

Third Access, Participation, Eligibility, and Certification Study (APEC-III) Final Report

Volume 4: Appendices – Appendix A. Sampling Procedures

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Appendix A

Sampling Procedures

A.1 SFA Sample Frame Construction

The following sections describe the construction of the SFA sampling frame (i.e., universe list) used to select SFAs for APEC III. Section A.1.1 summarizes the data sources used to create the sampling frame. Section A.1.2 describe procedures used to update a small number of erroneous data elements in the FNS-742 file, and to assign (impute) an appropriate measure of size to CEP SFAs for which such data required for sampling was missing. Some descriptive statistics on the final sampling frame are given in Section A.1.3.

A.1.1 Data Sources

Two data files maintained by the FNS were provided to Westat for sample frame construction. These included (a) FY15 FNS-742 SFA File (version dated 2-22-2016) and (b) CEP SY15-16 National Elections Data-September 2015 (version dated 3-25-2016). The former contained a list of the over 19,000 SFAs participating in the NSLP/SBP. This file also contained SFA-level information such as type of control (public/private), the number of schools and students participating in NSLP/SBP, the number of students certified for free/reduced price meals, and the number of schools participating in CEP and the corresponding number of students in the CEP schools. The latter file contained information for the approximately 3,000 school districts that elected to participate in CEP as of September 2015, along with a list of the 18,000 schools participating in the CEP. Since the National Elections Data file was more current than the FNS-742 file, it was used to augment the CEP-status information in the FNS-742 file. As a result of combining information on CEP status from the two data sources, an additional 810 SFAs that had not been classified as such in the FNS-742 file were reclassified as CEP.

A.1.2 Sample Frame Updates

First, only those SFAs in the 48 contiguous states and the District of Columbia were kept in the FNS 742 frame to be consistent with the target population for APEC II. As summarized in Table A-1, various quality checks were then conducted on selected variables reported by the SFAs in the

frame. Once potential inconsistencies or possible errors were identified, we used the National Center for Education Statistics (NCES) 2013-14 Common Core of Data (CCD) Local Education Agency (LEA) data file maintained by NCES as the reference to determine whether there was an error in the FNS-742 frame data, and updates were made to the frame data if necessary. Details of the updates made to the FNS-742 data can be found in Attachment A1.

Table A-1. Quality checks on the FNS 742 frame

Quality checks	Solution
Unusually large number of students per school	CCD data were used to update total enrollment
Proportion of students certified for free lunch in a SFA >1	CCD data were used to update total enrollment, if the enrollment on CCD is greater than the enrollment on the frame
Proportion of CEP schools in a SFA > 1	Updates not needed since no issues identified
Unusually large number of students per school for CEP schools	Updates not needed since no issues identified
Proportion of CEP students in a SFA > 1	Total CEP students were set equal to the total enrollment
Duplicate SFA IDs within states	The duplicate New Mexico SFA IDs were updated using the new SFA IDs that New Mexico provided to FNS. For the other duplicate SFAs, unique IDs were created for them.

Next, we extracted the following data from the most recent National Elections Data file (dated March 25, 2016) and attached them to the SFA records in the FNS 742 frame:

- Number of schools in LEA
- Total enrollment in LEA
- Number of schools participating in CEP
- Total enrollment in CEP schools
- District-wide claiming percentages
- Number of schools participating as part of a group or district
- Number of students participating as part of a group or district
- Number of distinct school-level ISPs
- Number of identified students

When attaching the CEP-related data in the National Elections data file to the corresponding SFA records in the FNS-742 sampling frame, we first aggregated the school-level data in the National Elections data file to the LEA level and attached the aggregated data to the LEA records in the

National Elections data file. Since there were no unique SFA identifiers in the National Elections data file to link to the SFAs in the FNS-742 frame, we used the State and LEA name to match records between the two files. Details on the matching process can be found in Attachment A1.

For sampling purposes, an SFA was considered to be CEP if it satisfies either of the following two conditions: (a) it was coded as having at least one CEP school in the FNS-742 frame, or (b) it appeared in the National Elections data file as a CEP district and had a matching SFA record in the FNS-742 frame. The latter were considered to be “new” CEP SFAs since the data in the National Elections data file was more current. For the new CEP SFAs, the associated number of CEP schools was missing in the original FNS-742 SFA data record, and was estimated by allocating the total number of schools reported in the FNS frame to CEP and non-CEP subgroups using the proportion of schools in the district that are CEP derived from the CEP National Elections data file. The number of students in CEP schools was also estimated in a similar fashion for the “new” CEP SFAs.

Finally, SFAs that consist of only Residential Child Care Institutions (RCCIs) or non-CEP SFAs that did not have any students certified for free or reduced price meals were dropped from the FNS frame. There were 1,531 such SFAs, which accounts for about 8% of the total SFAs in the sampling frame.

A.1.3 Summary of Final Frame

After making the exclusions and updates described above, 17,854 SFAs were included in the final sampling frame. Table A-2 summarizes the numbers of SFAs, schools, and students in the final SFA sampling frame. As shown in the table, 2,973 SFAs have at least one CEP school. Although the CEP SFAs account for only about 17 percent of all SFAs in the frame, they accounted for a much greater share of total enrollment (32%) and students certified for free/reduced price lunch (43%). Among the 93,990 schools associated with the SFAs in the frame, 17,400 (19%) elected CEP. Among the 50 million students enrolled in schools, 8 million (16%) are enrolled in CEP schools. Among the 27 million students certified for free or reduced-price meals, 12 million (43%) are in CEP SFAs.

Table A-2. Distribution of SFAs and associated numbers of schools and students in the final SFA frame

Percent CEP schools	No. of SFAs	No. of schools	No. of enrollment	No. of CEP schools	No. of enrollment in CEP schools	No. of students certified for free or reduced-price meals
0%	14,881	64,831	34,041,752	0	0	15,489,495
(0-25%)	234	6,197	3,981,780	621	256,083	2,346,246
[25%-50%)	218	6,860	4,372,842	2,447	1,155,850	2,393,215
[50%-75%)	271	3,887	2,148,630	2,388	1,121,507	1,601,184
[75%-100%)	116	2,031	1,073,217	1,760	887,618	881,214
100%	2,134	10,184	4,809,537	10,184	4,800,524	4,428,056
Total	17,854	93,990	50,427,758	17,400	8,221,582	27,139,410

A.2 Selection of the non-CEP SFAs

The first step in the selection process was to identify the “certainty” SFAs. Next, a sufficiently large sample of the remaining noncertainty SFAs was selected to allow for both a primary sample that would be sufficient to accommodate an expected 80 percent response rate, and a possible reserve sample if response rates turned out to be lower. However, due a high response rate, the reserve sample was not necessary. The steps in sample selection are presented below. Attachment A2 includes the complete list of sampled SFAs.

A.2.1 Certainty Non-CEP SFAs

The certainty SFAs refer to those SFAs that are so large in terms of the number of students certified for free/reduced price meals that they should be included in the sample with certainty (i.e., not subject to random sampling). Such SFAs are therefore “self-representing.” For the purpose of identifying the certainty SFAs, all non-CEP SFAs that otherwise would have a probability of selection of 0.75 or greater under PPS (probability-proportionate-to-size) sampling were included in the sample with certainty. With a target sample size of 155 (responding) non-CEP SFAs, this criterion corresponds to a certainty cutoff for SFAs of

$$C_{cert}^{nonCEP} = 0.75 M^{nonCEP} / 155,$$

where M^{nonCEP} = the total number of students certified for free/reduced price meals across all non-CEP SFAs. Applying this criterion to the SFAs in the non-CEP sampling frame, the six largest non-CEP SFAs listed in Attachment A2 were included in the sample with certainty.

A.2.2 Noncertainty Non-CEP SFAs

Let $m_{NC}^{nonCEP} = (155 - 6)/0.80 = 186.25$ denote the expected number of *noncertainty* SFAs to be selected to achieve the desired total of 155 responding SFAs. The factor of 0.80 in the computation of m_{NC}^{nonCEP} compensates for an assumed 80% response rate among the noncertainty SFAs. Because of their relative importance in the sample, a 100 percent response rate is assumed for the 6 certainty SFAs. To allow for a possible reserve sample, we specified twice the required number of SFAs to sample initially, i.e., $2 m_{NC}^{nonCEP}$.

To select the $2 m_{NC}^{nonCEP}$ noncertainty SFAs, we sorted the frame of non-CEP SFAs by (a) the seven FNS Regions, (b) type of control (public/private) within region, (c) three broad enrollment size classes (<1,000, 1,000 to 9,999 and 10,000+) within type of control, and (d) by the sampling MOS (number of students certified for free/reduced price meals) alternating from high-to-low and then low-to-high from cell to cell. The SFAs were selected systematically and with probabilities proportionate to the MOS from the sorted file.

Of the $2 m_{NC}^{nonCEP}$ noncertainty SFAs, a random systematic half sample was designated as the “primary” sample, and the remaining half sample was designated as a “reserve” sample. The reserve sample will be set aside for later use if it appears that the primary sample will not yield the desired number of responding SFAs. Because they are self-representing, there will be no reserve samples for the certainty SFAs. Table A-3 summarizes the distribution of the non-CEP SFA sample by FNS region and sample-status.

Table A-3. Distribution of non-CEP sample by FNS region

FNS Region	No. certainty SFAs	No. of non-certainty SFAs in frame	No. of students certified for F/R price meals in non-cert. SFAs	No. of non-cert. SFAs in initial (total) sample	No. of non-cert. SFAs in primary sample
1 NERO	0	1,789	1,005,312	26	13
2 MARO	0	1,539	1,427,076	35	18
3 SERO	5	781	2,082,573	53	27
4 MWRO	0	4,129	2,306,937	59	29
5 SWRO	0	1,962	2,698,923	68	34
6 MPRO	0	2,676	1,410,287	35	17
7 WRO	1	1,999	3,784,434	96	48
Total	6	14,875	14,715,542	372	186

A.3 Selection of the CEP SFAs

The approach to selecting the CEP SFAs was generally similar to that described previously for the non-CEP SFAs, but with the added complication that both CEP and non-CEP schools will be sampled from the selected SFAs.

A.3.1 Certainty CEP SFAs

The first step was to construct an appropriate composite sampling measure of size for each CEP SFA in the sampling frame. This measure of size is a weighted combination of (a) the number of students certified for free/reduced price meals in the non-CEP schools in the SFA and (b) the identified students multiplied by 1.6, or total enrollment of the schools if the former is greater than the total enrollment in the CEP schools in the SFA. For the 2,973 CEP SFAs in the sampling frame, the composite sampling measure of size, CEPMOS, was computed as:

$$\text{CEPMOS} = f^{CEP} * M_1 + f^{nonCEP} * M_2$$

where f^{CEP} and f^{nonCEP} are composite weighting factors that are proportional to the overall rates at which students in the CEP schools and non-CEP schools, respectively, will be sampled from the CEP SFAs. Since the goal is to sample a total of 4,488 (responding) students from the CEP schools and 935 (responding) students certified for free/reduced price meals from the non-CEP schools, we computed the required weighting factors as: $f^{CEP} = 4,488 / N^{CEP}$ and $f^{nonCEP} = 935 / N^{nonCEP}$, where N^{CEP} and N^{nonCEP} are estimates of the number of students in CEP schools and students certified for free/reduced price meals in non-CEP schools, respectively¹.

Next, the certainty cutoff for the CEP SFAs was computed as:

$$C_{cert}^{CEP} = 0.75 M^{CEP} / 120,$$

where M^{CEP} = the sum of CEPMOS of all CEP SFAs in the frame.

¹ The values of the factors used to compute the composite measure of size were $f^{CEP} = .000566612$ and $f^{nonCEP} = .000329577$, respectively. For a discussion of the use of this type composite measure of size for sampling purposes, see Folsom, R., Potter, F., Williams, S., (1987), *Notes on a composite size measure for selfweighting samples in multiple domains*. Proceedings of the Survey Methods Research Section, American Statistical Association, 792-796.

Using the cutoff computed above, a total of 17 certainty CEP SFAs were initially identified. In addition, 6 large CEP SFAs with a MOS close to the certainty cutoff were also included with certainty. The 23 certainties are listed in Attachment A2.

A.3.2 Noncertainty CEP SFAs

Let $m_{NC}^{CEP} = (120 - 23)/0.80 = 121$ denote the expected number of *noncertainty* SFAs to be sampled to achieve the desired total of 120 responding SFAs. The factor of 0.80 in the computation of m_{NC}^{CEP} compensates for an assumed 80% response rate among the noncertainty SFAs. Because of their relative importance in the sample, a 100 percent response rate is assumed for the 23 certainty SFAs. To allow for a possible reserve sample, we specified twice the required number of noncertainty SFAs to sample initially, i.e., $2m_{NC}^{CEP}$.

To select the $2m_{NC}^{CEP}$ noncertainty SFAs, we sorted the frame of CEP SFAs by (a) the seven FNS Regions, (b) three broad enrollment size classes (<1,000, 1,000 to 9,999 and 10,000+) within region, and (c) by CEP MOS alternating from high-to-low and then low-to-high from cell to cell. The SFAs were selected systematically and with probabilities proportionate to CEP MOS from the sorted file.

Of the $2m_{NC}^{CEP}$ noncertainty SFAs, a random systematic half sample was designated as the “primary” sample, and the remaining half sample was designated as a “reserve” sample. The reserve sample will be set aside for later use if it appears that the primary sample will not yield the desired number of responding SFAs. Because they are self-representing, there will be no reserve samples for the certainty SFAs. Table A-4 summarizes the distribution of the CEP SFA sample by FNS region and sample-status.

Table A-4. Distribution of CEP sample by FNS region

FNS Region	No. certainty SFAs	No. of non-cert. SFAs in frame	Total enrollment in non-cert. SFAs	No. of students certified for F/R price meals in non-cert. SFAs	No. of non-cert. SFAs in initial (total) sample	No. of non-cert. SFAs in primary sample
1 NERO	2	282	741,135	652,753	21	10
2 MARO	2	318	1,460,261	998,794	28	14
3 SERO	9	630	3,637,513	2,705,820	78	39
4 MWRO	3	848	1,675,550	1,344,265	41	21
5 SWRO	4	402	1,997,979	1,473,739	40	21
6 MPRO	0	232	696,324	466,258	13	6
7 WRO	3	238	1,291,196	840,222	21	10
Total	23	2,950	11,499,958	8,481,852	242	121

A.4 School Sample Selection

The school sample was selected in the following steps. First, the sample size goals (targets) were revised to reflect changes in the CEP status of SFAs and the higher than anticipated SFA response rates. Next, the samples were allocated to SFAs in a manner designed to select either one or three schools per non-certainty SFA as per the study design (discussed briefly below). The required numbers of schools were then selected with probabilities proportionate to measure of size within the SFA. To select the CEP school sample, an additional stage of sampling was implemented in some SFAs to maximize the number of schools to be selected from the same CEP group whenever possible.

As described in the APEC III Final Study Design, the school sample selection incorporates a requirement to sample one or three schools from each SFA. While the APEC III sampling plan preserves the APEC II sample design, it includes an increase in the number of SFAs sampled to facilitate a thorough exploration of the relationship between SFAs implementation strategies and error rates. These additional analyses are an enhancement for APEC III. To capture the relationship between SFA policies and error rates sampled at least one school per additional SFA. Sampling more than one school for the additional SFAs was unnecessary as the sample of schools already met precision objectives

A.4.1 Allocation of School Sample to SFAs

In general, the approximately optimum allocation of the school sample to the 302 SFAs retained for school sampling depended on the number of eligible schools in the SFA, the measure of size of the eligible schools in the SFA, and the probability of selecting the SFA in which the schools are located. Specifically, for each of the categories of schools defined by (a) SFA type (non-CEP vs. CEP) and (b) school type (non-CEP vs. CEP) within SFA, let

m = the number of sample SFAs in a given category;

P_h^{SFA} = the probability of selecting SFA h ;

N_h = the total number of eligible schools reported by SFA h during recruitment;

M_{hi} = the measure of size (MOS) of school i in SFA h based on information collected during SFA recruitment;

$M_h = \sum_{i=1}^{N_h} M_{hi}$ = the total MOS of all N_h schools in SFA h ;

$\hat{M} = \sum_{h=1}^m M_h / P_h^{SFA}$ = the estimated total MOS based on the m sample SFAs;

n_s = the number of schools of a particular type (i.e., either non-CEP school or CEP school) to be sampled from the m sampled SFAs.

Note that the n_s 's correspond to the sample sizes given in Table A-5. Because we wanted to select the schools with overall probabilities proportionate to size (PPS), where the size measure for school i in SFA h is defined by M_{hi} , the optimum allocation of the n_s schools to SFA h was given by

$$n_h = n_s (M_h / P_h^{SFA}) / (\sum_{h=1}^m M_h / P_h^{SFA}) = n_s (M_h / P_h^{SFA}) / \hat{M}, \quad (\text{Equation 1})$$

and the corresponding within-SFA selection probability of selecting school i in SFA h was

$$P_{hi}^{within} = n_h (M_{hi} / M_h) = (1 / P_h^{SFA}) (n_s M_{hi} / \hat{M}). \quad (\text{Equation 2})$$

The within-SFA sampling rates given by equation (2) were approximately optimal because the resulting overall probability of selecting school i in SFA h was

$$P_{hi}^{overall} = P_h^{SFA} P_{hi}^{within} = n_s M_{hi} / \hat{M}, \quad (\text{Equation 3})$$

which is the desired probability of selection under a PPS sample design. The number of schools selected varied from PSU to PSU but were average to be around n_s/m .

However, the study design specified the selection of either one or three schools from an SFA whenever possible. This applied only to the non-certainty SFAs. Because of the relative importance of the certainty SFAs, there were no restrictions on the number of schools selected from them. Thus, where feasible, the non-certainty SFAs were randomly assigned to one of two groups, A or B. If assigned to A, three schools were selected. If assigned to B, one school was selected. Note that if an SFA contained two or fewer eligible schools, then only one school was sampled.

While this method of sample allocation is unbiased, it did increase sampling variances and thus reduced statistical precision. The reason for the reduced precision is that there was an increased clustering effect due to the selection of three schools per SFA in a proportion of the SFAs. The reduction in precision depended on the magnitude of the intraclass correlation between schools within SFAs of the characteristics being measured in the survey (e.g., error rates or improper dollar amounts). To illustrate, consider the simple case where the overall goal is to sample two schools per

SFA. Let $\bar{y}$ denote an estimated mean based on the sample of $n = m \bar{n} = 2m$ schools, where m = the number of sample SFAs and $\bar{n} = 2$ schools per SFA. Then the variance of $\bar{y}$ is approximately $V_1(\bar{y}) = \sigma^2[1 + (\bar{n} - 1)\rho] / m \bar{n} = \sigma^2[1 + \rho] / 2m$, where σ^2 is the population variance of the y -characteristic and ρ is the intraclass correlation between schools within SFAs. However, under the proposed sample design, the goal was to select either 1 or 3 schools per SFA. Suppose, for the sake of simplicity, that in one-half of the sampled SFAs we select exactly 1 school per SFA, while in the remaining half we select exactly 3 schools per SFA. Let A denote the set of SFAs where three schools per SFA are selected, and let B denote the set where one school is selected. Let $\bar{y}_A$ denote the estimated mean based on the $3m/2$ schools in the SFAs in A, and let $\bar{y}_B$ denote the estimated mean based on the $m/2$ schools in the SFAs in B.

The overall estimate obtained by combining the results of A and B is the average of the two sample estimates, i.e., $\bar{y}_{AB} = (\bar{y}_A + \bar{y}_B)/2$, and the variance of the combined estimate is given approximately by $V_2(\bar{y}_{AB}) = \sigma^2[1 + (1+2\rho)/3] / 2m$. The ratio $V_1(\bar{y}) / V_2(\bar{y}_{AB}) = 3(1+\rho)/(4+2\rho)$ is always less than 1 and provides a measure of how much smaller the variance of $\bar{y}$ is (under the traditional two-stage sampling approach) compared with the variance of $\bar{y}_{AB}$ from the proposed “three-or-one” sampling scheme. If $\rho = 0$, $V_1(\bar{y}) = 0.75 V_2(\bar{y}_{AB})$ (i.e., in this case, the variance based on the proposed sampling scheme is about 33% greater than that from the traditional approach). If $\rho = 0.20$, $V_1(\bar{y}) = 0.82 V_2(\bar{y}_{AB})$. The two methods have equal variance when $\rho = 1$. Despite the potentially larger sampling variances, the sampling method is unbiased and will yield statistically valid estimates from the survey.

A.4.2 Clustering the Sample of CEP Schools by CEP Group

The way in which the identified student percentages (ISPs) are determined for the CEP schools varied from SFA to SFA. In some SFAs, the ISP was determined on a school-by-school basis. In others, the ISP is determined on a districtwide basis. Yet in other SFAs, the ISP was determined for specific groups (i.e., collections of schools) within the SFA such that all schools within a group receive the same ISP. Because the determination of error rates depends on how the schools are grouped, it was desirable to cluster the *sampled schools* by the ISP groups within the SFA. This was accomplished by identifying the various groups of schools within the SFA, and then randomly

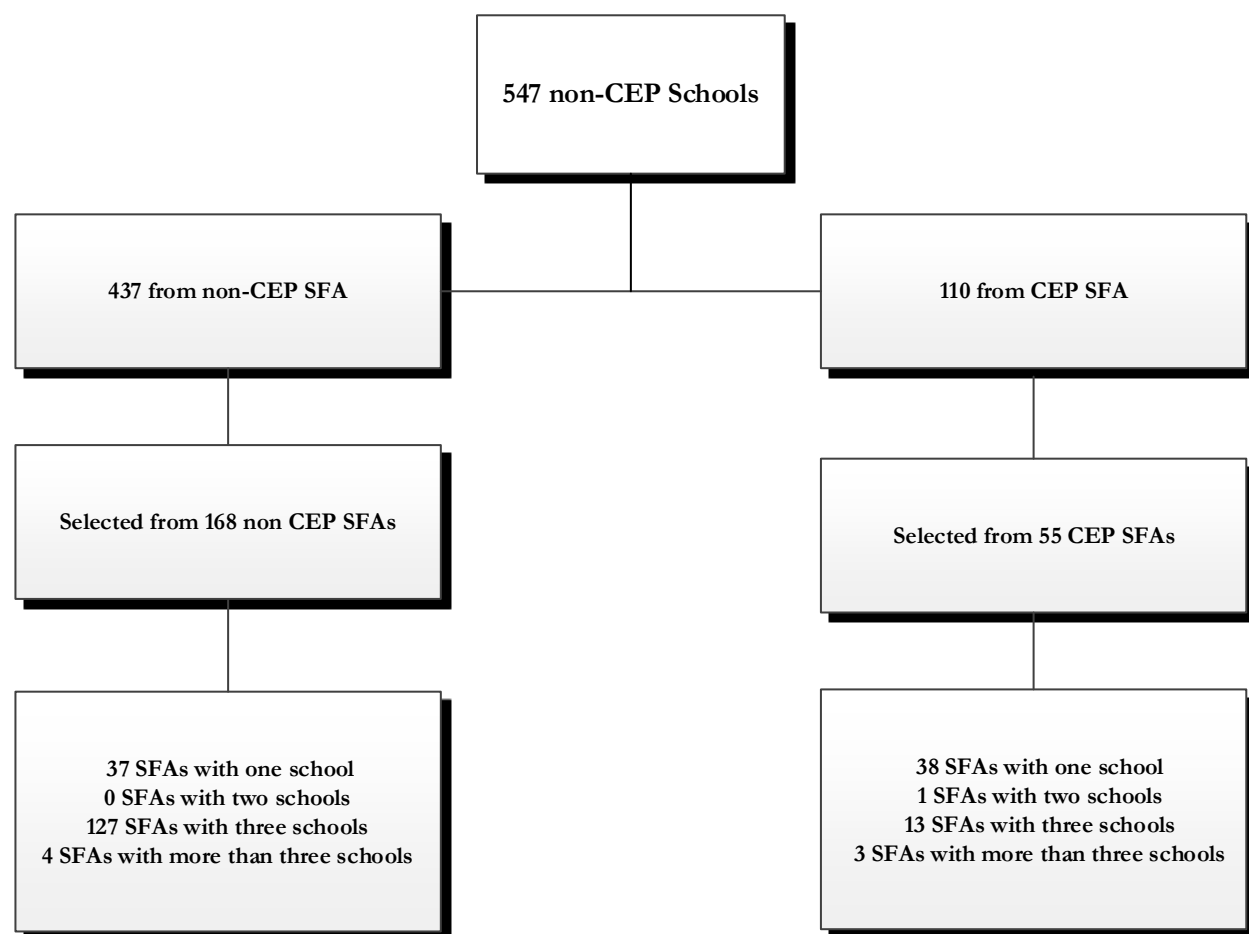
selecting one group with probability proportionate to size (where the size of the cluster is the sum of the size measures of the CEP schools in the cluster). Within the selected group (cluster), up to three CEP schools were sampled. In other words, an additional stage of sampling was introduced in some SFAs where the CEP schools are grouped for ISP determination.

This approach helped ensure that multiple sampled schools are from the same ISP group to the extent feasible, but did not guarantee it because all schools in the SFA must be given appropriate chances of selection to avoid potential sampling biases. Note that the clustering did not apply to SFAs in which each CEP school is its own group, nor those SFAs in which all CEP schools belong to the same group.

A.4.3 Selection of the Non-CEP School Sample

A total of 547 non-CEP schools were selected for the study, including 437 in non-CEP SFAs and 110 in CEP SFAs. The samples were selected following the general guidelines outlined in Section 3.2. Additional details are provided below, separately for the non-CEP and CEP SFAs. Figure A-1 provides a summary of the non-CEP schools sample.

Figure A-1. Summary of non-CEP school sample



A.4.4 Non-CEP Schools in Non-CEP SFAs

A total of 437 non-CEP schools in non-CEP SFAs was selected for the study sample. Of these, 23 were in certainty SFAs, and 414 were in non-certainty SFAs. The 23 schools in the six certainty SFAs were selected as follows: First, all of the eligible schools in the certainty SFAs were sorted by SFA, three school levels (elementary, middle, secondary/combined)² within SFA, and measure of size (MOS) within school level. From the sorted list, a systematic sample of 23 schools was selected

² School level was as an implicit rather than an explicit stratifier to help ensure that schools of the three grade levels were appropriately represented in across the entire sample of SFAs.

with probabilities proportionate to the MOS using standard algorithms (e.g., see Kish,³ 1965, page 230). The number of schools sampled per certainty SFA varied from 3 to 7.

Ordinarily, the sample of schools in the non-certainty SFAs would be selected with the optimal probabilities given by equation (2) (see Section A.4.1). However, because of the requirement to restrict the number of sample schools to either 1 or 3 schools per SFA to the extent feasible, the optimal probabilities of selection had to be modified to meet these conditions. The modifications were made in a manner designed to minimize the adverse impact on design effects. Thus, the 414 schools in the non-certainty SFAs were selected using the procedures outlined below. The set number given below is simply a label to group SFAs that meet the criteria for that set.

- Set 11: If the non-CEP SFA contained two or fewer non-CEP schools, or the *expected* sample size for the non-CEP SFA was less than 1.5 non-CEP schools and there were no CEP schools in the SFA, exactly one non-CEP school was sampled.
- Set 12: If the non-CEP SFA contained both CEP and non-CEP schools, and the expected number of non-CEP schools to be sampled was less than 1.5, then exactly one non-CEP school was sampled. In addition, up to three CEP schools were sampled and set aside for further processing as described in Section 3.5.
- Set 21: If the non-CEP SFA contained three or more non-CEP schools and no CEP schools, and the expected number of non-CEP schools to be sampled was between 1.5 and 2.5, the SFA was randomly assigned with appropriate probabilities to one of two sampling groups, A or B. If assigned to B, exactly one school was sampled. If assigned to group A, three schools were sampled.
- Set 22: If the non-CEP SFA contained both CEP and non-CEP schools, and the expected number of CEP schools to be sampled was 1 or 2, while the expected number of non-CEP schools to be sampled was more than 1.5, then (a) 1 or 2 CEP schools were sampled according to the expected number to be sampled; and (b) the SFA was randomly assigned to sampling group A or B, and if assigned to B, one non-CEP school was sampled, but if assigned to A, three non-CEP schools were sampled.
- Set 32: If the non-CEP SFA contained only non-CEP schools and the expected number of non-CEP schools to be sampled was greater than 2.5, the SFA was randomly assigned with appropriate probabilities to one of two sampling groups, A or B. If assigned to B, exactly one school was sampled. If assigned to group A, three schools were sampled.

³ Kish, L. (1965). *Survey Sampling*. John Wiley & Sons: New York.

The distribution of the sample of non-CEP schools in the non-CEP SFAs is summarized in Table A-5. Attachment A4 includes the list of sampled schools.

A.4.5 Non-CEP Schools in CEP SFAs

A total of 110 non-CEP schools in CEP SFAs were selected for the study sample. Of these, 41 were in certainty CEP SFAs, and 69 were in non-certainty CEP SFAs. The 41 schools in the 23 certainty CEP SFAs were selected. First, all of the eligible schools in the certainty SFAs were sorted by SFA, three school levels (elementary, middle, and secondary/combined) within SFA, and MOS within school level. Next, from the sorted list, a systematic sample of 41 schools was selected with probabilities proportionate to the MOS using standard algorithms (e.g., see Kish, 1965, page 230). The number of non-CEP schools selected per certainty SFA varied from 0 to 19.

Similar to the selection of schools in the non-CEP SFAs, the sample of schools in the non-certainty CEP SFAs ordinarily would be selected with the optimal probabilities given by equation (2) (see Section A.4.1). However, because of the requirement to restrict the number of sampled schools to either 1 or 3 CEP schools per SFA to the extent feasible, the optimal probabilities of selection were adjusted to meet these conditions in a manner designed to minimize the adverse impact on design effects. Thus, the 69 non-CEP schools in the non-certainty CEP SFAs were selected using the procedures outlined below. Again, the set number given below is simply a label to group SFAs that meet the criteria for that set.

- Set 11: If there were fewer than three CEP schools and no non-CEP schools in the SFA, then exactly one CEP school was selected from the SFA.
- Set 12: If there were fewer than three CEP schools and fewer than three non-CEP schools in the SFA, then one CEP school and one non-CEP school was selected from the SFA.
- Set 13: If there were fewer than three CEP schools in the SFA and the expected number of non-CEP schools to be sampled in the SFA was between 1.5 and 2.5, then one CEP school and one or three non-CEP schools were selected from the SFA depending on the expected sample size.
- Set 14: If there were fewer than three CEP schools in the SFA and the expected number of non-CEP schools to be sample was greater than 2.5, then one CEP school and three non-CEP schools were selected from the SFA.

- Set 21: If there were only CEP schools in the SFA and the expected number of CEP schools to be sampled in the SFA was between 1.5 and 2.5, then the SFA was randomly assigned with appropriate probabilities to one of two sampling groups, A or B. If assigned to B, exactly one CEP school was sampled from the SFA. If assigned to group A, three CEP schools were sampled from the SFA.
- Set 22: If the SFA contained both CEP and non-CEP schools, and the expected number of CEP schools to sample was less than 1.0 but the expected number of non-CEP schools to sample was 2.0 or greater, then one CEP school was selected with probability equal to the expected number of CEP schools, and three non-CEP schools were selected from the SFA.
- Set 23.1: If the SFA contained both CEP and non-CEP schools, and the expected number of CEP schools to sample was between 1.5 and 2.5, but the expected number of non-CEP schools to sample was less than 0.4, then (a) the SFA was randomly assigned with appropriate probabilities to one of two sampling groups, A or B, and if assigned to B, exactly one CEP school was sampled from the SFA, or if assigned to group A, three CEP schools were sampled from the SFA; and (b) one non-CEP school was selected from the SFA with probability 0.10 or 0.50, depending on the expected number of schools to be sampled.
- Set 23.2: If the SFA contained both CEP and non-CEP schools, and the expected number of CEP schools to sample was greater than 1.5 and the expected number of non-CEP schools to sample was less than 2.2, then the SFA was randomly assigned with appropriate probabilities to one of two sampling groups, A or B, and if assigned to B, exactly one CEP school and one non-CEP school were sampled from the SFA, or if assigned to group A, three CEP schools and one non-CEP schools were sampled from the SFA.
- Set 24: If the SFA contained both CEP and non-CEP schools, and the expected number of CEP schools to sample was less than 1.5 and the expected number of non-CEP schools to sample was less than 2.2, then one CEP school and one non-CEP school were selected from the SFA.

The distribution of the sample of non-CEP schools in the CEP SFAs is summarized in Table A-5. Attachment A4 includes the list of sampled schools.

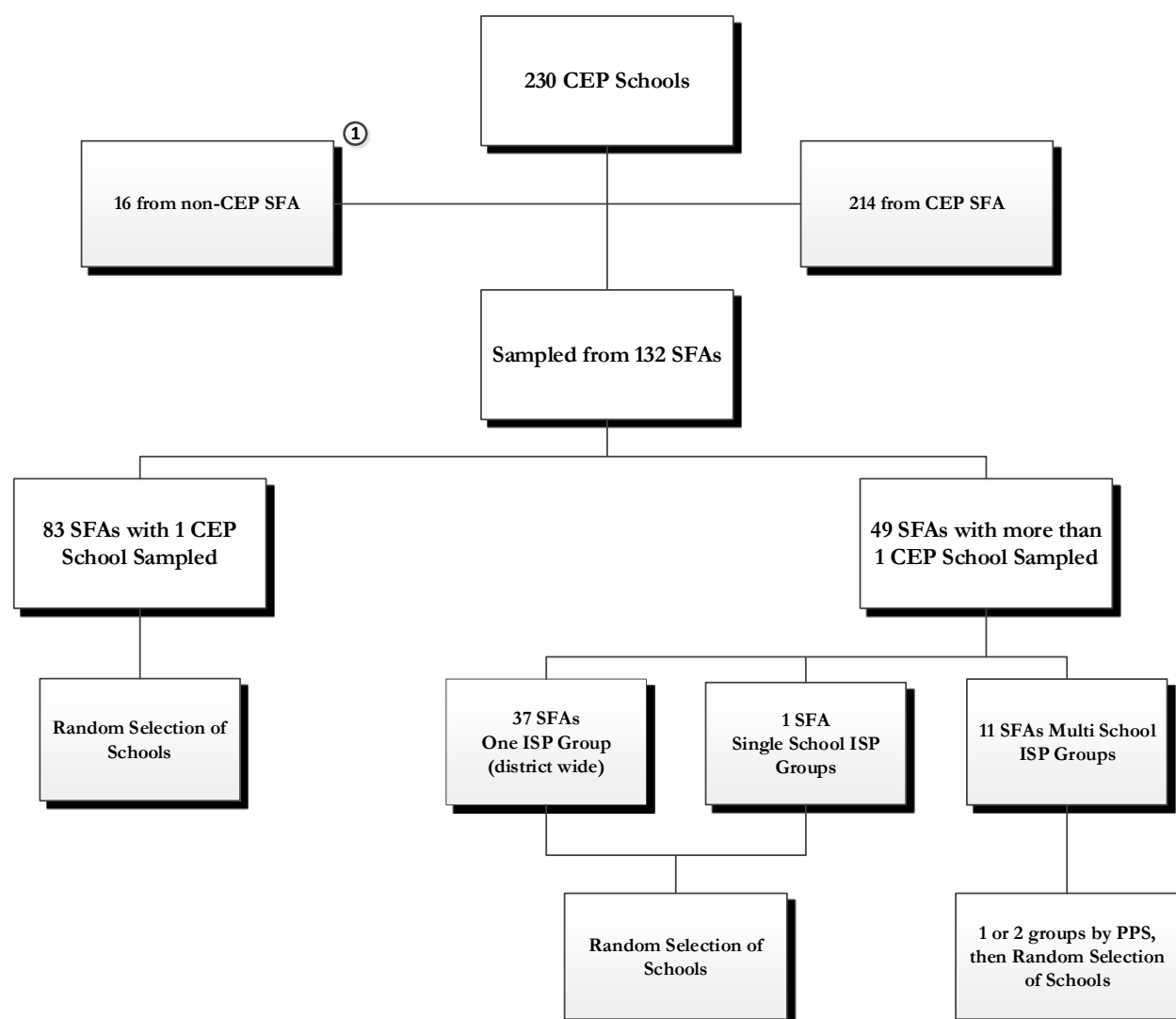
A.4.6 Selection of the CEP School Sample

As noted in Table A-5 a total of 230 CEP schools were selected for the study, including 16 in non-CEP SFAs and 214 in CEP SFAs. Unlike the non-CEP school sample, the way in which CEP schools were selected depended on whether one or two or more schools were to be selected from the SFA. If a single school was to be selected from the SFA, the school was selected randomly from the eligible schools in the SFA. If two or more schools were to be selected from the SFA, then an

additional stage of selection was introduced for some SFAs. In this case, an ISP group (i.e., a “sample cluster”) was selected in the first stage with probability proportionate to size, and then schools within the selected clusters were randomly selected in the second stage.

Some ISP groups contained fewer schools than the target sample size, and those groups were combined into clusters so that each cluster contained at least the target number of schools. When those clusters are selected, the sample schools within them may come from different ISP groups. There are a few exceptions where the combining of small ISP groups was not conducted and schools were selected in a single stage without the initial selection of clusters: (1) SFAs in which each school uniquely represented an ISP group; (2) SFAs in which the vast majority of ISP groups contained a single school, but a few groups had three or more schools; (3) SFAs in which most schools were in one group, but there were several smaller groups with fewer CEP schools than the target number; or (4) SFAs in which all schools belonged to only one ISP group. For the first three scenarios, the sampled schools may come from different ISP groups, although the chances for this to happen in the third scenario are very small. Additional details about the selection of the CEP schools are described in Sections A.4.7 and A.4.8. Figure A-2 provides a summary of the CEP schools sample.

Figure A-2. Summary of CEP school sample



A.4.7 CEP Schools in Non-CEP SFAs

As indicated previously, there were a small number of non-CEP SFAs containing both CEP and non-CEP schools. In these SFAs, one to three CEP schools were sampled. First, all of the CEP schools in the non-CEP SFAs were sorted by SFA, three school levels (elementary, middle, secondary/combined) within SFA, and MOS within school level. Next, from the sorted list, a target number of schools were selected with probabilities proportionate to the MOS. It was not necessary to select an ISP group first, since all schools belonged to only one ISP group in the SFAs where more than one CEP schools were to be selected. The distribution of the sample of CEP schools in

the non-CEP SFAs is summarized in Table A-5. Attachment A4 includes the list of sampled schools.

A.4.8 CEP Schools in CEP SFAs

Selecting CEP Schools in Certainty CEP SFAs

A total of 214 CEP schools in the CEP SFAs was selected for the study sample. Of these, 58 were in certainty CEP SFAs, and 156 were in non-certainty CEP SFAs. The 58 schools in the 23 certainty CEP SFAs were selected as described below.

First, we determined the number of CEP schools to be selected from each SFA by allocating the 58 sample schools in proportion to the measure of size of the SFA. For those SFAs with an allocation of one sample school, exactly one school was selected randomly from the eligible schools in the SFA.

For those SFAs with an allocation of two or more schools, we identified three types of SFAs as follows:

- Type 1: SFAs with only one ISP group across the entire SFA;
- Type 2: SFAs in which all ISP groups consisted of only one school; and
- Type 3: SFAs with multiple ISP groups, most of which contained 2 or more schools.

From the Type 1 and 2 SFAs, the specified number of CEP schools were selected randomly and systematically from a list of the eligible schools in the SFA that been ordered by grade level (elementary, middle, secondary/combined). From the Type 3 SFAs, one or two ISP groups (i.e., clusters) were initially selected with probability proportionate to size, and the specified number of schools were randomly selected from the selected clusters. In general, the aim was to sample no more than three CEP schools per cluster. However, there was one SFA (City of Chicago) where all of the CEP schools were in the same ISP group and the target sample size was 9 CEP schools. Therefore, 9 CEP schools were selected from the same ISP group for that SFA. The number of CEP schools selected per certainty SFA varied from 0 to 9. Because the schools were selected across the entire set of certainty SFAs using a single random starting point, it was possible by chance to skip over (i.e., not select) the schools in some SFAs.

Selecting CEP Schools in Non-Certainty CEP SFAs

Similar to the selection of schools in the non-CEP SFAs, the sample of CEP schools in the non-certainty CEP SFAs ordinarily would be selected with the optimal probabilities given by equation (2) in Section A.4.1. However, because of the requirement to restrict the number of sampled schools to either 1 or 3 CEP schools per SFA to the extent feasible, the optimal probabilities of selection were adjusted to meet these conditions in a manner designed to minimize the adverse impact on design effects. Thus, the 156 CEP schools in the non-certainty CEP SFAs were selected using the procedures outlined below. Again, the set number given below is simply a label to group SFAs that meet the criteria for that set.

- Set 11: If there were fewer than three CEP schools and no non-CEP schools in the SFA, then one CEP school was selected from the SFA.
- Set 12: If there were fewer than three CEP schools and fewer than three non-CEP schools in the SFA, then one CEP school was selected from the SFA.
- Set 13: If there were fewer than three CEP schools in the SFA and the expected number of non-CEP schools to be sampled in the SFA was between 1.5 and 2.5, then one CEP school was selected from the SFA.
- Set 14: If there were fewer than three CEP schools in the SFA and the expected number of non-CEP schools to be sampled was greater than 2.5, then one CEP school was selected from the SFA.
- Set 21: If there were only CEP schools in the SFA and the expected number of CEP schools to be sampled in the SFA was between 1.5 and 2.5, then the SFA was randomly assigned with appropriate probabilities to one of two sampling groups, A or B. If assigned to group B, exactly one CEP school would be sampled from the SFA. If assigned to group A, three CEP schools would be sampled from the SFA according to whether the SFA was Type 1, 2, or 3 as indicated above.
- Set 22: If the SFA contained both CEP and non-CEP schools, and the expected number of CEP schools to sample was less than 1.0 but the expected number of non-CEP schools to sample was 2.0 or greater, then one CEP school was selected from the SFA with probability equal to the expected number of CEP schools.
- Set 23: If the SFA contained both CEP and non-CEP schools, and the expected number of CEP schools to sample was between 1.5 and 2.5, the SFA was randomly assigned with appropriate probabilities to one of two sampling groups, A or B. If assigned to group B, one CEP school would be sampled from the SFA. If assigned to group A, three CEP schools would be sampled from the SFA according to whether the SFA was Type 1, 2, or 3 as indicated above.

- Set 24: If the SFA contained both CEP and non-CEP schools, and the expected number of CEP schools to sample was less than 1.5 and the expected number of non-CEP schools to sample was less than 2.2, then one CEP school and one non-CEP school were selected from the SFA.

The distribution of the sample of CEP schools in the CEP SFAs is summarized in Table A-5.

Attachment A4 includes the list of sampled schools.

Table A-5. Distribution of the school sample by type of SFA, FNS region, and SFA certainty status

FNS region / SFA certainty status	Non-CEP SFAs			CEP SFAs			ALL SFAs		
	Non-CEP schools	CEP schools	Total	Non-CEP schools	CEP schools	Total	Non-CEP schools	CEP schools	Total
FNS region:									
1. Northeast	27	1	28	21	22	43	48	23	71
2. Mid Atlantic	35	1	36	10	25	35	45	26	71
3. Southeast	84	2	86	26	72	98	110	74	184
4. Midwest	63	0	63	4	34	38	67	34	101
5. Southwest	80	7	87	19	35	54	99	42	141
6. Mountain Plains	45	0	45	6	9	15	51	9	60
7. Western	103	5	108	24	17	41	127	6	133
SFA certainty status:									
Certainty	23	1	24	41	58	99	64	59	123
Non-certainty	414	15	429	69	156	225	483	171	654
Total	437	16	453	110	214	324	547	230	777

A.5 Application / Household Sample Selection

In the third stage, we sampled an average of 11 households from non-CEP schools and 24 households from CEP schools. In non-CEP schools, we sampled from the students who applied for free or reduced price meals, or were directly certified. In CEP, we sampled from ‘identified students’ who were directly certified for free meals. These households were sampled from 777 (499 CEP and 278 non-CEP) selected schools, resulting in 12,321 sampled households for application abstraction and the household survey. Of the 12,321 sampled students, 92 were found to be ineligible for APEC-III, leaving a total of 12,229 eligible sample students.

Students from Non-CEP Schools

The list of students were obtained directly from SFAs. SFAs submitted a data file of students who applied for free or reduced price meals, and students directly certified for free meals for the 2017-

2017 SY. Students with no application and not directly certified (i.e., paid with no application) were not eligible for sampling. The sample frame include students in one of the following categories:

1. Free with application
2. Free, directly certified
3. Reduce priced, with application
4. Paid with application (i.e., denied)
5. Paid, without application {NOT ELIGIBLE SAMPLING}

Lists of study eligible students was created for each participating school including a flag distinguishing between those certified for free or reduced-price meals and those whose application was denied. Prior to sample selection, we sorted the students by this certification status flag to ensure proportional representation within schools. An equal probability sample of students was selected from each non-CEP school at rates designed to achieve (to the extent feasible) an overall self-weighting sample of students among all non-CEP schools. Statisticians created a selection probability by school to monitor the sampling weights.

Also prior to sample selection, we sorted students by family to minimize the number of students selected from any one household. However, if more than one student was sampled from a single household, both were kept in the sample. In these cases, the student-level questions, such as participation in SBP and NSLP and perceptions of meal program quality, were collected for each sampled student. The household level questions, such as income applied to both students.

After receiving the data files, we conducted a multi-step review of the data file, which included comparison of measure of size, checking for siblings, and other general data file quality issues. In many cases, follow up with the SFA was necessary. Next, the sampling algorithm was applied to each school's list. The sampled list of students was loaded into the study management system for household survey recruitment and application abstraction.

In an effort to ensure the sample represented all the applications for the school year household sampling and survey twice during the school year (September/October 2017 and February/March 2018). To capture only new applicants and avoid double or triple counting, we eliminated students in the first wave of data collection from subsequent sample lists obtained.

During the first wave, student eligible for sampling included those who submitted an application or were directly certified in July 2017, or later. For subsequent waves, we sampled students with an application or directly certified after the sample date for the prior wave.

Students from CEP Schools

In sampling student records from CEP schools, the targeted number of student records is 24 per school. We obtained the list of students in CEP schools from the SFA or the Stage agency, using similar protocols used for non-CEP schools. From the list of identified students, we randomly selected 24 students for verification.

Attachment A1

Documentation of Sample Frame Updates

First, only those SFAs in the 48 contiguous states and the District of Columbia were kept in the FNS 742 frame to be consistent with the target population of the APEC study. This left 19,385 SFAs in the frame. Various quality checks (as shown in Table A-6 below) were then conducted on the frame. Once the potential problematic SFAs were identified, we used the NCES 2013-14 Common Core of Data (CCD) Local Education Agency (LEA) data file maintained by NCES as the reference to determine whether there was an error in the frame data, and updates were made to the frame data if necessary, as summarized in Table A-6 below.

Table A-6. Quality checks on the FNS 742 frame

Quality checks	Solution
Unusually large number of students per school	CCD data were used to update total enrollment
Proportion of students certified for free lunch in a SFA >1	CCD data were used to update total enrollment, if the enrollment on CCD is greater than the enrollment on the frame
Proportion of CEP schools in a SFA > 1	Updates not needed since no issues identified
Unusually large number of students per school for CEP schools	Updates not needed since no issues identified
Proportion of CEP students in a SFA > 1	Total CEP students were set equal to the total enrollment
Duplicate SFA IDs within states	The duplicate New Mexico SFA IDs were updated using the new SFA IDs that New Mexico provided to FNS. For the other duplicate SFAs, unique IDs were created for them.

Next, we extracted the following data items from the most recent National Elections Data file (dated March 25, 2016) and attached them to the FNS 742 frame:

- Number of schools in LEA as recorded in “CEP Elections - by LEA” tab.
- Total enrollment in LEA as recorded in the “CEP Elections - by LEA” tab.
- Number of schools participating in CEP as recorded in “CEP Elections - by LEA” tab.
- Total enrollment in CEP schools as recorded in “CEP Elections - by LEA” tab.
- District-wide claiming percentages as recorded in “CEP Elections - by LEA” tab.
- Number of schools participating as part of a group or district (tabulated from column H of the “CEP Elections - by School” tab), aggregated to LEA level.
- Number of students participating as part of a group or district (tabulated from column I of the “CEP Elections - by School” tab), aggregated to LEA level.

- Number of distinct school-level ISPs as derived from column G of the “CEP Elections - by School” tab, aggregated to LEA level.
- Number of identified students as derived from columns G and I of the “CEP Elections - by School” tab. For Kentucky the School tab column M (KY - Reported ISP/1.6) was used instead of column G. The number of identified students was then aggregated to LEA level. If this number was missing or 0 for a LEA, it was filled in by multiplying the LEA enrollment in CEP schools with district wide ISP if available.

Two steps were involved when attaching the CEP-related data. First, relevant data on the school-level tab were aggregated to the LEA level and attached to the LEA tab. Second, the LEA tab was attached to the FNS 742 frame. Updates were made to the LEA ID, LEA name, and ISP rate on the CEP participation file to address duplicate or missing LEA IDs in several states, correct typos, and reconcile differences in spellings to facilitate the matching between the school-level tab and LEA-level tab, and the matching between the CEP participation file and FNS 742 frame. Details on the updates are given in Subsection A.2.

Finally, the CEP status of SFA was updated by treating an SFA as CEP if it was either on the CEP participation file, or flagged as CEP on the FNS 742 frame although not on the CEP participation file. In addition, the total number of CEP schools was updated for SFAs that were new CEPs (i.e., SFAs not flagged as CEP on the FNS 742 frame but listed on the CEP participation file) by allocating the total number of schools on the FNS frame to CEP and non-CEP using the proportion of CEP schools based on the CEP participation file. e.g., updated number of CEP schools was computed by multiplying the total number of schools in the SFA (on the FNS frame) by the proportion of CEP schools in the SFA (from the CEP participation file). Similar updates were also made to the enrollment in CEP schools.

The old CEP SFAs (i.e., SFAs already flagged as CEP on the FNS 742 frame) were not updated with the data from the CEP participation file because (a) the data on the FNS frame seemed to be more accurate (based on comparison with CCD data), and (b) we expect some minor inconsistencies because the data in the CEP participation file are for LEAs while the data in the FNS frame are for SFAs. Although the relative difference in total enrollment between the two data sources among the matching SFAs was only about 4 percent, it was decided to update CEP data for the new CEPs only.

Furthermore, SFAs that consist of only RCCIs or non-CEP SFAs that do not have any students certified for free or reduced price meals were dropped from the FNS frame, since they do not have

students eligible for APEC III. There are 1,531 such SFAs, which accounts for about 8% of the total SFAs.

A1.1 Updates to the FNS Frame

The following tables document the changes that were made to selected data elements in the FNS-742 sampling frame.

Table A-7. Updates to total enrollment

State	SFA ID	Total enrollment
ME	1012	388
WV	50783	2,443
IN	3335	1,576
TX	981	752
OK	48-I014	301
TX	264	546
NY	261600997698	91
NY	470501997072	25
ME	3152	2,154
MD	5422	20
IL	34049085P00	167
NM	503	417
OK	21-I005	256
OK	61-I017	500
OK	70-I008	2,866
OK	72-I010	1,289
MT	34-1215	37
WA	160031	12,739
OH	009148	84

Table A-8. Updates to number of schools

State	SFA ID	Number of schools
OH	009148	1
OH	054999	1

Table A-9. Updates to SFA_ID to resolve duplicate SFA ID in states

State	SFA name	Original SFA ID	New SFA_ID
OR	The Dome School	3401003	3401003523
OR	Arco Iris Spanish Immersion School	3401003	3401003005
WA	Kent School District	159941	159941030
WA	Toppenish School District	159941	159941948
SFA IDs for New Mexico were updated for 77 SFAs using the updated spreadsheet from FNS			

Table A-10. Updates to number of students in CEP schools

State	SFA ID	Update
NC	970	The number of students in CEP schools was set equal to the total enrollment in the SFA.
VT	T249	

A1.2 Updates to the National Elections Data File

The following tables document the changes that were made to selected data elements in the National Elections Data File.

A1.2.1 LEA Tab

- The following 4 LEAs in California were missing LEA ID, so pseudo IDs were created for them to facilitate merging with the LEA tab:

LEA name	New LEA ID
Life Source Intl Charter	CA_MISS1
San Diego COE	CA_MISS2
Valley Prep Academy	CA_MISS3
Watts Learning Center Charter	CA_MISS4

- The following LEA was dropped, since it is a duplicate of another LEA (TAOS MUNICIPAL SCHOOLS):

State	LEA ID	LEA name
New Mexico	076000	VISTA GRANDE HIGH SCHOOL(TAOS MUNICIPAL SCHOOLS)

- LEA IDs were updated as follows to address duplicates and typos:

State	Original LEA ID	LEA name	New LEA ID
Indiana	9670	Indianapolis Academy of Excellence	9780
Georgia	612	Brantley County	613
Georgia	304		604
Illinois	1075004026		01075004026

A1.2.2 School Tab

- Same as the first bullet in the LEA tab.
- The following LEAID was updated to resolve duplicates:

State	Original LEA ID	LEA name	New LEAID
Indiana	9670	Indianapolis Academy of Excellence	9780

3. The following LEA IDs in the school tab were updated to match the LEA tab:

State	Original LEA ID	New LEA ID
Arkansas	544700	5440700
Georgia	11246	11212
Illinois	03011014024	10011014024
Illinois	03026201026	03026201026'
Illinois	03026202026	3026202026
Illinois	07016144002	07016144002'
Illinois	9010004026	09010004026
Illinois	13041005004	25041005004
Illinois	13041079002	25041079002
Illinois	13041082002	25041082002
Illinois	13058501026	13058501026'
Illinois	30002005026	02002005026
Illinois	30077101026	02077101026
Illinois	30091017022	02091017022
Illinois	30091084026	02091084026
Illinois	32000000000	3200000000
Illinois	33094238026	27094238026
Illinois	07-016-1480-02	07016148002
Illinois	07016152502'	07016152502
Illinois	30039186026'	30039186026
Illinois	55000000000'	55000000000
Indiana	4670	4760
Michigan	72021	72020
Michigan	72022	72020
Michigan	72023	72020
Michigan	72024	72020
North Carolina	10	010
North Carolina	20	020
North Carolina	30	030
North Carolina	40	040
North Carolina	70	070
North Carolina	80	080
North Carolina	90	090
Oklahoma	46-1032	46-1032
Virginia	033	33
Virginia	040	40
Virginia	044	44
Virginia	052	52
Virginia	077	77
Wyoming	074001	0740001

4. The following update to ISP rate was made to correct a typo:

State	LEA ID	School ID	Original ISP rate	New ISP rate
Georgia	789	3050	45.1775	0.451775

A1.3 Linking Files

The relevant data on the school tab were aggregated to the LEA level and attached to the LEA tab using STATE and LEA ID as the linkage. Then the LEA level data of the CEP participation file was linked to the FNS 742 frame using the following linkages:

- STATE and LEA (SFA) NAME for the states where SFA name can uniquely identify LEAs (SFAs).
- STATE and LEA (SFA) ID for the states where multiple LEAs/SFAs have the same name. These states include: AR, CO, IN, MO, NY, OH, OR, SC, TX, VA, WI, WV.

There are 44 LEAs in the CEP participation file that do not have a match on the FNS frame file (see Attachment A3). They were not added to the FNS frame.

The following updates were made to the CEP file to facilitate the matching with the FNS frame.

1. Updates to LEA ID on the CEP file

State	Old LEA ID	New LEA ID
IL	Replace ' at the end of the SFA ID with "" for all records in Illinois	
IN	0235	235
SC	add one leading 0 to SFA_ID if it has only 3 digits	
MO	115-928	115-660
NY	331500229996	331400229996
	332100229735	332000229735
	500401225586	500402225586
	500402226150	500402100008
VA	008	8
VA	013	13
WI	401439	409858
	409315	401315
	408001	408121
	401656	409869

2. Updates to LEA name on the CEP file

State	Old LEA name	New LEA name
CA	Replace USD with "UNIFIED SCHOOL DISTRICT", ESD with "ELEMENTARY SCHOOL DISTRICT", and HSD with "HIGH SCHOOL DISTRICT".	
WY	Replace "COUNTY SCHOOL DISTRICT" with CSD.	
CA	LIFE SOURCE INTL CHARTER SCHOOL	Life Source International Schools
CA	SAN DIEGO COE	SAN DIEGO CO OFFICE OF ED
CA	VALLEY PREP ACADEMY	Valley Preparatory Academy
CA	WATTS LEARNING CENTER CHARTER	WATTS LEARNING CENTER
CA	ONTARIO-MONTCLAIR SD	Ontario-Montclair School District
CA	HOLLISTER SD	Hollister School District
CT	ACES	AREA COOPERATIVE EDUCATIONAL SERVICES
CT	BRASS CITY CHARTER SCHOOL	BRASS CITY CHARTER SCHOOL
CT	GRACE WEBB	THE WEBB SCHOOLS
CT	KLINGBERG FAMILY CENTER	KLINGBERG FAMILY CENTERS
CT	NEW HAVEN	NEW HAVEN PUBLIC SCHOOLS
DC	ACHIEVEMENT PREPARATORY PCS	Achievement Prep. PCS
DC	APPLETREE LEARNING CENTER PCS	Apple Tree PCS
DC	CEDAR TREE PCS	Cedar Tree Academy PCS
DC	DC PREP PCS	DC Preparatory PCS
DC	DC SCHOLARS	DC Scholars PCS
DC	EAGLE ACADEMY PCS	Eagle Academy PCS
DC	EXCEL ACADEMY PCS	Excel PCS
DC	IDEAL ACADEMY PCS	IDEAL PCS
DC	INGENUITY PCS	Ingenuity Prep PCS
DC	KIPP PCS	Kipp DC PCS
DC	LATIN AMERICAN YOUTH CENTER CAREER ACADEMY	LAYC Career Academy PCS
DC	MARY MCLEOD BETHUNE ACADEMY PCS	Mary McLeod Bethune PCS
DC	MAYA ANGELOU PCHS	Maya Angelou PCS
DC	POTOMAC PREP PCS	Potomac Preparatory PCS
DC	SOMERSET PCS	Somerset Prep Academy PCS
DC	WILLIAM E DOAR PCS	William E. Doar PCS
DE	CHRISTINA	Christina - 9533000040
DE	COMMUNITY EDUCATION BUILDING	Community Education Building PS #5 LLC-0000218582
DE	EAST SIDE CHARTER SCHOOL	East Side Charter
DE	FAMILY FOUNDATIONS ACADEMY	Family Foundations Academy Charter School
DE	KINGSWOOD ACADEMY	Kingswood Academy-0000024327
DE	LAUREL	Laurel - 9516000030
DE	PARKWAY ACADEMY CENTRAL	Parkway Academy Central-Providence Serv Corp-
DE	PARKWAY NORTH	Parkway Academy North/Providence Serv Corp-0000032985
DE	POSITIVE CHANGE ACADEMY	Positive Change Academy/Providence Serv Corp-0000032985
DE	RED CLAY CONSOLIDATED	Red Clay Consolidated - 9532000020
DE	THOMAS A. EDISON CHARTER SCHOOL	Thomas A. Edison

State	Old LEA name	New LEA name
GA	KIPP METRO	KIPP METRO ATLANTA COLLABORATIVE IN
GA	DESTINY ACHEVIERS	Destiny Achievers Academy of Excell
IA	HOLY FAMILY SYSTEM ZZ -DUBUQUE	Holy Family System zz
ID	BLACKFOOT SCHOOL DISTRICT	Blackfoot S.D. #055
ID	BOISE SCHOOL DISTRICT	Boise S. D. #001
ID	BONNEVILLE JOINT SCHOOL DISTRICT	Bonneville Jt. S.D. #93
ID	BUHL SCHOOL DISTRICT	Buhl S.D. #412
ID	CALDWELL SCHOOL DISTRICT	Caldwell S.D. #132
ID	CASSIA COUNTY JOINT SCHOOL DISTRICT	Cassia County Jt. S.D. #151
ID	COEUR D'ALENE SCHOOL DISTRICT	Coeur D'Alene S.D. #271
ID	GOODING JOINT SCHOOL DISTRICT	Gooding Jt. S.D #231
ID	KAMIAH JOINT SCHOOL DISTRICT	Kamiah Jt. S.D. #304
ID	NAMPA SCHOOL DISTRICT	Nampa S.D. #131
ID	PAYETTE SCHOOL DISTRICT	Payette S.D. #371
ID	PLUMMER-WORLEY JOINT SCHOOL DISTRICT	Plummer-Worley Jt. S.D. #044
ID	SHOSHONE SCHOOL DISTRICT	Shoshone S.D. #312
ID	TWIN FALLS SCHOOL DISTRICT	Twin Falls S.D. #411
ID	WENDELL SCHOOL DISTRICT	Wendell S.D. #232
ID	WEST ADA SCHOOL DISTRICT	West Ada S.D. #002
IL	ARCHDIOCESE OF CHICAGO	Archdiocese of Chicago-Nw Hwy
IL	AURORA EAST SCHOOL DISTRICT 131	Aurora East USD 131
IL	BEACON THERAPEUTIC SCHOOL INC	Beacon Therapeutic Sch Inc
IL	BLACK HAWK AREA SEJA 865	Black Hawk Area Sp Ed District
IL	BROWNSTOWN COMM UNIT SCH DIST 201	Brownstown CUSD 201
IL	CAIRO SCHOOL DISTRICT 1	Cairo USD 1
IL	CARBONDALE ELEM SCHOOL DISTRICT 95	Carbondale ESD 95
IL	CENTRALIA SCH DIST 135	Centralia SD 135
IL	CENTURY SCHOOL DISTRICT 100	Century CUSD 100
IL	CHRISTOPHER HOUSE CHTR ES	Christopher House Chrt ES
IL	CLAY CWFORD JSER LWRNCE RHLAND	Clay/Cwford/Jser/Lwrnce/Rhland
IL	COLONA SCHOOL DISTRICT 190	Colona SD 190
IL	CRAB ORCHARD SD 30	Crab Orchard CUSD 3
IL	DOLTON SCH DIST 149	Dolton SD 149
IL	FOUR RIVERS SPECIAL EDUCATION DISTRICT	Four Rivers Spec Educ Dist
IL	FRANKLIN JEFFERSON CO SPEC ED DIST	Franklin-Jefferson Co Sp Ed Dist
IL	GALAPAGOS ROCKFORD CHARTER SCHOOL	Galapagos Rockford Charter Sch
IL	HAMILTON/JEFFERSON COUNTIES ROE	Hamilton/Jefferson ROE
IL	HOOVER-SCHRUM MEMORIAL SCH DIST 157	Hoover-Schrum Memorial SD 157
IL	ILLINI CENTRAL SD 189	Illini Central CUSD 189
IL	IROQUOIS KANKAKEE ROE 32	Iroquois/Kankakee ROE
IL	JOLIET PUBLIC SCHOOL DIST 86	Joliet PSD 86
IL	KANKAKEE AREA SPEC ED COOP	Kankakee Area Spec Educ Coop
IL	KANKAKEE SCHOOL DISTRICT 111	Kankakee SD 111
IL	KASKASKIA SPECIAL ED DIST	Kaskaskia Spec Educ District
IL	KELL CUSD 2	Kell Cons SD 2

State	Old LEA name	New LEA name
IL	LEGAL PREP CHARTER SCHOOL	LEGAL Prep Chtr Academy
IL	MADISON COMM UNIT SCH DIST 12	Madison CUSD 12
IL	MURPHYSBORO COMM UNIT SCH DIST 186	Murphysboro CUSD 186
IL	NEW HOLLAND MIDDLETOWN ESD 88	New Holland-Middletown ED 88
IL	NORTH MAC SD 34	North Mac CUSD 34
IL	PEMBROKE COMM CONS SCH DIST 259	Pembroke CCSD 259
IL	PLEASANT VALLEY SCH DIST 62	Pleasant Valley SD 62
IL	PRAIRIE-HILLS ELEM SCH DIST 144	Prairie-Hills ESD 144
IL	RANTOUL CITY SCH DIST 137	Rantoul City SD 137
IL	ROUND LAKE AREA SCHOOLS CUD 116	Round Lake CUSD 116
IL	SANDOVAL COMM UNIT SCH DIST 501	Sandoval CUSD 501
IL	SOUTH CENTRAL COMM UNIT SCH DIST 401	South Central CUD 401
IL	SOUTH HOLLAND SCHOOL DISTRICT 151	South Holland SD 151
IL	SPEED SEJA 802	Speed SEJA #802
IL	SPRINGFIELD SCH DIST 186	Springfield SD 186
IL	ST PATRICK SCHOOL	St Patrick Grade School
IL	UNITY LUTHERAN CHRISTIAN ELEM SCHOOL	Unity Lutheran Christian Elem Sch
IL	WAYNE CITY USD 100	Wayne City CUSD 100
IL	WEST CHICAGO SCH DIST 33	West Chicago ESD 33
IL	WILLOW GROVE SCHOOL DIST 46	Willow Grove SD 46
MA	BRIDGE BOSTON CHARTER PUBLIC SCHOOL	BRIDGE BOSTON CHARTER SCHOOL
MD	BALTIMORE CITY PUB SCH	BALTIMORE CITY PUB S
MD	CEDAR RIDGE CHILDRENS HOME	CEDAR RIDGE CHILDREN
MD	PRINCE GEORGE'S CO. PUBLIC SCHOOL	PRINCE GEORGE'S CO.
MD	SEED SCHOOL OF MARYLAND	SEED SCHOOL OF MARYL
MD	ST. IGNATIUS LOYOLA ACADEMY, INC	ST. IGNATIUS LOYOLA
MD	WASHINGTON CO PUB SCH	WASHINGTON CO PUB SC
MD	WICOMICO CO BRD OF ED	WICOMICO CO BRD OF E
ME	AUBURN	Auburn School Department
ME	CASWELL	Caswell School Department
ME	CONNER	Connor Consolidated School
ME	LEWISTON	Lewiston School Department
ME	OPPORTUNITY TRAINING CTR	Opportunity Training Center
ME	PORTLAND	Portland Schools
ME	RSU 03	Rsu 03/Msad 03
ME	RSU 10	Rsu 10 Western Foothills
ME	RSU 17	Rsu 17/Msad 17
ME	RSU 31	Rsu 31/Msad 31
ME	RSU 54	Rsu 54 / Msad 54
ME	RSU 74	Rsu 74/Msad 74
ME	RSU 86	Rsu 86/Msad 20
ME	RSU 88	Rsu 88/Msad 24
MN	CASS LAKE BENA ISD #115	Cass Lake Bena ISD #115
MN	STEP ACADEMY CHARTER SCHOOL	Step Academy Charter
MS	NORTH BOLIVAR CONSOLIDATED SCH	NORTH BOLIVAR CONS SCHOOL DISTRICT
MS	SUNFLOWER COUNTY CONSOLIDATED	SUNFLOWER CTY CONS SCHOOL DISTRICT
MS	WEST BOLIVAR CONSOLIDATED SCHO	WEST BOLIVAR CONS SCHOOL DISTRICT

State	Old LEA name	New LEA name
MS	WEST POINT CONSOLIDATED SCHOOL	WEST POINT SCHOOL DISTRICT
MT	BILLINGS PUBLIC SCHOOLS	Billings High School
MT	EAST GLACIER PARK ELEM	East Glacier Park Elementary
MT	GREAT FALLS PUBLIC SCHLS	Great Falls Public Schools
MT	HAYS-LODGE POLE K-12 SCHLS	Hays Lodge Pole K-12 Schools
MT	HEART BUTTE K-12 SCHOOLS	Heart Butte Elementary
MT	LODGE GRASS PUBLIC SCHLS	Lodge Grass Public Schools
MT	MISSOULA CO PUBLIC SCHLS	Missoula Elementary
MT	MONTANA SCHOOL FOR THE DEAF & BLIND	Montana School for the Deaf and Blind
MT	NKWUSM SCHOOL	Nkwusm
MT	NORTH CHEYENNE TRIB SCHOOLS	Northern Cheyenne Tribal Schools
MT	SUPERIOR K-12 SCHOOLS	Superior Elementary
MT	TWO EAGLE RIVER SCHOOLS	Two Eagle River High School
NC	ALAMANCE COUNTY SCHOOLS	Alamance-Burlington Schools
NC	CHARLOTTE MECKLENBURG SCHOOLS	Charlotte-Mecklenburg Schools
NC	DURHAM COUNTY SCHOOLS	Durham Public Schools
NC	HOPE CHARTER LEADERSHIP ACADEMY	Hope Elementary
NC	LENOIR COUNTY SCHOOLS	Lenoir County Public Schools
NC	NASH ROCKY MOUNT SCHOOLS	Nash-Rocky Mount Schools
NC	RESIDENTIAL SCHOOLS	Residential Schools
NC	WAYNE COUNTY SCHOOLS	Wayne County Public Schools
ND	BELCOURT PUBLIC SCHOOLS	Belcourt School District #7
ND	DUNSEITH PUBLIC SCHOOLS	Dunseith School District
ND	EMERADO PUBLIC	Emerado School
ND	FOUR WINDS	Four Winds Tribal School
ND	MINNEWAUKEN PUBLIC	Minnewaukan Public School
ND	SOLEN PUBLIC SCHOOLS	Solen Public School
ND	ST ANN'S CATHOLIC SCHOOL	St Anns Catholic Indian School
ND	ST JOHN PUBLIC	St John Public School
ND	STANDING ROCK ELEMENTARY & HS	Standing Rock School
ND	UNITED TRIBES TECHNICAL COLLEGE	United Tribes Tech College
NH	FALL MOUNTAIN REGIONAL SCHOOL DISTRICT	Fall Mountain Regional SAU Office
NH	WINCHESTER SCHOOL DISTRICT	Winchester SAU Office
NM	ACADEMY OF TRADES AND TECH	ACADEMY OF TRADES AND TECHNOLOGY
NM	ACE LEADERSHIP HIGH SCHOOL	ACE LEADERSHIP
NM	ALBUQUERQUE TALENT DEVELOPMENT ACADEMY	ALBUQUERQUE TALENT DEVELOPMENT SECONDARY
NM	CARRIZOZO MUNICIPAL SCHOOLS	CARRIZOZO MUNICIPAL SCHOOLS
NM	CESAR CHAVEZ COMMUNITY SCHOOL	CESAR CHAVEZ COMMUNITY SCHOOL
NM	CHAMA VALLEY INDEP. SCHOOLS	CHAMA VALLEY INDEPENDENT SCHOOLS
NM	CLOVIS MUNICIPAL SCHOOLS	CLOVIS MUNICIPAL SCHOOLS
NM	COBRE CONSOLIDATED SCHOOLS	COBRE CONSOLIDATED SCHOOL DISTRICT
NM	GALLUP-MCKINLEY CTY SCHOOLS	GALLUP MCKINLEY COUNTY SCHOOLS
NM	GRANTS-CIBOLA COUNTY SCHOOLS	GRANTS CIBOLA COUNTY SCHOOLS
NM	LA PROMESA EARLY LEARNING	LA PROMESA EARLY LEARNING CENTER
NM	LA RESOLANA LEADERSHIP	LA RESOLANA LEADERSHIP ACADEMY
NM	LAGUNA ACOMA SCHOOLS	KAWAIKA LAGUNA SCHOOLS
NM	LAS MONTAÑAS CHARTER HIGH SCHOOL	LAS MONTANAS HIGH SCHOOL
NM	LAS VEGAS CITY PUBLIC SCHOOLS	LAS VEGAS CITY PUBLIC SCHOOLS
NM	LOS PUENTES CHARTER	LOS PUENTES CHARTER SCHOOL

State	Old LEA name	New LEA name
NM	MESCALERO APACHE SCHOOL	MESCALERO APACHE SCHOOL
NM	MORIARTY-EDGEWOOD SCHOOL DISTRICT	MORIARTY-EDGEWOOD SCHOOLS
NM	PECOS INDEPENDENT SCHOOL DISTRICT	PECOS INDEPENDENT SCHOOLS
NM	PINE HILLS RAMAH NAVAJO SCHOOL BOARD	PINE HILLS RAMAH NAVAJO SCHOOL BOARD
NM	SILVER CONSOLIDATED SCHOOLS	SILVER CITY CONSOLIDATED SCHOOLS
NM	TSE II AHI COMMUNITY SCHOOL	TSE II AHI COMMUNITY SCHOOL
NM	WILLIAM W & JOSEPHINE DORN CHARTER COMMUNITY SCHOOL	WILLIAM W AND JOSEPHINE DORN COMMUNITY SCHOOL
NV	HUMBOLDT COUNTY SCHOOL DISTRICT	HUMBOLDT COUNTY SCHOOL DIST
NY	BAIS FRIMA CHINUCH CENTER	Mosdos Bnos Frima
NY	BRIGHTER CHOICE CHARTER SCHOOL-GIRLS	Brighter Choice Charter Middle-Girls
NY	CENTRAL UTA OF MONSEY - GIRLS	Central Uta Of Monsey
OK	MID-DEL	MIDWEST CITY-DEL CITY
OK	OKC	OKLAHOMA CITY
PA	BELMONT ACADEMY CS (FORMERLY FAMILY CS)	INQUIRY CHARTER SCHOOL (FORMERLY BELMONT ACADEMY CHARTER SCHOOL)
PA	WILKES-BARRE AVTS	WILKES-BARRE AREA CAREER & TECHNICAL CENTER
PA	YOUNG SCHOLARS FREDERICK DOUGLASS CHARTER SCHOOL	Frederick Douglass Mastery Charter School
RI	PROVIDENCE PUBLIC SCHOOL DEPARTMENT	Providence Public Schools
SD	ANDES CENTRAL SCHOOL DISTRICT	ANDES CENTRAL SCHOOL DISTRICT 11-1
SD	ASPIRE INC	ASPIRE Incorporated
SD	MCLAUGHLIN SCHOOL DISTRICT	MCLAUGHLIN SCHOOL DISTRICT 15-2
SD	OGLALA LAKOTA COUNTY SCHOOL DISTRICT	SHANNON COUNTY SCHOOL DISTRICT 65-1
SD	SMEE SCHOOL DISTRICT	SMEE SCHOOL DISTRICT 15-3
SD	WAGNER COMMUNITY SCHOOL DISTRICT 11-4	WAGNER COMMUNITY SCHOOL DISTRICT 11
VT	BURLINGTON	Burlington School District
VT	CALEDONIA CENTRAL	Caledonia Central SU
VT	CALEDONIA NORTH	Caledonia North SU
VT	ESSEX CALEDONIA	Essex Caledonia SU
VT	FRANKLIN CENTRAL	Franklin Central SU
VT	FRANKLIN NORTHEAST	Franklin Northeast SU
VT	GRAND ISLE	Grand Isle SU
VT	LAMOILLE NORTH	Lamoille North SU
VT	NORTH COUNTRY	North Country SU
VT	ORANGE EAST	ORANGE EAST SU
VT	ORLEANS CENTRAL	Orleans Central SU
VT	ORLEANS SOUTHWEST	Orleans Southwest SU
VT	RUTLAND CITY	Rutland City School District
VT	SOUTHWEST VERMONT	Southwest Vermont SU
VT	WINDHAM SOUTHWEST	Windham Southwest SU
VT	WINOOSKI	Winooski School District
WA	BELLINGHAM SCHOOL DISTRICT	Bellingham Public Schools
WA	CENTRALIA SCHOOL DISTRICT	Centralia School District
WA	CHIEF LESCHI SCHOOL	Chief Leschi Schools
WA	FRANKLIN PIERCE SCHOOL DISTRICT	Franklin Pierce Schools
WA	GRANGER SCHOOL DISTRICT	Granger School Dist.

State	Old LEA name	New LEA name
WA	RICHLAND SCHOOL DISTRICT	Richland School District #400
WA	SPOKANE SCHOOL DISTRICT	Spokane Public Schools
IL	ADAM/BRWN/CASS/MORGN/PIK/SCTT ROE	Adams/Pike ROE
IL	CLINTN/JEFFRSN/MARIN/WASHNGTN ROE	Clinton/Marion/Washington ROE
IL	ROE 20	Edwd/Gltn/Hdin/Pop/Sine/Wbh/Wn/Wh
IL	WABASH & OHIO VALLEY SP ED DIST	Wabash Ohio Valley Sp Ed Dist
IL	COMMUNITY UNIT SCHOOL DISTRICT 300	CUSD 300
IL	LA SALLE/MARSHALL/PUTNAM ROE	La Salle ROE
IL	BETTY SHABAZZ CHARTER SCHOOL	Shabazz International Charter Sch
MA	VENTURA USD	New Bedford Public Schools
NC	CHEROKEE CENTRAL SCHOOLS	Cherokee Central School

Attachment A2

APEC III SFA Sample

CEP status	Certainty	State	SFA name	No. of students certified for F/R price meal	Total enrollment	Enrollment in CEP school
CEP	Yes	NY	NYC CHANCELLOR'S OFFICE	499,385	1,523,590	208,142
non-CEP	Yes	FL	MIAMI-DADE COUNTY PUBLIC SCHOOLS	229,929	302,696	-
CEP	Yes	CA	LOS ANGELES UNIFIED SCHOOL DISTRICT	198,496	587,059	257,301
CEP	Yes	NV	CLARK COUNTY SCHOOL DISTRICT	190,892	335,629	7,323
non-CEP	Yes	FL	BROWARD COUNTY SCHOOL BOARD	142,010	223,387	-
non-CEP	Yes	FL	HILLSBOROUGH COUNTY SCHL BOARD	121,374	191,575	-
non-CEP	Yes	FL	THE SCHOOL DISTRICT OF PALM BEACH COUNTY	106,558	176,007	-
CEP	Yes	FL	ORANGE COUNTY SCHOOL BOARD	104,329	198,103	10,710
non-CEP	Yes	GA	GWINNETT COUNTY	96,836	173,443	-
CEP	No	MD	PRINCE GEORGE'S CO.	82,687	128,006	4,089
non-CEP	Yes	CA	SAN DIEGO UNIFIED SCHOOL DISTRICT	77,246	130,947	-
CEP	No	TX	AUSTIN ISD	73,583	84,624	582
CEP	Yes	MD	BALTIMORE CITY PUB S	71,623	85,018	85,018
CEP	Yes	FL	PINELLAS COUNTY SCHOOL BOARD	67,420	101,841	40,257
CEP	Yes	NC	CHARLOTTE-MECKLENBURG SCHOOLS	65,592	145,413	61,732
CEP	Yes	TX	HOUSTON ISD	61,701	215,123	110,486
CEP	Yes	FL	POLK COUNTY SCHOOL BOARD	56,261	88,125	38,917
CEP	Yes	FL	DUVAL COUNTY SCHOOL BOARD	55,689	115,987	62,895
non-CEP	No	NC	WAKE COUNTY SCHOOLS	54,865	158,024	-
CEP	Yes	FL	SCHOOL DISTRICT OF LEE COUNTY	54,605	76,584	67,564
non-CEP	No	MD	MONTGOMERY CO PUB SC	54,099	154,350	-
CEP	No	TX	CYPRESS-FAIRBANKS ISD	53,167	113,174	2,033
non-CEP	No	VA	FAIRFAX COUNTY PUBLIC SCHOOLS	51,964	184,157	-
non-CEP	No	GA	COBB COUNTY	49,255	109,767	-
non-CEP	No	CA	SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT	46,568	50,118	-
non-CEP	No	UT	GRANITE SCHOOL DISTRICT	45,317	72,316	-
CEP	Yes	TX	FORT WORTH ISD	44,587	85,729	51,341
non-CEP	No	TX	BROWNSVILLE ISD	43,820	48,393	-
CEP	No	FL	OSCEOLA COUNTY SCHOOL BOARD	41,904	58,092	4,348
CEP	No	GA	FULTON COUNTY	41,535	91,202	1,231
non-CEP	No	FL	VOLUSIA COUNTY SCHOOL BOARD	38,512	60,552	-
non-CEP	No	LA	JEFFERSON PARISH SCHOOLS	38,020	46,787	-
non-CEP	No	CA	FONTANA UNIFIED SCHOOL DISTRICT	36,712	41,281	-
non-CEP	No	KS	WICHITA	36,523	47,909	-
CEP	No	SC	GREENVILLE 01	35,299	73,031	782
non-CEP	No	CA	ANAHEIM UNION HIGH SCHOOL DISTRICT	35,210	50,758	-
non-CEP	No	VA	PRINCE WILLIAM COUNTY PUBLIC SCHOOLS	34,806	85,918	-
non-CEP	No	CA	SACRAMENTO CITY UNIFIED SCHOOL DISTRICT	34,389	45,060	-
CEP	No	CA	SAN FRANCISCO UNIFIED SCHOOL DISTRICT	33,833	59,497	861
non-CEP	No	NV	WASHOE COUNTY SCHOOL DISTRICT	31,682	63,339	-
non-CEP	No	TX	GARLAND ISD	31,328	58,869	-
non-CEP	No	TX	MESQUITE ISD	29,669	40,253	-
CEP	No	NM	ALBUQUERQUE PUBLIC SCHOOLS	29,409	85,793	37,872
CEP	No	TX	EL PASO ISD	29,379	61,063	32,612
CEP	No	NC	FORSYTH COUNTY SCHOOLS	28,187	55,767	18,832
non-CEP	No	FL	COLLIER COUNTY SCHOOL BOARD	27,678	43,304	-
non-CEP	No	CA	BAKERSFIELD CITY SCHOOL DISTRICT	27,142	31,209	-
CEP	No	TX	NORTHSIDE ISD-SAN ANTONIO	26,541	103,317	39,571
non-CEP	No	LA	CADD0 PARISH SCHOOL BOARD	26,266	41,216	-
CEP	No	MN	ST PAUL ISD #625	25,497	40,753	5,922

CEP status	Certainty	State	SFA name	No. of students certified for F/R price meal	Total enrollment	Enrollment in CEP school
CEP	No	TX	SAN ANTONIO ISD	25,368	53,059	52,974
CEP	No	FL	MANATEE COUNTY SCHOOL BOARD	25,125	44,050	13,473
non-CEP	No	CA	KERN HIGH SCHOOL DISTRICT	23,753	37,603	-
non-CEP	No	SC	HORRY 01	23,429	41,670	-
CEP	No	TX	KILLEEN ISD	23,124	42,677	2,070
CEP	No	IL	ROCKFORD SD 205	22,552	27,565	27,565
CEP	No	OR	SALEM KEIZER SCHOOL DISTRICT	22,128	40,937	13,505
non-CEP	No	AZ	PHOENIX UNION HIGH SCHOOL DISTRICT	21,998	26,894	-
CEP	No	IA	DES MOINES INDEPENDENT COMM SCHOOL DISTRICT	21,222	34,073	18,439
non-CEP	No	CA	SAN JUAN UNIFIED SCHOOL DISTRICT	21,161	40,667	-
non-CEP	No	TX	RICHARDSON ISD	21,002	38,678	-
CEP	Yes	KY	JEFFERSON COUNTY PUBLIC SCHOOLS	20,686	100,107	55,006
non-CEP	No	FL	SARASOTA COUNTY SCHOOL BOARD	20,428	41,078	-
non-CEP	No	NJ	ELIZABETH BD OF ED	19,992	25,716	-
non-CEP	No	TX	KLEIN ISD	19,810	49,262	-
CEP	No	NC	GUILFORD COUNTY SCHOOLS	19,796	74,111	28,468
non-CEP	No	CA	LODI UNIFIED SCHOOL DISTRICT	19,228	29,295	-
CEP	No	VA	NEWPORT NEWS CITY PUBLIC SCHOOLS	18,634	29,292	3,545
CEP	No	IN	INDIANAPOLIS PUBLIC SCHOOLS	18,284	29,985	29,985
non-CEP	No	CA	CHULA VISTA ELEMENTARY SCHOOL DISTRICT	17,457	30,744	-
CEP	No	SC	RICHLAND 01	17,237	24,565	24,565
non-CEP	No	TN	RUTHERFORD COUNTY	17,225	42,235	-
non-CEP	No	TX	LEWISVILLE ISD	17,104	53,382	-
CEP	No	MA	WORCESTER PUBLIC SCHOOLS	17,072	25,917	25,917
non-CEP	No	UT	DAVIS SCHOOL DISTRICT	16,434	71,290	-
non-CEP	No	TX	ROUND ROCK ISD	16,422	47,128	-
CEP	No	CA	HESPERIA UNIFIED SCHOOL DISTRICT	16,400	22,136	2,103
non-CEP	No	CA	VAL VERDE UNIFIED SCHOOL DISTRICT	15,792	19,556	-
non-CEP	No	TX	ECTOR COUNTY ISD	15,002	31,862	-
non-CEP	No	CA	HACIENDA LA PUENTE UNIFIED SCHOOL DISTRICT	14,906	19,835	-
non-CEP	No	FL	HERNANDO COUNTY SCHOOL BOARD	14,831	22,960	-
non-CEP	No	CA	OXNARD SCHOOL DISTRICT	14,420	17,316	-
CEP	No	AZ	WASHINGTON ELEMENTARY SCHOOL DISTRICT	14,185	23,942	17,227
non-CEP	No	CA	LAKE ELSINORE UNIFIED SCHOOL DISTRICT	13,785	22,482	-
CEP	No	FL	SCHOOL BOARD OF MARION COUNTY, FLORIDA	13,715	42,168	20,544
non-CEP	No	MO	SPRINGFIELD R-XII	13,300	25,673	-
non-CEP	No	TX	TYLER ISD	13,244	18,027	-
non-CEP	No	CA	LYNWOOD UNIFIED SCHOOL DISTRICT	13,001	15,454	-
non-CEP	No	IL	CICERO SD 99	12,606	12,878	-
non-CEP	No	GA	CHEROKEE COUNTY	12,567	40,684	-
non-CEP	No	CA	GLENDALE UNIFIED SCHOOL DISTRICT	12,431	26,262	-
non-CEP	No	TX	HURST-EULESS-BEDFORD ISD	12,149	23,250	-
CEP	No	NC	CABARRUS COUNTY SCHOOLS	12,086	31,454	1,098
non-CEP	No	CA	ALHAMBRA UNIFIED SCHOOL DISTRICT	11,928	17,800	-
CEP	No	WI	RACINE UNIFIED SCHOOL DISTRICT	11,746	19,962	6,773
non-CEP	No	WA	EVERGREEN SCHOOL DISTRICT	11,634	25,831	-
CEP	No	TX	SPRING BRANCH ISD	11,518	35,190	4,234
CEP	No	CA	PORTERVILLE UNIFIED SCHOOL DISTRICT	11,503	15,108	13,993
CEP	No	PA	ALLENTOWN CITY SCHOOL DISTRICT	11,445	17,897	17,897
non-CEP	No	CA	CAPISTRANO UNIFIED SCHOOL DISTRICT	10,561	49,901	-
CEP	No	GA	CLARKE COUNTY	10,521	13,566	13,566
non-CEP	No	MS	HARRISON CTY SCHOOL DISTRICT	10,401	14,513	-
non-CEP	No	TX	DEL VALLE ISD	10,384	11,740	-
CEP	No	IL	PEORIA SD 150	10,205	13,525	12,186

CEP status	Certainty	State	SFA name	No. of students certified for F/R price meal	Total enrollment	Enrollment in CEP school
non-CEP	No	NM	RIO RANCHO PUBLIC SCHOOLS	9,910	17,249	-
non-CEP	No	AZ	DEER VALLEY UNIFIED DISTRICT	9,863	34,375	-
CEP	No	SD	SIOUX FALLS SCHOOL DISTRICT 49-5	9,839	22,882	1,644
CEP	No	LA	IBERIA PARISH SCHOOL BOARD	9,813	14,073	14,073
non-CEP	No	GA	COWETA COUNTY	9,784	22,247	-
CEP	No	AL	HUNTSVILLE CITY BOARD OF EDUCATION	9,761	23,542	13,781
non-CEP	No	KS	SHAWNEE MISSION	9,570	27,751	-
non-CEP	No	CA	SAN MARCOS UNIFIED SCHOOL DISTRICT	9,384	21,854	-
non-CEP	No	OK	GUYMON	9,057	2,866	-
non-CEP	No	FL	SCHOOL BOARD OF HIGHLANDS COUNTY	9,043	12,282	-
non-CEP	No	IN	MSD OF PIKE TWP	9,019	11,268	-
non-CEP	No	NJ	PERTH AMBOY BD OF ED	8,936	11,093	-
CEP	No	GA	MUSCOGEE COUNTY	8,865	32,268	14,507
non-CEP	No	CA	SOUTH BAY UNION SCHOOL DISTRICT	8,714	9,666	-
non-CEP	No	CA	COVINA-VALLEY UNIFIED SCHOOL DISTRICT	8,577	12,624	-
non-CEP	No	TX	LOS FRESNOS CONS ISD	8,539	10,651	-
non-CEP	No	IL	J S MORTON HSD 201	8,427	8,427	-
CEP	No	AZ	TEMPE SCHOOL DISTRICT	8,202	12,041	1,231
CEP	No	IL	ARCHDIOCESE OF CHICAGO-NW HWY	7,985	59,400	22,496
non-CEP	No	MA	EVERETT PUBLIC SCHOOLS	7,974	8,304	-
non-CEP	No	SC	PICKENS 01	7,858	16,698	-
CEP	No	MD	WASHINGTON CO PUB SC	7,845	21,903	3,936
non-CEP	No	CO	WESTMINSTER 50	7,817	9,766	-
CEP	No	TX	LAMAR CONSOLIDATED ISD	7,762	28,337	5,524
non-CEP	No	CA	GILROY UNIFIED SCHOOL DISTRICT	7,715	11,708	-
CEP	No	GA	ATLANTA PUBLIC SCHOOLS	7,585	51,094	29,648
non-CEP	No	CA	TULARE CITY SCHOOL DISTRICT	7,528	9,760	-
non-CEP	No	AZ	PENDERGAST ELEMENTARY DISTRICT	7,006	10,148	-
non-CEP	No	CT	STAMFORD	6,811	16,169	-
non-CEP	No	TX	DICKINSON ISD	6,531	10,400	-
non-CEP	No	TN	HAMBLEN COUNTY	6,502	10,373	-
non-CEP	No	CA	TORRANCE UNIFIED SCHOOL DISTRICT	6,251	24,100	-
non-CEP	No	DE	INDIAN RIVER	6,198	10,048	-
non-CEP	No	TX	NEW CANEY ISD	6,192	9,718	-
non-CEP	No	AZ	YUMA ELEMENTARY DISTRICT	6,117	9,168	-
non-CEP	No	CO	BOULDER VALLEY RE 2	6,020	29,786	-
non-CEP	No	MN	ROCHESTER ISD #535	6,015	17,142	-
CEP	No	FL	LEON COUNTY SCHOOL BOARD	5,731	32,233	12,121
non-CEP	No	AL	CALHOUN COUNTY BOARD OF EDUCATION	5,656	9,218	-
non-CEP	No	SC	OCONEE 01	5,605	10,582	-
non-CEP	No	WA	BETHEL SCHOOL DISTRICT	5,434	18,960	-
CEP	No	SD	RAPID CITY AREA SCHOOL DISTRICT 51-4	5,412	14,040	2,811
CEP	No	MA	SPRINGFIELD PUBLIC SCHOOLS	5,328	29,194	25,886
CEP	No	TN	BLOUNT COUNTY	5,189	11,322	864
non-CEP	No	CA	SNOWLINE JOINT UNIFIED SCHOOL DISTRICT	4,975	8,213	-
non-CEP	No	TX	HARMONY PUBLIC SCHOOLS	4,954	8,640	-
non-CEP	No	TN	KINGSPORT CITY	4,735	7,410	-
CEP	No	IL	DANVILLE CCSD 118	4,630	5,697	5,697
CEP	No	NC	FRANKLIN COUNTY SCHOOLS	4,619	9,494	4,174
CEP	No	OR	REYNOLDS SCHOOL DISTRICT NO. 7	4,599	11,694	5,990
non-CEP	No	OH	NORTHWEST LOCAL SCHOOL DISTRICT	4,536	9,034	-
CEP	No	ID	TWIN FALLS S.D. #411	4,478	9,545	2,411
non-CEP	No	AZ	FLAGSTAFF UNIFIED DISTRICT	4,452	9,925	-
CEP	No	TX	TEXAS CITY ISD	4,383	6,105	211

CEP status	Certainty	State	SFA name	No. of students certified for F/R price meal	Total enrollment	Enrollment in CEP school
non-CEP	No	CA	VACAVILLE UNIFIED SCHOOL DISTRICT	4,313	12,195	-
non-CEP	No	VA	MANASSAS CITY PUBLIC SCHOOLS	4,277	7,447	-
non-CEP	No	GA	LAURENS COUNTY	4,261	6,624	-
CEP	No	DC	DC PUBLIC SCHOOLS	4,223	48,215	30,630
non-CEP	No	MI	ANN ARBOR PUBLIC SCHOOLS	3,980	16,990	-
non-CEP	No	NY	HAVERSTRAW-STONY POINT CSD (NORTH ROCKLAND)	3,975	8,094	-
CEP	No	NM	GALLUP MCKINLEY COUNTY SCHOOLS	3,962	11,175	8,563
non-CEP	No	TX	EVERMAN ISD	3,891	5,534	-
non-CEP	No	CA	BUENA PARK ELEMENTARY SCHOOL DISTRICT	3,807	5,204	-
non-CEP	No	GA	JACKSON COUNTY	3,765	7,456	-
non-CEP	No	OH	REYNOLDSBURG CITY SD	3,720	6,968	-
non-CEP	No	TX	ROCKWALL ISD	3,714	15,004	-
non-CEP	No	MO	POPLAR BLUFF R-I	3,255	5,372	-
non-CEP	No	WA	WALLA WALLA PUBLIC SCHOOLS	3,200	6,225	-
non-CEP	No	MD	DORCHESTER CO BOARD	3,200	4,832	-
non-CEP	No	TX	LA FERIA ISD	3,148	3,605	-
non-CEP	No	MO	WENTZVILLE R-IV	3,127	15,368	-
non-CEP	No	CA	COALINGA-HURON UNIFIED SCHOOL DISTRICT	2,997	5,348	-
non-CEP	No	MS	MARSHALL CTY PUBLIC SCHOOLS	2,970	3,290	-
non-CEP	No	OH	BARBERTON CITY SD	2,965	3,694	-
CEP	No	IA	OTTUMWA COMM SCHOOL DISTRICT	2,876	4,406	884
CEP	No	NC	ANSON COUNTY SCHOOLS	2,826	3,740	3,740
non-CEP	No	TX	LIVINGSTON ISD	2,743	4,048	-
non-CEP	No	RI	E. PROVIDENCE SCHOOL DEPARTMENT	2,739	5,391	-
non-CEP	No	VA	YORK COUNTY PUBLIC SCHOOLS	2,731	12,667	-
non-CEP	No	WA	SHELTONSCHOOL DISTRICT	2,651	4,195	-
CEP	No	PA	MIFFLIN COUNTY SCHOOL DISTRICT	2,622	5,201	586
non-CEP	No	OH	FINDLAY CITY SD	2,588	5,949	-
CEP	No	TX	WEST ORANGE-COVE CONS ISD	2,486	2,486	245
non-CEP	No	MS	COVINGTON CTY SCHOOL DISTRICT	2,466	3,053	-
non-CEP	No	KS	LEAVENWORTH	2,452	3,876	-
non-CEP	No	LA	ASSUMPTION PARISH SCHOOL BOARD	2,404	3,735	-
non-CEP	No	VA	CHARLOTTESVILLE CITY PUBLIC SCHOOLS	2,385	4,369	-
non-CEP	No	AZ	BUCKEYE UNION HIGH SCHOOL DISTRICT	2,385	4,168	-
CEP	No	IL	BERWYN SOUTH SD 100	2,357	3,983	948
non-CEP	No	IL	MATTESON ESD 162	2,305	2,903	-
CEP	No	PA	ARCHDIOCESE OF PHILADELPHIA	2,267	27,081	16,505
CEP	No	ME	RSU 17/MSAD 17	2,262	3,513	1,942
non-CEP	No	GA	PIERCE COUNTY	2,187	3,735	-
non-CEP	No	CA	LAKE TAHOE UNIFIED SCHOOL DISTRICT	2,141	3,936	-
non-CEP	No	WI	SUN PRAIRIE AREA SCHOOL DISTRICT	2,036	7,315	-
non-CEP	No	MD	QUEEN ANNES CO BD OF EDUCATION	2,027	7,781	-
CEP	No	GA	ELBERT COUNTY	1,986	3,103	1,427
non-CEP	No	OK	DUNCAN	1,982	3,933	-
non-CEP	No	NE	SCOTTSBLUFF PUBLIC SCHOOLS	1,947	3,211	-
non-CEP	No	ME	BANGOR SCHOOL DEPARTMENT	1,891	3,794	-
non-CEP	No	ID	LAKELAND S.D. #272	1,881	4,214	-
CEP	No	CA	FOWLER UNIFIED SCHOOL DISTRICT	1,867	2,477	242
non-CEP	No	KY	WOODFORD COUNTY	1,862	4,122	-
non-CEP	No	IN	MISSISSINAWA COMMUNITY SCHOOLS	1,771	2,560	-
non-CEP	No	TX	MADISONVILLE CONS ISD	1,706	2,338	-
non-CEP	No	CA	CALAVERAS UNIFIED SCHOOL DISTRICT	1,605	3,135	-
non-CEP	No	MN	ST FRANCIS ISD #15	1,581	4,834	-
CEP	No	TN	GIBSON COUNTY SSD	1,526	4,067	561

CEP status	Certainty	State	SFA name	No. of students certified for F/R price meal	Total enrollment	Enrollment in CEP school
non-CEP	No	MS	NORTH PIKE SCHOOL DISTRICT	1,504	2,493	-
non-CEP	No	AR	GREENWOOD	1,441	3,711	-
non-CEP	No	PA	BALDWIN-WHITEHALL SCHOOL DISTRICT	1,427	4,128	-
non-CEP	No	MI	ANCHOR BAY SCHOOL DISTRICT	1,421	6,063	-
non-CEP	No	NY	FRONTIER CSD	1,388	5,007	-
non-CEP	No	KS	SEAMAN	1,381	3,811	-
non-CEP	No	CA	RIVER DELTA JOINT UNIFIED SCHOOL DISTRICT	1,327	2,643	-
non-CEP	No	MI	SOUTH REDFORD SCHOOL DISTRICT	1,277	3,130	-
non-CEP	No	TX	KENNEDALE ISD	1,213	3,195	-
CEP	No	FL	ODYSSEY CHARTER SCHOOL, INC.	1,192	1,315	477
non-CEP	No	MI	BELDING AREA SCHOOL DISTRICT	1,137	2,083	-
non-CEP	No	NC	MADISON COUNTY SCHOOLS	1,127	2,465	-
non-CEP	No	NJ	ELMWOOD PARK BD OF ED	1,105	2,653	-
CEP	No	OK	IDABEL	1,105	1,268	1,253
CEP	No	WV	PRESTON CO BD OF EDUCATION	1,087	4,255	1,768
CEP	No	OH	SOUTH POINT	1,084	1,776	1,721
non-CEP	No	WI	FORT ATKINSON SCH DISTRICT	1,042	2,755	-
non-CEP	No	CA	HOLTVILLE UNIFIED SCHOOL DISTRICT	1,028	1,647	-
non-CEP	No	NY	WHITESBORO CSD	1,016	3,226	-
non-CEP	No	MO	SCHOOL OF THE OSAGE	1,004	1,921	-
non-CEP	No	TX	TATUM ISD	965	1,718	-
non-CEP	No	MI	BLOOMINGDALE PUBLIC SCHOOL DISTRICT	954	1,189	-
non-CEP	No	VA	GALAX CITY PUBLIC SCHOOLS	916	1,391	-
CEP	No	GA	PEACH COUNTY	894	3,666	2,291
non-CEP	No	CA	PLEASANTON UNIFIED SCHOOL DISTRICT	889	14,781	-
non-CEP	No	IN	MT VERNON COMMUNITY SCHOOL CORP	846	3,638	-
non-CEP	No	OH	MASON CITY SD	838	10,468	-
non-CEP	No	PA	PHILADELPHIA CS FOR ARTS & SCIENCES AT H.R. EDMUNDS	837	985	-
non-CEP	No	NY	WINDSOR CSD	789	1,730	-
non-CEP	No	OH	ALEXANDER LOCAL SD	773	1,624	-
non-CEP	No	SC	CLARENDON 03	768	1,286	-
non-CEP	No	TX	LA VERNIA ISD	752	3,197	-
non-CEP	No	WA	CASHMERE SCHOOL DISTRICT	746	1,546	-
non-CEP	No	MO	EAST PRAIRIE R-II	720	1,243	-
non-CEP	No	PA	SPRING COVE SCHOOL DISTRICT	711	1,916	-
non-CEP	No	IN	UNION COUNTY/COLLEGE CORNER JOINT SCHOOL	682	1,501	-
CEP	No	SC	FLORENCE 04	670	754	754
CEP	Yes	CA	FRESNO UNIFIED SCHOOL DISTRICT	665	75,549	74,798
CEP	No	NY	BINGHAMTON CITY SD	628	6,759	5,798
non-CEP	No	MA	BELLINGHAM PUBLIC SCHOOLS	612	2,294	-
non-CEP	No	IN	BREMEN PUBLIC SCHOOLS	588	1,491	-
CEP	No	GA	BRANTLEY COUNTY	548	3,600	2,609
non-CEP	No	FL	CITY OF HIALEAH EDUCATIONAL ACADEMY	528	615	-
non-CEP	No	NM	LORDSBURG MUNICIPAL SCHOOLS	521	518	-
non-CEP	No	IL	CARLINVILLE CUSD 1	501	1,478	-
non-CEP	No	PA	WARRIOR RUN SCHOOL DISTRICT	492	1,561	-
non-CEP	No	WI	WEBSTER SCHOOL DISTRICT	471	689	-
non-CEP	No	NY	ATTICA CSD	449	1,359	-
non-CEP	No	AZ	IMAGINE AVONDALE ELEMENTARY, INC.	426	552	-
non-CEP	No	AR	NORFORK	383	472	-
non-CEP	No	NY	GREENVILLE CSD	368	530	-
CEP	No	MI	GRAND RAPIDS PUBLIC SCHOOLS	364	23,885	19,116
non-CEP	No	MI	HEMLOCK PUBLIC SCHOOL DISTRICT	358	1,284	-

CEP status	Certainty	State	SFA name	No. of students certified for F/R price meal	Total enrollment	Enrollment in CEP school
CEP	No	TX	PREMONT ISD	358	506	506
non-CEP	No	MN	EDEN VALLEY WATKINS ISD #463	343	947	-
non-CEP	No	CO	PLATTE CANYON 1	336	945	-
CEP	No	IN	IMAGINE INDIANA LIFE SCIENCES ACADEMY WES	333	526	526
CEP	No	VT	WINDHAM SOUTHWEST SU	320	783	61
non-CEP	No	OK	CHISHOLM	316	1,044	-
non-CEP	No	NY	CRISTO REY BROOKLYN HIGH SCHOOL	267	273	-
non-CEP	No	OH	CUYAHOGA VALLEY CAREER CENTER	242	928	-
CEP	No	OH	ST ALBERT THE GREAT	235	3,871	952
non-CEP	No	TX	FROST ISD	234	416	-
non-CEP	No	CA	BUELLTON UNION ELEMENTARY SCHOOL DISTRICT	213	623	-
non-CEP	No	KS	MILL CREEK VALLEY	196	460	-
non-CEP	No	CA	ST PATRICK ELEM CATHOLIC	161	259	-
non-CEP	No	IL	ROME CCSD 2	140	306	-
CEP	No	CT	NEW HAVEN PUBLIC SCHOOLS	105	21,773	21,641
non-CEP	No	MO	AVILLA R-XIII	90	158	-
CEP	No	SC	JASPER 01	86	3,019	2,933
non-CEP	No	NJ	SHAMONG TWP BD OF ED	83	799	-
CEP	Yes	MI	DETROIT CITY SCHOOL DISTRICT	57	66,288	66,142
non-CEP	No	MA	BROOKFIELD SCHOOL COMMITTEE	34	318	-
CEP	Yes	IL	CITY OF CHICAGO SD 299	-	375,287	375,287
CEP	Yes	TX	DALLAS ISD	-	160,163	160,163
CEP	Yes	PA	SCHOOL DISTRICT OF PHILADELPHIA	-	139,443	139,443
CEP	Yes	TN	SHELBY COUNTY SCHOOLS	-	122,989	122,989
CEP	Yes	TN	DAVIDSON COUNTY	-	81,480	81,480
CEP	Yes	WI	MILWAUKEE PUBLIC SCHOOL DISTRICT	-	78,076	78,076
CEP	Yes	TX	ALDINE ISD	-	69,679	69,679
CEP	No	AL	MOBILE COUNTY BOARD OF EDUCATION	-	64,735	64,735
CEP	Yes	MA	BOSTON SCHOOL COMMITTEE	-	58,786	58,224
CEP	No	GA	CLAYTON COUNTY	-	53,520	53,520
CEP	No	OH	COLUMBUS PUBLIC SCHOOLS	-	51,131	51,131
CEP	No	LA	EAST BATON ROUGE PARISH SCHOOL SYSTEM	-	40,605	40,605
CEP	No	OH	CLEVELAND CITY SCHOOL DISTRICT	-	38,002	38,002
CEP	No	GA	RICHMOND COUNTY	-	31,811	31,811
CEP	No	TX	PHARR-SAN JUAN-ALAMO ISD	-	31,486	31,486
CEP	No	NY	ROCHESTER CITY SD	-	31,035	31,032
CEP	No	MS	JACKSON PUBLIC SCHOOL DIST	-	29,122	29,122
CEP	No	GA	BIBB COUNTY	-	24,354	24,354
CEP	No	VA	RICHMOND CITY PUBLIC SCHOOLS	-	23,079	23,079
CEP	No	NY	SYRACUSE CITY SD	-	20,874	20,874
CEP	No	TX	DONNA ISD	-	15,328	15,328
CEP	No	MO	FERGUSON-FLORISSANT R-II	-	12,782	12,782
CEP	No	PA	ERIE CITY SCHOOL DISTRICT	-	12,667	12,667
CEP	No	IL	JOLIET PSD 86	-	11,771	11,771
CEP	No	TX	RIO GRANDE CITY ISD	-	10,904	10,904
CEP	No	NC	LENOIR COUNTY PUBLIC SCHOOLS	-	9,420	9,420
CEP	No	NY	UTA	-	9,137	9,137
CEP	No	OH	CANTON CITY SD	-	8,940	8,940
CEP	No	LA	MONROE CITY SCHOOL BOARD	-	8,149	8,149
CEP	No	GA	TIFT COUNTY	-	7,929	7,929
CEP	No	WV	WAYNE CO BD OF EDUCATION	-	7,428	7,428
CEP	No	OH	MIDDLETOWN CITY SD	-	6,575	6,575
CEP	No	NC	SCOTLAND COUNTY SCHOOLS	-	6,195	6,195
CEP	No	MS	GREENVILLE PUBLIC SCHOOLS	-	5,623	5,623

CEP status	Certainty	State	SFA name	No. of students certified for F/R price meal	Total enrollment	Enrollment in CEP school
CEP	No	OH	WARREN CITY SD	-	5,049	5,049
CEP	No	MI	YPSILANTI COMMUNITY SCHOOLS	-	4,276	4,276
CEP	No	KY	PERRY COUNTY	-	4,240	4,240
CEP	No	GA	TATNALL COUNTY	-	3,774	3,774
CEP	No	LA	RSD-FIRSTLINE SCHOOLS, INC.	-	3,692	3,692
CEP	No	KY	LETCHER COUNTY	-	3,250	3,250
CEP	No	PA	NEW CASTLE AREA SCHOOL DISTRICT	-	3,160	3,160
CEP	No	ME	RSU 54 / MSAD 54	-	2,658	2,658
CEP	No	MS	TUNICA CTY SCHOOL DISTRICT	-	2,233	2,233
CEP	No	PA	OLNEY CHARTER HIGH SCHOOL	-	1,707	1,707
CEP	No	AZ	TOLTEC SCHOOL DISTRICT	-	1,217	1,217
CEP	No	MO	CARUTHERSVILLE 18	-	1,132	1,132
CEP	No	GA	WHEELER COUNTY	-	1,074	1,074
CEP	No	PA	MEMPHIS STREET ACADEMY CHARTER SCHOOL AT J.P. JONES	-	887	887
CEP	No	MI	BURTON GLEN CHARTER ACADEMY	-	651	651
CEP	No	IL	QUEST CHARTER SCHOOL ACADEMY	-	496	496
CEP	No	KY	ROBERTSON COUNTY	-	366	366

Attachment A3

LEAs in CEP Participation File not in the FNS 742 Data

STATE_ID	CEP_LEAID	LEA_NAME
IN	K385	CORNERSTONE CHRISTIAN COLLEGE PREP
NY	331500226123	MESILAS BAIS YAAKOV
NY	331800880145	HCHC, INC. - KINGSBROOK JEWISH MEDI
OH	014932	CINCINNATI GENERATION ACADEMY
TX	252	EXCELLENCE 2000, INC.
WI	401701	A PROMISE OF HOPE ACADEMY
WI	401704	SHINING STAR CHRISTIAN SCHOOLS
WI	409661	ST. JOHN PAUL II CONGREGATION
WI	511711	HOPE CHRISTIAN SCHOOL: VIA
CA	3776851	BONSALL USD
DC	186	KINGSMAN ACADEMY PCS
DC	184	MONUMENT ACADEMY PCS
DC	188	THE CHILDREN'S GUILD
DC	263	WASHINGTON GLOBAL PCS
DE	9608	DELAWARE MET HS
FL	1053	DAUGHTER OF ZION JUNIOR ACADEMY
FL	1083	FATHER'S H.A.R.B.O.R. ACADEMY, INC.
FL	454	LEGACY PREPARATORY ACADEMY, INC.
FL	1051	ONE ACCORD CHRISTIAN MINISTRIES INC
FL	1052	PROFECTUS LEARNING SYSTEMS INC
FL	1065	REACH ONE TEACH ONE, INC
ID	555	CANYON-OWYHEE SCHOOL SERVICE AGENCY
IL	13058722026	ODIN PUBLIC SCHOOL DISTRICT 722
IL	13041178004	SPRING GARDEN CCSD 178
KS	P0539	COMMUNITY FIRST
LA	3AQ	BATON ROUGE UNIVERSITY PREPARATORY SCHOOL INC
LA	036	ORLEANS PARISH SCHOOLS
MI	25240	BEECHER COMMUNITY SCHOOL DISTRICT
MI	41917	WILLIAM C. ABNEY ACADEMY
MS	V0001592510	MIDTOWN PARTNERS, INC.
MS	V234567891	REPUBLIC SCHOOLS INC.
NE	280775	NELSON MANDELA ELEMENTARY SCHOOL
PA	105257512	ERIE RISE LEADERSHIP ACADEMY CHARTER SCHOOL
PA	121398065	EXECUTIVE EDUCATION ACADEMY CHARTER SCHOOL
PA	126512850	HARAMBEE INSTITUTE OF SCIENCE AND TECHNOLOGY CHARTER SCHOOL INC
PA	126516457	MASTERY CHARTER SCHOOL - HARRITY ELEMENTARY
PA	126517286	MASTERY CHARTER SCHOOL - SMEDLEY ELEMENTARY
PA	126519644	MASTERY CS - CLEVELAND ELEMENTARY
PA	126511748	MASTERY CS-CLYMER ELEMENTARY
PA	126518795	MASTERY CS-PASTORIUS CAMPUS
PA	121391526	ROBERTO CLEMENTE ELEMENTARY CHARTER SCHOOL
PA	126512860	WORLD COMMUNICATIONS CHARTER SCHOOL
TN	P021	ACADEMY FOR G.O.D
TN	87	EXPLORE COMMUNITY SCHOOL

Attachment A4

APEC III Sampled Schools

STATE_ID	SFA_NAME	SFA_CERT	SFA_CEPS TAT	SCHOOL_NAME	SCHOOL_ID	School_city	SCH_CEPSTAT	CEP_GROUP
AL	CALHOUN COUNTY BOARD OF EDUCATION	non- certainty	nonCEP	OHATCHEE HIGH SCH	4	OHATCHEE	nonCEP	
AL	CALHOUN COUNTY BOARD OF EDUCATION	non- certainty	nonCEP	WELLBORN ELEM SCH	12	ANNISTON	nonCEP	
AL	CALHOUN COUNTY BOARD OF EDUCATION	non- certainty	nonCEP	WHITE PLAINS ELEM SCH	14	ANNISTON	nonCEP	
AL	HUNTSVILLE CITY BOARD OF EDUCATION	non- certainty	CEP	WHITESBURG MIDDLE SCH	41	HUNTSVILLE	CEP	1
AL	MOBILE COUNTY BOARD OF EDUCATION	non- certainty	CEP	SEMMES ELEM SCH	73	SEMMES	CEP	1
AR	GREENWOOD	non- certainty	nonCEP	EAST POINTE ELEMENTARY SCHOOL	2	GREENWOOD	nonCEP	
AR	GREENWOOD	non- certainty	nonCEP	GREENWOOD JUNIOR HIGH SCHOOL	4	GREENWOOD	nonCEP	
AR	GREENWOOD	non- certainty	nonCEP	WESTWOOD ELEMENTARY SCHOOL	5	GREENWOOD	nonCEP	
AR	NORFORK	non- certainty	nonCEP	ARRIE GOFORTH ELEMENTARY SCHOOL	1	NORFORK	nonCEP	
AZ	BUCKEYE UNION HIGH SCHOOL DISTRICT	non- certainty	nonCEP	YOUNGKER HIGH SCHOOL	3	BUCKEYE	nonCEP	
AZ	DEER VALLEY UNIFIED DISTRICT	non- certainty	nonCEP	DIAMOND CANYON ELEMENTARY	14	ANTHEM	nonCEP	
AZ	DEER VALLEY UNIFIED DISTRICT	non- certainty	nonCEP	PARK MEADOWS ELEMENTARY SCHOOL	27	GLENDALE	nonCEP	
AZ	DEER VALLEY UNIFIED DISTRICT	non- certainty	nonCEP	Vista Peak	37	Phoenix	nonCEP	
AZ	FLAGSTAFF UNIFIED DISTRICT	non- certainty	nonCEP	FLAGSTAFF HIGH SCHOOL	4	FLAGSTAFF	nonCEP	
AZ	FLAGSTAFF UNIFIED DISTRICT	non- certainty	nonCEP	JOHN Q THOMAS ELEMENTARY SCHOOL	5	FLAGSTAFF	nonCEP	
AZ	FLAGSTAFF UNIFIED DISTRICT	non- certainty	nonCEP	WEITZEL'S PUENTE DE HOZHO BILINGUAL MAGNET SCHOOL	15	FLAGSTAFF	nonCEP	
AZ	IMAGINE AVONDALE ELEMENTARY, INC.	non- certainty	nonCEP	IMAGINE AVONDALE ELEMENTARY	1	AVONDALE	nonCEP	
AZ	PENDERGAST ELEMENTARY DISTRICT	non- certainty	nonCEP	AMBERLEA ELEMENTARY SCHOOL	1	PHOENIX	nonCEP	

STATE_ID	SFA_NAME	SFA_CERT	SFA_CEPS TAT	SCHOOL_NAME	SCHOOL_ID	School_city	SCH_CEPSTAT	CEP_GROUP
AZ	PENDERGAST ELEMENTARY DISTRICT	non-certainty	nonCEP	SUNSET RIDGE ELEMENTARY SCHOOL	10	GLENDALE	nonCEP	
AZ	PENDERGAST ELEMENTARY DISTRICT	non-certainty	nonCEP	WESTWIND ELEMENTARY SCHOOL	12	PHOENIX	nonCEP	
AZ	PHOENIX UNION HIGH SCHOOL DISTRICT	non-certainty	nonCEP	CAMELBACK HIGH SCHOOL	4	PHOENIX	nonCEP	
AZ	PHOENIX UNION HIGH SCHOOL DISTRICT	non-certainty	nonCEP	NORTH HIGH SCHOOL	11	PHOENIX	nonCEP	
AZ	PHOENIX UNION HIGH SCHOOL DISTRICT	non-certainty	nonCEP	TREVOR BROWNE HIGH SCHOOL	16	PHOENIX	nonCEP	
AZ	TEMPE SCHOOL DISTRICT	non-certainty	CEP	CARMINATI SCHOOL	4	TEMPE	nonCEP	
AZ	TEMPE SCHOOL DISTRICT	non-certainty	CEP	CURRY ELEMENTARY SCHOOL	6	TEMPE	nonCEP	
AZ	TEMPE SCHOOL DISTRICT	non-certainty	CEP	GILILLAND MIDDLE SCHOOL	9	TEMPE	nonCEP	
AZ	TOLTEC SCHOOL DISTRICT	non-certainty	CEP	ARIZONA CITY ELEMENTARY SCHOOL	1	ARIZONA CITY	CEP	1
AZ	WASHINGTON ELEMENTARY SCHOOL DISTRICT	non-certainty	CEP	CACTUS WREN ELEMENTARY SCHOOL	5	PHOENIX	CEP	1
AZ	WASHINGTON ELEMENTARY SCHOOL DISTRICT	non-certainty	CEP	MOON MOUNTAIN SCHOOL	16	PHOENIX	CEP	1
AZ	WASHINGTON ELEMENTARY SCHOOL DISTRICT	non-certainty	CEP	ORANGEWOOD SCHOOL	20	PHOENIX	CEP	1
AZ	YUMA ELEMENTARY DISTRICT	non-certainty	nonCEP	DESERT MESA ELEMENTARY SCHOOL	4	YUMA	nonCEP	
AZ	YUMA ELEMENTARY DISTRICT	non-certainty	nonCEP	GEORGE WASHINGTON CARVER ELEMENTARY SCHOOL	6	YUMA	nonCEP	
AZ	YUMA ELEMENTARY DISTRICT	non-certainty	nonCEP	GILA VISTA JR HIGH SCHOOL	7	YUMA	nonCEP	
CA	ANAHEIM UNION HIGH SCHOOL DISTRICT	non-certainty	nonCEP	BALL JUNIOR HIGH	2	ANAHEIM	nonCEP	
CA	ANAHEIM UNION HIGH SCHOOL DISTRICT	non-certainty	nonCEP	CYPRESS HIGH	5	CYPRESS	nonCEP	
CA	ANAHEIM UNION HIGH SCHOOL DISTRICT	non-certainty	nonCEP	LOARA HIGH	12	ANAHEIM	nonCEP	
CA	BAKERSFIELD CITY SCHOOL DISTRICT	non-certainty	nonCEP	CURRAN MIDDLE	10	BAKERSFIELD	nonCEP	
CA	BAKERSFIELD CITY SCHOOL DISTRICT	non-certainty	nonCEP	LONGFELLOW ELEMENTARY	25	BAKERSFIELD	nonCEP	

STATE_ID	SFA_NAME	SFA_CERT	SFA_CEPS TAT	SCHOOL_NAME	SCHOOL_ID	School_city	SCH_CEPSTAT	CEP_GROUP
CA	BAKERSFIELD CITY SCHOOL DISTRICT	non-certainty	nonCEP	PIONEER DRIVE ELEMENTARY	30	BAKERSFIELD	nonCEP	
CA	CALAVERAS UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	SAN ANDREAS ELEMENTARY	8	SAN ANDREAS	CEP	1
CA	CALAVERAS UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	TOYON MIDDLE	9	VALLEY SPRINGS	CEP	1
CA	CALAVERAS UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	VALLEY SPRINGS ELEMENTARY	4	VALLEY SPRINGS	nonCEP	
CA	CAPISTRANO UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	DEL OBISPO ELEMENTARY	17	SAN JUAN CAPISTRANO	nonCEP	
CA	CAPISTRANO UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	NEWHART MIDDLE	36	MISSION VIEJO	nonCEP	
CA	CAPISTRANO UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	SAN JUAN HILLS HIGH	46	SAN JUAN CAPISTRANO	nonCEP	
CA	COALINGA-HURON UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	HURON ELEMENTARY	7	HURON	nonCEP	
CA	FONTANA UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	ALDER MIDDLE	1	FONTANA	nonCEP	
CA	FONTANA UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	DATE ELEMENTARY	11	FONTANA	nonCEP	
CA	FONTANA UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	SIERRA LAKES ELEMENTARY	36	FONTANA	nonCEP	
CA	FOWLER UNIFIED SCHOOL DISTRICT	non-certainty	CEP	FOWLER HIGH	5	FOWLER	nonCEP	
CA	FOWLER UNIFIED SCHOOL DISTRICT	non-certainty	CEP	JOHN SUTTER MIDDLE	7	FOWLER	nonCEP	
CA	FOWLER UNIFIED SCHOOL DISTRICT	non-certainty	CEP	MALAGA ELEMENTARY	9	FRESNO	CEP	1
CA	FOWLER UNIFIED SCHOOL DISTRICT	non-certainty	CEP	MARSHALL ELEMENTARY	8	FOWLER	nonCEP	
CA	FRESNO UNIFIED SCHOOL DISTRICT	certainty	CEP	EDISON HIGH	88	FRESNO	CEP	5
CA	FRESNO UNIFIED SCHOOL DISTRICT	certainty	CEP	LAWLESS ELEMENTARY	50	FRESNO	CEP	3
CA	GILROY UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	CHRISTOPHER HIGH	3	GILROY	nonCEP	
CA	GILROY UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	GLEN VIEW ELEMENTARY	8	GILROY	nonCEP	
CA	GILROY UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	RUCKER ELEMENTARY	13	GILROY	nonCEP	

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CA	GLENDALE UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	BENJAMIN FRANKLIN ELEMENTARY	4	GLENDALE	nonCEP	
CA	GLENDALE UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	CRESCENTA VALLEY HIGH	8	LA CRESCENTA	nonCEP	
CA	GLENDALE UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	HORACE MANN ELEMENTARY	15	GLENDALE	nonCEP	
CA	HACIENDA LA PUENTE UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	FAIRGROVE ACADEMY	6	LA PUENTE	nonCEP	
CA	HACIENDA LA PUENTE UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	LOS ALTOS HIGH	14	HACIENDA HEIGHTS	nonCEP	
CA	HACIENDA LA PUENTE UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	NELSON ELEMENTARY	18	LA PUENTE	nonCEP	
CA	HESPERIA UNIFIED SCHOOL DISTRICT	non-certainty	CEP	COTTONWOOD ELEMENTARY	4	HESPERIA	nonCEP	
CA	HESPERIA UNIFIED SCHOOL DISTRICT	non-certainty	CEP	KRYSTAL SCHOOL OF SCIENCE, MATH & TECHNOLOGY	12	HESPERIA	nonCEP	
CA	HESPERIA UNIFIED SCHOOL DISTRICT	non-certainty	CEP	MESA GRANDE ELEMENTARY	26	HESPERIA	CEP	1
CA	HESPERIA UNIFIED SCHOOL DISTRICT	non-certainty	CEP	SULTANA HIGH	21	HESPERIA	nonCEP	
CA	HOLTVILLE UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	EMMETT S. FINLEY ELEMENTARY	1	HOLTVILLE	nonCEP	
CA	HOLTVILLE UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	HOLTVILLE HIGH	3	HOLTVILLE	nonCEP	
CA	HOLTVILLE UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	PINE ELEMENTARY	5	HOLTVILLE	nonCEP	
CA	KERN HIGH SCHOOL DISTRICT	non-certainty	nonCEP	FOOTHILL HIGH	6	BAKERSFIELD	nonCEP	
CA	KERN HIGH SCHOOL DISTRICT	non-certainty	nonCEP	SOUTH HIGH	19	BAKERSFIELD	nonCEP	
CA	KERN HIGH SCHOOL DISTRICT	non-certainty	nonCEP	TIERRA DEL SOL CONTINUATION HIGH	21	BAKERSFIELD	nonCEP	
CA	LAKE TAHOE UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	SOUTH TAHOE MIDDLE	5	SOUTH LAKE TAHOE	nonCEP	
CA	LODI UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	ELKHORN	10	STOCKTON	nonCEP	
CA	LODI UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	GEORGE WASHINGTON ELEMENTARY	14	LODI	nonCEP	
CA	LODI UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	RONALD E. MCNAIR HIGH	39	STOCKTON	nonCEP	

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CA	LOS ANGELES UNIFIED SCHOOL DISTRICT	certainty	CEP	ARLETA HS	787		CEP	26
CA	LOS ANGELES UNIFIED SCHOOL DISTRICT	certainty	CEP	BRIGHT ELEMENTARY	788		CEP	26
CA	LOS ANGELES UNIFIED SCHOOL DISTRICT	certainty	CEP	CHEVIOT HILLS CONTINUATION HIGH	139		nonCEP	
CA	LOS ANGELES UNIFIED SCHOOL DISTRICT	certainty	CEP	CURTISS M/S MAGNET	165		nonCEP	
CA	LOS ANGELES UNIFIED SCHOOL DISTRICT	certainty	CEP	DANUBE ELEMENTARY	172		nonCEP	
CA	LOS ANGELES UNIFIED SCHOOL DISTRICT	certainty	CEP	HAMILTON MUSIC ACADEMY MAGNET	275		nonCEP	
CA	LOS ANGELES UNIFIED SCHOOL DISTRICT	certainty	CEP	MAGNOLIA ELEMENTARY	696		CEP	1
CA	LOS ANGELES UNIFIED SCHOOL DISTRICT	certainty	CEP	MENLO ELEMENTARY	697		CEP	1
CA	LOS ANGELES UNIFIED SCHOOL DISTRICT	certainty	CEP	MORNINGSIDE ELEMENTARY	434		nonCEP	
CA	LOS ANGELES UNIFIED SCHOOL DISTRICT	certainty	CEP	SAN PEDRO SENIOR HIGH	549		nonCEP	
CA	LOS ANGELES UNIFIED SCHOOL DISTRICT	certainty	CEP	WILLOW EL	790		CEP	26
CA	LOS ANGELES UNIFIED SCHOOL DISTRICT	certainty	CEP	WOODCREST ELEMENTARY	698		CEP	1
CA	LYNWOOD UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	LUGO ELEMENTARY	7	LYNWOOD	nonCEP	
CA	LYNWOOD UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	LYNWOOD MIDDLE	9	LYNWOOD	nonCEP	
CA	LYNWOOD UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	WILSON ELEMENTARY	19	LYNWOOD	nonCEP	
CA	OXNARD SCHOOL DISTRICT	non-certainty	nonCEP	CESAR E. CHAVEZ ELEMENTARY	1	OXNARD	nonCEP	
CA	OXNARD SCHOOL DISTRICT	non-certainty	nonCEP	CHRISTA MCAULIFFE ELEMENTARY	2	OXNARD	nonCEP	
CA	OXNARD SCHOOL DISTRICT	non-certainty	nonCEP	ROBERT J. FRANK INTERMEDIATE	17	OXNARD	nonCEP	
CA	PLEASANTON UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	FOOTHILL HIGH	5	PLEASANTON	nonCEP	
CA	PLEASANTON UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	HARVEST PARK MIDDLE	6	PLEASANTON	nonCEP	

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CA	PLEASANTON UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	LYDIKEN ELEMENTARY	8	PLEASANTON	nonCEP	
CA	PORTERVILLE UNIFIED SCHOOL DISTRICT	non-certainty	CEP	GRANITE HILLS HIGH	5	PORTERVILLE	CEP	1
CA	RIVER DELTA JOINT UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	ISLETON ELEMENTARY	6	ISLETON	nonCEP	
CA	RIVER DELTA JOINT UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	RIVERVIEW MIDDLE	11	RIO VISTA	nonCEP	
CA	RIVER DELTA JOINT UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	WALNUT GROVE ELEMENTARY	12	WALNUT GROVE	nonCEP	
CA	SACRAMENTO CITY UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	HOLLYWOOD PARK ELEMENTARY	32	SACRAMENTO	nonCEP	
CA	SACRAMENTO CITY UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	PARKWAY ELEMENTARY	55	SACRAMENTO	nonCEP	
CA	SACRAMENTO CITY UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	SCHOOL OF ENGINEERING & SCIENCES	62	SACRAMENTO	nonCEP	
CA	SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	HILLSIDE ELEMENTARY	8	SAN BERNARDINO	nonCEP	
CA	SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	MONTEREY ELEMENTARY	57	SAN BERNARDINO	CEP	1
CA	SAN BERNARDINO CITY UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	PACIFIC HIGH	62	SAN BERNARDINO	CEP	1
CA	SAN DIEGO UNIFIED SCHOOL DISTRICT	certainty	nonCEP	FARB MIDDLE	51	SAN DIEGO	nonCEP	
CA	SAN DIEGO UNIFIED SCHOOL DISTRICT	certainty	nonCEP	THE O'FARRELL CHARTER	191	SAN DIEGO	CEP	1
CA	SAN FRANCISCO UNIFIED SCHOOL DISTRICT	non-certainty	CEP	STEVENSON (ROBERT LOUIS) ELEMENTARY	53		nonCEP	
CA	SAN FRANCISCO UNIFIED SCHOOL DISTRICT	non-certainty	CEP	WILLIE BROWN	117		CEP	1
CA	SAN JUAN UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	ANDREW CARNEGIE MIDDLE	2	ORANGEVALE	nonCEP	
CA	SAN JUAN UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	MIRA LOMA HIGH	41	SACRAMENTO	nonCEP	
CA	SAN JUAN UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	SIERRA OAKS K-8	52	SACRAMENTO	nonCEP	
CA	SAN MARCOS UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	LA COSTA MEADOWS ELEMENTARY	8	CARLSBAD	nonCEP	
CA	SNOWLINE JOINT UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	PINON HILLS ELEMENTARY	6	PINON HILLS	nonCEP	

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CA	SNOWLINE JOINT UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	SERRANO HIGH	9	PHELAN	nonCEP	
CA	SNOWLINE JOINT UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	VISTA VERDE ELEMENTARY	11	VICTORVILLE	nonCEP	
CA	SOUTH BAY UNION SCHOOL DISTRICT	non-certainty	nonCEP	NESTOR LANGUAGE ACADEMY CHARTER	8	SAN DIEGO	nonCEP	
CA	TULARE CITY SCHOOL DISTRICT	non-certainty	nonCEP	GARDEN ELEMENTARY	5	TULARE	nonCEP	
CA	TULARE CITY SCHOOL DISTRICT	non-certainty	nonCEP	MAPLE ELEMENTARY	10	TULARE	nonCEP	
CA	TULARE CITY SCHOOL DISTRICT	non-certainty	nonCEP	MULCAHY MIDDLE	12	TULARE	nonCEP	
CA	VACAVILLE UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	FAIRMONT CHARTER ELEMENTARY	9	VACAVILLE	nonCEP	
CA	VACAVILLE UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	VACAVILLE HIGH	14	VACAVILLE	nonCEP	
CA	VACAVILLE UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	WILLIS JEPSON MIDDLE	16	VACAVILLE	nonCEP	
CA	VAL VERDE UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	COLUMBIA ELEMENTARY	3	PERRIS	nonCEP	
CA	VAL VERDE UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	RANCHO VERDE HIGH	13	MORENO VALLEY	nonCEP	
CA	VAL VERDE UNIFIED SCHOOL DISTRICT	non-certainty	nonCEP	VISTA VERDE MIDDLE	21	MORENO VALLEY	nonCEP	
CO	BOULDER VALLEY RE 2	non-certainty	nonCEP	LOUISVILLE ELEMENTARY SCHOOL	35	LOUISVILLE	nonCEP	
CO	BOULDER VALLEY RE 2	non-certainty	nonCEP	MONARCH HIGH SCHOOL	39	LOUISVILLE	nonCEP	
CO	BOULDER VALLEY RE 2	non-certainty	nonCEP	SANCHEZ ELEMENTARY SCHOOL	48	LAFAYETTE	nonCEP	
CO	PLATTE CANYON 1	non-certainty	nonCEP	DEER CREEK ELEMENTARY SCHOOL	1	BAILEY	nonCEP	
CO	PLATTE CANYON 1	non-certainty	nonCEP	FITZSIMMONS MIDDLE SCHOOL	2	BAILEY	nonCEP	
CO	PLATTE CANYON 1	non-certainty	nonCEP	PLATTE CANYON HIGH SCHOOL	3	BAILEY	nonCEP	
CO	WESTMINSTER 50	non-certainty	nonCEP	JOSEPHINE HODGKINS ELEMENTARY SCHOOL	9	DENVER	nonCEP	
CO	WESTMINSTER 50	non-certainty	nonCEP	SHERRELWOOD ELEMENTARY SCHOOL	13	DENVER	nonCEP	

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CO	WESTMINSTER 50	non-certainty	nonCEP	WESTMINSTER HIGH SCHOOL	18	WESTMINSTER	nonCEP	
CT	NEW HAVEN PUBLIC SCHOOLS	non-certainty	CEP	CLINTON AVENUE SCHOOL	11	NEW HAVEN	CEP	1
CT	NEW HAVEN PUBLIC SCHOOLS	non-certainty	CEP	EAST ROCK COMMUNITY MAGNET SCHOOL	16	NEW HAVEN	CEP	1
CT	NEW HAVEN PUBLIC SCHOOLS	non-certainty	CEP	JAMES HILLHOUSE HIGH SCHOOL	25	NEW HAVEN	CEP	1
CT	STAMFORD	non-certainty	nonCEP	CLOONAN SCHOOL	1	STAMFORD	nonCEP	
CT	STAMFORD	non-certainty	nonCEP	HART SCHOOL	4	STAMFORD	nonCEP	
CT	STAMFORD	non-certainty	nonCEP	STILLMEADOW SCHOOL	15	STAMFORD	nonCEP	
DC	DC PUBLIC SCHOOLS	non-certainty	CEP	CAPITOL HILL MONTESSORI SCHOOL AT LOGAN	2	WASHINGTON	nonCEP	
DC	DC PUBLIC SCHOOLS	non-certainty	CEP	PAYNE ES	83	WASHINGTON	CEP	1
DE	INDIAN RIVER	non-certainty	nonCEP	EAST MILLSBORO ELEMENTARY SCHOOL	3	MILLSBORO	nonCEP	
DE	INDIAN RIVER	non-certainty	nonCEP	INDIAN RIVER HIGH SCHOOL	8	DAGSBORO	nonCEP	
DE	INDIAN RIVER	non-certainty	nonCEP	NORTH GEORGETOWN ELEMENTARY SCHOOL	12	GEORGETOWN	nonCEP	
FL	BROWARD COUNTY SCHOOL BOARD	certainty	nonCEP	MCNICOL MIDDLE SCHOOL	117	HOLLYWOOD	nonCEP	
FL	BROWARD COUNTY SCHOOL BOARD	certainty	nonCEP	MEADOWBROOK ELEMENTARY SCHOOL	118	FORT LAUDERDALE	nonCEP	
FL	BROWARD COUNTY SCHOOL BOARD	certainty	nonCEP	NORTH SIDE ELEMENTARY SCHOOL	132	FORT LAUDERDALE	nonCEP	
FL	BROWARD COUNTY SCHOOL BOARD	certainty	nonCEP	NORTHEAST HIGH SCHOOL	133	OAKLAND PARK	nonCEP	
FL	CITY OF HIALEAH EDUCATIONAL ACADEMY	non-certainty	nonCEP	City of Hialeah Educational Academy	1	Hialeah	nonCEP	
FL	COLLIER COUNTY SCHOOL BOARD	non-certainty	nonCEP	GULFVIEW MIDDLE SCHOOL	18	NAPLES	nonCEP	
FL	COLLIER COUNTY SCHOOL BOARD	non-certainty	nonCEP	PALMETTO RIDGE HIGH SCHOOL	41	NAPLES	nonCEP	
FL	COLLIER COUNTY SCHOOL BOARD	non-certainty	nonCEP	POINCIANA ELEMENTARY SCHOOL	46	NAPLES	nonCEP	

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FL	DUVAL COUNTY SCHOOL BOARD	certainty	CEP	GREGORY DRIVE ELEMENTARY SCHOOL	81	JACKSONVILLE	CEP	1
FL	DUVAL COUNTY SCHOOL BOARD	certainty	CEP	KERNAN MIDDLE SCHOOL	22	JACKSONVILLE	nonCEP	
FL	HERNANDO COUNTY SCHOOL BOARD	non-certainty	nonCEP	HERNANDO HIGH SCHOOL	15	BROOKSVILLE	nonCEP	
FL	HILLSBOROUGH COUNTY SCHL BOARD	certainty	nonCEP	Lamb Elementary School	117	Tampa	nonCEP	
FL	HILLSBOROUGH COUNTY SCHL BOARD	certainty	nonCEP	LOMAX MAGNET ELEMENTARY SCHOOL	112	TAMPA	nonCEP	
FL	HILLSBOROUGH COUNTY SCHL BOARD	certainty	nonCEP	WHARTON HIGH SCHOOL	222	TAMPA	nonCEP	
FL	HILLSBOROUGH COUNTY SCHL BOARD	certainty	nonCEP	YOUNG MIDDLE MAGNET SCHOOL	231	TAMPA	nonCEP	
FL	MANATEE COUNTY SCHOOL BOARD	non-certainty	CEP	ANNIE LUCY WILLIAMS ELEMENTARY SCHOOL	2	PARRISH	nonCEP	
FL	MANATEE COUNTY SCHOOL BOARD	non-certainty	CEP	FLORINE J ABEL ELEMENTARY SCHOOL	41	SARASOTA	CEP	1
FL	MIAMI-DADE COUNTY PUBLIC SCHOOLS	certainty	nonCEP	BRENTWOOD ELEMENTARY SCHOOL	29	OPA LOCKA	nonCEP	
FL	MIAMI-DADE COUNTY PUBLIC SCHOOLS	certainty	nonCEP	COCONUT PALM K-8 ACADEMY	48	HOMESTEAD	nonCEP	
FL	MIAMI-DADE COUNTY PUBLIC SCHOOLS	certainty	nonCEP	DR. MICHAEL M. KROP SENIOR HIGH	77	MIAMI-DADE	nonCEP	
FL	MIAMI-DADE COUNTY PUBLIC SCHOOLS	certainty	nonCEP	G. HOLMES BRADDOCK SENIOR HIGH	101	MIAMI	nonCEP	
FL	MIAMI-DADE COUNTY PUBLIC SCHOOLS	certainty	nonCEP	LENORA BRAYNON SMITH ELEMENTARY	173	MIAMI	nonCEP	
FL	MIAMI-DADE COUNTY PUBLIC SCHOOLS	certainty	nonCEP	MIAMI SPRINGS MIDDLE SCHOOL	213	MIAMI SPRINGS	nonCEP	
FL	MIAMI-DADE COUNTY PUBLIC SCHOOLS	certainty	nonCEP	WEST HOMESTEAD ELEMENTARY SCHOOL	326	HOMESTEAD	nonCEP	
FL	ODYSSEY CHARTER SCHOOL, INC.	non-certainty	CEP	Odyssey Charter School	1	Palm Bay	nonCEP	
FL	ODYSSEY CHARTER SCHOOL, INC.	non-certainty	CEP	Odyssey Preparatory Academy	4	Palm Bay	CEP	1
FL	ORANGE COUNTY SCHOOL BOARD	certainty	CEP	Apopka High	6		nonCEP	
FL	ORANGE COUNTY SCHOOL BOARD	certainty	CEP	Southwest Middle	129		nonCEP	

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FL	ORANGE COUNTY SCHOOL BOARD	certainty	CEP	Spring Lake Elementary	131		nonCEP	
FL	OSCEOLA COUNTY SCHOOL BOARD	non- certainty	CEP	DEERWOOD ELEMENTARY SCHOOL	22	KISSIMMEE	CEP	1
FL	OSCEOLA COUNTY SCHOOL BOARD	non- certainty	CEP	HARMONY HIGH SCHOOL	8	HARMONY	nonCEP	
FL	OSCEOLA COUNTY SCHOOL BOARD	non- certainty	CEP	KISSIMMEE MIDDLE SCHOOL	28	KISSIMMEE	CEP	1
FL	OSCEOLA COUNTY SCHOOL BOARD	non- certainty	CEP	REEDY CREEK ELEMENTARY SCHOOL	43	KISSIMMEE	CEP	1
FL	PINELLAS COUNTY SCHOOL BOARD	certainty	CEP	BELLEAIR ELEMENTARY SCHOOL	107	CLEARWATER	CEP	24
FL	PINELLAS COUNTY SCHOOL BOARD	certainty	CEP	NORTHEAST HIGH SCHOOL	42	ST PETERSBURG	nonCEP	
FL	POLK COUNTY SCHOOL BOARD	certainty	CEP	KAREN M. SIEGEL ACADEMY	66	LAKE ALFRED	CEP	1
FL	POLK COUNTY SCHOOL BOARD	certainty	CEP	KINGSFORD ELEMENTARY SCHOOL	70	MULBERRY	CEP	1
FL	SARASOTA COUNTY SCHOOL BOARD	non- certainty	nonCEP	BAY HAVEN SCHOOL OF BASICS PLUS	4	SARASOTA	nonCEP	
FL	SARASOTA COUNTY SCHOOL BOARD	non- certainty	nonCEP	GLENALLEN ELEMENTARY SCHOOL	14	NORTH PORT	nonCEP	
FL	SARASOTA COUNTY SCHOOL BOARD	non- certainty	nonCEP	IMAGINE SCHOOL AT NORTH PORT	18	NORTH PORT	nonCEP	
FL	SCHOOL BOARD OF HIGHLANDS COUNTY	non- certainty	nonCEP	LAKE PLACID ELEMENTARY SCHOOL	9	LAKE PLACID	nonCEP	
FL	SCHOOL BOARD OF HIGHLANDS COUNTY	non- certainty	nonCEP	LAKE PLACID HIGH SCHOOL	10	LAKE PLACID	nonCEP	
FL	SCHOOL BOARD OF HIGHLANDS COUNTY	non- certainty	nonCEP	PARK ELEMENTARY SCHOOL	13	AVON PARK	nonCEP	
FL	SCHOOL DISTRICT OF LEE COUNTY	certainty	CEP	ROYAL PALM EXCEPTIONAL SCHOOL CENTER	69	FORT MYERS	CEP	2
FL	SCHOOL DISTRICT OF LEE COUNTY	certainty	CEP	TANGLEWOOD ELEMENTARY SCHOOL	75	FORT MYERS	CEP	2
FL	THE SCHOOL DISTRICT OF PALM BEACH COUNTY	certainty	nonCEP	GREENACRES ELEMENTARY SCHOOL	71	GREENACRES	nonCEP	
FL	THE SCHOOL DISTRICT OF PALM BEACH COUNTY	certainty	nonCEP	JFK MEDICAL CENTER CHARTER SCHOOL	91	LAKE WORTH	nonCEP	
FL	THE SCHOOL DISTRICT OF PALM BEACH COUNTY	certainty	nonCEP	SANTALUCES COMMUNITY HIGH	167	LANTANA	nonCEP	

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FL	THE SCHOOL DISTRICT OF PALM BEACH COUNTY	certainty	nonCEP	TRADEWINDS MIDDLE SCHOOL	183	GREENACRES	nonCEP	
FL	VOLUSIA COUNTY SCHOOL BOARD	non-certainty	nonCEP	BLUE LAKE ELEMENTARY SCHOOL	2	DELAND	nonCEP	
FL	VOLUSIA COUNTY SCHOOL BOARD	non-certainty	nonCEP	SPRUCE CREEK HIGH SCHOOL	61	PORT ORANGE	nonCEP	
FL	VOLUSIA COUNTY SCHOOL BOARD	non-certainty	nonCEP	TOMOKA ELEMENTARY SCHOOL	67	ORMOND BEACH	nonCEP	
GA	ATLANTA PUBLIC SCHOOLS	non-certainty	CEP	CENTENNIAL PLACE ELEMENTARY SCHOOL	19	ATLANTA	CEP	1
GA	ATLANTA PUBLIC SCHOOLS	non-certainty	CEP	CHARLES R. DREW CHARTER SCHOOL	3	ATLANTA	nonCEP	
GA	BIBB COUNTY	non-certainty	CEP	HERITAGE ELEMENTARY SCHOOL	14	MACON	CEP	1
GA	BIBB COUNTY	non-certainty	CEP	NORTHEAST HIGH SCHOOL	22	MACON	CEP	1
GA	BIBB COUNTY	non-certainty	CEP	RILEY ELEMENTARY SCHOOL	25	MACON	CEP	1
GA	BRANTLEY COUNTY	non-certainty	CEP	BRANTLEY COUNTY HIGH SCHOOL	7	NAHUNTA	CEP	2
GA	CLAYTON COUNTY	non-certainty	CEP	FOUNTAIN ELEMENTARY SCHOOL	15	FOREST PARK	CEP	1
GA	CLAYTON COUNTY	non-certainty	CEP	JONESBORO HIGH SCHOOL	21	JONESBORO	CEP	1
GA	CLAYTON COUNTY	non-certainty	CEP	MARTIN LUTHER KING- JR. ELEMENTARY SCHOOL	33	COLLEGE PARK	CEP	1
GA	COBB COUNTY	non-certainty	nonCEP	DANIELL MIDDLE SCHOOL	25	MARIETTA	nonCEP	
GA	COBB COUNTY	non-certainty	nonCEP	PITNER ELEMENTARY SCHOOL	83	ACWORTH	nonCEP	
GA	COBB COUNTY	non-certainty	nonCEP	SOUTH COBB HIGH SCHOOL	98	AUSTELL	nonCEP	
GA	COWETA COUNTY	non-certainty	nonCEP	EAST COWETA HIGH SCHOOL	7	SHARPSBURG	nonCEP	
GA	COWETA COUNTY	non-certainty	nonCEP	LEE MIDDLE SCHOOL	14	SHARPSBURG	nonCEP	
GA	COWETA COUNTY	non-certainty	nonCEP	MORELAND ELEMENTARY SCHOOL	16	MORELAND	nonCEP	
GA	ELBERT COUNTY	non-certainty	CEP	ELBERT COUNTY HIGH SCHOOL	1	ELBERTON	nonCEP	

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GA	ELBERT COUNTY	non- certainty	CEP	ELBERT COUNTY MIDDLE SCHOOL	3	ELBERTON	CEP	1
GA	FULTON COUNTY	non- certainty	CEP	MCNAIR MIDDLE SCHOOL	85	COLLEGE PARK	CEP	2
GA	FULTON COUNTY	non- certainty	CEP	STONEWALL TELL ELEMENTARY SCHOOL	59	COLLEGE PARK	nonCEP	
GA	GWINNETT COUNTY	certainty	nonCEP	BERKMAR MIDDLE SCHOOL	14	LILBURN	nonCEP	
GA	GWINNETT COUNTY	certainty	nonCEP	NORCROSS ELEMENTARY SCHOOL	91	NORCROSS	nonCEP	
GA	GWINNETT COUNTY	certainty	nonCEP	NORCROSS HIGH SCHOOL	92	NORCROSS	nonCEP	
GA	JACKSON COUNTY	non- certainty	nonCEP	JACKSON COUNTY HIGH SCHOOL	6	JEFFERSON	nonCEP	
GA	JACKSON COUNTY	non- certainty	nonCEP	NORTH JACKSON ELEMENTARY SCHOOL	8	TALMO	nonCEP	
GA	JACKSON COUNTY	non- certainty	nonCEP	SOUTH JACKSON ELEMENTARY SCHOOL	9	ATHENS	nonCEP	
GA	MUSCOGEE COUNTY	non- certainty	CEP	BLANCHARD ELEMENTARY SCHOOL	4	COLUMBUS	nonCEP	
GA	MUSCOGEE COUNTY	non- certainty	CEP	DOUBLE CHURCHES MIDDLE SCHOOL	49	COLUMBUS	CEP	4
GA	MUSCOGEE COUNTY	non- certainty	CEP	HARDAWAY HIGH SCHOOL	53	COLUMBUS	CEP	4
GA	MUSCOGEE COUNTY	non- certainty	CEP	RIGDON ROAD ELEMENTARY SCHOOL	54	COLUMBUS	CEP	4
GA	PEACH COUNTY	non- certainty	CEP	FORT VALLEY MIDDLE SCHOOL	3	FORT VALLEY	CEP	1
GA	PIERCE COUNTY	non- certainty	nonCEP	BLACKSHEAR ELEMENTARY SCHOOL	1	BLACKSHEAR	nonCEP	
GA	PIERCE COUNTY	non- certainty	nonCEP	PATTERSON ELEMENTARY SCHOOL	3	PATTERSON	nonCEP	
GA	PIERCE COUNTY	non- certainty	nonCEP	PIERCE COUNTY HIGH SCHOOL	4	BLACKSHEAR	nonCEP	
GA	RICHMOND COUNTY	non- certainty	CEP	GOSHEN ELEMENTARY SCHOOL	18	AUGUSTA	CEP	1
GA	RICHMOND COUNTY	non- certainty	CEP	LANGFORD MIDDLE SCHOOL	31	AUGUSTA	CEP	1
GA	RICHMOND COUNTY	non- certainty	CEP	WS Hornsby Elementary	57	Augusta	CEP	1

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GA	TIFT COUNTY	non- certainty	CEP	G. O. BAILEY PRIMARY SCHOOL	4	TIFTON	CEP	1
GA	WHEELER COUNTY	non- certainty	CEP	WHEELER COUNTY ELEMENTARY SCHOOL	1	ALAMO	CEP	1
IA	DES MOINES INDEPENDENT COMM SCHOOL DISTRICT ZZ	non- certainty	CEP	CALLANAN MIDDLE SCHOOL	47	DES MOINES	CEP	3
IA	DES MOINES INDEPENDENT COMM SCHOOL DISTRICT ZZ	non- certainty	CEP	ROOSEVELT HIGH SCHOOL	16	DES MOINES	nonCEP	
IA	DES MOINES INDEPENDENT COMM SCHOOL DISTRICT ZZ	non- certainty	CEP	SAMUELSON ELEMENTARY SCHOOL	56	DES MOINES	CEP	3
IA	DES MOINES INDEPENDENT COMM SCHOOL DISTRICT ZZ	non- certainty	CEP	WEEKS MIDDLE SCHOOL	57	DES MOINES	CEP	3
IA	OTTUMWA COMM SCHOOL DISTRICT	non- certainty	CEP	EVANS MIDDLE SCHOOL	2	OTTUMWA	nonCEP	
IA	OTTUMWA COMM SCHOOL DISTRICT	non- certainty	CEP	WILSON ELEMENTARY SCHOOL	8	OTTUMWA	CEP	1
ID	LAKELAND S.D. #272	non- certainty	nonCEP	BETTY KIEFER ELEMENTARY SCHOOL	2	RATHDRUM	nonCEP	
ID	LAKELAND S.D. #272	non- certainty	nonCEP	LAKELAND SENIOR HIGH SCHOOL	6	RATHDRUM	nonCEP	
ID	LAKELAND S.D. #272	non- certainty	nonCEP	SPIRIT LAKE ELEMENTARY SCHOOL	8	SPIRIT LAKE	nonCEP	
ID	TWIN FALLS S.D. #411	non- certainty	CEP	HARRISON ELEMENTARY SCHOOL	12	TWIN FALLS	CEP	5
ID	TWIN FALLS S.D. #411	non- certainty	CEP	VERA C O'LEARY JR HIGH SCHOOL	7	TWIN FALLS	nonCEP	
IL	ARCHDIOCESE OF CHICAGO-NW HWY	non- certainty	CEP	CICS LONGWOOD	125		CEP	7
IL	ARCHDIOCESE OF CHICAGO-NW HWY	non- certainty	CEP	ST. CHRISTOPHER	47		nonCEP	
IL	BERWYN SOUTH SD 100	non- certainty	CEP	IRVING ELEM SCHOOL	5	BERWYN	CEP	1
IL	CARLINVILLE CUSD 1	non- certainty	nonCEP	CARLINVILLE INTERMEDIATE SCHOOL	2	CARLINVILLE	nonCEP	
IL	CARLINVILLE CUSD 1	non- certainty	nonCEP	CARLINVILLE MIDDLE SCHOOL	3	CARLINVILLE	nonCEP	
IL	CARLINVILLE CUSD 1	non- certainty	nonCEP	CARLINVILLE PRIMARY SCHOOL	4	CARLINVILLE	nonCEP	
IL	CICERO SD 99	non- certainty	nonCEP	COLUMBUS WEST ELEMENTARY SCHOOL	5	CICERO	nonCEP	

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IL	CITY OF CHICAGO SD 299	certainty	CEP	CAMELOT - CHICAGO EXCEL HS	68		CEP	1
IL	CITY OF CHICAGO SD 299	certainty	CEP	CURIE HS	126		CEP	1
IL	CITY OF CHICAGO SD 299	certainty	CEP	HAMMOND	222		CEP	1
IL	CITY OF CHICAGO SD 299	certainty	CEP	LLOYD	314		CEP	1
IL	CITY OF CHICAGO SD 299	certainty	CEP	MAYER	339		CEP	1
IL	CITY OF CHICAGO SD 299	certainty	CEP	MIRELES	352		CEP	1
IL	CITY OF CHICAGO SD 299	certainty	CEP	NOBEL	380		CEP	1
IL	CITY OF CHICAGO SD 299	certainty	CEP	NORTH RIVER	381		CEP	1
IL	CITY OF CHICAGO SD 299	certainty	CEP	NORTHSIDE PREP HS	384		CEP	1
IL	DANVILLE CCSD 118	non- certainty	CEP	EAST PARK ELEMENTARY SCHOOL	3	DANVILLE	CEP	1
IL	DANVILLE CCSD 118	non- certainty	CEP	EDISON ELEM SCHOOL	4	DANVILLE	CEP	1
IL	DANVILLE CCSD 118	non- certainty	CEP	NORTH RIDGE MIDDLE SCHOOL	8	DANVILLE	CEP	1
IL	J S MORTON HSD 201	non- certainty	nonCEP	J STERLING MORTON EAST HIGH SCH	2	CICERO	nonCEP	
IL	J S MORTON HSD 201	non- certainty	nonCEP	J STERLING MORTON FRESHMAN CNTR	3	CICERO	nonCEP	
IL	J S MORTON HSD 201	non- certainty	nonCEP	J STERLING MORTON WEST HIGH SCH	4	BERWYN	nonCEP	
IL	JOLIET PSD 86	non- certainty	CEP	GOMPERS JUNIOR HIGH SCHOOL	8	JOLIET	CEP	1
IL	JOLIET PSD 86	non- certainty	CEP	M J CUNNINGHAM ELEM SCH	12	JOLIET	CEP	1
IL	JOLIET PSD 86	non- certainty	CEP	THOMAS JEFFERSON ELEM SCHOOL	18	JOLIET	CEP	1
IL	MATTESON ESD 162	non- certainty	nonCEP	O W HUTH MIDDLE SCHOOL	5	MATTESON	nonCEP	
IL	PEORIA SD 150	non- certainty	CEP	KELLAR PRIMARY SCHOOL	10	PEORIA	CEP	1

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IL	QUEST CHARTER SCHOOL ACADEMY	non-certainty	CEP	QUEST CHARTER SCHOOL ACADEMY	1	PEORIA	nonCEP	
IL	ROME CCSD 2	non-certainty	nonCEP	ROME COMM CONS ELEM SCHOOL	1	DIX	nonCEP	
IN	INDIANAPOLIS PUBLIC SCHOOLS	non-certainty	CEP	JAMES A GARFIELD SCH 31	30	INDIANAPOLIS	CEP	1
IN	MISSISSINewa COMMUNITY SCHOOLS	non-certainty	nonCEP	WESTVIEW ELEMENTARY SCHOOL	4	JONESBORO	nonCEP	
IN	MT VERNON COMMUNITY SCHOOL CORP	non-certainty	nonCEP	FORTVILLE ELEMENTARY SCHOOL	1	FORTVILLE	nonCEP	
IN	MT VERNON COMMUNITY SCHOOL CORP	non-certainty	nonCEP	MT VERNON HIGH SCHOOL	4	FORTVILLE	nonCEP	
IN	MT VERNON COMMUNITY SCHOOL CORP	non-certainty	nonCEP	MT VERNON MIDDLE SCHOOL	5	FORTVILLE	nonCEP	
IN	UNION COUNTY/COLLEGE CORNER JOINT SCHOOL DISTRICT	non-certainty	nonCEP	COLLEGE CORNER UNION ELEM SCH	1	COLLEGE CORNER	nonCEP	
IN	UNION COUNTY/COLLEGE CORNER JOINT SCHOOL DISTRICT	non-certainty	nonCEP	UNION COUNTY HIGH SCHOOL	3	LIBERTY	nonCEP	
IN	UNION COUNTY/COLLEGE CORNER JOINT SCHOOL DISTRICT	non-certainty	nonCEP	UNION COUNTY MIDDLE SCHOOL	4	LIBERTY	nonCEP	
KS	LEAVENWORTH	non-certainty	nonCEP	RICHARD WARREN MIDDLE SCHOOL	6	LEAVENWORTH	nonCEP	
KS	MILL CREEK VALLEY	non-certainty	nonCEP	MILL CREEK VALLEY JUNIOR HIGH	3	PAXICO	nonCEP	
KS	SEAMAN	non-certainty	nonCEP	LOGAN ELEMENTARY	2	TOPEKA	nonCEP	
KS	SEAMAN	non-certainty	nonCEP	Northern Hills Elementary	4	Topeka	nonCEP	
KS	SEAMAN	non-certainty	nonCEP	SEAMAN HIGH	5	TOPEKA	nonCEP	
KS	SHAWNEE MISSION	non-certainty	nonCEP	BRIARWOOD ELEM	4	SHAWNEE MISSION	nonCEP	
KS	SHAWNEE MISSION	non-certainty	nonCEP	HOCKER GROVE MIDDLE	14	SHAWNEE MISSION	nonCEP	
KS	SHAWNEE MISSION	non-certainty	nonCEP	ROSEHILL ELEM	30	SHAWNEE MISSION	nonCEP	
KS	WICHITA	non-certainty	nonCEP	ANDERSON ELEM	4	WICHITA	nonCEP	
KS	WICHITA	non-certainty	nonCEP	SELTZER ELEM	73	WICHITA	nonCEP	

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KS	WICHITA	non- certainty	nonCEP	WEST HIGH	83	WICHITA	nonCEP	
KY	JEFFERSON COUNTY PUBLIC SCHOOLS	certainty	CEP	MIDDLETOWN ELEMENTARY	100	LOUISVILLE	CEP	1
KY	JEFFERSON COUNTY PUBLIC SCHOOLS	certainty	CEP	SOUTHERN HIGH SCHOOL	123	LOUISVILLE	CEP	1
KY	LETCHER COUNTY	non- certainty	CEP	ARLIE BOGGS ELEMENTARY SCHOOL	1	EOLIA	CEP	1
KY	LETCHER COUNTY	non- certainty	CEP	COWAN ELEMENTARY SCHOOL	2	WHITESBURG	CEP	1
KY	LETCHER COUNTY	non- certainty	CEP	WHITESBURG MIDDLE SCHOOL	10	WHITESBURG	CEP	1
KY	PERRY COUNTY	non- certainty	CEP	PERRY COUNTY CENTRAL HIGH SCHOOL	7	HAZARD	CEP	1
KY	ROBERTSON COUNTY	non- certainty	CEP	ROBERTSON COUNTY SCHOOL	1	MOUNT OLIVET	CEP	1
KY	WOODFORD COUNTY	non- certainty	nonCEP	NORTHSIDE ELEMENTARY SCHOOL	2	MIDWAY	nonCEP	
LA	ASSUMPTION PARISH SCHOOL BOARD	non- certainty	nonCEP	ASSUMPTION HIGH SCHOOL	1	NAPOLEONVILLE	nonCEP	
LA	ASSUMPTION PARISH SCHOOL BOARD	non- certainty	nonCEP	LABADIEVILLE PRIMARY SCHOOL	6	LABADIEVILLE	nonCEP	
LA	ASSUMPTION PARISH SCHOOL BOARD	non- certainty	nonCEP	NAPOLEONVILLE MIDDLE SCHOOL	7	NAPOLEONVILLE	nonCEP	
LA	CADDO PARISH SCHOOL BOARD	non- certainty	nonCEP	ARTHUR CIRCLE ELEMENTARY SCHOOL	14	SHREVEPORT	CEP	1
LA	CADDO PARISH SCHOOL BOARD	non- certainty	nonCEP	FAIR PARK COLLEGE PREPARATORY ACADEMY	5	SHREVEPORT	nonCEP	
LA	CADDO PARISH SCHOOL BOARD	non- certainty	nonCEP	J. S. CLARK ELEMENTARY SCHOOL	34	SHREVEPORT	CEP	1
LA	CADDO PARISH SCHOOL BOARD	non- certainty	nonCEP	WERNER PARK ELEMENTARY SCHOOL	59	SHREVEPORT	CEP	1
LA	EAST BATON ROUGE PARISH SCHOOL SYSTEM	non- certainty	CEP	BELAIRE HIGH SCHOOL	6	BATON ROUGE	CEP	1
LA	IBERIA PARISH SCHOOL BOARD	non- certainty	CEP	NORTH LEWIS ELEMENTARY SCHOOL	19	NEW IBERIA	CEP	1
LA	JEFFERSON PARISH SCHOOLS	non- certainty	nonCEP	ESTELLE ELEMENTARY SCHOOL	40	MARRERO	CEP	1
LA	JEFFERSON PARISH SCHOOLS	non- certainty	nonCEP	GREEN PARK ELEMENTARY SCHOOL	46	METAIRIE	CEP	1

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LA	JEFFERSON PARISH SCHOOLS	non- certainty	nonCEP	HARRY S. TRUMAN MIDDLE SCHOOL	6	MARRERO	nonCEP	
LA	MONROE CITY SCHOOL BOARD	non- certainty	CEP	CLARA HALL ACCELERATED SCHOOL	6	MONROE	CEP	1
LA	MONROE CITY SCHOOL BOARD	non- certainty	CEP	J.S. CLARK MAGNET ELEMENTARY SCHOOL	8	MONROE	CEP	1
LA	MONROE CITY SCHOOL BOARD	non- certainty	CEP	ROBERT E. LEE JUNIOR HIGH SCHOOL	15	MONROE	CEP	1
LA	RSD-FIRSTLINE SCHOOLS, INC.	non- certainty	CEP	ARTHUR ASHE CHARTER SCHOOL	1	NEW ORLEANS	CEP	1
MA	BELLINGHAM PUBLIC SCHOOLS	non- certainty	nonCEP	BELLINGHAM HIGH SCHOOL	1	BELLINGHAM	nonCEP	
MA	BELLINGHAM PUBLIC SCHOOLS	non- certainty	nonCEP	BELLINGHAM MEMORIAL MIDDLE SCHOOL	2	BELLINGHAM	nonCEP	
MA	BELLINGHAM PUBLIC SCHOOLS	non- certainty	nonCEP	STALL BROOK	5	BELLINGHAM	nonCEP	
MA	BOSTON SCHOOL COMMITTEE	certainty	CEP	JOSIAH QUINCY	66	BOSTON	CEP	1
MA	BROOKFIELD SCHOOL COMMITTEE	non- certainty	nonCEP	BROOKFIELD ELEMENTARY	1	BROOKFIELD	nonCEP	
MA	EVERETT PUBLIC SCHOOLS	non- certainty	nonCEP	EVERETT HIGH	2	EVERETT	nonCEP	
MA	EVERETT PUBLIC SCHOOLS	non- certainty	nonCEP	GEORGE KEVERIAN SCHOOL	3	EVERETT	nonCEP	
MA	EVERETT PUBLIC SCHOOLS	non- certainty	nonCEP	PARLIN SCHOOL	6	EVERETT	nonCEP	
MA	SPRINGFIELD PUBLIC SCHOOLS	non- certainty	CEP	HIGH SCHOOL OF COMMERCE	23	SPRINGFIELD	CEP	1
MA	SPRINGFIELD PUBLIC SCHOOLS	non- certainty	CEP	MARTIN LUTHER KING CHARTER SCHOOL	36	SPRINGFIELD	CEP	1
MA	SPRINGFIELD PUBLIC SCHOOLS	non- certainty	CEP	STEM MIDDLE ACADEMY	55	SPRINGFIELD	CEP	1
MA	WORCESTER PUBLIC SCHOOLS	non- certainty	CEP	JACOB HIATT MAGNET	21	WORCESTER	CEP	1
MD	BALTIMORE CITY PUB S	certainty	CEP	CARVER VOCATIONAL-TECHNICAL HIGH	31	BALTIMORE	CEP	1
MD	BALTIMORE CITY PUB S	certainty	CEP	ELMER A. HENDERSON: A JOHNS HOPKINS PARTNERSHIP SC	59	BALTIMORE	CEP	1
MD	DORCHESTER CO BOARD	non- certainty	nonCEP	MACE'S LANE MIDDLE SCHOOL	4	CAMBRIDGE	nonCEP	

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MD	DORCHESTER CO BOARD	non- certainty	nonCEP	MAPLE ELEMENTARY SCHOOL	5	CAMBRIDGE	nonCEP	
MD	DORCHESTER CO BOARD	non- certainty	nonCEP	WARWICK ELEMENTARY SCHOOL	12	SECRETARY	nonCEP	
MD	PRINCE GEORGE'S CO.	non- certainty	CEP	ARDMORE ELEMENTARY	7	SPRINGDALE	nonCEP	
MD	PRINCE GEORGE'S CO.	non- certainty	CEP	DR. HENRY A. WISE, JR. HIGH	53	UPPER MARLBORO	nonCEP	
MD	PRINCE GEORGE'S CO.	non- certainty	CEP	ROGERS HEIGHTS ELEMENTARY	156	BLADENSBURG	nonCEP	
MD	WASHINGTON CO PUB SC	non- certainty	CEP	NORTH HAGERSTOWN HIGH	17	HAGERSTOWN	nonCEP	
MD	WASHINGTON CO PUB SC	non- certainty	CEP	SALEM AVENUE ELEMENTARY	42	HAGERSTOWN	CEP	1
ME	BANGOR SCHOOL DEPARTMENT	non- certainty	nonCEP	BANGOR HIGH SCHOOL	2	BANGOR	nonCEP	
ME	BANGOR SCHOOL DEPARTMENT	non- certainty	nonCEP	DOWNEAST SCHOOL	8	BANGOR	CEP	1
ME	RSU 17/MSAD 17	non- certainty	CEP	GUY E ROWE SCHOOL	4	NORWAY	CEP	1
ME	RSU 17/MSAD 17	non- certainty	CEP	HARRISON ELEMENTARY	5	HARRISON	CEP	1
ME	RSU 17/MSAD 17	non- certainty	CEP	OXFORD HILLS COMPREHENSIVE H S	1	SOUTH PARIS	nonCEP	
ME	RSU 17/MSAD 17	non- certainty	CEP	PARIS ELEMENTARY SCHOOL	9	SOUTH PARIS	CEP	1
MI	ANCHOR BAY SCHOOL DISTRICT	non- certainty	nonCEP	ANCHOR BAY HIGH SCHOOL	1	IRA	nonCEP	
MI	ANCHOR BAY SCHOOL DISTRICT	non- certainty	nonCEP	ANCHOR BAY MIDDLE SCHOOL NORTH	2	NEW BALTIMORE	nonCEP	
MI	ANCHOR BAY SCHOOL DISTRICT	non- certainty	nonCEP	ASHLEY ELEMENTARY SCHOOL	4	NEW BALTIMORE	nonCEP	
MI	ANN ARBOR PUBLIC SCHOOLS	non- certainty	nonCEP	FORSYTHE MIDDLE SCHOOL	13	ANN ARBOR	nonCEP	
MI	ANN ARBOR PUBLIC SCHOOLS	non- certainty	nonCEP	HAISLEY ELEMENTARY SCHOOL	14	ANN ARBOR	nonCEP	
MI	ANN ARBOR PUBLIC SCHOOLS	non- certainty	nonCEP	PIONEER HIGH SCHOOL	23	ANN ARBOR	nonCEP	
MI	BELDING AREA SCHOOL DISTRICT	non- certainty	nonCEP	BELDING MIDDLE SCHOOL	2	BELDING	nonCEP	

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MI	BELDING AREA SCHOOL DISTRICT	non- certainty	nonCEP	ELLIS ELEMENTARY SCHOOL	3	BELDING	nonCEP	
MI	BELDING AREA SCHOOL DISTRICT	non- certainty	nonCEP	WOODVIEW ELEMENTARY SCHOOL	4	BELDING	nonCEP	
MI	BLOOMINGDALE PUBLIC SCHOOL DISTRICT	non- certainty	nonCEP	BLOOMINGDALE ELEMENTARY SCHOOL	1	BLOOMINGDALE	nonCEP	
MI	BLOOMINGDALE PUBLIC SCHOOL DISTRICT	non- certainty	nonCEP	BLOOMINGDALE MIDDLE AND HIGH SCHOOL	2	BLOOMINGDALE	nonCEP	
MI	BLOOMINGDALE PUBLIC SCHOOL DISTRICT	non- certainty	nonCEP	PULLMAN ELEMENTARY SCHOOL	4	PULLMAN	nonCEP	
MI	BURTON GLEN CHARTER ACADEMY	non- certainty	CEP	BURTON GLEN CHARTER ACADEMY	1	BURTON	CEP	1
MI	DETROIT PUBLIC SCHOOLS COMMUNITY DISTRICT	certainty	CEP	PASTEUR ELEMENTARY SCHOOL	79	DETROIT	CEP	1
MI	DETROIT PUBLIC SCHOOLS COMMUNITY DISTRICT	certainty	CEP	WESTERN INTERNATIONAL HIGH SCHOOL	91	DETROIT	CEP	1
MI	GRAND RAPIDS PUBLIC SCHOOLS	non- certainty	CEP	HARRISON PARK ELEMENTARY SCHOOL	24	GRAND RAPIDS	CEP	1
MI	HEMLOCK PUBLIC SCHOOL DISTRICT	non- certainty	nonCEP	HEMLOCK ALTERNATIVE EDUCATION	1	HEMLOCK	nonCEP	
MI	HEMLOCK PUBLIC SCHOOL DISTRICT	non- certainty	nonCEP	HEMLOCK MIDDLE SCHOOL	3	HEMLOCK	nonCEP	
MI	HEMLOCK PUBLIC SCHOOL DISTRICT	non- certainty	nonCEP	K.C. LING ELEMENTARY SCHOOL	4	HEMLOCK	nonCEP	
MI	SOUTH REDFORD SCHOOL DISTRICT	non- certainty	nonCEP	FISHER ELEMENTARY SCHOOL	1	REDFORD	nonCEP	
MI	SOUTH REDFORD SCHOOL DISTRICT	non- certainty	nonCEP	JOHN D. PIERCE MIDDLE SCHOOL	3	REDFORD	nonCEP	
MI	SOUTH REDFORD SCHOOL DISTRICT	non- certainty	nonCEP	LEE M. THURSTON HIGH SCHOOL	4	REDFORD	nonCEP	
MN	EDEN VALLEY WATKINS ISD #463	non- certainty	nonCEP	EDEN VALLEY ELEMENTARY	1	EDEN VALLEY	nonCEP	
MN	EDEN VALLEY WATKINS ISD #463	non- certainty	nonCEP	EDEN VALLEY SECONDARY	2	EDEN VALLEY	nonCEP	
MN	EDEN VALLEY WATKINS ISD #463	non- certainty	nonCEP	WATKINS ELEMENTARY	3	WATKINS	nonCEP	
MN	ST FRANCIS ISD #15	non- certainty	nonCEP	CEDAR CREEK COMMUNITY SCHOOL	1	CEDAR	nonCEP	
MN	ST FRANCIS ISD #15	non- certainty	nonCEP	ST. FRANCIS HIGH	5	SAINT FRANCIS	nonCEP	

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MN	ST FRANCIS ISD #15	non- certainty	nonCEP	ST. FRANCIS MIDDLE	6	SAINT FRANCIS	nonCEP	
MN	ST PAUL ISD #625	non- certainty	CEP	JIE MING MANDARIN IMMERSION ACADEMY	33	SAINT PAUL	CEP	1
MN	ST PAUL ISD #625	non- certainty	CEP	MURRAY MIDDLE SCHOOL	19	SAINT PAUL	nonCEP	
MO	AVILLA R-XIII	non- certainty	nonCEP	AVILLA ELEM.	1	AVILLA	nonCEP	
MO	CARUTHERSVILLE 18	non- certainty	CEP	CARUTHERSVILLE HIGH	2	CARUTHERSVILL E	CEP	1
MO	EAST PRAIRIE R-II	non- certainty	nonCEP	A. J. MARTIN ELEM.	1	EAST PRAIRIE	nonCEP	
MO	EAST PRAIRIE R-II	non- certainty	nonCEP	EAST PRAIRIE HIGH	2	EAST PRAIRIE	nonCEP	
MO	EAST PRAIRIE R-II	non- certainty	nonCEP	R. A. DOYLE ELEM.	4	EAST PRAIRIE	nonCEP	
MO	FERGUSON-FLORISSANT R-II	non- certainty	CEP	BERKELEY MIDDLE	2	BERKELEY	CEP	1
MO	FERGUSON-FLORISSANT R-II	non- certainty	CEP	BERMUDA ELEM.	3	ST LOUIS	CEP	1
MO	FERGUSON-FLORISSANT R-II	non- certainty	CEP	MCCLUER NORTH HIGH	18	FLORISSANT	CEP	1
MO	POPLAR BLUFF R-I	non- certainty	nonCEP	EUGENE FIELD ELEM.	1	POPLAR BLUFF	nonCEP	
MO	POPLAR BLUFF R-I	non- certainty	nonCEP	OAK GROVE ELEM.	4	POPLAR BLUFF	nonCEP	
MO	POPLAR BLUFF R-I	non- certainty	nonCEP	POPLAR BLUFF 5TH 6TH CTR.	5	POPLAR BLUFF	nonCEP	
MO	SCHOOL OF THE OSAGE	non- certainty	nonCEP	Heritage Elementary	1	Lake Ozark	nonCEP	
MO	SCHOOL OF THE OSAGE	non- certainty	nonCEP	OSAGE MIDDLE	3	OSAGE BEACH	nonCEP	
MO	SCHOOL OF THE OSAGE	non- certainty	nonCEP	OSAGE UPPER ELEM.	4	OSAGE BEACH	nonCEP	
MO	SPRINGFIELD R-XII	non- certainty	nonCEP	REED MIDDLE	35	SPRINGFIELD	nonCEP	
MO	SPRINGFIELD R-XII	non- certainty	nonCEP	ROUNTREE ELEM.	37	SPRINGFIELD	nonCEP	
MO	SPRINGFIELD R-XII	non- certainty	nonCEP	WILLIAMS ELEM.	51	SPRINGFIELD	nonCEP	

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MO	WENTZVILLE R-IV	non-certainty	nonCEP	EMIL E. HOLT SR. HIGH	5	WENTZVILLE	nonCEP	
MO	WENTZVILLE R-IV	non-certainty	nonCEP	FRONTIER MIDDLE	6	O'FALLON	nonCEP	
MO	WENTZVILLE R-IV	non-certainty	nonCEP	PEINE RIDGE ELEM.	12	WENTZVILLE	nonCEP	
MS	COVINGTON CTY SCHOOL DISTRICT	non-certainty	nonCEP	COLLIN ELEM SCHOOL	2	COLLINS	nonCEP	
MS	COVINGTON CTY SCHOOL DISTRICT	non-certainty	nonCEP	COLLINS HIGH SCHOOL	3	COLLINS	nonCEP	
MS	COVINGTON CTY SCHOOL DISTRICT	non-certainty	nonCEP	HOPEWELL ELEM SCHOOL	4	COLLINS	nonCEP	
MS	GREENVILLE PUBLIC SCHOOLS	non-certainty	CEP	AKIN ELEMENTARY	1	GREENVILLE	CEP	1
MS	HARRISON CTY SCHOOL DISTRICT	non-certainty	nonCEP	CROSSROADS ELEM	2	GULFPORT	nonCEP	
MS	HARRISON CTY SCHOOL DISTRICT	non-certainty	nonCEP	WEST HARRISON HIGH	19	GULFPORT	nonCEP	
MS	HARRISON CTY SCHOOL DISTRICT	non-certainty	nonCEP	WOOLMARKET ELEM	21	BILOXI	nonCEP	
MS	JACKSON PUBLIC SCHOOL DIST	non-certainty	CEP	CALLAWAY HIGH SCHOOL	9	JACKSON	CEP	1
MS	MARSHALL CTY PUBLIC SCHOOLS	non-certainty	nonCEP	BYHALIA HIGH	3	BYHALIA	nonCEP	
MS	MARSHALL CTY PUBLIC SCHOOLS	non-certainty	nonCEP	H. W. BYERS ELEM	7	HOLLY SPRINGS	nonCEP	
MS	MARSHALL CTY PUBLIC SCHOOLS	non-certainty	nonCEP	H. W. BYERS MIDDLE	8	HOLLY SPRINGS	nonCEP	
MS	NORTH PIKE SCHOOL DIST	non-certainty	nonCEP	NORTH PIKE ELEMENTARY	1	SUMMIT	nonCEP	
MS	NORTH PIKE SCHOOL DIST	non-certainty	nonCEP	NORTH PIKE MIDDLE SCH	2	SUMMIT	nonCEP	
MS	NORTH PIKE SCHOOL DIST	non-certainty	nonCEP	NORTH PIKE SR HIGH	3	SUMMIT	nonCEP	
MS	TUNICA CTY SCHOOL DISTRICT	non-certainty	CEP	ROBINSONVILLE SCHOOL	2	ROBINSONVILLE	CEP	1
MS	TUNICA CTY SCHOOL DISTRICT	non-certainty	CEP	ROSA FORT HIGH SCHOOL	3	TUNICA	CEP	1
MS	TUNICA CTY SCHOOL DISTRICT	non-certainty	CEP	TUNICA ELEMENTARY	4	TUNICA	CEP	1

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NC	ANSON COUNTY SCHOOLS	non- certainty	CEP	ANSON HIGH SCHOOL	3	WADESBORO	CEP	1
NC	ANSON COUNTY SCHOOLS	non- certainty	CEP	LILESVILLE ELEMENTARY	7	LILESVILLE	CEP	1
NC	ANSON COUNTY SCHOOLS	non- certainty	CEP	WADESBORO ELEMENTARY	10	WADESBORO	CEP	1
NC	CABARRUS COUNTY SCHOOLS	non- certainty	CEP	A T ALLEN ELEMENTARY	1	CONCORD	nonCEP	
NC	CABARRUS COUNTY SCHOOLS	non- certainty	CEP	C C GRIFFIN MIDDLE	4	CONCORD	nonCEP	
NC	CABARRUS COUNTY SCHOOLS	non- certainty	CEP	HARRISBURG ELEMENTARY	17	HARRISBURG	nonCEP	
NC	CHARLOTTE-MECKLENBURG SCHOOLS	certainty	CEP	ALBEMARLE ROAD MIDDLE	92	CHARLOTTE	CEP	1
NC	CHARLOTTE-MECKLENBURG SCHOOLS	certainty	CEP	BERRYHILL SCHOOL	95	CHARLOTTE	CEP	1
NC	CHARLOTTE-MECKLENBURG SCHOOLS	certainty	CEP	PINEVILLE ELEMENTARY	71	PINEVILLE	nonCEP	
NC	FORSYTH COUNTY SCHOOLS	non- certainty	CEP	HALL-WOODWARD ELEMENTARY	58		CEP	1
NC	FORSYTH COUNTY SCHOOLS	non- certainty	CEP	NORTH FORSYTH HIGH	22		nonCEP	
NC	FRANKLIN COUNTY SCHOOLS	non- certainty	CEP	FRANKLINTON ELEMENTARY	11	FRANKLINTON	CEP	1
NC	FRANKLIN COUNTY SCHOOLS	non- certainty	CEP	FRANKLINTON HIGH	5	FRANKLINTON	nonCEP	
NC	GUILFORD COUNTY SCHOOLS	non- certainty	CEP	ALLEN JAY ELEMENTARY	70	HIGH POINT	CEP	1
NC	GUILFORD COUNTY SCHOOLS	non- certainty	CEP	MIDDLE COLLEGE AT GTCC-GSO	32	GREENSBORO	nonCEP	
NC	LENOIR COUNTY PUBLIC SCHOOLS	non- certainty	CEP	CONTENTNEA-SAVANNAH SCHOOL	7	KINSTON	CEP	7
NC	MADISON COUNTY SCHOOLS	non- certainty	nonCEP	MADISON HIGH	4	MARSHALL	nonCEP	
NC	MADISON COUNTY SCHOOLS	non- certainty	nonCEP	MADISON MIDDLE	5	MARSHALL	nonCEP	
NC	MADISON COUNTY SCHOOLS	non- certainty	nonCEP	MARS HILL ELEMENTARY	6	MARS HILL	nonCEP	
NC	SCOTLAND COUNTY SCHOOLS	non- certainty	CEP	WAGRAM ELEMENTARY	12	WAGRAM	CEP	1

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NC	WAKE COUNTY SCHOOLS	non-certainty	nonCEP	POWELL ELEMENTARY	125	RALEIGH	nonCEP	
NC	WAKE COUNTY SCHOOLS	non-certainty	nonCEP	SALEM MIDDLE	137	APEX	nonCEP	
NC	WAKE COUNTY SCHOOLS	non-certainty	nonCEP	SANDERSON HIGH	138	RALEIGH	nonCEP	
NE	SCOTTSBLUFF PUBLIC SCHOOLS	non-certainty	nonCEP	LONGFELLOW ELEMENTARY SCHOOL	4	SCOTTSBLUFF	nonCEP	
NE	SCOTTSBLUFF PUBLIC SCHOOLS	non-certainty	nonCEP	ROOSEVELT ELEMENTARY SCHOOL	5	SCOTTSBLUFF	nonCEP	
NE	SCOTTSBLUFF PUBLIC SCHOOLS	non-certainty	nonCEP	SCOTTSBLUFF SENIOR HIGH SCHOOL	6	SCOTTSBLUFF	nonCEP	
NJ	ELIZABETH BD OF ED	non-certainty	nonCEP	JOSEPH BATTIN SCHOOL NO. 4	16	ELIZABETH	nonCEP	
NJ	ELIZABETH BD OF ED	non-certainty	nonCEP	THOMAS JEFFERSON ARTS ACADEMY	27	ELIZABETH	nonCEP	
NJ	ELIZABETH BD OF ED	non-certainty	nonCEP	WINFIELD SCOTT SCHOOL NO. 2	30	ELIZABETH	nonCEP	
NJ	ELMWOOD PARK BD OF ED	non-certainty	nonCEP	GANTNER AVENUE SCHOOL	1	ELMWOOD PARK	nonCEP	
NJ	ELMWOOD PARK BD OF ED	non-certainty	nonCEP	MEMORIAL SENIOR HIGH SCHOOL	4	ELMWOOD PARK	nonCEP	
NJ	ELMWOOD PARK BD OF ED	non-certainty	nonCEP	SIXTEENTH AVENUE SCHOOL	5	ELMWOOD PARK	nonCEP	
NJ	PERTH AMBOY BD OF ED	non-certainty	nonCEP	HERBERT N. RICHARDSON 21ST CENTURY SCHOOL	5	PERTH AMBOY	nonCEP	
NJ	PERTH AMBOY BD OF ED	non-certainty	nonCEP	PERTH AMBOY HIGH SCHOOL	7	PERTH AMBOY	nonCEP	
NJ	PERTH AMBOY BD OF ED	non-certainty	nonCEP	WILLIAM C. MCGINNIS MIDDLE SCHOOL	12	PERTH AMBOY	nonCEP	
NJ	SHAMONG TWP BD OF ED	non-certainty	nonCEP	INDIAN MILLS ELEMENTARY SCHOOL	1	SHAMONG	nonCEP	
NM	ALBUQUERQUE PUBLIC SCHOOLS	non-certainty	CEP	GRANT MIDDLE	24	ALBUQUERQUE	nonCEP	
NM	ALBUQUERQUE PUBLIC SCHOOLS	non-certainty	CEP	MARYANN BINFORD ELEMENTARY	118	ALBUQUERQUE	CEP	1
NM	GALLUP MCKINLEY COUNTY SCHOOLS	non-certainty	CEP	GALLUP HIGH	9	GALLUP	CEP	1
NM	GALLUP MCKINLEY COUNTY SCHOOLS	non-certainty	CEP	GALLUP MIDDLE	10	GALLUP	CEP	1

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NM	GALLUP MCKINLEY COUNTY SCHOOLS	non-certainty	CEP	NAVAJO ELEMENTARY	17	NAVAJO	CEP	1
NM	LORDSBURG MUNICIPAL SCHOOLS	non-certainty	nonCEP	R.V. TRAYLOR ELEMENTARY	4	LORDSBURG	CEP	1
NM	RIO RANCHO PUBLIC SCHOOLS	non-certainty	nonCEP	LINCOLN MIDDLE	7	RIO RANCHO	nonCEP	
NM	RIO RANCHO PUBLIC SCHOOLS	non-certainty	nonCEP	RIO RANCHO ELEMENTARY	13	RIO RANCHO	nonCEP	
NM	RIO RANCHO PUBLIC SCHOOLS	non-certainty	nonCEP	RIO RANCHO HIGH	14	RIO RANCHO	nonCEP	
NV	CLARK COUNTY SCHOOL DISTRICT	certainty	CEP	DESERT PINES HIGH SCHOOL	62	LAS VEGAS	nonCEP	
NV	CLARK COUNTY SCHOOL DISTRICT	certainty	CEP	JOSEPH M NEAL ELEMENTARY SCHOOL	168	LAS VEGAS	nonCEP	
NV	CLARK COUNTY SCHOOL DISTRICT	certainty	CEP	LAURA DEARING ELEMENTARY SCHOOL	186	LAS VEGAS	nonCEP	
NV	CLARK COUNTY SCHOOL DISTRICT	certainty	CEP	VIRGIN VALLEY HIGH SCHOOL	301	MESQUITE	nonCEP	
NV	CLARK COUNTY SCHOOL DISTRICT	certainty	CEP	WALTER JOHNSON JUNIOR HIGH SCHOOL	304	LAS VEGAS	nonCEP	
NV	CLARK COUNTY SCHOOL DISTRICT	certainty	CEP	WAYNE N TANAKA ELEMENTARY SCHOOL	306	LAS VEGAS	nonCEP	
NV	WASHOE COUNTY SCHOOL DISTRICT	non-certainty	nonCEP	MARVIN MOSS ELEMENTARY SCHOOL	60	SPARKS	nonCEP	
NV	WASHOE COUNTY SCHOOL DISTRICT	non-certainty	nonCEP	RITA CANNAN ELEMENTARY SCHOOL	71	RENO	nonCEP	
NV	WASHOE COUNTY SCHOOL DISTRICT	non-certainty	nonCEP	ROBERT MC QUEEN HIGH SCHOOL	72	RENO	nonCEP	
NY	ATTICA CSD	non-certainty	nonCEP	ATTICA ELEMENTARY SCHOOL	1	ATTICA	nonCEP	
NY	BINGHAMTON CITY SD	non-certainty	CEP	WEST MIDDLE SCHOOL	9	BINGHAMTON	CEP	1
NY	GREENVILLE CSD	non-certainty	nonCEP	GREENVILLE HIGH SCHOOL	1	GREENVILLE	nonCEP	
NY	GREENVILLE CSD	non-certainty	nonCEP	GREENVILLE MIDDLE SCHOOL	2	GREENVILLE	nonCEP	
NY	GREENVILLE CSD	non-certainty	nonCEP	SCOTT M ELLIS ELEMENTARY SCHOOL	3	GREENVILLE	nonCEP	
NY	HAVERSTRAW-STONY POINT CSD (NORTH RO	non-certainty	nonCEP	HAVERSTRAW ELEMENTARY SCHOOL	3	HAVERSTRAW	nonCEP	

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NY	HAVERSTRAW-STONY POINT CSD (NORTH RO	non- certainty	nonCEP	NORTH ROCKLAND HIGH SCHOOL	5	THIELLS	nonCEP	
NY	HAVERSTRAW-STONY POINT CSD (NORTH RO	non- certainty	nonCEP	STONY POINT ELEMENTARY SCHOOL	6	STONY POINT	nonCEP	
NY	NYC CHANCELLORS OFFICE	certainty	CEP	Abraham Lincoln HS	4		nonCEP	
NY	NYC CHANCELLORS OFFICE	certainty	CEP	Antonia Pantoja Preparatory Academy: A College Board School	1844		CEP	4
NY	NYC CHANCELLORS OFFICE	certainty	CEP	Brownsville Collegiate Charter	162		nonCEP	
NY	NYC CHANCELLORS OFFICE	certainty	CEP	Ebc HS for Public Service-Bushwick	239		nonCEP	
NY	NYC CHANCELLORS OFFICE	certainty	CEP	Forest Hills HS	282		nonCEP	
NY	NYC CHANCELLORS OFFICE	certainty	CEP	Green School: An Academy for Environmental Careers	317		nonCEP	
NY	NYC CHANCELLORS OFFICE	certainty	CEP	Growing up Green Middle Charter School	320		nonCEP	
NY	NYC CHANCELLORS OFFICE	certainty	CEP	IS 141 The Steinway	395		nonCEP	
NY	NYC CHANCELLORS OFFICE	certainty	CEP	IS 286M Renaissance Leadership Academy	1587		CEP	1
NY	NYC CHANCELLORS OFFICE	certainty	CEP	IS 364 Gateway	1849		CEP	4
NY	NYC CHANCELLORS OFFICE	certainty	CEP	JHS 062 Ditmas	1850		CEP	4
NY	NYC CHANCELLORS OFFICE	certainty	CEP	JHS 074 Nathaniel Hawthorne	1604		CEP	1
NY	NYC CHANCELLORS OFFICE	certainty	CEP	Math, Engineering And Science Academy Charter High School	512		nonCEP	
NY	NYC CHANCELLORS OFFICE	certainty	CEP	P369K @ PS 67K	1690		CEP	1
NY	NYC CHANCELLORS OFFICE	certainty	CEP	PS 008 Issac Varian	609		nonCEP	
NY	NYC CHANCELLORS OFFICE	certainty	CEP	PS 048 P.O. Michael J. Buczek	709		nonCEP	
NY	NYC CHANCELLORS OFFICE	certainty	CEP	PS 055 Maure	726		nonCEP	
NY	NYC CHANCELLORS OFFICE	certainty	CEP	PS 059 The Community School of Technology	736		nonCEP	

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NY	NYC CHANCELLORS OFFICE	certainty	CEP	PS 094 Kings College School	811		nonCEP	
NY	NYC CHANCELLORS OFFICE	certainty	CEP	PS 109 Sedgwick	846		nonCEP	
NY	NYC CHANCELLORS OFFICE	certainty	CEP	PS 192 Jacob H. Schiff	1010		nonCEP	
NY	NYC CHANCELLORS OFFICE	certainty	CEP	PS 196 Grand Central Parkway	1018		nonCEP	
NY	NYC CHANCELLORS OFFICE	certainty	CEP	PS 234	1077		nonCEP	
NY	NYC CHANCELLORS OFFICE	certainty	CEP	PS 249 The Caton	1091		nonCEP	
NY	NYC CHANCELLORS OFFICE	certainty	CEP	Transit Tech Career & Technical Education HS	1447		nonCEP	
NY	ROCHESTER CITY SD	non- certainty	CEP	SCHOOL 45-MARY MCLEOD BETHUNE	37	ROCHESTER	CEP	1
NY	SYRACUSE CITY SD	non- certainty	CEP	EDWARD SMITH K-8 SCHOOL	9	SYRACUSE	CEP	1
NY	UTA	non- certainty	CEP	Bais Ruchel High School	1	Brooklyn	CEP	1
NY	WHITESBORO CSD	non- certainty	nonCEP	MARCY ELEMENTARY SCHOOL	3	MARCY	nonCEP	
NY	WHITESBORO CSD	non- certainty	nonCEP	WESTMORELAND ROAD ELEMENTARY SCHOOL	5	WHITESBORO	nonCEP	
NY	WHITESBORO CSD	non- certainty	nonCEP	WHITESBORO MIDDLE SCHOOL	7	WHITESBORO	nonCEP	
NY	WINDSOR CSD	non- certainty	nonCEP	A F PALMER ELEMENTARY SCHOOL / WINDSOR CENTRAL MID	1	WINDSOR	nonCEP	
NY	WINDSOR CSD	non- certainty	nonCEP	FLOYD BELL ELEMENTARY SCHOOL	3	KIRKWOOD	nonCEP	
NY	WINDSOR CSD	non- certainty	nonCEP	WINDSOR CENTRAL HIGH SCHOOL	4	WINDSOR	nonCEP	
OH	ALEXANDER LOCAL SD	non- certainty	nonCEP	ALEXANDER JR. / SR. HIGH SCHOOL	2	ALBANY	nonCEP	
OH	CANTON CITY SD	non- certainty	CEP	YOUTZ ELEMENTARY SCHOOL	22	CANTON	CEP	1
OH	CLEVELAND CITY SCHOOL DISTRICT	non- certainty	CEP	ALFRED BENESCH	2	CLEVELAND	CEP	1
OH	COLUMBUS PUBLIC SCHOOLS	non- certainty	CEP	DEVONSHIRE ALTERNATIVE ELEMENTARY SCHOOL	31		CEP	1

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OH	CUYAHOGA VALLEY CAREER CENTER	non-certainty	nonCEP	CUYAHOGA VALLEY CAREER CENTER	1	BRECKSVILLE	nonCEP	
OH	FINDLAY CITY SD	non-certainty	nonCEP	DONNELL MIDDLE SCHOOL	3	FINDLAY	nonCEP	
OH	FINDLAY CITY SD	non-certainty	nonCEP	FINDLAY HIGH SCHOOL	4	FINDLAY	nonCEP	
OH	FINDLAY CITY SD	non-certainty	nonCEP	LINCOLN ELEMENTARY SCHOOL	9	FINDLAY	nonCEP	
OH	MASON CITY SD	non-certainty	nonCEP	MASON EARLY CHILDHOOD CENTER ELEMENTARY SCHOOL	1	MASON	nonCEP	
OH	MASON CITY SD	non-certainty	nonCEP	MASON INTERMEDIATE ELEMENTARY SCHOOL	2	MASON	nonCEP	
OH	MASON CITY SD	non-certainty	nonCEP	WILLIAM MASON HIGH SCHOOL	5	MASON	nonCEP	
OH	MIDDLETOWN CITY SD	non-certainty	CEP	HIGHVIEW 6TH GRADE CENTER	4	MIDDLETOWN	CEP	1
OH	NORTHWEST LOCAL SCHOOL DISTRICT	non-certainty	nonCEP	COLERAIN HIGH SCHOOL	2	CINCINNATI	nonCEP	
OH	NORTHWEST LOCAL SCHOOL DISTRICT	non-certainty	nonCEP	WEIGEL ELEMENTARY SCHOOL	10	CINCINNATI	nonCEP	
OH	NORTHWEST LOCAL SCHOOL DISTRICT	non-certainty	nonCEP	WHITE OAK MIDDLE SCHOOL	12	CINCINNATI	nonCEP	
OH	REYNOLDSBURG CITY SD	non-certainty	nonCEP	HANNAH J ASHTON MIDDLE SCHOOL	3	REYNOLDSBURG	nonCEP	
OH	REYNOLDSBURG CITY SD	non-certainty	nonCEP	SLATE RIDGE ELEMENTARY SCHOOL	10	REYNOLDSBURG	nonCEP	
OH	REYNOLDSBURG CITY SD	non-certainty	nonCEP	TAYLOR ROAD ELEMENTARY SCHOOL	12	REYNOLDSBURG	nonCEP	
OH	SOUTH POINT	non-certainty	CEP	SOUTH POINT MIDDLE SCHOOL	4	SOUTH POINT	CEP	1
OH	WARREN CITY SD	non-certainty	CEP	LINCOLN PK-8 SCHOOL	2	WARREN	CEP	1
OH	WARREN CITY SD	non-certainty	CEP	MCGUFFEY PK-8 SCHOOL	3	WARREN	CEP	1
OH	WARREN CITY SD	non-certainty	CEP	WARREN G HARDING HIGH SCHOOL	4	WARREN	CEP	1
OK	CHISHOLM	non-certainty	nonCEP	CHISHOLM ES	1	ENID	nonCEP	
OK	CHISHOLM	non-certainty	nonCEP	CHISHOLM HS	2	ENID	nonCEP	

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OK	CHISHOLM	non- certainty	nonCEP	CHISHOLM MS	3	ENID	nonCEP	
OK	DUNCAN	non- certainty	nonCEP	DUNCAN MS	2	DUNCAN	nonCEP	
OK	DUNCAN	non- certainty	nonCEP	EMERSON ES	3	DUNCAN	nonCEP	
OK	DUNCAN	non- certainty	nonCEP	MARK TWAIN ES	5	DUNCAN	nonCEP	
OK	GUYMON	non- certainty	nonCEP	CENTRAL JHS	2	GUYMON	nonCEP	
OK	IDABEL	non- certainty	CEP	IDABEL HS	3	IDABEL	CEP	3
OR	SALEM KEIZER SCHOOL DISTRICT	non- certainty	CEP	JUDSON MIDDLE SCHOOL	12	SALEM	nonCEP	
OR	SALEM KEIZER SCHOOL DISTRICT	non- certainty	CEP	PARRISH MIDDLE SCHOOL	54	SALEM	CEP	1
PA	ALLENTOWN CITY SCHOOL DISTRICT	non- certainty	CEP	CENTRAL EL SCH	1	ALLENTOWN	CEP	1
PA	ALLENTOWN CITY SCHOOL DISTRICT	non- certainty	CEP	LOUIS E DIERUFF HS	9	ALLENTOWN	CEP	1
PA	ALLENTOWN CITY SCHOOL DISTRICT	non- certainty	CEP	MUHLENBERG EL SCH	13	ALLENTOWN	CEP	1
PA	ARCHDIOCESE OF PHILADELPHIA	non- certainty	CEP	Russel Byers Charter School	57	Philadelphia	CEP	1
PA	BALDWIN-WHITEHALL SCHOOL DISTRICT	non- certainty	nonCEP	BALDWIN SHS	1	PITTSBURGH	nonCEP	
PA	BALDWIN-WHITEHALL SCHOOL DISTRICT	non- certainty	nonCEP	MCANNULTY EL SCH	3	PITTSBURGH	nonCEP	
PA	BALDWIN-WHITEHALL SCHOOL DISTRICT	non- certainty	nonCEP	PAYNTER EL SCH	4	PITTSBURGH	nonCEP	
PA	ERIE CITY SCHOOL DISTRICT	non- certainty	CEP	GROVER CLEVELAND EL SCH	6	ERIE	CEP	1
PA	MIFFLIN COUNTY SCHOOL DISTRICT	non- certainty	CEP	LEWISTOWN EL SCH	10	LEWISTOWN	CEP	1
PA	MIFFLIN COUNTY SCHOOL DISTRICT	non- certainty	CEP	LEWISTOWN INTRMD SCH	4	LEWISTOWN	nonCEP	
PA	MIFFLIN COUNTY SCHOOL DISTRICT	non- certainty	CEP	MIFFLIN CO HS	5	LEWISTOWN	nonCEP	
PA	MIFFLIN COUNTY SCHOOL DISTRICT	non- certainty	CEP	MIFFLIN CO MS	7	LEWISTOWN	nonCEP	

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PA	NEW CASTLE AREA SCHOOL DISTRICT	non-certainty	CEP	HARRY W LOCKLEY KDG CTR	1	NEW CASTLE	CEP	1
PA	NEW CASTLE AREA SCHOOL DISTRICT	non-certainty	CEP	NEW CASTLE JHS	2	NEW CASTLE	CEP	1
PA	NEW CASTLE AREA SCHOOL DISTRICT	non-certainty	CEP	WASHINGTON INTRMD SCH	4	NEW CASTLE	CEP	1
PA	OLNEY CHARTER HIGH SCHOOL	non-certainty	CEP	OLNEY CHARTER HIGH SCHOOL	1	PHILADELPHIA	CEP	1
PA	PHILADELPHIA CS FOR ARTS & SCIENCES AT HR EDMUNDS	non-certainty	nonCEP	THE PHILADELPHIA CS FOR ARTS AND SCIENCE	1	PHILADELPHIA	CEP	1
PA	SCHOOL DISTRICT OF PHILADELPHIA	certainty	CEP	BALDI	11		CEP	
PA	SCHOOL DISTRICT OF PHILADELPHIA	certainty	CEP	COMLY	37		CEP	
PA	SCHOOL DISTRICT OF PHILADELPHIA	certainty	CEP	GREENBERG	83		CEP	
PA	SCHOOL DISTRICT OF PHILADELPHIA	certainty	CEP	NORTHEAST	155		CEP	
PA	SPRING COVE SCHOOL DISTRICT	non-certainty	nonCEP	CENTRAL HS	1	MARTINSBURG	nonCEP	
PA	SPRING COVE SCHOOL DISTRICT	non-certainty	nonCEP	SPRING COVE EL SCH	3	ROARING SPRING	nonCEP	
PA	SPRING COVE SCHOOL DISTRICT	non-certainty	nonCEP	SPRING COVE MS	4	ROARING SPRING	nonCEP	
PA	WARRIOR RUN SCHOOL DISTRICT	non-certainty	nonCEP	TURBOTVILLE EL SCH	1	TURBOTVILLE	nonCEP	
PA	WARRIOR RUN SCHOOL DISTRICT	non-certainty	nonCEP	WARRIOR RUN HS	2	TURBOTVILLE	nonCEP	
PA	WARRIOR RUN SCHOOL DISTRICT	non-certainty	nonCEP	WARRIOR RUN MS	3	TURBOTVILLE	nonCEP	
RI	E. PROVIDENCE SCHOOL DEPARTMENT	non-certainty	nonCEP	EDWARD MARTIN MIDDLE	4	EAST PROVIDENCE	nonCEP	
RI	E. PROVIDENCE SCHOOL DEPARTMENT	non-certainty	nonCEP	ORLO AVENUE SCHOOL	9	EAST PROVIDENCE	nonCEP	
RI	E. PROVIDENCE SCHOOL DEPARTMENT	non-certainty	nonCEP	SILVER SPRING SCHOOL	11	EAST PROVIDENCE	nonCEP	
SC	CLARENDON 03	non-certainty	nonCEP	EAST CLARENDON MIDDLE-HIGH	1	TURBEVILLE	nonCEP	
SC	FLORENCE 04	non-certainty	CEP	BROCKINGTON ELEMENTARY	1	TIMMONSVILLE	CEP	1

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SC	FLORENCE 04	non- certainty	CEP	JOHNSON MIDDLE	2	TIMMONSVILLE	CEP	1
SC	FLORENCE 04	non- certainty	CEP	TIMMONSVILLE HIGH	3	TIMMONSVILLE	CEP	1
SC	GREENVILLE 01	non- certainty	CEP	BRUSHY CREEK ELEMENTARY	10	TAYLORS	nonCEP	
SC	GREENVILLE 01	non- certainty	CEP	EAST NORTH STREET ACADEMY	75	GREENVILLE	CEP	1
SC	GREENVILLE 01	non- certainty	CEP	GREENVILLE MIDDLE ACADEMY	22	GREENVILLE	nonCEP	
SC	GREENVILLE 01	non- certainty	CEP	MAULDIN HIGH	34	MAULDIN	nonCEP	
SC	HORRY 01	non- certainty	nonCEP	NORTH MYRTLE BEACH HIGH	32	LITTLE RIVER	nonCEP	
SC	HORRY 01	non- certainty	nonCEP	Ocean Drive Elementary	36	North Myrtle Beach	nonCEP	
SC	HORRY 01	non- certainty	nonCEP	ST. JAMES MIDDLE	47	MYRTLE BEACH	nonCEP	
SC	JASPER 01	non- certainty	CEP	HARDEEVILLE-RIDGELAND MIDDLE	2	HARDEEVILLE	CEP	1
SC	JASPER 01	non- certainty	CEP	RIDGELAND ELEMENTARY	3	RIDGELAND	CEP	1
SC	JASPER 01	non- certainty	CEP	RIDGELAND-HARDEEVILLE HIGH	4	RIDGELAND	CEP	1
SC	PICKENS 01	non- certainty	nonCEP	CLEMSON ELEMENTARY	4	CLEMSON	nonCEP	
SC	PICKENS 01	non- certainty	nonCEP	DACUSVILLE ELEMENTARY	7	EASLEY	nonCEP	
SC	PICKENS 01	non- certainty	nonCEP	RICHARD H. GETTYS MIDDLE	22	EASLEY	nonCEP	
SC	RICHLAND 01	non- certainty	CEP	BROCKMAN ELEMENTARY	8	COLUMBIA	CEP	1
SD	RAPID CITY AREA SCHOOL DISTRICT 51-4	non- certainty	CEP	GENERAL BEADLE ELEMENTARY - 01	18	RAPID CITY	CEP	1
SD	RAPID CITY AREA SCHOOL DISTRICT 51-4	non- certainty	CEP	RAPID VALLEY ELEMENTARY - 12	10	RAPID CITY	nonCEP	
SD	SIOUX FALLS SCHOOL DISTRICT 49- 5	non- certainty	CEP	CLEVELAND ELEMENTARY - 14	5	SIOUX FALLS	nonCEP	
SD	SIOUX FALLS SCHOOL DISTRICT 49- 5	non- certainty	CEP	HARVEY DUNN ELEMENTARY - 54	10	SIOUX FALLS	nonCEP	

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SD	SIOUX FALLS SCHOOL DISTRICT 49-5	non-certainty	CEP	NEW TECHNOLOGY HS - 30	19	SIOUX FALLS	nonCEP	
TN	BLOUNT COUNTY	non-certainty	CEP	HERITAGE HIGH SCHOOL	7	MARYVILLE	nonCEP	
TN	BLOUNT COUNTY	non-certainty	CEP	LANIER ELEMENTARY	18	MARYVILLE	CEP	1
TN	BLOUNT COUNTY	non-certainty	CEP	MIDDLESETTLEMENTS	9	LOUISVILLE	nonCEP	
TN	BLOUNT COUNTY	non-certainty	CEP	UNION GROVE MIDDLE SCHOOL	15	FRIENDSVILLE	nonCEP	
TN	DAVIDSON COUNTY	certainty	CEP	LOCKELAND ELEMENTARY DESIGN CENTER	86	NASHVILLE	CEP	1
TN	DAVIDSON COUNTY	certainty	CEP	MADISON MIDDLE SCHOOL	87	OLD HICKORY	CEP	1
TN	GIBSON COUNTY SSD	non-certainty	CEP	DYER ELEMENTARY	9	DYER	CEP	2
TN	GIBSON COUNTY SSD	non-certainty	CEP	RUTHERFORD ELEMENTARY	4	RUTHERFORD	nonCEP	
TN	HAMBLÉN COUNTY	non-certainty	nonCEP	LINCOLN HEIGHTS ELEMENTARY	6	MORRISTOWN	nonCEP	
TN	HAMBLÉN COUNTY	non-certainty	nonCEP	MANLEY ELEMENTARY	8	MORRISTOWN	nonCEP	
TN	HAMBLÉN COUNTY	non-certainty	nonCEP	MORRISTOWN WEST HIGH	11	MORRISTOWN	nonCEP	
TN	KINGSPORT CITY	non-certainty	nonCEP	DOBYNS - BENNETT HIGH	1	KINGSPORT	nonCEP	
TN	KINGSPORT CITY	non-certainty	nonCEP	LINCOLN ELEMENTARY	9	KINGSPORT	CEP	1
TN	KINGSPORT CITY	non-certainty	nonCEP	SEVIER MIDDLE SCHOOL	11	KINGSPORT	CEP	1
TN	RUTHERFORD COUNTY	non-certainty	nonCEP	LAVERGNE LAKE ELEMENTARY SCHOOL	20	LAVERGNE	nonCEP	
TN	RUTHERFORD COUNTY	non-certainty	nonCEP	STEWARTS CREEK ELEMENTARY SCHOOL	40	SMYRNA	nonCEP	
TN	RUTHERFORD COUNTY	non-certainty	nonCEP	STEWARTS CREEK HIGH SCHOOL	41	SMYRNA	nonCEP	
TN	SHELBY COUNTY SCHOOLS	certainty	CEP	CORDOVA MIDDLE SCHOOL	35	CORDOVA	CEP	1
TN	SHELBY COUNTY SCHOOLS	certainty	CEP	Cornerstone Prep @ Denver	43	Memphis	CEP	1

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TN	SHELBY COUNTY SCHOOLS	certainty	CEP	GERMANTOWN HIGH SCHOOL	74	GERMANTOWN	CEP	1
TX	ALDINE ISD	certainty	CEP	ECKERT INT	22	HOUSTON	nonCEP	
TX	AUSTIN ISD	non- certainty	CEP	CROCKETT H S	31	AUSTIN	nonCEP	
TX	AUSTIN ISD	non- certainty	CEP	PECAN SPRINGS EL	88	AUSTIN	nonCEP	
TX	AUSTIN ISD	non- certainty	CEP	RODRIGUEZ EL	99	AUSTIN	nonCEP	
TX	BROWNSVILLE ISD	non- certainty	nonCEP	DEL CASTILLO EL	15	BROWNSVILLE	nonCEP	
TX	BROWNSVILLE ISD	non- certainty	nonCEP	PACE H S	36	BROWNSVILLE	nonCEP	
TX	BROWNSVILLE ISD	non- certainty	nonCEP	RUSSELL EL	47	BROWNSVILLE	nonCEP	
TX	CYPRESS-FAIRBANKS ISD	non- certainty	CEP	HAIRGROVE EL	36	HOUSTON	nonCEP	
TX	CYPRESS-FAIRBANKS ISD	non- certainty	CEP	HOLBROOK EL	85	HOUSTON	CEP	1
TX	CYPRESS-FAIRBANKS ISD	non- certainty	CEP	JERSEY VILLAGE HIGH SCHOOL	44	HOUSTON	nonCEP	
TX	CYPRESS-FAIRBANKS ISD	non- certainty	CEP	LABAY MIDDLE	49	HOUSTON	nonCEP	
TX	DALLAS ISD	certainty	CEP	DAVID W CARTER H S	45	DALLAS	CEP	1
TX	DALLAS ISD	certainty	CEP	JIMMIE TYLER BRASHEAR EL	102	DALLAS	CEP	1
TX	DALLAS ISD	certainty	CEP	SAN JACINTO EL	180	DALLAS	CEP	1
TX	DALLAS ISD	certainty	CEP	SARAH ZUMWALT MIDDLE	181	DALLAS	CEP	1
TX	DEL VALLE ISD	non- certainty	nonCEP	CREEDMOOR EL	2	CREEDMOOR	nonCEP	
TX	DEL VALLE ISD	non- certainty	nonCEP	DAILEY MIDDLE	3	AUSTIN	nonCEP	
TX	DEL VALLE ISD	non- certainty	nonCEP	DEL VALLE H S	5	DEL VALLE	nonCEP	
TX	DICKINSON ISD	non- certainty	nonCEP	Elva C. Lobit Middle	6	Dickinson	nonCEP	

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TX	DONNA ISD	non- certainty	CEP	GUZMAN EL	11	DONNA	CEP	1
TX	DONNA ISD	non- certainty	CEP	JULIAN S ADAME	13	DONNA	CEP	1
TX	DONNA ISD	non- certainty	CEP	VETERANS MIDDLE	20	DONNA	CEP	1
TX	ECTOR COUNTY ISD	non- certainty	nonCEP	MURRY FLY EL	30	ODESSA	nonCEP	
TX	EL PASO ISD	non- certainty	CEP	CROSBY EL	56	EL PASO	CEP	1
TX	EL PASO ISD	non- certainty	CEP	MESITA EL	18	EL PASO	nonCEP	
TX	EVERMAN ISD	non- certainty	nonCEP	DAN POWELL INT	3	EVERMAN	nonCEP	
TX	EVERMAN ISD	non- certainty	nonCEP	EVERMAN H S	6	EVERMAN	nonCEP	
TX	EVERMAN ISD	non- certainty	nonCEP	JOHN AND POLLY TOWNLEY EL	8	EVERMAN	nonCEP	
TX	FORT WORTH ISD	certainty	CEP	DE ZAVALA EL	64	FORT WORTH	CEP	1
TX	FORT WORTH ISD	certainty	CEP	DUNBAR MIDDLE	68	FORT WORTH	CEP	1
TX	FORT WORTH ISD	certainty	CEP	PASCHAL H S	26	FORT WORTH	nonCEP	
TX	FROST ISD	non- certainty	nonCEP	FROST H S	2	FROST	nonCEP	
TX	HARMONY PUBLIC SCHOOLS	non- certainty	nonCEP	HARMONY SCHOOL OF INNOVATION- EULESS	3	EULESS	nonCEP	
TX	HOUSTON ISD	certainty	CEP	BELL EL	6		nonCEP	
TX	HOUSTON ISD	certainty	CEP	BURBANK EL	123		CEP	1
TX	HOUSTON ISD	certainty	CEP	GROSS EL	163		CEP	1
TX	HOUSTON ISD	certainty	CEP	LAMAR H S	49		nonCEP	
TX	HOUSTON ISD	certainty	CEP	MILBY H S	208		CEP	1
TX	HURST-EULESS-BEDFORD ISD	non- certainty	nonCEP	BELL H S	4		nonCEP	

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TX	HURST-EULESS-BEDFORD ISD	non- certainty	nonCEP	BELLAIRE EL	6		nonCEP	
TX	HURST-EULESS-BEDFORD ISD	non- certainty	nonCEP	STONEGATE EL	25		nonCEP	
TX	KENNEDALE ISD	non- certainty	nonCEP	KENNEDALE H S	3	KENNEDALE	nonCEP	
TX	KENNEDALE ISD	non- certainty	nonCEP	KENNEDALE J H	4	KENNEDALE	nonCEP	
TX	KENNEDALE ISD	non- certainty	nonCEP	R F PATTERSON EL	5	ARLINGTON	nonCEP	
TX	KILLEEN ISD	non- certainty	CEP	HAY BRANCH EL	42	KILLEEN	CEP	4
TX	KILLEEN ISD	non- certainty	CEP	VENABLE VILLAGE EL	25	FT HOOD	nonCEP	
TX	KLEIN ISD	non- certainty	nonCEP	KLEIN H S	21	KLEIN	nonCEP	
TX	KLEIN ISD	non- certainty	nonCEP	KRIMMEL INTERMED	28	KLEIN	nonCEP	
TX	KLEIN ISD	non- certainty	nonCEP	MUELLER EL	35	KLEIN	nonCEP	
TX	LA FERIA ISD	non- certainty	nonCEP	LA FERIA H S	5	LA FERIA	nonCEP	
TX	LA FERIA ISD	non- certainty	nonCEP	NOEMI DOMINGUEZ EL	6	LA FERIA	nonCEP	
TX	LA FERIA ISD	non- certainty	nonCEP	SAM HOUSTON EL	7	LA FERIA	nonCEP	
TX	LA VERNIA ISD	non- certainty	nonCEP	LA VERNIA H S	1	LA VERNIA	nonCEP	
TX	LA VERNIA ISD	non- certainty	nonCEP	LA VERNIA INT	2	LA VERNIA	nonCEP	
TX	LA VERNIA ISD	non- certainty	nonCEP	LA VERNIA J H	3	LA VERNIA	nonCEP	
TX	LAMAR CONSOLIDATED ISD	non- certainty	CEP	GEORGE RANCH H S	13	RICHMOND	nonCEP	
TX	LAMAR CONSOLIDATED ISD	non- certainty	CEP	TAYLOR RAY EL	39	ROSENBERG	CEP	1
TX	LEWISVILLE ISD	non- certainty	nonCEP	HUFFINES MIDDLE SCHOOL	33	LEWISVILLE	nonCEP	
TX	LEWISVILLE ISD	non- certainty	nonCEP	INDIAN CREEK EL	35	CARROLLTON	nonCEP	

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TX	LEWISVILLE ISD	non- certainty	nonCEP	LAKELAND ELEMENTARY	37	LEWISVILLE	nonCEP	
TX	LIVINGSTON ISD	non- certainty	nonCEP	LIVINGSTON H S	3	LIVINGSTON	nonCEP	
TX	LIVINGSTON ISD	non- certainty	nonCEP	LIVINGSTON J H	5	LIVINGSTON	nonCEP	
TX	LIVINGSTON ISD	non- certainty	nonCEP	PINE RIDGE EL	6	LIVINGSTON	nonCEP	
TX	LOS FRESNOS CONS ISD	non- certainty	nonCEP	LIBERTY MEMORIAL MIDDLE	6	SAN BENITO	nonCEP	
TX	LOS FRESNOS CONS ISD	non- certainty	nonCEP	LOPEZ-RIGGINS EL	7	LOS FRESNOS	nonCEP	
TX	LOS FRESNOS CONS ISD	non- certainty	nonCEP	LOS FRESNOS UNITED	11	SAN BENITO	nonCEP	
TX	MADISONVILLE CONS ISD	non- certainty	nonCEP	MADISONVILLE EL	1	MADISONVILLE	nonCEP	
TX	MADISONVILLE CONS ISD	non- certainty	nonCEP	MADISONVILLE INT	3	MADISONVILLE	nonCEP	
TX	MADISONVILLE CONS ISD	non- certainty	nonCEP	MADISONVILLE JUNIOR HIGH SCHOOL	4	MADISONVILLE	nonCEP	
TX	MESQUITE ISD	non- certainty	nonCEP	GENTRY EL	11	MESQUITE	nonCEP	
TX	MESQUITE ISD	non- certainty	nonCEP	KIMBROUGH MIDDLE	18	MESQUITE	nonCEP	
TX	MESQUITE ISD	non- certainty	nonCEP	MESQUITE H S	25	MESQUITE	nonCEP	
TX	NEW CANEY ISD	non- certainty	nonCEP	KEEFER CROSSING MIDDLE	3	NEW CANEY	nonCEP	
TX	NEW CANEY ISD	non- certainty	nonCEP	KINGS MANOR EL	4	KINGWOOD	nonCEP	
TX	NEW CANEY ISD	non- certainty	nonCEP	TAVOLA EL	14	NEW CANEY	nonCEP	
TX	PHARR-SAN JUAN-ALAMO ISD	non- certainty	CEP	DANIEL RAMIREZ EL	15	PHARR	CEP	1
TX	PHARR-SAN JUAN-ALAMO ISD	non- certainty	CEP	HENRY FORD EL	22	PHARR	CEP	1
TX	PHARR-SAN JUAN-ALAMO ISD	non- certainty	CEP	PSJA SOUTHWEST EARLY COLLEGE H S	35	PHARR	CEP	1
TX	PREMONT ISD	non- certainty	CEP	PREMONT H S	2	PREMONT	CEP	1

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TX	RICHARDSON ISD	non- certainty	nonCEP	BERKNER H S	5	RICHARDSON	nonCEP	
TX	RICHARDSON ISD	non- certainty	nonCEP	NORTHLAKE EL	30	DALLAS	nonCEP	
TX	RICHARDSON ISD	non- certainty	nonCEP	RISD ACAD	44	DALLAS	nonCEP	
TX	RIO GRANDE CITY ISD	non- certainty	CEP	RIO GRANDE CITY CISD GRULLA H S	11	RIO GRANDE CITY	CEP	1
TX	ROCKWALL ISD	non- certainty	nonCEP	AMANDA ROCHELL EL	1	ROCKWALL	nonCEP	
TX	ROCKWALL ISD	non- certainty	nonCEP	J W WILLIAMS MIDDLE	11	ROCKWALL	nonCEP	
TX	ROCKWALL ISD	non- certainty	nonCEP	ROCKWALL-HEATH H S	17	HEATH	nonCEP	
TX	ROUND ROCK ISD	non- certainty	nonCEP	LIVE OAK EL	33	AUSTIN	nonCEP	
TX	ROUND ROCK ISD	non- certainty	nonCEP	ROUND ROCK H S	43	ROUND ROCK	nonCEP	
TX	ROUND ROCK ISD	non- certainty	nonCEP	UNION HILL EL	49	ROUND ROCK	nonCEP	
TX	SAN ANTONIO ISD	non- certainty	CEP	J T BRACKENRIDGE EL	63	SAN ANTONIO	CEP	59
TX	SPRING BRANCH ISD	non- certainty	CEP	HOUSMAN EL	6	HOUSTON	nonCEP	
TX	SPRING BRANCH ISD	non- certainty	CEP	SPRING SHADOW EL	36	HOUSTON	CEP	1
TX	TATUM ISD	non- certainty	nonCEP	TATUM EL	1	TATUM	nonCEP	
TX	TATUM ISD	non- certainty	nonCEP	TATUM H S	2	TATUM	nonCEP	
TX	TATUM ISD	non- certainty	nonCEP	TATUM PRI	4	TATUM	nonCEP	
TX	TEXAS CITY ISD	non- certainty	CEP	BLOCKER MIDDLE	1	TEXAS CITY	nonCEP	
TX	TEXAS CITY ISD	non- certainty	CEP	NORTHSIDE EL	6	TEXAS CITY	nonCEP	
TX	TEXAS CITY ISD	non- certainty	CEP	TEXAS CITY H S	8	TEXAS CITY	nonCEP	
TX	TYLER ISD	non- certainty	nonCEP	BIRDWELL EL	3	TYLER	nonCEP	

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TX	TYLER ISD	non- certainty	nonCEP	JOHN TYLER H S	11	TYLER	nonCEP	
TX	TYLER ISD	non- certainty	nonCEP	JONES EL	26	TYLER	CEP	8
TX	TYLER ISD	non- certainty	nonCEP	MOORE MST MAGNET SCHOOL	12	TYLER	nonCEP	
TX	WEST ORANGE-COVE CONS ISD	non- certainty	CEP	WEST ORANGE-STARK EL	3	ORANGE	CEP	1
TX	WEST ORANGE-COVE CONS ISD	non- certainty	CEP	WEST ORANGE-STARK H S	1	ORANGE	nonCEP	
UT	DAVIS SCHOOL DISTRICT	non- certainty	nonCEP	CENTENNIAL JR HIGH	11	KAYSVILLE	nonCEP	
UT	DAVIS SCHOOL DISTRICT	non- certainty	nonCEP	LAYTON HIGH	44	LAYTON	nonCEP	
UT	DAVIS SCHOOL DISTRICT	non- certainty	nonCEP	MOUNTAIN VIEW SCHOOL	52	LAYTON	nonCEP	
UT	GRANITE SCHOOL DISTRICT	non- certainty	nonCEP	CYPRUS HIGH	15	MAGNA	nonCEP	
UT	GRANITE SCHOOL DISTRICT	non- certainty	nonCEP	JACKLING SCHOOL	42	WEST VALLEY CITY	nonCEP	
UT	GRANITE SCHOOL DISTRICT	non- certainty	nonCEP	REDWOOD SCHOOL	69	WEST VALLEY CITY	nonCEP	
VA	CHARLOTTESVILLE CITY PUBLIC SCHOOLS	non- certainty	nonCEP	BUFORD MIDDLE	1	CHARLOTTESVILL E	nonCEP	
VA	CHARLOTTESVILLE CITY PUBLIC SCHOOLS	non- certainty	nonCEP	CHARLOTTESVILLE HIGH	3	CHARLOTTESVILL E	nonCEP	
VA	CHARLOTTESVILLE CITY PUBLIC SCHOOLS	non- certainty	nonCEP	JACKSON-VIA ELEM	6	CHARLOTTESVILL E	nonCEP	
VA	FAIRFAX COUNTY PUBLIC SCHOOLS	non- certainty	nonCEP	HAYFIELD SECONDARY	85	ALEXANDRIA	nonCEP	
VA	FAIRFAX COUNTY PUBLIC SCHOOLS	non- certainty	nonCEP	HYBLA VALLEY ELEM	95	ALEXANDRIA	nonCEP	
VA	FAIRFAX COUNTY PUBLIC SCHOOLS	non- certainty	nonCEP	MOUNT EAGLE ELEM	133	ALEXANDRIA	nonCEP	
VA	MANASSAS CITY PUBLIC SCHOOLS	non- certainty	nonCEP	OSBOURN HIGH	6	MANASSAS	nonCEP	
VA	NEWPORT NEWS CITY PUBLIC SCHOOLS	non- certainty	CEP	ACHIEVABLE DREAM ACADEMY	22	NEWPORT NEWS	CEP	1
VA	NEWPORT NEWS CITY PUBLIC SCHOOLS	non- certainty	CEP	WARWICK HIGH	20	NEWPORT NEWS	nonCEP	

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VA	PRINCE WILLIAM COUNTY PUBLIC SCHOOLS	non-certainty	nonCEP	ANTIETAM ELEM.	2	WOODBIDGE	nonCEP	
VA	PRINCE WILLIAM COUNTY PUBLIC SCHOOLS	non-certainty	nonCEP	Colgan High School	16	MANASSAS	nonCEP	
VA	PRINCE WILLIAM COUNTY PUBLIC SCHOOLS	non-certainty	nonCEP	FANNIE W. FITZGERALD ELEM. SCH.	22	WOODBIDGE	nonCEP	
VA	RICHMOND CITY PUBLIC SCHOOLS	non-certainty	CEP	WILLIAM FOX ELEM.	41	RICHMOND	CEP	1
VT	WINDHAM SOUTHWEST SU	non-certainty	CEP	Readsboro elementary School	5	Readsboro	CEP	1
VT	WINDHAM SOUTHWEST SU	non-certainty	CEP	Twin Valley Elementary School	3	Wilmington	nonCEP	
WA	BETHEL SCHOOL DISTRICT	non-certainty	nonCEP	ROCKY RIDGE ELEMENTARY	23	GRAHAM	nonCEP	
WA	CASHMERE SCHOOL DISTRICT	non-certainty	nonCEP	CASHMERE HIGH SCHOOL	1	CASHMERE	nonCEP	
WA	CASHMERE SCHOOL DISTRICT	non-certainty	nonCEP	CASHMERE MIDDLE SCHOOL	2	CASHMERE	nonCEP	
WA	CASHMERE SCHOOL DISTRICT	non-certainty	nonCEP	VALE ELEMENTARY SCHOOL	3	CASHMERE	nonCEP	
WA	EVERGREEN SCHOOL DISTRICT	non-certainty	nonCEP	CASCADE MIDDLE SCHOOL	4	VANCOUVER	nonCEP	
WA	EVERGREEN SCHOOL DISTRICT	non-certainty	nonCEP	CRESTLINE ELEMENTARY SCHOOL	8	VANCOUVER	nonCEP	
WA	EVERGREEN SCHOOL DISTRICT	non-certainty	nonCEP	HERITAGE HIGH SCHOOL	19	VANCOUVER	nonCEP	
WA	SHELTONSCHOOL DISTRICT	non-certainty	nonCEP	EVERGREEN ELEMENTARY SCHOOL	3	SHELTON	nonCEP	
WA	SHELTONSCHOOL DISTRICT	non-certainty	nonCEP	OAKLAND BAY JUNIOR HIGH SCHOOL	5	SHELTON	nonCEP	
WA	SHELTONSCHOOL DISTRICT	non-certainty	nonCEP	SHELTON HIGH SCHOOL	7	SHELTON	nonCEP	
WA	WALLA WALLA PUBLIC SCHOOLS	non-certainty	nonCEP	BERNEY ELEMENTARY SCHOOL	2	WALLA WALLA	nonCEP	
WA	WALLA WALLA PUBLIC SCHOOLS	non-certainty	nonCEP	BLUE RIDGE ELEMENTARY	3	WALLA WALLA	nonCEP	
WA	WALLA WALLA PUBLIC SCHOOLS	non-certainty	nonCEP	LINCOLN HIGH SCHOOL	7	WALLA WALLA	nonCEP	
WI	FORT ATKINSON SCH DISTRICT	non-certainty	nonCEP	BARRIE ELEMENTARY	1	FORT ATKINSON	nonCEP	

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WI	FORT ATKINSON SCH DISTRICT	non- certainty	nonCEP	FORT ATKINSON MIDDLE SCHOOL	3	FORT ATKINSON	nonCEP	
WI	FORT ATKINSON SCH DISTRICT	non- certainty	nonCEP	PURDY ELEMENTARY	5	FORT ATKINSON	nonCEP	
WI	MILWAUKEE PUBLIC SCHOOL DISTRICT	certainty	CEP	MILWAUKEE COLLEGE PREPARATORY SCHOOL – 38TH STREE	97		CEP	1
WI	MILWAUKEE PUBLIC SCHOOL DISTRICT	certainty	CEP	PULASKI HIGH	123		CEP	1
WI	RACINE UNIFIED SCHOOL DISTRICT	non- certainty	CEP	CASE HIGH	1	RACINE	nonCEP	
WI	RACINE UNIFIED SCHOOL DISTRICT	non- certainty	CEP	WEST RIDGE ELEMENTARY	32	RACINE	CEP	1
WI	SUN PRAIRIE AREA SCHOOL DISTRICT	non- certainty	nonCEP	NORTHSIDE ELEMENTARY	6	SUN PRAIRIE	nonCEP	
WI	SUN PRAIRIE AREA SCHOOL DISTRICT	non- certainty	nonCEP	PATRICK MARSH MIDDLE	7	SUN PRAIRIE	nonCEP	
WI	SUN PRAIRIE AREA SCHOOL DISTRICT	non- certainty	nonCEP	SUN PRAIRIE HIGH	11	SUN PRAIRIE	nonCEP	
WI	WEBSTER SCHOOL DISTRICT	non- certainty	nonCEP	WEBSTER ELEMENTARY	1	WEBSTER	nonCEP	
WI	WEBSTER SCHOOL DISTRICT	non- certainty	nonCEP	WEBSTER HIGH	2	WEBSTER	nonCEP	
WI	WEBSTER SCHOOL DISTRICT	non- certainty	nonCEP	WEBSTER MIDDLE	3	WEBSTER	nonCEP	
WV	PRESTON CO BD OF EDUCATION	non- certainty	CEP	BRUCETON SCHOOL	1	BRUCETON MILLS	nonCEP	
WV	PRESTON CO BD OF EDUCATION	non- certainty	CEP	KINGWOOD ELEMENTARY	4	KINGWOOD	CEP	1
WV	PRESTON CO BD OF EDUCATION	non- certainty	CEP	ROWLESBURG SCHOOL	5	ROWLESBURG	CEP	1
WV	PRESTON CO BD OF EDUCATION	non- certainty	CEP	SOUTH PRESTON MIDDLE SCHOOL	6	TUNNELTON	CEP	1
WV	WAYNE CO BD OF EDUCATION	non- certainty	CEP	BUFFALO ELEMENTARY SCHOOL	1	KENOVA	CEP	1
WV	WAYNE CO BD OF EDUCATION	non- certainty	CEP	SPRING VALLEY HIGH SCHOOL	15	HUNTINGTON	CEP	1
WV	WAYNE CO BD OF EDUCATION	non- certainty	CEP	VINSON MIDDLE SCHOOL	17	HUNTINGTON	CEP	1

Third Access, Participation, Eligibility, and Certification Study (APEC-III) Final Report

Volume 4: Appendices – Appendix B. Student School and SFA Characteristics

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Appendix B

Student School and SFA Characteristics

Table B-1. Characteristics of students, by certification status (percentages of students)

Characteristic	Certified students and denied applicants		
	Free and reduced-price certified	Denied applicants	All students
Child's grade			
Pre-K to K	10.39	10.97	10.43
1 to 3	23.15	20.11	22.97
4 to 5	17.15	22.96	17.51
6 to 8	21.35	15.62	21.00
9 to 12	27.90	30.34	28.05
Ungraded	0.05	0.00	0.05
Gender			
Male	52.41	44.89	51.95
Female	47.59	55.11	48.05
Race/ethnicity			
White, non-Hispanic	33.01	37.87	33.30
Black, non-Hispanic	17.24	12.64	16.96
Hispanic	37.83	34.19	37.60
Other	5.11	11.98	5.54
Urbanicity			
Urban	23.96	30.94	24.39
Suburban	44.07	47.70	44.29
Town	13.25	11.60	13.15
Rural	18.72	9.76	18.17
Household headed by			
Two parents	47.56	67.80	48.79
Single parent	46.99	31.10	46.02
Other relative	5.24	1.10	4.98
Nonrelative	0.22	-	0.20
Parent's education			
Less than high school	21.09	9.34	20.37
High school or GED	47.02	38.42	46.49
Some college	18.90	16.43	18.74
College graduate	12.99	35.82	14.39
Program participation^a			
TANF	7.30	-	6.85
Food stamps	44.72	3.38	41.97
FDPIR	0.15	-	0.13
Medicaid	57.75	21.41	53.69
Number of children < 18 years			
1	17.68	23.48	18.33
2	37.78	43.39	38.40
3	26.74	19.05	25.88
4 or more	-	-	-

Table B-1. Characteristics of students, by certification status (percentages of students)
(continued)

Characteristic	Certified students and denied applicants		
	Free and reduced-price certified	Denied applicants	All students
Age of youngest child			
Younger than 5	26.40	23.78	26.10
5 to 8	30.52	33.23	30.82
9 to 13	30.61	26.20	30.12
14 to 18	12.47	16.79	12.95
Income relative to poverty (percentage)			
Less than 50	14.39	5.19	13.37
50 to 99	19.58	6.83	18.17
100 to 129	16.69	5.60	15.47
130 to 184	29.30	13.92	27.60
185 to 249	12.33	20.41	13.23
250 to 399	5.24	24.94	7.42
400 or more	2.47	23.10	4.75
Sample size	3,338	203	3,541

Source: APEC-III study, household survey data.

Notes: Data are weighted by student weight. Sample size varies because of item nonresponse. Items may not sum to 100 percent because of rounding.

^a Does not sum to 100 percent because students' household may participate in more than one program.

Table B-2. Characteristics of schools, by CEP status (percentages of schools)

Characteristic	CEP status		All schools
	CEP	Non-CEP	
Urbanicity			
District covers urban area	48.88	20.67	27.79
District covers suburban area	13.49	30.95	26.55
District serves a town	13.82	16.79	16.04
District covers rural area	23.80	31.59	29.63
Region			
Northeast	13.50	11.31	11.86
Mid-Atlantic	12.62	10.06	10.71
Southeast	26.02	13.57	16.71
Midwest	13.77	19.20	17.83
Southwest	19.73	13.28	14.91
Mountain Plains	5.80	13.24	11.36
Western	8.56	19.34	16.62
School level			
Elementary	70.13	58.27	61.26
Middle	14.19	17.50	16.67
High	15.67	24.23	22.07
School enrollment			
Fewer than 400 students	40.23	39.99	40.05
400 to 799 students	46.56	39.24	41.08
800 to 1,200 students	10.63	12.26	11.85
More than 1,200 students	2.58	8.51	7.01
Median	457.36	480.66	476.41
Mean	512.41	604.98	581.64
Sample size	240	419	659

Source: APEC-III study, data on study schools from SFA Director Survey.

Notes: Data are weighted by school weight. Sample size varies because of item nonresponse. Items may not sum to 100 percent because of rounding.

Table B-3. Characteristics of schools, by CEP status (percentages of students in schools with characteristics indicated in row headings)

Characteristic	CEP status		All schools
	CEP	Non-CEP	
Urbanicity			
District covers urban area	55.51	22.66	29.96
District covers suburban area	16.13	39.41	34.24
District serves a town	10.16	13.33	12.63
District covers rural area	18.20	24.61	23.18
Region			
Northeast	13.36	7.62	8.89
Mid-Atlantic	12.14	10.16	10.60
Southeast	26.74	16.38	18.68
Midwest	13.44	17.29	16.44
Southwest	18.81	15.09	15.91
Mountain Plains	4.42	12.69	10.85
Western	11.09	20.77	18.62
School level			
Elementary	64.46	46.55	50.53
Middle	14.40	20.41	19.08
High	21.14	33.03	30.39
School enrollment			
Fewer than 400 students	19.91	17.12	17.74
400 to 799 students	51.40	37.21	40.36
800 to 1,200 students	20.10	19.07	19.30
More than 1,200 students	8.59	26.59	22.60
Median	605.71	739.33	702.45
Mean	723.73	1,002.17	940.33
Sample size	240	419	659

Source: APEC-III study, data on study schools from SFA Director Survey.

Notes: Data are weighted by school weight adjusted for number of enrolled students with access to the school meal programs. Sample size varies because of item nonresponse. Items may not sum to 100 percent because of rounding.

Table B-4. NSLP and SBP meal program characteristics, by CEP status (percentages of schools)

Characteristic	CEP status		All schools
	CEP	Non-CEP	
Types of meal programs offered			
NSLP only	0.75	5.74	4.56
SBP only	0.00	0.00	0.00
Both NSLP and SBP	99.25	94.26	95.44
Provision 2 or 3 status			
NSLP only, NP 2/3	0.74	5.08	4.15
SBP only, NP 2/3	0.00	0.00	0.00
SBP NP 2/3, NSLP NP 2/3	99.26	91.24	92.97
NSLP P 2/3, SBP NP 2/3	0.00	0.00	0.00
SBP P 2/3, NSLP NP 2/3	-	1.39	1.09
SBP P 2/3, NSLP P 2/3	-	2.29	1.80
Uses OVS ^a			
Uses OVS	94.41	95.45	95.18
Does not use OVS	5.60	4.56	4.82
Student certification (mean percentages)			
Certified for free meals	86.83	39.97	45.83
Certified for reduced-price meals	N/A	7.20	7.20
Certified for free or reduced-price meals	86.83	46.89	51.91
Percentage of NSLP lunches by type			
Free	94.47	52.16	62.94
Reduced-price	0.00	8.75	6.52
Paid	78.46	53.24	59.60
Receives NSLP 60 percent subsidy ^b			
Yes	0.74	0.32	0.43
No	99.26	99.68	99.57
NSLP participation (percentages)			
Average daily participation rate			
Among all students	78.46	53.24	59.60
Among students certified for free meals	79.82	75.79	76.30
Among students certified for reduced-price meals	N/A	71.31	71.31
Among students not certified (paid)	43.74	39.22	39.58
Percentage of breakfasts by type			
Free	94.47	61.86	70.10
Reduced-price	0.00	9.93	7.42
Paid	5.53	23.43	18.90
Receives severe needs SBP subsidy ^c			
Yes	92.00	62.00	69.00
No	8.00	38.00	31.00
SBP participation (percentages)			
Average daily participation rate			
Among all students	56.32	28.47	35.49
Among students certified for free meals	53.29	41.78	43.22
Among students certified for reduced-price meals	N/A	33.82	33.82
Among students not certified (paid)	28.01	15.71	16.68

Table B-4. NSLP and SBP meal program characteristics, by CEP status (percentages of schools) (continued)

Characteristic	CEP status		All schools
	CEP	Non-CEP	
Certified for additional 6 cents^d			
Yes	100.00	99.15	99.36
No	0.00	0.85	0.64
Sample size	240	419	659

Source: APEC-III study, data on study schools from SFA Director Survey.

Notes: Data are weighted by school weight. Sample size varies because of item nonresponse. Items may not sum to 100 percent because of rounding.

^a School uses OVS option in one or both school meal programs.

^b School receives extra 2 cents for each lunch served because 60 percent of more of total lunches are to students certified for free or reduced-price meals.

^c School receives extra 24 cents for each free or reduced-price breakfast served.

^d School receives additional 6-cent subsidy for each NSLP lunch served because SFA certified it compliant with new meal pattern and nutrition requirements by State agency.

Table B-5. NSLP and SBP meal program characteristics, by CEP status (percentages of students in schools with characteristics indicated in row heading)

Characteristic	CEP status		All schools
	CEP	Non-CEP	
Types of meal programs offered			
NSLP only	0.54	3.92	3.20
SBP only	0.00	0.00	0.00
Both NSLP and SBP	99.46	96.08	96.80
Provision 2 or 3 status			
NSLP only, NP 2/3	0.54	3.44	2.89
SBP only, NP 2/3	0.00	0.00	0.00
SBP NP 2/3, NSLP NP 2/3	99.46	92.95	94.20
NSLP P 2/3, SBP NP 2/3	0.00	0.00	0.00
SBP P 2/3, NSLP NP 2/3	0.00	1.11	0.90
SBP P 2/3, NSLP P 2/3	0.00	2.49	2.02
Uses OVS ^a			
Uses OVS	95.92	97.52	97.17
Does not use OVS	4.08	2.48	2.83
Student certification (mean percentages)			
Certified for free meals	87.32	37.97	43.51
Certified for reduced-price meals	N/A	6.73	6.73
Certified for free or reduced-price meals	87.32	44.42	49.25
Percentage of NSLP lunches by type			
Free	94.69	50.32	60.18
Reduced-price	0.00	8.37	6.51
Paid	5.31	41.31	33.31
Receives NSLP 60 percent subsidy ^b			
Yes	77.34	35.61	44.88
No	22.66	64.39	55.12
NSLP participation (percentages)			
Average daily participation rate			
Among all students	72.82	50.43	55.41
Among students certified for free meals	78.40	73.21	73.79
Among students certified for reduced-price meals	N/A	70.36	70.36
Among students not certified (paid)	41.19	37.06	37.37
Percentage of breakfasts by type			
Free	94.69	63.51	70.51
Reduced-price	0.00	9.75	7.56
Paid	5.31	23.69	19.57
Receives severe needs SBP subsidy ^c			
Yes	96.00	54.00	64.00
No	4.00	46.00	36.00
SBP participation (percentages)			
Average daily participation rate			
Among all students	49.15	22.25	28.22
Among students certified for free meals	50.02	34.79	36.50
Among students certified for reduced-price meals	N/A	28.44	28.44
Among students not certified (paid)	26.31	12.17	13.21

Table B-5. NSLP and SBP meal program characteristics, by CEP status (percentages of students in schools with characteristics indicated in row heading) (continued)

Characteristic	CEP status		All schools
	CEP	Non-CEP	
Certified for additional 6 cents^d			
Yes	100.00	99.22	99.39
No	0.00	0.78	0.61
Sample size	240	419	659

Source: APEC-III study, data on study schools from SFA Director Survey.

Notes: Data are weighted by school weight adjusted for number of enrolled students with access to the school meal programs. Sample size varies because of item nonresponse. Items may not sum to 100 percent because of rounding.

^a School uses OVS option in one or both school meal programs.

^b School receives extra 2 cents for each lunch served because 60 percent of more of total lunches are to students certified for free or reduced-price meals.

^c School receives extra 24 cents for each free or reduced-price breakfast served.

^d School receives additional 6-cent subsidy for each NSLP lunch served because SFA certified it compliant with new meal pattern and nutrition requirements by State agency.

Table B-6. Characteristics of SFAs, by CEP status (percentages of SFAs)

Characteristic	CEP status			All SFAs
	All schools are CEP	Some schools are CEP	No schools are CEP	
Public vs. private SFA				
Administers public schools only	98.84	97.72	99.00	98.84
Administers private schools only	0.29	0.00	0.00	0.05
Administers both public and private schools	0.87	2.28	1.00	1.11
Single- vs. multiple-district SFA				
Administers single district	92.06	82.21	96.02	93.88
Administers multiple districts or entities	7.94	17.79	3.98	6.12
Urbanicity (mean percentages)				
District covers urban area	16.67	22.33	2.30	7.07
District covers suburban area	6.04	24.76	24.64	21.20
District serves a town	5.93	23.90	41.15	32.81
District covers rural area	71.35	29.01	31.90	38.92
District size				
Total number of schools (mean)	62.90	20.33	4.23	16.00
Total number of schools (median)	1.78	9.10	1.56	1.80
Percentage of schools by type of school				
Elementary	54.29	62.08	70.59	67.22
Middle	36.01	18.06	27.85	28.99
High	14.83	15.91	29.58	23.48
Other	3.22	11.32	8.57	6.71
Student enrollment				
Fewer than 1,000	73.96	22.87	59.59	58.94
1,000 to 4,999	18.93	47.91	30.66	30.07
5,000 to 9,999	3.13	11.43	4.70	5.01
10,000 to 19,999	2.48	6.10	3.47	3.53
20,000 to 49,999	1.20	9.22	1.28	1.96
50,000 or more	0.30	2.46	0.30	0.49
Median	3,489.55	453.40	708.13	733.27
Mean	2,361.71	9,088.26	2,516.30	3,068.45
Sample size	56	69	109	234

Source: APEC-III study, SFA Director Survey data.

Notes: Data are weighted by SFA weight. Sample size varies because of item nonresponse. Items may not sum to 100 percent because of rounding.

Table B-7. Characteristics of SFAs, by CEP status (percentages of students in SFAs with characteristics indicated in row headings)

Characteristic	CEP status			All SFAs
	All schools are CEP	Some schools are CEP	No schools are CEP	
Public vs. private SFA				
Administers public schools only	75.72	91.26	97.25	92.70
Administers private schools only	1.34	0.00	0.00	0.19
Administers both public and private schools	22.94	8.74	2.75	7.12
Single- vs. multiple-district SFA				
Administers single district	93.69	92.91	94.56	94.01
Administers multiple districts or entities	6.31	7.09	5.44	5.99
Urbanicity				
District covers urban area	53.86	48.25	11.93	27.25
District covers suburban area	11.93	25.10	47.99	37.00
District serves a town	5.50	12.46	15.91	13.56
District covers rural area	28.71	14.20	24.18	22.20
District size				
Total number of schools (mean)	80.87	110.38	27.23	56.81
Total number of schools (median)	13.00	41.73	10.42	14.70
Percentage of schools by type of school				
Elementary	61.87	63.34	11.93	61.07
Middle	19.90	16.86	47.99	19.79
High	18.89	15.67	15.91	19.15
Other	10.48	7.63	24.18	7.57
Student enrollment				
Fewer than 1,000	14.80	1.42	11.09	9.08
1,000 to 4,999	20.08	17.46	29.66	25.14
5,000 to 9,999	8.63	10.13	12.85	11.55
10,000 to 19,999	12.36	8.48	17.84	14.63
20,000 to 49,999	14.22	30.40	16.26	19.67
50,000 or more	29.91	32.11	12.31	19.93
Median	11,553.00	28,845.00	7,910.54	10,703.00
Mean	175,515.00	72,754.00	26,046.00	59,015.00
Sample size	56	69	109	234

Source: APEC-III study, SFA Director Survey data.

Notes: Data are weighted by SFA weight adjusted for number of enrolled students with access to the school meal programs. Sample size varies because of item nonresponse. Items may not sum to 100 percent because of rounding.

Table B-8. NSLP and SBP meal program characteristics, by CEP status (percentages of SFAs)

Characteristic	CEP status			All SFAs
	All schools are CEP	Some schools are CEP	No schools are CEP	
Percentage of schools by type of meal program offered				
NSLP only	0.00	0.78	16.73	13.71
SBP only	0.00	0.01	0.00	0.00
Both NSLP and SBP	100.00	99.21	83.27	86.29
Percentage of enrolled students by type of meal program offered				
In schools offering NSLP only	14.72	1.63	16.44	14.82
In schools offered SBP only	14.72	1.09	0.43	3.07
In schools offering both NSLP and SBP	70.57	97.27	83.13	82.11
Student certification status (percentages)				
Certified for free meals	38.46	56.05	33.76	36.51
Certified for reduced-price meals	5.73	4.74	6.51	6.29
Certified for free or reduced-price meals	64.87	29.40	59.67	57.22
Percentage of NSLP lunches by type				
Free	82.25	73.43	44.37	54.33
Reduced-price	3.57	5.92	8.87	7.60
Paid	19.07	20.54	45.88	38.32
NSLP participation (percentages)				
Average daily participation rate				
Among all students	75.58	58.88	54.83	59.00
Among students certified for free meals	59.53	71.18	72.44	72.08
Among students certified for reduced-price meals	66.12	60.19	76.11	73.82
Among students not certified (paid)	38.95	46.76	42.51	42.52
Percentage of SBP breakfasts by type				
Free	77.68	80.43	56.35	62.79
Reduced-price	3.64	4.96	9.00	7.60
Paid	18.85	14.44	24.65	22.50
SBP participation (percentages)				
Average daily participation rate				
Among all students	58.43	27.70	25.86	31.92
Among students certified for free meals	94.61	35.29	38.64	45.07
Among students certified for reduced-price meals	55.16	23.85	29.21	31.67
Among students not certified (paid)	26.31	14.53	10.96	12.94
Sample size	56	69	109	234

Source: APEC-III study, SFA Director Survey data.

Notes: Data are weighted by SFA weight. Sample size varies because of item nonresponse. Items may not sum to 100 percent because of rounding.

Table B-9. NSLP and SBP meal program characteristics, by CEP status (percentages of students in SFAs with characteristics indicated in row headings)

Characteristic	CEP Status			All SFAs
	All schools are CEP	Some schools are CEP	No schools are CEP	
Percentage of schools by type of meal program offered				
NSLP only	0.00	0.72	8.19	5.21
SBP only	0.00	0.02	0.00	0.01
Both NSLP and SBP	100.00	99.25	91.81	94.78
Percentage of enrolled students by type of meal program offered				
In schools offering NSLP only	2.95	2.20	9.72	6.81
In schools offered SBP only	2.88	1.06	1.85	1.79
In schools offering both NSLP and SBP	94.17	96.74	88.43	91.40
Student certification status (percentages)				
Certified for free meals	41.56	57.46	37.81	44.53
Certified for reduced-price meals	5.19	5.23	6.50	6.10
Certified for free or reduced-price meals	65.58	32.22	55.03	47.49
Percentage of NSLP lunches by type				
Free	93.27	76.77	51.61	64.15
Reduced-price	0.84	5.10	8.39	6.45
Paid	7.47	18.14	39.29	29.20
NSLP participation (percentages)				
Average daily participation rate				
Among all students	68.64	56.73	52.41	55.87
Among students certified for free meals	59.53	70.94	72.09	71.63
Among students certified for reduced-price meals	64.32	59.08	67.29	64.81
Among students not certified (paid)	37.89	29.04	36.54	34.14
Percentage of SBP breakfasts by type				
Free	92.01	84.00	64.30	73.42
Reduced-price	0.81	4.14	9.23	6.69
Paid	7.44	11.93	21.07	16.73
SBP participation (percentages)				
Average daily participation rate				
Among all students	46.82	30.94	23.62	28.87
Among students certified for free meals	97.14	41.48	37.47	40.10
Among students certified for reduced-price meals	58.88	25.22	28.54	28.13
Among students not certified (paid)	28.27	11.38	11.36	11.67
Sample size	56	69	109	234

Source: APEC-III study, SFA Director Survey data.

Notes: Data are weighted by SFA weight adjusted for number of enrolled students with access to the school meal programs. Sample size varies because of item nonresponse. Items may not sum to 100 percent because of rounding.

Table B-10. Characteristics of SFA school meal program operations, by CEP status (percentages of SFAs)

Characteristic	CEP status			All SFAs
	All schools are CEP	Some schools are CEP	No schools are CEP	
Uses food service management company				
Yes	62.88	20.26	26.25	32.42
No	37.12	79.74	73.75	67.58
Uses Direct Certification				
Yes	N/A	100.00	99.69	99.73
No	N/A	0.00	0.31	0.27
Direct Certification method ^a				
Central matching	N/A	80.62	99.36	96.99
Local matching	N/A	58.13	80.70	77.88
Letter method	N/A	40.72	57.99	55.77
Number of years using Direct Certification				
1 to 2 years	N/A	0.00	0.04	0.03
3 to 5 years	N/A	7.21	65.87	61.88
6 to 8 years	N/A	11.28	3.74	4.25
More than 8 years	N/A	81.51	30.36	33.83
Percentage of students certified for free meals by certification method				
Direct Certification	N/A	68.59	73.47	72.95
Other certification not by application	N/A	0.02	0.00	0.00
Application—categorically certified	N/A	5.60	5.90	5.86
Application—income certified	N/A	25.81	20.63	21.18
Percentage of approved application by type of approval				
Free, categorically certified	N/A	10.22	18.75	17.83
Free, income certified	N/A	51.87	40.55	41.78
Reduced-price, income certified	N/A	37.90	40.70	40.39
Sample size	56	69	109	234

Source: APEC-III study, SFA Director Survey data.

Notes: Data are weighted by SFA weight. Sample size varies because of item nonresponse. Items may not sum to 100 percent because of rounding.

^a Items can sum to more than 100 because districts can use more than one method.

Table B-11. Characteristics of SFA school meal program operations, by CEP status (percentages of students in SFAs with characteristics indicated in row headings)

Characteristic	CEP status			All SFAs
	All schools are CEP	Some schools are CEP	No schools are CEP	
Uses food service management company				
Yes	36.45	79.74	22.16	21.96
No	63.55	20.26	77.84	78.04
Uses Direct Certification				
Yes	N/A	100.00	99.57	99.70
No	N/A	0.00	0.43	0.30
Direct Certification method ^a				
Central matching	N/A	80.62	98.13	96.90
Local matching	N/A	58.13	64.81	65.54
Letter method	N/A	40.72	36.12	33.35
Number of years using Direct Certification				
1 to 2 years	N/A	0.00	1.03	0.68
3 to 5 years	N/A	7.21	37.69	30.81
6 to 8 years	N/A	11.28	11.93	17.29
More than 8 years	N/A	81.51	49.36	51.22
Percentage of students certified for free meals by certification method				
Direct Certification	N/A	69.25	64.74	66.11
Other certification not by application	N/A	0.02	0.02	0.02
Application—categorically certified	N/A	3.39	4.80	4.37
Application—income certified	N/A	27.36	30.47	29.52
Percentage of approved application by type of approval				
Free, categorically certified	N/A	8.60	12.00	10.96
Free, income certified	N/A	56.78	51.84	53.35
Reduced-price, income certified	N/A	34.62	36.16	35.69
Sample size	56	69	109	234

Source: APEC-III study, SFA Director Survey data.

Notes: Data are weighted by SFA weight adjusted for number of enrolled students with access to the school meal programs. Sample size varies because of item nonresponse. Items may not sum to 100 percent because of rounding.

^a Items can sum to more than 100 because districts can use more than one method.

Third Access, Participation, Eligibility, and Certification Study (APEC-III) Final Report

Volume 4: Appendices – Appendix C. Data Collection Procedures

Contract # AG-3198-B-15-0010

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Appendix C

Data Collection Procedures

As described in Chapter 2, data was collected from SFAs, schools, households, and State CN agencies. This appendix provides details on the data collection procedures, conducted by field data collectors and the home office research team. Field data collectors traveled to SFAs and schools to conduct in-person data collection on a pre-scheduled date and time. Additionally, they traveled to households to conduct the Household Survey. Table C-1 provides a summary of the data collection activities and instruments by error type. Appendix D includes the instruments. The data collection procedures and instruments for the qualitative analyses are discussed separately in Volume 2 of the Final Reports on Qualitative Analysis based on in-depth interviews conducted with SFA Directors, Cafeteria Managers and Households.

Table C-1. Overview of APEC-III data collection by error type

Source	Data collection activity	Key data elements	Instrument
Certification error			
SFA/School	Abstract Income Eligibility Application Data	- Household size and income - Participation in SNAP, TANF, or FDPIR - Foster child status - Eligibility determination	A1. Application Abstraction Form
SFA	Meal participation data	- Monthly meal counts for each sample student (free, reduced-price, paid) - Changes in certification status or enrollment for each sampled student	SFA Meal Participation Data Request and Guide
SFA/State	CEP Record Review	Source documentation for verifying Identified Student Percentage (ISP)	A2. CEP Questionnaire and Records Request (Sent via Email)
Household	In Person Household Survey	- Household size and income - Participation in SNAP, TANF, or FDPIR - Foster child status	E. Household Survey and Income Worksheet (English)
Aggregation errors			
School	Abstract Meal Count Data	Daily and monthly meal count for each meal (free, reduced-price, paid) for target month	D1. School Meal Count Verification Form

Table C-1. Overview of APEC-III data collection by error type (continued)

Source	Data collection activity	Key data elements	Instrument
Aggregation errors (continued)			
SFA	Abstract SFA meal claim for sampled schools for target month submitted to State	Meal claim reported to State by SFA for target month	- D2. SFA Reimbursement Claim Verification Form for Sampled Schools – or – - D3. SFA Reimbursement Consolidation and Claim Verification Form for All Schools
State	Obtain State meal claim records (Extant data from FNS, States, and other sources)	State meal claim data for sampled SFA/schools for target month	State Meal Claim Request (Sent via Email)
Meal claiming error			
School	Meal Observations	- Observe meals served & record food items on student trays - Observe how meals are recorded (reimbursable/not reimbursable) - Observe who received meal (student/non-student) - Record type of meal service (OVS, cafeteria style)	C. Meal Observation Booklet
Other Data Collection Activities			
SFA	SFA Director Survey	- SFA characteristics - Training procedures - Technology used	B3. SFA Director Survey

Note: Meal claiming error is not included in estimates of improper payments.

To facilitate the on-site visits, the home office sent a pre-visit questionnaire to each sampled SFA and school. The pre-visit questionnaires with the SFA and/or school enabled the field data collector to: (1) schedule the data collection site visits at the convenience of the SFA and each school; and (2) provide and obtain logistical information to adequately prepare both the data collector and schools for on-site visits. All information collected, including scheduling information for both data collection visits to the SFA and schools, was reviewed prior to the on-site visit. Field data collectors followed up directly with the SFA/school(s), as needed.

Household survey sampling was conducted twice during the data collection period. Based on APEC-II findings on when applications were submitted, approximately 70 percent of the students were sampled in the fall (Wave 1) and approximately 30 percent in the winter (Wave 2). This approach ensured that household surveys were conducted as soon as possible after the application submission

(targeted for within 6 – 8 weeks of certification), and that the sample included applications submitted over the course of the school year. Household survey data collection for the Wave 1 sample occurred in September to November 2017. All SFA and school visits were conducted between January and May 2018. Household surveys for the Wave 2 sample, occurred between January and June 2018. State-level data collection activities occurred throughout the data collection period.

The followings sections detail data collection activities conducted to measure certification, meal claiming and aggregation error. Appendix D includes the data collection instruments.

C.1 Data Collection to Measure Certification Error

As previously mentioned, certification error may be due to administrative errors made by the SFA/school or in household reporting. Westat completed an independent determination of student certification status based on application records and compared it with the determinations made by the SFA/school. The study team compared the certification status derived from the household survey to the certification status based on data reported on the application. The following section briefly discusses the data gathered to determine certification errors. Appendix D includes the application abstraction form, household survey, and data requests forms.

C.1.1 Application Abstraction (*A1. Application Abstraction Form*)

While on site at the non-CEP SFAs, data collectors worked with staff to access applications or other eligibility documentation records/reports from electronic records. Data collectors abstracted student identification information, income eligibility information, and eligibility determination as follows:

- Identification Information: Student’s full name, date of application, household size, number of students covered by application, and whether the student was a foster child.
- Income Eligibility Information: Income data by source for all household members, whether household received SNAP, FDPIR or TANF benefits and corresponding case number.
- Eligibility Determination: SFA/school determination of household size, income, and certification status (free, reduced-price, or paid), and reason for denial if applicable (income too high, incomplete application, etc.).

If any information was missing from the hardcopy application, the data collector requested it from the SFA contact. If appropriate, a screenshot of an electronic application from the SFA's management system was requested. When time permitted, data collectors completed as much of the data entry as possible while on-site. However, to minimize burden and time at the SFA, data collectors entered the majority of the data off-site. All data was scanned and entered directly into the APEC-III SMS.

A subsample of the application data was reviewed for quality control purposes within two weeks of data transmission. If errors were found, the data collector was consulted for clarification. When applicable, the data was corrected in the database at the home office prior to analysis.

C.1.2 SFA Meal Participation Data (*SFA Meal Participation Data Request and Guide*)

The data request included meal participation data and any changes in certification status or enrollment. Meal participation data provided information on how many breakfast and lunch meals sampled students received during the school year. Also, since student certification status may change during the school year, SFAs were asked to provide an updated list to identify students with a change in certification status. Data was submitted using a secure study file transfer protocol (FTP) site and was reviewed by study staff and analysts upon receipt. The study team worked directly with SFA staff to clarify any missing data or address data questions prior to analysis.

C.1.3 CEP Records Review (*A2. CEP Questionnaire and Records Request [Sent via Email]*)

For CEP schools, over the course of the data collection period, we requested an electronic file from the State or SFA (for sampled SFAs) requesting the following information:

- School name
- School ID
- Student First Name and Last Name
- Student Date of Birth
- Student 'Identified Student Status' (Identified student or non-identified student)

- For identified students their direct certification source/status (e.g. SNAP, TANF, etc.)

State agencies or SFAs were able to return the files via email or uploaded data files to a secure file transfer protocol (FTP) site. From this data file, the analytic team sampled 24 students who were classified as “identified students” and “non-identified” students and used the data to estimate certification error in CEP schools.

C.1.4 Household Survey (*E. Household Survey and Income Worksheet*)

Once a household was successfully recruited to participate, data collectors traveled to the respondent’s home to conduct the interview (unless a different location was requested by the respondent).¹ Prior to the start of the interview, data collectors administered informed consent. A signed copy of the consent form, with the assurance of confidentiality, was provided to the respondent for their own records.

The household survey was completed using a computer-assisted personal interview (CAPI) accessible on the data collector’s laptop computer. At the appropriate time in the survey, respondents were asked to provide documentation of income and/or benefits.

The interview took 45 minutes on average to complete. During the in-person interview, the data collector made sure that the respondent understood the definition of income and requested documentation of all sources of income. This included paid work and benefits payments. While collecting the information, data collectors referred to the income worksheet, as needed. Below is list of the components of the survey.

- Section A: Enrollment Status
- Section B: Participation in School Breakfast and Lunch Program
- Section C: Perception of School Meals
- Section D: Perception of the Household Application
- Section E: Categorical Eligibility
- Section F: Household Composition

¹ In the final weeks of data collection, the household survey was conducted by phone for a small subset of households.

- Section G: Income and Earning Sources
- Section H: Income and Earning Amounts
- Section I: Total Monthly Income
- Section J: Demographic Characteristics

Obtaining income documentation for verification was a challenge in APEC-II. This shortcoming, and methods for addressing it, was identified as a special study consideration by FNS. APEC-III protocol included an enhancement to income verification that improved the quality and completeness of the data. The following procedures were implemented to improve the response rate of income documentation for the household survey:

1. Informed parents in advance that income documentation will be requested during the in-person survey.
2. Provided examples (in advance) of the appropriate types of documentation that would be requested during the survey.
3. Emphasized that the documentation would be viewed for survey purposes and not removed from the home.
4. Provided respondents with a short worksheet in advance of the interview to help them prepare for the income questions.
5. Provided a base incentive for completing the survey (\$30), as well as an additional incentive (\$20) for providing the income documentation. This resulted in a total incentive in the amount of \$50.²

The survey data was transmitted to a secure home office database shortly after completion.

C.2 Data Collection to Measure Aggregation Errors

Aggregation errors occur at various points in SFA and school operations after the student's certification status is determined and meals are served. These errors include errors in meal counts in school records, errors in reporting meal counts from the school to the SFA, or errors in reporting

² If any documentation was provided, even if it was not for all income sources, the respondent still received the additional incentive.

meal counts from the SFA to the State CN Agency. As meal claims are aggregated, errors can occur in counting, consolidation, and claiming of meals.

To measure aggregation error meal counts/claiming, data collectors abstracted records from different sources (school, SFA, State) for a target month, and Westat identified discrepancies in data reported at each stage of the meal count and claiming process. The following section describes the data collection activities to support the data analysis for aggregation errors. Appendix D includes the meal count and claims abstraction forms.

C.2.1 School Meal Count Data (*D1. School Meal Count Verification Form*)

During data collection visits to the SFA and school, the field data collector requested meal count and claim records for abstraction for a target month for breakfast (if applicable) and lunch. The target month was the most recent calendar month in which the school had submitted meal count data to the SFA. This was typically one to three months prior to the on-site data collection visit. The meal count and claim data included reimbursable meal counts, number of students at each certification level (free, reduced-price, or paid), enrollment, daily attendance, and number of serving days.

During the school site visit day, data collectors abstracted meal count records at the sampled schools for the same target month collected from the SFA. The type and name of school reports differed, but the report had to contain a detailed record of the meal service for the day, week, and/or month. Data collectors used the school's records to abstract the meal counts for the target month, by reimbursement category (free, reduced-price, or paid), general student information (number enrolled, average daily attendance, and number of serving days), the claiming percentage for CEP schools and supplemental data as needed using the D2. School Meal Count Verification Form. All the data was entered into the SMS and reviewed by home office staff periodically over the course of data collection.

C.2.2 SFA Meal Claim Data (*D2. SFA Reimbursement Claim Verification Form for Sampled Schools or D3. SFA Reimbursement Consolidation and Claim Verification Form for All Schools*)

The data abstracted from SFAs included the meal claim data submitted by the school to the SFA, and by the SFA to the State agency. SFAs submit meal claims to their State Agency in one of two ways, separated by school or in a consolidated manner. If the SFA provided data by school, data collectors used the D2. SFA Reimbursement Claim Verification Form for Sampled Schools. If the SFA provided data across all schools, data collectors completed the D3. SFA Reimbursement Consolidation and Claim Verification Form for All Schools. The field data collector entered the data directly into the SMS using the appropriate electronic form. In addition, the records were scanned and securely uploaded to the SMS for later review and Quality Control (QC), as needed.

C.2.3 Meal Claim Data (*State Meal Claim Request [Sent via Email]*)

We also requested State meal claim data records for sampled SFA/schools for the same target month. The request was sent via email and States were given the option to upload it to a secure home office FTP site. Upon receiving the e-mail, some States called or requested a conference call to clarify the information they were to provide.

Westat project staff checked the data received from each State to make sure that the information was complete and that all sampled SFAs/school meal claims were included in the data file. If project staff found that information was missing or discovered discrepancies in these data, they followed up with the State by telephone and/or e-mail to try to resolve the discrepancy. All data collected was compiled and stored in the secure study database for analysis.

C.3 Data Collection to Measure Meal Claiming Error (*C. Meal Observation Booklet*)

To measure meal claiming errors, field data collectors conducted meal observations in schools and recorded (a) the food items made available, (b) the food items served on student trays, and (c) if the meal served/received was recorded as reimbursable by the cashier. Other details were recorded such as meal location and the format in which meals were served. The analysts used this data to determine if meals were reimbursable (based on USDA meal requirements), and compared this to

how they were claimed. Meal claiming errors were estimated to examine the extent to which schools meet the meal pattern requirements and are not included in estimates of improper payments.

Field data collectors observed breakfast and lunch meal service during the onsite data collection visit. There are a number of different systems used by schools to offer their students reimbursable meals. For example, a school may have cafeteria-style service or meals in the classroom. At the senior high school level, “offer versus serve” (OVS) is required at lunch unless the school or SFA demonstrates to the State agency that their system does not accommodate OVS.

Data collectors gathered meal service information (i.e., the location of meal service, the number of meal periods and the number of service lines per meal period) and entered it into the SMS, which then randomly selected one serving location to observe for each breakfast and/or lunch meal period. This occurred in real time at the school. The sampling algorithm ensured that a random sample of cashiers and meal periods were sampled for observation. During each meal observation, data collectors observed and recorded (1) items on each tray and the number of servings of each item; (2) whether the meal was served to a student or a non-student/adult; and (3) whether the cashier recorded the tray as a reimbursable meal.³ Data collectors also recorded whether the school was OVS. OVS criteria requires at least three food items are selected (one serving of fruit or vegetable and two other food items for breakfast and one serving of fruit or vegetable and two other food items for lunch). Therefore, during data analysis, the criteria for reimbursable meals was adjusted accordingly for OVS schools. Following the same protocol from APEC-II, data collectors recorded meal observations in an easy-to-use hard-copy booklet and mailed the hard-copy booklets back to the home office. The data was then entered into the SMS, reviewed, and corrected as needed for data analysis. Appendix D includes the meal observation form.

C.4 Other Data Collection

In addition to the data collection activities related to the calculation of the three types of error already discussed, Westat project staff collected additional data to support further data analysis. The

³ The data collector was positioned close enough to the cashier to observe his/her transactions for each sampled student.

following section outlines other data collection activities and copies of the instruments are provided in Appendix D.

C.4.1 SFA Director Survey (*B3. SFA Director Survey*)

The SFA director was also asked to complete a web-based survey about their SFA's policies, training and certification procedures, and characteristics that may relate to error rates and understanding the errors. In addition, the survey requested information about participation in meal programs, school data, CEP schools, and claiming percentages information. A hardcopy version of the survey was made available to SFA directors, if requested. Data gathered from the SFA Director Survey was used to provide a thorough robust examination of the reasons for program errors as well as inform the sub-study among SFAs regarding implementation strategies used.

C.4.2 Qualitative Analysis (*In-depth Interviews*)

In addition, experienced qualitative researchers conducted semi-structured interviews with a random sample of SFA Directors, Cafeteria Managers, and households to understand what factors contribute to errors and how to minimize them. Volume 2 presents the qualitative analysis and provides copies of the interview guides.

C.5 Quality Control

The APEC-III study incorporated QC procedures throughout data collection. QC of fieldwork began at training and continued throughout the course of data collection. Data collectors received training, documentation, and guidance throughout the data collection period so that they followed standardized procedures to collect data and document activities with each SFA/school and household respondent. As needed, data collectors received refresher training, technical assistance, and monitoring.

Third Access, Participation, Eligibility, and Certification Study (APEC-III) Final Report

Volume 4: Appendices – Appendix D. Study Instruments and Forms

Contract # AG-3198-B-15-0010

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Appendix D

Study Instruments

This appendix includes a copy of the Study Instruments and Forms. The subsequent pages include the following:

1. D1. Application Abstraction Form
2. D2. CEP Records Request (Sent via Email)
3. D3. SFA Meal Participation Data Request (Sent via Email)
4. D4. Household Survey (Phone Interview)
5. D5. School Meal Count Verification Form
6. D6. SFA Reimbursement Claim Verification Form for Sampled Schools
7. D7. SFA Reimbursement Consolidation and Claim Verification Form for All Schools
8. D8. State Meal Claim Request (Sent via Email)
9. D9. Meal Observation Data
10. D10. SFA Director Survey (Web-survey)

Appendix D1
Application Abstraction Form

THIRD ACCESS, PARTICIPATION, ELIGIBILITY, AND CERTIFICATION STUDY (APEC-III)

APPENDIX D1. APPLICATION ABSTRACTION FORM

Data collectors obtained hardcopy applications or printed copies of electronic submission of applications to collect and abstract the data. Data collectors entered the information on this form directly into a formatted web-based application abstraction form. The web-based form included a layout for ease of data entry, and built in skip patterns where applicable.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0584-0530. The time required for the SFA director to provide access to the SFA and/or school administrative records is estimated to average 1 hour per response during each data collection round, including the time to review instructions, search existing data resources, gather and maintain the data needed, and complete and review the collection of information.

APPLICATION DATA ABSTRACTION FORM

GENERAL INFORMATION:

1. DATE OF ABSTRACTION
2. DATA COLLECTOR NAME
3. DATA COLLECTOR ID

SECTION A: STUDENT INFORMATION

1. STUDENT FIRST NAME
2. STUDENT LAST NAME
3. STUDENT DOB
4. STUDENT WESTAT STUDY ID
5. STUDENT GRADE
6. SCHOOL WESTAT STUDY ID
7. SCHOOL NAME

SECTION B: IF NOT COMPLETING APPLICATION ABSTRACTION FORM, MARK REASON(S) BELOW: *(required if not completing form)*

1. DIRECT CERTIFICATION STUDENT (NO APP.)
2. DIRECT CERTIFICATION STUDENT (W/ APP.)
3. APPLICATION CANNOT BE FOUND
4. APPLICATION HAS NOT BEEN SUBMITTED
5. OTHER REASON, SPECIFY:

SECTION C: FORMAT IN WHICH APPLICATION WAS COMPLETED / SUBMITTED: *(Check One, required)*

1. HARDCOPY OR PAPER APPLICATION, SUBMITTED IN PERSON, MAIL, FAX, OR EMAIL
2. ONLINE (WEB-BASED)
3. OTHER , SPECIFY:
4. UNKNOWN

SECTION D: SELECT ALL SOURCES USED TO COMPLETE APPLICATION DATA ABSTRACTION FORM: *(Select All That Apply)*

1. HARDCOPY OR PAPER APPLICATION
2. SCHOOL/DISTRICT/STATE DIRECT CERTIFICATION MATCHING LIST
3. ONLINE (WEB-BASED) APPLICATION
4. VERBAL REPORT FROM STAFF
5. SCHOOL OR DISTRICT SUMMARY REPORT
6. OTHER SOURCE, SPECIFY:

SECTION E. HOUSEHOLD INFORMATION AND ELIGIBILITY STATUS: Complete the information below using the most recent school meal application completed for school year 2017-2018 for the student named in Section A.

E1. APPLICATION DATE

E2. BASIS FOR ELIGIBILITY (select all that apply)

1. INCOME
2. CATEGORICAL ELIGIBILITY
 - a. TANF
 - b. SNAP
 - c. FDPIR
 - d. OTHER: _____
 - e. NOT SPECIFIED
 - f. CHECK IF CASE NUMBER RECORDED
3. SPECIAL STATUS
 - a. FOSTER CHILD
 - b. MIGRANT
 - c. RUNAWAY
 - d. OBSERVED NEED
 - e. HOMELESS
 - f. MEDICAID
 - g. INSTITUTIONALIZED / RESIDENTIAL CARE
 - h. OTHER, SPECIFY

E3. NUMBER OF STUDENTS COVERED BY APPLICATION

E4. CERTIFICATION / ELIGIBILITY DETERMINATION DATE

1. SECONDARY SOURCE USED (OTHER THAN APPLICATION)
2. NOT AVAILABLE / NOT APPLICABLE

E5. SFA ASSESSMENT OF MEAL ELIGIBILITY STATUS

1. FREE
2. REDUCED-PRICE
3. DENIED / PAID
4. CATEGORICAL ELIGIBILITY
5. SECONDARY SOURCE USED (OTHER THAN APPLICATION)

E6. SFA'S ASSESSMENT OF HOUSEHOLD SIZE

1. SECONDARY SOURCE USED (OTHER THAN APPLICATION)
2. Not Available / Not Applicable

E7. SFA'S ASSESSMENT OF HOUSEHOLD INCOME

1. WEEKLY
2. BI-WEEKLY
3. SEMI-MONTHLY
4. MONTHLY
5. ANNUAL
6. OTHER _____
7. UNIT NOT REPORTED
8. SECONDARY SOURCE USED (OTHER THAN APPLICATION)
9. NOT AVAILABLE / NOT APPLICABLE

E8. COMMENTS ON HOUSEHOLD INFORMATION AND ELIGIBILITY STATUS:

SECTION F. HOUSEHOLD INCOME:

- List all household members (including children, students and adults without income), and their income.
- The number recorded in this section should match the number of household members listed on the application, including the person who signed the application.
- If zero (\$0) is reported as the income record zero (\$0).
- INCOME LEFT BLANK: For each person, check Yes or No to indicate whether income was left blank.
- PERSON ADDED TO TABLE: For each person, check Yes or NO to indicate whether you, the data collector, added the person to the income table.
- SECONDARY SOURCE: For each person, check Yes or No to indicate whether the income information was obtained from a secondary source (i.e. anything other than the application).

Record the following for each household member:

1. First name
2. Last name
3. Amount of earnings from work
4. The frequency of the amount of earnings from work
5. Amount from child support or alimony, excluding SNAP, TANF
6. The frequency of the amount from child support or alimony
7. Amount from pensions, retirement, social security, or any other income
8. The frequency of the amount from pensions, retirement, social security, or any other income
9. Did you add the household member to the income table?
10. Was the income for the household member left blank (not zero)?
11. Was income information obtained from a secondary source?

F12. Did the applicant select, check, circle, fill in, or enter the frequency of the income (i.e. weekly; bi-weekly; semi-monthly; monthly; yearly; or other) directly?

1. YES
2. NO
3. NOT APPLICABLE

F13. Did SFA staff verbally provide/confirm the income frequency because it was not specifically indicated on the application?

1. YES
2. NO
3. NOT APPLICABLE

F14. COMMENTS ON HOUSEHOLD INCOME:

SECTION G. FORM COMPLETENESS

- G1. Was target student's name listed on the application? (Y/N)
- G2. Was income recorded on the application for at least one household member? (Y/N)
- G3. Were the last four digits of the signer's SSN recorded? (Y/N)
- G4. Was there an indication that signer does not have an SSN? (Y/N)
- G5. Was a case number recorded on the application? (Y/N)
- G6. Was the application signed? (Y/N)

SECTION H. COMMENTS SPECIFICALLY ON APPLICATION FORMAT:

SECTION I. OTHER GENERAL COMMENTS (Not related to application format):

Appendix D2
CEP Records Request (Sent via Email)

THIRD ACCESS, PARTICIPATION, ELIGIBILITY, AND CERTIFICATION STUDY (APEC-III)

APPENDIX D2. CEP RECORDS REQUEST (TEMPLATE SENT VIA EMAIL)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0584-0530. The time required for the SFA Director to provide this information collection is estimated to average 30 minutes per response, including the time to review instructions, search existing data resources, gather and maintain the data needed, and complete and review the collection of information.

EMAIL TEMPLATE:

Dear [SFA Director]:

The next step in the APEC 3 data collection is to provide the following information regarding CEP participation for the SFAs listed below. Please contact the SFAs to assist in obtaining and submitting this information.

[List the following for each SFAs: SFA Name, Level of CEP Participation, and schools in the APEC III sample].

The following is a summary of the data request for each SFA:

1. **List of enrolled students in the base year**, which is the year when the ISP and CEP claiming percentage for the SY 2017-18 was established.
 - a) The data file(s) should contain the following information for each student enrolled in the district or group of schools:
 - i. School name
 - ii. School ID
 - iii. Student Last Name
 - iv. Student First Name
 - v. Student Date of Birth
 - vi. Identified Student Status: Identified or Non Identified Student
 - vii. For Identified Students: Categorical Source (e.g., SNAP, TANF, etc.)
 - b) *For SFAs with districtwide CEP:*
 - Specify the base year for the district's participation
 - Specify the total student enrollment for the district
 - List of all students enrolled in the district
 - c) *For SFAs with schools participating in groups:*
 - Specify the base year for each group
 - List of the schools within each CEP group
 - Specify the student enrollment for each group
 - List of all students enrolled in each group of schools
 - Option 1: Include a separate file for each group
 - Option 2: Include a single file that includes a variable/field that specifies the CEP group

2. **Supporting source documentation** used to determine the identified student percentage (ISP) for the district or group. This may include a report of eligible students by source.

Possible sources include:

- SNAP
- TANF
- FDPIR
- Runaway student
- Migrant student
- Homeless student
- Foster child
- Medicaid (if SFA participates in Medicaid Direct Certification)

We kindly request that you submit these data files by [INSERT DATE], electronically via our secure FTP site.

Please send the name and email address of the individual(s) who will upload the data to the secure FTP site. We will set up an account for him/her and send an email with instructions. If you will be the person accessing the security FTP site, let us know and we will set up the account for you. For security purposes, a secure FTP account must be set up for each individual.

Again, we appreciate your efforts in fulfilling this data request and working with your SFAs to obtain additional information, if needed. If you have questions, please feel free to contact me at [insert email] or [insert number].

Kind regards,
[Insert Name]
APEC-III, Director of Operations

Appendix D3

**SFA Meal Participation Data Request
(Sent via Email)**

THIRD ACCESS, PARTICIPATION, ELIGIBILITY, AND CERTIFICATION STUDY (APEC-III)

APPENDIX D3. SFA MEAL PARTICIPATION DATA REQUEST (TEMPLATE SENT VIA EMAIL)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0584-0530. The time required for the SFA data manager to complete this information collection is estimated to average 2 hours per response, including the time to review instructions, search existing data sources, gather and maintain the data needed, and complete and review the collection of information.

TEMPLATE EMAIL:

Dear [SFA Director]:

Thank you again for your participation in the third Access, Participation, Eligibility and Certification Study Series (APEC-III).

The final part of Westat's data collection efforts include collecting meal participation administrative data from SFAs. Meal participation data includes the number of meals students received during the school year, and any changes in their certification status or enrollment. We are requesting this data for the **2017-2018 school year for your sampled students**. Please submit the meal participation electronically data through our secure FTP site.

Secure FTP Site Address: <https://securetransfer2.westat.com>

Your SFA's User Name: «User_ID»

Your SFA's Password: «Password»

- A. Meal participation data
 - i. Number of meals each sampled student received
 - ii. SY 2017-2018 by month
- B. Student Meal Eligibility and Enrollment Status
 - i. Meal Eligibility Status (Free, Reduced-Price, or Paid)
 - ii. Changes in Certification status
 - iii. Changes in enrollment

We kindly ask that you submit your data by [Insert Date].

Under the Improper Payments Elimination and Recovery Improvement Act (IPERIA) of 2012, all Federal agencies that administer large programs are required to report these findings to the Office of Management and Budget (OMB). APEC III will provide USDA's Food and Nutrition Service with data on the National School Lunch Program (NSLP) and the School Breakfast Program (SBP) in school year (SY) 2017-2018 to be compliant with applicable regulations.

Please feel free to contact me at [insert number] or [insert email] if you have any questions, or if you would like an electronic copy of sampled list or reference guide. Thank you in advance for your help and cooperation.

Sincerely,

[insert name]
APEC III Field Director

Appendix D4
Household Survey (Phone Interview)

THIRD ACCESS, PARTICIPATION, ELIGIBILITY AND CERTIFICATION STUDY SERIES (APEC-III)

APPENDIX D4. HOUSEHOLD SURVEY

This is a hardcopy version of the programmed CAPI survey. For reference only. All capitalized text is not read to the respondent, but is a question or instruction to the interviewer.

Field Data Collectors conducted the household survey with parents/guardians of sampled students (from sampled schools) using the Computer Assisted Personal Interview (CAPI). They recorded responses directly on the study laptop. The CAPI program led interviewers through the interview questions and included a layout for ease of data entry, and built in skip patterns where applicable.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0584-0530. The time required to complete this information collection is estimated to average 45 minutes per response, including the time to review instructions, search existing data sources, gather and maintain the data needed, and complete and review the collection of information.

SECTION A: INTRODUCTION AND OBTAINING INFORMED CONSENT

STUDY ID NUMBER:

DATE:

INTERVIEWER ID NUMBER:

TIME INTERVIEW BEGAN:

INTERVIEW LOCATION:

1. **[Parent1 Address]**
2. **[Parent2 Address]**
3. OTHER LOCATION, SPECIFY

IC1a. INDICATE THE PARENT/GUARDIAN RESPONDENT

1. **[IDENTIFIED PARENT/GUARDIAN]**
2. **[SECOND IDENTIFIED PARENT/GUARDIAN]**

96. ANOTHER PERSON, SPECIFY

IC2. CODE IF OBVIOUS, OR ASK: Does **[TARGET STUDENT name]** live with you?

1. YES
2. NO

INTERVIEW NOTE: TAKE OUT TWO COPIES OF THE INFORMED CONSENT DOCUMENT

CONSENT

This interview takes about 45 minutes to complete. You will receive up to \$50.00 for completing the survey and having income documents available as our thank you. Participation in this study is voluntary and will not affect any benefits you or your child may receive now or in the future. All information is kept private and will never be used in any way that could identify you or your child.

REFER TO PRIVACY SECTION OF CONSENT FORM: This section describes the steps the study takes to protect your privacy. Among those steps is the agreement I signed to keep your information private.

Please review this document that describes this study and what you are being asked to do. HAND RESPONDENT A COPY OF THE CONSENT FORM. Let me know if you have any questions.

WHEN PARENT/GUARDIAN IS FINISHED, ASK: Do you have any questions? TAKE TIME TO ANSWER ALL QUESTIONS APPROPRIATELY. Now, I would like you to sign here (INDICATE SIGNATURE SPACE) to indicate you agree to complete the interview.

INTERVIEWER NOTE: READ THE CONSENT FORM TO RESPONDENT IF REQUESTED OR IT APPEARS THERE IS READING DIFFICULTY.

1. CONTINUE

IC3. DID PARENT/GUARDIAN SIGN THE CONSENT FORM?

1. YES (GO TO IC4)
2. NO (GO TO IC5)

IC4. Here is a copy of the form you have just signed for your own records. I have also signed your copy to confirm my agreement to keep your information private. Now, unless you have any questions we can get started.

1. CONTINUE

IC4a. We would like to record your questions and answers for training and data quality. I'd like to continue now unless you have questions.

1. CONTINUE

7. DID NOT ALLOW RECORDING (GO TO IC4c)

IC4b. Today is **[insert date]**. The recorder is running, is it okay if I continue?

1. CONTINUE (GO TO SECTION A)

7. DID NOT ALLOW RECORDING (GO TO IC4c)

IC4c. That's fine. The interview will not be recorded.

1. CONTINUE (GO TO SECTION A)

IC5. INTERVIEWER: USE STUDY PROCEDURES TO DOCUMENT WHY CONSENT WAS NOT OBTAINED OR WHY INTERVIEW WAS NOT CONTINUED.

NOT A GOOD TIME, SCHEDULE REVISIT (CLOSE SCRIPT # 1)

REFUSED OR NOT INTERESTED (CLOSE SCRIPT # 2)

NOT SURE ABOUT DOING OR HAS QUESTIONS (CLOSE SCRIPT # 2)

IDENTIFIED PARENT/GUARDIAN NOT AVAILABLE (CLOSE SCRIPT # 3)

IDENTIFIED PARENT/GUARDIAN IS NOT CORRECT (CLOSE SCRIPT # 4)

NO LONGER HAS CUSTODY OF FOSTER CHILD (CLOSE SCRIPT # 4)

TARGET STUDENT RESIDES IN GROUP HOME (CLOSE SCRIPT # 4)

TARGET STUDENT DECEASED (CLOSE SCRIPT # 5)

CLOSE SCRIPTS:

- SCRIPT 1 SCHEDULE NEW APPOINTMENT: Let's try to find a time that works better for you. What date and time would work for you? INTERVIEWER: CHECK YOUR AVAILABILITY FOR THAT TIME AND DATE, IF AVAILABLE CONFIRM DATE AND TIME AND ADD TO YOUR CALENDAR. IF NOT AVAILABLE, I'm sorry I'm not available at that time but I am available INSERT DATE AND TIME, does that work for you? Thank you for your time today.
- SCRIPT 2 ADDRESS RESPONDENT CONCERNS: APPLY REFUSAL CONVERSION TECHNIQUES AND FAQs TO ANSWER QUESTIONS OR ADDRESS CONCERNS. AGREED TO PARTICIPATE AND SIGN FORM (GO BACK TO 03)
REFUSAL (GO TO SCRIPT #6)
- SCRIPT 3 COLLECT GOOD TIME TO REACH IDENTIFIED PARENT/GUARDIAN: I am sorry that I missed **[parent/guardian]** today. When would be a good time to contact (him/her) by phone to set a new appointment? RECORD THE CALL BACK INFORMATION. Thank you for your time today.
- SCRIPT 4 CONTACT INFORMATION FOR BEST ADULT TO ANSWER QUESTIONS: I'm sorry but I must speak with a parent or guardian who lives with **[TARGET STUDENT]**. IF NEEDED: When would be a good time to contact (him/her) by phone to set a new appointment? RECORD THE CONTACT INFORMATION. Thank you for your time today.
- SCRIPT 5 CONDOLENCE: I am very sorry to hear about your loss. We will not do an interview. RECORD THE CALL BACK INFORMATION. Thank you for your time.
- SCRIPT 6 REFUSAL: We accept your decision not to participate. Thank you for your time today.

SECTION A: ENROLLMENT STATUS

TIME INTERVIEW BEGAN:

INTRO: These next questions ask about [TARGET STUDENT NAME] and his/her usual weekly attendance at [TARGET SCHOOL].

1. CONTINUE

A1. CODE WITHOUT ASKING IF KNOWN OR ASK: Is [Target Student Name] male or female?

1. MALE
2. FEMALE

A2. Does [Target Student Name] currently attend [Target School]?

1. YES (GO TO A5)
2. NO

A3. Does [Target Student Name] attend another school? [(IF NO:] Why is [Target Student Name] no longer attending school?

YES (ASK A3a.), STUDENT DROPPED OUT OF SCHOOL (GO TO A4).

NO, STUDENT DECEASED (GO TO A6).

NO, PLEASE (SPECIFY) (GO TO A4)

A3a. What school does (she/he) attend now?

A4. When did (she/he) stop attending [Target School]?

A5. Has (she/he) attended [Target School] from the beginning of the school year?

PROBE: By "the school year" I mean the current school year 2017-2018.

1. YES (GO TO SECTION B)
2. NO (ASK A5a)

A5a. When did (she/he) begin attending [Target School] this school year? (GO TO SECTION B)

PROBE: Was that in the beginning, middle, or the end of the month?

A6. I am very sorry to hear about your loss. Thank you for your time. We will not do an interview.

A7. We are only interested in talking to parents or guardians of the student who attended [Target School] this school year. We will not be able to conduct an interview with you. Thank you for your time.

SECTION B: PARTICIPATION IN SCHOOL BREAKFAST AND LUNCH PROGRAMS

B1. The next questions are about the meals [Target Student Name] eats at school.

I am going to ask about whether your child had a school breakfast or lunch each day during the last full week of school. I am referring to the meals provided under the School Breakfast and School Lunch Program. They are the meals that are on the menu for free or a single price, as opposed to individual foods, such as salads, meats, and desserts that are priced and bought separately.

1. CONTINUE

B2START. When was the last full week of school?

B3. Now please think about the last full week of school—that would be (Monday through Friday last week/from Monday—DATE to Friday—DATE).

Did your child attend school on [Day of Week, DATE]:

PROBE: By attend school, we mean your child was at school all or part of the day.

- a. Monday, DATE
 - 1. YES
 - 2. NO
- b. Tuesday, DATE
 - 1. YES
 - 2. NO
- c. Wednesday, DATE
 - 1. YES
 - 2. NO
- d. Thursday, DATE
 - 1. YES
 - 2. NO
- e. Friday, DATE
 - 1. YES
 - 2. NO

B4. Does [TARGET SCHOOL] serve breakfast through the School Breakfast Program?

PROBE: The School Breakfast Program consists of a set of food items from the menu that were either free or, if paid for, was purchased for a single price, as opposed to individual foods that are priced and bought separately.

- 1. YES
- 2. NO (GO TO B8)

B4a. Did [Target Student Name] eat breakfast at school (on DAY, DATE)?

- 1. YES
- 2. NO

B5. Was that breakfast through the School Breakfast program?

PROBE: The School Breakfast Program consists of a set of food items from the menu that were either free or, if paid for, were purchased for a single price, as opposed to individual foods that are priced and bought separately.

1. YES
2. NO

B6. You just mentioned that [Target Student Name] did not eat breakfast provided by the School Breakfast Program on any day (she/he) attended school during the last week (she/he) went to school. Why didn't (she/he) eat the school breakfast during that week?

AFTER RESPONSE, SAY: Were there other reasons? (MARK ALL THAT APPLY)

1. EATS BREAKFAST AT HOME
2. BRINGS BREAKFAST FROM HOME
3. DOES NOT LIKE THE FOOD AT SCHOOL
4. NOT ENOUGH TIME TO EAT AT SCHOOL
5. STUDENT DOES NOT EAT BREAKFAST
6. ON A DIET
7. DOES NOT LIKE WAITING IN LINE
8. STUDENT THINKS ONLY NEEDY CHILDREN EAT SCHOOL BREAKFAST
9. STUDENT DOES NOT EAT SCHOOL BREAKFAST BECAUSE FRIENDS DO NOT EAT IT
10. NOT IN SCHOOL THAT WEEK/OUT SICK ALL WEEK
11. LATE FOR SCHOOL EVERY DAY THAT WEEK
12. HAD EARLY MORNING CLASSES THAT WEEK
13. STUDENT OR PARENT TOO EMBARRASSED TO PARTICIPATE
14. GOES OFF CAMPUS FOR BREAKFAST
96. OTHER (SPECIFY)

INTERVIEWER NOTE: IF MORE THAN ONE ANSWER TO B6, ASK B7; ELSE GO TO B8.

B7. Of the reasons you just mentioned, which one is the most important reason (she/he) did not eat the school breakfast that week?

1. EATS BREAKFAST AT HOME
2. BRINGS BREAKFAST FROM HOME
3. DOES NOT LIKE THE FOOD AT SCHOOL
4. NOT ENOUGH TIME TO EAT AT SCHOOL
5. STUDENT DOES NOT EAT BREAKFAST
6. ON A DIET
7. DOES NOT LIKE WAITING IN LINE
8. STUDENT THINKS ONLY NEEDY CHILDREN EAT SCHOOL BREAKFAST
9. STUDENT DOES NOT EAT SCHOOL BREAKFAST BECAUSE FRIENDS DO NOT EAT IT
10. NOT IN SCHOOL THAT WEEK/OUT SICK ALL WEEK
11. LATE FOR SCHOOL EVERY DAY THAT WEEK
12. HAD EARLY MORNING CLASSES THAT WEEK
13. STUDENT OR PARENT TOO EMBARRASSED TO PARTICIPATE
14. GOES OFF CAMPUS FOR BREAKFAST
96. OTHER (SPECIFY)

B8. Does [TARGET SCHOOL] serve lunch through the School Lunch Program?

PROBE: The School Lunch Program consists of a set of food items from the menu that were either free or, if paid for, was purchased for a single price, as opposed to individual foods that are priced and bought separately.

1. YES
2. NO (GO TO B12)

8a. Did (she/he) eat lunch at school (on DAY, DATE)?

1. YES
2. NO

B9. Was that lunch provided through the School Lunch Program?

PROBE: The School Lunch Program consists of a set of food items from the menu that were either free or, if paid for, was purchased for a single price, as opposed to individual foods that are priced and bought separately.

1. YES
2. NO

B10. You mentioned that [**Target Student Name**] did not eat the school lunch on any day (she/he) attended school. Why didn't (she/he) get the school lunch during that week?

AFTER RESPONSE, SAY: Were there any other reasons? (MARK ALL THAT APPLY).

1. PREFERS TO BRING LUNCH FROM HOME
2. EATS LUNCH AT HOME
3. DOES NOT LIKE THE FOOD AT SCHOOL
4. NOT ENOUGH TIME TO EAT AT SCHOOL
5. STUDENT DOES NOT EAT LUNCH
6. ON A DIET
7. DOES NOT LIKE WAITING IN LINE
8. STUDENT THINKS ONLY NEEDY CHILDREN EAT SCHOOL LUNCHES
9. STUDENT DOES NOT EAT SCHOOL LUNCH BECAUSE FRIENDS DO NOT EAT IT
10. NOT IN SCHOOL THAT WEEK/SICK ALL WEEK
11. LATE FOR SCHOOL EVERY DAY THAT WEEK
12. HAD CLASSES DURING LUNCH PERIOD THAT WEEK
13. STUDENT OR PARENT TOO EMBARRASSED TO PARTICIPATE
14. GOES OFF CAMPUS FOR LUNCH
96. OTHER (SPECIFY)

INTERVIEWER NOTE:IF MORE THAN ONE ANSWER TO B10, ASK B11; ELSE GO TO B12.

B11. Of the reasons you just mentioned, which one is the most important reason (she/he) did not eat the school lunch that week?

1. PREFERS TO BRING LUNCH FROM HOME
2. EATS LUNCH AT HOME
3. DOES NOT LIKE THE FOOD AT SCHOOL
4. NOT ENOUGH TIME TO EAT AT SCHOOL
5. STUDENT DOES NOT EAT LUNCH
6. ON A DIET
7. DOES NOT LIKE WAITING IN LINE
8. STUDENT THINKS ONLY NEEDY CHILDREN EAT SCHOOL LUNCHES
9. STUDENT DOES NOT EAT SCHOOL LUNCH BECAUSE FRIENDS DO NOT EAT IT
10. NOT IN SCHOOL THAT WEEK/SICK ALL WEEK
11. LATE FOR SCHOOL EVERY DAY THAT WEEK
12. HAD CLASSES DURING LUNCH PERIOD THAT WEEK
13. STUDENT OR PARENT TOO EMBARRASSED TO PARTICIPATE
14. GOES OFF CAMPUS FOR LUNCH
96. OTHER (SPECIFY)

B12. INTERVIEWER: DID [TARGET STUDENT NAME] HELP THE RESPONDENT WITH THE QUESTIONS ON MEALS EATEN AT SCHOOL?

1. YES (GO TO SECTION C)
2. NO (GO TO SECTION C)

B13. I am going to ask you how often your child usually had school breakfast or lunch each week when **[Target Student Name]** was going to **[Target School]**. By school breakfast or lunch, I mean the meals your child's school provides to students under the School Breakfast and School Lunch Program. School meals are meals that include a set of food items from the menu that were either free or, if paid for, was purchased for a single price, as opposed to individual foods such as salads, meats, or desserts that are priced and bought separately.

When **[Target Student Name]** was going to **[Target School]**, how many days in an average week did (he/she) eat a school breakfast?

B14. When **[Target Student Name]** was going to **[Target School]**, how many days in an average week did (he/she) eat a school lunch?

SECTION C: PERCEPTIONS OF SCHOOL MEALS

INTRO: The next questions are about [Target Student Name]'s satisfaction with school breakfast meals at [Target School].

Regarding the school breakfast meals at [Target School], how satisfied is/was [Target Student Name] with...

C1a. how the food tasted? (Is/Was) (she/he) ...

1. Very Satisfied
2. Somewhat satisfied
3. Somewhat dissatisfied
4. Very Dissatisfied
5. Student Never Eats School Breakfast

C1b. the amount of food served? (Is/Was) (she/he) ...

1. Very Satisfied
2. Somewhat satisfied
3. Somewhat dissatisfied
4. Very Dissatisfied
5. Student Never Eats School Breakfast

C1c. the school breakfast meal program overall? (Is/Was) (she/he) ...

1. Very Satisfied
2. Somewhat satisfied
3. Somewhat dissatisfied
4. Very Dissatisfied
5. Student Never Eats School Breakfast

The next questions are about [Target Student Name]'s satisfaction with school lunch meals at [Target School].

Regarding the school lunch meals at [Target School], how satisfied is/was [Target Student Name] with...

C1d. how the food tasted? (Is/Was) (she/he) ...

1. Very Satisfied
2. Somewhat satisfied
3. Somewhat dissatisfied
4. Very Dissatisfied
5. Student Never Eats School Breakfast

C1e. the amount of food served? (Is/Was) (she/he) ...

1. Very Satisfied
2. Somewhat satisfied
3. Somewhat dissatisfied
4. Very Dissatisfied
5. Student Never Eats School Breakfast

C1f. the school lunch meal program overall? (Is/Was) (she/he) ...

1. Very Satisfied
2. Somewhat satisfied
3. Somewhat dissatisfied
4. Very Dissatisfied
5. Student Never Eats School Breakfast

The next questions are about your satisfaction with school breakfast meals at [**Target School**].

Regarding the school meals at [**Target School**], how satisfied are/were you with ...

C2a. the healthfulness of the food [**Target Student Name**] is/was served at school?
Are/Were you ...

1. Very Satisfied
2. Somewhat satisfied
3. Somewhat dissatisfied
4. Very Dissatisfied
5. Student Never Eats School Breakfast

C2b. the school breakfast meal program overall? Are/Were you ...

1. Very Satisfied
2. Somewhat satisfied
3. Somewhat dissatisfied
4. Very Dissatisfied
5. Student Never Eats School Breakfast

The next questions are about your satisfaction with school lunch meals at [**Target School**].

Regarding the school lunch meals at [**Target School**], how satisfied are/were you with ...

C2c. the healthfulness of the food [**Target Student Name**] is/was served at school?
Are/Were you ...

1. Very Satisfied
2. Somewhat satisfied
3. Somewhat dissatisfied
4. Very Dissatisfied
5. Student Never Eats School Breakfast

C2d. the school lunch meal program overall? Are/Were you ...

1. Very Satisfied
2. Somewhat satisfied
3. Somewhat dissatisfied
4. Very Dissatisfied
5. Student Never Eats School Breakfast

C3. INTERVIEWER: DID THE [TARGET STUDENT NAME] HELP THE RESPONDENT WITH THE QUESTIONS ON MEALS EATEN AT SCHOOL?

1. YES
2. NO

SECTION D: PERCEPTIONS OF THE HOUSEHOLD APPLICATION

INTRO: Next, I would like to ask questions about the application you filled out for the school meal programs.

1. CONTINUE

D1. How easy or difficult was it for you to complete the application? Was it....

1. Very easy
2. Somewhat easy
3. Neither easy nor difficult
4. Somewhat difficult
5. Very difficult
6. DID NOT COMPLETE THE APPLICATION (SKIP TO SECTION E)

D2. Were you able to fill out the application in the language of your choice?

1. YES (GO TO D4)
2. NO

D3. What would you say is your preferred language?

1. Spanish
2. Chinese (e.g. Mandarin or Cantonese)
3. French
4. Tagalog
5. Vietnamese
6. Korean
7. Arabic
8. Russian
96. Other (specify)

D4. How did you complete the application? Was it...

1. A paper application
2. An on-line or electronic application or
3. Over the phone

D5. Did you need assistance to complete the application?

1. YES
2. NO (GO TO SECTION E)

D6. Did you request assistance to complete the application?

1. YES
2. NO (GO TO SECTION E)

D7. Did you receive assistance to complete the application?

1. YES
2. NO (GO TO SECTION E)

D8. Who provided the assistance? (TITLE OF PERSON, DO NOT RECORD NAMES)

D9. What type of assistance did you receive?

SECTION E: CATEGORICAL ELIGIBILITY

INTRO: Next, I would like to ask questions about **[Target Student Name]**, and benefits your household may receive.

1. CONTINUE

E1. What is **[Target Student Name]**'s relationship to you? Is (he/she) your biological child, stepchild or adopted child, a foster child or something else? (IF SOMETHING ELSE:) What is that relationship.

1. BIOLOGICAL CHILD
2. STEPCHILD OR ADOPTED CHILD
3. FOSTER CHILD
4. SPOUSE OR DOMESTIC PARTNER
5. BOYFRIEND, GIRLFRIEND, OR PARTNER
6. AUNT OR UNCLE
7. SIBLING (BROTHER OR SISTER)
8. NEPHEW OR NIECE
9. COUSIN
10. GRANDCHILD
11. OTHER RELATIVE
12. NON-RELATIVE (INCLUDING ROOMER OR BOARDER)
96. OTHER (SPECIFY)

E2. CODE WITHOUT ASKING (BASED ON RESPONSE FROM A1): **[Target Student Name]**'s GENDER:

1. MALE
2. FEMALE

E3. CONFIRM IF DATE IS PRE-FILLED
IF NOT PRE-FILLED ASK: What is **[Target Student Name]**'s date of birth?

E4. Did **[Target Student Name]** live with you in **[Application Month, Year]**?

1. YES
2. NO

E4a. How many other children, in addition to **[TARGET STUDENT]** lived with you in **application month and year**?

E4b. Are you currently married?

1. YES
2. NO

HOUSEHOLD BENEFITS

INTRO: The next questions are about benefits received through government programs. It will be helpful to review any documentation you have about payments from these programs so that we can work together to answer the questions. .

TANF BENEFITS

INTRO: Let's discuss TANF benefits also known as Temporary Assistance for Needy Families. Do not include TANF benefits received by another household member with their own TANF case number that does not include you, your spouse, and/or your child/children.

E5 During **[application month and year]**, did you, (your spouse), or (child/children) receive Temporary Assistance for Needy Families, also known as cash welfare, or **[State Name for TANF]**?

1. YES
2. NO (GO TO E18)

E6. We need to record the total amount you, and/or your child/children/you or your spouse and child/children received in (State TANF/TANF) benefits during **[application month and year]**. We can get that amount from your TANF award statement or notification of payment. Do you have a statement or notification that includes **[application month and year]**?

1. YES
2. NO

E7. IF DOCUMENTATION IS PROVIDED RECORD AMOUNT BELOW.

IF NO DOCUMENTATION PROVIDED ASK: How much did you receive in these benefits? IF UNSURE: Your best estimate is fine.

E8. How often do you receive this payment?

1. WEEKLY
2. EVERY TWO WEEKS
3. TWICE MONTHLY
4. MONTHLY
96. OTHER (SPECIFY)

E9. INTERVIEWER: RECORD TYPE OF DOCUMENT.

1. AWARD STATEMENT
2. NOTIFICATION OF PAYMENT
3. CHECK STUB
96. OTHER (SPECIFY)

E10. INTERVIEWER: ENTER PERIOD ENDING DATE FROM DOCUMENT.

- E11. INTERVIEWER: RECORD THE YEAR-TO-DATE AMOUNT SHOWN ON THE DOCUMENT.
- E12. INTERVIEWER: DOES THE TANF BENEFITS STATEMENT REFLECT AMOUNT PAID DURING THE APPLICATION MONTH, THE CURRENT MONTH, OR ANOTHER TIME PERIOD?
1. [APPLICATION MONTH] (GO TO J1)
 2. CURRENT MONTH
 3. BETWEEN [APPLICATION MONTH] AND CURRENT MONTH
 4. 1 TO 3 MONTHS PRIOR TO [APPLICATION MONTH]
 5. MORE THAN 3 MONTHS PRIOR TO [APPLICATION MONTH]
- E13. Is the amount we just discussed as the TANF payment about the same as, less than, or more than the payment received in [application month and year]?
1. ABOUT THE SAME
 2. LESS
 3. MORE
- E14. Do you have your TANF EBT card, also known as STATE NAME FOR TANF card, that you can show me?
1. YES
 2. NO (GO TO E16)
- E15. INTERVIEWER: DID THE RESPONDENT SHOW A VALID TANF CARD?
1. YES
 2. NO
- E16. Does anyone else in your household receive TANF under a different case number?
1. YES
 2. NO (GO TO E18)
- E17. Do you share housing, income, or expenses with this person?
1. YES
 2. NO

SNAP BENEFITS

INTRO: Now let's discuss any Supplemental Nutrition Assistance Program or SNAP benefits your household may receive. Do not include SNAP benefits received by another household member with their own SNAP case number that does not include you, your spouse, and-or your child/children.

E18. During [application month and year], did you and your child/children/you and your spouse and child/children receive Supplemental Nutrition Assistance Program benefits (formerly known as Food Stamps), also known as **[State Name for SNAP]**

1. YES
2. NO (GO TO E31)

E19. We need to record the total amount you and your child/children/you and your spouse and child/children received in (State SNAP/ SNAP) benefits during **[application month and year]**. We can get that amount from your SNAP award statement or notification of payment. Do you have a statement or notification that includes **[application month and year]**?

1. YES
2. NO

E20. IF DOCUMENTATION IS PROVIDED RECORD AMOUNT BELOW.

IF NO DOCUMENTATION PROVIDED ASK: How much did you receive in these benefits? IF UNSURE: Your best estimate is fine.

E21. How often do you receive this payment?

1. WEEKLY
2. EVERY TWO WEEKS
3. TWICE MONTHLY
4. MONTHLY
96. OTHER (SPECIFY)

E22. INTERVIEWER: RECORD TYPE OF DOCUMENTATION:

1. AWARD STATEMENT
2. NOTIFICATION OF PAYMENT
3. CHECK STUB
96. OTHER (SPECIFY)

E23. INTERVIEWER: ENTER PERIOD ENDING DATE FROM DOCUMENT.

E24. INTERVIEWER: RECORD THE YEAR-TO-DATE AMOUNT SHOWN ON THE DOCUMENT.

- E25. INTERVIEWER: DOES THE SNAP BENEFITS STATEMENT REFLECT AMOUNT PAID DURING THE APPLICATION MONTH, THE CURRENT MONTH, OR ANOTHER TIME PERIOD?
1. [APPLICATION MONTH] (GO TO J1)
 2. CURRENT MONTH
 3. BETWEEN [APPLICATION MONTH] AND CURRENT MONTH
 4. 1 TO 3 MONTHS PRIOR TO [APPLICATION MONTH]
 5. MORE THAN 3 MONTHS PRIOR TO [APPLICATION MONTH]
- E26. Is the amount we just discussed as the SNAP payment about the same as, less than, or more than the payment received in [application month and year]?
1. ABOUT THE SAME
 2. LESS
 3. MORE
- E27. Do you have your SNAP EBT card, also known as STATE NAME FOR SNAP card, that you can show me?
1. YES
 2. NO (GO TO E29)
- E28. INTERVIEWER: DID THE RESPONDENT SHOW A VALID SNAP CARD?
1. YES
 2. NO
- E29. Does anyone else in your household receive SNAP under a different case number?
1. YES
 2. NO (GO TO SECTION J)
- E30. Do you share housing, income, or food expenses with this person?
1. YES
 2. NO

OTHER BENEFITS

- E31. During [application month and year], did you, (your spouse), and/or (child/children) participate in the Food Distribution Program for Indian Reservations (FDPIR)? Do not include FDPIR benefits received by another household member that does not include you, your spouse, and/or your child/children.
1. YES
 2. NO (GO TO E34)
- E32. Do you have your FDPIR verification letter, that you can show me?
1. YES
 2. NO (GO TO SECTION F)
- E33. INTERVIEWER: DID THE RESPONDENT SHOW A FDPIR VERIFICATION LETTER?
1. YES
 2. NO
- E34. Did you, your spouse, and/or child/children receive Medicaid benefits during [application month and year]?
1. YES
 2. NO (GO TO SECTION F)
- E35. We need to document that you, your spouse, and/or child/children receive Medicaid benefits. Do you have a Medicaid card or other documentation that shows you receive Medicaid benefits?
1. YES
 2. NO (GO TO SECTION F)
- E36. INTERVIEWER: RECORD TYPE OF DOCUMENT.
1. MEDICAID CARD (GO TO SECTION F)
 2. OTHER DOCUMENTATION (GO TO SECTION F)

SECTION F: HOUSEHOLD COMPOSITION

INTRO: Next, I would like to ask questions about the people who live here with you.

F1. I have your name recorded as [parent/guardian name]. Is this correct?

1. YES (GO TO F3)
2. NO (GO TO F2)

F2. May I please have the correct spelling of your full name?

F3. Not including yourself, how many people live with you? Please include babies, small children, people who are not related to you and people who are temporarily away, for example, at school or in a hospital.

F4. **CODE IF KNOWN OR ASK:** Does [Target Student Name] live with you?

1. YES
2. NO

F5. Please tell me the first name of everyone who lives with you.

PROBE: Who else lives with you?

INTERVIEWER NOTE: QUESTIONS F6 THROUGH F12 ARE REPEATED/ASKED FOR ALL HOUSEHOLD MEMBERS LISTED.

F6. What is [NAME's] relationship to you?

1. BIOLOGICAL CHILD
2. STEPCHILD OR ADOPTED CHILD
3. FOSTER CHILD
4. SPOUSE OR DOMESTIC PARTNER
5. BOYFRIEND, GIRLFRIEND, OR PARTNER
6. PARENT
7. STEPPARENT
8. GRANDPARENT OR GREAT-GRANDPARENT
9. AUNT, UNCLE, GREAT-AUNT, OR GREAT-UNCLE
10. SIBLING (BROTHER OR SISTER)
11. NEPHEW OR NIECE
12. COUSIN
13. GRANDCHILD
14. OTHER RELATIVE OR IN-LAW
15. NON-RELATIVE (INCLUDING ROOMER OR BOARDER)
96. OTHER (SPECIFY)

F7. CODE GENDER. IF NECESSARY, ASK: Is [NAME] female or male?

1. FEMALE
2. MALE

F8. What is (her/his) date of birth?

F9. How old is (he/she)? (YEARS/MONTHS)

F10. Is [name] currently attending school?

1. YES
2. NO (GO TO F12)

F11. What grade is [name] attending?

INTERVIEWER: ENTER GRADE OR

1. PRESCHOOL
2. KINDERGARTEN
3. ELEMENTARY
4. MIDDLE
5. HIGH SCHOOL
6. IN COLLEGE
7. UNGRADED

F12. Did [name] live with you in [application month]?

1. YES
2. NO

AFTER QUESTIONS F6 THROUGH F12 ARE ASKED OF ALL HOUSEHOLD MEMBERS, CONTINUE.

F13. You have just told me that **[number of persons on household roster]** person(s) live here with you. This includes **[names of all reported persons]**. Just to confirm, have you told me about everyone who lives here, including babies, small children, people who are not related to you and people who are temporarily away, for example, at school or in a hospital?

1. YES
2. NO (RETURN TO F5 AND ADD NAMES TO THE HOUSEHOLD ROSTER)

F14. For this next question, do not include temporary visitors. Did anyone (else) live with you in this household in [application month and year] that does not live with you now?

IF NEEDED, ADD: This is the month you reported your income when [Target Student Name]'s eligibility was checked for the food program benefits at [Target School].

1. YES (GO TO F15)
2. NO

F15. How many other people lived with you in [application month and year]?

F16. Please tell me the first name(s) of the other (person/people) that lived with you in [application month and year] who no longer live here with you now.

INTERVIEWER NOTE: QUESTIONS F17 TO F19 ARE ASKED FOR EACH PERSON LISTED UNDER AGE 18 OR THE TARGET STUDENT REGARDLESS OF AGE AND NOT A FOSTER CHILD.

F17. In [application month and year], did you (or your spouse/partner) pay any household expenses or provide any financial support to [name of each child under age of 18 who is not identified as a foster child]? This question refers to your own income and resources to financially support [name], not the income and resources of others, which we will ask about later.

1. YES
2. NO

F18. Based on the information you gave about people living in your household, these persons are considered to be adults by this study, meaning ages 18 and older. INTERVIEWER READ LIST.

Does my list include everyone considered to be an adult in this household?

1. YES
2. NO (RETURN TO F5)

INTERVIEWER NOTE: DO NOT ASK F19 ABOUT THE TARGET STUDENT REGARDLESS OF AGE.

F19. In the [application month and year], did (you/you and your spouse/you and your partner pay any household expenses or provide any financial support to [Name of each household member on the created list in Box FE]?

1. YES
2. NO

F20. In the [application month and year], did [name of each household member on the created list (referenced in box FF)] pay any household expenses or provide any financial support to [name of child under 18 years]?

1. YES
2. NO

F21. In **[application month and year]**, did **[name of each household member on the created list]** pay any household expenses or provide any financial support to you/you and your spouse/you and your partner?

1. YES
2. NO

F22. **INTERVIEWER NOTE: ASK F22 ONLY IF THE RELATIONSHIP TO THE RESPONDENT IS FOSTER CHILD**

Who has legal and financial responsibility for **[name of foster child]**?

1. SELECT NAME(S) FROM HOUSEHOLD ROSTER (INCLUDE ADULTS DO NOT INCLUDE TARGET STUDENT IF 18 OR OLDER)
2. SOMEONE OUTSIDE THE HOUSEHOLD
3. AN AGENCY
96. OTHER, SPECIFY

SECTION G: INCOME AND EARNING SOURCES

SOURCES: Now we ask you about sources of income and benefits you and your household may have each month. While these questions may seem personal, they are important to understanding the school meal program application process and the needs of families whose children are enrolled in the [Target School District Name]. We want to assure you that all of your responses are kept strictly private.

INTERVIEWER NOTE: ASK G1-G6 OF EACH CHILD UNDER THE AGE OF 18 OR THE TRAGET STUDENT REGARDLESS OF AGE WHO HAD FINANCIAL SUPPORT FROM THE PARENT OR GUARDIAN.

G1. During [application month and year], did ([[Target Student Name]]/[child's name]) have any income from child support, Social Security, persons outside the household, or any other source? This is income paid directly to your child, not income that you collect yourself.

1. YES
2. NO (REPEAT G1 FOR EACH CHILD)

G2. What was the source of that income? SELECT ALL THAT APPLY

PROBE: Were there any other sources of income?

1. CHILD SUPPORT (ASK G3)
2. SOCIAL SECURITY OR DISABILITY SURVIVORS' BENEFITS (ASK G4)
3. PERSONS OUTSIDE THE HOUSEHOLD (ASK G5)
96. OTHER, SPECIFY (ASK G6)

G3. How much is received monthly in child support?

G4. How much is received monthly in Social Security benefits or disability survivors benefits?

G5. How much is received monthly from persons outside the household?

G6. How much is received monthly from the other sources?

INTERVIEWER NOTE: REPEAT G1 TO G6 FOR ALL CHILDREN IN HOUSEHOLD.

INTERVIEWER NOTE: PROVIDE THE RESPONDENT WITH THE INCOME SOURCE SHOW CARD AS A REFERENCE SO THEY CAN FOLLOW ALONG AND SELECT INCOME SOURCES.

INTRO. Please refer to this show card or your completed household income worksheet if you had a chance to complete it as we work through the next set of questions.

1. CONTINUE

G7. Do you have your completed worksheet?

1. YES
2. NO

G7a. INTERVIEWER: IS RESPONDENT ABLE TO TELL THE INCOME SOURCE NUMBER FROM EITHER THE INCOME WORKSHEET OR INCOME SOURCE CARD FOR **RESPONDENT/PERSON NAME?**

1. YES
2. NO

G7b. Based on your worksheet and/or the income source card, please tell me the number that corresponds to the income source or benefits payments that you received during [APPLICATION MONTH]

PROBE: Is there any other source of income that wasn't mentioned on your worksheet?

INTERVIEWER NOTE: ASK UNTIL RESPONDENT CONFIRMS THERE IS NO OTHER SOURCE OF INCOME OR BENEFITS FOR RESPONDENT/PERSON. IF YES, SPECIFY AND RECORD.

INTERVIEWER NOTE: CHECK THE BOX ASSOCIATED WITH EACH SOURCE TYPE FOR HOUSEHOLD INCOME AND BENEFIT PAYMENT TYPE ON SHOW CARD 1 REPORTED BY THE RESPONDENT AS FOLLOWS:

- 01-Paid work
- 02-Unemployment
- 03-Worker's compensation
- 04-Strike benefits
- 05-Social Security/ Railroad Benefits
- 06-Private pension, annuity, survivor benefits
- 07-Military cash subsidies not combat pay)
- 08-Veteran's benefits
- 09-Government disability benefits or SSI
- 10-Private disability benefits
- 11-Alimony payments
- 12-Child support payments
- 13-Interest, dividends, and/or capital gains
- 14-Income from others in form of rent
- 15-Profit or loss from nonfarm business
- 16-Profit or loss from farm business
- 17-Financial aid to college students not including tuition, books, & fee
- 18- Regular payments/ withdrawals from huge awards or settlements
- 19-Regular support from outside household
- 20-Net royalties, trusts, 401k, prizes or bonuses
- 21-General assistance (not including TANF or SNAP)
- 22-Housing subsidy

23-Black lung benefits

24-Another kind of public assistance including a foster care subsidy, SPECIFY

INTERVIEWER NOTE: CONFIRM THAT REPORTING IS COMPLETE BY PROBING “ANYTHING ELSE?” UNTIL RESPONDENT CONFIRMS THERE IS NO OTHER SOURCE OF INCOME OR BENEFITS FOR RESPONDENT/PERSON’S NAME

INTERVIEWER NOTE: QUESTIONS G8 THROUGH G32 ARE ONLY ASKED IF THE INCOME SOURCE WAS SELECTED ON THE IN QG7b. THE CAPI SYSTEM GUIDES THE INTERVIEW ACCORDING TO SPECIFIC PROGRAMMING. IF ANY RESPONSE FOR G8 THROUGH G32 IS YES, IT WILL BE INCLUDED IN SECTION H OF THE SURVEY.

G8. During the [application month and year], did (you/[person’s name]) ...work at a job for pay?

PROBE: If you have your own business, only include the salary you pay yourself as personal income or regular earnings. Do not include the business profits or losses. We will ask about that later.

1. YES
2. NO

The next questions are about other kinds of income (you/[person’s name]) may have received during [application month and year].

G9. Did (you/[person’s name]) receive income from unemployment compensation?

1. YES
2. NO

G10. Did (you/[person’s name]) receive income from worker’s compensation?

1. YES
2. NO

G11. Did (you/[person’s name]) receive income from strike benefits?

1. YES
2. NO

G12. Did (you/[person’s name]) receive income from Social Security or railroad retirement?

1. YES
2. NO

G13. Did (you/[person’s name]) receive income from private pensions, annuities, or survivor’s benefits?

1. YES
2. NO

G14. Did (**you/[person's name]**)receive military cash benefits such as housing, food, or clothing allowances? Please do not include combat pay.

1. YES
2. NO

G15. Did (**you/[person's name]**)receive income from Veteran's benefits?

1. YES
2. NO

G16. Did (**you/[person's name]**)receive government disability benefits from Supplemental Security Income or SSI?

1. YES
2. NO

G17. Did (**you/[person's name]**)receive income from private disability benefits?

1. YES
2. NO

G18. Did (**you/[person's name]**)receive alimony payments?

1. YES
2. NO

G19. Did (**you/[person's name]**)receive child support payments?

PROBE: Do not include the child support payment you reported on earlier about **[name of child/children]**.

1. YES
2. NO

G20. Did (**you/[person's name]**)receive income from interest, dividends, or capital gains?

1. YES
2. NO

G21. Did (**you/[person's name]**)receive rental income, that is, income from others in the form of rent?

1. YES
2. NO

G22. Did (**you/[person's name]**) receive profit or loss from (your/her/his) own nonfarm business, partnership, or professional practice?

PROBE: This is profit or loss is separate from the salary you pay yourself as personal income or regular earnings from the business.

1. YES
2. NO

G23. Did (**you/[person's name]**) receive profit or loss from (your/her/his) own farm business?

1. YES
2. NO

G24. Did (**you/[person's name]**) receive financial aid to college students? Please exclude money used for tuition, books, and fees but include money used for room and board.

1. YES
2. NO

G25. Did (**you/[person's name]**) receive regular payments or withdrawals from large awards or settlements?

PROBE: Include income from legal settlements, inheritance, or prize winnings.

1. YES
2. NO

G26. Did (**you/[person's name]**) receive income from regular contributions or support from persons outside the household, for example, cash gifts or other financial assistance from friends or family?

1. YES
2. NO

G27 Did (**you/[person's name]**) receive any other income, such as, net royalties, income from trusts, 401k, prize winnings, or bonuses?

1. YES
2. NO

G28. Did (**you/[person's name]**) receive general assistance, such as state disability assistance or general relief programs? Please do not include TANF or SNAP benefits,.

1. YES
2. NO

G29. Did (**you/[person's name]**) receive a housing subsidy?

PROBE: Do not include military housing subsidies.

1. YES
2. NO

G30. Did **(you/[person's name])** receive black lung benefits?

1. YES
2. NO

G31. Did **(you/[person's name])** receive any other kind of public assistance including foster care subsidies but not including TANF, SNAP, MEDICAID, OR FDPIR?

1. YES
2. NO

G32. IF QG31 IS YES, ASK: What kind of public assistance did **(you/person's name)** receive during **[application month and year]**?

1. YES
2. NO

IF QG31 IS NO: GO TO SECTION H.

INTERVIEWER NOTE: CONFIRM THAT REPORTING IS COMPLETE BY PROBING: IS THERE ANY OTHER SOURCE OF INCOME THAT WASN'T MENTIONED ON YOUR WORKSHEET? ASK UNTIL RESPONDENT CONFIRMS THERE IS NO OTHER SOURCE OF INCOME OR BENEFITS FOR RESPONDENT/PERSON'S NAME.

IF YES, SPECIFY AND RECORD. THIS SOURCE WILL BE INCLUDED IN SECTION H.

INTERVIEWER NOTE: ASK G33 IF F21 = 1 IF PERSON (PAID ANY HOUSEHOLD EXPENSES OR PROVIDE ANY FINANCIAL SUPPORT TO RESPONDENT OR SPOUSE) AND THE PERSON IS NOT THE RESPONDENT OR THE SPOUSE/PARTNER OF THE RESPONDENT; OTHERWISE CONTINUE TO NEXT PERSON OR TO NEXT SECTION.

G33. Did [NAME OF HOUSHOLD MEMBER] receive any of the following types of government benefits:

G33a. Temporary Assistance for Needy Families also known as TANF?

1. YES
2. NO

G33b. Supplemental Nutrition Assistance Program or SNAP?

1. YES
2. NO

G33c. Food Distribution Program for Indian Reservations or FDPIR?

1. YES
2. NO

INTERVIEW NOTE: REPEAT SERIES OF QUESTIONS (G33A-G33C) FOR EACH PERSON IDENTIFIED UNTIL INFORMATION IS COLLECTED FOR EACH PERSON. OTHERWISE CONTINUE TO SECTION H.

Section H: INCOME AND EARNINGS AMOUNTS

Next, I would like to ask you about the different amounts of income you and the other adults in your household received from the sources you just reported. For each type of income you reported, we will go over the income and look at your documents together so that we are sure we get the right amounts. We can take a short break now so you can collect the documentation. The types of documentation I would like to see are:

- check stubs,
- paystubs,
- last year's income tax return for earnings from jobs,
- receipts for cash jobs,
- leave and earnings statements,
- business records,
- award letters, or
- statement summaries that accompany pension or benefit payments.

INTERVIEWER NOTE: WAIT FOR RESPONDENT TO COLLECT DOCUMENTS THEN CONTINUE ON TO ASK INCOME AND EARNING AMOUNTS. ASK H1-H11 FOR EACH ADULT HOUSEHOLD MEMBER WHO HAD INCOME FOR A PAID JOB (SOURCE #1).

You just told me that (you/[person's name]) had earnings from paid jobs during **[application month and year]**. Let's work together, using the documentation you have available, to document the total pay received.

INTERVIEWER NOTE: WHENEVER POSSIBLE, USE AVAILABLE DOCUMENTS TO VERIFY OR CLARIFY RESPONDENT'S RESPONSES.

H1. We need to record the amount of (your/[person's name]'s) earnings from all paid jobs during **[application month and year]**. The amount I need is the gross or total pay, that is before taxes and other deductions, not the amount that was brought home.

How much did (you/[person's name]) earn from a paid job during **[application month and year]**?

- Please include tips, commissions, and regular overtime pay.
- Please do not include profits or losses from (your/[person's name]'s) own farm or nonfarm business, partnership, or professional practice in the **[application month and year]**.

IF APPROPRIATE, ADD: We can probably get that amount from the earnings statement.

IF NEEDED, ADD: Do you have an earnings statement]?

IF DOCUMENTATION IS NOT AVAILABLE, ADD: Your best estimate is fine.

H2. How often are these earnings paid to (you/[person's name])?

1. HOURLY (GO TO H3)
2. DAILY (GO TO H3)
3. WEEKLY (GO TO H3)
4. EVERY 2 WEEKS (BI-WEEKLY) (GO TO H3)
5. TWICE A MONTH (GO TO H3)
6. MONTHLY (GO TO H4)
7. QUARTERLY (GO TO H4)
8. ANNUALLY (GO TO H4)
96. OTHER, SPECIFY (GO TO H4)

H3. How many [hours/days/times] (were you /was [person name]) (work/paid) during **[application month and year]**. Your best estimate of the [hours/days/times] worked is fine. IF APPROPRIATE, ADD: If it is easier, tell me the number of [hours/days] worked weekly.

INTERVIEWER: IF WEEKLY HOURS/DAYS WORKED IS REPORTED RECORD NUMBER REPORTED AND ADD A REMARK (F9).

INTERVIEWER: IF RESPONDENT ANSWERS DON'T KNOW, A COMMENT MUST BE ENTERED FOR CLARIFICATION.

H4. INTERVIEWER: WAS DOCUMENTATION AVAILABLE TO PROVIDE DETAILS ABOUT THIS PERSON'S EARNINGS FROM A PAID JOB?

1. YES
2. NO (GO TO H11)

H5. INTERVIEWER: WHAT TYPE OF DOCUMENT WAS PROVIDED? (CODE ALL THAT APPLY.)

1. CHECK STUB OR PAY STUB
2. INCOME TAX RETURN
3. RECEIPT FOR CASH JOB
4. LEAVE AND EARNINGS STATEMENT
5. BUSINESS RECORDS
6. AWARD LETTER/CONTRACT
7. EXPENSE RECEIPT
8. W2 FORM
96. OTHER, SPECIFY

H6. INTERVIEWER: WHAT WAS THE PERIOD ENDING DATE ON THE DOCUMENT?

H7. INTERVIEWER: ENTER THE YEAR-TO-DATE AMOUNT SHOWN ON THE DOCUMENT.

H8. DOES THE PAY STATEMENT REFLECT EARNINGS DURING [APPLICATION MONTH], THE CURRENT MONTH, CURRENT YEAR OR ANOTHER TIME PERIOD?

1. [APPLICATION MONTH] (GO TO H11)
2. CURRENT MONTH
3. BETWEEN [APPLICATION MONTH] AND CURRENT MONTH
4. 1 TO 3 MONTHS PRIOR TO [APPLICATION MONTH]
5. MORE THAN 3 MONTHS PRIOR TO [APPLICATION MONTH]

H9. Is the amount we just discussed as (you/[person's name]'s) income from this paid job about the same as, less than, or more than income reported in **[application month and year]**?

IF NEEDED, ADD: I am asking you to compare the income you just reported for this job to the income from this job that was reported when [[Target Student Name]]'s eligibility was determined for the school meal program benefits at [Target School].

1. ABOUT THE SAME (GO TO H11)
2. LESS
3. MORE

H10. What is your best estimate of the amount (you/[person's name]) received from this paid job during **[application month and year]**?

H11. Did (you/[person's name]) have any other paid jobs during **[application month and year]**?

1. YES
2. NO

INTERVIEW NOTE: THE CAPI SYSTEM WILL REPEAT QUESTIONS H1 TO H11 IN A LOOP FOR EVERY JOB UNTIL RESPONSE TO H11 = 2 (NO). THE CAPI SYSTEM WILL ALSO GUIDE THE INTERVIEW TO ASK H12 THROUGH H20 ABOUT EVERY OTHER REPORTED SOURCES OF INCOME FOR EACH ADULT PERSON BEFORE CONTINUING TO ASK THE SAME SERIES FOR THE NEXT ADULT.

Previously, you told me about some other sources of income that you and other persons in your household received during **[application month and year]**. Again, let's work together using the information you have available, to show the amounts (you/[person's name]) received from these other sources.

INTERVIEWER NOTE: WHENEVER POSSIBLE, USE AVAILABLE DOCUMENTS TO VERIFY OR CLARIFY RESPONDENT'S RESPONSES.

H12. How much income did (you/[person's name]) receive from **[source in G8]**, during **[application month and year]**?

PROBE: If income is received on a yearly or quarterly basis, use your best estimate for what amount it would be on a monthly basis.

INTERVIEWER NOTE: IF INCOME IS NOT A DIRECT PAYMENT, SUCH AS A SUBSIDY, THE RESPONDENT SHOULD PROVIDE THEIR BEST ESTIMATE OF THE DOLLAR VALUE OF THE SUBSIDY ON A MONTHLY BASIS.

IF APPROPRIATE, ADD: We can probably get this this amount from the payment statement. Do you have a benefits statement ?

OR ADD: Your best estimate is fine.

FILLS FOR INCOME SOURCES

2= Unemployment Compensation

3= Workers Compensation Benefits

4=Strike Benefits

5=Social Security or Retirement Benefits

6= Pensions, Annuities, or Survivor's Benefits

- 7= Military Cash Benefits
- 8= Veteran's Benefits
- 9= Supplemental Security Income (SSI)
- 10= Private Disability Benefits
- 11= Alimony Benefits
- 12= Child Support Payments
- 13= Interest and dividends Income
- 14= Net rental income
- 15= Profit or loss from Nonfarm business, partnership or professional practice
- 16= Profit or loss from a farm
- 17= Financial aid to college students
- 18= Regular payments or Withdrawals from large awards or settlements
- 19= Regular contributions from persons outside the household
- 20= Other income such as Net Royalties, Trust Income or 401K.
- 21= General assistance benefits
- 22 = Housing subsidy.
- 23= Federal Black Lung Program
- 24= Other public benefits, not including TANF or SNAP

H13. How often did (you/[person's name]) receive [other income source]?

- 1. WEEKLY (GO TO H13A)
- 2. 2 WEEKS (BI-WEEKLY) (GO TO H13A)
- 3. TWICE A MONTH (GO TO H13A)
- 4. MONTHLY (GO TO H14)
- 5. QUARTERLY (GO TO H14)
- 6. ANNUALLY (GO TO H14)
- 96. OTHER, SPECIFY (GO TO H14)

H13a. How many times (did you/did [person name]) receive a payment. Your best estimate is fine.

H14. INTERVIEWER: WAS DOCUMENTATION AVAILABLE TO PROVIDE DETAILS ABOUT [INCOME SOURCE PAYMENT]?

- 1. YES
- 2. NO

INTERVIEW NOTE: RECORD FOR ALL WITH DOCUMENTATION

H15. INTERVIEWER: SPECIFY THE TYPE OF DOCUMENT.

- 1. STATEMENT
- 2. BENEFITS LETTER
- 3. CHECK STUB
- 4. INCOME TAX RETURN
- 5. AWARD LETTER/CONTRACT
- 6. W2 FORM
- 96. OTHER, SPECIFY

- H16. INTERVIEWER: WHAT WAS THE PERIOD ENDING DATE ON THE DOCUMENT?
- H17. INTERVIEWER: RECORD THE YEAR-TO-DATE AMOUNT SHOWN ON THE DOCUMENT.
- H18. DOES THE DOCUMENT REFLECT PAYMENT DURING THE APPLICATION MONTH, THE CURRENT MONTH, CURRENT YEAR OR ANOTHER TIME PERIOD?
1. APPLICATION MONTH
 2. CURRENT MONTH
 3. BETWEEN [APPLICATION MONTH] AND CURRENT MONTH
 4. TO 3 MONTHS PRIOR TO [APPLICATION MONTH]
 5. MORE THAN 3 MONTHS SINCE [APPLICATION MONTH]
 6. CURRENT YEAR
- H19. Is the amount we just discussed as (your/[person's name]'s) payment from this source about the same as, less than, or more than the payment received in **[application month and year]**?
- IF NEEDED, ADD: I am asking you to compare the payment amount on this statement to the payment from **[other income source]** that was reported when **[Target Student Name]**'s eligibility was checked for the school meal program benefits at **[Target School]**.
1. ABOUT THE SAME
 2. LESS
 3. MORE
- H20. What is your best estimate of the amount (you/[person's name]) received from this **[other income source]** during **[application month and year]**?

INTERVIEWER: RECORD AMOUNT TO NEAREST WHOLE DOLLAR. THE CAPI PROGRAM WILL REPEAT THE LOOP OF H12 THROUGH H20 TO ASK ABOUT EACH ADULT PERSON WITH AT LEAST ONE REPORTED SOURCE OF INCOME OR BENEFIT.

SECTION I: TOTAL MONTHLY INCOME

INTERVIEW NOTE: THE CAPI PROGRAM WILL POST A TABLE THAT SHOWS A CALCULATION OF ALL SOURCE OF REPORTED INCOME/BENEFITS FOR THE HOUSEHOLD. ASK THE FOLLOWING QUESTIONS OF ALL RESPONDENTS.

- I1. The computer just added up all the income sources you told me about and the total household income for all household members in **[application month and year]** (including the income of people no longer here) is **[calculated total from all sources]**. Does that sound about right?

1. YES (GO TO I4)
2. NO (GO TO I2)

- I2. Since you believe that the total calculated by the computer is not right, let's review each income source and amount that you told me about to correct the amounts.

INTERVIEWER: READ RESPONDENT EACH INCOME SOURCE AND AMOUNT AND MAKE ADJUSTMENTS WHERE NEEDED. WHEN REVIEW IS COMPLETE, CODE 1 TO CONTINUE.

1. CONTINUE

- I3. The revised total income for **[application month and year]** is now **[total from all sources listed in section F and G]**. Does that sound right?

1. YES
2. NO (RETURN TO I2 TO REPEAT REVIEW OF ALL SOURCES, REPEAT PROCESS UNTIL INCOME IS CORRECTED TO THE RESPONDENT'S SATISFACTION)

- I4. Was the **[total from all sources listed in section F and G]** we just recorded for your household income in **[application month and year]** a usual amount, or was it more than or less than the average you expect (your/his/her) monthly income to be this school year?

1. USUAL AMOUNT (GO TO J1)
2. MORE THAN AVERAGE
3. LESS THAN AVERAGE

INTERVIEW NOTE: Q15 ASKED IF CALCULATED INCOME IS MORE OR LESS THAN AN AVERAGE MONTH.

- I5. Since the total amount we just recorded for your household in **[Month]** is not the usual amount, how much do you expect the usual amount for your monthly household income to be over the school year?

SECTION J: DEMOGRAPHIC CHARACTERISTICS

The next set of questions will help give us background information on the people completing this survey.
ASK ALL RESPONDENTS

J1. Are you currently married, living with a partner to whom you are not married, widowed, divorced, separated, or never married?

1. MARRIED
2. LIVING WITH PARTNER TO WHOM YOU ARE NOT MARRIED
3. WIDOWED
4. DIVORCED
5. SEPARATED
6. NEVER MARRIED

J2. What is the highest grade or level of school that you have completed?

1. LESS THAN HIGH SCHOOL
2. HIGH SCHOOL GRADUATE OR GED
3. ASSOCIATES DEGREE
4. BACHELORS DEGREE
5. MASTERS DEGREE
6. DOCTORATE (PhD) DEGREE
7. LAW DEGREE
8. MEDICAL (M.D.) DEGREE.
96. OTHER, SPECIFY

J3. Do you consider yourself to be Hispanic or of Latino origin?

PROBE: That is a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin.

1. HISPANIC OR LATINO
2. NOT HISPANIC OR LATINO

J4. Are you American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander or White? (MARK ALL THAT APPLY).

1. AMERICAN INDIAN OR ALASKA NATIVE
2. ASIAN
3. BLACK OR AFRICAN AMERICAN
4. NATIVE HAWAIIAN OR OTHER PACIFIC ISLANDER
5. WHITE
96. OTHER

J5. Is English the primary language spoken in this household?

1. YES (GO TO J7)
2. NO

J6. What is the primary language spoken in the household?

1. Spanish
2. Chinese (e.g. Mandarin or Cantonese)
3. French
4. Tagalog
5. Vietnamese
6. Korean
7. Arabic
8. Russian
96. Other (specify)

J7. Are you a United States citizen?

1. YES (GO TO J9)
2. NO

J8. How long have you lived in the United States?

PROBE: Include the total number of years/months living in the United States even if you did not live here continuously?

1. MONTHS
2. YEARS
3. YEARS AND MONTHS
4. SINCE YEAR
5. MY ENTIRE LIFE

The next questions are about **[Target Student Name]**.

J9. Is **[Target Student Name]** Hispanic or of Latino origin?

PROBE: This is a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin.

1. HISPANIC OR LATINO
2. NOT HISPANIC OR LATINO

J10. Is (she/he) American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander or White? (MARK ALL THAT APPLY)

1. AMERICAN INDIAN OR ALASKA NATIVE
2. ASIAN
3. BLACK OR AFRICAN AMERICAN
4. NATIVE HAWAIIAN OR OTHER PACIFIC ISLANDER
5. WHITE
96. OTHER

SECTION K: CLOSE OUT AND FUTURE CONTACT

K1. INTERVIEWER: DID RESPONDENT PROVIDE AT LEAST ONE SOURCE OF INCOME DOCUMENTATION?

1. YES
2. NO

K2. This is the end of the interview. Thank you very much for participating in our study. You will now receive (\$30 for completing the survey/\$50 for completing the survey and providing income documentation).

WAS INCENTIVE PAYMENT ACCEPTED?

1. YES
2. NO

INCENTIVE PAYMENT AMOUNT:

1. \$30.00 FOR INTERVIEW
2. \$50.00 FOR INTERVIEW AND INCOME DOCUMENTATION

INTERVIEWER: RECORD TIME INTERVIEW ENDED

K2a. INTERVIEWER: RECORD THE 16 DIGITS OF GIFT CARD NUMBER.

K2b. INTERVIEWER:

- HAVE RESPONDENT SIGN INCENTIVE RECEIPT FORM.
- YOU SIGN INCENTIVE RECEIPT FORM
- RETAIN TOP COPY AND PROVIDE BOTTOM COPY TO THE RESPONDENT.

K2c. INTERVIEWER: ONCE YOU HAVE A SIGNED RECEIPT, GIVE THE RESPONDENT THE [\$50/\$30]

GIFT CARD.

- POINT OUT THE INSTRUCTIONS ON HOW TO ACTIVATE THE CARD.
- ASK THE RESPONDENT IF THEY NEED HELP ACTIVATING THE CARD
- IF THE RESPONDENT ASKS FOR HELP, STAY WITH THE RESPONDENT UNTIL THE RESPONDENT ACTIVATES HIS/HER OWN CARD USING THE INSTRUCTIONS PROVIDED WITH THE CARD.
- IF NEEDED. OFFER HELP USING YOUR STUDY PHONE

INTERVIEWER NOTE: IF DID NOT COMPLETE HOUSEHOLD APPLICATION (D1 =6) SKIP TO K8; OTHERWISE CONTINUE TO K3.

K3. We are planning to contact some study participants in the future to learn more about your experiences in completing the application for meal benefits for school breakfast and lunch programs. This would be a separate interview by phone. If you are chosen and answer the questions you will receive an additional \$20. Would you be interested in being contacted again to participate in this phone interview?

1. YES (GO TO K4)
2. NO (GO TO K8)

K4. Let me confirm some contact information for you. I have your phone number as (INSERT PHONE NUMBER). Is that correct?

1. YES (GO TO K6)
2. NO

K5. Could you please give me a phone number where we can reach you?

K6. What is another phone number where we may reach you?

INTERVIEWER NOTE: ENTER 999-999-9999 IF NO SECOND NUMBER GIVEN. IF EMAIL ADDRESS IN LOAD FILE FOR RESPONDENT ASK K7, OTHERWISE GO TO K8.

K7. We would also like to have an email address. I have your email address as (INSERT EMAIL ADDRESS). Is that correct? Do you have an email address where we can contact you? (IF YES:) What is your email address?

1. YES (GO TO K9)
2. NO

K8. Do you have an email address where we can contact you? (IF YES:) What is your email address?

1. YES
2. NO

K8. Thank you very much for participating in our study. (We may be contacting you again in the future.)

Appendix D5
School Meal Count Verification Form

THIRD ACCESS, PARTICIPATION, ELIGIBILITY AND CERTIFICATION STUDY SERIES (APEC-III)

APPENDIX D5. SCHOOL MEAL COUNT VERIFICATION FORM

Field Data Collectors used this form to gather and abstract meal count data from the cashier/school and the final meal counts submitted to the SFA for the Target Month.

Data collectors entered the information directly into a formatted web-based form. The web-based form, designed for ease of data entry, included built in skip patterns where applicable.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0584-0530. The time required for the School staff and/or Cafeteria Manager to provide access to the school meal count records is estimated to average 30 minutes per response during each data collection round, including the time to review instructions, search existing data resources, gather and maintain the data needed, and complete and review the collection of information.

General Information:

1. SFA ID
2. School ID
3. Date
4. If a Supplemental Reporting Form was Required (Y/N)

Section A—Target Month Data

1. Target Month (Month, Year))
2. If applicable, Target Month Breakfast Meal Counts (Free, Reduced-Price, Paid and Total)
3. If applicable, Target Month Lunch Meal Counts (Free, Reduced-Price, Paid and Total)
4. If applicable, Week 1 Dates
5. If applicable, Week 1 breakfast meal counts
6. If applicable, Week 2 Dates
7. If applicable, Week 2 breakfast meal counts
8. If applicable, Week 3 Dates
9. If applicable, Week 3 breakfast meal counts
10. If applicable, Week 4 Dates
11. If applicable, Week 4 breakfast meal counts
12. If applicable, Week 1 Dates
13. If applicable, Week 1 lunch meal counts
14. If applicable, Week 2 Dates
15. If applicable, Week 2 lunch meal counts
16. If applicable, Week 3 Dates
17. If applicable, Week 3 lunch meal counts
18. If applicable, Week 3 Dates
19. If applicable, Week 4 lunch meal counts

FIELD DATA COLLECTOR NOTE: NO SECTION B OR C

Section D—Student Information for School

1. Total number of enrolled students
2. Average daily attendance (number or percent)
3. Number of serving days
4. Number of students approved for Free meals
5. Number of students approved for Reduced-price meals

FIELD DATA COLLECTOR NOTES:

IF SCHOOL IS PROVISION 2 OR 3 IN A NON-BASE YEAR, SKIP TO SECTION E.

IF SCHOOL IS CEP SCHOOL, SKIP TO SECTION F.

Section E—Provision 2 or 3 Claiming Percentages for School Year 2017-2018 (Only for Provision 2 or 3 schools)

1. If applicable, Claiming Percentage for Breakfast (Free, Reduced-price, and Paid)
2. If applicable, Base Year Used for Breakfast (Yearly or Monthly, Noting the Specific Month)
3. If applicable, Claiming Percentage for Lunch (Free, Reduced-price, and Paid)
4. If applicable, Base Year Used for Lunch (Yearly or Monthly, Noting the Specific Month)

Section F—For CEP Schools only, Claiming Percentages for School Year 2017-2018

1. Claiming Percentage for Free Meals
2. Claiming Percentage for Paid Meals

Section G—Supplemental Report Form

1. If applicable, total Breakfast meals reported (Free, Reduced-price, Paid and Total).
 - a. Target Month (Month, Year))
 - b. For CEP Schools, enter reported meals for Free, Paid and Total only. Enter claiming percentages for free and paid only.
 - c. For Provision 2 or 3 School in a non-base years, enter the base year claiming percentage.
 - d. Note if Provision 2 or 3 base year period used is yearly or monthly percentages.
2. If applicable, total Lunch meals reported (Free, Reduced-price, Paid and Total).
 - a. Target Month (Month, Year))
 - b. For CEP Schools, enter reported meals for Free, Paid and Total only. Enter claiming percentages for free and paid only.
 - c. If a Provision 2 or 3 School in a non-base years, enter the base year claiming percentage.
 - d. Note if Provision 2 or 3 base year period used is yearly or monthly percentages.
3. If applicable,
 - a. If applicable, Week 1 Dates
 - b. If applicable, Week 1 breakfast meal counts
 - c. If applicable, Week 2 Dates
 - d. If applicable, Week 2 breakfast meal counts
 - e. If applicable, Week 3 Dates
 - f. If applicable, Week 3 breakfast meal counts
 - g. If applicable, Week 4 Dates
 - h. If applicable, Week 4 breakfast meal counts
 - i. If applicable, Week 1 Dates
 - j. If applicable, Week 1 lunch meal counts
 - k. If applicable, Week 2 Dates
 - l. If applicable, Week 2 lunch meal counts
 - m. If applicable, Week 3 Dates
 - n. If applicable, Week 3 lunch meal counts
 - o. If applicable, Week 3 Dates
 - p. If applicable, Week 4 lunch meal counts

Section H— Notes in the records or reported by school staff that were related to meal count records or data.

Appendix D6

**SFA Reimbursement Claim Verification Form
for Sampled Schools**

THIRD ACCESS, PARTICIPATION, ELIGIBILITY AND CERTIFICATION STUDY SERIES (APEC-III)

APPENDIX D6. SFA REIMBURSEMENT CLAIM VERIFICATION FORM—SAMPLED SCHOOLS

Field Data Collectors obtained and abstracted meal count and claims data for the Target Month.

Data collectors entered the information directly into a formatted web-based form. The web-based form, designed for ease of data entry, included built in skip patterns where applicable.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0584-0530. The time required for the SFA data manager to provide access to the SFA claim records is estimated to average 30 minutes per response during each data collection round, including the time to review instructions, search existing data resources, gather and maintain the data needed, and complete and review the collection of information.

Complete one form per sampled school.

General Information:

1. SFA Name
2. SFA ID
3. School Name
4. School ID
5. Date Data Collection
6. Target Month
7. Number of Breakfast Serving Days
8. Number of Lunch Serving Days

Section A—Breakfast Meal Claims:

1. Meals reported to SFA by School
 - a. Number of Free Meals
 - b. Number of Reduced-price Meals
 - c. Total Number of Paid Meals
 - d. Total Number of Meals

Note: For CEP, schools only report the total number of meals.

2. Meals Reported to State Agency by SFA
 - a. Number of Free Meals
 - b. Number of Reduced-price Meals
 - c. Total Number of Paid Meals
 - d. Total Number of Meals

Note: For CEP, schools only report the total number of meals.

3. For Provision school in non-base year:
 - a. Free claiming percentage, or number of free meals
 - b. Reduced-price claiming percentage, or number of reduced-price meals
 - c. Paid claiming percentage, or number of paid meals
 - d. Base Year Period Used:
 - Yearly percentage
 - Monthly percentages (specify month)
4. For CEP school:
 - a. Free claiming percentage, or number of free meals
 - b. Paid claiming percentage, or number of paid meals

Section B—Lunch Meal Claims:

1. Meals reported to SFA by School
 - a. Number of Free Meals
 - b. Number of Reduced-price Meals
 - c. Total Number of Paid Meals
 - d. Total Number of Meals

Note: For CEP, schools only report the total number of meals.

2. Meals Reported to State Agency by SFA
 - a. Number of Free Meals
 - b. Number of Reduced-price Meals
 - c. Total Number of Paid Meals
 - d. Total Number of Meals

Note: For CEP, schools only report the total number of meals.

3. For Provision school in non-base year:
 - a. Free claiming percentage, or number of free meals
 - b. Reduced-price claiming percentage, or number of reduced-price meals
 - c. Paid claiming percentage, or number of paid meals
 - d. Base Year Period Used:
 - Yearly percentage
 - Monthly percentages (specify month)
4. For CEP school:
 - a. Free claiming percentage, or number of free meals
 - b. Paid claiming percentage, or number of paid meals

Section C—Comments:

- Notes in the records, or reported to you by SFA staff, indicating that the SFA corrected or adjusted the school breakfast or lunch meal counts.
- Notes that may be related to any potential discrepancies between school meal counts (what the school reported to the SFA) and SFA meal claims (what the SFA reported to the State).

Appendix D7

SFA Reimbursement Consolidation and Claim Verification Form for All Schools

THIRD ACCESS, PARTICIPATION, ELIGIBILITY AND CERTIFICATION STUDY SERIES (APEC-III)

APPENDIX D7. SFA REIMBURSEMENT CONSOLIDATION AND CLAIM VERIFICATION FORM—ALL SCHOOLS

Field Data Collectors obtained and abstracted meal count and claims data for the Target Month.

Data collectors entered the information directly into a formatted web-based form. The web-based form, designed for ease of data entry, included built in skip patterns where applicable.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0584-0530. The time required for the SFA data manager to provide access to the SFA claim records is estimated to average 30 minutes per response during each data collection round, including the time to review instructions, search existing data resources, gather and maintain the data needed, and complete and review the collection of information.

General Information Recorded:

1. SFA Name
2. SFA ID
3. Date Collected
4. Target Month

Section A—SFA Consolidate Meal Claim (FOR ALL SCHOOLS CONSOLIDATED):

1. Breakfast Meal Counts (Free, Reduced-price, Paid and Total)
 - a. Number of Free Meals
 - b. Number of Reduced-price Meals
 - c. Total Number of Paid Meals
 - d. Total Number of Meals

Note: For CEP, schools only report the total number of meals.

2. Lunch Meal Counts (Free, Reduced-price, Paid and Total)
 - a. Number of Free Meals
 - b. Number of Reduced-price Meals
 - c. Total Number of Paid Meals
 - d. Total Number of Meals

Note: For CEP, schools only report the total number of meals.

Section B—Meal Claims for Each School (RECORD FOR EACH INDIVIDUAL SCHOOL):

1. Breakfast Meal Counts (Free, Reduced-price, Paid and Total)
 - a. Number of Free Meals
 - b. Number of Reduced-price Meals
 - c. Total Number of Paid Meals
 - d. Total Number of Meals

Note: For CEP, schools only report the total number of meals.

2. Lunch Meal Counts (Free, Reduced-price, Paid and Total)
 - a. Number of Free Meals
 - b. Number of Reduced-price Meals
 - c. Total Number of Paid Meals
 - d. Total Number of Meals

Note: For CEP, schools only report the total number of meals.

REPEAT FOR EACH SCHOOL

Section C—Comments:

- Notes in the records, or reported to you by SFA staff, that may be related to any potential discrepancies between school meal counts (what the school reported to the SFA) and SFA meal claims (what the SFA reported to the State).

Appendix D8

State Meal Claim Request (Sent via Email)

THIRD ACCESS, PARTICIPATION, ELIGIBILITY, AND CERTIFICATION STUDY (APEC-III)

APPENDIX D8. STATE MEAL CLAIM REQUEST (TEMPLATE SENT VIA EMAIL)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0584-0530. The time required for the State data manager to complete this information collection is estimated to average 4 hours per response, including the time to review instructions, search existing data sources, gather and maintain the data needed, and complete and review the collection of information.

TEMPLATE EMAIL

Dear [State CN Agency Director],

The final part of Westat's data collection efforts includes collecting the meal claiming data that the State submitted to USDA's FNS. As part of data collection earlier this year, Westat collected meal claiming data at the school level and from School Food Authorities.

We ask that you electronically send the meal claim data that your office submitted to the USDA's FNS for the <<ENTER NUMBER OF SFAs>> participating sampled SFAs in. We request the data only for a specific target month. The target month is the calendar month during SY 2017-2018 that the SFA provided meal claiming data during data collection. The table below indicates the target month for each of the participating sampled SFAs.

<<TABLE WITH SFA NAME AND TARGET MONTH FOR EACH PARTICIPATING SAMPLED SFA>>

You can send the data directly to us by replying to this email with the data attached, or we can provide you with login information to upload this data/report through our secure FTP site. **The preferred format is an Excel file.** Please submit your data [insert date]. The required data elements for the file(s) for each school in the district are:

1. SFA Name
2. SFA ID
3. School Name
4. School ID
5. Number of Free Meals Claimed by school in the target month broken out by both breakfast and lunch
6. Number of Reduced Priced Meals Claimed in the target month broken out by both breakfast and lunch
7. Number of Paid Meals Claimed in the target month broken out by both breakfast and lunch
8. Total Meals Claimed in the target month broken out by both breakfast and lunch

We appreciate your efforts in fulfilling this data request. If you have questions, please feel free to contact me at [insert email] or [insert number] and/or [insert email] or [insert number].

Regards,

[insert name]
APEC III, Field Director

[insert name]
APEC III, Director of Operations

Appendix D9
Meal Observation Data

THIRD ACCESS, PARTICIPATION, ELIGIBILITY AND CERTIFICATION STUDY SERIES (APEC-III)

APPENDIX D9. MEAL OBSERVATION BOOKLET

Field Data Collectors conducted meal observations to a) record meal components on the student's tray, b) whether the cashier recorded the meal served as reimbursable, and c) meal and tray level exceptions that occurred.

Data collectors observed breakfast and lunch meals service. Using a sampling algorithm, they randomly select the meal period, serving line, and meal trays for observation. Data collectors recorded meal observations in a hard copy booklet, later entered the data electronically, and securely transmitted the data to the home office.

The design and formatting of the meal observation booklet facilitated ease of entering information during observation in real time. The booklet contained multiple pages and half pages that allowed for the observation of up to 25 trays for each meal period observed. The booklet also allowed for right or left-handed users.

The following lists the information observed, and recorded by the data collector into the booklet.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0584-0530. The time required for the School Cafeteria Manager to provide access to meal transactions for observation is estimated to average 30 minutes per response during each data collection round, including the time to review instructions, search existing data resources, gather and maintain the data needed, and complete and review the collection of information.

Section A: Observation Summary

1. School Information:
 - a. SFA Name and ID
 - b. School NAME and ID
 - c. Date of Meal Observation
 - d. Data Collector Name and ID
2. Breakfast Sampling Information
 - a. Meal Period Number
 - b. Number of Registers or Locations in Meal Period
 - c. Approximate Number of Students in Meal Period
 - d. Meal Serving Locations
3. Breakfast Sampling Results
 - a. Meal Period Number
 - b. Meal Serving Location
 - c. Number of Meal Trays to Observe
 - d. Start with Number (e.g., start with 3 tray)
 - e. Interval to observe (e.g., every '4th' tray)
4. Lunch Sampling Information
 - a. Meal Period Number
 - b. Number of Registers or Locations in Meal Period
 - c. Approximate Number of Students in Meal Period
 - d. Meal Serving Locations
5. Lunch Sampling Results
 - a. Meal Period Number
 - b. Meal Serving Location
 - c. Number of Meal Trays to Observe
 - d. Start with Number (e.g., start with 3 tray)
 - e. Interval to observe (e.g., every '4th' tray)

Section B Meal observation detail:

1. Meal observation summary
 - a. Meal Type (Breakfast or Lunch)
 - b. Meal Period
 - c. Time Observation Began
 - d. Time Observation Ended
 - e. Location of Observation
 - f. Meal Service Delivery Type
 - g. Whether the Meal Service was Offer versus Serve (OVS)
 - h. The total number of OVS food items offered in a meal service space.
 - i. The type of Fruits and Vegetables served
 - j. The Fruit and Vegetable Quantities served
 - k. Notes

2. Special details about the meal such as:
 - a. Whether there was a food or salad bar, and if the minimum serving size for each food component/food item was offered
 - b. Whether the food or salad bar area included signage to show which food and combinations of foods students may choose to select a reimbursable meal under OVS
3. Exceptions
 - a. Whether any of the following exceptions occurred:
 - Could not observe all sampled meals.
 - Food item ran out and was not replenished.
 - Substitute cashier worked on the day of observation
 - Atypical circumstance occurred
 - b. Exception Notes:
 - Description of atypical circumstances on the day of observation
 - How reimbursable meal status was determine if here was no cashier or register used
 - Other exceptions regarding meal service
 - General comments

Section C: Tray level details for each breakfast and lunch tray observed

- a. Tray Number
- b. Type of Participant (Student, Non-Student, Adult)
- c. Tray level Exceptions
- d. Travel level Comments
- e. Food Items
- f. Number of Servings Taken/Served for each food item
- g. Whether the tray was recorded as reimbursable
- h. Notes

Section D: General Comments

Appendix D10
SFA Director Survey (Web-survey)

THIRD ACCESS, PARTICIPATION, ELIGIBILITY AND CERTIFICATION STUDY SERIES (APEC-III)

APPENDIX D10. SFA DIRECTOR SURVEY (WEB BASED)

THIS IS A HARDCOPY VERSION OF THE PROGRAMMED WEB SURVEY, WITH
AUTOMATED SKIP PATTERS INCORPORATED.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0584-0530. The time required for the SFA director to complete this information collection is estimated to average 45 minutes per response during each data collection round, including the time to review instructions, search existing data resources, gather and maintain the data needed, and complete and review the collection of information.

General Instructions for Completing the Survey

1. You can print a blank hardcopy version of the survey as a reference to help you prepare to complete the survey online.
2. Report the number of schools, students, meals served, and applications for School Year 2017-2018 AS OF OCTOBER 31, 2017, or for the period, which you reported to the State Child Education or Nutrition Agency.
3. If a given data item is not readily available, please conduct a manual count if possible. If a manual count is not possible, provide your best estimate.
4. You can complete the survey over time, by saving your survey and coming back to continue later.
5. Sometimes researchers do not get the whole story from answers to closed-ended questions. Throughout the survey, there will be an opportunity to add comments that may be helpful in our understanding your answers.
6. You may not need to answer all the questions. The survey is programmed to move to the next appropriate question based on your responses.
7. At the end of the survey, you will be able to print out a copy of your responses. Please print a copy of your responses as a reference. We may contact you for further clarification.
8. At the end of the survey, select the “Submit Survey” button to complete the survey.

If you have any questions, contact us at [INSERT EMAIL] OR [INSERT NUMBER].

Informed Consent (C1)

Thank you for participating in the third Access, Participation, Eligibility and Certification Study Series (APEC-III). As you know, the U.S. Department of Agriculture's (USDA) Food and Nutrition Service (FNS) has contracted with Westat to administer APEC III. This SFA Director Survey is one component of data collection that will provide important information about the characteristics of the SFAs participating in the study.

Your responses to this survey will help the study understand your school district's participation in the National School Lunch Program (NSLP) and/or the School Breakfast Program (SBP), your district's participation in special provisions (if applicable), how you certify students for free and reduced-price meals, your verification process, how you and your schools record and account for meals served to students, and other relevant information about your district's processes.

The information you provide will be used for research purposes only. It will not be used to evaluate any single SFA or district and will only be used in aggregate.

Survey Consent Form

PURPOSE: Funded by the United States Department of Food and Agriculture (USDA), Food and Nutrition Service (FNS), the goal of the APEC III study is to provide FNS with reliable, national estimates of erroneous payments in the National School Lunch Program (NSLP) and the School Breakfast Program (SBP) in school year (SY) 2017-2018. The data collected will be used to:

- Generate a national estimate of the annual amount of erroneous payments;
- Provide a robust examination of the student (household), school, and School Food Authorities (SFAs) characteristics that may contribute to or mitigate error;
- Conduct a sub-study on the differences in error rates among SFAs using different implementation strategies in their school meals program; and
- Complete qualitative analyses to better understand the sources of errors and how to potentially address them.

Westat, a research organization, has a contract with USDA's FNS to conduct the APEC III study.

HOW YOU WERE SELECTED: The study team used a scientific method to randomly pick your SFA from a list of SFA's throughout the entire United States.

INFORMATION TO BE COLLECTED: As the SFA Director, we will ask questions about your district's participation in the National School Lunch Program (NSLP) and/or the School Breakfast Program (SBP), your district's participation in special provisions (if applicable), how you certify students for free and reduced-price meals, your verification process, how you and your schools record and account for meals served to students, and other relevant information about your district's processes.

RISKS AND PRIVACY: There is little risk to being part of this study. We use all data we collect only for the purposes we describe. Many steps are taken to keep your data private to the full extent allowed by law. Any reports we prepare will combine your answers with those from other SFA directors in the study to summarize what we learn. Your name, district or SFA will never be in the reports we prepare. Nothing you report is shared with the schools in your SFA, other SFAs or any agency that provides benefits to your SFA. Participating in the survey may not help you individually, but it may help us better understand how to reduce error rates in the school meals programs.

STUDY COSTS AND COMPENSATION: There is no cost to you to complete this survey. The survey takes about 45 minutes.

VOLUNTARY PARTICIPATION: This web survey is part of the APEC III research study. While Section 305 of the Healthy, Hunger-Free Kids Act of 2010 requires SFAs to cooperate with FNS research studies, participating in this survey is voluntary. You may skip any question you do not wish to answer and you can stop the survey at any time. Agreeing to participate does not waive any of your legal rights. Refusal to participate will not have any impact on your district or position as SFA staff.

QUESTIONS: If you have questions about the study, you may call Tom Bosworth, the study's Director of Operations, toll-free at 1-855-820-6138. If you have questions about your rights as a research participant, please call the Westat Human Subjects Protections office at 1-888-920-7631. Please leave a message with your full name, the name of this study (APEC III), and a phone number including the area code. Someone will return your call as soon as possible.

CONSENT: I have read and understand this entire consent form, and agree to participate in this SFA Director Survey as part of the APEC III study.

To continue, please check the box below.

☐ I agree to participate

INTRODUCTION

According to our records, the following schools from your SFA were sampled for the APEC III study. The school type (non CEP, CEP, or Provision) is also listed.

[INSERT SCHOOL NAMES AND TYPES]

- If the school type listed above is not accurate for any of the schools, please click 'save and continue later', and contact us at schoolmealstudy@westat.com or 855-820-6138. We will update the school status in our records and reset your survey accordingly.
- If the school type(s) listed above are accurate, click next to continue.

Q1. Since the focus of this research study is on USDA's NSLP and SBP, we ask that you calculate and record counts of both schools participating in the NSLP and/or SBP and students enrolled in schools participating in the NSLP and/or SBP program.

For example, there may be schools within your SFA that do not provide lunch or breakfast. Preferably, students enrolled in these schools would not be included in student enrollment counts in this survey because the school does not participate in the NSLP or SBP.

If there are some schools in your district that do not participate in the NSLP and/or SBP, AND it is not possible to limit the counts reported in this survey to students enrolled in schools participating in the NSLP and SBP, you may provide the counts for all students enrolled in the district.

Select the option below that best describes how you will complete the survey:

1. All schools in my district participate in NSLP and/or SBP. The counts will reflect all schools and students
2. Some, but not all schools in my district participate in NSLP and/or SBP. The counts will only reflect schools and students participating in NSLP and/or SBP
3. Some, but not all schools in my district participate in NSLP and/or SBP. The counts will reflect all schools and students, including those in schools that do not participate in NSLP and/or SBP

- Q2. Will you report the number of schools, students, meals served, and applications for School Year 2017-2018 as of October 31, 2017 or from another date?
1. As of October 31, 2017 (Go to Q4)
 2. From another date
- Q3. Please specify the other date?
- Q4. Which of the following best describes your district's participation in the NSLP and/or SBP program?
1. All schools participate in NSLP and/or SBP
 2. Some, but not all schools participate in NSLP and/or SBP
- Q5. Which of the following best describes the type of schools in your district?
1. All schools are non-CEP schools
 2. All schools are CEP schools
 3. Some schools are non-CEP schools and some schools are CEP schools

SECTION A: SFA DISTRICT AND STUDENT CHARACTERISTICS

- A1. As of October 31, 2017 (or the date you specified in Q3), please indicate if your SFA includes public schools only, private schools only, or both public and private schools? (Publically funded charter schools should be considered public schools.)
1. Public schools only
 2. Private schools only
 3. Both public and private schools
- A1a. How many {public schools/private schools/public and private schools} are in the district(s) managed by your SFA?
- A2. Does your SFA administer the NSLP or SBP for more than one school district or other local entity?
1. Yes
 2. No (GO TO A4)
- A3. What is the total number of school districts (public or private) in your SFA?

- A4. In School Year 2017-2018, do all of the schools in your district start and end on the same date?
1. Yes, all schools start and end on the same day
 2. No, the start and end date varies
- A5. When was the date of the first day of your current school year (2017-2018)? If the first day of school varies, record the earliest start date.
- A6. When is the last day of your current school year (2017-2018)? If the last day of school varies, record the latest end date.
- A7. Is your SFA food service operation under the direction of a food service management company, or does your SFA use a consulting company, vended meal company, or independent consultant to help plan or manage food service operations?
1. Operated by a food service management company
 2. Uses consulting company, vended meal company, or independent consultant
 3. Both apply
 4. Neither apply

COMMENTS (A1): Please provide any comments that you believe would be helpful in understanding your responses above.

- A8. Next we would like to collect some information about the schools in your district.

Indicate the number of schools, overall and by grade level that participate in the NSLP, SBP, or both as of October 31, 2017 (or the date you specified in Q3).

Elementary schools are typically grades K-5, middle/junior high schools are typically grades 6-8, and high schools are typically grades 9-12. If your schools don't align with these categories, please fit them as closely as possible.

- A8a. For the entire SFA,

1. How many schools operate both the NSLP and SBP?
2. How many schools operate only NSLP?
3. How many schools operate only the SBP?

- A8b. Among elementary schools,
1. How many schools operate both the NSLP and SBP?
 2. How many schools operate only NSLP?
 3. How many schools operate only the SBP?

- A8c. Among middle or junior high schools,
1. How many schools operate both the NSLP and SBP?
 2. How many schools operate only NSLP?
 3. How many schools operate only the SBP?

- A8d. Among high schools,
1. How many schools operate both the NSLP and SBP?
 2. How many schools operate only NSLP?
 3. How many schools operate only the SBP?

- A8e. Among other types of programs (please specify),
1. How many schools operate both the NSLP and SBP?
 2. How many schools operate only NSLP?
 3. How many schools operate only the SBP?

- A9. Indicate the total number of students enrolled, overall and by grade level, enrolled in schools that participate in the NSLP, SBP, or both as of October 31, 2017 (or the date you specified in Q3).

NOTE: We are asking for the total number of students enrolled at these schools, not the number who participate in NSLP or SBP.

- A9a. For the entire SFA,
1. What is the total number of students enrolled in schools operating both NSLP and SBP?
 2. What is the total number of students enrolled in schools operating only NSLP?
 3. What is the total number of students enrolled in schools operating only SBP?

- A9b. Among elementary schools,
1. What is the total number of students enrolled in schools operating both NSLP and SBP?
 2. What is the total number of students enrolled in schools operating only NSLP?
 3. What is the total number of students enrolled in schools operating only SBP?

- A9c. Among middle or junior high schools,
1. What is the total number of students enrolled in schools operating both NSLP and SBP?
 2. What is the total number of students enrolled in schools operating only NSLP?
 3. What is the total number of students enrolled in schools operating only SBP?

A9d. Among high schools,

1. What is the total number of students enrolled in schools operating both NSLP and SBP?
2. What is the total number of students enrolled in schools operating only NSLP?
3. What is the total number of students enrolled in schools operating only SBP?

A9e. Among other types of programs (please specify),

1. What is the total number of students enrolled in schools operating both NSLP and SBP?
2. What is the total number of students enrolled in schools operating only NSLP?
3. What is the total number of students enrolled in schools operating only SBP?

COMMENTS (A2): Please provide any comments that you believe would be helpful in understanding your responses above.

A10a. As of October 31, 2017 (or the date you specified in Q3), record the ethnic composition of enrolled students. If there are no enrolled students of a particular group, enter "0".

1. Number of Hispanic students:
2. Number of non-Hispanic students:

A10b. As of October 31, 2017 (or the date you specified in Q3), record the racial composition of enrolled students. If there are no enrolled students of a particular group, enter "0". (A student may be of more than one racial group.)

1. Number of White students:
2. Number of Black or African American students:
3. Number of Indian or Alaska Native students:
4. Number of Asian students:
5. Number of Hawaiian or Pacific Islander students:
6. Number of Other Race students:

A10c. As of October 31, 2017 (or the date you specified in Q3), record the gender composition of enrolled students. If there are no enrolled students of a particular group enter "0".

1. Number of Male Students:
2. Number of Female Students:

A11. The Healthy Hunger-Free Kids Act provides an additional 6-cents per lunch reimbursement to school districts that are certified to be in compliance with the updated meal patterns. The increased reimbursement is provided to school districts once they meet the new meal patterns published in the final rule on January 26, 2012. Funding became available to school districts starting October 1, 2012.

Does your SFA receive an additional 6-cent reimbursement per lunch for being in compliance with updated meal patterns?

1. Yes
2. No
3. Don't know/Not sure

A12. SFAs where 60 percent or more of the lunches in the second preceding school year (two years prior to the current year) were served free or reduced price receive an additional two-cents per meal served. This is referred to as the NSLP 60% subsidy or the "two-cent differential."

Does your SFA receive a NSLP 60% subsidy?

1. Yes
2. No
3. Don't know/Not sure

A13. Schools are defined as "severe need" for breakfast if they claimed more than 40 percent of their lunches at the free and reduced-price rate in the second preceding school year (two years prior to the current year). Do any schools within your SFA receive this severe need subsidy?

1. Yes
2. No
3. Don't know/Not sure

A14. Does your district currently participate in any of the demonstration programs that use Medicaid data to directly certify students?

1. Yes
2. No (Go to Comment Box A3)
3. Don't know/Not sure (Go to Comment Box A3)

A14a. Is the direct certification based on Medicaid data only for free meal eligibility or for both free and reduced price meal eligibility?

1. Free meal eligibility only
2. Both free and reduced price meal eligibility
3. Don't know/Not sure

COMMENTS (A3): Please provide any comments that you believe would be helpful in understanding your responses above.

NOTE: SKIP QUESTION A15a IF ALL SCHOOLS IN SFA ARE CEP SCHOOLS.

A15a. For the month of October 2017 (or the month you specified in Q3), record the number of meals claimed for reimbursement by program for all non-CEP schools in the SFA.

- a. For NSLP, Lunch
 1. What is the total number of meals claimed for ALL non-CEP schools?
 2. What is the total number of Free meals claimed for ALL non-CEP schools?
 3. What is the total number of Reduced Price meals claimed for ALL non-CEP schools?
 4. What is the total number of Paid meals claimed for ALL non-CEP schools?
- b. For SBP, Breakfast
 1. What is the total number of meals claimed for ALL non-CEP schools?
 2. What is the total number of Free meals claimed for ALL non-CEP schools?
 3. What is the total number of Reduced Price meals claimed for ALL non-CEP schools?
 4. What is the total number of Paid meals claimed for ALL non-CEP schools?

NOTE: SKIP QUESTION A15b IF ALL SCHOOLS IN SFA ARE NON CEP SCHOOLS.

A15b. For the month of October 2017 (or the month you specified in Q3), record the number of meals claimed for reimbursement by program for all CEP schools in the SFA.

- c. For NSLP, Lunch
 1. What is the total number of meals claimed for ALL CEP schools?
 2. What is the total number of Free meals claimed for ALL CEP schools?
 3. What is the total number of Paid meals claimed for ALL non-CEP schools?
- d. For SBP, Breakfast
 1. What is the total number of meals claimed for ALL non-CEP schools?
 2. What is the total number of Free meals claimed for ALL non-CEP schools?
 3. What is the total number of Paid meals claimed for ALL non-CEP schools?

COMMENTS (A4): Please provide any comments that you believe would be helpful in understanding your responses above.

SECTION B: SFA PARTICIPATION IN PROVISION 2 AND 3

- B1. Under Provision 2 or 3, schools establish claiming percentages in a 'base year', serve meals free to all students. After the base year, schools do not process applications nor track whether students receiving meals are approved for free or reduced-price meals for up to four years.

Under Provision 2, the reimbursements received from USDA in a non-base year are based on the total number of meals served and claiming percentages by meal reimbursement type that were established in the base year.

Under Provision 3, the reimbursements are based on the total dollar reimbursement received during the base year and may be adjusted for changes in enrollment and inflation.

Any school participating in the National School Lunch Program or the Breakfast Program may opt for Provision 2 or Provision 3.

Which of the following best describes schools in your SFA?

1. All schools in the SFA use Provision 2 (Skip B2)
 2. All schools in the SFA use Provision 3 (Skip B2)
 3. Some schools in the SFA use Provision 2, but none use Provision 3
 4. Some schools in the SFA use Provision 3, but none use Provision 2
 5. Some schools use Provision 2 and some schools use Provision 3
 6. No schools use Provision 2 or 3
- B2. What is the primary reason more schools in your SFA do not participate in Provision 2 or 3?
1. Process is too complicated or time consuming
 2. Lack technology or resources to change current system
 3. State or local rules require SFA to collect and report individual meal application data yearly
 4. Provision 2 or 3 is not economically beneficial or appropriate for our schools
 5. Community Eligibility Provision (CEP) is a better option for our schools
 6. Other (SPECIFY)

NOTE: IF NO SCHOOLS USE PROVISION 2 OR 3, SKIP TO SECTION C.

**NOTE: IF ALL OR SOME SCHOOLS ARE PROVISION 2, ANSWER B3a.
IF ALL OR SOME SCHOOLS ARE PROVISION 3, ANSWER B3b.**

B3a. As of October 31, 2017 (or the date you specified in Q3), record the number of Provision 2 schools and the enrolled students, by category, for all the schools managed by your SFA.

For Provision 2 for NSLP:

1. What is the total schools:
2. What is the total number of enrolled students:

For Provision 2 for NSLP in base year:

1. What is the total schools:
2. What is the total number of enrolled students:

For Provision 2 for NSLP in non-base year:

1. What is the total schools:
2. What is the total number of enrolled students:

For Provision 2 for SBP:

1. What is the total schools:
2. What is the total number of enrolled students:

For Provision 2 for SBP in base year:

1. What is the total schools:
2. What is the total number of enrolled students:

For Provision 2 for SBP in non-base year:

1. What is the total schools:
2. What is the total number of enrolled students:

B3b. As of October 31, 2017 (or the date you specified in Q3), record the number of Provision 3 schools and the enrolled students, by category, for all schools managed by your SFA.

For Provision 3 for NSLP:

1. What is the total schools:
2. What is the total number of enrolled students:

For Provision 3 for NSLP in base year:

1. What is the total schools:
2. What is the total number of enrolled students:

For Provision 3 for NSLP in non-base year:

1. What is the total schools:
2. What is the total number of enrolled students:

For Provision 3 for SBP:

1. What is the total schools:
2. What is the total number of enrolled students:

For Provision 3 for SBP in base year:

1. What is the total schools:
2. What is the total number of enrolled students:

For Provision 3 for SBP in non-base year:

1. What is the total schools:
2. What is the total number of enrolled students:

NOTE: ANSWER QUESTIONS B4 TO B7 FOR EACH SAMPLED SCHOOL THAT IS A PROVISION 2 OR 3 SCHOOL.

B4. Does <INSERT SCHOOL NAME> participate in provision 2 or 3 for **breakfast**? (SELECT ALL THAT APPLY.)

1. Yes, Provision 2
2. Yes, Provision 3
3. Neither (Go to B6)

B5. What is the base school year for this school's provision 2 or 3 breakfast participation?

1. SY 2014-2015
2. SY 2015-2016
3. SY 2016-2017
4. SY 2017-2018
5. Don't know/Not sure

B6. Does <INSERT SCHOOL NAME> participate in provision 2 or 3 for **lunch**? (SELECT ALL THAT APPLY.)

1. Yes, Provision 2
2. Yes, Provision 3
3. Neither (Skip B7)

B7. What is the base school year for this school's provision 2 or 3 lunch participation?

1. SY 2014-2015
2. SY 2015-2016
3. SY 2016-2017
4. SY 2017-2018
5. Don't know/Not sure

COMMENTS (B1): Please provide any comments that you believe would be helpful in understanding your responses above.

SECTION C: SFA PARTICIPATION IN CEP

Under the Community Eligibility Provision (CEP), schools apply claiming percentages to the total number of reimbursable meals in the school(s) that elected CEP (individually or as a group). A school(s) that elects CEP will claim reimbursement based on the percentage of its enrolled students that are "identified students" (e.g., directly certified or other identified students (e.g., homeless, migrants, runaways)). The CEP can be elected for the entire local education agency (LEA), for a group(s) of schools within an LEA, or for an individual school in the LEA.

An LEA is a public board of education or other public authority legally constituted within a State for either administrative control or direction of, or to perform a service function for, public elementary schools or secondary schools in a city, county, township, school district, or other political subdivision of a State, or for a combination of school districts or counties that is recognized in a State as an administrative agency for its public elementary schools or secondary schools.

An SFA is the governing body, which is responsible for the administration of one or more schools; and has the legal authority to operate child nutrition programs therein or be otherwise approved by USDA to operate the Program.

NOTE: SKIP QUESTION C1 IF AT LEAST ONE SCHOOL IN THE SFA IS CEP.

C1. What is the primary reason your SFA did not elect CEP for any school(s)?

1. Process is too complicated or time consuming
2. Lack technology or resources to change current system
3. State or local rules require SFA to collect and report individual meal application data yearly
4. CEP is not economically beneficial or appropriate in our SFA
5. No schools (or group of schools) were eligible
6. Provision 2 or 3 is a better option for our schools
7. Other (SPECIFY)
8. Don't know/Not sure

NOTE: IF ALL SCHOOLS IN THE SFA ARE NON-CEP, SKIP TO SECTION D.

C2. In the district(s) managed by your SFA, was CEP elected by...

1. The entire district(s)?
2. Only individual schools?
3. Only groups of schools within the district(s)?
4. Combination of individual schools and groups of schools within the SFA?

C3. Which source(s) did you use to determine your ISP (Identified Student Percentage) rate? (SELECT ALL THAT APPLY.)

1. Supplemental Nutrition Assistance Program (SNAP)
2. Temporary Assistance for Needy Families (TANF)
3. Food Distribution Program on Indian Reservations (FDPIR)
4. Head Start or Early Head Start Participant
5. Migrant child
6. Runaway child
7. Homeless child
8. Foster child certified through means other than an application
9. Non-applicant children certified through means other than an application
10. Medicaid
11. Other (SPECIFY)

COMMENTS (C1): Please provide any comments that you believe would be helpful in understanding your responses above.

With **State-level matching**, a State agency (usually Child Nutrition) has primary responsibility for developing and maintaining a system that matches lists of children in NSLP schools with a list of children in Supplemental Nutrition Assistance Program (SNAP), Temporary Assistance for Needy Families (TANF) or Food Distribution Program on Indian Reservations (FDPIR) households using a common identifier or identifiers. This system can be set up in a variety of ways. Some examples include:

- Districts upload enrollment information into a State-maintained computer or web-based system that conducts a match to a list of children in SNAP households. Students are directly certified on the basis of this match.
- A State agency matches State enrollment information with a State list of children in SNAP households. A list of students directly certified on the basis of this match is forwarded to districts.
- An initial match is conducted by a State agency. A list of matched students is sent to districts, which then verify the matches, get further information on students who are “potential” matches, or conduct other types of secondary matching.

C4. Does your SFA use State-level matching to determine the ISP?

1. Yes
2. No
3. Don't know/Not sure

With **district-level matching**, districts have primary responsibility for matching a list of children enrolled in their schools with a list of children in SNAP households using a common identifier or identifiers. Districts may use manual methods or an automated or electronic system.

C5. Does your SFA use district-level matching to determine the ISP?

1. Yes
2. No
3. Don't know/Not sure

NOTE: IF YOU USE BOTH STATE LEVEL MATCHING AND DISTRICT LEVEL MATCHING, ANSWER QUESTION C6. OTHERWISE, SKIP C6.

C6. What are the reasons your district performs data matching in addition to that conducted at the State level? (SELECT ALL THAT APPLY.)

1. To confirm State-level data matching results (quality control)
2. To confirm direct certification status of students identified by the State as “potential matches”
3. District preference
4. Statutory requirement
5. Additional check on new enrollments
6. State Agency request
7. Other (SPECIFY) _____

COMMENTS (C2): Please provide any comments that you believe would be helpful in understanding your responses above.

The following is a list of the CEP schools in your SFA that were sampled for APEC III. The next set of questions are about these specific schools.

INSERT Name of Sampled CEP School 1

INSERT Name of Sampled CEP School 2

INSERT Name of Sampled CEP School 3

NOTE: IF ALL SCHOOLS START AND END ON THE SAME DATE, SKIP QUESTION C7.

C7. What is the date of the first and last day of school for each of the sampled schools listed below?

Sampled CEP School 1

1. First Day of School
2. Last Day of School

Sampled CEP School 2

1. First Day of School
2. Last Day of School

Sampled CEP School 3

1. First Day of School
2. Last Day of School

C8. Does your SFA serve breakfast through the School Breakfast Program?

1. Yes
2. No (Skip C9)

C9. For each of the sampled schools listed below, during October, 2017 (or the month/year you specified in Q3) how many days was breakfast served? If breakfast was not served at a school, please record "0".

1. Number of days in the month breakfast was served at Sampled CEP School 1?
2. Number of days in the month breakfast was served at Sampled CEP School 2?
3. Number of days in the month breakfast was served at Sampled CEP School 3?

C10. Does your SFA serve lunch through the National School Lunch Program?

1. Yes
2. No (Skip C11)

C11. For each of the sampled schools listed below, during October, 2017 (or the month/year you specified in Q3), how many days was lunch served? If lunch was not served, please enter "0".

1. Number of days in the month lunch was served at Sampled CEP School 1?
2. Number of days in the month lunch was served at Sampled CEP School 2?
3. Number of days in the month lunch was served at Sampled CEP School 3?

NOTE: IF CEP IS DISTRICT WIDE, SKIP QUESTION C12, AND GO TO SECTION D.

C12. For each CEP school listed below, indicate how the school participates in CEP and the ISP for the school.

For CEP School 1<insert school name>:

1. Is participation in CEP based on an individual school or a group of schools?
 1. Individual School
 2. Group of Schools
2. What is the school's Identified Student Percentage (ISP)?

For CEP School 2<insert school name>:

1. Is participation in CEP based on an individual school or a group of schools?
 1. Individual School
 2. Group of Schools
2. What is the school's Identified Student Percentage (ISP)?

For CEP School 3<insert school name>:

1. Is participation in CEP based on an individual school or a group of schools?
 1. Individual School
 2. Group of Schools
2. What is the school's Identified Student Percentage (ISP)?

COMMENTS (C3): Please provide any comments that you believe would be helpful in understanding your responses above.

SECTION D: CHARACTERISTICS OF EACH NON-CEP SAMPLED SCHOOL

NOTE: IF ALL SAMPLED SCHOOLS ARE CEP SCHOOLS, SKIP SECTION D AND CONTINUE TO SECTION E.

The next questions ask about the non-CEP schools sampled from your SFA. Answer the questions below as of October 31, 2017(or the date you specified in Q3) for each of the sampled. The schools are:

INSERT Name of Sampled non-CEP School 1

INSERT Name of Sampled non-CEP School 2

INSERT Name of Sampled non-CEP School 3

NOTE: IF ALL SCHOOLS START AND END ON THE SAME DATE, SKIP QUESTION D1.

D1. What is the date of the first and last day of school for each of the sampled schools listed below?

Sampled non-CEP School 1

1. First Day of School
2. Last Day of School

Sampled non-CEP School 2

1. First Day of School
2. Last Day of School

Sampled non-CEP School 3

1. First Day of School
2. Last Day of School

NOTE: SKIP QUESTION D2 IF THIS QUESTION WAS ANSWERED EARLIER IN QUESTION C8.

D2. Does your SFA serve breakfast through the School Breakfast Program?

1. Yes
2. No (Skip D3)

D3. For each of the sampled schools listed below, during October, 2017 (or the month/year you specified in Q3), how many days was breakfast served? If breakfast was not served at a school, please record "0".

1. Number of days in the month breakfast was served at Sampled non-CEP School 1?
2. Number of days in the month breakfast was served at Sampled non-CEP School 2?
3. Number of days in the month breakfast was served at Sampled non-CEP School 3?

NOTE: SKIP QUESTION D4 IF THIS QUESTION WAS ANSWERED EARLIER IN QUESTION C10.

D4. Does your SFA serve lunch through the National School Lunch Program?

1. Yes
2. No (Skip D5)

D5. For each of the sampled schools listed below, during October, 2017 (or the month/year you specified in Q3), how many days was lunch served? If lunch was not served, please enter "0".

1. Number of days in the month lunch was served at Sampled non-CEP School 1?
2. Number of days in the month lunch was served at Sampled non-CEP School 2?
3. Number of days in the month lunch was served at Sampled non-CEP School 3?

D6. Record the following information about each school listed below as of October 31, 2017 (or the date you specified in Q3).

Non-CEP School 1:

1. Number of students enrolled
2. Number of enrolled students with a meal eligibility status of free
3. Number of enrolled student with a meal eligibility status of reduced price
4. Number of enrolled student with a meal eligibility status of paid
5. Number of enrolled students directly certified for free without an application

Non-CEP School 2:

1. Number of students enrolled
2. Number of enrolled students with a meal eligibility status of free
3. Number of enrolled student with a meal eligibility status of reduced price
4. Number of enrolled student with a meal eligibility status of paid
5. Number of enrolled students directly certified for free without an application

Non-CEP School 3:

1. Number of students enrolled
2. Number of enrolled students with a meal eligibility status of free
3. Number of enrolled student with a meal eligibility status of reduced price
4. Number of enrolled student with a meal eligibility status of paid
5. Number of enrolled students directly certified for free without an application

COMMENTS (D1): Please provide any comments that you believe would be helpful in understanding your responses above.

SECTION E: APPLICATION FOR FREE OR REDUCED PRICE MEALS

NOTE: IF ALL SCHOOLS IN THE DISTRICT ARE CEP SCHOOLS, SKIP SECTION E AND CONTINUE TO SECTION F.

HOWEVER, IF ANY OF THE SCHOOLS IN THE DISTRICT, EVEN IF THEY ARE NOT IN THE SAMPLE FOR APEC III, ARE NON CEP SCHOOLS, PLEASE COMPLETE SECTION E.

The following questions ask about the process in which parents/guardians apply for free or reduced-price meal benefits.

E1. How does your district accept applications for meal benefits?

- a. Paper application submitted in person, by mail or email
 1. Yes
 2. No
- b. Online application via district/school website
 1. Yes
 2. No
- c. Online application via a vendor website
 1. Yes
 2. No
- d. Some other way
 1. Yes (Specify)
 2. No

COMMENTS (E1): Please provide any comments that you believe would be helpful in understanding your responses above.

NOTE: IF YOUR DISTRICT DOES NOT USE AN ONLINE APPLICATION VIA A VENDOR WEBSITE, SKIP QUESTIONS E2 TO E4.

E2. Do you use Meals Plus software?

1. Yes
2. No (Go to E3)

E2a. When did you start using Meals Plus?

E2b. Which version of Meals Plus are you using?

E3. Do you use Horizon software?

1. Yes
2. No (Go to E4)

E3a. When did you start using Horizon?

E4. Is there any other software used to download, store and process applications that has not been previously mentioned?

1. Yes
2. No (Go to E5)

E4a. What is the name of that software?

E5. Please provide any comments that you feel may be helpful in understand how applications in your SFA are distributed, accepted, and/or processed.

E6. Does your SFA provide assistance to the parent in completing the application?

1. Yes
2. No (Go to E9)

E7. What type of assistance is available? (SELECT ALL THAT APPLY.)

1. Written instructions
2. Assistance over the phone
3. Assistance in person
4. Group Sessions/classes
5. Some other way (SPECIFY)

E8. What are the most common types of assistance/questions that parents need/request? (SELECT ALL THAT APPLY.)

1. Language problems
2. Illiteracy/reading comprehension
3. How to complete/answer income questions
4. Determining household composition
5. Determining income sources to include
6. Some other assistance/question (SPECIFY)

COMMENTS (E2): Please provide any comments that you believe would be helpful in understanding your responses above.

E9. Are paper applications processed electronically (e.g., scanned or processed using a software package) or manually (e.g., manual review of each application)?

1. Electronically
2. Manually
3. A combination of both methods
4. We do not use paper applications

E10. How many staff (at the SFA level) have primary responsibility for reviewing applications and determining eligibility status?

E11. Does your SFA temporarily extend a student's certification status of free or reduced price from the prior school year into the current school year?

1. Yes
2. No (Go to E13)

E12. For how long is the certification status of free or reduced price extended into the current school year?

1. Less than 30 days
2. 30 days
3. More than 30 days
4. Until a certain date (SPECIFY)
5. Some other time period (SPECIFY)

E13. When applications are received, how are they reviewed?

1. On a "flow basis" as they are received
2. Saved and reviewed in batches
3. Some other way (SPECIFY)

E14. Does your staff contact the household if there are any questions when reviewing the application?

1. Yes
2. No (Go to E16)

E15. Once a household is contacted regarding questions about their applications, how and where are their answers about their application recorded?

E16. Does another staff conduct a second review of some or all of the applications prior to the meal eligibility status being final?

1. Yes
2. No (Go to E18)

E17. Is this review for all applications, or for a sample of applications?

1. All applications
2. Sample of applications

E18. What are the common omissions or mistakes on applications? (SELECT ALL THAT APPLY.)

1. Income amount (s)
2. Income type included/excluded
3. Income frequency (weekly, bi-weekly, monthly etc.)
4. Household composition/size
5. Leaving sections blank
6. Failing to provide case numbers for categorically eligible
7. Failing to provide a signature
8. Failing to provide last 4 digits of SSN
9. Some other mistake (SPECIFY)

E19. Do you offer the application in languages other than English?

1. Yes
2. No (Go to Section F)

E20. What languages other than English are available for parents? (SELECT ALL THAT APPLY.)

1. Spanish
2. Chinese (e.g., Mandarin or Cantonese)
3. French
4. Tagalog
5. Vietnamese
6. Korean
7. Arabic
8. Russian
9. Other (SPECIFY)

COMMENTS (E3): Please provide any comments that you believe would be helpful in understanding your responses above.

SECTION F: DIRECT CERTIFICATION FOR NON CEP SCHOOLS

NOTE: IF ALL SCHOOLS IN THE DISTRICT ARE CEP SCHOOLS, SKIP SECTION F AND CONTINUE TO SECTION G.

HOWEVER, IF ANY OF THE SCHOOLS IN THE DISTRICT, EVEN IF THEY ARE NOT IN THE SAMPLE FOR APEC III, ARE NON CEP SCHOOLS, PLEASE COMPLETE SECTION F.

The next questions are about direct certification, which allows SFAs with non-CEP schools to approve students as eligible for free meals based on information received from other public assistance programs instead of on the basis of an application submitted by the household. Students are generally directly certified by one of three methods: state-level matching, district-level matching, or the letter method.

F1. Does your SFA use direct certification?

1. Yes (Go to F3)
2. No

F2. Why doesn't your SFA participate in direct certification?

NOTE: IF YOUR SFA DOES NOT PARTICIPATE IN DIRECT CERTIFICATION, SKIP TO SECTION G AFTER ANSWERING QUESTIONS F1 AND F2.

F3. In what year did your SFA begin using direct certification? Your best estimate is fine.

2. Don't know/Not sure

With **State-level matching**, a State agency (usually Child Nutrition) has primary responsibility for developing and maintaining a system that matches lists of children in NSLP schools with a list of children in Supplemental Nutrition Assistance Program (SNAP), Temporary Assistance for Needy Families (TANF) or Food Distribution Program on Indian Reservations (FDPIR) households using a common identifier or identifiers. This system can be set up in a variety of ways. Some examples include:

- Districts upload enrollment information into a State-maintained computer or web-based system that conducts a match to a list of children in SNAP households. Students are directly certified on the basis of this match.
- A State agency matches State enrollment information with a State list of children in SNAP households. A list of students directly certified on the basis of this match is forwarded to districts.
- An initial match is conducted by a State agency. A list of matched students is sent to districts, which then verify the matches, get further information on students who are “potential” matches, or conduct other types of secondary matching.

F4. Does your SFA use State-level matching to directly certify students?

1. Yes
2. No

With **district-level matching**, school districts have primary responsibility for matching a list of children enrolled in their schools with a list of children in SNAP households using a common identifier or identifiers. Districts may use manual methods or an automated or electronic system.

F5. Does your SFA use district-level matching to directly certify students?

1. Yes
2. No (Go to F8)

F6. If students are directly certified using district-level matching, is this matching performed manually or electronically, or a combination of both?

1. Manual matching
2. Electronic matching
3. Combination of both

NOTE: IF YOUR SFA USES BOTH STATE AND DISTRICT LEVEL MATCHING, ANSWER QUESTION F7. OTHERWISE SKIP TO F8

F7. When students are directly certified using both state- and district-level matching, what are the reasons your district performs data matching at both the district and the State level? (SELECT ALL THAT APPLY).

1. To confirm State-level data matching results (quality control)
2. To confirm direct certification status of students identified by the State as “potential matches”
3. District preference
4. Statutory requirement
5. Additional check on new enrollments
6. State Agency request
7. Other (SPECIFY)

With the **letter method**, the State mails letters to all SNAP households notifying them of their children’s eligibility for free school meals. Households who return the letters to the school district are certified for school meal benefits without having to fill out an application.

F8. Does your SFA use the letter method to directly certify students?

1. Yes
2. No

COMMENTS (F1): Please provide any comments that you believe would be helpful in understanding your responses above.

SECTION G: VERIFICATION

NOTE: IF ALL SCHOOLS IN THE DISTRICT ARE CEP SCHOOLS, SKIP SECTION G AND CONTINUE TO SECTION H.

HOWEVER, IF ANY OF THE SCHOOLS IN THE DISTRICT, EVEN IF THEY ARE NOT IN THE SAMPLE FOR APEC III, ARE NON CEP SCHOOLS, PLEASE COMPLETE SECTION G.

The next set of questions asks about the process by which your district verifies the information households reported on applications.

G1. Does your SFA conduct verification on applications?

1. Yes
2. No (Go to Section H)

G2. When did your SFA begin to verify applications for school year 2017-2018?

G3. What is your schedule for verification? That is, how often do you complete verification activities on applications during the school year?

1. Ongoing throughout the school year
2. More than once a month/every few weeks
3. Monthly
4. Every few months/quarterly
5. Twice a year
6. Once a year

G4. Does your SFA conduct verification of applications electronically, manually or a combination of both?

- | | |
|---------------------------------------|---|
| 1. Manual/Hardcopy records..... | 1 |
| 2. Automated/Electronic Records | 2 |
| 3. Combination of both | 3 |

G5. Does your SFA conduct a verification of all applications received?

1. Yes (Go to Section H)
2. No

G6. What percentage of applications are selected for verification?

G7. How do you determine which applications are selected for verification?

1. A random sample only (Skip G8 and G9)
2. A focused or error prone sample only (Skip G8 and G9)
3. A mixture of random and focused or error prone
4. Some other way (SPECIFY) (Skip G8 and G9)

G8. What percentage of applications selected for verification were randomly selected?

G9. What percentage of applications selected for verification were a 'focused or error prone' sample?

COMMENTS (G1): Please provide any comments that you believe would be helpful in understanding your responses above.

SECTION H: MEAL COUNTING AND CLAIMING

- H1. For each of the following procedures, record whether your SFA uses a manual process and/or hardcopy records, uses an automated process and/or electronic records, or uses a combination of both:
- a. Point of sale meal counting
 - 1. All schools use manual process/ hardcopy records
 - 2. All schools use automated process/ electronic records
 - 3. Combination manual and automated
 - b. School preparation of meal counts submitted to SFA
 - 1. All schools use manual process/ hardcopy records
 - 2. All schools use automated process/ electronic records
 - 3. Combination manual and automated
 - c. SFA preparation and submission of meal reimbursement claims to state agency
 - 1. All schools use manual process/ hardcopy records
 - 2. All schools use automated process/ electronic records
 - 3. Combination manual and automated
- H2. Describe your procedures or processes in place to ensure accuracy of meal counting and claims submitted.

SECTION I: TRAINING

This section asks about training and technical assistance provided to both SFA and school staff related to processing applications, preparing and serving meals, recording meals as reimbursable, and/or meal counting and claiming.

- I1. During the past 12 months, did you require a mandatory training for your staff at the SFA and/or school staff?
- 1. Yes
 - 2. No (Go to I6)

I2. What was the format of this training? (SELECT ALL THAT APPLY.)

1. Web-based
2. In-person group classes or workshops
3. Self-study
4. One-on-one
5. Hardcopy materials or resource documents
6. Other (SPECIFY)

I3. What specific strategies do you use to train staff? (SELECT ALL THAT APPLY.)

1. Pairing less experienced staff with more experienced staff
2. Use of contractors or senior staff
3. 100% QC of applications (for Non-CEP schools)
4. Using qualified and experienced staff only
5. None in particular
6. Other (SPECIFY)

I4. Are any of the following topics covered in trainings?

Reimbursable Meal component

1. Yes
2. No

Meal/Serving line

1. Yes
2. No

Administrative requirements

1. Yes
2. No

Monitoring requirements

1. Yes
2. No

Direct certification guidelines

1. Yes
2. No

CEP and ISP requirements

1. Yes
2. No

Applications for meal benefits

1. Yes
2. No

Certification for meal benefits

1. Yes
2. No

Preparing and filing monthly claims

- 1. Yes
- 2. No

Recordkeeping and documentation

- 1. Yes
- 2. No

Maintaining confidentiality

- 1. Yes
- 2. No

USDA civil rights requirements

- 1. Yes
- 2. No

Food purchasing

- 1. Yes
- 2. No

Menu planning

- 1. Yes
- 2. No

Food preparation

- 1. Yes
- 2. No

Food safety/food service operations

- 1. Yes
- 2. No

Food waste

- 1. Yes
- 2. No

Nutrition

- 1. Yes
- 2. No

“Smart Snacks”

- 1. Yes
- 2. No

Staff wellness

- 1. Yes
- 2. No

Parent relations

- 1. Yes
- 2. No

Other (SPECIFY)

- 1. Yes
- 2. No

COMMENTS (I1): Please provide any comments that you believe would be helpful in understanding your responses above.

15. What types of staff received training? (SELECT ALL THAT APPLY.)

1. District-level administrators
2. School-level administrators
3. Food Service Director
4. Cafeteria managers
5. Other cafeteria staff
6. Nutritionists (including RDs and RDNs)
7. Other (SPECIFY)

16. During the past 12 months, has your SFA received any technical assistance from your State Agency?

Technical assistance is defined broadly to mean any form of support from the State agency to correct or prevent problems with program compliance or to improve program operations. Technical assistance can cover any aspect of nutrition program operations, such as meal pattern compliance, menus and food production, procurement, financial management, food safety, meal counting and claiming, and eligibility determinations. Technical assistance may be provided by the State in a variety of formats, including by telephone, email, web, or onsite.

1. Yes
2. No (Go to 18)

17. On what topics did you receive technical assistance from your State Agency? (SELECT ALL THAT APPLY.)

New meal pattern requirements

1. Yes
2. No

Defining reimbursable meals

1. Yes
2. No

Using computer/software (not certification tool training)

1. Yes
2. No

Developing menu cycles

1. Yes
2. No

Using standardized recipes

1. Yes
2. No

Implementing Offer vs. Serve

1. Yes
2. No

Controlling portion sizes

- 1. Yes
- 2. No

Documenting use of substitute food

- 1. Yes
- 2. No

Documenting use of left overs

- 1. Yes
- 2. No

Marketing your food program

- 1. Yes
- 2. No

Food purchasing

- 1. Yes
- 2. No

USDA foods

- 1. Yes
- 2. No

Food sanitation/safety

- 1. Yes
- 2. No

Food vendor contracts

- 1. Yes
- 2. No

Budgeting

- 1. Yes
- 2. No

Program Regulations and Procedures

- 1. Yes
- 2. No

Record keeping and reporting

- 1. Yes
- 2. No

Preparing certification materials for additional reimbursement (including certification tool training)

- 1. Yes
- 2. No

Local school wellness policy development and implementation

- 1. Yes
- 2. No

Local School Wellness Program monitoring, assessment and evaluation

- 1. Yes
- 2. No

Other (SPECIFY)

- 1. Yes
- 2. No

COMMENTS (I2): Please provide any comments that you believe would be helpful in understanding your responses above.

These next set of questions are about monitoring visits conducted by your SFA.

- I8. Does your SFA conduct on-site monitoring visits of schools?
1. Yes
 2. No (Go to I13)
- I9. Does your SFA conduct on-site monitoring visits during:
1. Breakfast only
 2. Lunch only
 3. Both breakfast and lunch
 4. Outside of meal service times
- I10. Which areas do your visits cover? (SELECT ALL THAT APPLY.)
1. Meal counting procedures/point of services
 2. Claiming meals as reimbursable or not
 3. Cafeteria/food service practices
 4. Other (SPECIFY)
- I11. What percentage of all the schools in the SFA are visited for on-site monitoring by your SFA in a typical school year?
- I12. How do you determine which schools to select for an on-site monitoring visit?
- I13. Please provide additional information on your review process that will assist us in more fully understanding your process.

SECTION J: EDUCATION AND EXPERIENCE

- J1. How many years of experience did you have working in the NSLP and SBP prior to your position as SFA director?
- J2. How many years of experience do you have as an SFA Director?

J3. What is your highest level of education?

1. Some high school, no diploma
2. High school graduate, diploma or the equivalent (for example: GED)
3. Some college credit, no degree
4. Trade/technical/vocational training
5. Associate degree
6. Bachelor's degree
7. Master's degree
8. Professional degree
9. Doctorate degree
10. Other (SPECIFY)

SECTION K: GENERAL COMMENTS

K1. Please share any relevant comments or suggestions that you would like the study to consider that we have not asked about in this survey.

K2. We would like to learn more contextual information about a sample of SFAs. This would be separate interview by phone at a time that is convenient for you. It is estimated to take about 30 minutes. Would you be interested in being contacted again to participate in this phone interview?

1. Yes
2. No

Thank you for your time and participation. Your feedback is important.

This is a hardcopy version of the web survey for reference only. Please go to [INSERT URL] to complete this SFA Director Survey online. You will need your unique SFA PIN, which was provided in the email you received with the request to complete the survey. Thank you.

If you have any questions or comments please contact us at [INSERT NUMBER] or email us at [INSERT EMAIL].

Third Access, Participation, Eligibility, and Certification Study (APEC-III) Final Report

Volume 4: Appendices – Appendix E. Nonresponse Bias Analysis

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Appendix E

Nonresponse Bias Analysis

As specified in the *Standards and Guidelines for Statistical Surveys* published by the Office of Management and Budget (September 2006; https://www.samhsa.gov/data/sites/default/files/standards_stat_surveys.pdf), a nonresponse bias analysis is required if the overall unit response rate for a survey is less than 80 percent (Guideline 3.2.9). For the various data collection activities conducted under the APEC III, nonresponse could result from failure to collect required data from the sampled SFAs, sampled schools or from the sampled students within participating schools. Table E-1 provides a summary of the percent of SFAs, school, and students for which we obtained usable data for each type of analyses.

This appendix is divided into six sections. Section E.1 summarizes the sample design. Section E.2 summarizes the procedures used to construct the SFA-level, school-level and student-level base weights. Section E.3 discusses the impact of SFA-level nonresponse on estimates and the adjustments made to the weights to moderate potential bias. This is followed by a discussion of the impact of school-level nonresponse on estimates derived from the survey and the adjustments made to the weights to moderate potential bias in Section E.4. Finally, Section E.5 discusses the impact of student-level nonresponse on estimates derived from the survey, and the adjustments made to the student weights to moderate potential biases. Section E.6 a brief summary and conclusions.

Table E-1. Response rates by type of analysis and sampling unit

Type of analysis	Sampling unit	Sample size	Respondents	Non-respondents	Ineligible	Unweighted response rate	Weighted response rate ¹
SFA directors survey	SFA	302	234	68	0	77.5%	79.0%
Certification error in CEP schools	Schools	777	542	235	0	69.8%	71.0%
Aggregation error	Schools	777	628	149	0	80.8%	80.9%
Meal observation error	Schools	777	659	118	0	84.8%	83.9%
Total certification error in non-CEP schools	Student	12,229	3,792	8,437	0	31.0%	33.5%
Reporting/overlapping error in non-CEP schools	Student	12,229	3,541	8,688	0	29.0%	32.4%
Administrative certification error in non-CEP schools	Student	12,229	11,353	876	0	92.8%	96.4%

¹ Weighted response rates are calculated using base weights.

E.1 Sample Design

A multistage stratified probability sample design was used to select the sample of SFAs, schools and students for APEC III. In the initial stage of sampling, a stratified sample of 336 SFAs was initially selected and the strata were based on the CEP-status of the SFA, where an SFA was classified as a “CEP SFA” if at least one of its associated schools participated in CEP; otherwise, the SFA was classified as a “nonCEP SFA.” Within the non-CEP stratum, (a) the six largest SFAs in terms of the total number of students certified for free/reduced price meals were included in the study sample with certainty, and (b) a systematic sample of 186 SFAs was selected from the remaining noncertainty SFAs with probabilities proportionate to the number of students certified for free/reduced price meals in the SFA. Within the CEP stratum, (a) the 23 largest SFAs in terms of a measure of size (MOS) equal to a weighted combination of the number of students certified for free/reduced price meals in nonCEP schools and enrollment in CEP schools were included in the sample with certainty, and (b) a systematic sample of 121 SFAs was selected from the remaining noncertainty SFAs with probabilities proportionate to the MOS. Of the 336 sampled SFAs, 323 (including all 29 certainty SFAs) were successfully confirmed for participation in the study and provided school lists for subsequent stages of sampling and data collection. The sample of 323 participating SFAs was subsequently subsampled to control costs. Of the 294 participating noncertainty SFAs, 273 were randomly selected for further data collection, along with all 29 certainty SFAs, resulting in a final total sample size of 302 SFAs.

In the second stage of sampling, each of the 302 SFAs participating in APEC III provided lists of their eligible schools for sampling purposes. Along with the name and location of the school, the school-level data provided by the SFA included grades covered, CEP status, ISP group within SFA if applicable, enrollment, and number of students eligible for free/reduced price meals. Schools operating a pre-kindergarten program only were deleted since such schools are out-of-scope of APEC III. The final school sampling frame included a total of 16,156 eligible schools of which 9,532 were non-CEP schools and 6,624 were CEP schools. From this sampling frame, 777 schools were randomly selected with probabilities proportionate to a measure of size that depended on the CEP-status of the SFA in which the school is located, the CEP status of the school, the number of the schools in the SFA, and other factors. Of the 777 sampled schools, 499 were non-CEP schools and 278 were CEP schools.

In the third stage of sampling, random samples of students were selected from each of the 499 non-CEP schools from lists of eligible students provided by the participating school. In general, students eligible for sampling were those who submitted an application or were directly certified for free meals for SY 2017-18. Students with no application (paid) or who were not directly certified were not eligible for APEC III. In total, 12,341 students were selected from the 499 non-CEP schools participating in the study

E.2 Construction of Base Weights

E.2.1 SFA Base Weights

Let t denote the SFA sampling stratum ($t = 1$ for CEP SFAs, $t = 2$ for nonCEP SFAs). The probability of selecting SFA a from stratum t for the initial sample is given by the formula:

$$\begin{aligned} P_{ta}^{SFA} &= 1, \text{ if the SFA was selected with certainty;} \\ &= m_t^{nc} S_{ta} / \sum_{i=1}^{M_t^{nc}} S_{ti}, \text{ otherwise,} \end{aligned} \quad (\text{Formula 1})$$

where

$$\begin{aligned} m_t^{nc} &= \text{the number of noncertainty SFAs sampled from stratum } t; \\ M_t^{nc} &= \text{the total number of noncertainty SFAs in stratum } t; \\ S_{ti} &= \text{the measure of size specified for sampling purposes for SFA } i \text{ in stratum } t. \end{aligned}$$

The corresponding initial weight for SFA a in stratum t was therefore computed as:

$$W_{ta}^{SFA} = 1 / P_{ta}^{SFA}. \quad (\text{Formula 2})$$

Of the 336 sampled SFAs, 323 (including all 29 certainty SFAs) were successfully confirmed for participation in the study and provided school lists for subsequent stages of sampling and data collection. This represents an unweighted response rate of 96 percent for study participation. To compensate for the 13 non-participating SFAs, the initial weights given by formula (2) were adjusted (inflated) by the reciprocal of the weighted response rate. Specifically, the adjusted SFA weight for *participating* SFA a in stratum t and certainty status c was computed as:

$$W_{tca}^{ADJ} = W_{tca}^{SFA} \left(\sum_{i=1}^{m_{tc}^{smp}} W_{tci}^{SFA} / \sum_{i=1}^{m_{tc}^{part}} W_{tci}^{SFA} \right) \quad (\text{Formula 3})$$

where

W_{tca}^{SFA} = the initial weight for SFA a in stratum t and certainty status c ,

m_{tc}^{smp} = the number of sampled SFAs in stratum t and certainty status c ,

m_{tc}^{part} = the number of participating SFAs in stratum t and certainty status c .

The sample of 323 participating SFAs was subsequently subsampled to control costs. Of the 294 participating noncertainty SFAs, 273 were randomly selected for further data collection, along with all 29 certainty SFAs, resulting in a final total sample size of 302 SFAs. The final SFA base weight for SFA a in stratum t , which is the basic component of all of the weight calculations, was computed as

$$W_{ta}^{SFA:FIN} = K W_{ta}^{ADJ} \quad (\text{Formula 4})$$

where $K = 1$ for the 29 certainty SFAs, and $K = (294/273)$ for the 273 noncertainty SFAs retained in the sample.

In the absence of nonresponse, the base weights are theoretically unbiased in that they will produce unbiased (or consistent) estimates when used to weight the sample survey results. However, when nonresponse rates are relatively high, use of the base weights to derive estimates from the survey can potentially result in biased estimates. To minimize the potential for nonresponse bias, the standard practice is to apply adjustments to the base weights to compensate for differential nonresponse losses. This is done by identifying relevant subsets of the sample (referred to as “weighting adjustment cells”) within which the statistical adjustments are made.

Nonresponse Adjustment of the SFA Weights

To compensate for sample losses due to SFA nonresponse, the weights of the responding SFAs were adjusted (multiplied) by the reciprocal of the weighted response rate among the eligible SFAs within cells that were expected to be homogeneous with respect to response propensities. A chi

square automatic interaction detector (CHAID) analysis¹ was conducted to identify the appropriate weighting cells.

The full-sample nonresponse adjustment factor for weighting cell h , A_h^{NR} was computed as

$$A_h^{NR} = \sum_{i=1}^{m_h^{smp}} W_{hi}^{SFA:FIN} / \sum_{i=1}^{m_h^{resp}} W_{hi}^{SFA:FIN} \quad (\text{Formula 5})$$

where

- $W_{hi}^{SFA:FIN}$ = the final weight for SFA i in adjustment cell h ,
- m_h^{smp} = the number of sampled SFAs in adjustment cell h ,
- m_h^{resp} = the number of responding SFAs in in adjustment cell h ,

The adjustment factors, A_h^{NR} , were then applied to the full-sample SFA base weights, $W_{hi}^{SFA:FIN}$, of the 234 responding SFAs to obtain the corresponding nonresponse-adjusted SFA weights to be used for analysis:

$$W_{hi}^{SFA:NR} = W_{hi}^{SFA:FIN} A_h^{NR} . \quad (\text{Formula 6})$$

E.2.2 School Base Weights

Let a denote the SFA and b denote the school within the SFA, The initial step in the school weighting process was to assign a base weight to each of the 777 schools in the sample as follows:

$$W_{ab}^{SCH:BW} = W_a^{SFA:NR} / P_{b|a}^{SCH} \quad (\text{Formula 7})$$

where

- $W_a^{SFA:NR}$ = the nonresponse-adjusted weight for SFA a ,
- $P_{b|a}^{SCH}$ = the conditional probability of selecting school b in SFA a .

¹ Magidson, J. (2005). SI-CHAID Users Guide. Statistical Innovations. <https://www.statisticalinnovations.com/wp-content/uploads/SI-CHAIDUsersguide.pdf>

Nonresponse Adjusted School Weights

To compensate for sample losses due to school nonresponse, the weights of the responding schools were adjusted (multiplied) by the reciprocal of the weighted response rate among the eligible schools within cells that were expected to be homogeneous with respect to response propensities. The adjustment process was done separately for each of the three types of school weights, and involved the following steps. First, the school-level base weight computed from formula (7) was assigned to the 777 sampled schools. Next, a Chi Square Automatic Interaction Detector (CHAID) analysis was conducted separately for the three sets of weights to identify appropriate weighting cells. The final adjustment cells denoted by g , and the corresponding weighted response rates, $R_g^{(i)}$, were obtained for each type-of-school weight $i = 1, 2, 3$.

The adjustment factor defined by $A_g^{SCH(i)} = 1 / R_g^{(i)}$ was then applied to the base weight of school a in adjustment cell, $W_{gb}^{SCH:BW}$, to obtain the corresponding nonresponse-adjusted school weight for type-of-school weight $i = 1, 2, 3$ as follows:

$$W_{gb}^{SCH(i):NR} = W_{gb}^{SCH:BW} A_g^{SCH(i)}. \quad (\text{Formula 8})$$

E.2.3 Student Base Weights

Let a denote the SFA, b denote the school within the SFA, and s denote the sampled student within the school. The initial step in the student weighting process was to assign a base weight to each of the 12,341 sampled students as follows:

$$W_{abs}^{STUD:BW} = W_{ab}^{SCH:BW} / P_{s|ab}^{STUD} \quad (\text{Formula 9})$$

where

$W_{ab}^{SCH:BW}$ = the base weight for school b in SFA a from formula (7);

$P_{s|ab}^{STUD}$ = the within-school probability of selecting student s in school b in SFA a .

Ordinarily, the student base weights given by formula (9) would provide the starting point for the calculation of nonresponse-adjustments described in the following sections. However, an examination of the distribution of these weights indicated that there were 14 sampled cases with extremely large weights relative to the weights of other cases in the same region. To reduce the

variability of the weights which can lead to inflated sampling variances, an adjustment known as “weight trimming” was applied to the base weights of the sampled students in this region.² For this purpose, a weight outlier was defined to be a weight that exceeded 4.5 times the average base weight within the specified region. The weights of the outliers were then capped at (i.e., trimmed down to) 4.5 times the average weight. Finally, the resultant weights were adjusted so that the sum of the trimmed weights equaled the sum of the original base weights prior to trimming. In what follows, we denote these trimmed base weights by $W_{abs}^{STUD:TRIM}$. Note that the trimming process was applied to the weights of only one of the seven FNS regions. That is, the trimmed weight for student s in FNS region $r = 1, 2, \dots, 7$, is given by:

$$W_{rs}^{STUD:TRIM} = T_r W_{rs}^{STUD:BW} \quad (\text{Formula 10})$$

where T_1 = the trimming adjustment for FNS region 1, and $T_r = 1$ for regions $r = 2, 3, \dots, 7$.

Nonresponse Adjusted Student Weights

To compensate for sample losses due to student nonresponse, the weights of the responding students were adjusted (multiplied) by the reciprocal of the weighted response rate among the eligible students within cells that were expected to be homogeneous with respect to response propensities. The adjustment process was done separately for each of the three types of student weights, and involved the following steps. First, the student-level trimmed base weight computed from formula (10) was assigned to the 12,341 sampled students. Next, a Chi Square Automatic Interaction Detector (CHAID) analysis was conducted separately for the three sets of weights to identify appropriate weighting cells. The final adjustment cells denoted by g , and the corresponding weighted response rates, $R_g^{(i)}$, were obtained for the three types of student weights denoted by $i = 1, 2, 3$.

² Valliant, R., Dever, J., and Kreuter, F. (2013). Practical Tools for Designing and Weighting Survey Samples. New York, NY: Springer.

The adjustment factor defined by $A_g^{STUD(i)} = 1 / R_g^{(i)}$ was then applied to the trimmed base weight of student s in adjustment cell g , $W_{gs}^{STUD:TRIM}$, to obtain the corresponding nonresponse-adjusted weight for type-of-weight $i = 1, 2, 3$ as follows:

$$W_{gs}^{STUD(i):NR} = W_{gs}^{STUD:TRIM} A_g^{STUD(i)}. \quad (\text{Formula 11})$$

E.3 Impact of SFA Nonresponse

E.3.1 Response Rates by Selected SFA Characteristics

To examine the extent to which missing data resulting from nonresponse are “missing at random,” we calculated response rates for subsets of the sample based on selected characteristics of the sampled SFAs. These characteristics are limited by the information available for sample selection and include variables such as CEP status, FNS Region, number of schools, type of SFA, student enrollment size, percent of CEP SFA, percent of CEP students, number of eligible free and reduced price students, participation in Provision 2/3, verification status, including exemption from verification. Results are summarized in Table E-2. In addition to the unweighted and weighted response rates, the p-value for a test of association between response rates and levels of the given characteristic is also shown. A p -value of 0.05 or less for the test of association indicates that response rates differ significantly across the various levels of the given characteristic, which could potentially lead to biases if not accounted for in weighting. As can be seen in the tables, only the response rates by “percent of free/reduced price eligible students” categories varied significantly, where SFAs with percent of free/reduced price eligible students between 50 and 75 percent had a much lower response rate than other SFAs.

Table E-2. SFA response rates by selected characteristics

SFA characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Sample size				Unwtd. resp. rate (%)	Wtd. resp. rate (%)*	p-value†
Total	Resp.	Non- resp.	Incl.				
Overall	302	234	68	0	77.48%	79.02%	-
CEP status							0.7559
1: CEP	132	104	28	0	78.79%	75.93%	
2: Non-CEP	170	130	40	0	76.47%	79.58%	
At least one school in SFA is CEP							0.8619
1: CEP	156	118	38	0	75.64%	78.64%	
2: Non-CEP	146	116	30	0	79.45%	80.62%	
Student enrollment							0.7514
1: 1 - 999	22	15	7	0	68.18%	79.65%	
2: 1000 - 2499	31	22	9	0	70.97%	71.56%	
3: 2500 - 4999	47	41	6	0	87.23%	92.03%	
4: 5000 - 9999	41	31	10	0	75.61%	76.12%	
5: 10000 - 24999	55	41	14	0	74.55%	68.52%	
6: 25000 - 99999	82	63	19	0	76.83%	81.18%	
7: > 100000	24	21	3	0	87.50%	86.86%	
FNS region							0.317
1 Northeast	22	16	6	0	72.73%	92.53%	
2 Mid-Atlantic	29	23	6	0	79.31%	95.99%	
3 Southeast	73	60	13	0	82.19%	89.59%	
4 Midwest	45	33	12	0	73.33%	72.32%	
5 Southwest	57	43	14	0	75.44%	50.35%	
6 Mountain Plains	23	18	5	0	78.26%	75.80%	
7 Western	53	41	12	0	77.36%	71.92%	
Number of schools							0.999
1: 1 - 4	50	34	16	0	68.00%	79.01%	
2: 5 - 9	45	38	7	0	84.44%	80.14%	
3: 10 - 49	122	96	26	0	78.69%	77.48%	
4: 50 - 99	44	32	12	0	72.73%	72.71%	
5: > 100	41	34	7	0	82.93%	86.30%	
SFA has school operating provision 2/3							0.890
0: NO	274	211	63	0	77.01%	78.99%	
1: YES	28	23	5	0	82.14%	80.72%	

Table E-2. SFA response rates by selected characteristics (continued)

SFA characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Sample size				Unwtd. resp. rate (%)	Wtd. resp. rate (%)*	p-value†
	Total	Resp.	Non- resp.	Incl.			
ALL schools and/or RCCIs are exempt from verification							0.506
0: NO	253	201	52	0	79.45%	79.53%	
1: YES	49	33	16	0	67.35%	70.38%	
Direct verification was not conducted in the SFA							0.923
0: NO	185	146	39	0	78.92%	79.41%	
1: YES	117	88	29	0	75.21%	78.62%	
Standard type of verification process used							0.883
0: NO	104	77	27	0	74.04%	80.31%	
1: YES	198	157	41	0	79.29%	78.42%	
Alternate two type of verification process used							0.504
0: NO	272	210	62	0	77.21%	78.76%	
1: YES	30	24	6	0	80.00%	87.10%	
Was verification performed and completed by November 15th?							0.797
0: NO	75	50	25	0	66.67%	81.29%	
1: YES	227	184	43	0	81.06%	78.49%	
Was verification performed and completed after November 15th?							0.598
0: NO	281	221	60	0	78.65%	78.19%	
1: YES	21	13	8	0	61.90%	84.94%	
Type of SFA							-
0: not public school	3	3	0	0	100.00%	100.00%	
1: public school	299	231	68	0	77.26%	79.00%	
Number of eligible free and reduced price students							0.956
1: 0	47	33	14	0	70.21%	75.07%	
2: 1 - 1000	46	34	12	0	73.91%	78.36%	
3: 1001 - 5000	77	65	12	0	84.42%	83.70%	
4: 5001 - 20000	73	55	18	0	75.34%	74.36%	
5: > 20000	59	47	12	0	79.66%	78.99%	
Percent of free/reduced price eligible students							0.002
0: 0	47	33	14	0	70.21%	75.07%	
1: < 25%	27	24	3	0	88.89%	97.19%	
2: 25% - < 50%	80	66	14	0	82.50%	73.28%	
3: 50% - < 75%	103	79	24	0	76.70%	62.79%	
4: >= 75%	45	32	13	0	71.11%	92.36%	

Table E-2. SFA response rates by selected characteristics (continued)

SFA characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Sample size				Unwtd. resp. rate (%)	Wtd. resp. rate (%)*	p-value†
	Total	Resp.	Non-resp.	Inel.			
Percent of CEP SFA							0.271
0: 0	170	130	40	0	76.47%	79.58%	
1: < 25%	22	20	2	0	90.91%	98.51%	
2: 25% - < 50%	19	16	3	0	84.21%	70.52%	
3: 50% - < 75%	17	14	3	0	82.35%	77.19%	
4: 75% - < 100%	15	12	3	0	80.00%	95.18%	
5: >= 100%	59	42	17	0	71.19%	65.30%	
Percent of CEP students							0.356
0: missing	170	130	40	0	76.47%	79.58%	
1: < 25%	30	26	4	0	86.67%	91.81%	
2: 25% - < 50%	17	15	2	0	88.24%	80.56%	
3: 50% - < 100%	30	22	8	0	73.33%	72.75%	
4: >= 100%	55	41	14	0	74.55%	67.76%	

* Weighted response rates are calculated using base weights.

† For test of association between response status and indicated characteristic.

E.3.2 Comparison of Responding and Nonresponding SFAs by Selected Characteristics

Base-weighted distributions of responding and nonresponding SFAs were calculated for the same set of variables for which response rates were summarized in Table E-2. These distributions, which are presented in Table E-3, provide an alternative but equivalent way of examining response rates within selected subgroups. The base-weighted distributions of responding SFAs (respondent sample) are compared with the corresponding base-weighted distributions of the total sample to obtain a measure of the potential impact of SFA-level nonresponse on the survey-based estimates. For example, the difference between the base-weighted estimate of the percentage of *responding* SFAs with a particular characteristic and the corresponding base-weighted estimate for all (eligible) sampled SFAs provides an indication of the bias that might occur in weighted estimates if no adjustments are made to compensate for nonresponse.

For each set of base-weighted percentages given in the columns under the heading “base weighted distribution” of Table E-3, the relative bias (defined to be the difference between the base-weighted estimate for the respondent sample and the corresponding base-weighted estimate for the total sample, expressed as a percentage of the base-weighted estimate for the total sample) is shown. The *p*-value shown to the right of the relative bias column corresponds to a test of the hypothesis that the weighted distribution of the respondent sample is the same as the distribution of the total sample for the given characteristic. A *p*-value of 0.05 or less indicates that the two distributions are significantly different, which would suggest that the distribution of respondents is significantly different from that of the nonrespondents. (The tests associated with the *p*-values shown in the *last* three column of these tables are discussed later in Section E.3.4.)

As expected, the results in Table E-3 are consistent with those summarized in Table E-2. Except for “percent of free/reduced price eligible students”, there are no significant differences between the distributions of the responding and nonresponding centers for any of the variables given in the tables.

Table E-3. Comparison of responding and nonresponding SFAs by selected characteristics

SFA characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Base weighted distribution (%)					NR-adj wt. dist (%)		
	Total	Resp.	Non- resp.	Rel. bias ¹	P-value ²	Resp.	Rel. bias ³	P-value ⁴
CEP status	100.0	100.0	100.0		0.7559	100.0		0.1791
1: CEP	15.21	14.61	17.45	-3.91		13.90	-8.61	
2: Non-CEP	84.79	85.39	82.55	0.70		86.10	1.54	
At least one school in SFA is CEP	100.0	100.0	100.0		0.8619	100.0		-
1: CEP	80.71	80.32	82.18	-0.48		80.71	0.00	
2: Non-CEP	19.29	19.68	17.82	2.02		19.29	0.00	
Student enrollment	100.0	100.0	100.0		0.7514	100.0		0.8266
1: 1 - 999	56.84	57.29	55.14	0.79		56.85	0.01	
2: 1000 - 2499	19.80	17.93	26.84	-9.44		17.90	-9.60	
3: 2500 - 4999	12.67	14.76	4.81	16.46		15.03	18.64	
4: 5000 - 9999	4.67	4.50	5.32	-3.68		4.55	-2.49	
5: 10000 - 24999	4.19	3.63	6.29	-13.29		3.73	-11.06	
6: 25000 - 99999	1.66	1.71	1.49	2.73		1.76	5.90	
7: > 100000	0.16	0.18	0.10	9.92		0.18	9.39	
FNS Region	100.0	100.0	100.0		0.3167	100.0		0.4795
1 Northeast	23.56	27.58	8.38	17.10		27.06	14.89	
2 Mid-Atlantic	11.68	14.19	2.23	21.48		14.66	25.44	
3 Southeast	9.27	10.51	4.60	13.37		10.06	8.46	
4 Midwest	20.77	19.01	27.41	-8.48		19.20	-7.55	
5 Southwest	13.10	8.35	31.01	-36.29		8.98	-31.48	
6 Mountain Plains	13.91	13.34	16.04	-4.08		13.27	-4.60	
7 Western	7.70	7.01	10.31	-8.99		6.78	-12.06	
Number of schools	100.0	100.0	100.0		0.9989	100.0		0.9998
1: 1 - 4	69.20	69.19	69.25	-0.02		69.23	0.04	
2: 5 - 9	18.54	18.80	17.55	1.41		18.48	-0.29	
3: 10 - 49	11.18	10.97	12.01	-1.95		11.21	0.20	
4: 50 - 99	0.75	0.69	0.97	-7.98		0.71	-5.43	
5: > 100	0.33	0.36	0.21	9.21		0.37	13.70	
SFA has school operating provision 2/3	100.0	100.0	100.0		0.8899	100.0		0.5964
0: NO	98.00	97.95	98.16	-0.04		97.80	-0.20	
1: YES	2.00	2.05	1.84	2.15		2.20	10.02	

Table E-3. Comparison of responding and nonresponding SFAs by selected characteristics (continued)

SFA characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Base weighted distribution (%)					NR-adj wt. dist (%)		
	Total	Resp.	Non- resp.	Rel. bias ¹	P-value ²	Resp.	Rel. bias ³	P-value ⁴
ALL schools and/or RCCIs are exempt from verification	100.0	100.0	100.0		0.5062	100.0		0.274
0: NO	94.44	95.05	92.15	0.64		95.22	0.83	
1: YES	5.56	4.95	7.85	-10.93		4.78	-14.05	
Direct verification was not conducted in the SFA	100.0	100.0	100.0		0.9226	100.0		0.9035
0: NO	50.98	51.23	50.04	0.49		51.38	0.78	
1: YES	49.02	48.77	49.96	-0.51		48.62	-0.81	
Standard type of verification process used	100.0	100.0	100.0		0.8829	100.0		0.937
0: NO	31.82	32.34	29.87	1.63		32.13	0.96	
1: YES	68.18	67.66	70.13	-0.76		67.87	-0.45	
Alternate two type of verification process used	100.0	100.0	100.0		0.5041	100.0		0.5841
0: NO	96.92	96.60	98.10	-0.33		96.68	-0.24	
1: YES	3.08	3.40	1.90	10.22		3.32	7.60	
Was verification performed and completed by November 15th?	100.0	100.0	100.0		0.7973	100.0		0.8438
0: NO	18.99	19.53	16.93	2.87		19.39	2.11	
1: YES	81.01	80.47	83.07	-0.67		80.61	-0.50	
Was verification performed and completed after November 15th?	100.0	100.0	100.0		0.5981	100.0		0.5959
0: NO	87.70	86.78	91.17	-1.05		86.75	-1.08	
1: YES	12.30	13.22	8.83	7.48		13.25	7.71	
Type of SFA	100.0	100.0	100.0		0.5981	100.0		0.0745
0: not public school	0.08	0.11	.	26.55		0.13	54.29	
1: public school	99.92	99.89	100.00	-0.02		99.87	-0.05	
Number of eligible free and reduced price students	100.0	100.0	100.0		0.9563	100.0		0.8572
1: 0	6.19	5.88	7.36	-5.00		5.73	-7.35	
2: 1 - 1000	70.63	70.03	72.87	-0.84		69.60	-1.46	
3: 1001 - 5000	18.85	19.97	14.65	5.92		20.46	8.52	
4: 5001 - 20000	3.60	3.39	4.40	-5.90		3.48	-3.40	
5: > 20000	0.73	0.73	0.73	-0.04		0.74	0.34	

Table E-3. Comparison of responding and nonresponding SFAs by selected characteristics (continued)

SFA characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Base weighted distribution (%)					NR-adj wt. dist (%)		
	Total	Resp.	Non- resp.	Rel. bias ¹	P-value ²	Resp.	Rel. bias ³	P-value ⁴
Percent of free/reduced price eligible students	100.0	100.0	100.0		0.0017	100.0		0.1365
0: 0	6.19	5.88	7.36	-5.00		5.73	-7.35	
1: < 25%	26.44	32.51	3.54	22.99		32.58	23.23	
2: 25% - < 50%	33.12	30.71	42.17	-7.26		30.16	-8.91	
3: 50% - < 75%	24.44	19.42	43.35	-20.54		20.22	-17.26	
4: >= 75%	9.82	11.48	3.58	16.88		11.30	15.11	
Percent of CEP SFA	100.0	100.0	100.0		0.271	100.0		0.3734
0: 0	84.79	85.39	82.55	0.70		86.10	1.54	
1: < 25%	3.43	4.28	0.24	24.66		3.89	13.21	
2: 25% - < 50%	1.01	0.90	1.42	-10.76		0.93	-8.16	
3: 50% - < 75%	1.17	1.14	1.27	-2.32		1.06	-9.41	
4: 75% - < 100%	0.95	1.15	0.22	20.45		1.06	11.28	
5: >= 100%	8.64	7.14	14.29	-17.36		6.96	-19.41	
Percent of CEP students	100.0	100.0	100.0		0.356	100.0		0.6586
0: missing	84.79	85.39	82.55	0.70		-	-	
1: < 25%	4.18	4.86	1.63	16.19		5.71	36.57	
2: 25% - < 50%	1.17	1.19	1.08	1.95		1.38	18.31	
3: 50% - < 100%	1.74	1.61	2.27	-7.94		1.87	7.07	
4: >= 100%	8.11	6.96	12.47	-14.25		8.63	6.33	

¹ Relative bias defined to be $100 \times (B-A)/A$, where A = base-weighted estimate for total sample and B = base-weighted estimate for respondent sample.

² Test comparing distribution of total sample versus respondent sample using base weights.

³ Relative bias defined to be $100 \times (C-A)/A$, where A = base-weighted estimate for total sample and C = nonresponse-adjusted estimate for respondent sample

⁴ Test comparing distribution of respondent sample using nonresponse-adjusted weights with distribution of total sample using base weights.

E.3.3 Derivation of Nonresponse-Adjusted Weights (SFAs)

As noted in the previous section, the base-weighted distribution of the responding SFAs did not differ significantly from the total sample for most of the characteristics considered in the analysis. Despite the lack of statistical significance, there are noticeable differences that could potentially impact the estimates derived from the survey. For example, from Table E-3, it can be seen that a smaller percentage of the nonresponding SFAs were from Northeast region (8 %) compared with the responding centers (28 %). Similarly a smaller percentage of the nonresponding SFAs were from Mid-Atlantic region (2 %) compared with the responding centers (14 %).

Weighting adjustments are used to compensate for any distributional differences resulting from differential response rates. To be effective in reducing potential nonresponse biases, the nonresponse adjustment should be made within subsets of centers (or “weighting cells”) that (a) have similar propensities for responding to the survey and (b) are expected to be related to the outcomes from the survey. We used a CHAID³ analysis (Chi-square Automatic Interaction Detector) to identify subsets of SFAs in which the predicted probabilities of response were similar. The variables used to create the weight adjustment cells are those available for sample selection. The output from the CHAID analysis was a tree diagram that defined the final cells used in the nonresponse adjustment.

Four nonresponse adjustment cells were determined by the CHAID analysis for the SFA weights. The overall weighted response rate was 79 percent. Within the adjustment cells, the weighted response rates varied from 53 to 99 percent.

The nonresponse-adjusted weight, w_{ki}^{NR} , for the i th responding SFA in weighting cell k was computed as:

$$w_{ki}^{NR} = (1/R_k) w_{ki}^{base},$$

³ Magidson, J. (2005). SI-CHAID Users Guide. Statistical Innovations. <https://www.statisticalinnovations.com/wp-content/uploads/SI-CHAIDUsersguide.pdf>

where w_{ki}^{base} is the base weight for the i th responding center in weighting class k , and R_k is the base-weighted response rate for centers in weighting class k . The w_{ki}^{NR} 's defined above are the nonresponse-adjusted SFA weights.

E.3.4 Comparisons of Selected Distributions Before and After Nonresponse Adjustment (SFAs)

The last three columns of Table E-3 summarize results related to the weighted distributions of the respondent sample using the nonresponse-adjusted weights described above. The first column under the heading “NR-adj. wt. dist.” shows the (nonresponse-adjusted) weighted distributions for the listed characteristics. The next column shows the corresponding relative bias. The last column shows the p -value for a test comparing the nonresponse-adjusted weighted distribution with the corresponding base-weighted distribution in the column under the heading “Base weighted distribution.” As can be seen in these tables, there is generally very little difference between the base-weighted (column 1) and nonresponse-adjusted weighted distributions (column 6). This suggests that the weight adjustments made to account for SFA-level nonresponse mitigates potential nonresponse bias on SFA-level estimates.

E.4 Impact of School Nonresponse

E.4.1 Response Rates by Selected School Characteristics

To examine the extent to which missing data resulting from nonresponse are “missing at random,” we calculated response rates for subsets of the sample based on selected characteristics of the sampled schools. These characteristics are limited by the information available for sample selection and include variables such as school NSLP Status, student enrollment size, school type, type of SFA, FNS Region, total students in school, total students eligible for free/reduced price and others. Results are summarized in Tables E-4, E-5 and E-6 separately for the three versions of the school weights to be used in analysis; i.e., (a) weight for analysis of certification error in CEP schools, (b) weights for analysis of aggregation error, and (c) weights for analysis of meal observation errors. In addition to the unweighted and weighted response rates, the p -value for a test of association between response rates and levels of the given characteristic is also shown. A p -value of 0.05 or less for the test of association indicates that response rates differ significantly across the various levels of

the given characteristic, which could potentially lead to biases if not accounted for in weighting. As can be seen in Table E-4 the response rates by categories of variables for “school is CEP”, “at least one school in SFA is CEP” and “school NSLP Status” varied significantly. Schools with NSLP Status “Yes” has lower response rates than those with NSLP status of “No”. Private schools have higher response rates than non-private schools. In both Tables E-5 and E-6 the response rates by “school type” categories varied significantly, where middle schools had lower response rates compared to other school types.

Table E-4. School response rates for certification error in CEP schools by selected characteristics

School characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Sample size				Unwtd.resp. rate (%)	Wtd. resp. rate (%)*	p-value†
Total	Resp.	Non-resp.	Incl.				
Overall	777	542	235	0	69.8%	71.0%	—
School is CEP							<.0001
N = No school in SFA is CEP	499	412	87	0	82.6%	79.9%	
Y = At least one school in SFA is CEP	278	130	148	0	46.8%	44.8%	
At least one school in SFA is CEP							0.0032
N = No school in SFA is CEP	415	339	76	0	81.7%	79.2%	
Y = At least one school in SFA is CEP	362	203	159	0	56.1%	55.5%	
Student enrollment							0.2189
1: <1000	33	19	14	0	57.6%	54.1%	
2: 1000 - 9999	287	199	88	0	69.3%	74.6%	
3: > 10000	457	324	133	0	70.9%	74.9%	
FNS region							0.482
1 Northeast	71	35	36	0	49.3%	61.8%	
2 Mid-Atlantic	72	44	28	0	61.1%	51.0%	
3 Southeast	181	144	37	0	79.6%	78.0%	
4 Midwest	102	66	36	0	64.7%	74.3%	
5 Southwest	141	84	57	0	59.6%	64.1%	
6 Mountain Plains	60	54	6	0	90.0%	73.7%	
7 Western	150	115	35	0	76.7%	82.1%	
School NSLP status							<.0001
1: Yes	54	10	44	0	18.5%	20.7%	
2: No	723	532	191	0	73.6%	73.5%	
School type							0.122
1: 1=Elementary	415	279	136	0	67.2%	72.1%	
2: 2=Middle	152	108	44	0	71.1%	60.8%	
3: 3=Secondary/combined/ungraded	210	155	55	0	73.8%	77.7%	
Total students in school							0.117
1: <450	177	113	64	0	63.8%	65.5%	
2: 450 - 699	236	160	76	0	67.8%	73.1%	
3: 700 - 999	182	132	50	0	72.5%	77.1%	
4: >= 1000	182	137	45	0	75.3%	81.7%	

Table E-4. School response rates for certification error in CEP schools by selected characteristics (continued)

School characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Sample size				Unwtd.resp. rate (%)	Wtd. resp. rate (%)*	p-value†
	Total	Resp.	Non-resp.	Inel.			
Total students eligible for free/reduced price meals in school							0.435
1: 0 - 249	182	137	45	0	75.3%	74.3%	
2: 250 - 449	219	147	72	0	67.1%	65.9%	
3: 450 - 699	192	135	57	0	70.3%	69.8%	
4: >= 700	184	123	61	0	66.8%	64.8%	
Percent eligible for free/reduced price meals in school							0.123
1: < 25%	47	39	8	0	83.0%	73.2%	
2: 25% - < 50%	174	136	38	0	78.2%	75.0%	
3: 50% - < 75%	226	175	51	0	77.4%	79.3%	
4: 75% >= 75%	330	192	138	0	58.2%	56.1%	

* Weighted response rates are calculated using base weights.

† For test of association between response status and indicated characteristic.

Table E-5. School response rates for aggregation error by selected characteristics

School characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Sample size				Unwtd.resp. rate (%)	Wtd. resp. rate (%)*	p-value†
	Total	Resp.	Non-resp.	Inel.			
Overall	777	628	149	0	80.8%	80.9%	-
School is CEP							0.8757
N = No school in SFA is CEP	499	411	88	0	82.4%	81.1%	
Y = At least one school in SFA is CEP	278	217	61	0	78.1%	80.3%	
At least one school in SFA is CEP							0.6464
N = No school in SFA is CEP	415	337	78	0	81.2%	80.0%	
Y = At least one school in SFA is CEP	362	291	71	0	80.4%	82.6%	
Student enrollment							0.7264
1: <1000	33	26	7	0	78.8%	75.2%	
2: 1000 - 9999	287	230	57	0	80.1%	79.9%	
3: > 10000	457	372	85	0	81.4%	84.3%	
FNS region							0.090
1 Northeast	71	34	37	0	47.9%	58.0%	
2 Mid-Atlantic	72	67	5	0	93.1%	96.7%	
3 Southeast	181	146	35	0	80.7%	81.2%	
4 Midwest	102	80	22	0	78.4%	84.6%	
5 Southwest	141	115	26	0	81.6%	80.9%	
6 Mountain Plains	60	53	7	0	88.3%	70.4%	
7 Western	150	133	17	0	88.7%	91.4%	
School NSLP status							0.745
1: Yes	54	40	14	0	74.1%	78.2%	
2: No	723	588	135	0	81.3%	81.1%	
School type							0.001
1: 1=Elementary	415	344	71	0	82.9%	85.7%	
2: 2=Middle	152	118	34	0	77.6%	65.7%	
3: 3=Secondary/combined/ungraded	210	166	44	0	79.0%	82.4%	
Total students in school							0.803
1: <450	177	146	31	0	82.5%	80.6%	
2: 450 - 699	236	193	43	0	81.8%	84.0%	
3: 700 - 999	182	148	34	0	81.3%	79.0%	
4: >= 1000	182	141	41	0	77.5%	77.0%	

Table E-5. School response rates for aggregation error by selected characteristics (continued)

School characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Sample size				Unwtd.resp. rate (%)	Wtd. resp. rate (%)*	p-value†
	Total	Resp.	Non-resp.	Inel.			
Total students eligible for free/reduced price meals in school							0.978
1: 0 - 249	182	148	34	0	81.3%	80.4%	
2: 250 - 449	219	182	37	0	83.1%	82.4%	
3: 450 - 699	192	153	39	0	79.7%	80.1%	
4: >= 700	184	145	39	0	78.8%	81.3%	
Percent eligible for free/reduced price meals in school							0.205
1: < 25%	47	37	10	0	78.7%	84.7%	
2: 25% - < 50%	174	135	39	0	77.6%	74.1%	
3: 50% - < 75%	226	192	34	0	85.0%	88.2%	
4: 75% - < 100%	330	264	66	0	80.0%	80.7%	

* Weighted response rates are calculated using base weights.

† For test of association between response status and indicated characteristic.

Table E-6. School response rates for meal observation error by selected characteristics

School characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Sample size				Unwtd.resp. rate (%)	Wtd. resp. rate (%)*	p-value†
Total	Resp.	Non-resp.	Inel.				
Overall	777	659	118	0	84.8%	83.9%	–
School is CEP							0.5243
N = No school in SFA is CEP	499	419	80	0	84.0%	83.1%	
Y = At least one school in SFA is CEP	278	240	38	0	86.3%	86.3%	
At least one school in SFA is CEP							0.3268
N = No school in SFA is CEP	415	343	72	0	82.7%	82.1%	
Y = At least one school in SFA is CEP	362	316	46	0	87.3%	87.2%	
Student enrollment							0.7935
1: <1000	33	28	5	0	84.8%	78.2%	
2: 1000 - 9999	287	244	43	0	85.0%	86.0%	
3: > 10000	457	387	70	0	84.7%	84.4%	
FNS region							0.572
1 Northeast	71	50	21	0	70.4%	74.2%	
2 Mid-Atlantic	72	68	4	0	94.4%	98.3%	
3 Southeast	181	160	21	0	88.4%	87.8%	
4 Midwest	102	87	15	0	85.3%	85.9%	
5 Southwest	141	117	24	0	83.0%	87.0%	
6 Mountain Plains	60	56	4	0	93.3%	75.9%	
7 Western	150	121	29	0	80.7%	80.0%	
School NSLP status							0.542
1: Yes	54	38	16	0	70.4%	79.4%	
2: No	723	621	102	0	85.9%	84.1%	
School type							0.003
1: 1=Elementary	415	358	57	0	86.3%	88.1%	
2: 2=Middle	152	126	26	0	82.9%	69.5%	
3: 3=Secondary/combined/ungraded	210	175	35	0	83.3%	86.2%	
Total students in school							0.690
1: <450	177	148	29	0	83.6%	82.2%	
2: 450 - 699	236	204	32	0	86.4%	88.0%	
3: 700 - 999	182	159	23	0	87.4%	81.6%	
4: >= 1000	182	148	34	0	81.3%	84.0%	

Table E-6. School response rates for meal observation error by selected characteristics (continued)

School characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Sample size				Unwtd.resp. rate (%)	Wtd. resp. rate (%)*	p-value†
	Total	Resp.	Non-resp.	Inel.			
Total students eligible for free/reduced price meals in school							0.836
1: 0 - 249	182	153	29	0	84.1%	82.8%	
2: 250 - 449	219	187	32	0	85.4%	84.2%	
3: 450 - 699	192	169	23	0	88.0%	87.9%	
4: >= 700	184	150	34	0	81.5%	83.5%	
Percent eligible for free/reduced price meals in school							0.352
1: < 25%	47	41	6	0	87.2%	87.3%	
2: 25% - < 50%	174	143	31	0	82.2%	78.1%	
3: 50% - < 75%	226	195	31	0	86.3%	89.1%	
4: 75% - < 100%	330	280	50	0	84.8%	84.7%	

* Weighted response rates are calculated using base weights.

† For test of association between response status and indicated characteristic.

E.4.2 Comparison of Responding and Nonresponding Schools by Selected Characteristics

Base-weighted distributions of responding and nonresponding schools were calculated for the same set of variables for which response rates were summarized in Tables E-4, E-5, and E-6. These distributions, which are presented in Tables E-7, E-8 and E-9, provide an alternative but equivalent way of examining response rates within selected subgroups. The base-weighted distributions of responding schools (respondent sample) are compared with the corresponding base-weighted distributions of the total sample to obtain a measure of the potential impact of school-level nonresponse on the survey-based estimates. For example, the difference between the base-weighted estimate of the percentage of *responding* schools with a particular characteristic and the corresponding base-weighted estimate for all (eligible) sampled schools provides an indication of the bias that might occur in weighted estimates if no adjustments are made to compensate for nonresponse.

For each set of base-weighted percentages given in the columns under the heading “base weighted distribution” of Tables E-7, E-8 and E-9, the relative bias (defined to be the difference between the base-weighted estimate for the respondent sample and the corresponding base-weighted estimate for the total sample, expressed as a percentage of the base-weighted estimate for the total sample) is shown. The *p*-value shown to the right of the relative bias column corresponds to a test of the hypothesis that the weighted distribution of the respondent sample is the same as the distribution of the total sample for the given characteristic. A *p*-value of 0.05 or less indicates that the two distributions are significantly different, which would suggest that the distribution of respondents is significantly different from that of the nonrespondents. (The tests associated with the *p*-values shown in the *last* three column of these tables are discussed later in Section E.4.4.)

As expected, the results in Tables E-7, E-8 and E-9 are consistent with those summarized in Tables E-4, E-5, and E-6. Similar to Table E-4 there are significant differences between the distributions of the responding and nonresponding schools for variables for “school is CEP”, “at least one school in SFA is CEP” and “school NSLP Status” as shown in Table E-7. Nonresponding schools tend to NSLP Status “Yes” and high responding schools tend to be private schools. As shown in both Tables E-8 and E-9 there are no significant differences between the distributions of the responding and nonresponding schools for all other variables except for “school type”. For example, for the aggregation error in CEP schools weights (Table E-8), 37 percent of the nonresponding schools are middle schools, compared with 17 percent of the responding middle schools. A similar pattern holds for the meal observation error in CEP schools weights.

Table E-7. Comparison of responding and nonresponding schools for estimation of certification errors in CEP schools by selected characteristics

School characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Base weighted distribution (%)					NR-adj wt. dist (%)		
	Total	Resp.	Non- resp.	Rel. bias ¹	P-value ²	Resp.	Rel. bias ³	P-value ⁴
School is CEP	100.0	100.0	100.0		<.0001	100.0		1
N = No school in SFA is CEP	74.79	84.11	51.94	12.46		74.79	0.00	
Y = At least one school in SFA is CEP	25.21	15.89	48.06	-36.97		25.21	0.00	
At least one school in SFA is CEP	100.0	100.0	100.0		0.0032	100.0		0.6583
N = No school in SFA is CEP	65.63	73.15	47.19	11.47		65.10	-0.80	
Y = At least one school in SFA is CEP	34.37	26.85	52.81	-21.89		34.90	1.52	
Student enrollment	100.0	100.0	100.0		0.2189	100.0		0.2407
1: <1000	18.09	13.79	28.63	-23.78		13.30	-26.48	
2: 1000 - 9999	39.14	41.10	34.33	5.02		43.60	11.40	
3: > 10000	42.77	45.11	37.04	5.46		43.10	0.77	
FNS region	100.0	100.0	100.0		0.482	100.0		0.791
1 Northeast	12.07	10.51	15.89	-12.92		12.38	2.57	
2 Mid-Atlantic	9.42	6.77	15.93	-28.20		7.04	-25.25	
3 Southeast	16.56	18.18	12.58	9.81		17.52	5.85	
4 Midwest	17.43	18.23	15.45	4.63		18.72	7.42	
5 Southwest	14.73	13.29	18.27	-9.78		15.71	6.62	
6 Mountain Plains	12.16	12.63	11.02	3.82		11.26	-7.43	
7 Western	17.63	20.40	10.87	15.66		17.37	-1.50	
School NSLP status	100.0	100.0	100.0		<.0001	100.0		0.749
1: Yes	4.70	1.37	12.88	-70.89		4.74	0.86	
2: No	95.30	98.63	87.12	3.50		95.26	-0.04	
School type	100.0	100.0	100.0		0.122	100.0		0.423
1: 1=Elementary	58.46	59.38	56.20	1.58		60.89	4.16	
2: 2=Middle	20.32	17.40	27.47	-14.36		17.92	-11.79	
3: 3=Secondary/combined/ungraded	21.22	23.22	16.33	9.40		21.19	-0.17	
Total students in school	100.0	100.0	100.0		0.117	100.0		0.031
1: <450	46.93	43.27	55.89	-7.79		42.06	-10.38	
2: 450 - 699	27.41	28.21	25.47	2.90		31.17	13.70	
3: 700 - 999	15.38	16.70	12.16	8.55		16.18	5.20	
4: >= 1000	10.27	11.82	6.48	15.06		10.59	3.06	

Table E-7. Comparison of responding and nonresponding schools for estimation of certification errors in CEP schools by selected characteristics (continued)

School characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Base weighted distribution (%)					NR-adj wt. dist (%)		
	Total	Resp.	Non-resp.	Rel. bias ¹	P-value ²	Resp.	Rel. bias ³	P-value ⁴
Total students eligible for free/reduced price meals in school	100.0	100.0	100.0		0.435	100.0		0.492
1: 0 - 249	55.06	57.62	48.77	4.66		52.68	-4.31	
2: 250 - 449	23.78	22.07	27.98	-7.21		25.06	5.37	
3: 450 - 699	14.22	13.97	14.82	-1.72		15.50	8.99	
4: >= 700	6.94	6.33	8.43	-8.77		6.76	-2.64	
Percent eligible for free/reduced price meals in school	100.0	100.0	100.0		0.123	100.0		0.338
1: < 25%	12.84	13.23	11.86	3.09		10.70	-16.62	
2: 25% - < 50%	34.89	36.85	30.11	5.60		33.82	-3.07	
3: 50% - < 75%	26.40	29.47	18.86	11.65		29.95	13.46	
4: 75% - < 100%	25.87	20.45	39.16	-20.97		25.52	-1.35	

¹ Relative bias defined to be $100 \times (B-A)/A$, where A = base-weighted estimate for total sample and B = base-weighted estimate for respondent sample.

² Test comparing distribution of total sample versus respondent sample using base weights.

³ Relative bias defined to be $100 \times (C-A)/A$, where A = base-weighted estimate for total sample and C = nonresponse-adjusted estimate for respondent sample

⁴ Test comparing distribution of respondent sample using nonresponse-adjusted weights with distribution of total sample using base weights.

Table E-8. Comparison of responding and nonresponding schools for estimation of aggregation errors in CEP schools by selected characteristics

School characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Base weighted distribution (%)					NR-adj wt. dist (%)		
	Total	Resp.	Non- resp.	Rel. bias ¹	P-value ²	Resp.	Rel. bias ³	P-value ⁴
School is CEP	100.0	100.0	100.0		0.8757	100.0		1
N = No school in SFA is CEP	74.79	74.99	73.93	0.27		74.79	0.00	
Y = At least one school in SFA is CEP	25.21	25.01	26.07	-0.80		25.21	0.00	
At least one school in SFA is CEP	100.0	100.0	100.0		0.6464	100.0		0.3492
N = No school in SFA is CEP	65.63	64.90	68.71	-1.11		64.83	-1.21	
Y = At least one school in SFA is CEP	34.37	35.10	31.29	2.12		35.17	2.31	
Student enrollment	100.0	100.0	100.0		0.7264	100.0		0.8522
1: <1000	18.09	16.82	23.47	-7.02		17.86	-1.25	
2: 1000 - 9999	39.14	38.64	41.25	-1.27		37.90	-3.18	
3: > 10000	42.77	44.54	35.28	4.13		44.24	3.44	
FNS region	100.0	100.0	100.0		0.090	100.0		0.723
1 Northeast	12.07	8.64	26.58	-28.38		10.16	-15.79	
2 Mid-Atlantic	9.42	11.26	1.63	19.50		10.87	15.31	
3 Southeast	16.56	16.62	16.28	0.40		17.24	4.16	
4 Midwest	17.43	18.22	14.05	4.58		17.54	0.67	
5 Southwest	14.73	14.74	14.72	0.03		14.80	0.47	
6 Mountain Plains	12.16	10.59	18.84	-12.94		10.94	-10.09	
7 Western	17.63	19.93	7.91	13.01		18.45	4.62	
School NSLP status	100.0	100.0	100.0		0.745	100.0		0.785
1: Yes	4.70	4.54	5.38	-3.41		4.54	-3.57	
2: No	95.30	95.46	94.62	0.17		95.46	0.18	
School type	100.0	100.0	100.0		0.001	100.0		0.069
1: 1=Elementary	58.46	61.90	43.85	5.89		62.30	6.58	
2: 2=Middle	20.32	16.50	36.52	-18.81		16.38	-19.38	
3: 3=Secondary/combined/ungraded	21.22	21.60	19.62	1.78		21.32	0.44	
Total students in school	100.0	100.0	100.0		0.803	100.0		0.941
1: <450	46.93	46.74	47.75	-0.41		47.12	0.40	
2: 450 - 699	27.41	28.47	22.92	3.87		27.87	1.67	
3: 700 - 999	15.38	15.01	16.95	-2.41		15.10	-1.84	
4: >= 1000	10.27	9.78	12.38	-4.83		9.91	-3.51	

Table E-8. Comparison of responding and nonresponding schools for estimation of aggregation errors in CEP schools by selected characteristics (continued)

School characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Base weighted distribution (%)					NR-adj wt. dist (%)		
	Total	Resp.	Non- resp.	Rel. bias ¹	P-value ²	Resp.	Rel. bias ³	P-value ⁴
Total students eligible for free/reduced price meals in school	100.0	100.0	100.0		0.978	100.0		0.994
1: 0 - 249	55.06	54.72	56.49	-0.61		55.05	-0.01	
2: 250 - 449	23.78	24.23	21.89	1.88		23.93	0.62	
3: 450 - 699	14.22	14.08	14.81	-0.98		14.03	-1.33	
4: >= 700	6.94	6.97	6.81	0.44		6.99	0.69	
Percent eligible for free/reduced price meals in school	100.0	100.0	100.0		0.205	100.0		0.396
1: < 25%	12.84	13.44	10.27	4.71		13.41	4.44	
2: 25% - < 50%	34.89	31.97	47.28	-8.37		32.30	-7.45	
3: 50% - < 75%	26.40	28.78	16.31	9.02		28.64	8.47	
4: 75% - < 100%	25.87	25.81	26.14	-0.25		25.66	-0.80	

¹ Relative bias defined to be $100 \times (B-A)/A$, where A = base-weighted estimate for total sample and B = base-weighted estimate for respondent sample.

² Test comparing distribution of total sample versus respondent sample using base weights.

³ Relative bias defined to be $100 \times (C-A)/A$, where A = base-weighted estimate for total sample and C = nonresponse-adjusted estimate for respondent sample.

⁴ Test comparing distribution of respondent sample using nonresponse-adjusted weights with distribution of total sample using base weights.

Table E-9. Comparison of responding and nonresponding schools for estimation of meal observation errors in CEP schools by selected characteristics

School characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Base weighted distribution (%)					NR-adj wt. dist (%)		
	Total	Resp.	Non- resp.	Rel. bias ¹	P-value ²	Resp.	Rel. bias ³	P-value ⁴
School is CEP	100.0	100.0	100.0		0.5243	100.0		1
N = No school in SFA is CEP	74.79	74.07	78.50	-0.95		74.79	0.00	
Y = At least one school in SFA is CEP	25.21	25.93	21.50	2.83		25.21	0.00	
At least one school in SFA is CEP	100.0	100.0	100.0		0.3268	100.0		0.2164
N = No school in SFA is CEP	65.63	64.26	72.74	-2.08		64.91	-1.09	
Y = At least one school in SFA is CEP	34.37	35.74	27.26	3.98		35.09	2.09	
Student enrollment	100.0	100.0	100.0		0.7935	100.0		0.8085
1: <1000	18.09	16.87	24.44	-6.74		17.24	-4.70	
2: 1000 - 9999	39.14	40.10	34.12	2.46		40.46	3.38	
3: > 10000	42.77	43.03	41.44	0.60		42.30	-1.11	
FNS region	100.0	100.0	100.0		0.572	100.0		0.854
1 Northeast	12.07	10.67	19.32	-11.55		11.86	-1.66	
2 Mid-Atlantic	9.42	11.04	1.00	17.16		10.71	13.62	
3 Southeast	16.56	17.33	12.50	4.70		16.71	0.94	
4 Midwest	17.43	17.84	15.28	2.36		17.83	2.32	
5 Southwest	14.73	15.28	11.88	3.72		14.91	1.17	
6 Mountain Plains	12.16	11.01	18.16	-9.47		11.36	-6.61	
7 Western	17.63	16.82	21.85	-4.60		16.62	-5.73	
School NSLP status	100.0	100.0	100.0		0.542	100.0		0.654
1: Yes	4.70	4.45	6.02	-5.39		4.68	-0.57	
2: No	95.30	95.55	93.98	0.27		95.32	0.03	
School type	100.0	100.0	100.0		0.003	100.0		0.093
1: 1=Elementary	58.46	61.36	43.36	4.96		61.26	4.80	
2: 2=Middle	20.32	16.84	38.42	-17.11		16.67	-17.97	
3: 3=Secondary/combined/ungraded	21.22	21.80	18.22	2.72		22.07	3.99	
Total students in school	100.0	100.0	100.0		0.690	100.0		0.773
1: <450	46.93	45.98	51.89	-2.03		46.13	-1.71	
2: 450 - 699	27.41	28.76	20.38	4.92		28.58	4.27	
3: 700 - 999	15.38	14.97	17.53	-2.68		15.08	-2.00	
4: >= 1000	10.27	10.29	10.19	0.15		10.21	-0.61	

Table E-9. Comparison of responding and nonresponding schools for estimation of meal observation errors in CEP schools by selected characteristics (continued)

School characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Base weighted distribution (%)					NR-adj wt. dist (%)		
	Total	Resp.	Non- resp.	Rel. bias ¹	P-value ²	Resp.	Rel. bias ³	P-value ⁴
Total students eligible for free/reduced price meals in school	100.0	100.0	100.0		0.836	100.0		0.854
1: 0 - 249	55.06	54.32	58.91	-1.34		54.40	-1.20	
2: 250 - 449	23.78	23.88	23.28	0.41		23.94	0.64	
3: 450 - 699	14.22	14.89	10.70	4.75		14.70	3.38	
4: >= 700	6.94	6.91	7.11	-0.47		6.97	0.37	
Percent eligible for free/reduced price meals in school	100.0	100.0	100.0		0.352	100.0		0.471
1: < 25%	12.84	13.36	10.09	4.11		13.16	2.51	
2: 25% - < 50%	34.89	32.50	47.38	-6.87		32.76	-6.11	
3: 50% - < 75%	26.40	28.03	17.92	6.16		28.10	6.43	
4: 75% - < 100%	25.87	26.11	24.61	0.93		25.98	0.42	

¹ Relative bias defined to be $100 \times (B-A)/A$, where A = base-weighted estimate for total sample and B = base-weighted estimate for respondent sample.

² Test comparing distribution of total sample versus respondent sample using base weights.

³ Relative bias defined to be $100 \times (C-A)/A$, where A = base-weighted estimate for total sample and C = nonresponse-adjusted estimate for respondent sample

⁴ Test comparing distribution of respondent sample using nonresponse-adjusted weights with distribution of total sample using base weights.

E.4.3 Derivation of Nonresponse-Adjusted Weights (Schools)

As noted in the previous section, the base-weighted distribution of the responding schools did not differ significantly from the total sample for most of the characteristics considered in the analysis. Despite the lack of statistical significance, there are noticeable differences that could potentially impact the estimates derived from the survey. For example, from Table E-8, it can be seen that a smaller percentage of the nonresponding schools were elementary schools (44 %) compared with the responding schools (62 %). Similarly, a greater percentage of the nonresponding schools had between 25 and 50 percent of students eligible for free/reduced price meals (47 %) as compared with the responding schools (32 %). Among the nonresponding schools 23 percent student enrollment less than 1000 compared with 17 percent of the responding schools. These patterns are generally repeated in Table E-9.

Weighting adjustments are used to compensate for any distributional differences resulting from differential response rates. To be effective in reducing potential nonresponse biases, the nonresponse adjustment should be made within subsets of schools (or “weighting cells”) that (a) have similar propensities for responding to the survey and (b) are expected to be related to the outcomes from the survey. We used a CHAID⁴ analysis (Chi-square Automatic Interaction Detector) to identify subsets of schools in which the predicted probabilities of response were similar. The variables used to create the weight adjustment cells are those available for sample selection. The output from the CHAID analysis was a tree diagram that defined the final cells used in the nonresponse adjustment.

Eight nonresponse adjustment cells were determined by the CHAID analysis for the certification-error weights, 8 adjustment cells for the aggregation-error weights, and 10 adjustment cells for the meal observation-error weights. The overall weighted response rates for the three sets of school weights were 71 percent for the certification-error weights, 81 percent for the aggregation-error weights, and 84 percent for the meal observation-error weights. Within the three sets of weights, the weighted response rates varied from 20 to 98 percent for the certification-error weights, 67 to 100

⁴ Magidson, J. (2005). SI-CHAID Users Guide. Statistical Innovations. <https://www.statisticalinnovations.com/wp-content/uploads/SI-CHAIDUsersguide.pdf>

percent for the aggregation-error weights, and 63 to 93 percent for the meal observation-error weights.

Separately for the three types of school weights, the nonresponse-adjusted weight, w_{ki}^{NR} , for the i th responding school in weighting cell k was computed as:

$$w_{ki}^{NR} = (1/R_k) w_{ki}^{base},$$

where w_{ki}^{base} is the base weight for the i th responding school in weighting class k , and R_k is the base-weighted response rate for schools in weighting class k . The w_{ki}^{NR} 's defined above are the final school weights used to derive the survey-based estimates.

E.4.4 Comparisons of Selected Distributions Before and After Nonresponse Adjustment (Schools)

The last three columns of Tables E-7, E-8 and E-9 summarize results related to the weighted distributions of the respondent sample using the nonresponse-adjusted weights described above. The first column under the heading “NR-adj. wt. dist.” shows the (nonresponse-adjusted) weighted distributions for the listed characteristics. The next column shows the corresponding relative bias. The last column shows the p -value for a test comparing the nonresponse-adjusted weighted distribution with the corresponding base-weighted distribution in the column under the heading “Base weighted distribution.” As can be seen in these tables, there is generally very little difference between the base-weighted (column 1) and nonresponse-adjusted weighted distributions (column (6)). This suggests that the weight adjustments made to account for school-level nonresponse mitigates potential nonresponse bias on school-level estimates.

E.5 Impact of Student Nonresponse

E.5.1 Response Rates by Selected Student Characteristics

To examine the extent to which missing data resulting from nonresponse are “missing at random,” we calculated response rates for subsets of the sample based on selected characteristics of the sampled students. These characteristics are limited by the information available for sample selection and include variables such as Type of SFA, application submitted (APPSUB), directly certified for

free or reduced price meals (DIRCERT), meal benefit eligibility status (ELIGSTAT), Percent eligible for free/reduced price meals in school, sampling wave (fall vs winter/spring), school NSLP Status, student enrollment, total students eligible for free/reduced price meals in school, total students in school, FNS Region and others. Results are summarized in Tables E-10, E-11, and E-12 separately for the three versions of the student weights to be used in analysis; i.e., (a) weight for analysis of certification error in CEP students, (b) weights for analysis of reporting/overlapping-error, and (c) weights for analysis of administrative certification errors. In addition to the unweighted and weighted response rates, the p -value for a test of association between response rates and levels of the given characteristic is also shown. A p -value of 0.05 or less for the test of association indicates that response rates differ significantly across the various levels of the given characteristic, which could potentially lead to biases if not accounted for in weighting. As can be seen in both Tables E-10 and E-11 the response rates by categories of variables for directly certified for free or reduced price meals DIRCERT, meal benefit eligibility status (ELIGSTAT), sampling wave and NSLP status varied significantly. Students in sampling wave 1 tend to have higher response rates than those in sampling wave 2. In Table E-12 the response rates by categories of DIRCERT, ELIGSTAT, sampling wave and at least one CEP school in SFA varied significantly. Students in schools where at least one school in SFA is CEP tend to have higher response rates than non-those where schools in SFA are non-CEP.

Table E-10. Student response rates for certification error in non-CEP schools by selected characteristics

Student characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Sample size				Unwtd.resp. rate (%)	Wtd. resp. rate (%)*	p-value†
	Total	Resp.	Non-resp.	Incl.			
Overall	12,229	3,792	8,437	0	31.0%	33.5%	—
APPSUB							0.153
0: No	4,865	1,568	3,297	0	32.2%	34.5%	
1: Yes	7,364	2,224	5,140	0	30.2%	32.8%	
DIRCERT							0.013
0: No	5,735	1,666	4,069	0	29.0%	31.9%	
1: Yes	6,494	2,126	4,368	0	32.7%	34.8%	
ELIGSTAT							0.028
1: Free	9,719	3,085	6,634	0	31.7%	34.3%	
2: Reduced	1,676	475	1,201	0	28.3%	30.4%	
3: Paid	834	232	602	0	27.8%	30.8%	
Sampling wave							<.0001
1: Sampling wave 1	7,714	2,635	5,079	0	34.2%	34.8%	
2: Sampling wave 2	4,515	1,157	3,358	0	25.6%	24.5%	
At least one school in SFA is CEP							0.3112
N = No school in SFA is CEP	10,037	3,157	6,880	0	31.5%	34.0%	
Y = At least one school in SFA is CEP	2,192	635	1,557	0	29.0%	31.5%	
Student enrollment							0.2266
1: <1000	284	106	178	0	37.3%	29.1%	
2: 1000 - 9999	4,721	1,497	3,224	0	31.7%	35.3%	
3: > 10000	7,224	2,189	5,035	0	30.3%	32.6%	
FNS region							0.054
1 Northeast	564	131	433	0	23.2%	29.6%	
2 Mid-Atlantic	1,153	381	772	0	33.0%	39.1%	
3 Southeast	2,894	825	2,069	0	28.5%	31.8%	
4 Midwest	1,485	519	966	0	34.9%	36.2%	
5 Southwest	1,960	582	1,378	0	29.7%	31.4%	
6 Mountain Plains	1,283	470	813	0	36.6%	39.3%	
7 Western	2,890	884	2,006	0	30.6%	31.8%	
School NSLP status							0.008
2: No	12,086	3,766	8,320	0	31.2%	33.6%	
3: Provision school in base year	143	26	117	0	18.2%	23.7%	

Table E-10. Student response rates for certification error in non-CEP schools by selected characteristics (continued)

Student characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Sample size				Unwtd.resp. rate (%)	Wtd. resp. rate (%)*	p-value†
	Total	Resp.	Non-resp.	Inel.			
School type							0.139
1: 1=Elementary	5,838	1,951	3,887	0	33.4%	34.7%	
2: 2=Middle	2,510	771	1,739	0	30.7%	34.0%	
3: 3=Secondary/combined/ungraded	3,881	1,070	2,811	0	27.6%	31.3%	
Total students in school							0.077
1: < 450	2,327	778	1,549	0	33.4%	33.9%	
2: 450 - 699	3,345	1,099	2,246	0	32.9%	35.8%	
3: 700 - 999	2,943	937	2,006	0	31.8%	34.2%	
4: >= 1000	3,614	978	2,636	0	27.1%	30.5%	
Total students eligible for free/reduced price meals in school							0.065
1: 0 - 249	3,419	1,095	2,324	0	32.0%	33.2%	
2: 250 - 449	3,362	1,068	2,294	0	31.8%	34.6%	
3: 450 - 699	2,779	905	1,874	0	32.6%	36.0%	
4: >= 700	2,669	724	1,945	0	27.1%	29.6%	
Percent eligible for free/reduced price meals in school							0.549
1: < 25%	1,128	327	801	0	29.0%	31.6%	
2: 25% - < 50%	3,759	1,167	2,592	0	31.0%	33.4%	
3: 50% - < 75%	4,230	1,271	2,959	0	30.0%	32.9%	
4: 7 >= 75%	3,112	1,027	2,085	0	33.0%	35.5%	

* Weighted response rates are calculated using base weights.

† For test of association between response status and indicated characteristic.

Table E-11. Student response rates for reporting/overlapping error in non-CEP schools by selected characteristics

Student characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Sample size				Unwtd.resp. rate (%)	Wtd. resp. rate (%)*	p-value†
	Total	Resp.	Non-resp.	Incl.			
Overall	12,229	3,541	8,688	0	29.0%	32.4%	—
APPSUB							0.103
0: No	4,865	1496	3,369	0	30.8%	33.6%	
1: Yes	7,364	2045	5,319	0	27.8%	31.6%	
DIRCERT							0.004
0: No	5,735	1,522	4,213	0	26.5%	30.6%	
1: Yes	6,494	2,019	4,475	0	31.1%	33.9%	
ELIGSTAT							0.018
1: Free	9,719	2,906	6,813	0	29.9%	33.2%	
2: Reduced	1,676	432	1,244	0	25.8%	29.1%	
3: Paid	834	203	631	0	24.3%	29.5%	
Sampling wave							<.0001
1: Sampling wave 1	7,714	2,582	5,132	0	33.5%	34.1%	
2: Sampling wave 2	4,515	959	3,556	0	21.2%	20.3%	
At least one school in SFA is CEP							0.5134
N = No school in SFA is CEP	10,037	2,938	7,099	0	29.3%	32.8%	
Y = At least one school in SFA is CEP	2,192	603	1,589	0	27.5%	31.1%	
Student enrollment							0.15
1: <1000	284	82	202	0	28.9%	26.5%	
2: 1000 - 9999	4,721	1,430	3,291	0	30.3%	34.5%	
3: > 10000	7,224	2,029	5,195	0	28.1%	31.4%	
FNS region							0.060
1 Northeast	564	127	437	0	22.5%	29.2%	
2 Mid-Atlantic	1,153	355	798	0	30.8%	36.6%	
3 Southeast	2,894	776	2,118	0	26.8%	31.2%	
4 Midwest	1,485	496	989	0	33.4%	35.7%	
5 Southwest	1,960	547	1,413	0	27.9%	30.7%	
6 Mountain Plains	1,283	457	826	0	35.6%	38.8%	
7 Western	2,890	783	2,107	0	27.1%	29.8%	
School NSLP status							0.017
2: No	12,086	3,515	8,571	0	29.1%	32.6%	
3: Provision school in base year	143	26	117	0	18.2%	23.7%	

Table E-11. Student response rates for reporting/overlapping error in non-CEP schools by selected characteristics (continued)

Student characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Sample size				Unwtd.resp. rate (%)	Wtd. resp. rate (%)*	p-value†
	Total	Resp.	Non-resp.	Incl.			
School type							0.160
1: 1=Elementary	5,838	1,812	4,026	0	31.0%	33.6%	
2: 2=Middle	2,510	727	1,783	0	29.0%	33.2%	
3: 3=Secondary/combined/ungraded	3,881	1,002	2,879	0	25.8%	30.2%	
Total students in school							0.075
1: < 450	2,327	718	1,609	0	30.9%	32.8%	
2: 450 - 699	3,345	1,041	2,304	0	31.1%	35.0%	
3: 700 - 999	2,943	862	2,081	0	29.3%	32.8%	
4: >= 1000	3,614	920	2,694	0	25.5%	29.5%	
Total students eligible for free/reduced price meals in school							0.073
1: 0 - 249	3,419	1,025	2,394	0	30.0%	32.1%	
2: 250 - 449	3,362	994	2,368	0	29.6%	33.3%	
3: 450 - 699	2,779	848	1,931	0	30.5%	35.2%	
4: >= 700	2,669	674	1,995	0	25.3%	28.7%	
Percent eligible for free/reduced price meals in school							0.484
1: < 25%	1,128	317	811	0	28.1%	31.1%	
2: 25% - < 50%	3,759	1,058	2,701	0	28.1%	31.4%	
3: 50% - < 75%	4,230	1,206	3,024	0	28.5%	32.3%	
4: 7 >= 75%	3,112	960	2,152	0	30.8%	34.8%	

* Weighted response rates are calculated using base weights.

† For test of association between response status and indicated characteristic.

Table E-12. Student response rates for administrative certification error in non-CEP schools by selected characteristics

Student characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Sample size				Unwtd.resp. rate (%)	Wtd. resp. rate (%)*	p-value†
	Total	Resp.	Non-resp.	Incl.			
Overall	12,229	11,353	876	0	92.8%	96.4%	—
APPSUB							0.140
0: No	4,865	4,641	224	0	95.4%	97.4%	
1: Yes	7,364	6,712	652	0	91.1%	95.7%	
DIRCERT							0.029
0: No	5,735	5,214	521	0	90.9%	95.3%	
1: Yes	6,494	6,139	355	0	94.5%	97.3%	
ELIGSTAT							0.024
1: Free	9,719	9,085	634	0	93.5%	96.7%	
2: Reduced	1,676	1,533	143	0	91.5%	95.2%	
3: Paid	834	735	99	0	88.1%	95.3%	
Sampling wave							<.0001
1: Sampling wave 1	7,714	7,569	145	0	98.1%	98.3%	
2: Sampling wave 2	4,515	3,784	731	0	83.8%	82.7%	
At least one school in SFA is CEP							0.0002
N = No school in SFA is CEP	10,037	9,273	764	0	92.4%	95.9%	
Y = At least one school in SFA is CEP	2192	2,080	112	0	94.9%	98.8%	
Student enrollment							0.2698
1: <1000	284	,230	54	0	81.0%	91.1%	
2: 1000 - 9999	4,721	4,440	281	0	94.0%	96.6%	
3: > 10000	7,224	6,683	541	0	92.5%	96.7%	
FNS region							0.145
1 Northeast	564	471	93	0	83.5%	93.2%	
2 Mid-Atlantic	1,153	1,067	86	0	92.5%	92.2%	
3 Southeast	2,894	2,712	182	0	93.7%	98.0%	
4 Midwest	1,485	1,435	50	0	96.6%	98.6%	
5 Southwest	1,960	1,855	105	0	94.6%	97.5%	
6 Mountain Plains	1,283	1,222	61	0	95.2%	98.1%	
7 Western	2,890	2,591	299	0	89.7%	95.0%	
School NSLP status							0.519
2: No	12,086	11,251	835	0	93.1%	96.5%	
3: Provision school in base year	143	102	41	0	71.3%	91.9%	

Table E-12. Student response rates for administrative certification error in non-CEP schools by selected characteristics (continued)

Student characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Sample size				Unwtd.resp. rate (%)	Wtd. resp. rate (%)*	p-value†
	Total	Resp.	Non-resp.	Inel.			
School type							0.932
1: 1=Elementary	5,838	5,396	442	0	92.4%	96.5%	
2: 2=Middle	2,510	2,333	177	0	92.9%	96.7%	
3: 3=Secondary/combined/ungraded	3,881	3,624	257	0	93.4%	96.2%	
Total students in school							0.761
1: < 450	2,327	2,130	197	0	91.5%	95.5%	
2: 450 - 699	3,345	3,113	232	0	93.1%	97.2%	
3: 700 - 999	2,943	2,725	218	0	92.6%	96.4%	
4: >= 1000	3,614	3,385	229	0	93.7%	96.4%	
Total students eligible for free/reduced price meals in school							0.916
1: 0 - 249	3,419	3,185	234	0	93.2%	96.0%	
2: 250 - 449	3,362	3,107	255	0	92.4%	96.2%	
3: 450 - 699	2,779	2,590	189	0	93.2%	97.2%	
4: >= 700	2,669	2,471	198	0	92.6%	96.6%	
Percent eligible for free/reduced price meals in school							0.143
1: < 25%	1,128	1,092	36	0	96.8%	98.3%	
2: 25% - < 50%	3,759	3,437	322	0	91.4%	94.4%	
3: 50% - < 75%	4,230	3,936	294	0	93.0%	97.1%	
4: 7 >= 75%	3,112	2,888	224	0	92.8%	97.4%	

* Weighted response rates are calculated using base weights.

† For test of association between response status and indicated characteristic.

E.5.2 Comparison of Responding and Nonresponding Students by Selected Characteristics

Base-weighted distributions of responding and nonresponding students were calculated for the same set of variables for which response rates were summarized in Tables E-10, E-11 and E-12. These distributions, which are presented in Tables E-13, E-14, and E-15, provide an alternative but equivalent way of examining response rates within selected subgroups. The base-weighted distributions of responding students (respondent sample) are compared with the corresponding base-weighted distributions of the total sample to obtain a measure of the potential impact of student-level nonresponse on the survey-based estimates. For example, the difference between the base-weighted estimate of the percentage of *responding* students with a particular characteristic and the corresponding base-weighted estimate for all (eligible) sampled students provides an indication of the bias that might occur in weighted estimates if no adjustments are made to compensate for nonresponse.

For each set of base-weighted percentages given in the columns under the heading “base weighted distribution” of Tables E-13, E-14, and E-15, the relative bias (defined to be the difference between the base-weighted estimate for the respondent sample and the corresponding base-weighted estimate for the total sample, expressed as a percentage of the base-weighted estimate for the total sample) is shown. The *p*-value shown to the right of the relative bias column corresponds to a test of the hypothesis that the weighted distribution of the respondent sample is the same as the distribution of the total sample for the given characteristic. A *p*-value of 0.05 or less indicates that the two distributions are significantly different, which would suggest that the distribution of respondents is significantly different from that of the nonrespondents. (The tests associated with the *p*-values shown in the *last* three column of these tables are discussed later in Section E.5.4.)

As expected, the results in Tables E-13, E-14, and E-15 are consistent with those summarized in Tables E-10, E-11, and E-12. Similar to both Tables E-10 and E-11 there are significant differences between the distributions of the responding and nonresponding students for variables for directly certified for free or reduced price meals DIRCERT, meal benefit eligibility status (ELIGSTAT), sampling wave and NSLP status as shown in Tables E-13 and E-14. For the certification error weights (Table E-13), 14 percent of the nonresponding students are in sampling wave 2, compared with 10 percent of the responding wave 2 students. A similar pattern holds for the reporting/overlapping error student weights and administrative error student weights.

Table E-13. Comparison of responding and nonresponding schools for estimation of certification error in non-CEP schools by selected characteristics

Student characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Sample size				P-value ²	NR-adj wt. dist (%)		
	Total	Resp.	Non- resp.	Rel. bias ¹		Resp.	Rel. bias ³	P-value ⁴
APPSUB	100.0	100.0	100.0		0.153	100.0		0.8212
0: No	42.55	43.85	41.89	3.05		42.73	0.43	
1: Yes	57.45	56.15	58.11	-2.26		57.27	-0.32	
DIRCERT	100.0	100.0	100.0		0.013	100.0		0.108
0: No	44.42	42.24	45.52	-4.91		43.16	-2.82	
1: Yes	55.58	57.76	54.48	3.92		56.84	2.26	
ELIGSTAT	100.0	100.0	100.0		0.028	100.0		0.126
1: Free	80.13	81.92	79.22	2.24		81.43	1.63	
2: Reduced	13.58	12.30	14.23	-9.42		12.46	-8.28	
3: Paid	6.29	5.77	6.55	-8.22		6.11	-2.87	
Sampling wave	100.0	100.0	100.0		<.0001	100.0		1.000
1: Sampling wave 1	87.79	91.08	86.13	3.75		87.79	0.00	
2: Sampling wave 2	12.21	8.92	13.87	-26.94		12.21	0.00	
At least one school in SFA is CEP	100.0	100.0	100.0		0.3112	100.0		0.3018
N = No school in SFA is CEP	81.36	82.50	80.79	1.39		80.51	-1.05	
Y = At least one school in SFA is CEP	18.64	17.50	19.21	-6.08		19.49	4.56	
Student enrollment	100.0	100.0	100.0		0.2266	100.0		0.736
1: <1000	4.52	3.91	4.82	-13.34		4.11	-8.94	
2: 1000 - 9999	40.55	42.68	39.48	5.25		41.27	1.77	
3: > 10000	54.93	53.41	55.70	-2.78		54.62	-0.57	
FNS region	100.0	100.0	100.0		0.054	100.0		0.870
1 Northeast	6.03	5.32	6.39	-11.84		6.12	1.56	
2 Mid-Atlantic	9.08	10.59	8.32	16.65		9.41	3.66	
3 Southeast	22.09	20.95	22.66	-5.15		22.05	-0.17	
4 Midwest	11.85	12.80	11.37	8.03		11.13	-6.10	
5 Southwest	16.08	15.04	16.59	-6.41		16.66	3.62	
6 Mountain Plains	9.99	11.71	9.12	17.22		10.38	3.86	
7 Western	24.89	23.59	25.54	-5.23		24.25	-2.54	
School NSLP status	100.0	100.0	100.0		0.008	100.0		0.076
2: No	98.79	99.15	98.62	0.36		99.09	0.30	
3: Provision school in base year	1.21	0.85	1.38	-29.16		0.91	-24.79	

Table E-13. Comparison of responding and nonresponding schools for estimation of certification error in non-CEP schools by selected characteristics (continued)

Student characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Sample size				P-value ²	NR-adj wt. dist (%)		
	Total	Resp.	Non- resp.	Rel. bias ¹		Resp.	Rel. bias ³	P-value ⁴
School type	100.0	100.0	100.0		0.139	100.0		0.292
1: 1=Elementary	49.36	51.14	48.45	3.62		50.32	1.96	
2: 2=Middle	19.66	19.97	19.51	1.56		20.06	2.01	
3: 3=Secondary/combined/ungraded	30.98	28.88	32.04	-6.77		29.62	-4.40	
Total students in school	100.0	100.0	100.0		0.077	100.0		0.588
1: < 450	21.54	21.79	21.42	1.13		21.77	1.04	
2: 450 - 699	26.16	27.93	25.27	6.76		26.24	0.32	
3: 700 - 999	24.32	24.82	24.07	2.06		25.15	3.41	
4: >= 1000	27.98	25.46	29.24	-8.98		26.84	-4.07	
Total students eligible for free/reduced price meals in school	100.0	100.0	100.0		0.065	100.0		0.578
1: 0 - 249	31.18	30.91	31.31	-0.86		30.61	-1.81	
2: 250 - 449	26.26	27.12	25.83	3.27		26.63	1.37	
3: 450 - 699	22.85	24.56	21.99	7.45		23.73	3.86	
4: >= 700	19.71	17.41	20.86	-11.65		19.03	-3.44	
Percent eligible for free/reduced price meals in school	100.0	100.0	100.0		0.549	100.0		0.216
1: < 25%	9.87	9.30	10.16	-5.82		9.00	-8.87	
2: 25% - < 50%	31.68	31.57	31.74	-0.36		31.99	0.95	
3: 50% - < 75%	35.60	34.95	35.93	-1.82		34.74	-2.41	
4: 7 >= 75%	22.84	24.18	22.17	5.86		24.28	6.26	

¹ Relative bias defined to be $100 \times (B-A)/A$, where A = base-weighted estimate for total sample and B = base-weighted estimate for respondent sample.

² Test comparing distribution of total sample versus respondent sample using base weights.

³ Relative bias defined to be $100 \times (C-A)/A$, where A = base-weighted estimate for total sample and C = nonresponse-adjusted estimate for respondent sample

⁴ Test comparing distribution of respondent sample using nonresponse-adjusted weights with distribution of total sample using base weights.

Table E-14. Comparison of responding and nonresponding schools for estimation of reporting/overlapping error in non-CEP schools by selected characteristics

Student characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Sample size				p-value ²	NR-adj wt. dist (%)		
	Total	Resp.	Non- resp.	Rel. bias ¹		Resp.	Rel. bias ³	P-value ⁴
APPSUB	100.0	100.0	100.0		0.103	100.0		0.6391
0: No	42.55	44.05	41.83	3.52		42.95	0.94	
1: Yes	57.45	55.95	58.17	-2.61		57.05	-0.70	
DIRCERT	100.0	100.0	100.0		0.004	100.0		0.060
0: No	44.42	41.86	45.64	-5.75		42.97	-3.26	
1: Yes	55.58	58.14	54.36	4.60		57.03	2.61	
ELIGSTAT	100.0	100.0	100.0		0.018	100.0		0.131
1: Free	80.13	82.10	79.18	2.46		81.53	1.75	
2: Reduced	13.58	12.18	14.26	-10.33		12.36	-9.03	
3: Paid	6.29	5.72	6.56	-9.01		6.11	-2.82	
Sampling wave	100.0	100.0	100.0		<.0001	100.0		1.000
1: Sampling wave 1	87.79	92.36	85.59	5.22		87.79	0.00	
2: Sampling wave 2	12.21	7.64	14.41	-37.49		12.21	0.00	
At least one school in SFA is CEP	100.0	100.0	100.0		0.5134	100.0		0.4615
N = No school in SFA is CEP	81.36	82.12	81.00	0.93		82.08	0.88	
Y = At least one school in SFA is CEP	18.64	17.88	19.00	-4.08		17.92	-3.83	
Student enrollment	100.0	100.0	100.0		0.15	100.0		0.3512
1: <1000	4.52	3.69	4.92	-18.38		3.72	-17.56	
2: 1000 - 9999	40.55	43.08	39.34	6.24		41.93	3.40	
3: > 10000	54.93	53.23	55.75	-3.09		54.35	-1.07	
FNS region	100.0	100.0	100.0		0.060	100.0		0.788
1 Northeast	6.03	5.43	6.32	-9.96		5.66	-6.17	
2 Mid-Atlantic	9.08	10.25	8.52	12.91		8.72	-3.96	
3 Southeast	22.09	21.24	22.49	-3.81		22.23	0.67	
4 Midwest	11.85	13.03	11.28	9.97		12.35	4.21	
5 Southwest	16.08	15.20	16.49	-5.43		16.91	5.22	
6 Mountain Plains	9.99	11.96	9.05	19.70		10.46	4.66	
7 Western	24.89	22.88	25.85	-8.06		23.67	-4.91	
School NSLP status	100.0	100.0	100.0		0.017	100.0		0.118
2: No	98.79	99.12	98.64	0.33		99.10	0.31	
3: Provision school in base year	1.21	0.88	1.36	-26.81		0.90	-25.13	

Table E-14. Comparison of responding and nonresponding schools for estimation of reporting/overlapping error in non-CEP schools by selected characteristics (continued)

Student characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Sample size				p-value ²	NR-adj wt. dist (%)		
	Total	Resp.	Non-resp.	Rel. bias ¹		Resp.	Rel. bias ³	P-value ⁴
School type	100.0	100.0	100.0		0.160	100.0		0.082
1: 1=Elementary	49.36	51.05	48.54	3.44		50.75	2.82	
2: 2=Middle	19.66	20.09	19.46	2.16		20.26	3.02	
3: 3=Secondary/combined/ungraded	30.98	28.86	32.00	-6.85		28.99	-6.41	
Total students in school	100.0	100.0	100.0		0.075	100.0		0.353
1: < 450	21.54	21.76	21.44	1.00		21.80	1.17	
2: 450 - 699	26.16	28.21	25.18	7.83		26.65	1.89	
3: 700 - 999	24.32	24.60	24.19	1.16		25.20	3.60	
4: >= 1000	27.98	25.43	29.20	-9.10		26.35	-5.80	
Total students eligible for free/reduced price meals in school	100.0	100.0	100.0		0.073	100.0		0.946
1: 0 - 249	31.18	30.82	31.35	-1.15		31.22	0.13	
2: 250 - 449	26.26	26.93	25.95	2.52		26.46	0.73	
3: 450 - 699	22.85	24.80	21.92	8.54		23.04	0.81	
4: >= 700	19.71	17.45	20.79	-11.44		19.29	-2.12	
Percent eligible for free/reduced price meals in school	100.0	100.0	100.0		0.484	100.0		0.579
1: < 25%	9.87	9.47	10.07	-4.09		9.27	-6.15	
2: 25% - < 50%	31.68	30.64	32.18	-3.28		31.71	0.08	
3: 50% - < 75%	35.60	35.39	35.70	-0.60		35.14	-1.30	
4: 7 >= 75%	22.84	24.50	22.05	7.26		23.89	4.57	

¹ Relative bias defined to be $100 \times (B-A)/A$, where A = base-weighted estimate for total sample and B = base-weighted estimate for respondent sample.

² Test comparing distribution of total sample versus respondent sample using base weights.

³ Relative bias defined to be $100 \times (C-A)/A$, where A = base-weighted estimate for total sample and C = nonresponse-adjusted estimate for respondent sample

⁴ Test comparing distribution of respondent sample using nonresponse-adjusted weights with distribution of total sample using base weights.

Table E-15. Comparison of responding and nonresponding schools for estimation of administrative error in non-CEP schools

Student characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Sample size				p-value ²	NR-adj wt. dist (%)		
	Total	Resp.	Non- resp.	Rel. bias ¹		Resp.	Rel. bias ³	P-value ⁴
APPSUB	100.0	100.0	100.0		0.140	100.0		0.4539
0: No	42.55	42.96	31.48	0.96		42.84	0.70	
1: Yes	57.45	57.04	68.52	-0.71		57.16	-0.52	
DIRCERT	100.0	100.0	100.0		0.029	100.0		0.109
0: No	44.42	43.90	58.30	-1.16		43.98	-0.99	
1: Yes	55.58	56.10	41.70	0.92		56.02	0.79	
ELIGSTAT	100.0	100.0	100.0		0.024	100.0		0.598
1: Free	80.13	80.37	73.67	0.30		80.24	0.14	
2: Reduced	13.58	13.42	18.12	-1.24		13.47	-0.83	
3: Paid	6.29	6.22	8.21	-1.13		6.29	0.02	
Sampling wave	100.0	100.0	100.0		<.0001	100.0		.
1: Sampling wave 1	87.79	89.53	40.62	1.99		87.79	0.00	
2: Sampling wave 2	12.21	10.47	59.38	-14.28		12.21	0.00	
At least one school in SFA is CEP	100.0	100.0	100.0		0.0002	100.0		0.0757
N = No school in SFA is CEP	81.36	80.91	93.55	-0.55		80.81	-0.68	
Y = At least one school in SFA is CEP	18.64	19.09	6.45	2.42		19.19	2.99	
Student enrollment	100.0	100.0	100.0		0.2698	100.0		0.0061
1: <1000	4.52	4.27	11.26	-5.52		4.14	-8.30	
2: 1000 - 9999	40.55	40.63	38.42	0.19		41.12	1.40	
3: > 10000	54.93	55.10	50.32	0.31		54.74	-0.35	
FNS region	100.0	100.0	100.0		0.145	100.0		0.687
1 Northeast	6.03	5.83	11.55	-3.39		6.09	1.02	
2 Mid-Atlantic	9.08	8.68	19.89	-4.40		8.96	-1.32	
3 Southeast	22.09	22.43	12.69	1.57		22.09	0.00	
4 Midwest	11.85	12.12	4.66	2.24		11.95	0.82	
5 Southwest	16.08	16.25	11.34	1.09		16.14	0.40	
6 Mountain Plains	9.99	10.17	5.25	1.75		9.88	-1.09	
7 Western	24.89	24.53	34.60	-1.44		24.89	0.02	
School NSLP status	100.0	100.0	100.0		0.519	100.0		0.540
2: No	98.79	98.85	97.25	0.06		98.87	0.08	
3: Provision school in base year	1.21	1.15	2.75	-4.74		1.13	-6.37	

Table E-15. Comparison of responding and nonresponding schools for estimation of administrative error in non-CEP schools (continued)

Student characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Sample size				p-value ²	NR-adj wt. dist (%)		
	Total	Resp.	Non- resp.	Rel. bias ¹		Resp.	Rel. bias ³	P-value ⁴
School type	100.0	100.0	100.0		0.932	100.0		0.946
1: 1=Elementary	49.36	49.38	48.73	0.05		49.25	-0.22	
2: 2=Middle	19.66	19.71	18.27	0.26		19.68	0.10	
3: 3=Secondary/combined/ungraded	30.98	30.91	33.00	-0.24		31.07	0.29	
Total students in school	100.0	100.0	100.0		0.761	100.0		0.999
1: < 450	21.54	21.34	26.91	-0.92		21.57	0.13	
2: 450 - 699	26.16	26.38	20.25	0.83		26.13	-0.13	
3: 700 - 999	24.32	24.30	24.88	-0.08		24.30	-0.09	
4: >= 1000	27.98	27.98	27.96	0.00		28.00	0.10	
Total students eligible for free/reduced price meals in school	100.0	100.0	100.0		0.916	100.0		0.965
1: 0 - 249	31.18	31.04	34.80	-0.43		31.27	0.29	
2: 250 - 449	26.26	26.20	28.11	-0.26		26.28	0.07	
3: 450 - 699	22.85	23.03	18.03	0.78		22.91	0.25	
4: >= 700	19.71	19.73	19.06	0.12		19.54	-0.85	
Percent eligible for free/reduced price meals in school	100.0	100.0	100.0		0.143	100.0		0.614
1: < 25%	9.87	10.06	4.84	1.89		9.90	0.26	
2: 25% - < 50%	31.68	31.01	49.81	-2.12		31.95	0.84	
3: 50% - < 75%	35.60	35.85	28.90	0.70		35.37	-0.64	
4: 7 >= 75%	22.84	23.08	16.45	1.03		22.78	-0.29	

¹ Relative bias defined to be $100 \times (B-A)/A$, where A = base-weighted estimate for total sample and B = base-weighted estimate for respondent sample.

² Test comparing distribution of total sample versus respondent sample using base weights.

³ Relative bias defined to be $100 \times (C-A)/A$, where A = base-weighted estimate for total sample and C = nonresponse-adjusted estimate for respondent sample

⁴ Test comparing distribution of respondent sample using nonresponse-adjusted weights with distribution of total sample using base weights.

E.5.3 Derivation of Nonresponse-Adjusted Weights (Students)

As noted in the previous section, the base-weighted distribution of the responding students did not differ significantly from the total sample for most of the characteristics considered in the analysis. Despite the lack of statistical significance, there are noticeable differences that could potentially impact the estimates derived from the survey. For example, from Table E-13, it can be seen that a higher percentage of the nonresponding students were from sampling wave 2 (14 %) compared with the responding students (9 %). Among the nonresponding students 14 percent were eligible for reduced lunch with 12 percent of the responding students. These patterns are generally repeated in Table E-14.

Weighting adjustments are used to compensate for any distributional differences resulting from differential response rates. To be effective in reducing potential nonresponse biases, the nonresponse adjustment should be made within subsets of schools (or “weighting cells”) that (a) have similar propensities for responding to the survey and (b) are expected to be related to the outcomes from the survey. We used a CHAID⁵ analysis (Chi-square Automatic Interaction Detector) to identify subsets of schools in which the predicted probabilities of response were similar. The variables used to create the weight adjustment cells are those available for sample selection. The output from the CHAID analysis was a tree diagram that defined the final cells used in the nonresponse adjustment.

Sixteen nonresponse adjustment cells were determined by the CHAID analysis for the certification-error weights, 18 adjustment cells for the reporting/overlapping error weights, and 34 adjustment cells for the administrative reporting error weights. The overall weighted response rates for the three sets of school weights were 34 percent for the certification-error weights, 32 percent for the reporting/overlapping error weights, and 96 percent for the administrative reporting error weights. Within the three sets of weights, the weighted response rates varied from 20 to 47 percent for the certification-error weights, 19 to 46 percent for the reporting/overlapping error weights, and 46 to 100 percent for the administrative reporting error weights.

⁵ Magidson, J. (2005). SI-CHAID Users Guide. Statistical Innovations. <https://www.statisticalinnovations.com/wp-content/uploads/SI-CHAIDUsersguide.pdf>

Separately for the three types of school weights, the nonresponse-adjusted weight, w_{ki}^{NR} , for the i th responding student in weighting cell k was computed as:

$$w_{ki}^{NR} = (1/R_k) w_{ki}^{base},$$

where w_{ki}^{base} is the base weight for the i th responding student in weighting class k , and R_k is the base-weighted response rate for students in weighting class k . The w_{ki}^{NR} 's defined above are the final student weights used to derive the survey-based estimates.

E.5.4 Comparisons of Selected Distributions Before and After Nonresponse Adjustment (Students)

The last three columns of Tables E-13, E-14, and E-15 summarize results related to the weighted distributions of the respondent sample using the nonresponse-adjusted weights described above. The first column under the heading “NR-adj. wt. dist.” shows the (nonresponse-adjusted) weighted distributions for the listed characteristics. The next column shows the corresponding relative bias. The last column shows the p -value for a test comparing the nonresponse-adjusted weighted distribution with the corresponding base-weighted distribution in the column under the heading “Base weighted distribution.” As can be seen in these tables, there is generally very little difference between the base-weighted (column 1) and nonresponse-adjusted weighted (column 6) distributions. This suggests that the weight adjustments made to account for student-level nonresponse mitigates potential nonresponse bias on student-level estimates.

E.6 Summary and Conclusions

The overall SFA-level response rate for APEC III was 79 percent. While the observed response rates exhibited some variation by various characteristics (such as CEP status, FNS Region, number of schools, type of SFA, student enrollment size, percent of CEP students, number of eligible free and reduced price students), the variation in response rates was for the most part not statistically significant except for categories of “percent of free/reduced price eligible students”. The response rate observed for SFAs with percent of free/reduced price eligible students between 50 and 75 percent was significantly lower than that of the other SFAs.

To compensate for the differential survey response rates at the SFA level, weight adjustments were developed and applied to the base weights using a CHAID analysis to identify appropriate weight adjustment classes. The CHAID algorithm was effective in identifying subsets of the sample within which the predicted response propensities of the SFAs are similar. In general, such weight adjustments will reduce nonresponse bias if the variables used in forming the weight adjustment classes are both correlated with response propensity (the probability that a sampled SFA will provide useable data for analysis) and with the characteristics being measured in the study. It is standard practice to use the nonresponse-adjusted weights for estimation purposes to reduce potential biases that may arise from nonresponse.

Within the sample of responding SFAs, the overall weighted response rates was 71 percent, 81 percent and 84 percent for certification-error, aggregation-error and meal observation-error respectively. The CHAID analyses used to develop the nonresponse adjustments for school weights found that low response were found to vary appreciably depending on the characteristics of the school such as whether “school is CEP”, “at least one school in SFA is CEP” or “school NSLP Status”.

Within the sample of responding schools, the overall weighted response rates for students was 34 percent for the certification-error weights, 32 percent for the reporting/overlapping error weights, and 96 percent for the administrative reporting error. The CHAID analyses used to develop the nonresponse adjustments for students weights found that response rates varied depending on characteristics of the students and their associated schools such as DIRCERT, ELIGSTAT, sampling wave and if there is at least one CEP school in SFA. Students in schools where at least one school in SFA is CEP tend to have higher response rates than those students where schools in SFA are non-CEP.

Finally, we note that a comparison of the nonresponse-adjusted weighted distribution with the corresponding base-weighted distribution showed, in general, very little difference between the base-weighted and the nonresponse-adjusted weighted distributions. This suggests that the nonresponse weight adjustments made to account for nonresponse mitigates potential nonresponse bias.

Third Access, Participation, Eligibility, and Certification Study (APEC-III) Final Report

Volume 4: Appendices – Appendix F. Development of Sampling Weights

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Appendix F

Development of Sampling Weights

F.1 Introduction

Seven sets of analytic weights were constructed for analysis of data collected for APEC-III. One set of weights applies to analyses of the SFA Director Survey, three apply to analyses of school-level data pertaining to certification error, aggregation error, and meal observation error, respectively, and three apply to analyses of student (application)-level data pertaining to specific types of certification error in non-CEP schools. The seven sets of weights for APEC-III are listed in Table F-1. The procedures used to develop the analytic weights are described in the sections below.

Table F-1. APEC-III analytic weights

Analytic weight	Purpose of weights	Unit of analysis	Number of responding cases
SFA1WT ¹	SFA directors survey	SFA	234
SCH1WT ¹	Certification error in CEP schools	Schools	542
SCH2WT	Aggregation error	Schools	628
SCH3WT	Meal observation error	Schools	659
STUD1WT	Total certification error in non-CEP schools	Student	3,792
STUD2WT	Reporting/overlapping error in non-CEP schools	Student	3,541
STUD3WT	Administrative certification error in non-CEP schools	Student	11,353

¹ School-level data pertaining to certification error was obtained for 542 schools. However, only the subset of 130 CEP schools will be analyzed using this set of weights.

In addition to the full-sample weights, a series of replicate weights were created for purposes of variance estimation. The replicate weights are used in conjunction with the full-sample weights to generate standard errors and confidence limits and to conduct statistical tests. The procedures used to derive the replicate weights for variance estimation are described in Appendix G.

F.2 SFA Director Survey Weights

A stratified sample of 336 SFAs was initially selected from a sampling frame derived from the FY 15 FNS-742 SFA File and CEP SY 15-16 National Elections Data - September 2015 (see Appendix A on Sampling). The strata specified for sample selection were based on the CEP-status of the SFA, where an SFA was classified as a “CEP SFA” if at least one of its associated schools participated in

CEP; otherwise, the SFA was classified as a “nonCEP SFA.” Within the non-CEP stratum, (a) the six largest SFAs in terms of the total number of students certified for free/reduced price meals were included in the study sample with certainty, and (b) a systematic sample of 186 SFAs was selected from the remaining noncertainty SFAs with probabilities proportionate to the number of students certified for free/reduced price meals in the SFA. Within the CEP stratum, (a) the 23 largest SFAs in terms of a measure of size (MOS) equal to a weighted combination of the number of students certified for free/reduced price meals in nonCEP schools and enrollment in CEP schools were included in the sample with certainty, and (b) a systematic sample of 121 SFAs was selected from the remaining noncertainty SFAs with probabilities proportionate to the MOS.

Let t denote the SFA sampling stratum ($t = 1$ for CEP SFAs, $t = 2$ for nonCEP SFAs). The probability of selecting SFA a from stratum t for the initial sample is given by the formula:

$$\begin{aligned} P_{ta}^{SFA} &= 1, \text{ if the SFA was selected with certainty;} \\ &= m_t^{nc} S_{ta} / \sum_{i=1}^{M_t^{nc}} S_{ti}, \text{ otherwise,} \end{aligned} \quad (\text{Formula 1})$$

where

$$\begin{aligned} m_t^{nc} &= \text{the number of noncertainty SFAs sampled from stratum } t; \\ M_t^{nc} &= \text{the total number of noncertainty SFAs in stratum } t; \\ S_{ti} &= \text{the measure of size specified for sampling purposes for SFA } i \text{ in stratum } t. \end{aligned}$$

The corresponding initial weight for SFA a in stratum t was therefore computed as:

$$W_{ta}^{SFA} = 1 / P_{ta}^{SFA}. \quad (\text{Formula 2})$$

Of the 336 sampled SFAs, 323 (including all 29 certainty SFAs) were successfully confirmed for participation in the study and provided school lists for subsequent stages of sampling and data collection. This represents an unweighted response rate of 96 percent for study participation. To compensate for the 13 non-participating SFAs, the initial weights given by formula (2) were adjusted (inflated) by the reciprocal of the weighted response rate shown in the last column of Table F-2. Specifically, the adjusted SFA weight for *participating* SFA a in stratum t and certainty status c was computed as:

$$W_{tca}^{ADJ} = W_{tca}^{SFA} \left(\sum_{i=1}^{m_{tc}^{smp}} W_{tci}^{SFA} / \sum_{i=1}^{m_{tc}^{part}} W_{tci}^{SFA} \right) \quad (\text{Formula 3})$$

where

W_{tca}^{SFA} = the initial weight for SFA a in stratum t and certainty status c ,

m_{tc}^{smp} = the number of sampled SFAs in stratum t and certainty status c ,

m_{tc}^{part} = the number of participating SFAs in stratum t and certainty status c .

Table F-2. Unweighted and weighted number of sampled and participating SFAs by CEP status and certainty status

CEP status ¹	Certainty status	Number of sample SFAs	Weighted count of sample SFAs ²	Number of SFAs providing school lists	Weighted count of participating SFAs ²	Adjustment ratio
1. CEP	1 (certainty)	23	23	23	23	1.000
	0 (noncertainty)	121	2,532	117	2,327	1.088
2. Non CEP	1 (certainty)	6	6	6	6	1.000
	0 (noncertainty)	186	14,148	177	13,187	1.073
All SFAs		336	16,708	323	15,543	—

¹ Status of the SFA at the time of sampling based on information available in the FNS-742 file and National Elections data file.

² Weights are the initial SFA weights, W_{ta}^{SFA} .

The sample of 323 participating SFAs was subsequently subsampled to control costs. Of the 294 participating noncertainty SFAs, 273 were randomly selected for further data collection, along with all 29 certainty SFAs, resulting in a final total sample size of 302 SFAs. The final SFA base weight for SFA a in stratum t , which is the basic component of all of the weight calculations, was computed as

$$W_{ta}^{SFA:FIN} = K W_{ta}^{ADJ} \quad (\text{Formula 4})$$

where $K = 1$ for the 29 certainty SFAs, and $K = (294/273)$ for the 273 noncertainty SFAs retained in the sample. Table F-3 summarizes the unweighted and weighted counts of the retained SFAs by FNS region and CEP status of the SFA.

Table F-3. Unweighted and weighted numbers of SFAs retained for data collection by FNS region and CEP status

FNS region	Non CEP SFAs ¹		CEP SFAs ¹		All SFAs	
	Sample	Weighted count ²	Sample	Weighted count ²	Sample	Weighted count ²
1 Northeast	11	3,620	11	391	22	4,012
2 Mid Atlantic	14	1,791	15	198	29	1,990
3 Southeast	29	739	44	840	73	1,579
4 Midwest	25	3,109	20	428	45	3,537
5 Southwest	33	1,832	24	399	57	2,232
6 Mountain Plains	17	2,230	6	138	23	2,368
7 Western	41	1,118	12	194	53	1,312
TOTAL	170	14,440	132	2,590	302	17,030

¹ Status of the SFA at the time of sampling based on information available in the FNS-742 file and National Elections data file.

² Weights are the final SFA base weights, $W_{ta}^{SFA:FIN}$, given by formula (4).

Nonresponse Adjustment of the SFA Weights

Slightly over 77 percent of the 302 SFAs retained for the study provided usable data from the SFA Director Survey. To compensate for sample losses due to survey nonresponse, the weights of the responding SFAs were adjusted (multiplied) by the reciprocal of the weighted response rate among the eligible SFAs within cells that were expected to be homogeneous with respect to response propensities. A chi square automatic interaction detector (CHAID) analysis¹ was conducted to identify the appropriate weighting cells. The final adjustment cells and the corresponding weighted response rates used to adjust the base weights are documented in Table F-12 in Attachment 1.

The full-sample nonresponse adjustment factor for weighting cell h , A_h^{NR} was computed as

$$A_h^{NR} = \sum_{i=1}^{m_h^{samp}} W_{hi}^{SFA:FIN} / \sum_{i=1}^{m_h^{resp}} W_{hi}^{SFA:FIN} \quad (\text{Formula 5})$$

where

$W_{hi}^{SFA:FIN}$ = the final weight for SFA i in adjustment cell h ,

m_h^{samp} = the number of sampled SFAs in adjustment cell h ,

m_h^{resp} = the number of responding SFAs in in adjustment cell h ,

¹ Magidson, J. (2005). SI-CHAID Users Guide. Statistical Innovations. <https://www.statisticalinnovations.com/wp-content/uploads/SICHAIDusersguide.pdf>

The adjustment factors, A_h^{NR} , were then applied to the full-sample SFA base weights, $W_{hi}^{SFA:FIN}$, of the 234 responding SFAs to obtain the corresponding nonresponse-adjusted SFA weights to be used for analysis:

$$W_{hi}^{SFA:NR} = W_{hi}^{SFA:FIN} A_h^{NR} . \quad (\text{Formula 6})$$

Table F-4 summarizes the unweighted and weighted counts of the responding SFAs by FNS region and CEP status of the SFA.

Table F-4. Unweighted and weighted numbers of responding SFAs by FNS region and CEP status

FNS region	Non CEP SFAs ¹		CEP SFAs ¹		All SFAs	
	Resp. SFAs	Weighted count ²	Resp. SFAs	Weighted count ²	Resp. SFAs	Weighted count ²
1 Northeast	7	4,170	9	439	16	4,609
2 Mid Atlantic	10	2,040	13	456	23	2,496
3 Southeast	23	844	37	869	60	1,713
4 Midwest	19	3,153	14	117	33	3,270
5 Southwest	18	838	25	691	43	1,529
6 Mountain Plains	13	2,094	5	166	18	2,260
7 Western	28	607	13	547	41	1,154
TOTAL	118	13,745	116	3,285	234	17,030

¹ Actual status of the SFA at the time of data collection.

² Weights are the nonresponse-adjusted SFA weights, $W_{ta}^{SFA:NR}$ given by formula (6).

F.3 School Weights

Each of the 302 SFAs participating in APEC III provided lists of their eligible schools for sampling purposes. Along with the name and location of the school, the school-level data provided by the SFA included grades covered, CEP status, ISP group within SFA if applicable, enrollment, and number of students eligible for free/reduced price meals. In preparation for sampling, the lists were checked for duplicate records and missing data. Duplicate records were removed and missing data were retrieved from SFAs through followup operations. Schools operating a pre-kindergarten program only were deleted since such schools are out-of-scope of APEC III. The final (updated) school sampling frame included a total of 16,156 eligible schools of which 9,532 were non-CEP schools and were 6,624 CEP schools. From this sampling frame, 777 schools were randomly selected with probabilities proportionate to a measure of size that depended on the CEP-status of the SFA in which the school is located, the CEP status of the school, the number of the schools in

the SFA, and other factors. A detailed description of the sample selection process included in Appendix A on Sampling.

F.3.1 School Base Weights

Let a denote the SFA and b denote the school within the SFA, The initial step in the school weighting process was to assign a base weight to each of the 777 schools in the sample as follows:

$$W_{ab}^{SCH:BW} = W_a^{SFA:NR} / P_{b|a}^{SCH} \quad (\text{Formula 7})$$

where

$W_a^{SFA:NR}$ = the nonresponse-adjusted weight for SFA a ,

$P_{b|a}^{SCH}$ = the conditional probability of selecting school b in SFA a .

Table F-5 summarizes the unweighted and base-weighted counts of the sampled schools by FNS region and CEP status of the school. The base weights provide the starting point for the nonresponse-adjustments described in the following sections.

Table F-5. Unweighted and weighted numbers of sampled schools by FNS region and CEP status

FNS region	Non CEP schools ¹		CEP schools ¹		All schools	
	Sample schools	Weighted count ²	Sample schools	Weighted count ²	Sample schools	Weighted count ²
1 Northeast	29	7,766	42	3,239	71	11,004
2 Mid Atlantic	40	6,008	32	2,586	72	8,594
3 Southeast	105	8,321	76	6,779	181	15,099
4 Midwest	66	12,540	36	3,353	102	15,893
5 Southwest	87	9,075	54	4,362	141	13,438
6 Mountain Plains	49	10,089	11	1,004	60	11,094
7 Western	123	13,376	27	2,707	150	16,083
TOTAL	499	67,175	278	24,032	777	91,206

¹ Actual status of the school at the time of data collection.

² Weights are the school base weights, $W_{ab}^{SCH:BW}$ given by formula (7).

F.3.2 Nonresponse Adjusted School Weights

Of the 777 sampled schools, 70 percent provided useable data for estimation of certification error (corresponding to SCH1WT); however, the response rate varied by the CEP-status of the school. For non-CEP schools, the response rate was 83 percent, while for CEP schools, the response rate

was much lower at around 47 percent. Approximately 81 percent and 85 percent of the 777 sample schools provided usable data for analysis of aggregation error (corresponding to SCH2WT) and meal observation error (corresponding to SCH3WT), respectively.

To compensate for sample losses due to nonresponse, the weights of the responding schools were adjusted (multiplied) by the reciprocal of the weighted response rate among the eligible schools within cells that were expected to be homogeneous with respect to response propensities. The adjustment process was done separately for each of the three types of school weights, and involved the following steps. First, the school-level base weight computed from formula (7) was assigned to the 777 sampled schools. Next, a Chi Square Automatic Interaction Detector (CHAID) analysis was conducted separately for the three sets of weights to identify appropriate weighting cells. The final adjustment cells denoted by g , and the corresponding weighted response rates, $R_g^{(i)}$, are documented in Tables F-13, F-14, and F-15 in Attachment 1, respectively, for each type-of-school weight $i = 1, 2, 3$.

The adjustment factor defined by $A_g^{SCH(i)} = 1 / R_g^{(i)}$ was then applied to the base weight of school a in adjustment cell g , $W_{gb}^{SCH:BW}$, to obtain the corresponding nonresponse-adjusted school weight for type-of-school weight $i = 1, 2, 3$ as follows:

$$W_{gb}^{SCH(i):NR} = W_{gb}^{SCH:BW} A_g^{SCH(i)}. \quad (\text{Formula 8})$$

Tables F-6, F-7, and F-8 summarize the unweighted and weighted counts of the responding schools by FNS region and CEP status of the SFA for each of the three sets of weights constructed for analysis.

Table F-6. Unweighted and weighted numbers of responding schools for estimation of certification error by FNS region and CEP status

FNS region	Non CEP schools ¹		CEP schools ¹		All schools	
	Resp. schools	Weighted count ²	Resp. schools	Weighted count ²	Resp. schools	Weighted count ²
1 Northeast	20	8,429	15	2,940	35	11,369
2 Mid Atlantic	39	5,286	5	1,519	44	6,805
3 Southeast	92	8,899	52	6,443	144	15,341
4 Midwest	51	12,538	15	4,327	66	16,865
5 Southwest	63	8,597	21	4,756	84	13,352
6 Mountain Plains	47	9,543	7	1,317	54	10,861
7 Western	100	13,882	15	2,731	115	16,613
TOTAL	412	67,175	130	24,032	542	91,206

¹ Actual status of the school at the time of data collection.

² Weights are the nonresponse-adjusted school weights, $W_{gb}^{SCH(1):NR}$ given by formula (8).

Table F-7. Unweighted and weighted numbers of responding schools for estimation of aggregation error by FNS region and CEP status

FNS region	Non CEP schools ¹		CEP schools ¹		All schools	
	Resp. schools	Weighted count ²	Resp. schools	Weighted count ²	Resp. schools	Weighted count ²
1 Northeast	17	7,846	17	1,523	34	9,369
2 Mid Atlantic	37	7,304	30	2,632	67	9,936
3 Southeast	87	7,763	59	7,829	146	15,592
4 Midwest	53	12,463	27	3,854	80	16,317
5 Southwest	65	8,995	50	4,394	115	13,390
6 Mountain Plains	45	8,793	8	1,169	53	9,962
7 Western	107	14,011	26	2,630	133	16,641
TOTAL	411	67,175	217	24,032	628	91,206

¹ Actual status of the school at the time of data collection.

² Weights are the nonresponse-adjusted school weights, $W_{gb}^{SCH(2):NR}$ given by formula (8).

Table F-8. Unweighted and weighted numbers of responding schools for estimation of meal observation error by FNS region and CEP status

FNS region	Non CEP schools ¹		CEP schools ¹		All schools	
	Resp. schools	Weighted count ²	Resp. schools	Weighted count ²	Resp. schools	Weighted count ²
1 Northeast	23	7,734	27	3,154	50	10,887
2 Mid Atlantic	38	7,053	30	2,677	68	9,731
3 Southeast	90	8,463	70	6,892	160	15,355
4 Midwest	55	13,089	32	2,989	87	16,078
5 Southwest	69	9,180	48	4,561	117	13,741
6 Mountain Plains	48	9,044	8	1,090	56	10,133
7 Western	96	12,611	25	2,669	121	15,280
TOTAL	419	67,175	240	24,032	659	91,206

¹ Actual status of the school at the time of data collection.

² Weights are the nonresponse-adjusted school weights, $W_{gb}^{SCH(3):NR}$ given by formula (8).

F.4 Student Weights

As indicated in the previous section, 777 schools were selected for APEC III of which 499 were non-CEP schools. Random samples of students were selected from each of the 499 non-CEP schools from lists of eligible students provided by the participating school. Sampling was conducted in two mutually exclusive waves of data collection. In general, students eligible for sampling were those who submitted an application or was directly certified for free meals for SY 2017-18. Students with no application (paid), or who were not directly certified, were not eligible for APEC III. In total, 12,341 students were selected from the 499 non-CEP schools participating in the study.

F.4.1 Student Base Weights

Let a denote the SFA, b denote the school within the SFA, and s denote the sampled student within the school. The initial step in the student weighting process was to assign a base weight to each of the 12,341 sampled students as follows:

$$W_{abs}^{STUD:BW} = W_{ab}^{SCH:BW} / P_{s|ab}^{STUD} \quad (\text{Formula 9})$$

where

$W_{ab}^{SCH:BW}$ = the base weight for school b in SFA a from formula (7);

$P_{s|ab}^{STUD}$ = the within-school probability of selecting student s in school b in SFA a .

Ordinarily, the student base weights given by formula (9) would provide the starting point for the calculation of nonresponse-adjustments described in the following sections. However, an examination of the distribution of these weights indicated that there were 14 sampled cases with extremely large weights relative to the weights of other cases in the same region. To reduce the variability of the weights which can lead to inflated sampling variances, an adjustment known as “weight trimming” was applied to the base weights of the sampled students in this region.² For this purpose, a weight outlier was defined to be a weight that exceeded 4.5 times the average base weight within the specified region. The weights of the outliers were then capped at (i.e., trimmed down to) 4.5 times the average weight. Finally, the resultant weights were adjusted so that the sum of the trimmed weights equaled the sum of the original base weights prior to trimming. In what follows, we denote these trimmed base weights by $W_{abs}^{STUD:TRIM}$. Note that the trimming process was applied to the weights of only one of the seven FNS regions. That is, the trimmed weight for student s in FNS region $r = 1, 2, \dots, 7$, is given by:

$$W_{rs}^{STUD:TRIM} = T_r W_{rs}^{STUD:BW} \quad (\text{Formula 10})$$

where T_1 = the trimming adjustment for FNS region 1, and $T_r = 1$ for regions $r = 2, 3, \dots, 7$.

F.4.2 Nonresponse Adjusted Student Weights

Of the 12,341 sampled students, 12,229 were eligible for the study, and of the eligible sampled students, 31 percent provided useable data for estimation of certification error (corresponding to STUD1WT), 29 percent provided usable data for analysis of reporting/overlapping error (corresponding to STUD2WT), and 92 percent provided useable data for analysis of administrative error (corresponding to STUD3WT).

To compensate for sample losses due to nonresponse, the weights of the responding students were adjusted (multiplied) by the reciprocal of the weighted response rate among the eligible students within cells that were expected to be homogeneous with respect to response propensities. The adjustment process was done separately for each of the three types of student weights, and involved the following steps. First, the student-level trimmed base weight computed from formula (10) was

² Valliant, R., Dever, J., and Kreuter, F. (2013). Practical Tools for Designing and Weighting Survey Samples. New York, NY: Springer.

assigned to the 12,341 sampled students. Next, a Chi Square Automatic Interaction Detector (CHAID) analysis was conducted separately for the three sets of weights to identify appropriate weighting cells. The final adjustment cells denoted by g , and the corresponding weighted response rates, $R_g^{(i)}$, are documented in Tables F-16, F-17, and F-18 in Attachment 1, respectively, for the three types of student weights denoted by $i = 1, 2, 3$.

The adjustment factor defined by $A_g^{STUD(i)} = 1 / R_g^{(i)}$ was then applied to the trimmed base weight of student s in adjustment cell g , $W_{gs}^{STUD:TRIM}$, to obtain the corresponding nonresponse-adjusted weight for type-of-weight $i = 1, 2, 3$ as follows:

$$W_{gs}^{STUD(i):NR} = W_{gs}^{STUD:TRIM} A_g^{STUD(i)}. \quad (\text{Formula 11})$$

Tables F-9, F-10, and F-11, respectively, summarize the unweighted and weighted counts of the responding students by FNS region for the three sets of weights constructed for analysis.

Table F-9. Unweighted counts of sampled students by response status and final sum of weights for estimation of certification error by FNS region

FNS region	Unweighted counts by response status for total certification error ¹				Nonresponse-adjusted weighted count
	Resp. students	Nonresp. students	Ineligible	Total	
1 NERO	131	433	6	570	938,656
2 MARO	381	772	8	1,161	1,442,914
3 SERO	825	2,069	30	2,924	3,379,439
4 MWRO	519	966	16	1,501	1,705,546
5 SWRO	582	1,378	12	1,972	2,553,291
6 MPRO	470	813	7	1,290	1,590,467
7 WRO	884	2,006	13	2,903	3,717,603
TOTAL	3,792	8,437	92	12,321	15,327,916

¹ Weights are the nonresponse-adjusted student weights, $W_{gs}^{STUD(1):NR}$ given by formula (11).

Table F-10. Unweighted counts of sampled students by response status and final sum of weights for estimation of reporting/overlapping error by FNS region

FNS region	Unweighted counts by response status for reporting/overlapping error ¹				Nonresponse-adjusted weighted count
	Resp. students	Nonresp. students	Ineligible	Total	
1 NERO	127	437	6	570	867,272
2 MARO	355	798	8	1,161	1,336,837
3 SERO	776	2,118	30	2,924	3,408,018
4 MWRO	496	989	16	1,501	1,892,842
5 SWRO	547	1,413	12	1,972	2,592,693
6 MPRO	457	826	7	1,290	1,602,758
7 WRO	783	2,107	13	2,903	3,627,496
TOTAL	3,541	8,688	92	12,321	15,327,916

¹ Weights are the nonresponse-adjusted student weights, $W_{gs}^{STUD(2):NR}$ given by formula (11).

Table F-11. Unweighted counts of sampled students by response status and final sum of weights for estimation of administrative certification error by FNS region

FNS region	Unweighted counts by response status for administrative certification error ¹				Nonresponse-adjusted weighted count
	Resp. students	Nonresp. students	Ineligible	Total	
1 NERO	471	93	6	570	933,723
2 MARO	1,067	86	8	1,161	1,373,624
3 SERO	2,712	182	30	2,924	3,385,418
4 MWRO	1,435	50	16	1,501	1,831,287
5 SWRO	1,855	105	12	1,972	2,473,916
6 MPRO	1,222	61	7	1,290	1,514,672
7 WRO	2,591	299	13	2,903	3,815,277
TOTAL	11,353	876	92	12,321	15,327,916

¹ Weights are the nonresponse-adjusted student weights, $W_{gs}^{STUD(3):NR}$ given by formula (11).

Attachment 1. Weighting Cells Specified for Nonresponse Adjustment

Table F-12. Definition of nonresponse-adjustment cells for the SFA director survey weights

Variable 1	Variable 2	Variable 3	Variable 4	Final adjustment cell	Number of respondents	Weighted response rate	Adjustment factor
CEP_STATFIN=N			chdsegmt=1	1	118	78.6%	1.27
CEP_STATFIN=Y	PCTFRELI_C=0,4		chdsegmt=2	2	44	81.7%	1.22
CEP_STATFIN=Y	PCTFRELI_C=1-3	FNSREG=1,3,6-7	chdsegmt=3	3	45	99.0%	1.01
CEP_STATFIN=Y	PCTFRELI_C=1-3	FNSREG=2,4-5	chdsegmt=4	4	27	52.9%	1.89

See Attachment 2 for definition of variables used in CHAID analysis.

Table F-13. Definition of nonresponse-adjustment cells for the school-level certification error weights

Variable 1	Variable 2	Variable 3	Variable 4	Variable 5	Final adjustment cell	Number of respondents	Weighted response rate	Adjustment factor
SCHCEPSTAT=N	NSLP_Status=1			chdsegmt=1	1	9	20.1%	4.98
SCHCEPSTAT=N	NSLP_Status=2	FNSREG=1,4-5	TOTSTD_C=1,3	chdsegmt=2	2	65	85.6%	1.17
SCHCEPSTAT=N	NSLP_Status=2	FNSREG=1,4-5	TOTSTD_C=2,4	chdsegmt=3	3	63	74.0%	1.35
SCHCEPSTAT=N	NSLP_Status=2	FNSREG=2-3,6-7	ESIZECL<=4.5	chdsegmt=4	4	90	70.9%	1.41
SCHCEPSTAT=N	NSLP_Status=2	FNSREG=2-3,6-7	ESIZECL>4.5	chdsegmt=5	5	185	98.4%	1.02
SCHCEPSTAT=Y	FNSREG=1-2,4-5			chdsegmt=6	6	56	33.4%	2.99
SCHCEPSTAT=Y	FNSREG=3,6-7	ESIZECL<=5.5		chdsegmt=7	7	29	55.8%	1.79
SCHCEPSTAT=Y	FNSREG=3,6-7	ESIZECL>5.5		chdsegmt=8	8	45	71.3%	1.40

See Attachment 2 for definition of variables used in CHAID analysis.

Table F-14. Definition of nonresponse-adjustment cells for the school-level aggregation error weights

Variable 1	Variable 2	Variable 3	Variable 4	Final adjustment cell	Number of respondents	Weighted response rate	Adjustment factor
SCHCEPSTAT=N	FNSREG=1,5	TOTSTDTC=1-2	chdsegmt=1	1	33	66.6%	1.50
SCHCEPSTAT=N	FNSREG=1,5	TOTSTDTC=3-4	chdsegmt=2	2	49	85.4%	1.17
SCHCEPSTAT=N	FNSREG=2,6		chdsegmt=3	3	82	79.5%	1.26
SCHCEPSTAT=N	FNSREG=3-4,7	TOTSTDTC=1-2	chdsegmt=4	4	126	90.6%	1.10
SCHCEPSTAT=N	FNSREG=3-4,7	TOTSTDTC=3-4	chdsegmt=5	5	121	77.9%	1.28
SCHCEPSTAT=Y	FNSREG=1,3-4,6		chdsegmt=6	6	111	70.1%	1.43
SCHCEPSTAT=Y	FNSREG=2,5,7	ESIZECL<=5.5	chdsegmt=7	7	53	92.9%	1.08
SCHCEPSTAT=Y	FNSREG=2,5,7	ESIZECL>5.5	chdsegmt=8	8	53	100.0%	1.00

See Attachment 2 for definition of variables used in CHAID analysis.

Table F-15. Definition of nonresponse-adjustment cells for the school-level meal observation error weights

Variable 1	Variable 2	Variable 3	Variable 4	Variable 5	Final adjustment cell	Number of respondents	Weighted response rate	Adjustment factor
SCHCEPSTAT=N	FNSREG=1,3-5,7	NSLP_Status=1		chdsegmt=1	1	36	79.5%	1.26
SCHCEPSTAT=N	FNSREG=1,3-5,7	NSLP_Status=2	ESIZECL<=2.5	chdsegmt=2	2	44	79.9%	1.25
SCHCEPSTAT=N	FNSREG=1,3-5,7	NSLP_Status=2	ESIZECL>2.5<=3.5	chdsegmt=3	3	47	88.9%	1.12
SCHCEPSTAT=N	FNSREG=1,3-5,7	NSLP_Status=2	ESIZECL>3.5<=4.5	chdsegmt=4	4	37	76.7%	1.30
SCHCEPSTAT=N	FNSREG=1,3-5,7	NSLP_Status=2	ESIZECL>4.5<=5.5	chdsegmt=5	5	61	88.4%	1.13
SCHCEPSTAT=N	FNSREG=1,3-5,7	NSLP_Status=2	ESIZECL>5.5	chdsegmt=6	6	108	82.8%	1.21
SCHCEPSTAT=N	FNSREG=2,6			chdsegmt=7	7	86	84.1%	1.19
SCHCEPSTAT=Y	FNSREG=1,6			chdsegmt=8	8	35	62.7%	1.59
SCHCEPSTAT=Y	FNSREG=2-5,7	TOTFRERP_C=1-3		chdsegmt=9	9	149	92.9%	1.08
SCHCEPSTAT=Y	FNSREG=2-5,7	TOTFRERP_C=4		chdsegmt=10	10	56	86.0%	1.16

Table F-16. Definition of nonresponse-adjustment cells for the student-level total certification error weights

Variable 1	Variable 2	Variable 3	Variable 4	Variable 5	Variable 6	Final adjustment cell	Number of resp.	Wtd. resp. rate	Adjustment factor
Wave=1	FNSREG=1,3,5,7	TOTFRERP_C=1,4	ESIZECL<=6.5	FNSREG=1,5	chdsegmt=1	1	194	27.9%	3.59
Wave=1	FNSREG=1,3,5,7	TOTFRERP_C=1,4	ESIZECL<=6.5	FNSREG=3,7	chdsegmt=2	2	367	33.4%	2.99
Wave=1	FNSREG=1,3,5,7	TOTFRERP_C=1,4	ESIZECL>6.5	CEP_STATFIN=N	chdsegmt=3	3	87	28.3%	3.53
Wave=1	FNSREG=1,3,5,7	TOTFRERP_C=1,4	ESIZECL>6.5	CEP_STATFIN=Y	chdsegmt=4	4	33	19.6%	5.10
Wave=1	FNSREG=1,3,5,7	TOTFRERP_C=2-3	SCHGRADE=1	CEP_STATFIN=N	chdsegmt=5	5	490	39.3%	2.55
Wave=1	FNSREG=1,3,5,7	TOTFRERP_C=2-3	SCHGRADE=1	CEP_STATFIN=Y	chdsegmt=6	6	94	24.7%	4.04
Wave=1	FNSREG=1,3,5,7	TOTFRERP_C=2-3	SCHGRADE=2-3	APPSUB=0	chdsegmt=7	7	198	36.8%	2.72
Wave=1	FNSREG=1,3,5,7	TOTFRERP_C=2-3	SCHGRADE=2-3	APPSUB=1	chdsegmt=8	8	220	31.1%	3.21
Wave=1	FNSREG=2,4,6	ESIZECL<=4.5	DIRCERT=0		chdsegmt=9	9	195	35.2%	2.84
Wave=1	FNSREG=2,4,6	ESIZECL<=4.5	DIRCERT=1		chdsegmt=10	10	326	41.9%	2.39
Wave=1	FNSREG=2,4,6	ESIZECL>4.5<=5.5			chdsegmt=11	11	188	46.5%	2.15
Wave=1	FNSREG=2,4,6	ESIZECL>5.5			chdsegmt=12	12	243	35.4%	2.83
Wave=2	FNSREG=1-2				chdsegmt=13	13*	313	19.5%	5.12
Wave=2	FNSREG=3	PCTFRELIQ_C=1-3			chdsegmt=14	13*	313	19.5%	5.12
Wave=2	FNSREG=3	PCTFRELIQ_C=4			chdsegmt=15	13*	313	19.5%	5.12
Wave=2	FNSREG=4,6	ESIZECL<=3.5			chdsegmt=16	14	204	39.4%	2.54
Wave=2	FNSREG=4,6	ESIZECL>3.5<=4.5			chdsegmt=17	15*	152	22.3%	4.48
Wave=2	FNSREG=4,6	ESIZECL>4.5	DIRCERT=0		chdsegmt=18	15*	152	22.3%	4.48
Wave=2	FNSREG=4,6	ESIZECL>4.5	DIRCERT=1		chdsegmt=19	15*	152	22.3%	4.48
Wave=2	FNSREG=5,7	TOTSTD_C=1-3	TOTFRERP_C=1,3	DIRCERT=0	chdsegmt=20	16*	488	24.8%	4.04
Wave=2	FNSREG=5,7	TOTSTD_C=1-3	TOTFRERP_C=1,3	DIRCERT=1	chdsegmt=21	16*	488	24.8%	4.04
Wave=2	FNSREG=5,7	TOTSTD_C=1-3	TOTFRERP_C=2,4		chdsegmt=22	16*	488	24.8%	4.04
Wave=2	FNSREG=5,7	TOTSTD_C=4			chdsegmt=23	16*	488	24.8%	4.04

See Attachment 2 for definition of variables used in CHAID analysis.

* Cells were collapsed for weighting purposes as indicated by the final adjustment cell number. Weighted response rate and corresponding adjustment factor refer to the final collapsed cell.

Table F-17. Definition of nonresponse-adjustment cells for the student-level reporting/overlapping error weights

Variable 1	Variable 2	Variable 3	Variable 4	Variable 5	Variable 6	Final adjust-ment cell	Number of resp.	Wtd. resp. rate	Adjust-ment factor
Wave=1	FNSREG=1,3,5,7	TOTFRERP_C=1-2	PCTFRELIG_C=1-2		chdsegmt=1	1	332	30.0%	3.33
Wave=1	FNSREG=1,3,5,7	TOTFRERP_C=1-2	PCTFRELIG_C=3-4		chdsegmt=2	2	434	35.1%	2.85
Wave=1	FNSREG=1,3,5,7	TOTFRERP_C=3	SCHGRADE=1,3	DIRCERT=0	chdsegmt=3	3	179	33.4%	3.00
Wave=1	FNSREG=1,3,5,7	TOTFRERP_C=3	SCHGRADE=1,3	DIRCERT=1	chdsegmt=4	4	247	39.1%	2.56
Wave=1	FNSREG=1,3,5,7	TOTFRERP_C=3	SCHGRADE=2		chdsegmt=5	5	92	30.4%	3.29
Wave=1	FNSREG=1,3,5,7	TOTFRERP_C=4	ESIZECL<=5.5		chdsegmt=6	6	140	31.3%	3.19
Wave=1	FNSREG=1,3,5,7	TOTFRERP_C=4	ESIZECL>5.5	PCTFRELIG_C=2-3	chdsegmt=7	7	89	21.8%	4.58
Wave=1	FNSREG=1,3,5,7	TOTFRERP_C=4	ESIZECL>5.5	PCTFRELIG_C=1,4	chdsegmt=8	8	140	29.8%	3.36
Wave=1	FNSREG=2,4,6	ESIZECL<=2.5			chdsegmt=9	9	200	37.3%	2.68
Wave=1	FNSREG=2,4,6	ESIZECL>2.5<=4.5	DIRCERT=0	TOTFRERP_C=1	chdsegmt=10	10	27	20.6%	4.86
Wave=1	FNSREG=2,4,6	ESIZECL>2.5<=4.5	DIRCERT=0	TOTFRERP_C=2-4	chdsegmt=11	11	86	38.2%	2.62
Wave=1	FNSREG=2,4,6	ESIZECL>2.5<=4.5	DIRCERT=1		chdsegmt=12	12	185	43.6%	2.30
Wave=1	FNSREG=2,4,6	ESIZECL>4.5<=5.5			chdsegmt=13	13	188	46.5%	2.15
Wave=1	FNSREG=2,4,6	ESIZECL>5.5			chdsegmt=14	14	243	35.4%	2.83
Wave=2	ESIZECL<=2.5	FNSREG=1-3,6			chdsegmt=15	15*	125	19.9%	5.03
Wave=2	ESIZECL<=2.5	FNSREG=4-5,7	DIRCERT=0		chdsegmt=16	15*	125	19.9%	5.03
Wave=2	ESIZECL<=2.5	FNSREG=4-5,7	DIRCERT=1		chdsegmt=17	15*	125	19.9%	5.03
Wave=2	ESIZECL>2.5<=3.5	FNSREG=1,3,5,7	DIRCERT=0		chdsegmt=18	16*	106	22.3%	4.49
Wave=2	ESIZECL>2.5<=3.5	FNSREG=1,3,5,7	DIRCERT=1		chdsegmt=19	16*	106	22.3%	4.49
Wave=2	ESIZECL>2.5<=3.5	FNSREG=2,4,6			chdsegmt=20	17	81	38.4%	2.60
Wave=2	ESIZECL>3.5<=5.5	FNSREG=1-4	TOTSTD_C=1,3-4	ESIZECL>3.5<=4.5	chdsegmt=21	18*	647	19.0%	5.26
Wave=2	ESIZECL>3.5<=5.5	FNSREG=1-4	TOTSTD_C=1,3-4	ESIZECL>4.5<=5.5	chdsegmt=22	18*	647	19.0%	5.26
Wave=2	ESIZECL>3.5<=5.5	FNSREG=1-4	TOTSTD_C=2		chdsegmt=23	18*	647	19.0%	5.26
Wave=2	ESIZECL>3.5<=5.5	FNSREG=5-7	TOTSTD_C=1,4		chdsegmt=24	18*	647	19.0%	5.26
Wave=2	ESIZECL>3.5<=5.5	FNSREG=5-7	TOTSTD_C=2-3		chdsegmt=25	18*	647	19.0%	5.26
Wave=2	ESIZECL>5.5<=6.5	FNSREG=2-3,7	APPSUB=0		chdsegmt=26	18*	647	19.0%	5.26
Wave=2	ESIZECL>5.5<=6.5	FNSREG=2-3,7	APPSUB=1		chdsegmt=27	18*	647	19.0%	5.26
Wave=2	ESIZECL>5.5<=6.5	FNSREG=1,4-6			chdsegmt=28	18*	647	19.0%	5.26
Wave=2	ESIZECL>6.5	CEP_STATFIN=N			chdsegmt=29	18*	647	19.0%	5.26
Wave=2	ESIZECL>6.5	CEP_STATFIN=Y			chdsegmt=30	18*	647	19.0%	5.26

See Attachment 2 for definition of variables used in CHAID analysis.

* Cells were collapsed for weighting purposes as indicated by the final adjustment cell number. Weighted response rate and corresponding adjustment factor refer to the final collapsed cell.

Table F-18. Definition of nonresponse-adjustment cells for the student-level administrative reporting error weights

Variable 1	Variable 2	Variable 3	Variable 4	Variable 5	Variable 6	Final adjust-ment cell	Number of resp.	Wtd. resp. rate	Adjust-ment factor
Wave=1	ESIZECL<=2.5				chdsegmt=1	1	973	99.8%	1.00
Wave=1	ESIZECL>2.5<=3.5	FNSREG=1,5	DIRCERT=0		chdsegmt=2	2	144	88.1%	1.14
Wave=1	ESIZECL>2.5<=3.5	FNSREG=1,5	DIRCERT=1		chdsegmt=3	3	182	100.0%	1.00
Wave=1	ESIZECL>2.5<=3.5	FNSREG=2			chdsegmt=4	4	133	67.6%	1.48
Wave=1	ESIZECL>2.5<=3.5	FNSREG=3-4,6-7			chdsegmt=5	5	708	100.0%	1.00
Wave=1	ESIZECL>3.5<=5.5	DIRCERT=0			chdsegmt=6	6	1,177	99.7%	1.00
Wave=1	ESIZECL>3.5<=5.5	DIRCERT=1			chdsegmt=7	7	1,305	100.0%	1.00
Wave=1	ESIZECL>5.5<=6.5	FNSREG=2-6			chdsegmt=8	8	1,422	99.9%	1.00
Wave=1	ESIZECL>5.5<=6.5	FNSREG=1,7	PCTFRELI_C=1,3-4	TOTFRERP_C=1,4	chdsegmt=9	9	235	97.0%	1.03
Wave=1	ESIZECL>5.5<=6.5	FNSREG=1,7	PCTFRELI_C=1,3-4	TOTFRERP_C=2-3	chdsegmt=10	10	150	100.0%	1.00
Wave=1	ESIZECL>5.5<=6.5	FNSREG=1,7	PCTFRELI_C=2		chdsegmt=11	11	125	74.5%	1.34
Wave=1	ESIZECL>6.5	DIRCERT=0			chdsegmt=12	12	352	99.7%	1.00
Wave=1	ESIZECL>6.5	DIRCERT=1			chdsegmt=13	13	663	100.0%	1.00
Wave=2	FNSREG=1				chdsegmt=14	14	128	57.0%	1.75
Wave=2	FNSREG=2,4	ESIZECL<=2.5	DIRCERT=0		chdsegmt=15	15	111	68.8%	1.45
Wave=2	FNSREG=2,4	ESIZECL<=2.5	DIRCERT=1		chdsegmt=16	16	192	97.7%	1.02
Wave=2	FNSREG=2,4	ESIZECL>2.5<=4.5	TOTFRERP_C=1,3		chdsegmt=17	17	159	100.0%	1.00
Wave=2	FNSREG=2,4	ESIZECL>2.5<=4.5	TOTFRERP_C=2,4		chdsegmt=18	18	157	67.6%	1.48
Wave=2	FNSREG=2,4	ESIZECL>4.5			chdsegmt=19	19	343	99.9%	1.00
Wave=2	FNSREG=3	ESIZECL<=4.5			chdsegmt=20	20	264	79.3%	1.26
Wave=2	FNSREG=3	ESIZECL>4.5<=5.5			chdsegmt=21	21	120	81.1%	1.23
Wave=2	FNSREG=3	ESIZECL>5.5<=6.5			chdsegmt=22	22	229	79.2%	1.26
Wave=2	FNSREG=3	ESIZECL>6.5			chdsegmt=23	23	185	83.8%	1.19
Wave=2	FNSREG=5-6	ESIZECL<=4.5	TOTSTD_C=1-2		chdsegmt=24	24	175	76.5%	1.31
Wave=2	FNSREG=5-6	ESIZECL<=4.5	TOTSTD_C=3-4		chdsegmt=25	25	152	96.5%	1.04
Wave=2	FNSREG=5-6	ESIZECL>4.5<=5.5	.		chdsegmt=26	26	255	100.0%	1.00
Wave=2	FNSREG=5-6	ESIZECL>5.5	FNSREG=5	APPSUB=0	chdsegmt=27	27	125	76.6%	1.30
Wave=2	FNSREG=5-6	ESIZECL>5.5	FNSREG=5	APPSUB=1	chdsegmt=28	28	139	85.0%	1.18
Wave=2	FNSREG=5-6	ESIZECL>5.5	FNSREG=6		chdsegmt=29	29	186	99.8%	1.00
Wave=2	FNSREG=7	TOTSTD_C=1			chdsegmt=30	30	73	46.2%	2.17
Wave=2	FNSREG=7	TOTSTD_C=2,4	APPSUB=0		chdsegmt=31	31	175	95.1%	1.05
Wave=2	FNSREG=7	TOTSTD_C=2,4	APPSUB=1	TOTSTD_C=2	chdsegmt=32	32	201	84.8%	1.18
Wave=2	FNSREG=7	TOTSTD_C=2,4	APPSUB=1	TOTSTD_C=4	chdsegmt=33	33	211	76.5%	1.31
Wave=2	FNSREG=7	TOTSTD_C=2,4	APPSUB=1	TOTSTD_C=3	chdsegmt=34	34	204	75.4%	1.33

See Attachment 2 for definition of variables used in CHAID analysis.

Attachment 2. Variables Specified in CHAID Analyses to Define Nonresponse Adjustment Cells

Table F-19. Variables specified to define nonresponse adjustment cells for SFAs

Variable	Description
SFASTAT1	SFA director response status: 1= response, 2=nonresponse
SFASTAT2	SFA submitted data: 1= response, 2=nonresponse
SFASTAT3	SFA_submitted_d2d3: 1= response, 2=nonresponse
SFASTAT4	SFA participated meal observation: 1= response, 2=nonresponse
sfa_pub_sch	Type of control of SFA: 1 = public; 2 = other
ESIZECL	Categorized student enrollment of SFA: Enrollment size class: 1: <1000, 2: 1000-9999, 3: >=10000
NSIZECL	Categorized number of schools: 0: 0, 1: 1-4, 2: 5-9, 3: 10-49, 4:50-99, 5: 100+
FNSREG ¹	FNS region ² : 1=NERO, 2=MARO, 3=SERO, 4=MWRO, 5=SWRO, 6=MPRO, 7=WRO
OP_23_SFA	Whether an SFA has schools operating Provision 2/3: 1=yes
CEP_STATNEW	CEP status of SFA at time of sample selection: 1 = SFA has at least one CEP school; 2 = SFA has no CEP schools
	Categorized percent of CEP schools in SFA :0, <0.25, 0.25-0.5, 0.5-0.75, 0.75-1,1
PCTCEPSTD_C	Categorized percent CEP students in SFA: 0, <0.25, 0.25-0.5, 0.5-1, 1
CEP_STATFIN ¹	CEP status of SFA at time of data collection: 1 = At least one school in SFA is CEP; 0 = otherwise
TOTFRELI_C	Categorized total number of free eligible students and reduced price eligible students: 1=0, 2=1-1000, 3=1001-5000, 4=5001-20000, 5=>20000
PCTFRELI_C ¹	Categorized percent of free/reduced price eligible students in SFA: 0, <0.25, 0.25-0.5, 0.5-0.75, >=0.75

¹ Variable used to define final adjustment cells (see Attachment 1).

² 1 = Northeast (NERO); 2 = Mid Atlantic (MARO); 3 = Southeast (SERO); 4 = Midwest (MWRO); 5 = Southwest (SWRO); 6 = Mountain Plains (MPRO); 7 = Western (WRO).

Table F-20. Variables specified to define nonresponse adjustment cells for schools

Variable	Description
SCHSTAT1	School certification error response status: 1= response, 2=nonresponse
SCHSTAT2	School aggregation error response status: 1= response, 2=nonresponse
SCHSTAT3	School meal observation error response status: 1= response, 2=nonresponse
NSLP_Status ¹	NSLP school provision status (1 = yes, 2 = no, 3 = provision school in base year)
FNSREG ¹	FNS region ² : 1=NERO, 2=MARO, 3=SERO, 4=MWRO, 5=SWRO, 6=MPRO, 7=WRO
SCHGRADE	School type: 1=Elementary, 2=Middle, 3=Secondary/combined/ungraded
sfa_priv_sch	Type of control of SFA: 1 = private; 0 = public
ESIZECL ¹	Categorized student enrollment of SFA, Enrollment size class: 1: <1000, 2: 1000-9999, 3: >=10000
SCHCEPSTAT ¹	School is CEP Y/N
CEP_STATFIN	CEP status of SFA at time of data collection: 1 = At least one school in SFA is CEP; 0 = otherwise
TOTSTDY_C ¹	Categorized total students in school, 1:<450, 2:450-700, 3:700-1000, 4:>=1000
TOTFRERP_C ¹	Categorized total students Eligible for Free/Reduced Price Meals in school, 1:<250, 2:250-450, 3:450-700, 4:>=700

¹ Variable used to define final adjustment cells (see Attachment 1).

² 1 = Northeast (NERO); 2 = Mid Atlantic (MARO); 3 = Southeast (SERO); 4 = Midwest (MWRO); 5 = Southwest (SWRO); 6 = Mountain Plains (MPRO); 7 = Western (WRO).

Table F-21. Variables specified to define nonresponse adjustment cells for students/applications

Variable	Description
STUDSTAT1	Student certification error response status: 1= response, 2=nonresponse
STUDSTAT2	Student report error response status: 1= response, 2=nonresponse
STUDSTAT3	Student administration error response status: 1= response, 2=nonresponse
DIRCERT ¹	Directly certified for free or reduced price meals for SY 2017-18: 1 = yes; 2 = no
ELIGSTAT	Meal benefit eligibility status: 1 = free; 2 = reduced price; 3 = paid
Wave ¹	Survey wave of data collection: 1 or 2
APPSUB ¹	Application submitted for free or reduced price meals for SY 2017-18: 1 = yes, 0 = no
NSLP_Status	NSLP school provision status (1 = yes, 2 = no, 3 = provision school in base year)
FNSREG ¹	FNS region ² : 1=NERO, 2=MARO, 3=SERO, 4=MWRO, 5=SWRO, 6=MPRO, 7=WRO
SCHGRADE ¹	School type: 1=Elementary, 2=Middle, 3=Secondary/combined/ungraded
sfa_priv_sch	Type of control of SFA: 1 = private; 0 = public
ESIZECL ¹	Categorized student enrollment of SFA, Enrollment size class: 1: <1000, 2: 1000-9999, 3: >=10000
CEP_STATFIN ¹	CEP status of SFA at time of data collection: 1 = At least one school in SFA is CEP; 0 = otherwise
TOTSTD_C ¹	Categorized total students in school, 1:<450, 2:450-700, 3:700-1000, 4:>=1000
TOTFRERP_C ¹	Categorized total students eligible for free/reduced price meals in school, 1:<250, 2:250-450, 3:450-700, 4:>=700
PCTFRELIQ_C ¹	Categorized percent of free/reduced price eligible students in school: 0, <0.25, 0.25-0.5, 0.5-0.75, >=0.75

¹ Variable used to define final adjustment cells (see Attachment 1).

² 1 = Northeast (NERO); 2 = Mid Atlantic (MARO); 3 = Southeast (SERO); 4 = Midwest (MWRO); 5 = Southwest (SWRO); 6 = Mountain Plains (MPRO); 7 = Western (WRO).

Third Access, Participation, Eligibility, and Certification Study (APEC-III) Final Report

Volume 4: Appendices – Appendix G. Creation of Jackknife Replicates for Variance Estimation

Contract # AG-3198-B-15-0010

Contracting Officer Representative (COR):
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September 2021

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Appendix G

Creation of Jackknife Replicates for Variance Estimation

Since a multistage stratified sample design was used for APEC III, the usual methods of variance estimation based on simple random sampling assumptions are not appropriate. Thus, a jackknife replication method was used to compute the sampling errors of estimates derived from the survey results. The method requires that a series of replicate weights be computed and attached to each record in the analysis file. The replicate weights are derived by first defining a number of subsamples of the full-sample (referred to as jackknife replicates). Each subsample is re-weighted to account for the subsampling that occurred, and then the full-sample weighting process is applied to each of the subsamples (jackknife replicates). This results in a series of replicate-specific weights that are attached to each data record along with the full-sample weight. Together, the full-sample and replicate weights are used to compute the variability of any survey-based estimate from which standard errors and confidence limits can be derived.

The first step in creating the jackknife replicates was to define variance-estimation strata (VARSTRAT) and variance-estimation units (VARUNIT). Since the SFAs and schools were selected systematically within strata, the paired jackknife (also referred to as JK2) approach was used to create replicated weights. The JK2 approach requires two (or three) VARUNITs per VARSTRAT. The VARSTRAT and VARUNIT variables were defined for the SFA sample and school sample separately as follows.

- For the SFA sample, VARSTRAT was defined by pairing non-certainty SFAs within CEP status and FNS region. Occasionally, a VARSTRAT may contain triplets of SFAs if the total number of SFAs within a combination of CEP status and FNS region is odd. VARUNITs were the SFAs within each VARSTRAT. They were randomly numbered 1 and 2 within each pair of SFAs or 1, 2, 3 for triplets. The certainty SFAs were included in every replicate and their replicate weights were the same as the full-sample weights. Therefore, it was not necessary to assign VARSTRAT and VARUNIT for certainty SFAs.
- For schools in non-certainty SFAs, the VARSTRAT and VARUNIT were the same as those created for SFA sample. For schools in certainty SFAs, the VARSTRAT was defined by pairing schools within SFA and school CEP status. A VARSTRAT may contain triplets of schools if the total number of schools for a particular CEP status

within a SFA is odd. VARUNITs were the schools within each VARSTRAT. They were randomly numbered 1 and 2 within each pair of schools or 1, 2, 3 for triplets.

Once the variance strata and variance units were created, the jackknife replicates were created as follows.¹

- For VARSTRAT with two VARUNITs, the weight of the first VARUNIT from a VARSTRAT was doubled to form the replicate, the weight of the other VARUNIT in that VARSTRAT was set to 0, and the weights for the units in the remaining VARSTRAT were not modified.
- For VARSTRAT with triplets, the weights were adjusted for two sets of replicates. For one set of replicates, the weights of the first and second VARUNIT from a VARSTRAT were multiplied by 1.5, the weight of the third VARUNIT in that VARSTRAT was set to 0. In addition, another set of replicate weights were adjusted for the VARSTRAT with triplets. The weights in another selected replicate was modified by multiplying the weights of the first and third VARUNIT by 1.5 and setting the weight to 0 for the second VARUNIT. The weights for the units in the remaining VARSTRAT were not modified.

For the SFA sample, the replicate weights were first constructed from the final SFA base weights $W_{ta}^{SFA:FIN}$ (see Section F.2 in Appendix F) using the approach described above. A total of 132 sets of SFA replicate weights were created. Each set of the SFA replicate weights was then adjusted to account for the nonresponse to SFA director survey using the same adjustment cells as the full sample weights.

For the school sample, the replicate weights were first constructed from the school base weights $W_{ab}^{SCH:BW}$ (see Section F.3.1 in Appendix F) using the approach described above. A total of 190 sets of school replicate weights were created. Each set of the school replicate weights was then adjusted to account for nonresponse using the same adjustment cells as the full sample weights for the three sets of school-level weights respectively.

For the student sample, the replicate weights were derived by multiplying the school replicate weights by the within-school probability of selecting student $P_{s|ab}^{STUD}$ (see Section F.4.1 in Appendix F). Each set of the student replicate weights was then adjusted to account for nonresponse using the same adjustment cells as the full sample weights for the three sets of student weights respectively. There were 190 sets of replicate weights for the student sample.

¹ Rust, K.F., and Johnson, E.G. (1992). Sampling and Weighting in the National Assessment. *Journal of Educational and Behavioral Statistics*, 17(2), 111–129.

Third Access, Participation, Eligibility, and Certification Study (APEC-III) Final Report

Volume 4: Appendices – Appendix H. Certification Error in Non-CEP Schools

Contract # AG-3198-B-15-0010

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Appendix H

Certification Error in Non-CEP Schools

H.1 Preparation of Household Survey and Application Data for Analysis

The analysis of certification error rates in non-CEP schools relies on data from the household survey, documentation of direct certification and household applications from the school or SFA, and the district master benefit list. We reviewed and prepared these data sources for analysis using SAS version 9.4. This section first describes the approach to data preparation for each data source. Next, we discuss the imputation approach for missing meal participation records, which are necessary to determine erroneous payments due to certification errors in non-CEP schools. Finally, we provide results from an analysis of procedural and trend effects on reporting error, comparing data from APEC-II to APEC-III.

H.1.1 Preparation of the Household Survey Data

The certification error analysis requires a measure of the eligibility status of the student based on participation in a means-tested program or household size and income obtained via survey.

Means-Tested Program Participation. We first identified households that indicated that they participated in one of the means-tested programs that determines NSLP and SBP eligibility. If the household participated in one of these programs, we coded their eligibility status as Free and did not collect or assess information on household income and size.

Household Size. Household survey interviewers asked respondents to list all members of the household and their relation to the survey respondent. The survey respondents were also asked to list the relationship of each person currently living in the household. We reviewed open-ended responses for household members with a relationship of “other” and, if possible, assigned these to existing categories. The relationship of each household member provides useful information, however, for the purposes of determining income eligibility, we used the total count of individuals currently living in the household, and did not redefine the household size based on the relationship

of household members (such as, for example, restricting the household size count to only immediate family members).

Household Income. The survey interviewer asked respondents who did not indicate participation in a means-tested program to list income sources and amounts. These amounts were reported using different payment intervals (i.e., household, daily, weekly, every 2 weeks, twice a month, monthly, quarterly, annually). Household income amounts were standardized to monthly amounts and summed to create a measure of Total Household Monthly Income.

We removed 92 household survey responses due to missing income information that was necessary to determine eligibility status. These households did not indicate that they participated in a means-tested program and indicated that they received income, but did not provide the amounts of the income received.

H.1.2 Direct Certification Documentation, Application Data, and the District Master Benefit List

We received and abstracted records for 11,353 students. The general steps to the data preparation process for these data was similar to those followed for the household survey data. First, we assessed evidence of participation in means-tested programs. For those not participating in means-tested programs, we assessed the reported household size and monthly income. If an application was reviewed, data collectors also recorded the completeness of the application.

Direct Certification Documentation. Data collectors recorded the sources used as the basis for eligibility for each student. If the information indicated that the student was directly certified, we assessed whether documentation was on file to support direct certification.

Household Size and Income. Households submitting an application for certification based on income must provide a total number of household members and a list of income sources along with income amounts. If an income amount was not provided, we assumed that the income amount was \$0.

Using the FNS eligibility rules, we created an indicator of the eligibility status for each student based on the information provided by the school / SFA (means-tested program participation or household

size and income). This independent assessment of eligibility was then compared to the eligibility status recorded by the school / SFA as part of the analysis of reasons for administrative error.

H.2 Imputation of Missing Meal Participation Data

The number of meals received by each student in the sample during school year (SY) 2017-2018 are a key component in the estimation of erroneous payments due to certification errors in non-CEP schools. As described in Volume 1 Chapter 3, the numbers of meals received by the student are combined with the per-meal reimbursement rate based on the certification status of the student and the rates used by school (accounting for additional per-meal subsidies) to generate estimates of total payments.

School districts provided meal participation data for all months in SY 2017-2018 for approximately 56 percent of the 3,541 students included in the certification error analysis, meaning that the remaining 44 percent were missing full meal participation records. We considered two options to account for the missing data. The first option is to exclude students with missing meal participation records. This option was rejected because excluding these records would mean that erroneous payment analyses would include only a subset of records, which may result in biased and/or imprecise estimates. The second option was to estimate imputed meal counts for the students missing meal participation records using data from the household survey. Analysts chose the second option (imputation) because this approach allows for erroneous payment analyses based on errors estimated for the entire analytic sample instead of a subset. Furthermore, data from the household survey provide information relevant to meal participation to serve as inputs for the imputation models. This following sections describe the approach to the imputation of meal participation records and the results of the imputation procedure.

H.2.1 Imputation Approach and Model Results

To perform the imputation analyses, we created a data set containing the meal participation records and survey responses for only those students with a complete household survey ($n=3,792$). Of these, 56.22 percent of students had a complete count of meals based on administrative meal count data from the district for the entire school year. The remaining students fell in to three groups. The approach to the imputation differed for each group based on the types of data available.

Group 1 consists of students with meal counts provided from administrative records for only the target month of the school year instead of the entire school year (6.43 %). We generated imputed NSLP and SBP meal counts for these students by modeling total SY 2017-2018 meal counts using target month meal counts as the predictor for students with meal count records for the entire year with an Ordinary Least Squares (OLS) model. The results of the model were then used to predict total year meal counts using target month meal counts for this group of students.

Table H-1 provides the results of the imputation models for generating estimated NSLP and SBP meal counts for Group 1.

Table H-1 Model results for prediction of SY 2017-2018 total meal counts using a target month meal count (Group 1)

Independent variable	SY 2017-2018 Total meal counts	
	NSLP	SBP
Target month meal count	6.86*** (0.12)	7.51*** (0.10)
R-squared	0.64	0.76
Sample size (students)	1,872	1,758

Source: SFA student meal count administrative records

Notes: Cell entries are OLS regression coefficients, standard errors in parentheses.

*** p<0.01

Group 2 consists of students with no meal counts from administrative records with responses to the meal participation questions on the household survey (33.57 %). Respondents to the household survey (typically a parent or guardian) provided information about the student's meal participation during the full week prior to the interview. We used this information to create key predictor variables, computed as the proportion of NSLP meals the student received during the previous full week of school (the number of meals the student received during the week divided by the number of meals offered during the week). The same approach was used to compute the proportion of SBP meals received during the previous week. The models also included a selected set of demographics that may relate to meal participation (age, gender, and direct certification) as controls in the models.

For Group 2, the model estimation procedures differed for NSLP and SBP meal counts because of the higher proportion of zero values among SBP meal counts. OLS models assume a normally distributed outcome variable, and may not produce reliable estimates when the outcome variable has a high proportion of zeros. Therefore, for the SBP models, we used a two-part model approach (using the `tpm` command in Stata 16). This approach first estimates a logistic model to predict the

likelihood that the outcome (e.g., SBP meal counts) is 0. Then, if the first stage predicts that the outcome is not 0, the second stage estimates the value of the outcome using a Generalized Linear Model (GLM). We used OLS regressions for the NSLP meal counts because the distribution of NSLP meal counts do not have a concentration of zeros that would present a problem for OLS modeling.

Table H-2 provides the results of the imputation models for generating estimated NSLP and SBP meal counts for Group 2.

Table H-2. Model results for prediction of SY 2017-2018 total meal counts using survey responses to meal participation questions (Group 2)

Independent variable	SY 2017-2018 total meal counts		
	NSLP (OLS) ^a	SBP (Part 1 Logistic) ^b	SBP (Part 2 GLM) ^a
Proportion of NSLP meals received in most recent 5 day week	90.79*** (3.31)	2.32*** (0.17)	57.11*** (2.99)
Proportion of days attended school in most recent 5 day week	-67.08*** (10.33)	-1.19* (0.62)	-2.30 (12.29)
Child age (years)	4.40** (1.71)	-0.05 (0.11)	-2.95 (2.16)
Child age squared	-0.31*** (0.07)	-0.00 (0.00)	0.05 (0.10)
Child is female (base=Male)	-8.51*** (2.07)	-0.39*** (0.13)	-0.77 (2.55)
Student certified free by direct certification	3.70* (2.07)	-0.05 (0.13)	3.09 (2.58)
Constant	96.35*** (13.01)	2.60*** (0.82)	61.13*** (15.59)
R-squared ^c	0.34	-	-
Sample size (students)	1,949	1,812	1,812

Source: SFA student meal count administrative records and APEC-III household survey.

Notes:

^a Cell entries are linear regression coefficients, standard errors in parentheses.

^b Cell entries are logistic regression coefficients, standard errors in parentheses.

^c The r-squared is not reported for the SBP estimates because the two part model used for the SBP estimates does not produce a statistic analogous to the R-squared.

*** p<0.01, ** p<0.05, * p<0.1

Group 3 consists of students with no meal counts from administrative records who do not have responses to the meal participation questions on the household survey (3.77 % of all students with a complete household survey). The approach to imputing meal counts for students in Group 3 is the same as for those in Group 2 except that the proportion of NSLP and proportion of SBP predictor variables are not included in the models because this information is not available for these students.

Table H-3 provides the results of the imputation models for generating estimated NSLP and SBP meal counts for Group 3.

Table H-3. Model results for prediction of SY 2017-2018 total meal counts using student demographics (Group 3)

Independent variable	SY 2017-2018 total meal counts		
	NSLP (OLS) ^a	SBP (Part 1 Logistic) ^b	SBP (Part 2 GLM) ^a
Child age (years)	9.02*** (1.91)	0.04 (0.09)	0.18 (2.26)
Child age squared	-0.55*** (0.08)	-0.01 (0.00)	-0.15 (0.10)
Child is female (base=Male)	-8.86*** (2.35)	-0.43*** (0.11)	-3.48 (2.69)
Student certified free by direct certification	6.00** (2.36)	0.23** (0.11)	9.59*** (2.70)
Constant	85.01*** (10.32)	1.83*** (0.51)	83.01*** (12.07)
R-squared ^c	0.08	-	-
Sample size (students)	2,132	2,053	2,053

Source: SFA student meal count administrative records and APEC-III household survey.

Notes:

^a Cell entries are linear regression coefficients, standard errors in parentheses.

^b Cell entries are logistic regression coefficients, standard errors in parentheses.

^c The r-squared is not reported for the SBP estimates because the two part model used for the SBP estimates does not produce a statistic analogous to the R-squared.

*** p<0.01, ** p<0.05

H.2.2 Imputation Results

The imputation approach produces estimated meal counts for the entire set of students with a complete household survey that are close in terms of mean and range to the counts for the subset with full administrative records. Table H-4 below shows the summary statistics for the meal count data based only on the students with administrative records of meal counts for the entire school year and the summary statistics for the imputed meal counts for all students with a complete household survey.

Table H-4. Comparison of imputed meal count variable to administrative records for survey respondents

Meal count	N	Mean	Standard deviation	Minimum	Maximum
NSLP meal counts					
Administrative records only	2,132	107.13	56.71	0	195
Imputed meal counts	3,792	109.72	47.4	0	197
SBP meal counts					
Administrative records only	2,053	53.89	56.49	0	195
Imputed meal counts	3,792	56.58	47.69	0	195

Source: SFA student meal count administrative records and APEC-III household survey.

H.3 Calculating Erroneous Payment Rates and Amounts

We calculated erroneous payments for each student by combining the certification status based on the district master benefit list, eligibility status based on direct certification documentation or the household survey, and the meal participation records (missing values imputed) and creating estimated Overpayment, Underpayment, Gross erroneous payment, and Net erroneous payment amounts using the following steps:

1. Estimate the total amounts reimbursed separately for NSLP and SBP meals for the school year by multiplying the number of meals received by the per-meal reimbursement rate based on the certification status of the student. For any students who changed certification status during the school-year, adjust the reimbursement amounts for the different per-meal reimbursement rate for the portion of meals served at different rates.
2. Estimate the total correct reimbursement amounts separately for NSLP and SBP meals by multiplying the total meals received by the per-meal reimbursement rate for the true eligibility status of the student (based on evidence of direct certification documentation or household application).
3. Calculate Overpayments, Underpayments, Gross Erroneous Payments, and Net Erroneous Payments separately for NSLP and SBP meals for each student:
 - A. If the total amount reimbursed is greater than the total correct reimbursement amount, then the difference between these reimbursement estimates results is the Overpayment amount.
 - B. If the total amount reimbursed is less than the total correct reimbursement amount, then the difference between these reimbursement estimates is the Underpayment amount.
 - C. The Gross erroneous payment amount is the sum of the Overpayment and Underpayments.

- D. The Net erroneous payment amount is calculated by subtracting the correct reimbursement amount from the actual reimbursement amount. Positive values indicate Overpayments, and negative values Underpayments.

These steps resulted in estimated erroneous payment amounts and estimated reimbursements. Due to the sampling and estimation procedure, however, the estimated reimbursements do not perfectly equal the actual reimbursements made by FNS. There are two key differences between the weighted reimbursement estimates based on the sampled students and the actual reimbursements made during the school year. First, the reimbursement estimates from the sampled students are based in part on meal participation records that, while close, do not perfectly match the actual numbers of meals claimed during the school year. Second, the student sample only includes students certified at the free or reduced-price rate (certified students) and denied applicants. The student sample does not include non-applicants (i.e., students who did not apply and were not certified for free or reduced-price meals). Non-applicants correctly receive meals at the Paid rate; therefore, no improper payments were made to non-applicants.

To estimate improper payment amounts and rates that match actual reimbursement amounts, therefore, we needed to adjust the APEC-III estimated improper payment rates and amounts so that they represent the appropriate proportions of payments made to all students in non-CEP schools. We accomplish this by (1) estimating the total payments made to certified and denied applicants only based on school meal counts and student meal participation data, (2) creating budget calibrated weights based on the estimated totals from step 1, and (3) using the calibrated weights from step 2, estimating improper payment rates and amounts out of all payments made to all students (i.e., certified applicants, denied applicants, and non-applicants).

To adjust the estimated improper payment amounts, we need an estimate of the total payments made in non-CEP schools to Certified and denied Applicants only, excluding payments made to non-applicants. This amount corresponds to the payments made for meals served only to the students represented by the APEC-III student sample.

To estimate the reimbursements paid to Certified and denied Applicants in non-CEP schools, we can draw from two APEC-III data sources submitted by participating SFAs: (1) the school free, reduced-price, and paid meal counts, and (2) the meal participation records for sampled free or

reduced-price certified students and Denied applicants. For each meal type m (breakfast or lunch), let:

A_m = the ratio of total payments made at the paid rate over total payments at the free and reduced-price rates based the school meal count records (weighted estimate)

FRP_m = total payments made at the free or reduced-price rates based on student meal participation records (weighted estimate)

D_m = total payments made to denied applicants at the paid rate based on student meal participation records (weighted estimate)

T_m = the estimated total reimbursements at the free, reduced-price, and paid rates (including payments to non-applicants)

The equation below estimates the total payments (T_m), including those at the paid rate. The adjustment uses the observed ratio of payments at the paid rate relative to payments to students certified at the free or reduced-price rate from the school meal count records (A_m).

$$T_m = FRP_m + [A_m \times FRP_m]$$

We can calculate the estimated reimbursement amount for free certified, reduced-price certified, and denied applicants only for meal m (S_m) following a similar approach as the equation above but using the weighted estimate of payments made to Denied applicants only (D_m):

$$S_m = FRP_m + D_m$$

The next step is to use these calculated reimbursement amounts to estimate the degree to which the APEC-III household survey sample underestimates the actual reimbursements due to the exclusion of non-applicants from the sample. The adjustment factor for meal m is ADJ_m :

$$ADJ_m = \frac{S_m}{T_m}$$

We can use this adjustment to estimate the national reimbursements paid to Free certified, Reduced-price certified, and Denied applicants only using the FNS National Data Bank data for SY2017-2018:

PMT_m = The total reimbursements for meal m in non-CEP schools

$ADJTOT_m$ = The estimated reimbursements for meal m in non-CEP schools paid to Certified and Denied Applicants only

$$ADJTOT_m = PMT_m \times ADJ_m$$

The final step is to use this adjusted total reimbursement amount to budget-calibrate the estimates for improper payments due to certification error in non-CEP schools. We can then calculate the improper payment rates by dividing the weighted improper payment amounts by the total reimbursements (PMT_m). This approach will include all payments, including the payments made to non-applicants, in the denominator, and will assume that there are no improper payments made to non-applicants.

We followed the procedures described in the Study Design to create budget-calibrated weights for the purpose of estimating total erroneous payment amounts for School Year 2017-2018. We created separate budget-calibrated weights for NSLP and SBP reimbursements to calculate erroneous payment amounts separately for each program. The nonresponse-adjusted weights were calibrated so that the total sample-based weighted estimates of School Year reimbursements equal the corresponding actual reimbursement amounts recorded in FNS data files. We made this adjustment separately for NSLP and SBP. Let R_c^m = the $ADJTOT_m$ amount for meal m (representing total estimated payments to Certified and Denied Applicants in non-CEP schools only). We computed the final calibrated weight for student s in school j in school-type c and meal type m as:

$$w_{cmjs}^{cal} = w_{cmjs}^{NR} \{ R_c^m / \sum_{j=1}^c w_{cmjs}^{NR} R_{cmjs} \} \quad (1)$$

where R_{cmjs} = the total annual reimbursement reported by responding student s in school j in school-type c for meal type m .

H.4 Reporting Error: Estimating the Effect of Procedural Changes from APEC-II to APEC-III

APEC III includes three changes to how income data were collected for the household survey that can affect the certification error measures. Relative to APEC-II, in APEC-III we:

- Provided larger incentive to households in two parts; first for completing the survey and second for providing income documentation,
- Provided technical assistance (TA) on how to identify and access income verification documentation, and

- Conducted the survey within six weeks after certification, which shortens the recall period.

We use regression models to estimate both the effects procedural-change and trends have had the certification error measures between APEC-II and-III. The model includes variables that control for the enhancements in data collection protocols used in APEC-III. We pooled the APEC-II and III samples to estimate the model coefficients.

H.4.1 The Model

The behavioral changes that the new procedures elicit and our ability to detect errors can be expressed by a two-equation model as shown below.

- The first equation captures how the incentives and provision of TA influenced the likelihood of a household presenting income documentation. Both the higher 2-part incentive and the provision of TA on income verification documentation, along with household demographics, will affect the likelihood that a household provides income verification documentation.
- The second equation reflects our ability to detect an error given the data quality and the likelihood an error has occurred given household characteristics. Having the income verification documentation and shorting the recall period for the household survey should both work to increase the likelihood that we detect an error when one has occurred while household demographics affect the likelihood that an error has occurred.

$$(1) INCOMEDOC = f(NEWPROTOCOL, HHSIZE, HHED)$$

$$(2) E_{HR} = f(INCOMEDOC, HHSIZE, HHED, SAMPLEYR)^1$$

Where, for Equation 1,

- *INCOMEDOC*=a binary variable reflecting whether the household provided income verification documents, 1 if they did and 0 otherwise
- *NEWPROTOCOL*=a binary variable reflecting whether the household got new protocol (higher 2-part incentive and TA on income documentation¹) or the old protocol, 1 if they got the new protocol and 0 if they got the old protocol
- *HHSIZE*=the number of household members

¹ Because the higher incentive and TA are delivered “jointly” in that everyone in the APEC III sample gets both, they are 100% correlated with each other as well as with the SAMPLEYEAR. As such, we can only examine their joint impact and cannot estimate their individual effects.

- *HHED* = a binary variable reflecting whether the head of the household completed high school, 1 if they did, 0 otherwise

For Equation 2,

- *E_{HR}* = a binary variable reflecting household reporting errors, 1 if there is a reporting error, 0 otherwise
- *SAMPLEYR* = a binary variable reflecting whether the observation is from APEC II or APEC III, 1 if APEC III and 0 if APEC II.

In equation 2, the coefficient on *SAMPLEYR* provides an estimate of the trend effect. Similarly, the coefficient on *INCOMEDOC* in equation 2 along with the coefficient on *NEWPROTOCOL* in equation 1 can be combined to estimate the procedural-change effect.

Initially, the analysis plan called for utilizing a measure of the number of days between the date the application was submitted and the completion of the household interview (*RECALLDAYS*). The date of the household interview as missing for a large percentage of the records from the APEC II data. Including this variable in the models and deleting cases with missing values from the analysis would have resulted in a small and potentially biased sample. Therefore, the *RECALLDAYS* variable was omitted from Equation 2. For comparison, we estimated an alternative model on the subsample with non-missing *RECALLDAYS* information. The results of this alternative model found no significant relationship between *RECALLDAYS* and the likelihood of a reporting error.

H.4.2 Estimating the Model

We estimate the model equations separately because the system is recursive². To account for the fact that the dependent variables (*INCOMEDOC* and *E_{HR}*) must be between 0 and 1, we use logistic regression in estimating the models. If the coefficients on the procedural-change variables and the trend variable are statistically significant, these factors are affecting the APEC III error rate.

Because the logistic model is not linear, the estimated coefficients will not directly measure the magnitude of the impact of the explanatory variables on the dependent variables. To determine the

² The equations are recursive (rather than simultaneous) because the values for the dependent variables (*INCOMEDOC* and *E_{HR}*) can be determined sequentially rather than jointly. That is, *INCOMEDOC* can be determined from only exogenous variables (Xs) in equation 1 and then used to determine *E_{HR}* in equation 2.

magnitude of these effects, we evaluated the average percentage-point change due to each model component using the margins postestimation command in Stata 15.

For APEC-III, household survey respondents were asked to provide income documentation if they were not participating in a means-tested program that would confer categorical eligibility or direct certification status. To ensure that the APEC-II and APEC-III samples used in the models are comparable, we restricted the sample to only students who were not participating in a means-tested program that would have resulted in an exemption from providing income and household size information.

Table H-5 shows the model results. The first column provides the results of Equation 1 (outcome variable=INCOMEDOC). The results indicate that respondents who received the new protocol (i.e. those sampled for APEC-III) were 23.1 percentage points more likely to provide income documentation compared to those who received the old protocol under APEC-II.

The second column provides the results of Equation 2 (outcome variable= E_{HR}). The coefficients in Equation 2 for INCOMEDOC and SAMPLEYEAR are not significant. This indicates that, although Equation 1 indicates that respondents using the new protocol were significantly more likely to provide income documentation, providing income documentation is not significantly related to the likelihood of a household having a reporting error. Furthermore, the model does not reveal a significant trend effect, because the coefficient for SAMPLEYEAR is not significant, indicating no significant difference in the likelihood of a reporting error from APEC-III compared to APEC-II.

Not finding a significant procedural or trend effect may seem unexpected, given that Volume 1 of this report found that reporting error rates were significantly lower in APEC-III than in APEC-II. However, it is important to keep in mind the differences between the analyses. The reporting error rate comparisons presented in Volume 1 compared reporting error rates among all students in the samples, including those directly certified. The significant decrease in reporting error rates from APEC-II to APEC-III is largely due to the increased use of direct certification to certify students. Among those students included in the models presented in Table H-5 (i.e., those not directly certified), we do not find significant differences in reporting error rates between the two studies, due either to procedural or trend effects.

Table H-5. Procedural and Trend Effects on Reporting Error due to Changes from APEC-II to APEC-III

Independent variable	Equation 1: INCOMEDOC	Equation 2: E _{HR}
INCOMEDOC	–	8.25 (5.92)
HHSIZE	0.12 (0.24)	0.54 (1.16)
HHED	4.23*** (0.96)	10.21*** (3.78)
NEWPROTOCOL	23.10*** (1.08)	–
SAMPLEYEAR	–	-9.00 (5.71)
Sample size (students)	2,726	2,726

Source: APEC-III household survey and application record abstraction data, weighted.

Notes: Cell entries are marginal effects generated from weighted logistic regressions with standard errors in parentheses. The marginal effects represent the estimated percentage point change in the likelihood of a reporting error due to the corresponding variable, holding all else constant. Estimates were generated using Stata's svy: logit and margins procedures. Households were excluded from the analysis if they skipped the income portion of the household survey. Household skipped the income portion of the survey if they received TANF, SNAP, or FDPIR benefits.

*** p<0.01

Third Access, Participation, Eligibility, and Certification Study (APEC-III) Final Report

Volume 4: Appendices – Appendix I. Certification Error in CEP Schools

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Appendix I

Certification Error in CEP Schools

The memorandum submitted to FNS on January 15, 2016 addressed three key issues associated with estimating errors in CEP schools, and concluded with a proposed plan that was approved by FNS. This appendix provides a summary of the steps taken, following the approved plan, to collect data and estimate certification error rates for CEP schools. Table I-1 provides a summary of the error definition, data collection, and calculation of erroneous payment rates.

Table I-1. Summary of plan

Error definition	Error data collection and analysis	Calculation of CEP group ISP	Calculation of erroneous payment
Only among identified students	Individual level data only on identified students	Corrected ISP based on the percent of identified student verified in sampled schools within the CEP group	Difference in payments resulting from observed vs. corrected ISPs

Definition of Error

A certification error for CEP schools are cases of misclassified identified students that cause:

- The CEP group's ISP to be incorrect and
- The ISP is higher than the records they used support and
- The corrected ISP is below 62.5 percent.

As schools are required to maintain documentation¹ to verify their ISP, not having this supporting information is a form of an error that we will refer to as a *documentation error*. A documentation error occurs if there is a lack of required supporting documentation. In such cases, we recorded the lack of documentation at the school/SFA as an error.

Consistent with APEC methodology, we followed the steps summarized below in Table I-2 to estimate certification errors in CEP school groups. However, the exact approach used in APEC II for determining certification errors in CEP schools no longer applies given that at the time of APEC

¹ LEAs have been informed that documentation must be retained for the duration of their CEP period, plus for three years after submission of the final claim for reimbursement for the last fiscal year of CEP.

II, CEP was a pilot program in a few States. Currently, the program has been running for several years and is open to all States. Additionally, the current rules preclude using application data to justify students as being eligible for free meals. Students should be either identified using administrative data sources (matching) or be classified as “not identified.”

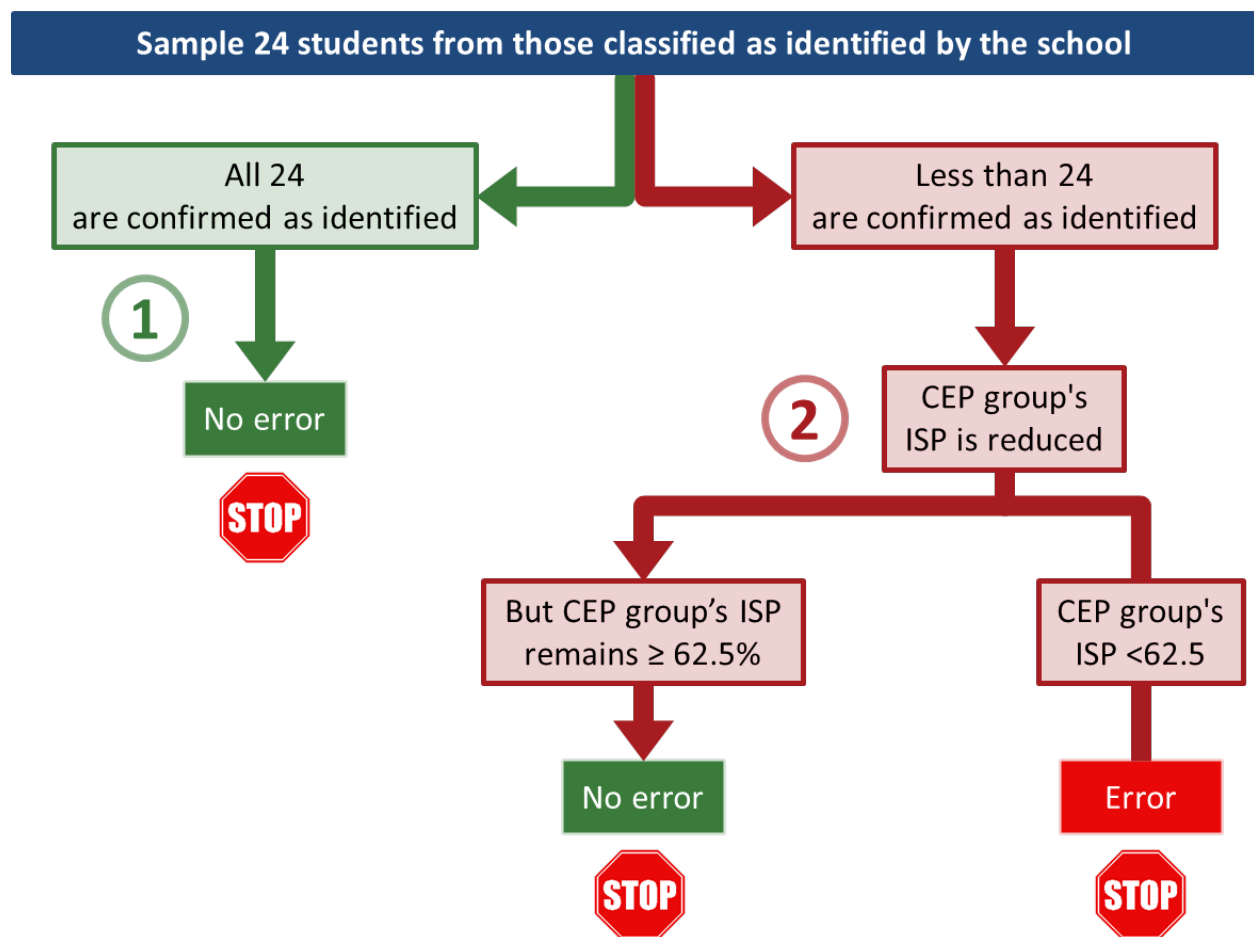
Table I-2. Steps for assessing certification errors and erroneous payments in CEP schools

Step	Activity
1 Obtain data	Obtain the student level data that was used to determine the school's ISP.
2 Sample identified students	- Sample 24 students from each school's list of identified students. - Pool the data from schools in the same CEP group, when applicable.
3 Determine the errors from identified students	- Use schools' supporting data to verify the identified students' status. - If all students are verified as eligible, there is no error and process ends. - If only some students are verified as eligible but the group's [corrected] ISP is still ≥ 62.5 percent, there is no error and process ends. - If only some students are verified as eligible and corrected group IPS is <62.5 percent, then the unverified students are certification errors. - The impact on ISP is calculated using the ISP correction formula described in step 4)
4 Calculate corrected ISP	- For cases in which less than 100% of sampled students are verified, create correction factors for adjusting the relative proportion of identified students. - The corrected ISP is calculated as: $ISP_{COR} = (MATCH^{ID} * ISP_{OBS}) * 100$ where the MATCH variable is the proportion of students verified by the study as correctly belonging to the identified category and the ISP_{OBS} is the ISP used by the CEP group. In essence the MATCH variable is a correction factor. - Apply correction factor to the CEP group's ISP to estimate a “corrected” ISP.
5 Estimate national error rate	- Apply school level sampling weights adjusted for nonresponse. - Sum over all CEP schools to get the total number of errors. - Divide by the total number of students enrolled in CEP schools to obtain the error rate.
6 Estimate school level erroneous payments	Calculate the difference in payments for the school using the observed and then the corrected ISPs and determine the difference. Multiply the number of meals served to all students by the ISPs' reimbursement rates and the respective reimbursements amounts to obtain measure of payments at the school level. The difference in the payment levels is the erroneous payments.
7 Calibrate CEP school weights	- We will have to “calibrate” the weights so that sample-based weighted estimates of reimbursements equals known CEP reimbursement totals from FNS administrative files. This adjustment will be applied to each set of school weights, $w_{gij}^{PS,em}$. - Let R_c^m = the total annual reimbursement amount derived from FNS administrative files for meal type m (breakfast or lunch) and type-of-school c (CEP vs. non-CEP). The final calibrated weight to be used for analysis of payment errors for school j in school-type c and meal type m will be computed as: $w_{cmj}^{cal,em} = w_{cmj}^{PS,em} \{ R_c^m / \sum_{j=1}^c w_{cmj}^{PS,em} R_{cmj} \}$ - where R_{cmj} = the total annual reimbursement reported by responding school j in school-type c for meal type m.
8 Estimate national erroneous payments	- Apply calibrated CEP school weights. - Sum over all CEP schools to get the total erroneous payment. - Divide by the total program reimbursement payments to obtain the erroneous payment rate.

Error Data Collection and Analyses

Using the data the school, SFA, or State used to calculate their ISP, we sampled 24 identified students from each school and independently determined if they were properly identified based on the data the school used. The findings from this initial analysis determined how we proceed, as shown in Figure I-1. If all 24 cases were confirmed as identified (pathway 1), there is no error and we ended the analysis. Alternatively, if not all 24 cases were confirmed as identified, we proceeded down pathway 2 and determined if the incorrect count of identified students would have impacted the CEP group's ISP. If the group would have remained at an ISP equal to or above 62.5 percent, even with these mistakes, there was no error and we ended the analysis. If the mistakes would have reduced the group's ISP below the maximum of 62.5 percent, then it is an error.

Figure I-1. Procedures for identifying certification errors in CEP schools



Calculating the Corrected ISP

To calculate the corrected ISP, we estimated the percentage in the identified group that matches the school's categorization of identified students versus not identified students. For example, if all sampled students are categorized correctly in the identified group, the match is 100 percent and no corrections need to be made. Alternatively, if only 90 percent of the students should have been in the identified group, the correction factor is .90. We measured and applied the correction factor to the ISP the CEP used and calculated a "corrected" ISP. For example, if the group's observed ISP was .60, then the corrected ISP in this example is $(.90 \times .60) \times 100 = .54$. After calculating the corrected ISP, we determined the estimated actual free and paid claiming percentage for the schools in the CEP group. Using this estimate, along with the number of reimbursable meals claimed by the school, we estimated the amount of improper payments for the NSLP and SBP.

Third Access, Participation, Eligibility, and Certification Study (APEC-III) Final Report

Volume 4: Appendices – Appendix J. Methods for Calculating Aggregation Error Estimates and Distribution of Aggregation Error

Contract # AG-3198-B-15-0010

Contracting Officer Representative (COR):
Conor McGovern

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September 2021

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Appendix J

Methods for Calculating Aggregation Error Estimates and Distribution of Aggregation Error

This appendix provides details of the methods used to collect, clean, and analyze meal count data for the aggregation error analyses, as well as additional analyses of the distribution of aggregation errors across schools. As discussed in Chapter 4, aggregation errors occur in the process of tallying the number of meals served each month (by claiming category), transferring it from school to SFA, and from the SFA to the State agency.

J.1 Data Collection and Cleaning

School Meal Count Abstraction

School meal count abstractions were completed for sampled schools during the on-site school visit. We used school meal count data to determine aggregation errors at the school level. Data collectors abstracted meal counts totals for each school for a specified pre-identified target month (varied by school). Analysts compared the school counts to the meal counts provided by the SFAs to identify discrepancies.

SFA Meal Count Abstraction

We collected two sets of meal count totals from SFAs for sampled schools. First, data collectors abstracted meal counts reported to the SFA by each of the schools for the target month. Second, data collectors requested the school meal counts from the same target month that the SFA used to report meal counts to the appropriate State agency. Discrepancies between these counts result in aggregation errors.

State Meal Claim Abstraction

The final meal count data we collected were the records of school meal counts that the State agency received from the SFA and submitted to FNS for reimbursement for the specified target month. Home office staff requested the school meal count records that the State used to calculate claims

submitted to USDA via an electronic data request. The States submitted the data through a secure web portal. These data were compared to the counts collected from the schools and SFAs to identify discrepancies resulting in aggregation error.

Non-Base Year Provision 2 & 3 Schools and CEP Schools

Provision 2 & 3 schools that are not in the base year do not collect applications and use the percentages of students certified as free, reduced-price, or not certified (paid) to calculate the numbers of meals served at each reimbursement rate. If the school was a Provision 2 or 3 school not in the base year, we collected the claiming percentages from the school and the total numbers of National School Lunch Program (NSLP) and School Breakfast Program (SBP) meals served during the target month. We then multiplied the claiming percentages by the total numbers of meals served to calculate the numbers of meals claimed at the free, reduced-price, and paid rate.

Similarly, CEP schools do not count individual meals as free, reduced-price, or paid. Instead, CEP schools estimate a Free Claiming Percentage (FCP) based on the Identified Student Percentage (ISP), and apply the FCP to the total number of meals served to determine the numbers of meals reimbursed at the free or the paid rate. We collected both the FCP and the total numbers of meals served during the target month from the school/SFA and multiplied the FCP by the total numbers of SBP and NSLP meals to determine the numbers of meals served at the free and at the paid rate.

J.2 Distribution of Aggregation Errors

Aggregation errors occurred in a minority of schools. At each aggregation level, about nine in ten schools had no aggregation error. For schools that did have an aggregation error, some had substantial errors (i.e. greater than 5%). The tables below show the distribution of aggregation errors at each level of aggregation. Table J-1 shows the distribution of aggregation error due to point-of-sale error. For the NSLP, 89.96 percent of schools had no point-of sale aggregation error (92.34 % for SBP meals). The percentage with errors greater than 5 percent were 5.42 percent for NSLP and 4.21 percent for SBP.

Aggregation errors due to School-to-SFA errors were relatively less common than point-of-sale errors. Table J-2 presents the School-to-SFA error distribution. For the NSLP, 95.03 percent of

schools had no School-to-SFA error (96.36 % for SBP meals). Only 0.87 percent had a School-to-SFA aggregation error of more than 5 percent for NSLP (1.94 % for SBP).

Table J-1. Distribution of schools by rate of erroneous payment due to aggregation error: point of sale error, SY 2017-2018

Level of error	NSLP	SBP
No error	89.96	92.34
At most 1% error	3.47	3.19
Greater than 1% and at most 5% error	1.15	0.26
Greater than 5% error	5.42	4.21
Sample size (schools)	558	567

Source: APEC-III data, weighted

Notes: Cell entries are percentages out of 100; standard errors in parentheses. Analyses include only schools/SFAs that provided both the “base” count and the “aggregated” count used in the comparison (see Table 5-1); sample sizes for individual analyses vary due to missing data for one or both counts used in the comparison.

Table J-2. Distribution of schools by rate of erroneous payment due to aggregation error: School-to-SFA error, SY 2017-2018

Level of error	NSLP	SBP
No error	95.03	96.36
At most 1% error	2.18	1.33
Greater than 1% and at most 5% error	1.92	0.37
Greater than 5% error	0.87	1.94
Sample size (schools)	525	538

Source: APEC-III data, weighted.

Notes: Cell entries are percentages out of 100; standard errors in parentheses. Analyses include only schools/SFAs that provided both the “base” count and the “aggregated” count used in the comparison (see Table 5-1); sample sizes for individual analyses vary due to missing data for one or both counts used in the comparison.

A larger percentage of schools had at least some error due to SFA-to-State errors compared to the other aggregation levels. For the NSLP, 88.99 percent had no SFA-to-State error (87.45 % for the SBP). About seven percent (6.75 % for the NSLP and 7.44 % for the SBP) had a SFA-to-State error greater than 5 percent.

Table J-3. Distribution of schools by rate of erroneous payment due to aggregation error: SFA-to-State error, SY 2017-2018

Level of error	NSLP	SBP
No error	88.99	87.45
At most 1% error	3.51	3.16
Greater than 1% and at most 5% error	0.75	1.96
Greater than 5% error	6.75	7.44
Sample size (schools)	469	478

Source: APEC-III data, weighted.

Notes: Cell entries are percentages out of 100; standard errors in parentheses. Analyses include only schools/SFAs that provided both the “base” count and the “aggregated” count used in the comparison (see Table 5-1); sample sizes for individual analyses vary due to missing data for one or both counts used in the comparison.

We also calculate True Aggregation Error, which is the comparison between the meal count reported to the SFA by the school and the meal count reported to FNS by the State agency. Table J-4 presents the distribution of True Aggregation Errors. For the NSLP, 87.23 percent of schools had no True error (87.05 % for the SBP). At the other end of the distribution, 5.78 percent of schools had a True Aggregation Error greater than 5 percent (7.34 % for the SBP).

Table J-4. Distribution of schools by rate of erroneous payment due to aggregation error: True error, SY 2017-2018

Level of error	NSLP	SBP
No error	87.23	87.05
At most 1% error	4.46	3.49
Greater than 1% and at most 5% error	2.53	2.12
Greater than 5% error	5.78	7.34
Sample size (schools)	509	518

Source: APEC-III data, weighted.

Notes: Cell entries are percentages out of 100; standard errors in parentheses. Analyses include only schools/SFAs that provided both the “base” count and the “aggregated” count used in the comparison (see Table 5-1); sample sizes for individual analyses vary due to missing data for one or both counts used in the comparison.

The data indicates that if there is an aggregation error, it tends to be greater than 5 percent error. A similar pattern was found in APEC-II. The specific reason for this pattern is unknown. Though we hypothesize it may relate to the impact of the magnitude of errors, and not necessarily the frequency of error. For example, random data entry errors in counts or the number of days can have a significant impact on improper payments. Across schools there was variability in the target month, with some months having fewer days than others due to holidays, snow days, and teacher work days. For target months with fewer days, the impact of each error is greater. Also, the magnitude of improper payments is greatly impacted by the meal type (free, reduced-priced, or paid) with errors in free meal counts having greater impact on improper payment error rates than those reimbursed at

the lower reduced-price or paid rates. Another possible explanation may related to the use of manual processes or technical difficulties with systems. In the APEC-III qualitative interviews, both SFA directors and cafeteria managers expressed that these contribute to aggregation errors. While they may occur infrequently, when they do occur it has a major impact on the magnitude of the error.

Third Access, Participation, Eligibility, and Certification Study (APEC-III) Final Report

Volume 4: Appendices – Appendix K. Net Combined Error Estimates Methodology

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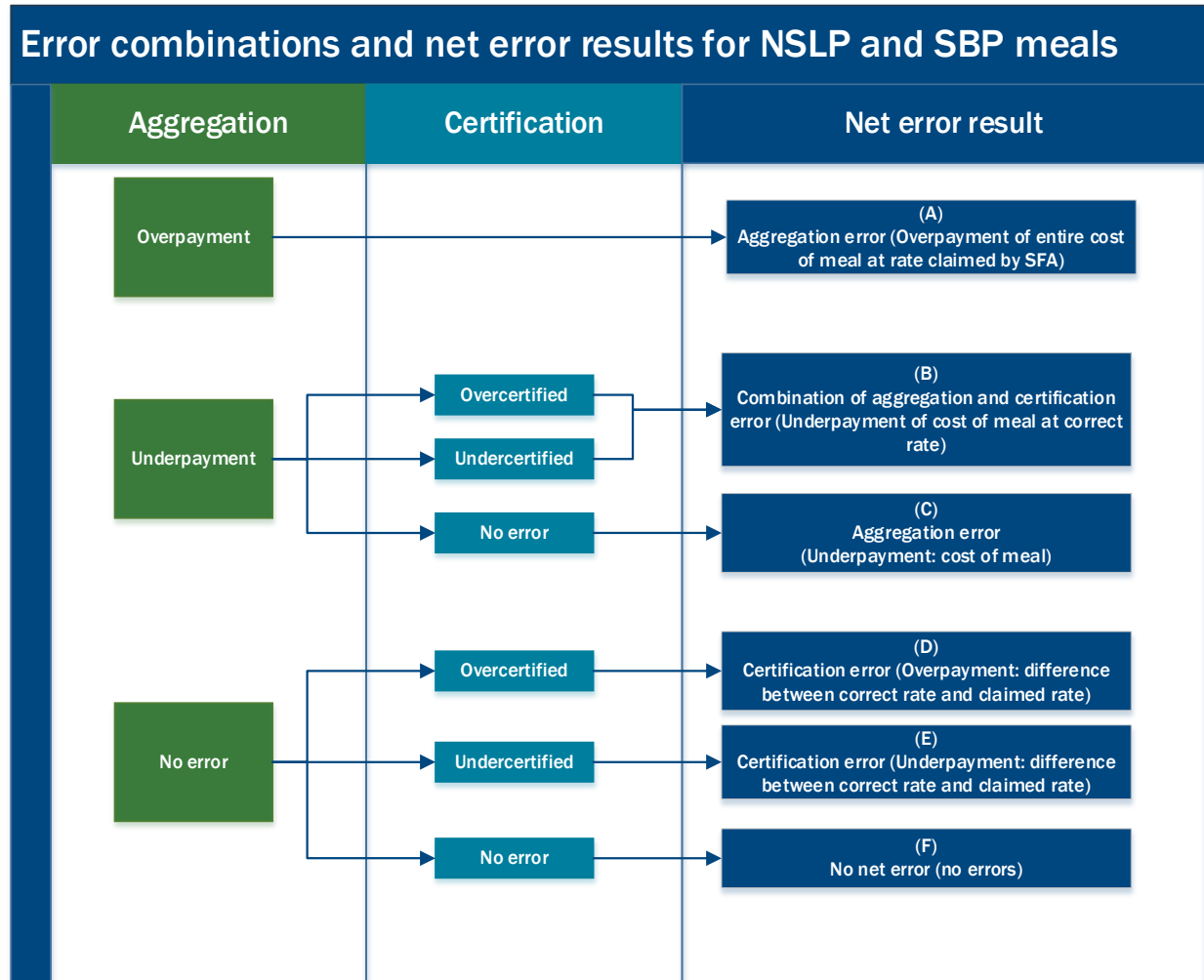
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Appendix K

Net Combined Error Estimates Methodology

The net error due to both certification and aggregation error is not simply the sum of the two error estimates. Certification and aggregation errors can overlap, resulting in different net impacts on improper payments. Figure K-1 provides a pathway diagram to show the net impact of each combination of errors. Some combinations of error result in improper payments equal to the entire cost of the meal at the claimed rate. For example, overpayments due to aggregation error (shown in the final column under box A) equal the entire cost of the meal. This occurs because these meals should not have been claimed at all. Conversely, underpayments due to aggregation errors alone equal the reimbursable amount that should have been paid for the meal (e.g., the errors in box C of the final column of Figure K-1). Underpayments due to aggregation errors that occur in combination with certification errors equal the reimbursable amount for the meal based on the student's correct eligibility status as determined by the APEC-III household survey or documentation of direct certification (shown in box B). Other error combinations result in improper payments amounts equal to the difference between the rate claimed by the school and the correct rate based on the student's correct eligibility status. For example, meals that were not reimbursed correctly due to certification errors alone result in improper payments calculated as the difference between the claimed rate and the correct rate (e.g., the combination of errors shown in boxes D and E).

Figure K-1. Potential error combinations and net error results



This study and others in the APEC series estimated improper payment rates for each error type using different samples and different units of analyses (e.g., students were sampled for estimating certification error in non-CEP schools; schools were sampled for certification error in CEP schools and aggregation error). Due to this methodological approach and concerns over privacy that do not allow analysts to link data across samples, the APEC-III data do not measure the actual combinations of errors that occurred during the school year. Instead, to generate a national estimate of net improper payments due to both certification and aggregation errors, we assume the errors are

distributed proportionally across all meals. The steps to estimate the errors that apply to each meal are as follows:

1. Compile the national total numbers of meals served at the free, reduced-price, and paid rates during the school year using FNS administrative data (FNS 10) for the NSLP and the SBP.
2. Using the weighted certification data, estimate the percentages of meals served with each combination of certification error in non-CEP schools. There are six potential combinations; the first three types listed (a, b, and c below) result in overpayments, and final three (d, e, and f) result in underpayments:
 - a. Meals served to students certified as free who were reduced-price eligible (Meals_FC_RE).
 - b. Meals served to students certified as free who were Not Eligible (Meals_FC_NE).
 - c. Meals served to students certified as reduced-price who were Not Eligible (Meals_RC_NE).
 - d. Meals served to students who were Not Certified who were eligible for free meals (Meals_NC_FE).
 - e. Meals served to students who were reduced-price certified who were eligible for free meals (Meals_RC_FE).
 - f. Meals served to students who were Not Certified who were eligible for reduced-price meals (Meals_NC_RE).
3. Estimate the number of meals served nationally at the free rate in CEP schools that should have been paid in CEP schools. Errors in determining the FCP result in meals reimbursed at the free rate that should have been reimbursed at the paid rate (Meals_FC_NE).
4. Using the aggregation error rates, estimate the overcounts and undercounts of free, reduced-price, and paid meals that resulted in overpayments and in underpayments.
5. Assuming that each error type applies proportionately to all meals, estimate the overall numbers and percentages of meals with each potential combination of error by multiplying the corresponding error rates for each combination of errors that apply to each meal.¹

¹ We used the formula $M_T^i = (E_c^i * M_T) * E_a^i$ to estimate the number of cases of combination errors. M_T^i equals the number of meals for each reimbursement type, T , with a given error combination, i . E_c^j equals the certification error rate (of which there are 6 rates, $j=1-6$) and M_T equals the total number of meals for each reimbursement type. E_a^i equals the relevant aggregation error rates associated with error combination i . If the error rate for a category is 0 (e.g., no certification error) that term was removed from the formula rather than set to 0.

K.1 Estimates of Net Program Error Rates

Table K-1 presents the estimates of the numbers and percentages of meals with each potential combination of error for the National School Lunch Program (NSLP) and the School Breakfast Program (SBP) in School Year (SY) 2017-2018. For both the NSLP and the SBP, more than eight in ten meals had no error (86.64 % of NSLP meals had no error, and 85.59 % of SBP meals had no error).

Table K-1. Estimates of net meals in error and error rates due to certification and aggregation error, SY 2017-2018

Error type	Impact on net improper payments	NSLP	SBP
Total meals (In millions)			
Total meals		4,829	2,409
Meals (In millions)			
(A) Aggregation error	Overpayment of entire cost of meal at rate claimed by SFA	36	35
(B) Combination of aggregation and certification error	Underpayment of cost of meal at correct rate	2	2
(C) Aggregation errors	Underpayment of cost of meal	17	16
(D) Certification error	Overpayment: difference between correct rate and claimed rate	435	218
(E) Certification error	Underpayment: difference between correct rate and claimed rate	154	76
(F) No errors	No net error	4,184	2,062
Meal error rates (percentages out of 100)			
(A) Aggregation error	Overpayment of entire cost of meal at rate claimed by SFA	0.75	1.47
(B) Combination of aggregation and certification error	Underpayment of cost of meal at correct rate	0.04	0.07
(C) Aggregation error	Underpayment of cost of meal	0.35	0.68
(D) Certification error	Overpayment: difference between correct rate and claimed rate	9.01	9.03
(E) Certification error	Underpayment: difference between correct rate and claimed rate	3.20	3.15
(F) No errors	No net error	86.64	85.59

Source: APEC-III data, weighted

Notes: Error type corresponds to net improper payment result in Figure K-1. Includes CEP, non-CEP, and non-base year Provision 2/3 schools.

For both the NSLP and the SBP, the errors that most commonly affected the meals served was an overpayment due to certification error (affecting an estimated 9.01 % of the NSLP meals served and 9.03 % of the SBP meals served). This type of error resulted in improper payments equal to the difference between the claimed and the correct reimbursement rates given the student's eligibility status based on evidence of direct certification documentation or responses to the household survey.

The differences in errors due to certification rates between the SBP and NSLP are due to the different program participation rates.

For the SY 2017-2018, the percentages of meals affected by aggregation error were small compared to those affected by certification error. There are some differences in the aggregation error rates when comparing the NSLP and the SBP. The SBP had a higher percentage of meals resulting in overpayments due to aggregation error (1.47 % for the SBP compared to 0.75 % for the NSLP). For underpayments due to aggregation error, by combining box B and C of Table 5-1, which cover the combinations of error that include aggregation underpayments, we calculate that 0.75 percent of meals had an underpayment due to aggregation error for the SBP compared to 0.39 percent for the NSLP.

K.2 Net Dollar Estimates of Program Errors

K.2.1 Methodology

Each unique combination of errors results in different improper payment amounts. Meals affected by aggregation error alone, for example, result in an over or underpayment of the entire reimbursable amount for the meal. Reimbursed meals affected only by a certification error, on the other hand, result in smaller improper payment equal to the difference between the claimed rate and the correct rate.. Meals affected by a combination of aggregation and certification error can result in an underpayment of the reimbursement amount based on the correct rate. To estimate the improper payment rates and amounts in dollars, we first applied the appropriate per-meal improper payment amount to each combination of error. Then, for each error combination, we summed the net improper payment rates for the estimated numbers of meals affected.

K.2.2 Net Dollar Estimates

Table K-2 shows for the NSLP and SBP separately, the estimated total improper payment amounts and rates for meals with each combination of errors and overall for all meals for SY 2017-2018. The net improper payment rates for NSLP and SBP meals were 4.90 percent (\$667 million) and 4.87 percent (\$210 million), respectively.

For NSLP meals, certification errors accounted for most improper payments. Overpayments due to certification errors accounted for 5.88 percent of NSLP payments (\$800 million). Certification errors were also the largest contributor to underpayments; underpayments due to certification errors alone accounted for 1.25 percent of NSLP payments (\$170 million). Aggregation errors contributed comparatively small sums to over- and underpayments.

Table K-2. Estimates of net improper payments due to certification and aggregation error, SY 2017-2018

Error type	Impact on net improper payments	NSLP	SBP
Total reimbursements (millions of dollars)			
Total reimbursements ^a		13,606	4,312
Net impact on improper payments (millions of dollars)			
(A) Aggregation error ^b	Overpayment of entire cost of meal at rate claimed by SFA	91	56
(B) Combination of aggregation and certification error	Underpayment of cost of meal at correct rate	-4	-2
(C) Aggregation error	Underpayment of cost of meal	-50	-34
(D) Certification error	Overpayment: difference between correct rate and claimed rate	800	245
(E) Certification error	Underpayment: difference between correct rate and claimed rate	-170	-56
(F) No errors	No net error	0	0
Total net improper payments (millions of dollars)			
Net improper payment amount		667	210
Net improper payment rates (percentages out of 100)			
(A) Aggregation error ^b	Overpayment of entire cost of meal at rate claimed by SFA	0.67	1.29
(B) Combination of aggregation and certification error	Underpayment of cost of meal at correct rate	-0.03	-0.04
(C) Aggregation error	Underpayment of cost of meal	-0.37	-0.78
(D) Certification error	Overpayment: difference between correct rate and claimed rate	5.88	5.69
(E) Certification error	Underpayment: difference between correct rate and claimed rate	-1.25	-1.29
(F) No errors	No net error	0.00	0.00
Total net improper payment rate (percentage out of 100)			
Net improper payment rate		4.90	4.87

Source: APEC-III data, weighted

Notes: Error type corresponds to net improper payment result in Figure K-1. Includes CEP, non-CEP, and non-base year Provision 2/3 schools.

Negative values indicate a net underpayment; positive values indicate a net overpayment.

^a Total reimbursements in the contiguous United States, SY2017-2018.

^b The aggregation overpayment error amounts and rates differ slightly from those presented in Tables 5.2 and 5.3 due to different samples and aggregation methods utilized and the process of combining errors of different types across samples.

The patterns were similar for SBP meals. Certification errors resulted in the majority of improper payments made as part of the SBP. Overpayments due to certification errors accounted for 5.69

percent of SBP payments (\$245 million). Certification errors were also the largest contributor to underpayments; underpayments due to certification errors alone accounted for 1.29 percent of SBP payments (\$56 million). Similar to the NSLP, aggregation errors contributed comparatively small sums to over- and underpayments for the SBP.

Third Access, Participation, Eligibility, and Certification Study (APEC-III) Final Report

Volume 4: Appendices – Appendix L. Meal Claiming Error Estimation

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Appendix L

Meal Claiming Error Estimation

This section provides more details on the process for coding food items and trays/meals as reimbursable or not. As meal claiming errors occur in school cafeterias¹ at the point-of-sale, the unit of analysis is a “meal” (or the food items on the tray). The requirement is that a meal is only reimbursable if all the components are offered and/or served. An error occurs if a non-reimbursable meal is claimed as reimbursable or a reimbursable meal is not claimed. Both for the CEP and non-CEP schools (and NSLP and SBP) the data and analysis was the same.

Rather than collecting data on more trays than was need to meet the precision required by IPERA (i.e. 90 % confidence bounds of no more than plus or minus 2.5 percentage points), the design for APEC-III reduced the number of trays and increased the number of SFA and schools in the sample. The goal in APEC-III was to increase the number of participating SFAs and schools to have greater variability at each of these levels of analysis. While APEC II collected data on 48,197 trays, APEC-III collected data on 30,284 trays, which met the precision requirements.

In addition to the changes in the relative sample sizes, the APEC-III design increased the use of random selection of trays. The following points summarize the enhancements in the APEC III design approach:

1. The APEC-III design randomly selected two meal periods to observe for breakfast and two meal periods to observe for lunch.
 - In contrast, the APEC-II design conducted an observation for as many meal periods that the school offered.
2. The APEC-III design observed up to 25 trays per meal period, or up to 50 breakfast trays and up to 50 lunch trays per school². The sampling of trays was calculated to ensure that observations continued through the end of the serving line.

¹ In some schools meals are served in other locations such as the classroom. We sampled “meal lines” from all the locations in the school that served meals.

² It is important to note that the increasing number of schools that now serve breakfast in the classroom resulted in fewer total breakfast observations. In many cases of breakfast served in the classroom, there were fewer than 25 students served.

- In contrast, the APEC-II design did not set the number of trays to observe at each school.
3. To efficiently conduct in person data collection visits in more schools in the same period of time, APEC-III included one data collector per school. As a result, APEC-III observed one serving line/location per meal period.
- In contrast, the APEC-II design had two data collectors per visits, resulting in two serving lines/locations observed per meal period per school.

Steps for Calculating Meal Claiming Errors

The list below provides a summary of the steps for calculating meal claiming errors and the associated dollar estimates of program error. The steps were repeated for lunch and breakfast.

- 1. Determine the Errors**
 - A. Observe cashier lines to assess whether each meal recorded as reimbursable by the cashier was actually reimbursable.
 - B. Observe the serving line to assess whether the required meal components were served (particularly for Offer versus Serve [OVS] meals).
- 2. Determine if the Cashier Correctly Classified the Meal**
 - C. Through observation we determined if a cashier correctly classified meals as reimbursable or not but we did not know the student's eligibility level as he/she passed through the cafeteria line.
 - D. We assume, as was done in APEC-II, meal claiming errors are randomly distributed and affect the reimbursement for each meal type proportionately (free, reduced-price, paid).³
- 3. Estimate the National Error Rates**
 - E. Apply schools weights.
 - F. Proportionally allocate the errors to reimbursement categories using data on the total meal counts by category.
 - G. For each reimbursement category, divide the number of errors by the total category count to estimate the error rate.

³ CEP schools and Provision 2 schools only record reimbursable meals.

L.1 Coding Food Items

The APEC-III meal observation database includes 366,873 food items on 30,284 trays.⁴ Because many of the food items observed across trays were the same, we identified food items that appeared multiple times and determined that there were 6,433 “unique” food items recorded in the database. The first step in the process was to code the unique food items to the appropriate food component (or components/combination food if the item met the requirement for multiple components).

This task was completed by trained coders, led and supervised by a senior dietary coder and nutritionist. Food item notes recorded by data collectors were reviewed as part of the coding process. The initial coding process utilized programmatic matching, followed by manual review, with the last phase being solely a manual review process. The data documentation will include the complete listing of food items, their coding to the food components, and decision rules. The dietary coding team used several FNS resources and memorandums as a guide for meal observation data coding including, but limited to, the following:

- Nutrition Standards in the NSLP and SBP 2012-1010 (1-26-2012)
- Policy Memo_Q&A on Final Rule Nutrition Standards_SP10-2012v9 (8-3-2015)
- USDA Food Buying Guide User Manual (Version 1.2.8, October 26, 2018)
- Policy Memo_OVS_SP41_2015os (7-21-2015)
- Policy Memo_School Meal Flexibilities for SY17-18_SP32-2017os (5-22-2017)

Using the coding scheme from APEC-II, the first step was to match as many of the 6,433 unique food items to APEC-II items and food codes as possible. The coding of food items was completed in four sequential phases: (1) match food items that were a 100 percent match to APEC-II coding; (2) match common food items from APEC-III; (3) determine food items that were partial match to APEC-II coding; and (4) the manual coding of ‘no match’ food items.

⁴ The term ‘tray’ is used to refer to a tray, lunch bag, lunch box, and another format in which the meals were served.

In the **first pass coding**, we programmatically matched APEC-III food items to APEC-II food items⁵, and used the food component(s) coding from APEC-II.⁶ In this phase the food item was an exact 100 percent match in the wording and description of the food item. In addition, any food items that included a food item notation in the APEC-III database were manually reviewed. The coding was updated as needed. For example, if the food item was an exact match to “hamburger” and the food item note indicated ‘no bun’, the grain component was removed from the coding for the food item. The first pass programmatic coding resulted in the coding of 30.4 percent of the food items.

The **second pass coding** were an exact 100 percent match to common food items from the APEC-III food items list. The list of food items were prepared by the dietary coding team. The coding team identified common foods that met the milk, fruit, vegetable, meat, grain, and legume requirement (see Table L-1 for examples). The list also included common food items that met more than one food component requirement. Common misspellings of food items were also included (e.g., ‘broccoli’, ‘carots’, ‘mlk’, ‘waffle’, etc.). Also, as done in the first pass coding, any food items that included a food item notation in the APEC-III database were manually reviewed and the coding was updated as needed. The second pass coding resulted in the coding of an additional 24.1 percent of the food items.

The **third pass coding** were a partial match to food items from the APEC-II dataset. The partial matches were food items that were “similar” in wording (see Table L-2 for examples) using a programmatic matching program. The algorithm calculated a score from .683 to .958 to indicate the strength of the match (1 = 100 % match). All of the partial matches, including the food item notes, were manually reviewed by the dietary coding team for verification. Updates were applied to the food component coding as needed. The third pass coding resulted in the coding of an additional 24.1 percent of the food items.

⁵ FNS previously provided the meal observation dataset used in APEC-II.

⁶ Some food items including multiple food components. For example, ‘sloppy joe sandwich’ included two components: meat and grain.

Table L-1. Examples of common food items programmatically coded in the 2nd pass of coding

Food component(s)	Sample of common foods	Food component(s)	Sample of common foods
Milk	Milk 1% skim Milk fat free chocolate Strawberry milk 1%	Fruit	Apple Pears Strawberries 100% fruit juice
Vegetable	Baby carrots Broccoli Baked potato Corn	Meat	Oven baked chicken Pork chop Teriyaki chicken Turkey ham
Grain	Breakfast bun Whole grain cereal Banana bread Blueberry muffin	Legume	Red beans Refried beans Edamame
Meat and grain	Corn dog Cheeseburger	Meat and vegetables	Popcorn chicken salad Southwest chicken salad

Table L-2. Examples of food item partial matches with matching score

APEC-III food item description	APEC-II food item description (partial match)	Matching score
Cheese steak w/fries	Cheesesteak sub	0.683
Chili cheese steak	Chili cheese dog	0.683
Fish treasures	Fish	0.683
Tuna and cheese	Tuna sandwich	0.683
Chicken salad flatbread	Chicken salad	0.684
Pizza / 4 varieties	Pizza	0.684
General TS chicken	General TSO's chicken w/rice	0.743
Sausage pep. pizza	A sausage pizza	0.743
Yogurt parfait strawberry/vanilla	Yogurt parfait, strawberry and granola	0.746
Blueberry crisp	Blueberries	0.751
Apple oatmeal bar	Apple cinn oatmeal bar	0.753
PB jelly sandwich	PB & J sandwich	0.753
Side salad w/ ranch	Salad w/ranch	0.753
Asian chicken bowl	A-chicken bowl	0.755
Mini maple pancake wraps	Mini maple pancake	0.862
Sweet & sour chicken	Sweet&sour chicken w/rice	0.863
Turkey pot roast w/roll	Turkey pot roast	0.866
Dominos Pizza	C Domino's Pizza	0.879
Greek salad wrap	Greek salad	0.894
Smucker's PBJ	Smucker's pb&j	0.938
Big Daddy cheese pizza	Big daddy's cheese pizza	0.943
Chicken ceasar salad roll	5- chicken caesar salad w roll	0.946
Turkey & gravy w/mashed potatoes	Trukey, gravy, mashed potatoes	0.958
PBJ uncrustables	PB&J uncrustable	0.97

The **fourth pass coding** were food items that were not coded in the first three passes, and identified as “no match”. These were typically combinations of foods with long word strings (see Table L-3 for examples). These food items were manually reviewed, along with the food item notes,

and coded to the appropriate food component(s). The fourth pass coding resulted in the coding of an additional 21.4 percent of the food items.

Table L-3. Examples of “No Match” combination foods that were manually coded

APEC-III food item description
Apple cinnamon texas toast
Asian egg rolls
Au gratin potatoes & ham
Bacon, egg & cheese muffin
Baked potato with turkey bacon and cheese
Beefy lasagna/breadstick
Burrito (turkey, sausage & cheese)
Chicken buffalo pizza
Chicken & veggie fajita
Fried chicken leg w/whole wheat biscuit
Hummus box: hummus, pita and string cheese
Mozzarella filled twisted breadstick
Peanut butter n jelly w/cheese stix & Goldfish crackers
Roasted chicken w/gravy & garlic breadstick
Shanghai chinese chicken salad artisan roll
Soft taco w/cheese & lettuce cup
Spaghetti Creole meat sauce casserole
Teriyaki chicken drumstick w/ roll rice pilaf
Vegetarian lasagna
Yogurt, organic raisins and granola

Crediting of Legumes

During the coding of food items, legumes were coded as legumes because their final crediting depended on the other food items on the tray. Trays with a food item coded as a legume were manually reviewed. Legumes were first counted as a meat if no other meat was present on the tray. If there was a meat present on the tray, it was counted as a vegetable if no other vegetable was present on the tray. If both a meat and vegetable were already present on the tray, the legumes were not counted. This was because an additional meat or vegetable would not affect the reimbursable status if both were already present. This approach is consistent with the approach used in APEC-II.

Following the coding of the unique food items, the food item coding were applied to all 366,873 food items applying the unique food item coding (i.e. one-to-many match). These food items were grouped as meals on 30,284 trays. Table L-4 provides an abbreviated illustration of the resulting coding of food items. The next step was to code the trays/meals as reimbursable or not and compare to the cashier reporting.

Table L-4. Illustration of resulting coding of individual food items

Food item ID	Food item	Food item notes	FR	GR	LG	MT	MK	VG	EO	FLAG
13605	Green salad (kale,tomatoes,cucumbers)							1		
1604	Tropicana 100% Orange Juice		1							
7690	(2) Baja fish taco w/WW soft shell			1		1				
12430	1% white milk or fat free	1%					1			
12461	1% white milk or fat free	FF					1			
3900	1/2 chicken/taters/veg/gravy					1		1	1	
5379	1/2 grilled cheese & tomato soup			1		1		1		
12459	100% fruit juice (apple or fruit punch)		1							
12459	100% fruit juice (apple or fruit punch)	Apple	1							
12459	100% fruit juice (apple or fruit punch)	Apple	1							
13731	100% white grape juice		1							
13734	3 cheese bread w/marinara			1		1		1		
1495	3 cheese calzone (meat+grain)			1		1		1		
12440	4 pretzel rods w/ cheese			1		1				
1939	4 oz yogurt (yoplait original)					1				
5824	4oz steak-burger melt			1		1				
8087	All american sandwich			1		1				
9528	Almond milk								1	
9265	Aloha/club chicken sandwich			1		1		1		
14723	Apple cinnamon texas toast			1						1
1494	Apple stuffed bagel bar			1					1	
4648	Appleways Bar (oatmeal)			1					1	
3448	Arroz con polo (diced chicken, wild rice & cheese)			1		1				
6418	Asian egg rolls			1		1		1		1
6698	Asian glazed chicken					1				
9266	Asian grilled chicken salad					1		1	1	1

Note: FR = Fruit, VG= Vegetable, GR = Grain, MT = Meat/Meat Alternative, MK= Milk, GL= Legume, EO = Extra/Other

L.2 Coding Trays/Meals

After coding each individual food item on the tray, the next step was to identify the food categories served at the tray/meal level. At this step, the USDA requirements for breakfast and lunch were programmatically applied to the meals to determine if they were reimbursable meals. The program factored in different requirements for breakfast, lunch, and OVS. All meals that were found to be ‘non-reimbursable’ were manually reviewed for any meal level exceptions or notations. Revisions were applied as needed and noted. The program then compared the reimbursable/non-reimbursable determination made using the classifications of the food items observed on the tray to the determination made by the cashier. We identified trays in error that were non-reimbursable but

identified by the cashier as reimbursable (resulting in overpayments), as well as trays that were reimbursable but were identified by the cashier as non-reimbursable (resulting in underpayments).

Table L-5 provides an illustration of how the meals were assessed programmatically to determine if the meal was reimbursable. The special requirements for OVS meals were applied where applicable.⁷ All OVS meals were flagged for additional review to confirm that the minimum number of fruits were offered. The same process was applied for breakfast meals.

Table L-5. Illustration of coding of trays

Meal type	Tray ID	<i>Food items on tray meet the requirements for the following categories (based on coding of food items in prior step)^a</i>							OVS	Reim-bursable	Missing	Flag for Review
		FR	VG	GR	MT	MK	GL	EO				
Lunch	1357	✓	✓	✓	✓	✓			NO	YES	NA	NO
Breakfast	4579			✓	✓	✓			NO	NO	FR	YES
Lunch	5547	✓		✓	✓	✓			YES	YES	NA	YES

^a FR = Fruit, VG= Vegetable, GR = Grain, MT = Meat/Meat Alternative, MK= Milk, GL= Legume, EO = Extra/Other.

⁷ For lunch, students must be offered 5 food components (varying number of food items per component) and served at least 3 of 5 components, one of which must add up to ½ cup of fruit or vegetable. For breakfast, students must be offered four items from 3 components and served at least 3 components, one of which must be ½ cup of fruit or vegetable.

Third Access, Participation, Eligibility, and Certification Study (APEC-III) Final Report

Volume 4: Appendices – Appendix M. Objective 2 Supplemental Tables

Contract # AG-3198-B-15-0010

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Appendix M

Objective 2 Supplemental Tables

Table M-1. Multivariate analyses of reasons for reporting error, logistic regression coefficients

Independent variable	All	Among those completing income portion of household survey
Grade (base=pre-k or Kindergarten)		
Child in grades 1 to 3	0.46 (0.33)	0.50 (0.35)
Child in grades 4 to 5	0.28 (0.29)	0.05 (0.31)
Child in grades 6 to 8	0.18 (0.33)	0.01 (0.37)
Child in grades 9 to 12	0.15 (0.29)	0.05 (0.29)
Parent's education (base=less than high school)		
Parent's education: high school diploma or GED	0.19 (0.19)	0.04 (0.20)
Parent's education: some college or technical	0.36 (0.23)	0.05 (0.27)
Parent's education: college graduate	0.09 (0.29)	-0.33 (0.35)
Participation in means-tested programs		
Participates in a means-tested program ^a	-1.16*** (0.15)	-0.10 (0.17)
Language		
English as a second language	0.14 (0.17)	-0.11 (0.24)
Student meal participation		
Participates in SBP	0.17 (0.18)	0.33* (0.19)
Total number of NSLP meals received	0.00 (0.00)	0.00 (0.00)
Total number of SBP meals received	-0.01*** (0.00)	-<0.01*** (0.00)
Age of youngest child in household (base=less than 5 years old)		
Youngest child in household 5 to 8 years old	-	0.19 (0.20)
Youngest child in household 9 to 13 years old	-	0.36 (0.24)
Youngest child in household 14 to 18 years old	-	0.29 (0.33)

Table M-1. Multivariate analyses of reasons for reporting error, logistic regression coefficients (continued)

Independent variable	All	Among those completing income portion of household survey
Household size (base=1 to 3 people in the household)		
4 to 6 people in the household	-	0.32 (0.20)
7 to 9 people in the household	-	0.33 (0.30)
10 or more people in the household	-	0.40 (0.65)
Income relative to poverty (base=less than 129 percent)		
Income relative to poverty: 131 to 185 percent	-	1.40*** (0.19)
Income relative to poverty: greater than 185 percent	-	1.56*** (0.25)
Difficulty of application (base=neither easy nor difficult)		
Perceived difficulty of application – Very Easy or Easy	-	0.55* (0.33)
Perceived difficulty of application – Very Difficult or Difficult	-	0.70 (0.44)
Application method (base=did not apply online)		
Applied online	-	0.01 (0.19)
Constant		
Constant	-1.56*** (0.40)	-3.34*** (0.69)
Sample size (students)	3,479	1,709

Source: APEC-III household survey and application record abstraction data, weighted.

Notes: The dependent variable is certification error due to reporting error (1=reporting error, 0=no reporting error). Cell entries are coefficients (log-odds ratios) generated from weighted logistic regressions with standard errors in parentheses. Estimates were generated using Stata's svy: logit procedure.

^a Households skipped the income portion of the survey if they received TANF, SNAP, or FDPIR benefits. Households receiving Medicaid benefits completed the income portion of the survey despite participating in a means-tested program.

*** p<0.01, * p<0.1

Summary: This table provides the results of multivariate analyses of reporting error. There are two analyses presented - the first includes all students, and the second includes only students from households who provided income information. Additional variables are included for students with an income application because they were not categorically eligible or directly certified.

Table M-2. Multivariate analyses of reasons for administrative error, logistic regression coefficients

Independent variable	Among those completing income portion of household survey
Participation in means-tested programs	
Participates in a means-tested program ^a	0.24 (0.23)
Age of youngest child in household (base=less than 5 years old)	
Youngest child in household 5 to 8 years old	0.06 (0.21)
Youngest child in household 9 to 13 years old	0.36 (0.24)
Youngest child in household 14 to 18 years old	0.21 (0.29)
Household size (base=1 to 3 people in the household)	
4 to 6 people in the household	-0.14 (0.22)
7 to 9 people in the household	-0.34 (0.34)
10 or more people in the household	0.13 (0.64)
Income relative to poverty (base=less than 129 percent)	
Income relative to poverty: 131 to 185 percent	1.47*** (0.24)
Income relative to poverty: greater than 185 percent	1.75*** (0.26)
School meal program participation	
NSLP total meals received	0.00 (0.00)
SBP total meals received	0.00 (0.00)
Constant	
Constant	-2.87*** (0.43)
Sample size (students)	1,854

Source: APEC-III household survey and application record abstraction data, weighted.

Notes: The dependent variable is certification error due to administrative error (1=administrative error, 0=no administrative error). Cell entries are logistic regression coefficients (log-odds ratios) from weighted logistic regressions with standard errors in parentheses. Estimates were generated using Stata's svy: logit procedure.

^a Households skipped the income portion of the survey if they received TANF, SNAP, or FDPIR benefits. Households receiving Medicaid benefits completed the income portion of the survey despite participating in a means-tested program.

*** p<0.01

Summary: This table provides the results of the multivariate analyses of administrative error rates.

Third Access, Participation, Eligibility, and Certification Study (APEC-III) Final Report

Volume 4: Appendices – Appendix N. Qualitative Analysis Materials

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Contracting Officer Representative (COR):
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Appendix N

Qualitative Analyses Materials

This appendix includes a copy of the Qualitative Analyses Materials discussed in Volume 2. The following is a listing of interview guides and codebooks used for the completion of the in-depth interviews and the qualitative analysis. The subsequent pages includes each material in the order listed.

1. SFA Director Interview Guide
2. Cafeteria Manager Interview Guide
3. Household Interview Guide
4. SFA Director Interview Codebook
5. Cafeteria Manager Interview Codebook
6. Household Interview Codebook

APEC III – SFA DIRECTOR INTERVIEW GUIDE

I. Introduction

Welcome and Overview

Good morning/afternoon. Thank you again for taking the time to talk with me today. My name is **[interviewer's name]** and as you know, I work for Westat, a private research company in Rockville, Maryland.

The US Department of Agriculture's, Food and Nutrition Service (FNS) is trying to improve the meal eligibility determination (i.e. certification) and meal claiming process for breakfast and lunch school meal programs. FNS hired Westat to conduct a study that looks at errors in payments for the School Breakfast Program and the National School Lunch Program. This is the third Access, Participation, Eligibility and Certification study series (APEC III). Part of this study includes talking directly with School Food Authority Directors and Cafeteria Managers to better understand if there are parts of the certification or meal claiming process that could be improved.

Disclosures and Ground Rules

Before we get started there are a few things I should mention.

- This is a research study. While Section 305 of the Healthy, Hunger-Free Kids Act of 2010 requires SFAs to cooperate with FNS research studies, sharing your personal thoughts and opinions during this discussion is voluntary.
- Refusal to participate or answer any questions will not have any impact on your district or position as SFA staff.
- The thoughts and opinions that you share during our discussion will be kept private. Your name will not be linked to any of your responses; in our reports, we may include quotes from our respondents, but these will be presented without the respondent's name and in such a way that you could not be identified by the reader.
- Your name will not appear in any documentation shared with the Food and Nutrition Service, the school district, the School Food Authority, or your manager.
- The thoughts and opinions that you share during our discussion will be used for research purposes only. We will combine your responses with those from other SFA

staff. They will not be used as an evaluation of your work, your staff's work or the district.

- Your feedback is important because input from SFA Directors like yourself help us better understand how the program can be improved.
- Once we start the interview, you can take a break, skip questions or stop participating at any time. Again, there will be no penalty or loss of benefits to you or your school district.
- Finally, with your permission, I would like to record this discussion. The recording will be transcribed, which will be used to help us recall exactly what was said when we prepare the summary of findings. The recordings, transcripts, and any notes we have will be stored on Westat's secure server and will be destroyed after the project is complete.

We have planned for this discussion to last about 45 minutes.

Do you have any questions? [ANSWER ALL QUESTIONS]

Do I have your consent to participate?

IF NO: [ADDRESS ANY CONCERNS. ONLY PROCEED IF THE ANSWER TO THE QUESTION IS YES.] Discontinue interview.

May I turn on the audio recorder now?

IF YES: [ONCE RECORDER IS ON, "Now that the recorder is on, do I still have your permission to audio record this interview?" MAKE SURE YOU GET AN AUDIBLE "Yes" FROM RESPONDENT.]

IF NO: Do you agree to continue with this interview without being audio-recorded?

II. In-Depth Interview

A. Approving Free and Reduced Price Applications

[IF APPLICABLE TO THE SFA] In this section we will discuss the approval process for free and reduced price applications. Let's start by discussing the steps taken when reviewing income-based

and categorically eligible applications. Later in our conversation we'll discuss topics such as direct certification, meal claiming, reporting and training.

1. To begin, please walk me through your district's process for approving income-based and categorically eligible applications. Tell me step by step to the extent you can.

Probes if needed:

- Who is responsible for reviewing and approving the applications?
- What tools, resources, data, and/or reports are used?
- How are the applications received?
- Is there a separate process for different application formats?
- What type of edit checks do you implement?

I want to talk briefly about households and *their* experiences completing the applications.

2. First, what are some common mistakes that households make when completing applications?
 - What do you think contribute to these mistakes?
3. Have you seen any changes in the types and frequency of mistakes on applications?
 - What do you think has contributed to those changes?

Probe if needed: Has application format been a factor?

4. What does your reviewer do when an application is incomplete? For example, what happens if an application is missing:
 - A social security number?
 - An adult signature?
 - Income frequency? (i.e. per month, biweekly, hourly, etc.)
 - Anything else?
5. Under what conditions might a reviewer approve an application, even if it's missing some information, such as a social security number?
6. On your side of things, what challenges do staff face when reviewing these applications?
 - **Probe:** We've heard from some SFAs that it can be difficult to read the handwriting on the paper applications, have you had any experience with that?

- **Probe:** Staff can sometimes miss or overlook certain details, such as miscounting household size, making a calculation error when determining income, or placing a family in the wrong meal eligibility category.
7. Out of all the challenges that you mentioned, what do you think is the most common, and why?
 8. Have you seen any changes over time in either types or frequency of reviewer errors?
 - What do you believe has contributed to these changes?
 9. What strategies have you tried to improve the approval process?
 - Have you tried any strategies that haven't worked as well?
 10. In your opinion, what is the impact of any specific Federal, State, or local requirements on the application approval process?
 11. Do you think there is anything else that could be done to improve the approval process?
 12. Sometimes people who may be eligible for free or reduced priced meals may be reluctant or afraid to apply. As a result their eligibility status is 'paid'. Do you have any experience with a situation like this? Do you think it impacts your district?
 13. Is there anything else you would like to share about the application process for the staff and the households that we have not discussed?

Thank you, this has been very helpful. Next, let's discuss the direct certification process.

B. Direct Certification Process

Can you walk me through the direct certification process?

- Which sources does your district use to determine students who are directly certified for free meals?
- How did you decide on those sources?

- How do you receive the data? From which agency or department? (e.g. “State” – Which department in the state? The Department of ed?)
- When and how often do you receive the data?

Probe if needed:

- I’m wondering about data sources such as SNAP, TANF, FDPIR (Food distribution program on Indian Reservations)?
 - District letters?
 - Lists of eligible students in foster care, or any others I haven’t mentioned?

If needed: Which sources, if any, has your district opted not to use? Explain.

14. What have been your experiences with using these sources?

Probe if needed:

- Are these sources generally available in time for you to use them to identify certified students?
- Is there ever any lag time from when the State updates their certification lists and your enrollment rosters? That is, do they both happen close to “real time” or does either list experience a delay causing them not to match up completely?
- Have there been any challenges to using these sources?

15. Have you encountered any errors when using these sources? For example students on the list that should not be or vice versa?

- What do you think contribute to these errors?

16. In your opinion, what could be done to improve the direct certification process?

17. Sometimes people who may be eligible for benefits such as SNAP or TANF may be reluctant or afraid to apply. As a result, they are not directly certified for free meals. Do you have any experience with a situation like this? Do you think it impacts your district?

18. Is there anything else you would like to share about the direct certification process that we have not discussed?

SFA DIRECTOR INTERVIEW GUIDE

This has been very helpful. Thank you.

IF ALL NON-CEP:

My records show that you have no CEP schools in your district, is that correct?

- If yes, skip section C. “Now let’s discuss the meal claiming process”

OTHERWISE: Let’s discuss CEP process

C. CEP /ISP Process

Now let's talk about your experiences with the Community Eligibility Provision (also known as CEP) and how you determined the Identified Student Percentage (or ISP) rate.

19. If all CEP (District wide) – Please describe how your district's ISP rate is determined.

If mixed – Could you describe how the school or group of schools ISP rate is determined?

➤ How do you determine which schools to group within your district?

If needed:

The Identified Student Percentage is the proportion of students who are directly certified for free school meals through means other than a school meal application and not subject to verification. In addition to determining CEP eligibility, the ISP is the basis of the claiming percentage to determine the Federal reimbursement.

20. Some districts may report an ISP rate that is lower than it actually is. Can you share your thoughts on why this might happen?

21. SFAs may differ in how they use sources. For example, if an SFA uses SNAP as a source, some will identify a certain number of students and once reaching that number they stop. Other SFAs may go through the entire list to make sure all students listed are identified. Do you use all of the sources completely? If not, when do you decide to stop?

22. Sometimes people who may be eligible for benefits such as SNAP or TANF may be reluctant to apply for benefits. This may result in an ISP lower than expected because they are not identified. Do you have any experience with a situation like this? Do you think it impacts your district or school ISP?

23. Is there anything else you would like to share about the CEP process that we have not discussed?

This has been very helpful. Thank you. Next, let's discuss meal claiming process.

D. Meal Claiming Process

My next questions are about the meal claiming process. As you know, meals claimed for reimbursement must meet the minimum Federal requirements to be a reimbursable meal. Meal claiming is the point at which cafeteria staff identify meals as reimbursable or not reimbursable. Meal claiming errors can occur at the end of the serving line, after a student has filled his or her tray, typically at the point of sale or cash register. For example, a meal is claimed for reimbursement but it doesn't meet the requirements, or vice versa.

24. In your district, what approach or strategy do you use to minimize meal claiming errors?

25. In your opinion, what could be done to simplify the meal serving process to reduce errors?

26. Is there anything else you would like to share about the meal serving and meal claiming process that we have not discussed?

This has been very helpful. Thank you. Next, let's discuss meal counts and aggregation process.

E. Aggregation/Reporting Process

Thanks. Now I'd like to ask about meal counts and claims process. I am referring to the process of counting and claiming paperwork sent from the school to the SFA and then the SFA to the State and the State to USDA.

27. Please describe the counting and claiming process starting with the data you receive from the school.

- How do you get the meal counts from each school?
- How often and in what format?
- How do you process the data you receive?

Probe if needed:

- Is it an automated process?

- How often does the SFA office receive the counting and claiming data from the schools?
- What is the SFA office's process upon receipt of claims from the school?
- How often do you send the meal counts to the State?

28. What do you think contributes to counting and claiming errors at each step in the process?

- What makes it easier? What makes it harder?

29. Have you tried any strategies to improve the reporting process?

- What's worked and not worked among the strategies tried?

30. In your opinion, what else could be done to improve the meal counts and aggregation process, in general?

31. Is there anything else you would like to share about the meal counts and aggregation process that we have not discussed?

Anytime you have to do manual paperwork its more difficult.

This has been very helpful. Thank you. Next, let's discuss training and technical assistance.

F. Training and Technical Assistance

NOTE TO INTERVIEWER: IF YOU ARE SHORT ON TIME, YOU CAN SKIP THIS SECTION

Now I'd like to learn more about training, technical assistance, and guidance that you or your SFA staff receive on the topics we've discussed so far. On the SFA director survey you completed, you reported on the types of training provided. Now, I would like to ask a few brief follow up questions.

32. What type of training, technical assistance or guidance have you found to be the most helpful for minimizing errors, and why?
33. What type of training, technical assistance or guidance have you found to be the least helpful for minimizing errors, and why?
34. What, if anything, would you like to change about the training or guidance that is currently provided? Explain.
35. Do you feel you have enough resources to adequately train your staff? If not, what resources would be most helpful?
36. Is there anything else you would like to share about training that we have not discussed?

Thanks for your feedback.

III. Closing

37. We covered a lot during our call. Is there anything else that we haven't discussed that can be done at the school level to reduce errors or make the process easier?
 - Anything at the SFA level?
 - What about at the State level?
 - And at USDA?
 - Any recommendations for FNS?

Those are all the questions I have for you. This was a great discussion; thank you very much for your time and thoughtful responses. If you have any questions about the study in the future, you can contact the APEC III Study line at 1-800-820-6138 or email us at schoolmealstudy@westat.com. Thank you for your time.

Cafeteria Manager Interview Guide

I. Introduction

Welcome and Overview

Good morning/afternoon. Thank you again for taking the time to talk with me today. My name is [interviewer's name] and as you know, I work for Westat, a private research company in Rockville, Maryland.

The US Department of Agriculture, Food and Nutrition Service (FNS) is trying to improve the application and meal claiming and recording process for breakfast and lunch school meal programs. FNS has hired Westat to talk with School Food Authority Directors and Cafeteria Managers to better understand if there are parts of the meal recording and claiming process that are challenging or could be improved upon.

Disclosures and Ground Rules

Before we get started there are a few things I should mention.

- This is a research study which means your participation in this interview is voluntary.
- If you choose not to participate, it will not have any impact on your position as the cafeteria manager.
- The thoughts and opinions that you share during our discussion will be kept private. Your name or school name will not be linked to any of your responses; in our reports, we may include quotes from our respondents, but these will be presented without the speaker's name and in such a way that you could not be identified by the reader. Your name will not appear in any documentation shared with FNS, the school district, the School Food Authority, or your manager.
- The thoughts and opinions that you share during our discussion will be used for research purposes only. We will combine your responses with those from other cafeteria managers. They will not be used as an evaluation of your work, nor of your staff's work.
- There are no direct benefits to you or your school district for participating in this study.

CAFETERIA MANAGER INTERVIEW GUIDE

- Your participation and feedback is important because we need input from cafeteria managers like yourself to better understand how the program can be improved.
- Once we start the interview, you can take a break, skip questions or stop participating at any time. Again, there will be no penalty or loss of benefits to you or your school district.
- We have planned for this discussion to last no more than 45 minutes.
- Do you have any questions?
- Finally, with your permission, I would like to record this discussion. We will create a written transcript of the recording, which will be used to help us recall exactly what was said when we go to summarize our findings. The recordings, transcripts, and any notes we have will be stored on Westat's secure server and will be destroyed after the project is complete.
- Do you agree to participate?

IF YES: Continue

IF NO: [ADDRESS ANY CONCERNS. ONLY PROCEED IF THE ANSWER TO THE QUESTION IS YES.]

May I turn on the audio recorder now? [ONCE RECORDER IS ON, "Today is [insert date]. Now that the recorder is on, do I still have your permission to audio record this interview?" MAKE SURE YOU GET AN AUDIBLE "Yes" FROM RESPONDENT.]

IF NO: Do not conduct the interview.

NOTE TO INTERVIEWER: YOU CAN SKIP QUESTIONS OR GO OUT OF ORDER IF THE QUESTION HAS ALREADY BEEN ANSWERED BY THE RESPONDENT.

II. Day of Observation Notes

Great, thank you. Before we get started, is there anything about today's meal service that is out of the ordinary? For example, was there a last minute menu change? Was there a food delivery problem? Are there any substitute staff or cashiers? Has the lay out for the food lines changed?

III. In-Depth Interview

Section A. Serving Meals

I'd like to learn more about the process of serving reimbursable meals, so let's start there.

1. What does the cashier or cafeteria staff do to make sure the meals are reimbursable?

Probe if needed:

- Do cafeteria staff prepare trays ahead of time?
- Do staff put up signs about meal selection in the cafeteria for students?
- Do any staff help the students select each component of the reimbursable meal?

2. How does the cashier determine if a student's meal is reimbursable?

IF SCHOOL SERVES BREAKFAST IN THE CLASSROOM:

- Can you describe how the reimbursable meal is served?

If needed: Are the breakfast meals pre-packaged and delivered to each classroom? Is there a cart delivery system?

- How do you know that each student receives all of the components?

3. What does the cashier do when a student doesn't have all of the components for a reimbursable meal?

Ask if the manager doesn't mention it:

- What happens if the student has taken more than the required components for a reimbursable meal?
- What happens when a student doesn't want to take a required component of a reimbursable meal?

- Do students have the option of receiving a non-reimbursable meal? What do you do when a meal is non-reimbursable?
 - What are some of the challenges to knowing if a meal is reimbursable?
4. How clear is it to students which components they need to take so the meal is reimbursable?
If needed: What do you think is adding to their confusion?
 5. What changes, if any, would you like to see so that it's easier to serve reimbursable meals?
Please explain.

Thanks, this is very helpful. Now I'd like to discuss how reimbursable meals are recorded.

Section B. Recording Reimbursable Meals

Now let's talk about the process of recording a reimbursable meal.

6. How do you record a reimbursable meal?

Probe if needed:

- How do you match the meal transaction to the student?

If needed: Is it through a student PIN number, an ID card, or a roster?

IF STUDENTS USE A PIN NUMBER OR ID CARD:

- What happens when a student forgets their PIN number or ID card?
- How do you know that the student is entering the correct PIN number?
- Is it possible for more than one student to accidentally use the same PIN on the same day when receiving a reimbursable meal? IF YES – Explain how that can happen.
How do you deal with that when recording the meals?
- FOR NON CEP SCHOOLS: Is it ever possible for the wrong student to be selected at the register? Explain how that can happen.

IF BREAKFAST IS SERVED IN THE CLASSROOM:

- How do you record reimbursable meals at breakfast?

7. How do you know that a student receives free, reduced-price or paid meals?
8. How do you collect money from students that are “paid” status?

Probe if needed:

- Is it ever possible for a “paid” status student taking a reimbursable meal but it being recorded as a free meal instead of a paid meal? Explain how that can happen.
9. Earlier we had talked about some of the challenges with students getting all the components for a reimbursable meal. This doesn’t have to be about your cafeteria, but in your opinion, what are some of the reasons a meal could be recorded incorrectly as reimbursable when there are missing components?

If needed: For example, is it possible that a mistake is made because it’s very busy and there are many students at the cash register so it’s hard for the cashier to see what’s on each student’s tray?

Ask if the manager doesn’t mention it:

- Do you have any examples of what might happen?
10. What kinds of improvements would you like to see so these types of things are less likely to happen?
11. Have there been any changes in the past year or two about how you record reimbursable meals?

IF YES: Describe. In your own opinion, do you think these changes have improved things or made them more difficult? Can you say more about that?

Section C. Meal Records

Now let’s discuss the meal counting and recording process. I realize that you keep counts of the number of meals you receive and then serve, but I’d like to know about the reports for meals that are recorded as free, reduced, and paid.

12. What steps do you take to record and send in the daily and weekly counts of free, reduced, and paid breakfast and lunch meals served?

IF BREAKFAST IS SERVED IN THE CLASSROOM:

Is the process for recording and sending in the daily and weekly counts different for breakfast? If different, how so? Explain. Is this a system that you came up with yourself or did someone train you to do it this way?

13. Is there anyone else besides you who checks the meal counts of free, reduced, and paid for the day or for the week?

- a. What edit checks are done before the school meal counts are sent out?
- 14. What changes, if any, would you like to see in how you gather and send in the daily or weekly counts?
- 15. In your opinion, are there ever any errors that could happen with the reports on free, reduced, and paid meals? What would some examples be?
- 16. Have there been any changes in the past year or two on how you gather and send in the daily and weekly counts?

IF YES: What have the changes been? In your opinion, do you think these changes have improved things or made them more difficult? Can you say more about that?

Section D. Staff Training

This has been very helpful, thank you. Now I'd like to learn about staff training for recording reimbursable meals. As a reminder, your answers will be kept private and your name will not be linked to any of your responses. Your responses will not affect your job or school district and will be used to help make improvements.

- 17. Describe for me the training that your staff receives on recording reimbursable meals.

Ask if the manager doesn't mention it:

- Is the training different for breakfast and lunch? If so, how?
 - How is the training provided?
 - How long is the training?
 - Is there anything you would change about the training?
 - Are there ever training refreshers?
- 18. In your experience, are there parts of training on recording reimbursable meals that need more practice or attention? Why do you think this is?
 - 19. Describe for me the training on making the reports for free, reduced, and paid meals.
 - 20. In your opinion, do cafeteria cashiers stay in their job for a long time?

IF NO: how do you think that affects the process of reimbursable meals in the cafeteria?

21. If your regular cashier is out sick or on vacation what kind of training do your substitute cashiers get?

Section E. Menu Planning

Thank you for everything you have provided so far. I just want to move onto one more topic before we end.

22. How do you go about developing menus that meet USDA meal component guidelines?

Ask if the manager doesn't mention it:

- How do you pick specific foods?
- Are there any particular strategies or guidelines that you use?
- How do you balance the guidelines with student tastes and preferences?

Section F. Summary Questions

Thanks for sharing all of this information – it's been incredibly helpful.

23. Is there anything else you would like to share about reimbursable meals or sending in meal counts that I haven't asked about?

IV. Closing

Those are all the questions I have for you. We covered a lot today; thank you very much for your time and thoughtful responses. If you have any questions about the study in the future, you can contact us at 1-855-820-6138.

APEC III – HOUSEHOLD INTERVIEW GUIDE

I. Introduction

Welcome and Overview

Good morning/afternoon. Thank you again for taking the time to talk with me today. My name is [interviewer's name] and I work for Westat, a private research company in Rockville, Maryland. You have already met with someone from the Westat team when you completed the household survey. Thank you again for your participation.

As you know, the US Department of Agriculture, Food and Nutrition Service (FNS) is trying to improve the application process for breakfast and lunch school meal programs. FNS has hired Westat to talk with those who have filled out the application to better understand if there are parts of the meal program application process that are confusing or could be improved upon.

Before we begin, are you the person who filled out the school meal application for [STUDENT NAME]?

IF YES: Excellent, thank you.

IF NO: We'd like to speak with the person in your household who filled out the application. The questions in the interview are very specific to the person's experience while completing the application. What is the person's name who filled out the application? [RECORD NAME] Is [INSERT NAME] available to speak now?

IF YES: Great. May I speak with him/her?

IF NO: Okay. At this time, I'd like to reschedule the call to speak with [identified person]. Someone on our team will get in touch with [identified person] so we won't be conducting our interview today. We appreciate your time.

Did you receive information about the study along with a blank copy of the meal application?

IF YES: Do you have that in front of you at the moment? If not, could you please get the application copy because we'll need to review it while we're talking today.

IF NEVER RECEIVED OR LOST: Are you able to access your email?

HAS ACCESS BUT NO EMAIL ADDRESS ON FILE: I can resend right now via email. Can you please give me your email address?

HAS ACCESS TO EMAIL: I've resent the document.

IF NO ACCESS TO EMAIL EVER: I will mail you another copy of the document to you. Let me confirm your address. We will need to find another time to schedule the interview once you've received the application.

IF NO ACCESS TO EMAIL DURING THE CALL: Okay, I will send you the documents again. We will need to find another time to schedule the interview so you can have the application in front of you during our conversation.

Disclosures and Ground Rules

Before we get started there are a few things I should mention.

- This is a research study which means your participation in this interview is voluntary.
- Refusal to participate will involve no penalty or loss of benefits to which you or your school district are otherwise entitled.
- The thoughts and opinions that you share during our discussion will be kept private. Your name will not be linked to any of your responses, though we may include quotes you provide in our reports. Your name will not appear in any documentation shared with the Food and Nutrition Service.
- There are no direct benefits to you or your school district for participating in this study.
- At the end of the interview, you will receive \$20 as a thank you for your time and participation.
- Once we start the interview, you can take a break, skip questions or stop participating at any time and there will be no penalty or loss of benefits to you or your school district.
- We have planned for this interview to last no more than 45 minutes.
- Do you have any questions? [ANSWER ALL QUESTIONS]

HOUSEHOLD INTERVIEW GUIDE

- Finally, with your permission, I would like to record this discussion. We will create a written transcript of the recording, which will be used to help us recall exactly what was said when we go to summarize our findings. The recordings, transcripts, and any notes we have will be stored on Westat's secure server and will be destroyed after the project is complete.
- Do you agree to participate?

IF YES: [CONTINUE]

IF NO: [ADDRESS ANY CONCERNS. ONLY PROCEED IF THE ANSWER TO THE QUESTION IS YES.]

May I turn on the audio recorder now? [ONCE RECORDER IS ON, "Now that the recorder is on, do I still have your permission to audio record this interview? MAKE SURE YOU GET AN AUDIBLE "Yes" FROM RESPONDENT.]

IF NO: Do you agree to continue with this interview without being audio-recorded?

INTERVIEWER: IF THE RESPONDENT DECLINES TO BE AUDIO RECORDED PLEASE COMPLETE:

II. In-Depth Interview

A. Experience Completing the Application

Let's start by discussing your experience filling out the application. Just tell me in your own words what that was like for you.

Probe if needed:

- What, if anything, was confusing?
 - How easy or difficult was it to understand the directions? What made them easy/difficult?
1. Do you know if there are people to assist with filling out the application at your child's school, or other organizations such as the Parent Teacher Association or any community organizations in your area?
 2. Did you have any questions on how to complete the application? What questions, if any, did you have about how to complete the application?

IF YES: How did you find the answers? On your own or did you ask someone? Who did you ask?

IF NO: If you did have any questions about completing the application, who would you ask? How did you choose to ask the person you just mentioned?

Probe if needed:

- If the person isn't employed by the school district: Would you ever consider asking someone at your child's school?
3. How much time did you have from when you first received the application to when it had to be turned in? In your opinion, was it enough time to gather the information you needed to complete the application?

If respondent hasn't already shared if the application was on-line or paper:

4. Did you fill out an on-line application or a paper application?

If paper:

- a. Did you have the choice to complete the application on-line?
- b. If so, why did you choose to fill out a paper application?

If on-line:

- c. Did you have the choice to complete a paper application? If so, why did you choose to fill out the application on-line?
- d. Were you able to complete the application over time or did it have to be done in one sitting?
- e. Did you get any error messages? IF YES, Can you tell me what they were? What did you do to fix them?

If information is provided at the end of the application:

5. Did you happen to notice the instructions that accompany the application?

Probe if needed:

- Did you read them?
- What, if anything, were you looking for when you read them?
- Were you able to find all the information you were looking for?

B. Understanding Application Components

Now let's go through the main parts of the application so we can get your feedback on some of the sections.

We can start with the section [insert section letter] on household members.

1. When filling out the application, how would you decide who to list as a part of your household?
2. Is there anyone who lives in your home, either some of the time or all of the time, who you wouldn't list?

Probe if needed:

- Is there anyone you wouldn't count, why not?
3. Would there be anyone you would be unclear about counting as part of your household? For example, sometimes people don't know if they should list a baby, grandparents or someone deployed in the military.

Probe if needed:

- What made it unclear?

This is very helpful, thank you. Now let's take a look at listing income. I'm in section [insert section letter where the income is listed].

Income

Listing Income

4. Looking at the application, what types of income would you put down in the income section of the application? How did you decide which type of income to include?

Probe if needed:

- Is there any type of income that you weren't sure about? If so, what did you do?
 - Was it unclear as to whether the income amount needed to be before or after taxes and other deductions?
5. Let me ask you about a couple types of income that can be confusing to people. If you were to receive income from child support would you enter that information in the income box? Explain.
- What about income from alimony payments? Explain.
 - Income from public assistance? Explain.
6. What if you had money coming in from worker's compensation or unemployment? Would you enter that information in the income box? Explain.
7. Now I'm going to read you the application instructions about reporting a child's income. [INTERVIEWER READ INSTRUCTIONS ON APPLICATION]. Based on those instructions,
- a. If your child had a full time or part time job, would you include his or her income when completing the income section of the application? Why or why not?

- b. What about if your child earned income every once in a while through babysitting or small jobs in the neighborhood like shoveling snow? Why or why not?
- c. Would you include money that your child was receiving through Social Security Disability or through being in the foster care system? Why or why not?

Income Frequency

Looking at the income box on the application I see that the options are [INTERVIEWER, READ THE FREQUENCY OPTIONS FROM THE INCOME BOX].

- 8. Are any of these options unclear? If so, which ones and why?
- 9. Some households have adults who don't earn any income. If you had an adult in your household who didn't have any income, would you still list that person?

IF YES: How would you fill out this person's income? Would you leave the income blank, write in zero [or if applicable, check the box that says "no income"]?

IF THE RESPONDENT RECEIVES SNAP, TANF, OR FDPIR BENEFITS:

- 10. Did you include your case number on the application?

IF YES: How difficult was it for you to find the number? Explain.

IF NO: Why not?

- 11. Did you also complete the income section on the application? If so, what made you decide to do that?

C. Accessibility

- 12. In what language did you fill out the application?
- 13. Would it have been easier to fill out the application in another language?

Probe if needed:

- Was an application in another language available?
- If yes, why did you choose to complete the application in the language you did?

D. Summary Questions

14. We've covered areas of the application that may cause difficulties for people completing the form—what other feedback or reactions do you have that we haven't already talked about?
15. What did you wish had been different about the application or the process?

III. Closing

Those are all the questions I have for you. We covered a lot today; thank you very much for your time and thoughtful responses. [TURN OFF RECORDING] If you have any questions about the study in the future, you can contact our main research team at 855-820-6138. [CONFIRM ADDRESS FOR INCENTIVE]

APEC III – SFA DIRECTOR INTERVIEW CODEBOOK

Nodes

Name	Description
A. Aggregation and Reporting	ORGANIZATION NODE for the Aggregation and Reporting process. Do not code here.
A1. Aggregation and Reporting Process	SFA Director discusses the general process for aggregation and reporting, including any edit checks conducted during the process. The aggregation and reporting process refers to the counting and claiming paperwork sent from the school to the SFA, the SFA to the State, and the State to the USDA.
A1a. Automated Point-of-Sale or Other Software	SFA Director describes using an automated Point-of-Sale (POS) system or other software to facilitate the aggregation and reporting process. For example, the SFA office can download the meal count reports daily using software that is linked to the electronic POS system at the schools.
A1b. Designated Staff for the Aggregation and Reporting Process	SFA Director describes using designated staff such as an IT specialist or other specialized staff roles during the aggregation and reporting process.
A2. Reasons for Aggregation and Reporting Errors	PARENT NODE for SFA Director discussions about what contributes to counting and claiming errors during the aggregation and reporting process.
A2a. Incorrect Data Entry (Cafeteria Level)	SFA Director speculates that data entry mistakes by the cafeteria staff may contribute to counting and claiming errors in the aggregation and reporting process. For example, cafeteria staff enter data into the wrong meal period (e.g. recording student meal transactions from breakfast into the lunch period record), they forget to input data (e.g. forgetting to record Saturday meal service), or they incorrectly record meal status (free, reduced, or paid).
A2b. Incorrect Enrollment Info	SFA Director describes aggregation and reporting errors stemming from incorrect enrollment info (e.g., students have transferred schools, outdated rosters, etc.).
A2c. Other Reasons for Errors in Aggregation and Reporting	Code any other reasons for errors in the aggregation and reporting process.

SFA Director Interview Codebook

Name	Description
A3. Strategies and Recommendations to Improve the Aggregation and Reporting Process	PARENT NODE for strategies the SFA Director has implemented to improve the aggregation and reporting process or recommendations to change the aggregation and reporting process.
A3a. Communication and Training (Aggregation and Reporting)	SFA Director describes addressing problems with school staff regularly and staff training as ways to minimize errors in the aggregation and reporting process.
A3b. Edit Checks as a Strategy to Reduce Aggregation and Reporting Errors	SFA Director describes edit checks or multiple reviewers (in-house or specialized staff) as strategies to reduce or minimize errors in the aggregation and reporting process.
A3c. Other Strategies or Recommendations (Aggregation and Reporting)	Code any other strategies or recommendations mentioned to improve the aggregation and reporting process.
A3d. Universal Free Meals (Aggregation and Reporting)	SFA Director suggests providing universal free meals as a way to reduce errors in the aggregation and reporting process.
A3e. Updating Point-of-Sale or Meal Claims Software	SFA Director describes implementing changes to the software, such as introducing an electronic POS, as a strategy to improve the aggregation and reporting process.
B. Applications	ORGANIZATION NODE for Applications Section. Do not code to this node.
B1. Application Approval Process	Include SFA Directors' general descriptions of their district's process for reviewing income-based and categorically eligible applications.
B1a. Approval of Applications with Mistakes or Missing Info	Discussions about approving or denying applications with mistakes or missing information.
B1b. How Households Submit Applications (Mode of Submission)	PARENT NODE for discussions about how the SFA receives applications from households (e.g. parents submit applications online or submit paper applications to the school or district office).
B1bi. Majority Online	SFA Director reports that the majority of the applications they receive are online, or that they only accept online applications.

SFA Director Interview Codebook

Name	Description
B1bii. Majority Paper	SFA Director reports that most applications are submitted on paper (including handwritten applications or typed and printed applications), or the SFA only accepts paper applications.
B1biii. Mixed	SFA Director reports that they accept and receive online and paper applications from households.
B1c. How SFA Determines Eligibility	PARENT NODE for discussions about how eligibility is determined. Does the computer calculate eligibility or does a staff member determine eligibility?
B1ci. Electronic Calculation	SFA uses specific software to determine eligibility of applications (e.g. the computer software calculates eligibility based on data entered into online applications or scanned paper applications).
B1cii. Manual Calculation by Staff	The SFA director mentions that a staff member calculates or determines eligibility.
B1d. Staff Roles in the Application Process	Include general descriptive discussions about who is reviewing the application; how staff is delegated etc.
B2. Benefits of Online Applications and Electronic Processing	PARENT NODE for SFA Director discussions regarding a reduction in errors or prevention of missing information because of an online application system. Includes other benefits of software such as electronic processing of scanned paper applications.
B2a. Can't Submit Application with Errors	When the SFA Director discusses online error messages stopping an application from being submitted with missing information.
B2b. Faster Processing of Applications	SFA Director describes online submission as facilitating faster processing of applications -- including needing less staff to process applications or taking less time to complete the approval process.
B2c. Other Benefits of Online Submission or Electronic Processing	Code any other benefits the SFA Director mentions regarding online applications or the electronic processing of online and scanned paper applications.
B2d. Reduction in Calculation Errors	SFA Director mentions that the computer calculates eligibility resulting in fewer errors when determining eligibility status.

SFA Director Interview Codebook

Name	Description
B3. Challenges Faced and Strategies Implemented (Application Approval Process)	PARENT NODE for common household mistakes and reviewer challenges experienced during the application approval process, as well as SFA strategies for mitigating these mistakes. Code the targeted solution/strategy in the associated challenge/problem node.
B3a. Changes in Staff Responsible for Reviewing Applications	SFA Director discusses any staffing changes and/or strategies (e.g. a staff member quit, SFA hired specialized staff to review applications, SFA implemented centralized processing of applications at the district level, SFA restructured staff roles, etc.).
B3b. Frequency of HOUSEHOLD Mistakes on Applications	PARENT NODE for when the SFA Director discusses the frequency of application mistakes by households (e.g. households make more mistakes, less mistakes, or they have detected no change in the rate of mistakes).
B3bi. Less Household Mistakes	SFA Director reports experiencing fewer household mistakes now than in the past.
B3bii. More Household Mistakes	SFA Director describes more mistakes by households now than in the past.
B3biii. No Change in Frequency of Household Mistakes	SFA Director reports no change in the frequency of mistakes on applications by households.
B3c. Frequency of REVIEWER Errors when Reviewing Applications	PARENT NODE for when the SFA Director discusses the frequency of reviewer errors (e.g. reviewers make more mistakes, less mistakes, or they have detected no change in the rate of mistakes).
B3ci. Less Reviewer Mistakes	SFA Director reports experiencing fewer reviewer mistakes now than in the past.
B3cii. More Reviewer Mistakes	SFA Director describes more mistakes by reviewers now than in the past.
B3ciii. No Change in Frequency of Reviewer Mistakes	SFA Director reports no change in the frequency of reviewer errors.
B3d. Language Barriers in the District	SFA Director describes language barriers in the district as a challenge and any strategies to deal with that (e.g., SFA has a translator on staff or the SFA offers applications in multiple languages).

SFA Director Interview Codebook

Name	Description
B3e. Missing or Incorrect Information on Applications	SFA Director cites missing or incorrect information as presenting challenges in the application approval process and discusses strategies to correct it (e.g. follow up with parents). Code general descriptions about missing or incorrect information and associated strategies to this node.
B3ei. Specific Types of Missing or Incorrect Information	PARENT NODE for when the SFA Director describes specific missing or incorrect information examples and strategies to correct this. In the appropriate subnodes, code mentions of mismatched household names with the number of household members, missing SSNs, income, etc.
B3ei1. Case Number (Public Assistance)	SFA Director mentions that households forget to include a case number for public assistance that they receive.
B3ei2. Household Members	SFA Director mentions that parents forget to list themselves or other members of the household, including other children; households list a number that doesn't match with the names on the list, etc.
B3ei3. Income	Code when the SFA Director mentions households leaving income blank or entering income in the wrong section of the application.
B3ei4. Income Frequency	SFA Director mentions that households report incorrect income frequency or leave it blank.
B3ei5. Migrant vs. Immigrant	SFA Director mentions household confusion over migrant vs. immigrant distinction (e.g. the SFA Director describes erroneously certifying students as migrants who may not be because parents checked the migrant box on the application).
B3ei6. Signature	SFA Director mentions receiving unsigned applications from households.
B3ei7. Social Security Number (SSN)	SFA Director discusses applications with missing Social Security Numbers.
B3f. Other Challenges and Strategies (Application Approval Process)	Code any other challenges and strategies of the application review process here.
B3g. Paper Application Challenges and Transitioning to Online Applications	SFA Director describes paper applications as creating challenges such as slow processing, illegible handwriting, etc. Also include strategies they have implemented to encourage parents to submit online (e.g., using a mobile unit), if applicable.

SFA Director Interview Codebook

Name	Description
B3h. Reason for Mistakes in the Application Process (Household Mistakes and Reviewer Errors)	PARENT NODE for discussions of what factors might contribute to household and reviewer mistakes.
B3hi. Applicant Can't Understand (or Does Not Read) Directions	SFA Director mentions that parents do not read or cannot understand the application's directions; the physical layout of application might also contribute to confusion.
B3hii. Applicant Concerned about Privacy and Information Sharing	SFA Director speculates that parents do not want to list their SSN or that they check the no SSN box out of privacy concerns, fear, or stigma in undocumented populations, etc.
B3hiii. Applicant has Inconsistent Income	SFA Director mentions income fluctuations as causing confusion for parents when reporting income on application.
B3hiv. Language of Applicant	SFA Director cites language difficulties for an applicant as a source of mistakes on applications.
B3hv. Other Reasons for Mistakes (Application Process)	Other discussions about what contributes to mistakes by households and reviewers during the application process.
B3i. School Records or Identification Issues (Application Process)	SFA Director reports problems when a student's enrollment status is not up-to-date or other issues with student records. Also code how the SFA deals with these issues, including matching the student identification number to the correct student record.
B3j. Tight Deadline for Application Submission and Reviewer Processing	When the SFA Director mentions challenges with processing all applications in time (e.g. tight turnaround, needing to hire more/temporary staff, receiving many applications at once, applicants "rushing through the application," or families being busy).
B4. Eligible, but Won't Submit a Meal Application	When the SFA Director discusses reasons why eligible students do not submit applications and any strategies to encourage parents to apply or to accommodate this population.
B5. Impact of Federal, State, or Local Requirements on the Application Process	PARENT NODE for federal, state, or local requirements that impact the application process.

SFA Director Interview Codebook

Name	Description
B5a. Federal	SFA Director discusses how federal policies have affected the application process.
B5b. Local	SFA Director discusses how local policies or requirements have affected the application process.
B5c. State	SFA Director describes how state policies or requirements have affected the application process (e.g., in one state, applications are tied to school funding or other school programs such as student discounts and concessions linked with meal applications).
B6. Recommendations to Improve the Application Process	PARENT NODE for SFA Director recommendations to improve the application process.
B6a. No Changes Option on Applications	SFA Director suggests including a "no changes" option or automatic resubmission of applications that have not changed from the previous year.
B6b. Other Recommendations for the Application Process	Code other recommendations about the application process here.
B6c. Remove Reduced-Price Eligibility	SFA Director suggests removing the reduced-price tier from eligibility categories.
B6d. Simplify the Application or Remove Unnecessary Information Requests	SFA Director speculates that some required information might be unnecessary to collect from parents such as SSNs etc.; suggests streamlining or simplifying the application content or layout.
B6e. Universal Free Meals (Application Process)	SFA Director suggests providing universal free meals to all students when discussing ways to improve the application process (e.g. eliminates the need to collect income-based applications).
c. CEP	ORGANIZATION ONLY for the CEP section. Do not code here.
C1. Benefits of Community Eligibility Provision (CEP)	PARENT NODE for when the SFA Director discusses any benefits of CEP at the student, school, or district level (e.g. less meal shaming for students, easier meal claiming for cafeteria managers, etc.).
C1a. Other Benefits of CEP	Code any other positive experience discussed by the SFA Director regarding CEP.

SFA Director Interview Codebook

Name	Description
C1b. School Level Benefits of CEP	SFA Director discusses how schools benefit from the CEP process (e.g. easier for cafeteria staff to count meals.)
C1c. SFA Level benefits of CEP	SFA Director discusses how the SFA benefits from CEP (groupings or district-wide). For example, districts may eliminate or receive fewer applications to review.
C1d. Student and Parent Level benefits of CEP	SFA Director discusses benefits of CEP for students, including less meal shaming, no applications for households, etc.
C2. How the SFA Determines the ISP Rate	How the SFA calculates the ISP (Identified Student Percentage) - the proportion of students who are directly certified for free school meals through means other than a school meal application and not subject to verification.
C2a. Full or Partial Use of Sources	Discussions about how the SFA uses sources for the CEP ISP rate (whether they use sources entirely or stop once they reach a certain number of students).
C2b. Grouping Schools	SFA Director discusses grouping schools (e.g. monitoring the Direct Certification matches to see if they need to change how schools are grouped to ensure the most amount of schools qualify for CEP).
C2c. Reluctance to Apply for Federal Benefits and Impact on ISP	SFA Director perspectives on eligible households' reluctance to apply for federal benefits such as SNAP, TANF, and FDPIR.
C2d. Updating ISP before Renewal	SFA Director discusses monitoring or updating the ISP before the 4-year renewal deadline.
C3. Negative Experiences and Challenges with CEP	PARENT NODE for when the SFA Director discusses negative experiences with CEP including issues with, challenges, and consequences of the process, as well as strategies they employ to navigate these problems.
C3a. Benefits and Funding Contingent on School Application Info	SFA Director mentions that CEP schools that do not collect applications encounter challenges with receiving funding/benefits/discounts that require income data from applications.
C3b. CEP Impact on the Meal Serving and Counting Process	SFA Director discusses any challenges with managing a new process for serving and counting meals because of CEP implementation.
C3c. Children in Different Schools or Grade Transitions	SFA Director reports that parents experience confusion when families have children in different schools that have divergent CEP statuses. Also code discussions about students changing schools as they age.

SFA Director Interview Codebook

Name	Description
C3d. Other Negative Experiences and Challenges Associated with CEP	Other negative experiences and challenges discussed by SFA Directors regarding CEP.
C3e. Potential Changes in CEP Status (School or District Level)	SFA Director discusses the potential for upsetting parents or the community if CEP status changes at the school or district level.
D. Direct Certification	ORGANIZATION ONLY node for Direct Certification. Do not code here.
D1. Direct Certification Process	Code the SFA Director's overview of the Direct Certification process.
D1a. How Often SFA Receives Direct Certification Data	SFA Director discusses how often data is pulled or uploaded into the system to directly certify students.
D1b. Sources Used for Direct Certification	PARENT NODE for discussions about the sources used for Direct Certification and SFA experiences with them.
D1bi. Data Site or Software Used for Direct Certification	Code mentions of software or sites that contain the data the SFA uses to directly certify students.
D1bii. Departments and Names of Sources Used for Direct Certification	Include the departments from which SFAs receive Direct Certification data (e.g. state departments of education, departments of agriculture, etc.) and the sources they use (SNAP, TANF, etc.).
D1biii. Direct Certification Process for Homeless, Migrant, and Foster Care students	Code any discussions about how the SFA directly certifies homeless, migrant, and foster care populations (e.g. homeless liaison, foster student lists, etc.).
D1biv. Experience with Direct Certification Sources	PARENT NODE for when the SFA Director discusses his/her experience using the sources - positive or negative (e.g. delay of list or never any problems getting information on time).
D1biv1. Delay for Certification List	Delay in receiving Direct Certification list or mismatched timing with certification list and enrollment rosters.

SFA Director Interview Codebook

Name	Description
D1biv2. Missing or Incorrect Information in Sources Used for Direct Certification	SFA Director describes sources with missing information, misspelled names, wrong SSNs, different names than those listed on a birth certificate, incorrect birthdays, etc. Include missing information due to changing school districts. Also code strategies to deal with missing or incorrect information (e.g. using sibling information to verify other siblings with missing information, etc.).
D1biv3. Other Experiences with Sources for Direct Certification	SFA Director discusses any other experiences using the sources for Direct Certification.
D1bv. Sources SFA Director Opted Not to Use for Direct Certification	Code any discussions about SFAs opting not to use specific sources for Direct Certification.
D1c. Staff Roles in the Direct Certification Process	SFA Director discusses staff roles in the Direct Certification process (e.g. designates specific staff to run Direct Certification).
D2. Recommendations for Direct Certification	Code SFA Directors' suggestions about what could be done to improve the Direct Certification process.
D3. Reluctance to Apply for Federal Benefits and Impact on Direct Certification	SFA Directors' perspectives on household reluctance to apply for federal benefits such as SNAP, TANF, or FDPIR even when eligible.
E. Meal Claiming and Serving Process	ORGANIZATION ONLY node for the meal serving and claiming process. Do not code here. Meal claiming is the point at which cafeteria staff identify meals as reimbursable or not reimbursable.
E1. Breakfast in the Classroom	Code any mention of breakfast in the classroom here. Include transitioning to or from breakfast in the classroom, and any challenges, strategies, or benefits of breakfast in the classroom.
E2. Recommendations for the Meal Serving and Claiming Process	PARENT NODE for SFA Director recommendations for improving or simplifying the meal claiming and serving process to reduce errors.
E2a. Other Recommendations for the Meal Claiming and Serving Process	Code any other recommendations SFA Directors suggest regarding meal serving and claiming at the cafeteria level.

SFA Director Interview Codebook

Name	Description
E2b. Simplify Meal Requirements	SFA Director discusses simplifying or clarifying the meal requirements (e.g. no differences between items at breakfast and components at lunch; convoluted vegetable requirements - green vs. non-green vegetables, etc.).
E2c. Universal Free Meals (Meal Serving and Claiming)	SFA Director mentions providing universal free meals to all students regardless of economic background or status as a way to lessen stress for cafeteria staff.
E3. Staff Challenges with the Meal Claiming and Serving Process	PARENT NODE for challenges cafeteria staff or school staff face in the meal claiming and serving process (e.g. making sure students take the required components, students forgetting pin numbers, etc.).
E3a. Clicker System Issues	SFA Director reports challenges using the "clicker system" for counting reimbursable meals.
E3b. Distraction in the Cafeteria	SFA Director mentions distractions as creating barriers for cafeteria staff to accurately record students' meals.
E3c. Getting Students to Take Required Items or Components (OVS)	SFA Director mentions staff challenges in getting students to take the required components/items and the right amount of required components/items.
E3d. ID or Pin Number Issues	SFA Director describes challenges associated with students entering ID or pin numbers, missing IDs, etc.
E3e. Other Challenges with Meal Claiming and Serving	Code any other challenges the SFA Director mentions regarding the meal claiming and serving process.
E3f. Understanding Requirements - Items (Breakfast) vs Components (Lunch)	SFA Director discusses confusion of cafeteria managers or school staff regarding items (breakfast) vs. components (lunch). For example, the cafeteria staff does not understand the difference between items vs. components or differences in requirements for breakfast vs. lunch.
E4. Strategies to Minimize Errors and Improve the Serving and Claiming Process	PARENT NODE for SFA Director discussions about strategies for minimizing claiming errors or how they have improved the meal serving and claiming process (e.g. computer automation, training, etc.).
E4addition. Experienced Staff	SFA Director mentions retaining experienced staff or strategic hiring as ways to minimize errors.
E4a. Other Strategies to Minimize Meal Claiming and Serving Errors	Code any other strategies SFA Directors mention for minimizing errors during the meal claiming and serving process.

SFA Director Interview Codebook

Name	Description
E4b. Point-of-Sale (POS) System or Other Automation	SFA Director describes the Point of Sale (POS) system, POS software, or other automation as helpful in minimizing errors.
E4c. Service Line Layout	SFA Director describes the physical layout of the service line as helping to reduce errors in the serving and claiming process.
E4d. Signage in Cafeteria	SFA Director discusses signs in the cafeteria or the school that depict meal requirements or emphasize the importance of healthy eating (e.g. taking 3 out of 5 meal components, eating more vegetables or fruits, etc.).
E4e. Staff Training and Site Visits (Meal Serving and Claiming)	SFA Director mentions staff training, site visits, and frequent communication with the schools as strategies to minimize errors in meal claiming (e.g., Cafeteria Managers are trained on required components for a reimbursable meal).
E4f. Strategic Menu Planning or Bundling Components	SFA Director discusses how menus are designed or meals are served to ensure students take the required items or components (e.g. menu planning at the SFA level; stacking or bagging components, etc.).
F. Provision 2 or 3	ORGANIZATION ONLY node for discussions about Provision 2 or Provision 3. Do not code here.
F1. Provision 2	General discussions about Provision 2 schools or districts.
F1a. Base Year Process	SFA Director describes the Provision 2 process during a base year.
F1b. Benefits of Provision 2	SFA Director describes the benefits of schools or a district being Provision 2.
F1c. Challenges with Provision 2	SFA Director describes challenges associated with the Provision 2 process such as maintaining records or transitioning from Provision 2 to CEP or collecting applications.
F2. Provision 3	General discussions about Provision 3 schools or districts.
G. Recommendations to Reduce Errors or Make the Process Easier Overall	ORGANIZATION ONLY node for general recommendations to improve the application, claiming, and reporting process overall.

SFA Director Interview Codebook

Name	Description
G1. Cost of Living and Eligibility	The SFA Director suggests considerations of cost of living or minimum wage differences in eligibility determinations. For example, the SFA Director mentions that cost of living varies greatly between districts and a blanket state-wide policy is detrimental to districts with higher costs of living that use the same eligibility guidelines.
G2. General Recommendations for FNS	SFA Director provides recommendations for FNS.
G3. Other Summary Recommendations to Improve the Overall Process	Code any other recommendations the SFA Director suggests during the closing remarks of the interview (if not clearly attributed to a particular level such as school, SFA, etc.).
G4. Reduce Overall Errors (by Level)	PARENT NODE for discussions of how to reduce errors at each level of the process (School; SFA: State; USDA).
G4a. School Level	SFA Director discusses how to reduce errors at the school level.
G4b. SFA Level	SFA Director discusses how to reduce errors at the SFA level.
G4c. State Level	SFA Director discusses how to reduce errors at the state level.
G4d. USDA Level	SFA Director discusses how to reduce errors at the USDA or federal level.
G5. Universal Free Meals (Closing Remarks)	SFA Director expresses wanting all students to have free meals during the summary/closing statements.
H. Training and Technical Assistance	ORGANIZATION ONLY node for the Training and Technical Assistance section. Do not code here.
H1. Availability and Quality of Resources for Training and Technical Assistance	SFA Director discusses the availability and quality of resources provided (e.g. what resources they need to better train staff).
H2. Least Helpful Training or Technical Assistance	SFA Director describes training that is least helpful for minimizing errors overall or for any of the topics discussed.
H3. Most Helpful Training or Technical Assistance	SFA Director describes training that is most helpful for minimizing errors overall or for any of the topics discussed.

SFA Director Interview Codebook

Name	Description
H4. Recommendations for Training or Technical Assistance	SFA Director provides recommendations to improve training, technical assistance, or guidance (e.g. process changes or suggestions for different types of training materials).

APEC III – CAFETERIA MANAGER INTERVIEW CODEBOOK

Nodes

Name	Description
A. Unusual Conditions	Parent Node for Day of Observation abnormalities in service (e.g. last minute menu changes; food delivery problems; substitute staff; service line layout changes).
A1. Nothing Out of the Ordinary	When the Cafeteria Manager answers that there are no unusual conditions on the day of observation.
A2. Food Delivery Problem	Cafeteria Manager mentions food delivery problems either that day or in general (and menu changes to accommodate this issue).
A3. Field Trips	Cafeteria Manager describes how field trips impact the serving, recording, and reporting process.
A4. Substitute Cashiers	Cafeteria Manager discusses managing substitute cashiers either that day or in general.
A5. Other Menu Changes	Cafeteria Manager describes having to implement last minute menu changes either that day or in general.
A6. Other Unusual Conditions	Cafeteria Manager describes any other unusual conditions on the day of the interview or in general.
B. Serving Meals	Parent Node for the Serving Meals section of the interview.
B1. Determining if a meal is reimbursable	How cashiers determine whether a student's meal is reimbursable.
B1a. Challenges with Knowing if a Meal is Reimbursable	Reported challenges to knowing if a meal is reimbursable.
B1b. Correcting Reimbursable Meals	Parent Node for discussions about what to do when students do not have, take more than, or refuse to take required components.

Cafeteria Manager Interview Codebook

Name	Description
B1b1. Missing or Wrong Components	Discussions about what happens if a child is missing required components or takes the wrong components (e.g. staff member tells the student to return to the cash register).
B1b2. More than Required Components	Code what happens when a student takes more than the required components.
B1b3. Refusal to Take Components	Code what happens when a student does not want to take a required component of a reimbursable meal.
B2. Facilitating Reimbursable Meal Selection	Parent Node for discussions about what cashiers or staff do to make sure meals are reimbursable prior to check out.
B2a. Staff Suggest or Help Students Select Components	Mentions of staff helping students select components or suggesting components to take to make sure students are taking reimbursable meals.
B2b. Bundling Components (on Menu or Service Line)	Cafeteria Manager describes designing menus or stacking items on the service line that incorporate required components in efforts to make it easier on the cashier.
B2c. Signs in Cafeteria	Mentions of signs displayed in the cafeteria about reimbursable meal components.
B2d. Student Experience	Cafeteria Manager notes that students know what items to take because of growing up in the school system (e.g. students have been getting reimbursable meals since elementary school and know what they need to put on their tray to make the meal free or reimbursable.)
B2e. Other Strategies to Facilitate Meal Selection	Code any other strategies the Cafeteria Manager mentions to facilitate meal selection.
B3. Meal Service Delivery Type	Parent Node for overall descriptions of how meals are served to students.
B3a. Tray	Students select their food and then wait in line to "check out" at a register.
B3b. Food or Salad Bar	Students select their meals from a food or salad bar.

Cafeteria Manager Interview Codebook

Name	Description
B3c. Bagged or Boxed Meals	Students pick up a packaged or boxed breakfast or lunch from a meal cart/station to consume in their classroom or multipurpose room. All meals are the same and reimbursable.
B3d. Hand-selected Kiosk or Grab and Go	Students select food items from a portable meal station in the hallway or classroom - the same way they do in a cafeteria line.
B3e. Pre-plated Meal	Students do not select their meals. Meals are prepared and set at the table and students sit at the table with breakfast or lunch already set.
B3f. Vending Machine	Students select their meals from a vending machine.
B4. Offer vs. Serve (OVS)	Discussions of the benefits or challenges of OVS meal service. Do not code if the Cafeteria Manager mentions that the school is OVS (include that in the Attributes).
B5. Changes over Time in the Serving Process	Cafeteria Manager describes how the serving process has changed over time.
B5a. Changes in the Law	Cafeteria Manager describes changes in the serving process due to changes in state, federal, or local law.
B6. Other Challenges with the Serving Process	Cafeteria Manager cites other challenges with service (beyond knowing components) such as pace of service, layout, etc.
B7. Recommendations to Improve the Serving Process	Cafeteria Managers' suggestions regarding what would make it easier to serve reimbursable meals.
B7a. No Recommendations for the Serving Process	Cafeteria Manager does not have recommendations to improve the process (e.g. says everything is fine, cannot think of any changes).
C. Breakfast in the Classroom	Parent Node for discussions about how breakfast (and/or lunch) are served and recorded in the classroom.
C1. Challenges of Breakfast in the Classroom	Cafeteria Manager describes any challenges associated with breakfast in the classroom service or the recording process.

Cafeteria Manager Interview Codebook

Name	Description
C2. Recording and Reporting Process	Cafeteria Manager describes how breakfast or other meals in the classroom are recorded (e.g. teachers using rosters to record which students have breakfast). Also include counting and reporting process (e.g. steps taken to record and send counts from breakfast in the classroom).
C3. Serving Process	Cafeteria Manager describes how breakfast or other meals are served in the classroom.
D. Share Table or Sharing Food	Cafeteria Manager discusses students sharing food items, including using share tables to reduce food waste.
E. Working with Food Vendors	Cafeteria Managers discuss how they work with their vendors to meet requirements and/or ways the vendors facilitate or impede the process.
F. Recording Reimbursable Meals	Parent Node for recording reimbursable meals.
F1. Meal Transaction Method	Parent Node for the method used for recording reimbursable meals at the Point-of-Sale (POS).
F1a. ID Card or Pin Number	Students have the option of using an ID card or pin number for meal transactions. Also include how cashiers handle students forgetting ID cards or pin numbers (including the use of rosters in that situation), entering the wrong ID or pin number, or using another student's ID or pin number.
F1a1. Only ID Card	Cafeteria Manager mentions students using an ID card for meal transactions. Also include how cashier handles students forgetting ID cards. Code here when ID card is the only meal transaction type.
F1a2. Only Student Pin Number	Code when the Cafeteria Manager mentions students using a pin number for transactions and what happens in scenarios where more than one student uses the same pin on the same day, a student enters the wrong pin number, or a student forgets their pin number. Code in this node if the school uses pin numbers only.
F1b. Roster	Cafeteria Manager describes using a roster to match meal transactions to students (e.g. using a roster with names and barcodes that the cashier scans or hand-checking students on a paper roster). Use when ID card or pin number are not the main forms of meal transaction.
F1c. Other Meal Transaction Methods	Cafeteria Manager describes unusual or unique meal transaction methods.

Cafeteria Manager Interview Codebook

Name	Description
F1d. Point-of-Sale Software Features	Cafeteria Manager describes features of the Point-of-Sale software that facilitate recording (e.g. a student's picture shows up on the screen when s/he enters a pin number or swipes an ID card; a color or fruit associated with eligibility status appears on the screen when a student swipes an ID card or enters a pin number).
F2. Reasons for Incorrect Recording	Cafeteria Manager describes possible reasons for recording errors such as pace of service, layout, distraction, etc.
F2a. Recording a Paid Status Student Meal as Free or Reduced-price	Cafeteria Manager discusses instances of “paid status” students receiving free or reduced-price meals.
F3. A La Carte or Non-reimbursable Meals	How the Cafeteria Manager records meals when “free status” students take a non-reimbursable meal or when students have reimbursable meals alongside a la carte items that are an extra cost.
F4. Paid Students	Cafeteria Manager describes meal transactions for paid students (e.g. collecting money, taking money from an account, etc.).
F5. Every Student Receives a Free Meal	Cafeteria Manager describes all meals served at the school as free (including CEP, Provision 2 or 3, etc.).
F5a. Clicker System	Cafeteria Manager describes using a clicker or another counting system to record the number of reimbursable meals served.
F6. Changes in the Recording Process over Time	Discussions about meal recording changes that the staff has implemented over time.
F6a. Changes have been Positive	Valence node for positive changes that have improved the recording of reimbursable meals.
F7. Recommendations for Improving the Recording Process	Cafeteria Manager suggests recommendations for improving the recording process.
F7a. No Recommendations for the Recording Process	Cafeteria Manager does not have any recommendations to improve the recording process (e.g. says everything is fine; cannot think of anything).
G. Counting and Reporting Meal Counts	Parent Node for discussions of how meals are counted, recorded, and sent to the School Food Authority.

Cafeteria Manager Interview Codebook

Name	Description
G1. Process for Recording and Sending Daily and Weekly Meal Counts	Cafeteria Manager describes the process of reporting and sending daily and weekly meal counts to the SFA.
G2. Staff Roles and Edit Checks	Code for staff roles in the counting and reporting process including sending counts to SFAs and edit checks.
G2a. Edit Check Worksheet	Cafeteria Manager describes using edit check worksheets for the counting and reporting process.
G3. Technology, Software, or Automated POS	Cafeteria Manager describes technology used in the counting and reporting process, including specific software and/or an automated POS that sends counts automatically to the SFAs.
G4. Reasons for Errors in Counting and Reporting	Cafeteria Manager describes how errors can occur in reports on free, reduced, and paid meals.
G5. Changes in the Reporting Process over Time	Cafeteria Manager describes any changes in the meal count reporting process over time.
G5a. Positive Changes in the Reporting Process	Valence node for positive changes that have improved the reporting process.
G6. Recommendations for the Reporting Process	Any recommendations for improving the counting and reporting process.
G6a. No Recommendations for the Reporting Process	Cafeteria Manager does not have recommendations for the reporting process (e.g. says everything is fine; cannot think of anything).
H. Staff Training	Parent Node for discussions about staff training.
H1. Training that Staff Receives	Cafeteria Manager describes the training that cafeteria staff, including cashiers, receive on recording reimbursable meals.
H1a. Training Refreshers	Frequency of training on reimbursable meals.
H2. Breakfast vs. Lunch Pattern Training	Cafeteria Manager describes different trainings for breakfast and lunch -- include training for how to record lunches (components) and breakfasts (items).

Cafeteria Manager Interview Codebook

Name	Description
H3. Regular Staff Not Available	Cafeteria Manager describes training for substitute cashiers when regular staff are not available (e.g. out sick or on vacation).
H4. Recommended Changes	Recommendations to improve training.
H4a. Areas that Need More Practice	Cafeteria Manager describes areas of training that are insufficient and require more practice or content.
H4b. No Recommendations to Improve the Training Process	Cafeteria Manager does not have any recommendations for the training process (e.g. says everything is fine; cannot think of anything).
I. Staff Retention	Cafeteria Manager discusses retention of cashiers or other cafeteria staff.
I1. Impact of Turnover	Cafeteria Manager discusses the impact of turnover on the meal claiming process.
J. Menu Planning	Cafeteria Manager describes a role in menu planning and/or how menus are planned to meet USDA meal component guidelines. Include discussions on menu items designed to incorporate multiple components.
J1. Cafeteria Manager Provides Feedback	Cafeteria Manager provides feedback to SFAs to inform menu planning (e.g. administers a survey once a year on students' meal preferences).
J2. No Role in Menu Planning	Cafeteria Manager does not have a role in menu planning. Include third party vendors or menus designed at the SFA level.
J2a. Cafeteria Manager Wants Role	Cafeteria Manager expresses that they would like a role in menu planning (e.g., they know what the students like; they believe that it would make the process easier for them).
K. Final Thoughts	Any other recommendations or thoughts about the meal claiming process during the Summary Questions portion of the interview.
K1. Universal Free Meals	Cafeteria Manager would like to see universal free meals offered to students.

APEC III – HOUSEHOLD INTERVIEW CODEBOOK

Nodes

Name	Description
A. Application is Confusing	Parent Node for reports that the application is confusing or unclear when asked about experience filling out the application.
A1. Children in Different Schools or Districts	Household respondents report confusion when children are in different schools that have different applications.
A2. General Confusion	Respondent reports that the application is confusing.
A3. Specific Section	Respondent remarks that a particular section of the application is confusing or contradictory (actual or hypothetical).
A3a. Child Income	Respondent highlighted the Child Income section as particularly confusing.
A3b. Household Members	Respondent described listing Household Members as particularly confusing.
A3c. Income	Respondent noted possible challenges with listing income on applications.
A3d. Social Security and Foster Care	Respondent described questions about listing Social Security and Foster Care on applications.
A4. Technical Difficulties	When a household member says s/he received an error message filling out the application online or had other issues filling out the online application.
A5. Unclear Directions	The respondent finds the directions to be long, unclear, etc., or states that s/he did not understand what the application was asking.
B. Application is Straightforward	Parent Node for reports about the clarity, ease, and simplicity of the application when asked about general experience filling out the application.

Household Interview Codebook

Name	Description
B1. Common Sense	Instances where a respondent mentions not needing to read directions; describes overall application as "common sense" or "self-explanatory."
B2. Easy	Respondent describes the application as easy, simple, or straightforward.
B3. History of Filling out Applications	Instances where respondents mention developing an understanding of what to include on applications through having to submit the application in the past.
B4. Length of Application	Respondents report that the application was short and easy.
B5. Read Directions	Code when respondents mention "reading directions" as facilitating application experience; straightforward directions.
C. Assistance	Parent Node for when respondents discuss assistance. Do not code here.
C1. Assistance, Sources of	Parent Node for discussions about the respondent's hypothetical or actual sources of assistance with the application process (organized by source).
C1a. Internet	Code respondents' mention of searching for assistance via the internet, a specific website, or a contact person listed on an online application.
C1b. Other Community Resources	Mentions of other sources of help in the community such as a library.
C1c. Other Parents	Code discussions of respondents seeking help (actual or hypothetical) from other parents.
C1d. School	Code respondents' mention of receipt (actual or hypothetical) of assistance from the school (e.g. administrative assistants, cafeteria managers, principals, or teachers).
C1e. SFA or District	Code here if the respondent mentions seeking assistance directly from the School Food Authority or another source at the district level (actual or hypothetical).
C2. Awareness of	Whether the respondent has knowledge or awareness of (or no knowledge of) application assistance.

Household Interview Codebook

Name	Description
C3. Resistance to	Respondents discuss submitting applications to the best of their ability; avoidance of assistance (even when they have questions on the application).
D. Child Income	Parent Node for logic behind whether or not to record a child's income.
D1. Contribution to the Household	Code when Household respondents make a distinction between a child's contribution to the household or "still income" versus an amount too insignificant to be considered a contribution to the household.
D2. Documentation of Pay	Include discussions about including child income when it is reported to SSA/IRS vs. "under the table" income, cash payments, etc.
D3. Explicit Instructions	If the respondent mentions including child income only when the application explicitly asks for that information.
D4. Job Stability	Respondent makes a distinction between reporting a child's steady/permanent work versus odd jobs.
D5. Perceived Familial Roles	The respondent argues that a child's income should not be included as household income because "it is not a child's responsibility," the money should be for the child's personal spending, or because adults/parents are viewed as providers.
D6. Reporting Child Income	General discussions about how or what to list as child income.
D7. Social Security Disability and Foster Care	Code answers to probes about recording children's Social Security Disability or income received through the Foster Care system.
E. Employment Income	Parent Node for discussions of employment income/income from work. Do not code here.
E1. Adults without Income	Code answers to the question about whether or not to list adults without income in the income section and whether the respondent leaves the amount blank or writes a zero.
E2. Defining Income Frequency	Code how the respondent defines income frequency or whether the respondent reports understanding income frequency.
E3. Gross vs. Net	Code how the respondent interpreted gross vs. net or whether the respondent was clear on how to report gross vs. net.

Household Interview Codebook

Name	Description
E4. Listing Employment Income	General discussions of listing income/earnings from work.
F. Good Things about the Application Process	Positive experiences with the application process.
G. Identifying Children in School	Respondent describes how s/he would list "students" in the household.
H. Identifying Household Members	Parent Node for reports of how the respondent identified household members.
H1. Age of Household Member	When the respondent mentions age of resident as a factor in the decision to include the household member on the application (e.g. daughter in college; baby).
H2. Financial Contribution to the Household	Discussions about whether to include a person that contributes or does not contribute to the household financially. Also include discussions about whether the household member is dependent on the applicant.
H3. Listing Household Members	General discussions about how and who to list as household members.
H4. Lives at House	When the respondent mentions full-time vs. less-than-full-time residence as a reason for reporting a household member or statements that the person "lives in the house."
H5. Relationship to the Participant	Code when the respondent distinguishes between familial roles vs. roommates, friends, etc.
I. Language	Parent Node for discussions about whether the language of the application presented a problem, whether the respondent preferred a different language, and whether an application was available in that language.
I1. Application Language	When a respondent mentions what language s/he used to fill out the application.
I2. Non-English Application	Code when respondents report that they filled out (or express that they wanted to fill out) the application in a language other than English.
I3. Translation Problems	Reported problems or anticipated problems with translated applications.
J. Length of Time to Complete the Application	Parent Node for discussions of how much time the respondent had to complete the application.

Household Interview Codebook

Name	Description
J1. No Deadline	Code mentions of year-round submission.
J2. Not Enough Time to Complete	Code reports of feeling rushed, that there was not enough time to submit the application, or that the respondent felt forced to complete the application in one sitting.
J3. Reasonable Deadline	Respondent reports having a "sufficient amount of time" to complete the application.
K. Mode of Submission	Parent Node for how a respondent submits an application. Do not code here.
K1. Choice of Submission	Whether or not the respondent had the choice (or knew about a choice) between filling out the application on paper or online.
K2. Online	Respondent submitted the application online.
K3. Paper	Respondent submitted a paper application.
L. Perceived Benefits of Handwritten Submission	Parent Node for discussions of why a respondent preferred to submit a handwritten application.
L1. Convenience	Respondent explains that handwritten applications were available at registration/enrollment day; s/he filled out an application "on the spot."
L2. Ease of Use	Code respondents' discussions of handwritten ease of use or perceptions that the paper application required less information.
M. Perceived Benefits of Online Submission	Parent Node for perceived benefits of online application submission.
M1. Accessibility	Respondent cites accessibility (for example, the ability to complete the application on different devices).
M2. Confidentiality	Instances where the respondent mentions online submission providing confidentiality/security (e.g. feeling more comfortable going online rather than filling out a paper application that would then be turned in to the teacher.)
M3. Ease of Use	Code when the respondent mentions ease of use of online applications; cites "point-and-click."

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Name	Description
M4. Faster Processing	Code when the respondent believes online submission will result in a faster decision regarding eligibility determination.
M5. Receipt Control	The respondent mentions that online submission prevents against misplacement of the application by the child, teacher, or themselves.
N. Perceived Challenges with Online Submission	Parent Node for discussions of problems/challenges of online submission.
N1. Digital Literacy	The respondent believes that s/he lacks the skills necessary to complete an application online.
N2. No Access to Computer	The respondent notes no access or limited access to a computer.
O. Public Assistance	Parent Node for mentions of public assistance. Do not code here.
O1. Listing Public Assistance	General discussions about whether the respondent would include income from public assistance on the application.
O2. Money vs. In-kind Assistance	Code if the respondent makes a distinction between assistance in monetary form vs. items/in-kind assistance (e.g. food or services).
P. Recommendations for Improving the Application Process	Parent Node for respondents' recommendations for improving the application process.
P1. Choice of Submission Mode	The respondent wishes s/he had a choice between online vs. paper submission.
P2. Clearer Instructions or Physical Layout of the Application	When the respondent says the instructions could have been clearer or the application layout could be improved.
P3. Consider Cost of Living and Other Expenses	When the respondent urges consideration of more than just income in eligibility determinations (e.g. rent, mortgage, etc.).
P4. No Changes Option	Suggestions about automatic resubmission of previous applications.

Household Interview Codebook

Name	Description
P5. Show Eligibility by Income Limits	Code when the respondent mentions wanting the application to include a breakdown of eligibility status by income limits.
Q. Special Types of Income (Child Support, Alimony, Workers Comp, Unemployment)	Parent Node for discussions (general descriptions of and logic behind) whether and how to include child support, alimony, workers comp, or unemployment on applications.
Q1. Associated with Work	Code if the respondent mentions listing workers comp and unemployment because they are "associated" with employment/work.
Q2. Documented or Reported to Government Agencies	Include discussions about listing special types of income when it is reported to SSA/IRS vs. "under the table" income, cash payments, etc.
Q3. Explicit Instructions	If the respondent mentions including special types of income only if the application explicitly asks for that information.
Q4. Listing Special Types of Income	General discussions about what and how to include special types of income.
Q5. Money Coming In	If the respondent frames special types as "still income," "still money coming in," etc.
Q6. Not Applicable to Respondent	The respondent is unsure of what s/he would report or avoids the answer, citing the reason as not having that situation.
Q7. Temporary vs. Stable Payment	If the respondent makes the decision to list special types of income only if they are received on a stable, permanent basis.