) for each grade level. A maximum of three nearest elementary schools (includes any grade 1 to 5) and two middle and secondary schools (does not include any grade 1 to 5) for each grade level was identified. To avoid including unlikely schools in the set of nearest schools, if a school is more than 5 miles from the FDCH and more than twice the

distance to the closest school, it was not included. We assumed that if all of the nearest schools for any grade satisfied the F/RP requirement it would be sufficient to confirm that the sponsor's determination of Tier I eligibility was correct.<sup>16</sup>

We implemented this approach for all Tier I FDCHs through the multi-step process shown in Figure 2-1. Step 1 (1a through 1d) consisted of data matches with school and Census data. State lists of schools with their percentage of students approved for F/RP meals were used for the school match. If Step 1 was not conclusive (as described below), the school district was contacted to determine the school attendance area for the FDCH (Step 2). After Steps 1 and 2, sponsors were asked to provide documentation of tiering determination for all FDCHs not verified by school or Census data (Step 3), and those documents were reviewed to determine the final FDCH classification (Step 4).

All Tier I FDCHs fell into one of the seven groups, as follows:

- A. All of the nearest schools met the F/RP requirement and the CBG was area-eligible (50% of children or more at or below 185% of the FPG).
- B. All of the nearest schools met the F/RP requirement but the CBG was not area-eligible.
- C. Some (but not all) of the nearest schools met the F/RP requirement, and the CBG was area-eligible.
- D. None of the nearest schools met the F/RP requirement, and the CBG was area-eligible.
- E. The correct school for the FDCH, as identified by contacting the school district, met the F/RP requirement, but the CBG was not area-eligible.
- F. Sponsor documents consistent with Tier I eligibility confirmed the determinations for the FDCHs; these determinations were not confirmed by the school and Census match, or the school district contacts.
- G. None of the methods confirmed sponsor determinations of Tier I eligibility, and the FDCH was considered misclassified.

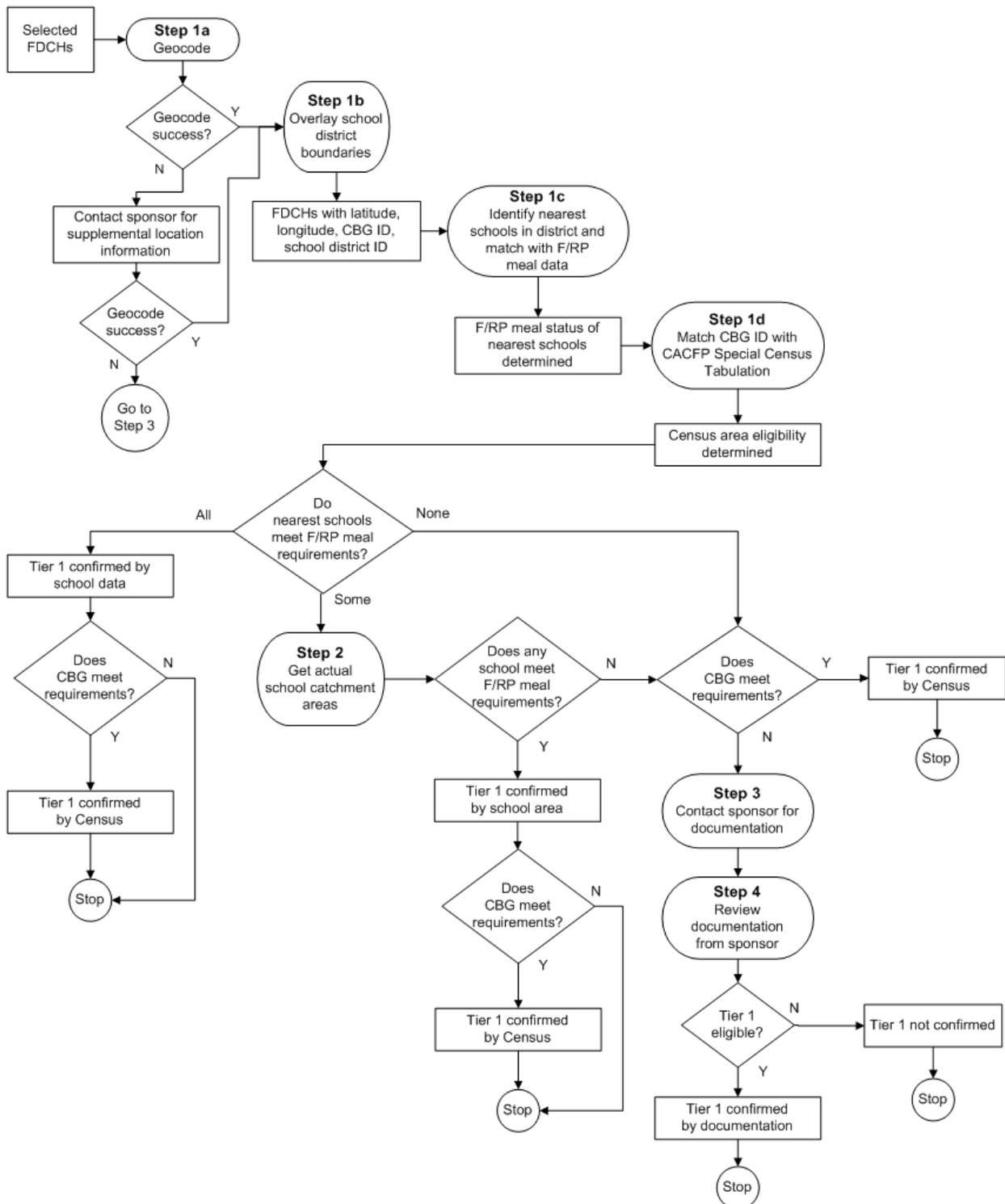
Thus, sponsor determinations of Tier I eligibility were independently confirmed by the school and Census match alone (i.e., without contacting the sponsor or a school district) if the FDCH fell into

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<sup>16</sup> This process is based on the assumption that the correct school attendance area for the FDCH belongs to one of the nearest schools. If this assumption is not correct, it is likely that the correct school attendance area is nearby and has approximately the same percentage of F/RP students as those of the nearest elementary schools. Nearest schools are determined by straight line distances. Less than the desired number of schools might be used if there are fewer schools of this grade level in the given school district.

group A, B, or D. Groups C and E were confirmed by contacting the school district, without requiring sponsor documents.

**Figure 2-1. Flowchart for the Tier I CACFP tiering verification process**



The independent assessment process was the same for Tier II FDCHs with the exception that we only ask for documentation if the FDCH appears to be Tier I eligible.

## **Comparison of This Assessment with Previous Assessments**

Eight annual Assessments of sponsor tiering determinations were previously conducted for the years 2005 through 2012. The 2013 Assessment follows the same methodology used in the 2008 thru 2012 Assessments as closely as possible. The only difference is:

- The CBG eligibility was based on the Census 2000 data for tiering dates before February 2012, was based on the Census 2006-2010 ACS data for tiering dates between March 2012 and February 2013, and was based on the Census 2007-2011 ACS data for tiering dates after March 2013. For tiering dates in the month of February 2012 or February 2013, CBG eligibility was based on either old or new Census data (the FDCH was considered eligible if it was eligible using either data file).

The remainder of this chapter describes the sampling design and data collection.

## **2.2 Sampling Design**

This Assessment used a three-stage probability sample to select a sample of FDCHs from which national tiering determination error statistics were obtained. This Assessment survey pertained to three types of errors that occurred during the survey reference period of August 2012 to July 2013 (referred to as the Program Year):

- The number and percentage of FDCHs that were active and misclassified as Tier I or Tier II;
- The number and percentage of meals reimbursed at the incorrect tier due to misclassification of FDCHs (meals reimbursed as Tier I that would have been reimbursed at Tier II if the FDCH had been correctly classified as Tier II, and vice versa); and
- The total dollar value of erroneous payments and the percentage of total payments to providers made in error, including separate estimates of totals and percentages for overpayments to Tier I FDCHs and underpayments to Tier II FDCHs. The total error is defined as the sum of over and underpayments.

Misclassification of homes as Tier I results in *overpayments* at the higher Tier I reimbursement rates, instead of the lower Tier II rates. Misclassification of homes as Tier II results in *underpayments* at the lower Tier II reimbursement rates, instead of the higher Tier I rates.

It would have been more efficient to select a sample of FDCHs directly but there was no sample frame of FDCHs available. Therefore, a three-stage sample design was used, where the first stage was sampling of states, from which a sample of sponsors were selected at the second-stage, and then at the last stage a sample of FDCHs was selected from selected sponsors. It is desirable to select an equal probability sample of FDCHs as much as possible because it produces more efficient (accurate for a given sample size) estimates. With this goal in mind, a probability proportional to size (PPS, see Kish (1965, page 220)) sampling of states, PPS sampling of sponsors, and simple random sampling of FDCHs, was implemented with the measure of size (MOS) being the number of FDCHs for PPS sampling. If the MOS is perfect and there are no dominating states or sponsors that require a certainty selection, this sample design would give an equal probability sample of FDCHs. However, we will see later that this was not possible to achieve because the MOS was imperfect<sup>17</sup> and there were some certainties. The MOS at the first stage was the number of FDCHs per state in FY2010, as reported in the FNS National Databank in March 2011. Nevertheless, the sample design gave an approximately equal probability sample, and the loss of efficiency due to minor inequality of the sampling probabilities is minimal.

The sample sizes at each stage of sampling were set at the same size as for the 2010 survey.<sup>18</sup> Table 2-1 presents these sample sizes. States with more than 1/15<sup>th</sup> of all FDCHs were given a chance to be selected twice, in which case twice as many sponsors and FDCHs were also selected from the state.

**Table 2-1. Sample sizes for the three-stage FNS Tiering Survey**

Sampling Stage	Sampling Unit	Sample Size		Comments
		Per State	Total	
1	State	---	15	One state was selected twice.
2	Sponsor	4 or 8	59	That state was given a sample size of 8 sponsors. Two sponsors were selected twice. One state had only three sponsors, all of which were selected.
3	FDCH	11 or 22	660	The two large sponsors were given a sample size of 22.

<sup>17</sup> At the first stage the MOS was the total number of FDCHs in a state in FY2010, the most recently available nationally at the time of selection. Sampled states then provided current counts of FDCHs per sponsor, and sampled sponsors provided counts of eligible FDCHs. All three counts were similar but not exactly consistent.

<sup>18</sup> See Logan et al. (2010).

One departure from the sample design used for the surveys up until 2011 was that the state sample was selected for three years with a sample size that was three times the annual sample size in 2011. The state sample size for three years was 45, and a PPS sample of 45 was selected using the systematic PPS sampling method after sorting the list of states (48 states and DC excluding Hawaii, Alaska, and outlying territories) by the FNS region.<sup>19</sup> This sample was randomly divided into three annual samples, and one was used in 2011, and the second one was used in 2012. The last one was used for the 2013 survey. Large states were selected more than once and they will be included in the sample more than one year. The reason for this change was to spread the sample over more states over the three years than when states are selected each year independently.

The largest state in terms of the number of FDCHs was selected 5 times in the three year sample, twice for survey years 2011 and 2012, and once for survey year 2013. Another large state was selected once for survey years 2011 and 2012 but twice for survey year 2013. If a state was selected twice in a given year, it was given twice (i.e., 8) the sponsor sample size that would be normally given (i.e., 4). A total of 15 states were selected each year but one state was selected twice, and thus, 14 unique states were selected each year. The number of unique states selected for the three years is 29; if yearly independent selection had been used, the expected number of unique states would have been 25 in three years – this is not a fixed number due to probability sampling. The three largest states were included with certainty for all three years. One additional state was also selected for all three years by chance although it had a chance of being selected only twice. One drawback of this strategy of selecting simultaneously for three years is that the measure of size (MOS) used for the second and third year selection will be somewhat less accurate than the MOS that would be used for independent selection; causing some loss in the sampling efficiency. This is due to the variation in distribution of number of FDCHs across states in the different years. However, a weighting adjustment through post-stratification will reduce the inefficiency caused by inaccurate MOS for the second and third years (the post-stratification is discussed in more detail in Appendix A). For this reason, we did not see any noticeable decrease in the precision of the estimates in 2013 as seen in 2012.

At the second stage of sampling, an initial sample of four sponsors was selected from each sampled state. The state that was selected twice in the state selection was given a sponsor sample of 8 twice the usual sample size. In the past, we selected a back-up sample of two for each state, making the total sample size six, but this time we did not select any back-up because back-up sponsor sample

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<sup>19</sup> The 2005-2007 Assessments excluded Alaska, Hawaii, Guam, and Puerto Rico because of the cost of site visits. The methodology for the 2008-2011 Assessments did not require site visits, but the same sampling frame was used to assure consistency.

had never been used throughout the entire history of the survey. The sampling method at the second stage was also PPS sampling with the MOS being the number of FDCHs for each sponsor.

Some sponsors were selected with certainty, because they had more than one-fourth of the FDCHs in the state. This was quite prevalent as it happened in seven of 14 states. Moreover, one state had only three sponsors, all of which were selected with certainty, and five states had only three sponsors selected because one sponsor was selected twice. These sponsors were given twice the FDCH sample size than other sponsors. Altogether 56 unique sponsors were selected from 14 states in the final sample.

### **Recruitment and Initial Response Rates**

Recruitment of sampled sponsors for the assessment began in September 2013. Westat contacted selected sponsors via Federal Express or regular mail (in instances where only a P.O. Box was provided). In addition, state directors were asked to send an email to selected sponsors encouraging participation in the assessment. The sponsor recruitment package (provided as Appendix B) included:

- Letter describing the assessment and the accompanying materials
- Brochure describing the requirements for participation
- Letters of support from The CACFP Sponsor's Association and CACFP National Forum
- Memorandum of Understanding (MOU)
- Instructions, user name, and password for accessing the SharePoint site

Sponsors were offered \$110 to offset the costs of providing information for the assessment, and an additional \$150 if they met all of the deadlines specified by Westat. All honoraria were provided upon completion of data collection after Westat determined that all requested documents were received.

As mentioned earlier, all 56 initially selected sponsors participated in the survey, and no back-up sample was used. The distribution of 56 sampled sponsors in terms of the number of FDCHs is shown in Table 2-2. The table shows that the sampled sponsors tended to be considerably smaller in 2013 than in 2012, when the mean number of sampled FDCH sponsors was 717. Considering the large standard deviation, this much fluctuation is not unusual. It also demonstrates the wide range of

sponsor sizes, which resulted in 3 of them being selected for 22 FDCHs rather than the 11 initially anticipated.

**Table 2-2. Distribution of the number of FDCHs for the 56 sample sponsors**

<b>Minimum</b>	<b>1<sup>st</sup> Quartile</b>	<b>Median</b>	<b>3<sup>rd</sup> Quartile</b>	<b>Maximum</b>	<b>Mean</b>	<b>Standard Deviation</b>
26	113	284	676	4376	541	732

### **Selection of FDCHs and the Final Response Rate**

At the time of recruitment, the 56 sampled sponsors were asked to provide a list of all FDCHs that they sponsored, regardless of whether the FDCH received reimbursement in that month. All 56 sponsors responded.

For each sampled sponsor, the sample was allocated between Tier I and Tier II in proportion to the numbers of Tier I and Tier II FDCHs they sponsored. Using simple random sampling, 11 regular sample FDCHs were selected along with 5 back-ups from each sample sponsor unless it was given a sample size twice the normal sample size. For those two sponsors that were selected twice, 22 regular FDCHs and 10 back-ups were selected. Some sponsors have a very small number of Tier II homes, so stratification by tier status was not done for them. Another exception was for a state with only three sponsors, all of which were selected with certainty. The FDCH sample of 44 was proportionally allocated, and 20, 17, and 7 FDCHs were, respectively, selected from the three sponsors for the state along with back-up samples of 10, 3, and 7 homes.

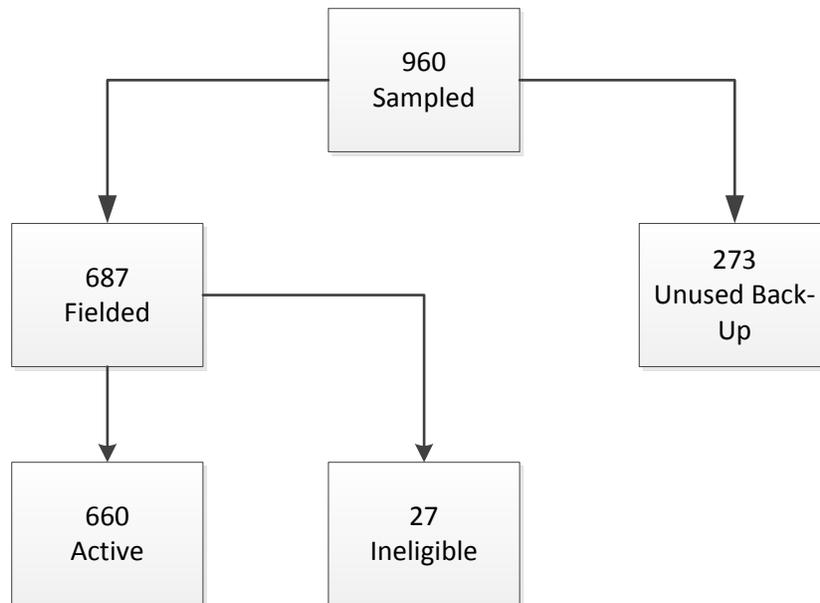
After the sample of FDCHs was selected, two subsequent data requests were sent to sponsors (as discussed in Section 2.3, which describes the data collection). Sponsors were asked to provide meal counts for sampled FDCHs for the reference period August 2012 through July 2013.

If a FDCH in the regular sample was determined to be inactive (have no meal reimbursements) for the reference period of the assessment or ineligible for some reasons (e.g., it happened that some non-FDCH records were included in the list provided by a sampled sponsor), the FDCH was replaced with a selection from the back-up sample. The back-up sample of five FDCHs selected for each sponsor was enough to replace those ineligible cases for all sponsors

In total, we selected 960 FDCHs of which 687 were fielded, and 660 were active and provided data (see Figure 2-2). The 27 (=687-660) ineligible FDCHs represent 3.9 percent of the whole fielded

sample. Considering the sample of FDCHs is roughly an equal probability sample, we expect a similar rate of ineligibility for the sample frame we used. This rate is lower than the rate of 6.5 and 6.8 percent observed in 2012 and 2011, respectively, but about the same as the 2010 rate of 4.2 percent.<sup>20</sup>

**Figure 2-2. FDCH sample results**



A final round of data collection was conducted to obtain documentation about tiering determinations for FDCHs that were not verified as geographically eligible for Tier I through a match with school and Census data and for Tier II FDCHs that appeared area-eligible for Tier I. Information was requested for 70 Tier I FDCHs and 8 Tier II FDCHs. The response rate for the final round of data collection was 100 percent, yielding a final sample of 660 FDCHs.

### **Sampling Weights and Estimation**

Each FDCH in the sample received a base sampling weight equal to the inverse of its probability of selection. Thus, the weight reflected the probability of selecting the state, the probability of selecting the sponsor (given that the state had been selected), and the probability of selecting the FDCH (from the sponsor’s list of FDCHs in the particular tier, given that the sponsor had been selected). The selection probabilities for FDCHs took into account the presence in the sample of FDCHs that

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<sup>20</sup> See Logan, et al (2010).

were found to be inactive for the reference period, so that the weights would allow projection from the sample to the universe of active FDCHs.

The total number of FDCHs reported across all sponsors by the states as of August 2013 generally differed from the corresponding totals provided in the FNS National Databank.<sup>21</sup> Similarly, the numbers of FDCHs on the sponsors' lists (as of August 2013) differed from the corresponding numbers reported by the states. Because this assessment aims to provide estimates for PY2013, the base sampling weights were adjusted by post-stratification to two control totals: the PY2013 total number of Tier I homes and the total number of Tier II homes (as reported in the FNS National Databank as of March 2014, after eliminating the states and territories that had been excluded from the sampling frame for this assessment).<sup>22</sup>

The final weights assigned to the responding FDCHs were used to obtain estimates of various population parameters and standard errors of these estimates. For obtaining the misclassification rates for Tier I, Tier II, and all FDCHs, weighted estimates were computed for the number of misclassified FDCHs by tier and overall and the corresponding total number of FDCHs. The ratios of these numbers provide the national estimates for the misclassification rates by tier and overall.

Weighted sample data also were used to estimate (by tier and overall) the percentage of meals reimbursed in error and the percentage of reimbursements paid in error due to misclassification of FDCHs. To obtain estimates of total meals reimbursed in error, these estimated percentages were multiplied by the national total of meals for PY2013 obtained from the FNS National Data Bank. Similarly, the estimated percentages of reimbursements paid in error were multiplied by the total reimbursements paid in PY2013, also based on FNS data. These calculations and their rationale are discussed further in Chapter 4 and in Appendix A.

Standard errors for the totals and percentages of FDCHs misclassified were computed using Westat's complex survey analysis system, WesVar, which takes into account the multistage sampling design used for the selection of FDCHs in the sample (including stratification and clustering of sampling units at various stages of sampling).

Appendix A provides more detail on the estimation procedures.

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<sup>21</sup> The FNS Databank provides the total number of FDCHs by state on the quarterly basis, in March, June, September, and December each year.

<sup>22</sup> The control totals were calculated as the average number of four quarterly total numbers of homes, reported in September 2012, December, 2012, March 2013, and June 2013.

## **2.3 Data Collection**

Data collection for the assessment began in August 2013 and continued through April 2014. Data were collected from FNS, State Child Nutrition Agencies, and CACFP sponsoring organizations. Family day care homes were not contacted for the assessment.

### **Data Collected from FNS**

FNS provided administrative data on FDCHs and meal reimbursements for PY2010 and PY2013 from its National Data Bank. As noted, the PY2010 counts of FDCHs by State were used as the measure of size (MOS) for selecting States for three years; more recent data would have given a better MOS but were not available at the time of sampling. However, appropriate data for the PY were used later as the control totals to adjust the sampling weights.

The PY2013 data on meal reimbursements from the National Databank were used to determine State-level percentages of meals in Tier II homes that were reimbursed at Tier I rates. As noted above, Tier II homes may claim Tier I meals for children that have been certified as income-eligible. Thus, for misclassified Tier I homes, we cannot assume that all meals were reimbursed in error, because some children might individually qualify for the higher Tier I reimbursement if given the opportunity to apply. Lacking information about individual children in misclassified Tier I homes, we applied the State-level percentages of Tier I meals in Tier II FDCHs when estimating the number of meals reimbursed in error in homes misclassified as Tier I. The rationale for this methodology is further explained in detail in Section 4.3. In addition, PY2013 total meal counts were used in the estimation of total meals reimbursed in error (as described above).

### **Data Collected from State Agencies**

The 14 selected States were asked to provide two types of data for the assessment: a list of CACFP sponsors in their State, and the "State list of schools" which is provided to CACFP sponsors for the purpose of determining FDCH eligibility for Tier I. The data request was mailed to State agencies in August 2013.

## **Lists of Sponsors**

States were asked to provide a list of CACFP sponsors of family day care homes to serve as the frame for sampling sponsors. The requested elements of the list included sponsor name, address, telephone number, and number of Tier I and Tier II homes. The total number of sponsors per State ranged from 3 to 82. Four States had 8 or fewer sponsors, six States had 15 to 23 sponsors, and four States had 28 or more sponsors. After data were received from State agencies, the second stage of sampling was conducted to select 56 sponsors for the assessment.

## **State List of Schools**

State CACFP agencies are required to provide to sponsors, by February 15 of each year, a list of schools in the State with each school's percentage of students approved for free or reduced-price (F/RP) meals. We requested this list for each school year from 2008-09 through 2012-13 (5 years). The submitted school lists had the following characteristics:

- 10 of the 14 States provided these lists in electronic data files suitable for matching. The other 4 States provided the lists in unstructured PDF or Word files that needed to be converted into data files suitable for matching.
- 10 of the states included district ID and school ID numbers which made matching of the schools with the CCD file significantly less time consuming and more accurate. The other 4 states required matching by name alone which was problematic because names were often spelled differently and/or changed in the five school years covered by the assessment.
- 8 states provided lists of schools with FR/P percentages and included schools both above and below the 50 percent cutoff, 6 states provided a list that includes only schools that met the F/RP requirement.

For each State, the five lists (one for each year 2008-09 to 2012-13) were merged into a single list of schools active at any time over the past five years, with an indication of whether or not the school met F/RP requirements for each year.

## **Data Collected from CACFP Sponsoring Organizations**

The 56 selected sponsors were contacted via Federal Express or regular mail (in instances where only a P.O. Box was provided) and recruited to participate in the assessment. In addition, state directors were asked to send an e-mail to selected sponsors encouraging participation. As discussed in the sampling section, they were asked at the time of recruitment to provide Westat with a list of

the homes that they sponsored, including, name, street address, city, state, zip code, Tier I/Tier II status, method used for tiering determination, and most recent tiering determination date for the home. After agreeing to participate, sponsors were contacted up to two additional times to provide information about the FDCHs that were sampled for the assessment:

- Monthly meal counts for selected FDCHs. Sponsors were also asked to indicate whether or not a redetermination had been done during the Assessment period and, if so, to provide previous tiering information.
- Copies of tiering determination documents for FDCHs not independently verified as Tier I through data matching.

Table 2-3 indicates the number of requests and responses for each round of data collection from sponsors. Appendix B contains the data collection materials for each of the three contacts with sponsors.

**Table 2-3. Data collection from CACFP sponsors and response rates for 2013 Assessment**

<b>Data Collection from CACFP Sponsors</b>	<b>Number of Sponsors/ Contacts</b>	<b>Number of Responses or Completes</b>	<b>Response/ Completion Rate</b>
Sponsor mailing #1 - request list of FDCHs	56	56	100%
Sponsor mailing #2 - request tiering dates and meal claims	56	56	100%
Sponsor mailing #3 - request tiering documents			
No mailing - all FDCHs verified by data matching	18	NA	
Requested documents	38	38	100%
<b>FDCHs with documents requested</b>	<b>78</b>	<b>78</b>	<b>100%</b>

### Meal Counts and Tiering Dates for Selected FDCHs

After sampling was complete, a second mailing to sponsors requested monthly counts of meals reimbursed for the reference period of August 2012 through July 2013. Monthly meal counts were requested as separate counts of breakfasts, lunches and suppers, and snacks, broken down between Tier I-eligible and Tier II-eligible meals. Counts of meals actually reimbursed by the sponsor were used.

If an FDCH in the primary sample was determined to be inactive (have no meal reimbursements) for the reference period of the assessment, the FDCH was replaced with a selection from the back-up sample. As shown in Figure 2-2, 27 (3.9 percent) were replaced because they were inactive.

Tier II FDCHs could have been reimbursed for meals at Tier I, Tier II, or both rates (concurrent Tier I and Tier II reimbursements), depending on whether some or all meals were served to Tier I-eligible children. In addition, Tier I FDCHs could have both Tier I and Tier II meal reimbursements during the data collection period if they had changed tiering status during the period.<sup>23</sup> The distribution of FDCHs by types of meal reimbursements (as approved by sponsors) is shown in Table 2-4.

**Table 2-4. Number of sample FDCHs by type of meal reimbursements reported for 2013 Assessment**

Type of Meal Claims	Tier I FDCH		Tier II FDCH	
	Number	Percent	Number	Percent
Tier I claims only	557	97.2%	4	4.6%
Tier II claims only	0	0.0%	70	80.5%
Tier I and Tier II claims, concurrent	8	1.4%	12	13.8%
Tier I and Tier II claims, not concurrent	8	1.4%	1	1.1%
<b>Total</b>	<b>573</b>	<b>100.0%</b>	<b>87</b>	<b>100.0%</b>

<sup>a</sup> "Concurrent" Tier I and Tier II claims occur when both Tier I and Tier II children are served in the same month.

Source: 2013 CACFP Assessment of Sponsor Tiering Determinations. Data are unweighted. Claims were reported for August 2012 through July 2013.

### Tiering Determination Documents for FDCHs Not Independently Verified

A final round of data collection obtained information about tiering determinations for FDCHs that either were: 1) not verified as geographically eligible for Tier I through a match with school and Census data; or 2) Tier II FDCHs that appeared area-eligible for Tier I based on school or Census data. Information was requested for 70 Tier I and 8 Tier II FDCHs. The response rate for the final round of data collection was 100 percent, yielding a final sample of 660 eligible FDCHs.

The final data request for copies of tiering documents was sent to sponsors after completion of the independent assessment of geographic eligibility, which is described in Chapter 3. Sponsors were asked to provide documents as specified below for FDCHs. Copies of the documentation on file

<sup>23</sup> Tier status was measured as of August 2013, the date when sponsors provided their list of FDCHs for sampling.

were requested for the most recent tiering determination prior to August 2013. This would include one or more of the following:

- School data - boundary information and school F/RP percentage or other available school eligibility documentation included in the FDCH's files
- Census data - block group code and percentage of children in households with income at or below 185% of poverty
- Household income or categorical eligibility information – Income Eligibility Statement listing household members and their income, and/or information about participation in programs that confer categorical eligibility. Also copies of documents used to verify Tier I income eligibility, such as wage stubs, income tax forms, or benefits letters.

Information about the types of documentation provided by sponsors is provided in Chapter 3.

# Methodology and Results of Assessment of Sponsor Tiering Determinations

## 3

The purpose of this Assessment was to identify FDCHs that were misclassified as Tier I or Tier II, and estimate erroneous payments due to misclassifications. This chapter describes the detailed methodology for using the information collected (as described in the previous chapter) to verify sponsor tiering determinations. The chapter also presents the tiering determination results for the unweighted study sample. We defer until the next chapter the presentation of results weighted up to represent national totals.

As shown in Figure 2-1, the first step in the assessment was to independently verify geographic eligibility for Tier I by matching FDCH address information with school and Census data. If needed, school district contacts were then used in a further attempt to independently verify Tier I eligibility. These steps independently verified sponsor tiering determinations for 87.8 percent of sampled Tier I FDCHs.

FDCHs not verified through data matching were assessed by reviewing sponsors' documentation of tiering determinations. Sponsor documents confirmed the sponsors' determinations for an additional 8.3 percent of sampled Tier I FDCHs and 7.7 percent of sampled Tier II FDCHs. There were 21 misclassified Tier I FDCHs; there was one misclassified Tier II FDCH. Thus, the unweighted misclassification rates for the sample were 3.7 percent for Tier I; 1.1 percent for Tier II; and 3.3 percent overall.

Below, we explain how these results were obtained and provide additional unweighted sample statistics for the assessment. Readers are cautioned that these unweighted results are provided for descriptive purposes, not as national estimates. National estimates of key measures and their confidence intervals are provided in Chapter 4.

### 3.1 Independent Verification of Geographic Eligibility for Tier

The first step in assessing geographic eligibility was to geocode FDCH addresses to obtain latitude and longitude coordinates, and Census block group (CBG) code. This step is depicted at the top of Figure 2-1. Geocoding was accomplished using Westat's in-house geocoding process. Thirteen

FDCH addresses could not be geocoded to street address because the address contained a post office box, did not have a specific street number, or there was a data entry error in recording the address. Sponsors were able to provide supplemental address information for all of these FDCHs so that they could be included in the verification process.

After geocoding was complete, the "Census match" involved a simple merge of FDCHs with Census data by CBG code.<sup>24</sup> In February 2012 and February 2013, FNS released Census block group poverty tabulations based on the Census Bureau's annual release of American Community Survey (ACS) data at the block group level. The CBG eligibility was based on the Census 2000 data for tiering dates before February 2012, was based on the Census 2006-2010 ACS data for tiering dates between March 2012 and February 2013, and was based on the Census 2007-2011 ACS data for tiering dates after March 2013. For tiering dates in the month of February 2012 or February 2013, CBG eligibility was based on either old or new Census data (since tiering determinations may have been in progress when the data was released).

The school match was more complicated because there are no readily available databases identifying school attendance areas and is described in detail below. The steps in the school match were (1) identify the school district where the FDCH was located; (2) within the school district, identify the schools nearest to the FDCH; and (3) determine if all, some, or none of the nearest schools were area-eligible for Tier I, i.e., they had at least 50 percent of children eligible for F/RP meals. If all of the nearest schools (all 3 of the nearest elementary schools for the old rule; either all 3 elementary schools or both of the nearest schools for any specific secondary grade for the new rule) were area-eligible for Tier I, or if the CBG was area-eligible, then the FDCH was verified as Tier I by the data matching process.

### **School Match Process**

The school match required several sources of information. To identify school district jurisdictions, FDCH locations were mapped with geographic information system (GIS) software using the latitude and longitude coordinates obtained from the geocoding process.<sup>25</sup> School district boundary

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<sup>24</sup> FNS provides the *Special Tabulation of Census Block Groups for CACFP*, prepared by the US Bureau of Census. For each CBG, the file contains the state, county, Census tract, and Census block group FIPS codes and the percentage of children under age 13 in households with income below 185 percent of the FPL.

<sup>25</sup> ArcGIS version 10.2 and PostGIS 2.0 were used for this Assessment.

information was obtained from the US Bureau of Census and also mapped in GIS software.<sup>26</sup> The school district boundaries were overlaid on FDCH locations to identify the school district where each FDCH was located. Some states have different school districts for elementary and secondary levels and two school districts were assigned to FDCHs in these states. Of the 14 states in this assessment, two had elementary and secondary districts, or a mix of elementary, secondary and unified districts.

After identifying the school districts containing FDCHs in the assessment sample, we assembled a list of public schools in those districts. Two sources of information were used to construct the list of schools:

- US Department of Education, Common Core of Data (CCD) Public Elementary/Secondary School Universe Survey: School Year 2011-12.
- State lists of schools provided to the CACFP, with F/RP percentage, for each school year from SY2008-09 to SY2012-13.

The CCD file provides a master list of all schools in the nation with information on grade level, whether the school is a charter or magnet school, and latitude and longitude coordinates. Only schools with a grade in the 1-12 range were included (PK-K only schools were dropped because they are not included in the basis for eligibility). Magnet and charter schools do not have defined boundary areas, so they were also dropped.

The State lists of schools either contained a list of all schools with the F/RP percentages needed to determine CACFP area eligibility for each school or only included schools that meet the F/RP percentage requirement. Because Tier I area eligibility based on school data is effective for 5 years, State school lists were obtained for the past 5 school years. The CCD and State lists of schools were combined to create a single master list of schools with latitude, longitude, and F/RP eligibility flags for each of the past five years.

The school match identified up to three nearest elementary schools and up to two additional secondary schools for each grade for each FDCH within the school district(s) where the FDCH was located.<sup>27</sup> This was accomplished by calculating the distance from each FDCH to every school in the district(s), and then assigning the nearest schools until the required number of schools were assigned

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<sup>26</sup> US Bureau of Census, Geography Division,, 2012 *TIGER/LINE Shapefiles*. Available at <http://www.census.gov/cgi-bin/geo/shapefiles2012/main>. Accessed November 2013.

<sup>27</sup> Fewer than three elementary schools or two secondary schools were identified if the school district had fewer than target number of schools for that grade level.

or there were no more schools at that grade level in the school district. The school match used the CCD list of schools active in SY2011-12 matched with eligibility information for all five years.<sup>28</sup> For the initial match, eligibility for Tier I (as of the tiering date provided by the sponsor) was determined based on schools' percentages of children eligible for F/RP meals for that school year.

### **Categorizing the Outcomes of the School and Census Match**

FDCHs were categorized according to the results of the school and Census match. CACFP program guidance specifies that school data should be used to determine geographic eligibility for Tier I when available, but Census data may be used in several circumstances.<sup>29</sup> For this assessment, both types of data were used to confirm Tier I eligibility, as was done for the previous assessments.

The categories of match outcomes are shown in the flowchart in Figure 2-1 and described in Table 3-1. The school match was conclusive if the school data indicated that all of the nearest schools were area-eligible. If the school match indicated that "some" or "none" of the nearest schools were area-eligible, then additional steps were taken to confirm the FDCHs eligibility for Tier I.

**Table 3-1. Categorizing the outcomes of the school and census match**

<b>School Match Result</b>	<b>Census Block Group Area Eligibility</b>	<b>Outcome</b>
<b>All nearest schools area-eligible</b>	<b>Yes</b>	<b>Tier I verified by school and Census data</b>
<b>All nearest schools area-eligible</b>	<b>No</b>	<b>Tier I verified by school data only</b>
<b>Some nearest schools area-eligible</b>	<b>Yes or No</b>	<b>School district contacted via website or phone to identify the school attendance areas for each grade level for the FDCH. If Tier I eligibility is not verified, documentation requested from sponsor.</b>
<b>None of the nearest schools area-eligible</b>	<b>Yes</b>	<b>Tier I verified by Census data only</b>
<b>None of the nearest schools area-eligible</b>	<b>No</b>	<b>Documentation requested from sponsor.</b>

If some of the nearest schools were area-eligible in the school match, then we used one of two methods to identify the school attendance area for the FDCH: district website searches and school

<sup>28</sup> If Tier I eligibility was based on a school that closed before SY 2011-12 and, thus, was not included in the CCD for SY 2011-12, eligibility was checked by contacting the school district.

<sup>29</sup> Census data may be used when: a) the FDCH is located in the attendance area of a school in which 40 to 49 percent of children are eligible for free or reduced-price meals; b) the school district has a school choice policy or the FDCH is located in the attendance area of a school whose population is affected by busing; or c) the school attendance area is geographically large and obscures smaller pockets of poverty. (Source: FNS CACFP Policy Memorandum 08-2007, June 15, 2007.)

district contacts. Tier I was verified if the school attendance area had at least 50 percent of students eligible for F/RP meals in the school year corresponding to the FDCH's most recent tiering determination. Tier I FDCHs not verified as eligible proceeded to the request for documentation of the sponsor's tiering determination.

Table 3-2 presents the results of the school and Census data match. FDCHs were categorized into three groups, based on these results. Group 1 comprised the FDCHs that were verified as Tier I by Census, the school match, or both; this group included 453 Tier I FDCHs and 2 Tier II FDCHs.

Groups 2 and 3 in Table 3-2 comprised the FDCHs that were not verified by the school and Census data matching. These FDCHs required further steps in the assessment process.

For Group 2 (91 FDCHs), school district contacts were required to determine the attendance area because some, but not all, of the nearest schools were area-eligible. School district contacts were able to confirm the tiering status for 50 of the 72 Tier I FDCHs. They also identified 6 FDCHs that may have incorrectly been made Tier II. The remaining 70 Tier I FDCHs are in Group 3. Their tiering determination could not be independently verified because the above procedures did not identify that the CBG or school boundary qualified for Tier I. These FDCHs that sponsors claimed as Tier I required sponsor documentation. The 6 possibly incorrect Tier II, along with the 2 Tier II FDCHs that appeared to be school eligible among Group 1, were also included in Group 3.

**Table 3-2. Results of tiering verification by data matching**

	Tier I FDCHs		Tier II FDCHs		Total Number
	Number	Percent	Number	Percent	
<b>Total FDCHs</b>	<b>573</b>	<b>100.0%</b>	<b>87</b>	<b>100.0%</b>	<b>660</b>
<b>Group 1:</b>					
Verified as Tier I by schools and Census	200	34.9%	0	0.0%	200
Verified as Tier I by schools only	193	33.7%	2	2.3%	195
Verified as Tier I by Census only	60	10.5%	0	0.0%	60
<b>Total - verified as Tier I by data match</b>	<b>453</b>	<b>79.1%</b>	<b>2</b>	<b>2.3%</b>	<b>455</b>
<b>Group 2:</b>					
School district contact required	72	12.6%	19	21.8%	91
Verified as Tier I by school district contact	50	8.7%	6	6.9%	56
<b>Group 3:</b>					
Unable to verify Tier with data matching	70	12.2%	8	9.2%	78

Source: 2013 CACFP Assessment of Sponsor Tiering Determinations. Data are unweighted.

The results of all independent verification attempts including data matching and school district contacts are shown in Table 3-3. A total of 503 Tier I FDCHs were independently verified, so sponsor documentation was not needed for 87.8 percent of the Tier I sample. This left 70 Tier I FDCHs that were not independently verified and required sponsor documentation.

Independent verification identified 8 Tier II FDCHs that may have been misclassified (9.2 percent). In total sponsors were asked about 78 FDCHs (70 Tier I and 8 Tier II). Documentation review procedures and results are presented in the next section.

**Table 3-3. Final status of FDCHs after data matching and school district contacts**

	Tier I FDCHs		Tier II FDCHs		Total Number
	Number	Percent	Number	Percent	
Eligible for Tier I by schools or Census	503	87.8%	8	9.2%	511
Not eligible for Tier I by schools or Census	70	12.2%	79	90.8%	149
<b>Total</b>	<b>573</b>	<b>100.0%</b>	<b>87</b>	<b>100.0%</b>	<b>660</b>

Source: 2013 CACFP Assessment of Sponsor Tiering Determinations. Data are unweighted.

## 3.2 Verifying Tiering Eligibility Through Review of Sponsor Documents

The school and Census matches streamlined the process of assessing sponsor tiering determinations for FDCHs that were geographically eligible for Tier I. All FDCHs with a sponsor-approved Tier I status not verified by the data matches and school district contacts were assessed by reviewing sponsor documentation from the most recent tiering determination. We also reviewed sponsor documentation for Tier II FDCHs that appeared area-eligible based on school or Census data.

This section describes the request for tiering determination documents, the document review process, and the algorithms for assessing the tiering determination. Following this description, the results of the document review are presented.

### Request for Tiering Determination Documents

For 78 FDCHs, Westat requested copies of the documentation on file for the most recent tiering determination prior to August 1, 2013.

This documentation included one or more of the following:

- School data - boundary information and school F/RP percentage or other available school eligibility documentation included in the file for the FDCH;
- Census data - block group code and percentage of children in households with income at or below 185% of poverty;
- Household income or categorical eligibility information - (a) Income Eligibility Statement (IES) listing household members and their income, and/or information about participation in programs that confer categorical eligibility; and (b) copies of documents used to verify Tier I income eligibility, such as wage stubs, income tax forms, or benefits letters.

For the assessment, sponsors were asked to complete a fact sheet that was preprinted with the names of FDCHs that required documentation. For Tier I FDCHs, they were instructed to indicate the method of tiering used most recently before August 2013; to indicate whether or not a redetermination had been done between August 1, 2012 and July 31, 2013; and to attach copies of documents from their files.

For Tier II FDCHs, sponsors were instructed to provide the schools whose attendance areas include the FDCH, to indicate whether or not a redetermination had been done from September 2007 through June 2013; and to provide copies of all documents associated with all tiering determinations.

### **Document Review Process**

Documentation was obtained for all 70 Tier I FDCHs for which documentation was requested. Information from the fact sheets was used to identify the detailed documents to be reviewed. All documentation was reviewed by senior project staff to determine whether the information provided confirmed the sponsor's determination. In those instances where there were questions or concerns, the project director made the final determination of whether the documentation confirmed that the FDCHs were correctly classified.

Similarly, documentation or an explanation from the sponsor if documentation was not available was provided for all 8 Tier II FDCHs for which we requested it.

## Algorithms for Assessing Tiering Determinations Using Sponsor Documents

The purpose of the tiering assessment algorithms was to confirm that the sponsor's tiering determination was correct and consistent with the FNS rules applicable to determinations made on that basis (geographic, program, or income). The following general rules were used to confirm tiering determinations:

- Documentation required for the type of eligibility (geographic, program, or income) must be present;
- Documentation must meet FNS standards for the information provided (e.g., signature provided when required); and
- Documentation must be consistent with the eligibility determination by the sponsor (e.g., documented income is 185 percent of the FPG or less).

Separate algorithms were used for each type of determination supported by documents provided by sponsors: school, Census, program certification, and provider income.

The algorithm for assessing determinations based on **school documents** required all of the following conditions to confirm Tier I eligibility:

- 1) Valid documentation that the FDCH was located in the attendance area of the identified school:
  - a document was provided for the school attendance area (school boundary map, page from school directory, Web site printout, letter from school official, or memorandum to file from contact with school official);
  - the document was dated after June 1, 2008;
  - FDCH address was identified on the document (not needed if the document was a memorandum to the file); and
  - the document was signed (only needed if the document was a letter from a school official or a memorandum to the file).
- 2) Valid documentation of area-eligibility for the school identified:
  - a document was provided for the school F/RP percentage (copy of State school list, printout from a State Web site, or letter from a school official);
  - the document was dated after June 1, 2008; and

- if the document was a letter from a school official, it was signed.

This algorithm identified procedural errors, i.e., instances when the sponsor did not provide sufficient valid documentation to verify the Tier I eligibility of the FDCH. The existence of a procedural error was not sufficient to find that the FDCH was actually misclassified. A sponsor could make a correct determination but fail to provide adequate documentation. In keeping with the basic rules of the assessment, therefore, we used the information provided by the sponsor with other resources in an attempt to independently verify the Tier I eligibility of FDCHs with procedural errors in determinations based on school documents.

- If the school attendance documentation provided by the sponsor lacked sufficient detail to locate the FDCH in the attendance area of the identified school, online resources such as Google Maps and school district web sites, as well as notes from any previous school district contact, were used to verify the location of the FDCH and to determine the correct school attendance area.
- If the sponsor did not provide documentation of area-eligibility for the identified school, we independently verified eligibility using the date of the determination and a copy of the State school list.

The algorithm for assessing determinations based on **Census documents** required all of the following conditions to confirm Tier I eligibility:

- the CBG code was provided;
- a document was provided indicating that the FDCH address was in the CBG;
- the address on the document corresponded to the FDCH address provided by the sponsor; and
- a document was provided showing, the percentage of children in households with income less than or equal to 185% of the FPG for the CBG.

The algorithm for assessing determinations based on means-tested **program certification documents** required all of the following, conditions to confirm Tier I eligibility:

- 1) Provider submitted a valid Income Eligibility Statement (IES):
  - the provider name and address on the IES matched our files;
  - the IES was signed by the provider;
  - the date of signing of IES was between July 31, 2012 and July 31, 2013;

- a Social Security Number (SSN) was provided, or the provider indicated that she did not have a SSN; and
  - the program indicated on IES was Food Stamps, TANF, or other program accepted for provider eligibility for Tier I in the State.
- 2) Provider submitted valid documentation of current eligibility for the program indicated on the IES:
- the document was a certification letter or other document acceptable under FNS guidance; and
  - the date of the document indicated current eligibility as of the date of the IES.

There were two algorithms for assessing determinations based on provider income, depending on whether a tax return (i.e., an Internal Revenue Service Form 1040) or other documents were provided. Both algorithms required the following conditions to confirm Tier I eligibility:

- provider submitted an IES;
- provider name and address on the IES matched our files;
- IES was signed by provider;
- date of signing of IES was between July 31, 2012 and July 31, 2013;
- Social Security Number (SSN) was provided or provider indicated that she did not have a SSN;
- total income on the IES was greater than zero and equal to or less than 185 percent of the FPG for the household size indicated on the IES.<sup>30</sup>

For determinations based on a Form 1040, the algorithm also required the following:

- gross income on the Form 1040 was equal to or less than 185 percent of the FPG for the household size indicated on the IES<sup>31</sup>
- all adults listed on the IES were listed on the Form 1040, or else had other acceptable income documentation.

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<sup>30</sup> Under FNS guidance, a provider reporting zero gross household income may be approved for Tier I for 45 days, as long as the provider explains how household expenses are met. The number of months of reimbursements after Tier I determination was checked to ensure that none of the providers was operating under a temporary approval when sampled.

<sup>31</sup> In computing gross income for this test, a negative amount for business income was changed to a zero, consistent with FNS policy. Income that is tax-exempt but reported on the IRS 1040 was counted in gross income according to FNS policy.

For determinations based on other income documentation, the algorithm required determining that valid documentation was provided for each item of income reported on the IES. The standard IES format requires separate reporting of each type of income (earnings, Social Security/pension, child support, other) for each household member. The algorithm required the following conditions to confirm Tier I eligibility (in addition to the IES criteria):

- acceptable documentation for each item of income reported on the IES (dated, third-party source or supported by receipts or sworn statement);
- total income on all documents was equal to or less than 185 percent of the FPG for the household size indicated on the IES.

To make this determination, the reviewer used the following procedure:

- Identify all persons in the household with reported income;
- For each person, determine the items of income reported;
- For each reported item of income, determine if an acceptable document was provided;
- For each item of documentation, review the amount of income and how frequently it was received.

This information was used to compute the total household income and percentage of the FPG indicated by the documentation.

For determinations based on income documentation other than IRS Form 1040, the algorithm had two specific requirements regarding income from family day care, following FNS policy. First, the provider had to report income from family day care, or else indicate that this self-employment resulted in a loss or no net income. Under FNS policy, receipt of payment for day care services is not a requirement for CACFP participation, but even zero income from day care must be declared on the IES.<sup>32</sup> Second, a statement of provider income and expenses other than an IRS Schedule C was accepted only if the statement was prepared by a third party, if receipts were provided, or if the documentation indicated that the sponsor had verified the statement. The provider's ledger of payments for day care was considered acceptable, but a statement affirming that receipts for expenses were available upon request was not accepted in lieu of copies of the receipts (unless there was indication that the sponsor had reviewed the receipts). If receipts for expenses were not

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<sup>32</sup> If a provider reports zero income from day care, other household income must be reported and documented (except in the case of 45-day approvals as previously discussed).

provided, Tier I eligibility was evaluated on the basis of the provider's gross revenues from day care and other income.

### **3.3 Final Results of Assessment of Sponsor Tiering Determinations**

Below, we present the results of the documentation review for FDCHs, a summary of the sources of misclassification, and the overall results for the study sample.

#### **Documentation Review Results for Tier I FDCHs**

The results of the documentation review for the Tier I FDCHs in the sample are shown in Tables 3-4 and 3-5 together with the results of the independent verification with school and Census data. A total of 49 Tier I FDCHs were verified with sponsor documents.

As with previous Assessments, income documents were the most common form of documentation, they were used to verify 22 of 35 FDCHs. Other forms of eligibility documentation were less common. Documentation of geographic (school or census) eligibility was provided for 28 Tier I FDCHs, of which 20 were verified. Program certification documents were provided for seven Tier I FDCHs, all of which were verified.

Table 3-4. Tier I verification results by source of determination

Source of Determination	Number of FDCHS	Percent of FDCHs in Tier
<b>Independently Verified by Area-Eligibility</b>		
Verified as Tier I by schools and Census	200	34.9%
Verified as Tier I by schools only	193	33.7%
Verified as Tier I by school district contact	50	8.7%
Verified as Tier I by Census only	60	10.5%
<b>Subtotal: Independently verified by area-eligibility</b>	<b>503</b>	<b>87.8%</b>
<b>Verified by Sponsor Documents</b>		
Verified by area-eligibility documents	20	3.5%
Verified by program certification documents	7	1.2%
Verified by income documents	22	3.8%
<b>Subtotal: Verified by sponsor documents</b>	<b>49</b>	<b>8.6%</b>
<b>Total Tier 1 Verified</b>	<b>552</b>	<b>96.3%</b>
<b>Misclassified Tier I<sup>a</sup></b>	<b>21</b>	<b>3.7%</b>
<b>All Tier 1</b>	<b>573</b>	<b>100.0%</b>

Notes:

<sup>a</sup> Tier I FDCHs were considered misclassified if they could not be independently verified as Tier I and the sponsor provided documentation that did not support Tier I eligibility.

Source: 2013 CACFP Assessment of Sponsor Tiering Determinations. Data are unweighted.

Table 3-5. Sources of Tier I misclassification

Source of Determination	Number of Misclassified FDCHs	Total with this Source <sup>a</sup>	Errors as % of FDCHs with this Source
School	6	23	26.1%
Census	2	5	40.0%
Program	0	7	0%
Income	13	35	37.1%
<b>Totals</b>	<b>21</b>	<b>70</b>	<b>30.0%</b>

<sup>a</sup> The source of determination for Tier I FDCHs claimed in the documentation provided by sponsors in response to Mailing #3.

Source: 2013 CACFP Assessment of Sponsor Tiering Determinations. Data are unweighted.

### Documentation Review Results for Tier II FDCHs

There were eight Tier II FDCHs that, after the initial match with school and Census data, appeared to be possibly eligible for Tier I by school only. However, upon review of the documentation submitted by the sponsors, seven were verified as Tier II.

## Final Overall Results for the Sample

Combining the results for Tier I and Tier II, Table 3-6 shows the assessment confirmed sponsor tiering determinations for 648 FDCHs (98.2%). There were 21 misclassified Tier I FDCHs and one misclassified Tier II FDCH.

These are unweighted estimates. Estimates of national misclassification rates are presented in Chapter 4, along with estimates of the impacts of misclassification errors: the number and percentage of meals reimbursed at the wrong tier, and the erroneous payments (total and percentages of reimbursements).

**Table 3-6. Overall verification results**

<b>Outcome</b>	<b>Number of FDCHs</b>	<b>% of All FDCHs</b>
<b>Total FDCHs verified</b>	<b>638</b>	<b>96.7%</b>
<b>Tier I FDCHs misclassified</b>	<b>21</b>	<b>3.2%</b>
<b>Tier II FDCHs misclassified</b>	<b>1</b>	<b>0.2%</b>
<b>Total FDCHs misclassified</b>	<b>22</b>	<b>3.3%</b>
<b>Total FDCHs in sample</b>	<b>660</b>	<b>100.0%</b>

Source: Unweighted estimates from 2013 sample data.

In conducting this assessment, we noticed that while 92 of the 660 sampled Tier I FDCHs were determined by sponsors to be eligible based on income or program participation, 50 of them were also eligible by geography. That means that over half (54%) of the annual tiering workload sponsors spend on income and program verification could be eliminated if they were to initially review for geographic eligibility. This finding is consistent with that of the 2012 Assessment, when almost two-thirds of the annual tiering workload could be reduced. This suggestion on how sponsors could reduce their time spent on tiering, while simultaneously improving accuracy, should be communicated by FNS and through the sponsors' associations.

# National Estimates of Misclassification Errors and Costs

## 4

In this chapter, we present the national estimates of the key measures for the CACFP Assessment of Sponsor Tiering Determinations for 2013:

- Number and percentage of FDCHs misclassified by sponsors
- Number and percentage of meals reimbursed in error due to misclassification of FDCHs
- Amount and percentage of reimbursements paid in error due to misclassification of FDCHs (overpayments and underpayments)

These national estimates were computed using the sample data presented in Chapter 3 and the adjusted sampling weights described in Chapter 2. For each of these estimates, we also present the lower and upper limits of the 90 percent confidence intervals, taking into account the sampling design. Appendix A provides further details on our estimation procedures.

### 4.1 National Totals for CACFP FDCHs

To provide context for the estimates in this chapter, Table 4-1 provides the total number of homes, number of meals, and reimbursements for the contiguous U.S. in PY2013, by tier and overall. (Alaska, Guam, Hawaii, Puerto Rico, and the Virgin Islands are excluded because they were not in the sampling universe for the assessment.) All data in Table 4-1 are actual national totals obtained from State reports collected and summarized in the FNS National Data Bank (NDB).<sup>33</sup>

In PY2013, within the continental U.S., a total of 103,050 Tier I FDCHs served 470 million meals, and an additional 19,967 Tier II FDCHs served 81 million meals. Total reimbursements were \$710.3 million for Tier I FDCHs and \$66.9 million for Tier II FDCHs.

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<sup>33</sup> The 2005-2007 Assessments based all national estimates on weighted sample data. Starting with the 2008 Assessment, the known national totals from the NDB are provided, and estimates from sample data have been adjusted to conform as closely as practical to known national totals. See Appendix A for details on these adjustments.

**Table 4-1. Contiguous United States FDCH totals for PY2013**

	<b>Tier I</b>	<b>Tier II</b>
<b>Number of FDCHs</b>	<b>103,050</b>	<b>19,967</b>
<b>Number of meals</b>	<b>470 million</b>	<b>81 million</b>
<b>Reimbursements</b>	<b>\$710.3 million</b>	<b>\$66.9 million</b>

Source: FNS National Data Bank totals for contiguous US (sample universe for the assessment).

## 4.2 National Estimates of Misclassification Errors

Our national estimates of misclassification rates for FDCHs in 2013 are 2.98 percent for Tier I and 1.22 percent for Tier II, resulting in an overall rate of 2.72 percent of all FDCHs misclassified due to sponsor tiering determination errors. These misclassification rates and their 90 percent confidence intervals are shown in Table 4-2, which also presents estimates of the number of misclassified FDCHs by tier and the total overall number of misclassified FDCHs. Given the total number of FDCHs, this misclassification rate implies that 3,114 Tier I FDCHs and 229 Tier II FDCHs were misclassified.

**Table 4-2. Estimated misclassification rates of FDCHs by tiering status in PY2013**

<b>Tier as Determined by Sponsor</b>	<b>Percentage of FDCHs Misclassified (90% Confidence Interval)</b>	<b>Number of FDCHs Misclassified (90% Confidence Interval)</b>
<b>Tier I</b>	<b>2.98%</b> <b>(1.79% to 4.93%)</b>	<b>3,114</b> <b>(1,870 to 5,144)</b>
<b>Tier II</b>	<b>1.22%</b> <b>(0.25% to 5.67%)</b>	<b>229</b> <b>(48 to 1,060)</b>
<b>All</b>	<b>2.72%</b> <b>(1.62% to 4.53%)</b>	<b>3,342</b> <b>(1,990 to 5,570)</b>

Source: Weighted estimates from 2013 sample data.

A different misclassification rate can be obtained by defining a misclassified FDCH as a home with misclassified meals. This misclassification rate used to be slightly smaller than the rates shown in Table 4-2 but this time, there is no difference. A small difference can happen if FDCHs having a tiering error but no meals claimed for the months when the tiering error occurred, or if it was a Tier I misclassified as a Tier II that already claimed all meals at the higher Tier I reimbursement level. This happened in 2012 but not this time.

## **4.3 National Estimates of Meals Reimbursed in Error Due to Misclassification of FDCHs**

For misclassified FDCHs, the number of meals reimbursed in error is the difference between the number actually reimbursed at Tier I rates and the number that would have been reimbursed at Tier I rates if they had been correctly classified. Meals reimbursed at Tier I rates that should have been reimbursed at Tier II rates resulted in overpayments; meals reimbursed at Tier II rates that should have been reimbursed at Tier I rates resulted in underpayments.

### **Estimation of Percentages of Meals Reimbursed at Incorrect Rate**

Recall that Tier II FDCHs may claim meals for eligible children at the Tier I rates. If a FDCH is classified as Tier II, parents can apply for free meals for their participating children, and the sponsor determines whether they are eligible. On average across the nation, 10 percent of Tier II FDCHs were classified as Tier II-high in PY2013, that is, all of the children they served were eligible for Tier I (high) rates; and 20 percent were classified as Tier II-mixed, because they served a mix of Tier I and Tier II children.

It follows that when a FDCH is misclassified, not all of the meals served were reimbursed in error. For a FDCH misclassified as Tier I, meals served to children who would have been individually eligible for Tier I rates were not reimbursed at Tier I rates in error, but any meals served to children who would not have been individually eligible for Tier I rates were reimbursed at the incorrect (Tier I) rate. Conversely, for a FDCH misclassified as Tier II, any meals served to children deemed individually eligible for free meals were reimbursed at the correct rate, but, since all meals should have been reimbursed at Tier I rates, the meals for children not individually deemed eligible for free meals were reimbursed at the incorrect (Tier II) rates.

For individual FDCHs misclassified as Tier I, we cannot determine the exact number of meals for which each FDCH was reimbursed in error. Because the FDCH was misclassified as Tier I, no applications for free meals were submitted by parents. Therefore, we cannot know the number of eligible children served by the FDCH and thus the number of meals that would have been correctly reimbursed at Tier I rates.

To estimate the expected numbers of Tier I and Tier II meals for which FDCHs misclassified as Tier I would have been reimbursed if those FDCHs had been correctly classified, we used the

annual percent of Tier I meals served at Tier II FDCHs for the PY in each of the States in the sample. We assumed for each meal type (breakfasts, lunches or suppers, and snacks) that the percentage for the 12 months in that State for Tier II FDCHs provide the best predictor of the expected percentage of meals by tier for the FDCHs misclassified as Tier I. We estimated:

- i) The statewide proportion (denoted by  $ST\_PR\_m$ ) of meals for a specified type of meal  $m$  in Tier II FDCHs that were reimbursed at the higher Tier I rate
- ii) The statewide proportion of meals for a specified type of meal in Tier II FDCHs that were reimbursed at the lower Tier II rate, which is one minus the proportion in i), that is  $1 - ST\_PR\_m$ .

The State percentages were obtained from PY 2013 meal counts in the FNS National Data Bank. These percentages are shown in Table 4-3. As the table shows, the percentages varied substantially across the States, thus the need to use separate State percentages in the computation. The national averages were 15.9 percent for breakfasts, 17.1 percent for lunches and suppers, and 16.3 percent for snacks.

**Table 4-3. Tier I share of meals by meal type at Tier II FDCHs by state, PY2013**

State	Tier I Breakfasts	Tier I Lunches/Dinners	Tier I Snacks
1	8.2%	8.3%	8.4%
2	25.4%	34.7%	30.1%
3	9.3%	9.6%	9.0%
4	6.6%	6.7%	6.9%
5	45.9%	67.0%	62.8%
6	5.1%	5.7%	5.7%
7	7.7%	7.2%	7.3%
8	6.5%	9.2%	9.3%
9	28.7%	29.2%	29.4%
10	21.9%	24.9%	26.8%
11	12.2%	15.4%	13.8%
12	13.7%	14.8%	15.3%
13	3.2%	4.8%	4.5%
14	22.0%	23.8%	22.9%
<b>National Average</b>	<b>15.9%</b>	<b>17.1%</b>	<b>16.3%</b>

Source: FNS National Data Bank, as of March 2014. Actual averages computed for each State and Nation from aggregate data for PY 2013. National average excludes Alaska, Guam, Hawaii, and Puerto Rico.

To estimate the meal counts by tier and type that we would expect if the misclassified Tier I FDCHs had been correctly classified, we multiplied the State percentages for each meal type  $m$  by each FDCH's total meals of that type as follows:

$$EN_{2m} = AN_{1m} * (1 - ST\_PR\_m)$$

where  $EN_{2m}$  is the expected count of Tier II meals for meal type  $m$  (if the Tier I FDCH had been correctly classified), and  $AN_{1m}$  is the actual counts of Tier I meals reimbursed for meal type  $m$ . So,  $EN_{2m}$  is the estimated number of meals reimbursed in error at the Tier I meal rate for meal type  $m$ .<sup>34</sup>

For FDCHs misclassified as Tier II, the computation of meals reimbursed in error was simpler. Had it not been misclassified, all meals reimbursed at Tier II rates would have been reimbursed at Tier I rates. Thus, the number of meals reimbursed in error equaled the number of meals reimbursed at Tier II rates. If we denote  $AN_{2m}$  as the actual counts of Tier II meals for meal type  $m$ , it is the number of meal type  $m$  meals reimbursed in error if the Tier II FDCH was misclassified.

The above computations yield the number of meal type  $m$  meals ( $EN_{2m}$ ) that should have been paid at Tier II rates but were not for the misclassified Tier I FDCHs and the number of meal type  $m$  meals ( $AN_{2m}$ ) that should have been paid at Tier I rates but were not for the misclassified Tier II FDCHs.

The national percentages of meals reimbursed in error were computed using the weighted totals of meals reimbursed in error by FDCHs in the sample and the total of all meals reimbursed, by tier and overall. We then computed the percentage for each tier and overall, using the ratio of the estimated meals reimbursed in error to the estimated total meals.

Table 4-4 presents national estimates of the number and percentage of meals claimed in error in PY2013.

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<sup>34</sup> This example simplifies the actual computation slightly for exposition. The reimbursement rates effective for July 1, 2012 – June 30, 2013 applied to meals reimbursed for August 2012 through June 2013; the rates effective for July 1, 2013 – June 30, 2014 applied to July 2013 meals. Therefore, we computed the number of misclassified meals separately for these periods, so that the appropriate rates could be used in computing the cost of misclassification.

**Table 4-4. National estimates of meals claimed in error, PY2013**

<b>Tier as Determined by Sponsor</b>	<b>Percentage of Meals Claimed in Error Due to Misclassification of FDCHs (90% CI)</b>	<b>Millions of Meals Claimed in Error Due to Misclassification of FDCHs (90% CI)</b>
Tier I	2.16% (1.01% to 3.25%)	10.16 (5.03 to 15.29)
Tier II	0.70% (0.00% to 1.90%)	0.56 (0.00 to 1.54)
All	1.98% (0.99% to 2.97%)	10.73 (5.51 to 15.95)

### **Estimation of Total Meals Reimbursed in Error**

A ratio estimation procedure (Cochran, 1977 page 35) was used to estimate the total meals reimbursed in error. For each tier, we multiplied the percentage of meals paid at the incorrect tier rate (from sample data, as described above) by the actual national total count of meals (from FNS data) to estimate the total number of meals paid at the incorrect rate. We summed the Tier I and Tier II totals to estimate the overall total. To estimate the lower and upper limits for the 90 percent confidence interval of the total meals paid at the incorrect rate, the lower and upper limits of the percentages by tier were multiplied by the national totals. The 90 percent confidence intervals for the totals for all FDCHs were computed using the estimated variances of Tier I and Tier II totals. Further details of these computations are provided in Appendix A.<sup>35</sup>

Approximately 2 percent of meals were claimed at the incorrect reimbursement rate. This corresponded to 10.73 million meals in total, causing overpayments for 10.16 million meals and underpayments for 0.56 million meals. These estimates have substantial confidence intervals, e.g., from 5.03 million to 15.29 million meals for Tier I, from 0 to 1.54 million for Tier II, and from 5.51 million to 15.95 million for overall.

It is interesting to note that while the tiering determination error rate for Tier I FDCHs increased in PY2013 to 2.98 percent (Table 4-2) from 2.20 percent last year, the percentage of meals claimed in error dropped to 2.16 percent (Table 4-4) from 2.39 percent. This can occur when either smaller FDCHs are in error, or the errors only affect a few months of the year.

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<sup>35</sup> These ratio estimates were superior to direct estimates of the totals from the sample data. As discussed in Appendix A, we determined that using sample data alone would result in underestimates of the totals, but that the sample-based *percentages* of meals reimbursed at the incorrect rate were valid and unbiased estimates.

## 4.4 Costs of Misclassification Errors

The costs of misclassification errors (i.e., the erroneous payments) include overpayments to FDCHs misclassified as Tier I and underpayments to FDCHs misclassified as Tier II. For each meal reimbursed at the wrong rate due to misclassification, the cost equals the difference between the Tier I and Tier II rate. Overpayments represent costs to taxpayers, while underpayments represent costs to FDCH providers. For this assessment, we treat both overpayments and underpayments as costs when we compute the total cost of misclassification errors. As with the counts of meals reimbursed at the incorrect rate, we first estimated the percentages of reimbursements paid in error due to misclassification of FDCHs, and then we estimated the national total costs of misclassification error by applying that percentage to total costs based on the FNS National Databank.

### Estimation of Percentage of Reimbursements Paid in Error

The amount of reimbursements paid in error was computed for each misclassified home in the sample, and then the weighted total of these amounts was computed. As previously discussed, the number of meals paid at the incorrect rate was computed separately for breakfasts, lunches and suppers, and snacks. Costs were summed across meal types to compute the total cost for each misclassified FDCH. The weighted total cost of misclassification errors was divided by the estimated total reimbursements to estimate the percentages of reimbursements paid in error, both by tier and overall.

The estimated national costs of misclassification errors were 1.08 percent of reimbursements for Tier I FDCHs and 0.69 percent for Tier II FDCHs, resulting in an overall cost of 1.05 percent of reimbursements to all FDCHs (Table 4-5). The 90 percent confidence intervals for these estimates, as shown in Table 4-5, were plus or minus 0.55 percentage points for Tier I and between 0 and 1.89 percent for Tier II;<sup>36</sup> overall the 90 percent confidence interval was plus or minus 0.54 percentage points. Thus, overall estimates meet the Office of Management and Budget (OMB) standard, which requires 90 percent confidence intervals plus or minus 2.5 percentage points or less.<sup>37</sup>

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<sup>36</sup> The confidence interval for Tier II is not symmetric because the negative lower bound was truncated at zero.

<sup>37</sup> Office of Management and Budget Circular A-123. Appendix C, August 10, 2006.

**Table 4-5. National estimates of the percentage of costs and total costs of misclassifications, PY2013**

<b>Tier as Determined by Sponsor</b>	<b>Percentage of Reimbursements Paid in Error Due to Misclassification of FDCHs (90% CI)</b>	<b>Millions of \$ in Reimbursements Paid in Error Due to Misclassification of FDCHs (90% CI)</b>
Tier I	1.08% (0.52% to 1.63%)	\$7.65 (\$3.70 to \$11.61)
Tier II	0.69% (0.00% to 1.89%)	\$0.46 (\$0.00 to \$1.26)
All	1.05% (0.51% to 1.59%)	\$8.18 (\$3.99 to \$12.37)

Costs of misclassification were calculated separately for meals claimed in August 2012 thru June 2013 and in July 2013 when new reimbursement rates took effect. These costs were then combined to produce the totals for the assessment period.

For Tier I FDCHs, the percentage of reimbursement dollars paid in error was a half of the 2.16 percent of meals reimbursed in error (given in Table 4-4). This difference is due to the fact that the overpayment is a fraction of the reimbursement for each meal reimbursed in error. For example, the Tier I rate for lunch or supper was \$2.38 and the Tier II rate was \$1.44 (using Aug 2012-Jun 2013 rates, as shown in Table 1-1); thus the cost of a lunch or supper reimbursed at the wrong rate was \$0.94, or about 40 percent of the Tier I rate. The ratio of the overpayment to the Tier I reimbursement varies by type of meal.

#### **Estimation of Total Costs of Misclassification of FDCHs**

For the total costs of misclassification, as for the total meals reimbursed in error, we used a ratio estimation procedure. For each tier, we multiplied the percentage of reimbursements paid in error (from sample data, as described above) by the national total reimbursements (from the NDB) to estimate the total cost of misclassification errors. We combined these totals to estimate the overall total. To estimate the lower and upper limits of the total costs of misclassification, the lower and upper limits of the percentages by tier were multiplied by the national totals by tier. Further details of these computations are provided in Appendix A.

The estimated national PY2013 costs of misclassification errors were \$7.65 million for Tier I FDCHs and \$0.46 million for Tier II FDCHs, resulting in a total cost (overpayments plus

underpayments) of \$8.18 million for all FDCHs. The 90 percent confidence intervals for these estimates, as shown in Table 4-5, were from \$3.70 million to \$11.61 million for Tier I, from \$0.00 million to \$1.26 million for Tier II, and \$3.99 million to \$12.37 million for all FDCHs.

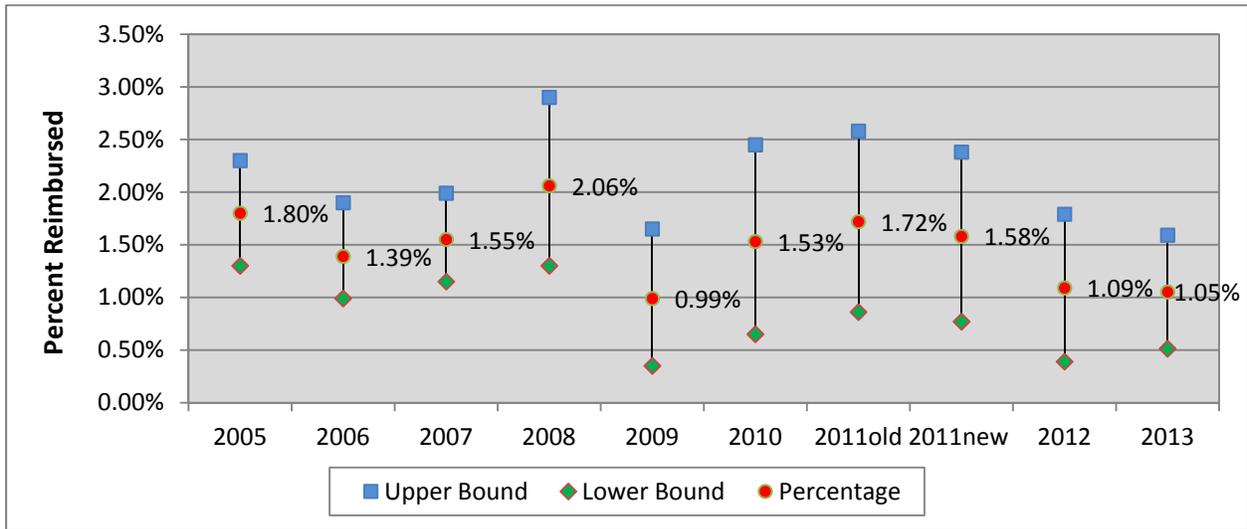
## **4.5 Comparison of Results with Estimates from Previous Assessments**

The 2013 Assessment is the ninth annual assessment of sponsor tiering determinations for CACFP FDCHs. Because of the interest in trends over time, in this section we compare the 2013 results with the results of previous assessments.

Figure 4-1 compares the estimated misclassification as a percentage of total reimbursements to all FDCHs (i.e., the improper payment rate) for 2005 thru 2013. The estimate for 2013 is lower than estimate for 2012 and close to those for 2009 (the lowest in the time series). The fluctuations in estimates of misclassification errors for the nine years of assessments are consistent with what we would expect in the presence of sampling error. However, it must be recalled that the rules in effect for the 2011, 2012, and 2013 Assessments were different from those of the six previous Assessments.

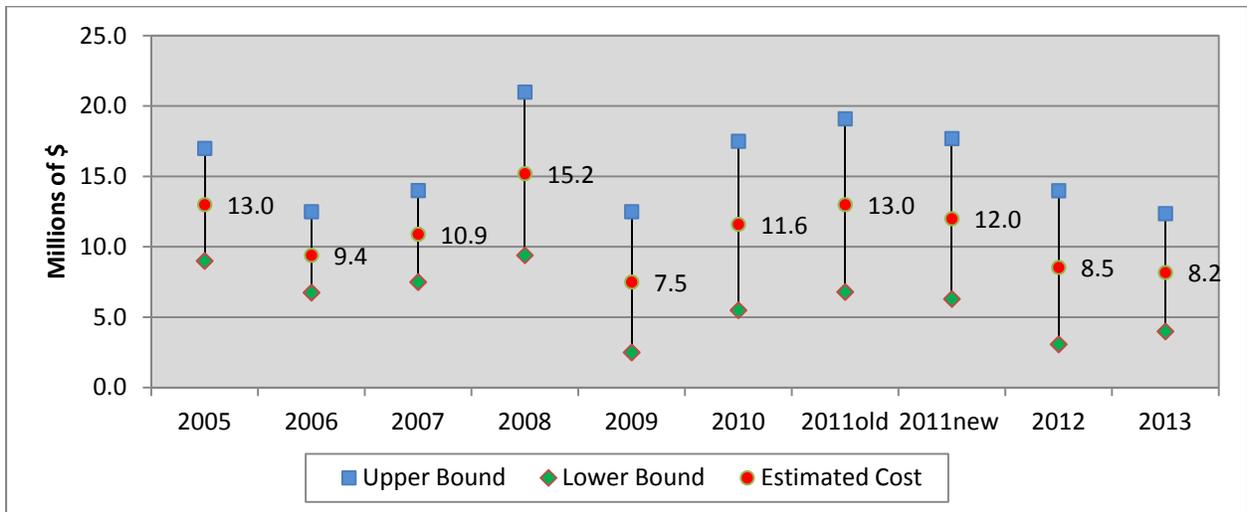
Similarly, the 2013 costs of misclassification shown in Figure 4-2 are consistent with those found in the previous assessments. The total cost of \$8.2 million is relatively close to the lowest costs, \$7.5 million, found in the 2009 Assessment.

**Figure 4-1. Estimated misclassification as a percentage of reimbursements: 2005 through 2013**



Note: 2011old and 2011new refer to the Tier I eligibility criteria before, and after, the effective date of the HHFK Act of 2010.

**Figure 4-2. Estimated cost of misclassification 2005 through 2013 (\$million)**



Note: 2011old and 2011new refer to the Tier I eligibility criteria before, and after, the effective date of the HHFK Act of 2010.

This 2013 Assessment is intended to provide FNS with national estimates of the percentage of Child and Adult Care Food Program (CACFP) family day care homes (FDCHs) that were misclassified as Tier I or Tier II in Program Year (PY) 2013, and the associated erroneous payments. During PY2013, there were 123,017 FDCHs participating in the CACFP in the contiguous United States (the sampling universe for the assessment), including 103,050 Tier I FDCHs and 19,967 Tier II FDCHs. Reimbursements to FDCHs totaled \$777.2 million. Thus, even a relatively modest percentage of FDCHs misclassified would lead to millions of dollars in erroneous payments.

## 5.1 Methods and Results

For this assessment, we attempted to verify sponsors' determinations of tiering status for a sample of 660 FDCHs, selected from the lists of 56 sponsors located in 14 States. All of the FDCHs in the final sample received reimbursement for meals at some time between August 2012 and July 2013. We first attempted to independently verify Tier I eligibility for all sampled FDCHs using matches to school and Census data for the year in which tiering was most recently determined. Tier I FDCHs were verified without any additional data collection if all three of the nearest elementary schools (or nearest two secondary schools) were area-eligible (i.e., at least 50 percent of students were approved for F/RP meals), or if the FDCH was located in a Census Block Group (CBG) that was area-eligible (with at least 50 percent of children at or below 185 percent of the Federal Poverty Guidelines, or FPG). If some but not all of the nearest schools were area-eligible, we contacted school districts or used their websites to determine the correct school attendance area for the FDCH, and then determined whether this school was area-eligible. Using these methods, we verified sponsors' determinations for 503 Tier I FDCHs, 87.8 percent of the Tier I sample.

For Tier I FDCHs not verified through data matching we reviewed sponsors' documentation of tiering determinations. These documents confirmed the sponsors' determinations for 49 Tier I FDCHs.

We verified 79 of the 87 Tier II FDCHs without contacting sponsors. After collecting documentation on the remaining 8 Tier II FDCHs, all but one were determined to be properly tiered. We identified 21 misclassified Tier I FDCHs and one misclassified Tier II FDCH.

Using the survey weights, we estimated that, nationwide 2.98 percent of Tier I FDCHs and 1.22 percent of Tier II FDCHs were misclassified in PY2013. As a result of these misclassifications, 2.16 percent of meals served by Tier I FDCHs were reimbursed at the higher Tier I rate instead of the lower Tier II rate. This was partially off-set by 0.70 percent of meals that were reimbursed at the lower Tier II rate instead of Tier I. The estimated costs of misclassification errors were overpayments of \$7.65 million to Tier I FDCHs and underpayments of \$0.46 million to Tier II FDCHs.

In total, we estimate that 3,342 FDCHs were misclassified and 10.73 million meals were reimbursed at the incorrect higher rate.

The estimates of the cost of misclassification for 2013 are somewhat lower than the estimates for 2012, still within the range of the estimates from prior assessments. The fluctuations in estimates of misclassification errors for the nine years of assessments are consistent with what we would expect in the presence of sampling error.

## **5.2 Implications of the Assessment Process and Results**

This Assessment met FNS's requirements to provide estimates of misclassification rates for FDCHs in the CACFP and the resulting erroneous payments, within the standards of precision set by OMB. The 2013 Assessment produced results comparable to those of previous assessments.

The Assessment confirms that the vast majority of tiering determinations –97 percent– were accurate. At the same time, the document review indicates that determinations based on income are more error-prone than other determinations, particularly income determinations without tax return documents.

From our independent review of tiering qualification we found that over half (64 percent last year, 54 percent this year) of FDCHs currently tiered based on income or program participation were also eligible based on geography. If sponsors were to check for geography before reviewing income or

program documentation they would likely approve the majority for a five year period, eliminating the requirement to conduct annual reviews. This would reduce the burden on sponsors and improve the accuracy of tiering determinations.

Finally, in considering the implications of this Assessment, it is important to acknowledge that tiering determinations are only one of several potential causes of improper payments in the CACFP. If tiering determinations were the sole source of improper payments, the CACFP would fall below the IPIA's reporting threshold, which mandates reports for programs with improper payments that exceed both \$10 million per year and 2.5 percent of total payments. The CACFP has several other potential sources of erroneous payments to FDCHs, including errors in determining eligibility of children in Tier II FDCHs for Tier I meals, meal claiming errors by providers, and meal claims processing errors by sponsors. Furthermore, this Assessment does not address erroneous payments to child care centers or adult day care programs. Thus, the estimates of this Assessment understate the full extent of improper payments in the CACFP.

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## Sampling, Weighting, and Estimation

The base sampling weight of a FDCH is equal to the inverse of the probability of selection for the three-stage sampling design. Thus, those weights reflect the probability of selecting the state, the probability of selecting the sponsor (given that the state had been selected), and the probability of selecting the FDCH (from the sponsor’s list of FDCHs in the particular tier, given that the sponsor had been selected). The sampling method, called probability proportional to size (PPS), was used at the first and second stage of sampling to select respectively states and sponsors. The number of FDCHs was used as measure of size (MOS) for both stages. In the third stage FDCHs were selected by simple random sampling (SRS) within the combination of sponsor and tier. When the number of Tier II homes is very small compared to the Tier I, in a given sponsor, then the selection is done without stratifying by tier. More specifically, when stratification by tier within sponsor is present, the base sampling weight for FDCH  $m$  in tier  $k$  within sponsor  $j$  in state  $i$  can be written as:

$$w_{ijkm} = \frac{1}{f_{1i} \times f_{2ij} \times f_{3ijkm}} \quad (1)$$

in which  $f_{1i}$  is the probability of selection for state  $i$ ,  $f_{2ij}$  is the probability of selection for sponsor  $j$  (given that state  $i$  has been selected), and  $f_{3ijkm}$  is the probability of selection for FDCH  $m$  in tier  $k$  (given that sponsor  $j$  in state  $i$  has been selected). If there was no stratification by tier, then the subscript  $m$  is redundant.

### A.1 Selection Probabilities for States

The first stage sampling corresponds to the selection of states among the 48 contiguous continental states and the District of Columbia (DC) – hereafter “national” refers to these 48 states and DC. Every year 15 states are selected to be part of the survey. To reduce the overlap between samples over time, we decided to select 3-year sample (2011, 2012, and 2013) and allocate it annually to get 15 states per year.

#### Selection of the 3-year sample

For selecting a sample of 45 states, the probability of selection for a particular state is:

$$P(\text{state } i \text{ in 3 year sample}) = \frac{45 \times (\text{Number of FDCHs in state } i)}{\text{Total number of FDCHs}} \quad (2)$$

Where the numbers of FDCHs are from the FNS National Databank for PY2010, omitting from the total number in the denominator those states and territories that had been excluded from the sampling frame for this assessment (i.e., Alaska, Guam, Hawaii, and Puerto Rico). For 12 states, the number of FDCHs was large enough that their selection probability, according to formula (1), was

greater than 1; those states were selected with certainty to be part of the 3-year sample. Some states were selected (hit) more than once, and therefore among the 49 states (including DC) in the frame, only 29 unique states were selected.

### Selection of the annual (1-year) sample

The 45 occurrences (hits) of the 29 states in the sample were assigned to one of the three years (2011, 2012, or 2013) using systematic sampling. The 3-year sample was sorted by state to ensure that the states selected at least 3 times are guaranteed to be in each of the 3 annual samples - they are certainty units for the annual samples.

The final probability of selection for the annual sample is:

$$f_{1i} = P(\text{state } i \text{ in annual sample}) = P(\text{state } i \text{ in 3 year sample}) \times \frac{1}{3}. \quad (3)$$

Three large states in terms of MOS were selected with certainty in each of the three annual samples. All the other states were selected with non-certainty for any given year.

### A.2 Selection Probabilities for Sponsors

Let  $n_i$  be the required number of sponsors to be selected in state  $i$ . In the past, a backup sample was selected in case of nonresponse to the survey by some selected sponsors. However, this had never happened, and therefore, backup sample was not selected in 2013. All sampled sponsors responded, and the backup sample was indeed not needed. However, information about how a backup sample was selected previously can be found in the reports for the past survey.

For this stage of selection, the numbers of FDCHs came from the lists of sponsors provided by the states as of May or June 2013. The probability of selecting sponsor  $j$  in the sponsor sample for state  $i$  is

$$f_{2ij} = P(\text{sponsor } j \mid \text{state } i) = \frac{n_i \times (\text{Number of FDCHs of Sponsor } j)}{\text{Number of FDCHs in state } i}. \quad (4)$$

where  $n_i$  is the sample size.

The sample size was fixed at 4 (i.e.  $n_i = 4$ ) with an exception for large states, which were hit twice in state selection, and thus, given a double sample size (i.e.  $n_i = 8$ ). In one state, there were only three sponsors in the sampling frame, all of which were selected with certainty. Some sponsors were selected with certainty due to their dominating size relative to the other sponsors in the same state, and some of them were selected twice so that their FDCH sample size was doubled. In total, 56 unique sponsors were selected for the 2013 FNS Tiering sample, and all of them responded.

Generally, the base sampling weights of each respondent is adjusted to account for nonrespondents to the survey. In this survey, however, no nonresponse adjustment to the weights was needed because all the sponsors responded to the survey. The correct sponsor weight is simply the inverse of (4) with sample size being the number of respondents.

### A.3 Selection Probabilities for FDCHs

At the third stage, for most sponsors a simple random sample (SRS) of 11 FDCHs was selected for each sponsor plus 5 backups for a total of 16 FDCHs per sponsor. For the sponsors selected twice because of their large size relatively to the others in a given state, 22 FDCHs were selected plus 10 backups. For the state, where all three sponsors were selected with certainty, we deviated from this FDCH selection procedure and allocated the sample proportionally to the number of FDCHs and selected SRS sample of FDCHs. The allocated sample sizes were 20, 17, and 7, respectively, for the regular samples, and 10, 7, and 3 as backups. Unlike the sponsor selection, it was necessary to use the backups to compensate for ineligible (inactive or for other reasons) homes in many situations. We will use the term “screening” for filtering ineligible FDCHs from the sample.

On the basis of the lists of FDCHs that the participating sponsors provided (as of August 2013), the number of FDCHs to be selected from the sponsor was further allocated between Tier I and Tier II in rough proportion to the sponsor’s numbers of FDCHs in the two tiers. For 22 sponsors in 11 states, the fraction of FDCHs in Tier II was so small that no tier stratification was used, and no Tier II FDCHs were selected from them through random sampling. With those allocations as the sample sizes for the sponsors with tier stratification, at the third stage a simple random sample of FDCHs was selected from each combination of sponsor and tier. For a particular combination of sponsor ( $j$ ) and tier ( $k$ ) all FDCHs have the same probability of selection. For example, assume that a certain sponsor has 267 Tier I FDCHs and 50 Tier II FDCHs; the sample includes 9 Tier I FDCHs and 2 Tier II FDCHs. For this sponsor, the 9 FDCHs selected in Tier I have  $f_{3ij1m} = 9/267$ , and the 2 FDCHs selected in Tier II have  $f_{3ij2m} = 2/50$ .

The sponsors were asked to list all FDCHs that they sponsored as of August 2013, so it was possible that some FDCHs were inactive during the reference period (August 2012 – July 2013). In the calculation of the base sampling weight, these inactive or other ineligible FDCHs found during screening and were considered part of the sample; that is, the numerator of  $f_{3ijkm}$  was equal to the combined number of eligible and ineligible FDCHs. (The ineligible FDCHs, however, were not used in estimation.) This approach is a standard way of handling ineligible sample units and allows that the ineligible FDCHs in the sample represent the ineligible FDCHs in the universe of FDCHs, whereas the eligible FDCHs in the sample represent the universe of eligible FDCHs.

### A.4 Post-stratification

The total number of FDCHs reported by the states as of May or June 2013 generally differed from the corresponding totals in the FNS National Databank for PY2013. Similarly, the numbers of FDCHs on the sponsors’ lists (as of August 2013) differed from the corresponding numbers reported by the states. Because this assessment aims to provide estimates for PY2013, the base sampling weights were adjusted by post-stratification to two control totals: the total number of Tier I FDCHs and the total number of Tier II FDCHs in the FNS National Databank for PY2013 (as of March 2014). The control totals excluded the states and territories that had been excluded from the sampling frame for this assessment (Alaska, Guam, Hawaii, and Puerto Rico). The weights obtained through the post-stratification are the final weights used for estimation.

## A.5 Estimation Procedures

The final weights assigned to each responding FDCH were used to obtain estimates of various population parameters and standard errors of these estimates. For computing standard errors, three self-representing certainty states were treated as strata, and all other non-certainty states were put into another stratum. These are not real strata used in sampling but formed for variance estimation, and for that reason they are called variance strata. The three states selected with certainty were assigned to variance stratum 1, variance stratum 2 and variance stratum 3 respectively, and the remaining 11 states were assigned to variance stratum 4.

### Misclassification Rates

The misclassification rates for Tier I and Tier II were computed as follows.

The final weight for a FDCH is written as  $w_{ijkm}$ , where  $i$  denotes the state,  $j$  denotes the sponsor,  $k$  denotes the tier, and  $m$  denotes the FDCH. Let  $y_{ijkm} = 1$  if the FDCH  $m$  in tier  $k$  within sponsor  $j$  in state  $i$  is misclassified and equal to zero otherwise. An FDCH is considered misclassified if it has an incorrect tier in any months during the assessment period.

The estimated number of FDCHs misclassified in tier  $k$  is given by

$$c_k = \sum_i \sum_j \sum_m w_{ijkm} y_{ijkm}$$

The misclassification rate for tier  $k$  is given by the proportion

$$r_k = \frac{c_k}{\hat{N}_k}$$

where  $\hat{N}_k$  is the estimated total number of FDCHs in tier  $k$  computed as follows:

$$\hat{N}_k = \sum_i \sum_j \sum_m w_{ijkm}$$

Note that the summations in the above formulae include those FDCHs selected without stratification by tier within sponsor. In this case, weights and  $y$ -values are defined without subscript  $m$ .

The misclassification rate for all FDCHs is given by the proportion.

$$r = \frac{\sum_{k=1}^2 c_k}{\hat{N}}$$

where  $\hat{N} = \sum_{k=1}^2 \hat{N}_k$  is the estimated total number of FDCHs in Tier I and Tier II.

### Total Meals Reimbursed in Error: Estimates from Sample Data

Let  $q_{ijkm}$  represent number of meals reimbursed in error to FDCH  $m$  in tier  $k$  within sponsor  $j$  in state  $i$ . Let  $q_1$  represent estimated total number of meals reimbursed in error to FDCHs misclassified as Tier I.  $q_1$  is then given by

$$q_1 = \sum_i \sum_j \sum_m w_{ij1m} q_{ij1m}$$

And  $q_2$ , similarly defined as the estimated total number of meals reimbursed in error to FDCHs misclassified as Tier II is given by

$$q_2 = \sum_i \sum_j \sum_m w_{ij2m} q_{ij2m}$$

The estimated total number of meals reimbursed in error to either Tier I or II FDCHs is then equal to  $q = q_1 + q_2$ .

Note that  $q_{ijkm} = 0$  if the FDCH was not misclassified.

### Estimation of Percentage of Meals Reimbursed in Error

The estimated percentage of meals served by misclassified Tier I FDCHs is obtained by dividing the estimated total number of meals reimbursed in error by the estimated total number of meals reimbursed to FDCHs in Tier I. (Note that if Tier I home was misclassified, all meals served by the home were misclassified.) Let  $u_{ijkm}$  represent the total number of meals reimbursed to FDCH  $m$  in tier  $k$  within sponsor  $j$  in state  $i$ , and let  $u_k$  represent the estimated total number of meals reimbursed to FDCHs in tier  $k$ .  $u_1$ , the estimated total number of meals reimbursed to Tier I FDCHs, is given by

$$u_1 = \sum_i \sum_j \sum_m w_{ij1m} u_{ij1m}$$

and  $u_2$ , defined as the estimated total number of meals reimbursed to Tier II FDCHs, is given by

$$u_2 = \sum_i \sum_j \sum_m w_{ij2m} u_{ij2m}$$

The percentage of total number of meals reimbursed in error to Tier I FDCHs is estimated by the ratio  $MR_1$  multiplied by 100, where

$$MR_1 = q_1/u_1 \tag{5}$$

Similarly, the percentage of total number of meals reimbursed in error to Tier II FDCHs is estimated by the ratio  $MR_2$  multiplied by 100, where

$$MR_2 = q_2/u_2 \quad (6)$$

### Total Overpayments and Underpayments to FDCHs: Estimates from Sample Data

Let  $p_{ijkm}$  represent erroneous payments made to FDCH  $m$  in tier  $k$  within sponsor  $j$  in state  $i$ .<sup>38</sup> Let  $p_k$  represent estimated total payments made in error to FDCHs misclassified as Tier  $k$ .  $p_1$ , which is the estimated total overpayments made to FDCHs misclassified as Tier I is given by

$$p_1 = \sum_i \sum_j \sum_m w_{ij1m} p_{ij1m}$$

And  $p_2$ , similarly defined as the estimated total underpayments to FDCHs misclassified as Tier II is given by

$$p_2 = \sum_i \sum_j \sum_m w_{ij2m} p_{ij2m}$$

The estimated total erroneous payments are then equal to  $p = p_1 + p_2$ .

### Estimation of Percentage of Payments in Error

The estimated percentage of payments made to misclassified Tier I FDCHs is obtained by dividing the estimated total overpayments by the estimated total payments made to FDCHs in Tier I. Let  $t_{ijkm}$  represent the total payments made to FDCH  $m$  in tier  $k$  within sponsor  $j$  in state  $i$ , and let  $t_k$  represent the estimated total dollars paid to FDCHs in tier  $k$ .  $t_1$ , the estimated total amount paid to Tier I FDCHs, is given by

$$t_1 = \sum_i \sum_j \sum_m w_{ij1m} t_{ij1m}$$

and  $t_2$ , the estimated total dollars paid to Tier II FDCHs, is given by

$$t_2 = \sum_i \sum_j \sum_m w_{ij2m} t_{ij2m}$$

The percentage of reimbursements to Tier I FDCHs paid in error is estimated by the ratio  $ER_1$  multiplied by 100, where

$$ER_1 = p_1/t_1 \quad (7)$$

Similarly, the percentage of reimbursements to Tier II FDCHs paid in error is estimated by the ratio  $ER_2$  multiplied by 100, where

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<sup>38</sup> When Tier I FDCH is misclassified, not all payments are in error because Tier II FDCHs can claim Tier I rate for eligible children. It is not possible to determine how many such children there were in the misclassified Tier I FDCHs in the sample. State overall percentage of the total Tier II reimbursement paid at the (low) Tier I rate to the total reimbursement paid to all Tier II FDCHs in the state for the PY was used to calculate the overpayment amount to each misclassified Tier I FDCH, which is incorporated in  $p_{ij1m}$ . For detailed discussion, see Section 4.3 in the main text.

$$ER_2 = p_2/t_2 \tag{8}$$

### Ratio Estimation Procedure for Final Estimates of Total Meals Reimbursed in Error and Erroneous Payments

As in the past assessments, the sample estimate of total meals for which FDCHs received reimbursement underestimated the known totals from the FNS data. Therefore, using weighted sample data without adjustment would yield underestimates of total meals reimbursed in error and costs of misclassification errors.

Careful consideration of the nature of the sampling frames for the FNS reports and our assessment indicated that these frames differed in how they deal with FDCHs that do not claim meals in all twelve months of a fiscal year. It was reported that in 2008, this subtle difference in sampling frame induced a difference in the estimates of the number of meals between the weighted sample data and the FNS National Databank information of 11 percent for Tier I FDCHs and 7 percent for Tier II FDCHs.<sup>39</sup> As in the past, this concern led us to adoption of a ratio estimator which takes the FNS National Databank numbers as exactly correct. Furthermore, ratio estimation is more efficient if the variable to be estimated and the auxiliary variable is highly correlated.<sup>40</sup> We discuss that method here. The same method was used in the 2008 through 2013 assessments. The report of the 2008 assessment provides an explanation for why the sample data underestimate the national total meal counts and reimbursements.<sup>41</sup>

### Estimation of Total Meals Reimbursed in Error

To produce revised national estimates of meals reimbursed in error and the associated costs of sponsor classification errors, we used the standard ratio-estimation procedure. This procedure assures that the national estimates of total meals served and total payments based on the sample data are consistent with the national totals as reported in the FNS National Data Bank.<sup>42</sup> Specifically, we proceeded as follows.

First, we used the weighted sample data to estimate the percentage of meals reimbursed at the wrong tier,  $MR_1$  for Tier I and  $MR_2$  for Tier II, as described above.

Second, we estimated the totals of meals reimbursed at the wrong tier (denoted as  $NME_1$  and  $NME_2$ ) using the national totals of PY2013 meals reimbursed to Tier I and Tier II FDCHs (denoted as  $FM_1$  and  $FM_2$ ) as reported by FNS and included in the National Data Bank. To do this, we multiplied the FNS national total (from the FNS National Data Bank; not the estimate derived directly from our survey) by the appropriate percentage estimated from weighted sample data ( $MR_1$  or  $MR_2$ , see formulae 5 and 6). For Tier I, the calculation used the following formula:

---

<sup>39</sup> See section A.6 of Logan et al. (2011).

<sup>40</sup> We believe that this is the case for our study although it is not possible to check due to lack of information on the reimbursement amounts reported to FNS for individual sampled FDCHs. However, we can still use the ratio estimation method because we need only the national total (except the outlying states and territories).

<sup>41</sup> Ibid.

<sup>42</sup> We acknowledge the possibility that the FNS totals are affected by non-sampling error.

$$NME_1 = FM_1 \times MR_1 \quad (9)$$

We used similar calculations to estimate the total meals reimbursed in error ( $NME_2$ ) for Tier II FDCHs, and we summed the estimates for Tier I and Tier II to estimate the totals for all FDCHs. Then the estimated total number of meals reimbursed in error is given by

$$NME = NME_1 + NME_2 \quad (10)$$

### Estimation of Total Costs of Misclassification of FDCHs

We used the same procedure to estimate the national total costs of misclassification for Tier I and Tier II FDCHs, denoted as  $NCM_1$  and  $NCM_2$ . First, we used the weighted sample data to estimate the percentage of reimbursements paid in error for each tier,  $ER_1$  and  $ER_2$  as shown above (see formulae 7 and 8). We then estimated the total reimbursements paid in error using the totals of all PY2013 FDCH reimbursements by tier (from the FNS National Data Bank), denoted as  $FR_1$  and  $FR_2$ . For Tier I, the calculation used the following formula:

$$NCM_1 = FR_1 \times ER_1 \quad (11)$$

The analogous calculation was used to estimate  $NCM_2$ , the national cost of misclassification for Tier II FDCHs. Then the estimated total cost of misclassification is given by

$$NCM = NCM_1 + NCM_2 \quad (12)$$

### A.6 Standard Errors of Estimates and Construction of Confidence Intervals

Standard errors for the totals, ratios, and percentages of FDCHs misclassified were computed using Westat's complex survey analysis system, WesVar, which takes into account the multistage sampling design used for the selection of FDCHs in the sample (including clustering of sampling units at various stages of sampling). Standard errors were used to compute the lower and upper bounds for the 90 percent confidence intervals of estimates using the student t-distribution – these intervals are symmetric about the estimates. However, we used the Wilson 90 percent confidence interval for percentages of misclassified FDCHs because it has superior coverage property for proportions than the usual symmetric t-based interval, especially for proportions close to zero or one (Newcombe, 1998). The Wilson interval is not symmetric and does not produce a nonsensical negative lower bound or greater than 100 percent upper bound as the symmetric interval can. Unfortunately, the Wilson interval is not available for the ratios, and their confidence interval based on the t-distribution can go out of the natural bounds. When this happens, the bound is usually replaced by the natural bound (e.g., a negative lower bound by zero). This happened for the lower 90 percent confidence interval for estimated percentages of meals reimbursed in error and reimbursements paid in error, and their corresponding total meal counts and total reimbursements in error for Tier II.

All computations of standard errors were done under the assumption that primary sampling units were sampled with replacement. The primary sampling units (PSUs) in variance strata 1, 2, and 3 (the certainty states) are sponsors, whereas the primary sampling units in variance stratum 4 (the non-certainty states) are states. Under this assumption, variances are computed based only on the PSU level estimates and generally are slight overestimates of the variance. Variance estimation

without this assumption is more complex and would require second order probabilities of selection at first and subsequent stages. Generally slight overestimation is well accepted in practice as the statistical inference based on a slight overestimate of variance gives a slightly conservative result. For example, a confidence interval is slightly longer, and the null hypothesis of a statistical test is slightly less likely to be rejected.

The confidence intervals for total meals reimbursed in error and total costs of misclassification used the confidence intervals for the estimated percentages of meals and reimbursements and the totals from FNS National Data Bank (NDB), which were known with certainty. For example, the computation of the 90 percent confidence interval (CI) for total meals reimbursed in error ( $NME_k$  given by formula 9) for Tier  $k$  FDCHs was as follows:

$$\begin{aligned} NME\_LOW_k &= FM_k \times MR\_LOW_k \\ NME\_HIGH_k &= FM_k \times MR\_HIGH_k \end{aligned}$$

where,

$NME\_LOW_k$  = 90 % CI lower bound of total meals reimbursed in error due to misclassification for Tier  $k$  FDCHs

$FM_k$  = total meals reimbursed to Tier  $k$  FDCHs from FNS NDB

$MR\_LOW_k$  = 90 % CI lower bound for  $MR_k$  (percentage of meals reimbursed in error for Tier  $k$  FDCHs)

$NME\_HIGH_k$  = 90 % CI upper bound of total meals reimbursed in error due to misclassification for

Tier  $k$  FDCHs.

$MR\_HIGH_k$  = 90 % CI upper bound for  $MR_k$  (percentage of meal reimbursed in error for Tier  $k$  FDCHs)

The standard error for the estimated overall total meals reimbursed in error ( $NME$ ) is given by

$$\sqrt{\hat{V}(NME_1) + \hat{V}(NME_2)} = \sqrt{FM_1^2 \times \hat{V}(MR_1) + FM_2^2 \times \hat{V}(MR_2)}$$

where  $\hat{V}(MR_1)$  and  $\hat{V}(MR_2)$  are variance estimates for  $MR_1$  and  $MR_2$ , which were obtained from WesVar. The 90 percent confidence interval ( $MR\_LOW_k, MR\_HIGH_k$ ) for  $MR_k$  is then computed using the usual formula with the appropriate t-value.

The confidence intervals for  $NCM_1, NCM_2$ , and  $NCM$  (see formulae 11 and 12) are computed in the same way.

**Appendix**

**B**

**Data Collection Materials**

## **Mailing #1 Documents**



An Employee-Owned  
Research Corporation

1600 Research Boulevard  
Rockville, MD 20850-3129  
tel: 301-251-1500  
fax: 301-294-2040  
www.westat.com

«Date»

«Name»

«CACFP»

«Address»

«PO\_Box»

«City», «State» «Zip»

Dear «Name»:

The USDA Food and Nutrition Service (FNS) needs your help for the **2013 CACFP Assessment of Sponsor Tiering Determinations**. FNS collects information each year to estimate the accuracy of tiering determinations by CACFP sponsors for family day care homes, as required by the Improper Payments Information Act. Westat is conducting the 2013 assessment for FNS. You may have heard about this assessment from your State Child Nutrition Director.

As explained in the enclosed brochure, you are one of 60 sponsors nationwide that have been randomly selected to represent all CACFP sponsors in this year's assessment. Your participation is crucial to ensure scientifically valid findings. I am writing to explain the assessment and to ask you to participate.

In brief, here's what we ask you to do by **«Due date»**:

1. Read and sign the enclosed Memorandum of Understanding (MOU), which explains the requirements of the assessment and how your data will be protected and used. Please keep one signed copy of the MOU for your own records.
2. Compile a list of all family day care homes (FDCH) that you sponsor, including their name, street address (**no PO Boxes**), city, state, zip code, Tier I/Tier II status, method used for tiering determination, and **most recent tiering determination date BEFORE AUGUST 2013**.
3. Return the MOU to Westat using the enclosed pre-paid envelope. Using our secure website you may either manually enter the information requested in Step 2 or upload a Word or Excel file containing the data. Directions for accessing and using the website are included. If you prefer to send the list on a CD or on paper, please use the enclosed pre-paid envelope.

Once we receive your list of FDCHs, we will select a sample of about 15 homes that you sponsor. Then, we will send you the list of homes and ask for their counts of meals approved for reimbursement for August 2012 through July 2013. Westat will attempt to verify the tier status of each home using Census and school information. About a month after we receive your meal counts, we will let you know if we are not able to verify the Tier I eligibility for any of your sampled homes

and will ask you to send us the documentation of your tiering determination for that home. **We will not contact family day care homes.**

Section 305 of the Child Nutrition Reauthorization Act (CNR) now requires participation in assessment and evaluation studies conducted on behalf of USDA/FNS. However, in recognition of your time and effort, we will provide a \$110 honorarium to sponsors that complete all parts of the assessment and an additional \$150 if you meet all of the deadlines specified during each mailing.

In this packet, you will find letters of support for the *CACFP Assessment of Sponsor Tiering Determinations* from the CACFP Sponsors Forum and The CACFP Sponsor's Association. These organizations recognize the importance of documenting the integrity of the CACFP.

Westat will not reveal the identities of participating sponsors or selected family day care homes to USDA/FNS. Information provided by sponsors will be kept confidential, to the extent provided by law, and results will be reported only at the national level.

USDA/FNS and Westat need your participation to assure that this assessment fairly and accurately represents the integrity of the CACFP. We thank you in advance for your time and cooperation in this important study. If you have any questions about the study, please feel free to call the toll-free help line at 1-855-561-0082, or send an e-mail to [CACFP@Westat.com](mailto:CACFP@Westat.com).

Sincerely,

A handwritten signature in black ink that reads "David Marker". The signature is written in a cursive, flowing style.

David Marker  
Project Director

Enclosures:

1. Program Assessment Brochure
2. Letters of Support
3. Memorandum of Understanding
4. User Name and Password
5. Instructions for Website
6. FedEx label for returning documents/data

Instructions: The table below shows the information we need for each of the FDCHs you sponsor.

Please provide the following: (a) FDCH name, (b) street address, (c) city, (d) state abbreviation, (e) zip code, (f) whether the FDCH is a Tier I or Tier II home, (g) date of most recent tiering determination RELEVANT TO THE ASSESSMENT PERIOD -- before August 1, 2013, and (h) method of tiering determination used.

**IMPORTANT NOTE: The assessment period is from 8/1/12 - 7/31/13. Please make sure the tiering information you provide is for that period. As an example, if an FDCH has a current tiering date of 9/1/13, we need to know the PREVIOUS tier, date, and determination method because 9/1/13 is outside of the assessment period. All dates should be BEFORE 8/1/13.**

You may use this form, which is available in the Mailing #1 folder on the secure website at <https://www.cacfp-assessment.com> to provide your data. Alternatively, you may generate the report yourself and upload an Excel file, a delimited text file (CSV or tab-delimited) or a Word file containing the data.

FDCH Name (a)	Street Address (NO PO Boxes) (b)	City (c)	State (d)	Zip Code (e)	Tier I or Tier II (f)	Date of Most Recent Tiering Determination for Assessment Period (BEFORE 8/1/13) (g)  _ _ / _ _ / _ _  M M D D Y Y	Method of Tiering Determination Used (h)
<FDCH ID>			_ _		Tier I . . . . 1 Tier II . . . . 2	_ _ / _ _ / _ _  M M D D Y Y	School data . . . . . 1 Census data . . . . . 2 Provider Income . . . . . 3 Program Participation . . 4
<FDCH ID>			_ _		Tier I . . . . 1 Tier II . . . . 2	_ _ / _ _ / _ _  M M D D Y Y	School data . . . . . 1 Census data . . . . . 2 Provider Income . . . . . 3 Program Participation . . 4
<FDCH ID>			_ _		Tier I . . . . 1 Tier II . . . . 2	_ _ / _ _ / _ _  M M D D Y Y	School data . . . . . 1 Census data . . . . . 2 Provider Income . . . . . 3 Program Participation . . 4
<FDCH ID>			_ _		Tier I . . . . 1 Tier II . . . . 2	_ _ / _ _ / _ _  M M D D Y Y	School data . . . . . 1 Census data . . . . . 2 Provider Income . . . . . 3 Program Participation . . 4
<FDCH ID>			_ _		Tier I . . . . 1 Tier II . . . . 2	_ _ / _ _ / _ _  M M D D Y Y	School data . . . . . 1 Census data . . . . . 2 Provider Income . . . . . 3 Program Participation . . 4

Return this information to Westat using the secure website located at <https://www.cacfp-assessment.com> or the provided envelope. If you have a question about how to provide this information, please send an e-mail to [CACFP@Westat.com](mailto:CACFP@Westat.com) or call us toll-free at 1-855-561-0082

## Frequently Asked Questions

### 1. When do I get the honorarium?

- » Westat will send you a check when we receive the requested information. You will receive \$110 if you provide all of the requested data. If you meet all of the deadlines, you will receive an additional \$150.

### 2. What if all my information is on paper and I can't send you a data file?

- » We like to get EXCEL or delimited text (CSV or tab-delimited) files because it's less work for us! We can also accept WORD files. But if all you have is paper, you can enter the information using the template on our secure website or mail it to us and we will compile a file.

### 3. If I participate once, do I have to do it again?

- » Each year, an independent sample of sponsors and homes is selected for assessment. If you are a large sponsor, there is a chance you will be selected in multiple years. It's important that you participate!

### 4. Will Westat contact the selected homes?

- » NO. We will obtain all of the information for the Assessment from you.

### For more information

Call 1-855-561-0082  
(toll-free)

Or send e-mail to  
[CACFP@Westat.com](mailto:CACFP@Westat.com)



1600 Research Boulevard  
Rockville, MD 20850  
Phone: 301-251-1500  
Fax: 301-294-2040

# CACFP Assessment of Tiering Determinations



Assessment conducted for the  
Food and Nutrition Service.



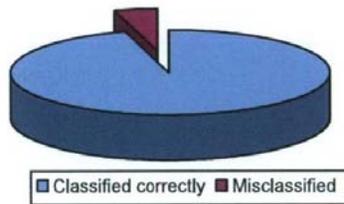
## About the Assessment

Each year the USDA Food and Nutrition Service (FNS) is required to report to Congress the percentage of CACFP family day care homes that are misclassified as Tier I or Tier II, and the resulting improper payments.

### Error rates are low in the CACFP!

In 2012, only 1.8 percent of homes were misclassified and 1.2 percent of payments were associated with errors.

#### CACFP Family Day Care Homes, 2012



CACFP provides about \$783 million in meal benefits annually, and so the Improper Payments Information Act of 2002 requires continued measurement of error rates.

**The study of CACFP tiering determinations has become easier!** Sponsors can now upload their files to a secure website. Sponsors will only be able to view their own data. You can also download templates for entering your data or to view items included in each mailing.

## Your Role in the Assessment

You are one of 60 sponsors nationwide that have been randomly selected this year to represent all CACFP sponsors. Your participation is crucial to ensure scientifically valid findings.

Westat will not visit you or intrude on your operations. We will provide you with a secure website where you can upload files. We'll also provide pre-paid envelopes for mailing. You will receive up to \$260 honorarium for your effort.

Westat will collect the following from Sponsors:

1. Signed Memorandum of Understanding. This document confirms your participation.
2. List of homes that you sponsor, tiering status, method used, most recent tiering determination date that was applicable between August 2012 and July 2013. This information is needed so that we can draw a sample of your homes for the Assessment and begin verifying their status.
3. Meal counts for the sampled homes. We will send you the list of sampled homes. For each selected home, we will need the monthly counts of approved Tier I and Tier II breakfasts, snacks, and lunches/dinners for the period from August 2012 to July 2013. Use our secure website or mail us the information.
4. Certification documents. We will let you know if we were unable to verify a home and need more information from you. We anticipate that most homes can be verified as Tier I based on Census or school information, so few homes will need followup.

**Due dates vary depending upon when you receive our request. Deadlines will be included with each request.**

## What should you do next?

- ✓ **First, read and sign the Memorandum of Understanding.** This is an important document that tells us that you understand:
  - a) the requirements of the assessment,
  - b) the honorarium that you will receive for completing the assessment, and
  - c) how your data will be protected and used.
  - » *Sign both copies, keep one for yourself, and return one copy in the envelope provided.*
- ✓ **Second, compile a list of all family day care homes that you sponsor.** This list should include all homes that you currently sponsor, regardless of whether they received reimbursements for the most recent month.

For each home, include: name of home, street address (**no PO boxes**), Tier I or Tier II status, method used to determine tiering, and most recent determination date.

  - » Enter data or upload it in a *WORD* or *EXCEL* file using our secure website. If you prefer to mail the data, use the prepaid envelope.
- ✓ **Third, let us know if you have questions.** We want to work with you to reduce your burden and to make this a successful assessment! We can be reached at:

1-855-561-0082

Or

[CACFP@Westat.com](mailto:CACFP@Westat.com)



September 2013

Dear Colleague:

I am writing on behalf of the National CACFP Sponsors Forum to encourage you to participate in the annual CACFP Program Assessment of Sponsor Tiering Determinations. You are one of approximately 60 sponsors that have been selected randomly to participate in this study.

As you may know, USDA must report to Congress an estimate of the percentage of family day care homes that are misclassified as Tier I or Tier II, and the resulting improper payments. As in 2011 and 2012, Westat will be conducting the CACFP Program Assessment of Sponsor Tiering Determinations. Westat has worked cooperatively with the National CACFP Sponsors Forum to minimize the burden placed on sponsors and homes in order to produce accurate, unbiased results.

The Assessment will not involve on-site visits to sponsors to review their tiering documentation. The tiering status of most of the homes selected will be verified independently using only census information or school eligibility. If Westat is unable to verify tiering status for the selected homes, you will need to provide additional documentation to support the tier classification. You will receive an honorarium in recognition of your time and effort.

This annual study is important - it has helped establish the integrity of the CACFP. The National CACFP Sponsors Forum encourages you to participate in this study. Remember, you are one of only a small number sponsors across the country randomly selected to represent all CACFP sponsors.

Thank you, in advance for your participation in this study.

Yours very truly,

Martha G. Campolito  
President

President, Martha Campolito ♦ Vice President, Glenda Overfelt ♦ Secretary, Jodi Khum ♦ Treasurer, Carolyn Morrison  
Sonja Carvalho ♦ Ipek Taffe ♦ Shelly Beiting ♦ Sheilah Mevis ♦ Susana Reza ♦ Jerry Bowers ♦ Paula James ♦ Reynaldo Green ♦ Marlene Jehnke  
Sonia Cotto-Moreno ♦ Edward Cooney ♦ Tom Clark ♦ Geraldine Henchy ♦ Linda Geigle ♦ Helen Blank ♦ Ed Mattson



September 2013

Dear CACFP Sponsor:

The Improper Payments Information Act of 2002 (Public Law 107-300) requires Federal agencies to determine the amount of erroneous payments in Federal programs and to periodically conduct detailed assessments of vulnerable program components. The *CACFP Program Assessment of Sponsor Tiering Determinations* is a program assessment developed to produce a national estimate of the share of CACFP Family Day Care Homes that are misclassified into the wrong reimbursement tier. Similar studies to this one have been conducted in recent years and found a very low error rate of misclassifications. Good news for the CACFP!

It is vitally important that we continue to demonstrate that the CACFP is meeting the goals of the program and doing this with a high degree of integrity. One way to accomplish this is through the results of this year's *CACFP Program Assessment of Sponsor Tiering Determinations*, which we are confident will once again show a low error rate of misclassifications and therefore resulting improper payments.

NCA is very pleased that Westat and USDA will again use a process that minimizes the burden to the sponsors who participate. These include:

- No on-site reviews.
- Verification of the tier status by first using census information and school eligibility, requiring only that you supply names, addresses, and tiering dates of the selected group.
- Requesting additional documentation only if this information does not support the tier classification. (This would typically be if the provider was classified for Tier I based on household size and income.)
- An honorarium paid to participating sponsors for their time and effort.
- Reporting only misclassifications and the resulting improper payments and not including procedural errors.

The NCA Board of Directors encourages you to participate in this important study and thanks you in advance for your cooperation. We will post its results on our website when they are published.

Sincerely,

Blake Sanford  
President  
National CACFP Sponsors Association

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# CACFP Assessment of Tiering Determinations

## MEMORANDUM OF UNDERSTANDING BETWEEN WESTAT AND Family League of Baltimore City, MD

This MEMORANDUM OF UNDERSTANDING is entered into by Family League of Baltimore City (SPONSOR) and Westat.

### A. PURPOSE OF AGREEMENT:

Westat and SPONSOR hereby agree to the terms of an exchange of information between SPONSOR and Westat. The USDA Food and Nutrition Service (FNS) has contracted with Westat to conduct the CACFP Program Assessment of Tiering Determinations (the Assessment). This annual Assessment is required by the Improper Payments Act of 2002. The sampling approach used by the Assessment provides an alternative to comprehensive federal reporting requirements. Section 305 of the Child Nutrition Reauthorization Act (CNR) requires participation in assessment studies on behalf of USDA/FNS.

For Westat, this agreement assures that the SPONSOR consents to participate and understands the requirements and honorarium for participating in the study.

For SPONSOR, this agreement provides assurance that information provided to Westat will be safeguarded and used only for specific research purposes directly connected to the administration of the CACFP. None of the information provided by SPONSOR to Westat will be released in a way that will identify SPONSOR or individual homes to USDA or any third party, unless required by law.

### B. WESTAT AGREES TO:

1. Provide clear instructions to SPONSOR and pre-paid mailing envelopes for sending information to Westat.
2. Provide a toll-free telephone number, dedicated e-mail address, and secure website for SPONSOR to use when contacting Westat.
3. Provide timely feedback, within 3 business days of receipt, if Westat is unable to read a data file, fax, or other document, or if Westat deems the data incomplete.
4. Provide a \$110 honorarium to SPONSOR in recognition of the effort of participating in the study. Westat will provide an additional \$150 honorarium if SPONSOR meets all specified deadlines.

### C. SPONSOR AGREES TO:

Provide the following to Westat:

1. **List of family day care homes.** SPONSOR will provide a list of all homes under sponsorship as of August 2013, regardless of whether the home received CACFP reimbursements for July 2013. The list must include the following data elements:
  - Name of home or name of provider
  - Street address (**not PO Box**) of home including city and zip code
  - Tier I or Tier II status as determined by SPONSOR
  - Method used to determine tiering status
  - Tiering determination date for the home **that was applicable between August 2012 and July 2013**

SPONSOR will upload the requested information in a WORD or EXCEL file onto Westat's secure website, enter the data using the templates provided on the secure website, or send it to Westat using the pre-paid envelope provided by Westat.

2. **Monthly meal counts for selected homes.** Westat will select a sample of homes (ranging from about 15-30 homes) from the list that SPONSOR provides and send the list of sampled homes to SPONSOR in late September or early October. For each sampled home, SPONSOR will provide to Westat monthly counts of meals approved for reimbursement for the twelve-month period from August 2012 through July 2013. For sampled FDCH whose tiering status was redetermined between 8/1/2012 and 7/31/2013, SPONSOR will provide the tiering status, date, and method used for BOTH the current and the

previous determinations.

- 3. **Documentation of tiering determination.** Westat will attempt to independently verify the Tier I eligibility of the selected homes using Census and school data. If Westat is unable to verify Tier I eligibility for a home, Westat will ask SPONSOR to provide copies of the complete documentation of tiering determination for that home.

D. HONORARIUM:

Westat will pay an honorarium to SPONSOR in recognition of the expected costs and effort of participating in the Assessment. The amount of the honorarium is \$110 payable upon receipt of the final data (documentation of tiering determination) or when SPONSOR is notified that no further data are needed. SPONSOR will receive an additional \$150 if they meet all of the specified deadlines for submitting information to Westat. Each deadline will be clearly specified in the letter from Westat requesting the information.

**Please tell us who we should make honorarium checks payable to:** \_\_\_\_\_

E. DISCLOSURE OF INFORMATION AND PROTECTION OF CONFIDENTIALITY:

Westat will keep all information provided by SPONSOR confidential, to the full extent allowed by law, and will use the information only for the purposes of the Assessment. Westat will use the data to prepare a final Assessment report, in which all data will be reported in an aggregated form and information cannot be linked to individual sponsors or homes. The information provided by SPONSOR under this agreement will be protected against unauthorized access or disclosure:

- a) The information subject to this agreement shall be used only to the extent necessary to assist in the valid needs for this specific Assessment and shall be disclosed only for the purposes as defined in this agreement.
- b) Westat will not use the information for any purposes not specifically authorized under this agreement.
- c) All members of the Westat project team with access to data provided by sponsors will sign data confidentiality agreements. Data will be stored in locked cabinets or password-protected files.
- d) Westat will not identify participating sponsors, providers, or the location of providers in any publications or data files provided to the Food and Nutrition Service, USDA.
- e) Under these restrictions, Westat will provide data files to FNS, which plans to use the files to replicate the research and to release a public-use data set. Non-FNS users will be asked to sign a pledge that they will not combine the public-use data with other data in a way that may identify sponsors or providers.

F. DURATION OF AGREEMENT

The confidentiality provisions of this agreement shall remain in effect indefinitely. All other provisions shall be in effect for one year from the date of signature.

**PRINCIPAL CONTACTS:**

**Westat Contact**

David Marker, Project Director  
Westat  
1600 Research Blvd.  
Rockville, MD 20850

Phone: 855-561-0082

FAX: 301-610-4900

E-Mail: [CACFP@Westat.com](mailto:CACFP@Westat.com)

**SPONSOR Contact**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

E-Mail: \_\_\_\_\_



\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
DATE

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
DATE

## **Mailing #2 Documents**



An Employee-Owned  
Research Corporation

1600 Research Boulevard  
Rockville, MD 20850-3129  
tel: 301-251-1500  
fax: 301-294-2040  
www.westat.com

[DATE]

«Contact»  
«Sponsor»  
«Address»  
«City», «State» «Zip»

Dear «Contact»:

On behalf of the Food and Nutrition Service (FNS) and Westat, I want to thank you for agreeing to participate in the **2012 CACFP Assessment of Sponsor Tiering Determinations**. Your participation is crucial to ensure scientifically valid findings.

Enclosed you will find two different types of forms.

1. The first form is a list of the CACFP family day care homes under your sponsorship that we have selected for this year's assessment. Please read the instructions and provide the relevant tiering information.
2. The second form is for monthly meal counts. We have included a separate form for each selected home. Please provide the following information for each FDCH:
  - **Monthly counts of meals** approved for reimbursement during August 2011-July 2012. We need separate counts of breakfasts, lunches or suppers, and snacks, broken down between Tier I-eligible and Tier II-eligible meals. You may provide a report with this information or copies of approved claims. Please see the attached instructions.
  - If meal counts for a home are not available for any of the 12 specified months, **please provide an explanation** on the list of homes or in an attached note.

Please go to the secure study website located at <https://www.cacfp-assessment.com> to submit monthly meal counts in a data file (preferably in Excel) or to enter the information directly into our template. If you prefer to use the template, make sure that you clearly identify the provider's name and address. If you need to send hardcopies or the information on a CD, please use the enclosed FedEx materials. **Please submit all completed forms by January 17, 2013.**

Once again, we remind you that Westat **will not contact family day care homes**, and we will not reveal the identity of cooperating sponsors or homes selected for the assessment (other than notifying State agencies of their sponsors that were selected).

Thank you in advance for your time and cooperation with the assessment. As specified in the Memorandum of Understanding, we may contact you for information again in about one month. If you have any questions, please call us toll-free at 1-888-924-9742, or send an e-mail to [CACFP@Westat.com](mailto:CACFP@Westat.com). Your agency will receive a check for \$110 at the end of your data collection and an additional \$150 if you meet all of the specified deadlines.

Sincerely,

David Marker  
Project Director

**Instructions:** The table below lists the family day care homes that have been selected for the 2012 CACFP Assessment of Sponsor Tiering Determinations. Based on information you provided earlier, we have completed Columns 2 – 3 for you.

- If Columns 2 - 3 are blank, please identify whether each FDCH is a Tier I or Tier II home and the date of the most recent tiering determination that was done **BEFORE AUGUST 1, 2012**.
- In Column 4, indicate whether or not you conducted a tiering redetermination for that FDCH **FOR ANY REASON** between 8/1/11 and 7/31/12. If your response is “No,” you do not need to complete Columns 5 - 7 for that FDCH.
- **Only if you responded “Yes” in Column 4**, complete Columns 5 – 7 for the FDCH. We need the tiering information that was in place **PRIOR** to the tiering information provided in Columns 2 – 3.

Name of Provider (1)	Recent Tiering Information		Redetermination Done Between 8/1/2011 and 7/31/2012? (4)	Previous Tiering Information		
	Tier I or Tier II (2)	Date of Most Recent Tiering Determination (BEFORE 8/1/12) MM DD YY (3)		Tier I or Tier II (5)	Date of Previous Tiering Determination MM DD YY (6)	Method of Tiering Determination Used (7)
«FDCH_FirstName» «FDCH_LastName»	«tier»	«tiering_date» «Next Record»	Yes ..... <input type="checkbox"/> No..... <input type="checkbox"/>			<input type="checkbox"/> School data <input type="checkbox"/> Census data <input type="checkbox"/> Income <input type="checkbox"/> Program participation
«FDCH_FirstName» «FDCH_LastName»	«tier»	«tiering_date» «Next Record»	Yes ..... <input type="checkbox"/> No..... <input type="checkbox"/>			<input type="checkbox"/> School data <input type="checkbox"/> Census data <input type="checkbox"/> Income <input type="checkbox"/> Program participation
«FDCH_FirstName» «FDCH_LastName»	«tier»	«tiering_date» «Next Record»	Yes ..... <input type="checkbox"/> No..... <input type="checkbox"/>			<input type="checkbox"/> School data <input type="checkbox"/> Census data <input type="checkbox"/> Income <input type="checkbox"/> Program participation
«FDCH_FirstName» «FDCH_LastName»	«tier»	«tiering_date» «Next Record»	Yes ..... <input type="checkbox"/> No..... <input type="checkbox"/>			<input type="checkbox"/> School data <input type="checkbox"/> Census data <input type="checkbox"/> Income <input type="checkbox"/> Program participation

«FDCH\_FirstName» «FDCH\_LastName»  
 «fdch\_address1», «fdch\_city», «fdch\_state» «fdch\_zip»

**Instructions:** For this home, please provide the number of approved CACFP meals for each month from August 2011 through July 2012. Provide separate counts for Tier I and Tier II meals and for each type of meal: breakfast, lunch or supper, and snacks.

At the bottom of the form, please indicate the number of months for which meal claims are provided. If this number is less than 12 for the listed home, explain in the space provided. If you prefer to attach a report or documentation for this home, you may do so.

**Monthly meal counts**

Month	Tier I Eligible Meals		Tier II Eligible Meals	
August, 2011	Breakfast: Lunch or Supper: Snacks:		Breakfast: Lunch or Supper: Snacks:	
September, 2011	Breakfast: Lunch or Supper: Snacks:		Breakfast: Lunch or Supper: Snacks:	
October, 2011	Breakfast: Lunch or Supper: Snacks:		Breakfast: Lunch or Supper: Snacks:	
November, 2011	Breakfast: Lunch or Supper: Snacks:		Breakfast: Lunch or Supper: Snacks:	
December, 2011	Breakfast: Lunch or Supper: Snacks:		Breakfast: Lunch or Supper: Snacks:	

**Monthly meal counts (continued)**

<b>Month</b>	<b>Tier I Eligible Meals</b>		<b>Tier II Eligible Meals</b>	
January, 2012	Breakfast: Lunch or Supper: Snacks:		Breakfast: Lunch or Supper: Snacks:	
February, 2012	Breakfast: Lunch or Supper: Snacks:		Breakfast: Lunch or Supper: Snacks:	
March, 2012	Breakfast: Lunch or Supper: Snacks:		Breakfast: Lunch or Supper: Snacks:	
April, 2012	Breakfast: Lunch or Supper: Snacks:		Breakfast: Lunch or Supper: Snacks:	
May, 2012	Breakfast: Lunch or Supper: Snacks:		Breakfast: Lunch or Supper: Snacks:	
June, 2012	Breakfast: Lunch or Supper: Snacks:		Breakfast: Lunch or Supper: Snacks:	
July, 2012	Breakfast: Lunch or Supper: Snacks:		Breakfast: Lunch or Supper: Snacks:	
<b>Total Number of Months of Claim Data Provided:</b> _____				
Explanation if Less Than 12 Months of Claim Data Provided: _____ _____ _____				

## **Mailing #3 Documents**



<date TBD>

«Contact»  
«Sponsor»  
«Address»  
«City», «State» «Zip»

Dear «Contact»:

Westat is nearing completion of the **2012 CACFP Assessment of Sponsor Tiering Determinations**. Your participation has been appreciated! We have one final request for information from you before we can complete the assessment.

Enclosed you will find a list of the CACFP family day care homes (FDCHs) under your sponsorship that we selected for the assessment and for which we were unable to verify tiering status. Tier I FDCHs may not have been verified due to an error on our part in matching to school and Census data, or because the provider applied for Tier I status on the basis of income or program participation. Tier II FDCHs may not have been able to be matched to school and Census data, due to insufficient address information.

Please provide the following information for each listed FDCH by **April 19, 2013** using the enclosed FedEx materials:

1. Tier I FDCHs: please provide copies of the documentation that you have on file for the most recent tiering determination done **before August, 2012**. **NOTE: IF YOU COMPLETED A DETERMINATION BETWEEN 8/1/2011 AND 7/31/2012 FOR ANY OF THE FDCH'S LISTED YOU WILL NEED TO PROVIDE DOCUMENTATION FOR BOTH THE CURRENT DETERMINATION AND THE PREVIOUS DETERMINATION.**

This will include one or more of the following:

- School data – boundary information and school FRP percentage or other available school eligibility documentation included in the FDCH's file.
- Census data – block group code and percentage of children in households with income at or below 185% of poverty.
- Household income or categorical eligibility information – application form listing household members and their income, and/or information about participation in programs that confer categorical eligibility. Include copies of documents used to verify Tier I income eligibility, such as wage stubs, income tax forms, or benefit letters.

2. For Tier II FDCHs, tell us:
- Whether the provider's tier status was determined or redetermined during the period from September 2006 to June 2012.
  - If a tiering determination was made between September 2006 and June 2012, provide copies of all documents associated with the tiering determination(s) (as listed above for Tier I FDCHs).
  - If a Tier II FDCH requested to have their tiering level re-evaluated in the time period, please provide a copy of their request.

Once again, we remind you that Westat **will not contact family day care homes** and we will not reveal the identity of homes selected for the assessment. All documents of tiering determinations provided to Westat will be kept confidential as provided under the Memorandum of Understanding between your agency and us.

Thank you in advance for your time and cooperation with the assessment. If you have any questions, please call us toll-free at 1-888-924-9742, or send an e-mail to [CACFP@Westat.com](mailto:CACFP@Westat.com).

Sincerely,

A handwritten signature in black ink that reads "David Marker". The signature is written in a cursive, flowing style.

David Marker  
Project Director

# Tier I Family Day Care Homes

**Instructions:** The table below lists the FDCHs that you have classified as Tier I and we were unable to verify using Census or school data. Based on information you provided earlier, we have completed Columns 2 – 3 and Columns 5 – 7 for you. If any of this information is incorrect, cross it out and record the correct information.

- **Most Recent Tiering Determination (Before 8/1/12).** Please provide copies of **all** documents associated with the tiering determination referenced in Columns 2 - 3. Documents will vary according to the method of determination and may include:
  - **If school data were used** – street address (not PO box or rural route), school boundary map, State list of schools indicating FRP percentage for school, letter from school official, printed copy of website information.
  - **If Census data were used** – street address (not PO box or rural route), block group boundary map, documentation showing that block group is income-eligible.
  - **If provider income or eligibility was used** - copy of form used by provider to list household members and their income, or information about participation in Food Stamps/SNAP, TANF, or other program approved for Tier I determinations. Also include copies of documents used to verify income or categorical eligibility - for example, food stamp/SNAP certification letter, income tax form, or wage stubs.
  - If you can't provide documentation for an FDCH, please provide an explanation in Column 4.
- **Previous Tiering Determination.** If you conducted a redetermination between 8/1/11 and 7/31/12, **please provide copies of all documents associated with the previous determination.**
  - If you can't provide documentation for an FDCH, please provide an explanation in Column 8.

B-20

Name of Provider (1)	Recent Tiering Information			Tier I or Tier II (5)	Previous Tiering Information			Explanation of Documentation Not Provided (8)
	Date of Most Recent Tiering Determination (BEFORE 8/1/12)  _ _ / _ _ / _ _  MM DD YY (2)	Method of Tiering Determination Used (3)	Explanation of Documentation Not Provided (4)		Date of Previous Tiering Determination  _ _ / _ _ / _ _  MM DD YY (6)	Method of Tiering Determination Used (7)		
Milissa Borde WI01-0468	7/1/2012	<input type="checkbox"/> School data <input type="checkbox"/> Census data <input type="checkbox"/> Income <input type="checkbox"/> Program participation		1	7/1/2011	<input type="checkbox"/> School data <input type="checkbox"/> Census data <input type="checkbox"/> Income <input type="checkbox"/> Program participation		
		<input type="checkbox"/> School data <input type="checkbox"/> Census data <input type="checkbox"/> Income <input type="checkbox"/> Program participation				<input type="checkbox"/> School data <input type="checkbox"/> Census data <input type="checkbox"/> Income <input type="checkbox"/> Program participation		

Return this information to Abt Associates using the provided Fed Ex envelope. If you have a question about how to provide this information, please send an e-mail to [CACFP@abtassoc.com](mailto:CACFP@abtassoc.com) or call us at toll-free at 1-800-517-5736.

## Tier II Family Day Care Homes

**Instructions:** The table below lists the FDCHs that you have classified as Tier II that we were unable to verify using Census or school data. Please complete the table for each Tier II FDCH listed, indicating the school attendance area and whether the FDCH's tier was determined or redetermined at any time from **September 2006 through June 2012**.

- If Tier II status was determined or redetermined – or if a Tier II FDCH applied for Tier I eligibility – during this period, please provide copies of **all** documents associated with **all** tiering determinations. Documents may include:
  - Requests from provider for tiering determination based on school or Census data
  - **If school data were used** – street boundary map, State list of schools indicating FRP percentage for school, letter from school official, printed copy of website information.
  - **If provider income or categorical eligibility was used** - copy of form used by provider to list household members and their income, or information about participation in Food Stamps/SNAP, TANF, or other program approved for Tier I determinations. Also include copies of documents used to verify income or categorical eligibility - for example, food stamp/SNAP certification letter, income tax form, or wage stubs.
  - If you can't provide documentation for an FDCH, please provide an explanation in Column 4.

Name of Provider (1)	Schools whose attendance area include the FDCH (2)	Was the FDCH's tier determined or redetermined from September 2006 through June 2012? (3)	If documents are not provided, explain. (4)
		<input type="checkbox"/> Yes – provide documents <input type="checkbox"/> Provider applied but no determination <input type="checkbox"/> No application or determination	
		<input type="checkbox"/> Yes – provide documents <input type="checkbox"/> Provider applied but no determination <input type="checkbox"/> No application or determination	
		<input type="checkbox"/> Yes – provide documents <input type="checkbox"/> Provider applied but no determination <input type="checkbox"/> No application or determination	
		<input type="checkbox"/> Yes – provide documents <input type="checkbox"/> Provider applied but no determination <input type="checkbox"/> No application or determination	