**2024–2025 National School Foods Study**

**OMB Supporting Statement  
Part B**

February 28, 2024

Project Officer: Ashley Chaifetz

USDA/FNS Office of Policy Support

1320 Braddock Place

Alexandria, VA 22314

Phone: (470) 528-7717

Email: Ashley.Chaifetz@usda.gov

PART B. STATISTICAL METHODS

B.1. Respondent Universe and Sampling Methods. 8

B.2. Procedures for the Collection of Information 13

B.3. Methods to Maximize Response Rates and to Deal with Nonresponse. 23

B.4. Tests of Procedures or Methods to Be Undertaken. 27

B.5. Individuals Consulted on Statistical Aspects and Individuals Collecting and/or Analyzing Data. 27

TABLES

Table B.1.1. Respondent universe for SNMCS-II component and expected and SNMCS-I response rates 11

Table B.1.2. Respondent universe for SFPS-IV component and expected and SFPS-III response rates 12

Table B.1.3. Respondent universe for FFVP-II component and expected and FFVP response rates 12

Table B.1.4. Respondent universe and sampling plan for each outlying area 13

Table B.2.1. Average SFA and school-level design effects and completed sample sizes 15

Table B.2.2. Expected precision levels for SFA-level estimates for SFPS-IV 15

Table B.2.3. Expected precision levels for SFA-level estimates for SNMCS-II 18

Table B.2.4. Expected precision levels for school-level estimates 19

Table B.2.5. Expected precision levels for student- and tray-level estimates for Groups 2a and 3 21

Table B.5.1. Individuals consulted on data collection or analysis 27

FIGURE

Figure B.1. Summary of the sample design 10

**APPENDICES**

A. National School Lunch Act, Sections 12(f), 19(h), and 28

B. Summary of THE Data Collection PlanS

C. SFA and School Recruitment Materials

C01. IRB Approval Letter

C02. Notification to Regional Offices

C03. Study Overview (Groups 1a, 1b, 2a, 2b, and 3)

C04. SFPS Brochure (Groups 1a and 1b)

C05. Sample Notification Email from Regional Offices to State Child Nutrition Directors (Groups 1a, 1b, 1c, 2a, 2b, 3, and Full and Limited Outlying Areas)

C06. State CN Director Study Introduction and Data Request Email (Groups 1a, 1b, 2a, 2b, and 3)

C07. SFA Director Sample Notification Email from State CN Director (Groups 1a, 1b, 2a, 2b, and 3)

C08. FSMC/Distributor Recruitment Letter/Email (Groups 1a, 1b, 2a, 2b, 3, and Full Outlying Areas)

C09. Endorsement Letters Template (Groups 1a, 1b, 2a, 2b, 3, and Full and Limited Outlying Areas)

C10. FSMC/Distributor Recruitment Call Script (Groups 1a, 1b, 2a, 2b, 3, and Full Outlying Areas)

C11. Study Webinar Invitation and Webinar (Groups 1a, 1b, 2a, 2b, 3, and Full and Limited Outlying Areas)

C12. SFA Director Recruitment Advance Letter/Email (Groups 1a, 1b, 2a, 2b, and 3)

C13. Recruiting Call Script (Groups 1a, 1b, 2a, 2b, 3, and Full and Limited Outlying Areas)

C14. SFPS Food Purchase Planning Interview (Groups 1a and 1b)

C15. SFPS Purchase Data Webinar Invitation and Webinar (Groups 1a and 1b)

C16. SFA Director Planning Interview (Groups 2a, 2b, 3, and Full and Limited Outlying Areas)

C17. SFA Post-Planning Email (Groups 2a, 2b, and 3)

C18. Data Collection Activities and Respondents (Groups 3 and Full and Limited Outlying Areas)

C19. Principal Introduction Email to Schools (Groups 2a, 2b, and 3)

C20. SNM Introduction Email (Groups 2a, 2b, and 3)

C21. Next Steps for Principals Email (Groups 2a and 2b)

C22. School Planning Interview (Groups 2a, 2b, 3, and Full Outlying Areas)

C23. Pre-Visit Reminder Email (Groups 2a, 2b, and 3)

D. Parent and Student Recruitment Materials

D01. School Roster Data Request (Groups 2a and 2b)

D02. School Endorsement Letter–English (Groups 2a and 2b)

D03. School Endorsement Letter–Spanish (Groups 2a and 2b)

D04. Parent (Household) Advance Letter–English (Groups 2a and 2b)

D05. Parent (Household) Advance Letter–Spanish (Groups 2a and 2b)

D06. Household Brochure–English (Groups 2a and 2b)

D07. Household Brochure–Spanish (Groups 2a and 2b)

D08. Parent Passive Consent Form–English (Groups 2a and 2b)

D09. Parent Passive Consent Form–Spanish (Groups 2a and 2b)

D10. Parent Active Consent Form–English (Groups 2a and 2b)

D11. Parent Active Consent Form–Spanish (Groups 2a and 2b)

D12. Student Assent Form–English (Groups 2a and 2b)

D13. Student Assent Form–Spanish (Groups 2a and 2b)

E. outlying areas recruitment Materials

E01. Outlying Areas Overview (Full and Limited Outlying Areas)

E02. State CN Director Study Introduction and Data Request Email (Full and Limited Outlying Areas)

E03. SFA Director Sample Notification Email from State CN Director (Full and Limited Outlying Areas)

E04. SFA Director Recruitment Advance Letter/Email (Full and Limited Outlying Areas)

E05. SFA Post-Planning Email (Full and Limited Outlying Areas)

E06. Principal Introduction Letter to Schools (Full Outlying Areas)

E07. SNM Introduction Letter (Full Outlying Areas)

E08. Pre-Target Week Reminder Email (Full and Limited Outlying Areas)

E09. Recruiting Call Script–Spanish (Limited Outlying Areas)

E10. Study Webinar Invitation and Webinar–Spanish (Limited Outlying Areas)

E11. SFA Director Planning Interview–Spanish (Limited Outlying Areas)

E12. Data Collection Activities and Respondents–Spanish (Limited Outlying Areas)

E13. State CN Director Study Introduction and Data Request Email–Spanish (Limited Outlying Areas)

E14. Outlying Areas Overview–Spanish (Limited Outlying Areas)

E15. SFA Director Sample Notification Email from State CN Director–Spanish (Limited Outlying Areas)

E16. SFA Director Recruitment Advance Letter/Email–Spanish (Limited Outlying Areas)

E17. Pre-Target Week Reminder Email–Spanish (Limited Outlying Areas)

E18. SFA Post-Planning Email–Spanish (Limited Outlying Areas)

F. survey instruments and contact materials

F01.01 SFPS Quarterly Program Data Form and Food Purchase Data Request Email (Groups 1a and 1b)

F01.02 SFPS Food Purchase Data Checklist (Groups 1a and 1b)

F01.03 SFPS Quarterly Program Data Form (Groups 1a and 1b)

F01.04 SFPS SFA Year-End Follow-Up Survey Specifications (Groups 1a and 1b)

F01.05 Request to SDAs to Submit USDA Foods Data (Groups 1a, 1b, and 3)

F01.06 SFPS Quarterly Reminder Email (Groups 1a and 1b)

F01.07 SFPS Telephone Script for Quarterly Data Clarifications and Confirmation (Groups 1a and 1b)

F01.08 SFPS Reminder Call Scripts to Collect Quarterly and Program Data (Groups 1a and 1b)

F01.09 SFPS SFA Year-End Follow-Up Survey Invitation (Groups 1a and 1b)

F01.10 SFPS Overview of USDA Foods Data (Groups 1a and 1b)

F01.11 SFPS Reminder Email for USDA Foods Data (Groups 1a and 1b)

F01.12 SFPS Reminder Script to Collect USDA Foods Data (Groups 1a and 1b)

F02.01 Menu Survey (Groups 2a, 3, and Full Outlying Areas)

F02.02 Menu Survey (Group Limited Outlying Areas)

F02.03 Fruit and Vegetable Questions and Meal Pattern Crediting Report (Groups 2a and 3)

F02.04 FFVP Menu Survey (Group 2b)

F03.01 SFA Director Survey (Groups 1a, 1b, 1c, 2a, and 3)

F03.02 SFA Director Survey Advance Letter/Email (Group 1c)

F03.03 SFA Director and Principal Email Invitation (Groups 1a, 1b, 2a, and 3)

F03.04 SFA Director Survey Email Invitation (Group 1c)

F03.05 SFA Director and Principal Surveys Follow-Up Email (Groups 1a, 1b, 1c, 2a, and 3)

F03.06 SFA Director Survey Reminder Call Script (Groups 1a, 1b, 1c, 2a, and 3)

F03.07 Principal Survey (Groups 2a and 3)

F03.08 Principal Survey Reminder Call Script (Groups 2a and 3)

F04.01 SNM Survey (Groups 2a and 3)

F04.02 FFVP SNM Survey (Group 2b)

F05.01 State Agency Indirect Cost Survey (Groups 3 and Full Outlying Areas)

F05.02 SFA On-Site Cost Interview with Reference Guide (Groups 3 and Full and Limited Outlying Areas)

F05.03 SFA On-Site Cost Interview with Reference Guide–Spanish (Limited Outlying Areas)

F05.04 Food Cost Worksheet (Groups 3 and Full and Limited Outlying Areas)

F05.05 Food Cost Worksheet–Spanish (Limited Outlying Areas)

F05.06 SFA Follow-Up Web Survey (Groups 3 and Full and Limited Outlying Areas)

F05.07 SFA Follow-Up Web Survey –Spanish (Limited Outlying Areas)

F05.08 SFA Follow-Up Cost Interview with Reference Guide (Groups 3 and Full and Limited Outlying Areas)

F05.09 SFA Follow-Up Cost Interview with Reference Guide–Spanish (Limited Outlying Areas)

F05.10 School Nutrition Manager Cost Interview with Reference Guide (Groups 3 and Full Outlying Areas)

F05.11 State Agency Indirect Cost Survey Invitation Letter/Email (Groups 3 and Full Outlying Areas)

F05.12 Principal Cost Interview with Reference Guide (Groups 3 and Full Outlying Areas)

F05.13 On-Site SS/MTO Bar Form (Group 3)

F05.14 SFA Follow-Up Web Survey and Interview Planning Email (Groups 3 and Full and Limited Outlying Areas)

F05.15 SFA Follow-Up Web Survey and Interview Planning Email–Spanish (Limited Outlying Areas)

F06. Reimbursable Meal Sale Data Request Form (Groups 2a and 2b)

F07. Observation Guide (Groups 2a, 2b, and 3)

F08.01 Student Interview–English/Spanish (Groups 2a and 2b)

F08.02 AMPM (24-Hour Dietary Recall) Day 1 (Group 2a) and AMPM (In-School Intake Dietary Recall) (Groups 2b)

F08.03 School Sources of Food Form (Groups 2a and 2b)

F08.04 Parent Interview –English/Spanish (Group 2a)

F08.05 Food Diary (Group 2a)

F08.06 Food Diary–Spanish (Group 2a)

F08.07 Student Interview Reminder Flyer (Groups 2a and 2b)

F08.08 Student Interview Reminder Flyer–Spanish (Groups 2a and 2b)

F08.09 Dietary Recall Reminders (Group 2a)

F08.10 Dietary Recall Reminders–Spanish (Group 2a)

F08.11 Parent Interview Invitation (Group 2a)

F08.12 Parent Interview Invitation–Spanish (Group 2a)

F09. Plate Waste Observation Booklet (Group 3)

G. study data collection plans

H. Burden Table

I. Public Comments and Responses

I01. Public Comments

I02. Response to Public Comments

j. Incentives, Response Rates, and nonresponse bias

k. Confidentiality Agreements

K01. Confidentiality Agreement–Mathematica

K02. Confidentiality Agreement–Subcontractors

L. SAMPLING PLANS

M. PRE-TEST Memo

N. NASS Comments and responses

PART B. STATISTICAL METHODS

The 2024–2025 National School Foods Study (hereafter referred to as “the study”) includes three components: the second School Nutrition and Meal Cost Study (SNMCS-II), the fourth School Food Purchase Study (SFPS-IV), and an updated evaluation of the Fresh Fruit and Vegetable Program (FFVP). A key goal of the study is minimizing data collection costs and respondent burden while facilitating comparisons within and across the three study components (SNMCS-II, SFPS-IV, and FFVP). The sampling plan will provide nationally representative estimates of school food authorities (SFAs), schools, students (and their parents), and meals in SY 2024–2025. In addition, the sample is designed to lead to estimates that are as comparable as possible with the estimates from SNMCS-I (OMB Control Number 0584-0596, expired 07/31/2017), SFPS-III (OMB Control Number 0584-0471, expired 3/31/2012), and, to a certain extent, FFVP-I (OMB Control Number 0584-0556, expired 06/15/2010) with the required levels of statistical precision. It is also designed to incorporate the Outlying Areas component (Alaska, Guam, Hawaii, Puerto Rico, and USVI) as part of the SNMCS-II study component. Two expanding policy-relevant subgroups are also incorporated into the design: SFAs and schools that are in States with funded Healthy School Meals for All (HSMFA, formerly referred to as Universal School Meals) programs and those that participate in the Community Eligibility Provision (CEP) option.

B.1. Describe (including a numerical estimate) the potential respondent universe and any sampling or other respondent selection method to be used. Data on the number of entities (e.g., establishments, State and local government units, households, or persons) in the universe covered by the collection and in the corresponding sample are to be provided in tabular form for the universe as a whole and for each of the strata in the proposed sample. Indicate expected response rates for the collection as a whole. If the collection had been conducted previously, include the actual response rate achieved during the last collection.

The universe for SNMCS-II includes public school and charter-only SFAs (SFAs that serve only charter schools) in the contiguous 48 States and the District of Columbia plus five States and Territories in the Outlying Areas. SFPS-IV includes only public school SFAs in the contiguous 48 States and the District of Columbia. The FFVP evaluation starts with a sample of SFAs (in the 48 contiguous States plus the District of Columbia) that have at least one elementary school participating in that program.

Selecting the samples requires high-quality sampling frames at each stage. The SFA sampling frame for the SNMCS and SFPS study components will be constructed by combining the most recent data from the SFA Verification Collection Report (FNS-742), the U.S. Department of Education’s (ED) Common Core of Data (CCD) “Local Education Agency (LEA or school district) Universe Survey” collected annually by the ED’s National Center for Education Statistics, and a Census file from the Small Area Income and Poverty Estimates Program with school district–level estimates of school-age children in poverty. As there is no unique identifier to easily link these files, we will use linkage methods to do so. To select the FFVP SFAs, we will obtain from FNS a list of elementary schools participating in the FFVP in 2023–2024 and deduplicate it to generate an SFA- level file for sampling.

The study sample is designed to yield data from 810 SFAs, 1,061 schools, and 3,302 students, and 1,800 parents. In addition, the study will collect plate waste data to yield a sample of 4,140 reimbursable lunch trays and 2,120 reimbursable breakfast trays. For the SNMCS (Mainland) and SFPS components, the universe of SFAs will be randomly divided into three mutually exclusive sampling groups each serving different study objectives. SFAs sampled in Group 1 will participate only at the SFA level and will provide data for both the SNMCS-II and the SFPS-IV. SFA-, school-, and student-level data will be collected from sampled SFAs assigned to Group 2a and will provide data for the SNMCS-II. Sampled SFAs assigned to Group 3 will provide school data, and a random subset will provide plate waste data for both lunches and breakfast–all for the SNMCS-II. Group 2b SFAs will be selected from a separate (overlapping) sampling frame that will be derived from a list of all elementary schools participating in the FFVP. The very large SFAs (referred to as the “certainty” SFAs) are included in Groups 1a, 2a, and 3 (and in 2b if they include at least one FFVP elementary school). The Outlying Areas sample will provide data to support the SNMCS-II only. For Puerto Rico and U.S. Virgin Islands (USVI), we will do a more limited data collection at the SFA level only, including all three SFAs in these two Territories.

Figure B.1 provides an overview of the sample design. The full sample design can be found in Appendix L.

Figure B.1. Summary of the sample design



Notes: Sample sizes show target number of completes.

Each of the certainty SFAs will be included in Groups 1a, 2a, 2b (if they have at least one FFVP school), and 3. They will participate in all data collection activities for these groups.

FFVP = Fresh Fruit and Vegetable Program; SFA = school food authority; SFPS = School Food Purchase Study; SNMCS= School Nutrition and Meal Cost Study.

**B.1.1.**  **Mainland study: Contiguous 48 States and DC**

The sampling frame for selecting schools within sampled SFAs will be the most recent available CCD school-level file. The CCD file contains more detailed information than the FNS-742 and has information that allows the elimination of some types of ineligible schools (such as charter schools and those serving institutional populations). The CCD file also contains enrollment figures, grades served, and demographic information that may be useful for stratification or weighting. For the FFVP school sample, we will use the FNS-provided list of schools offering the FFVP to sample one participating school per sampled SFA. The sampling frames for students will be lists of enrolled students obtained from sampled schools.

From the universe of SFAs in the contiguous 48 States and DC, we will select nationally representative samples that provide unbiased and precise estimates at each level of analysis (SFAs, schools, students [and their parents], and meals) for the population and unbiased and precise estimates for key subgroups. Key subgroups will be defined by SFA and school size (enrollment), HSMFA and CEP status of school, poverty level, urbanicity, FNS region, school type (elementary, middle, high), and school meal participants and nonparticipants.

The estimated size of the respondent universe, along with target completed sample sizes and previous response rates, are presented in Tables B.1.1, B.1.2, and B.1.3.

Table B.1.1. Respondent universe for SNMCS-II component and expected and SNMCS-I response rates

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sample group | Estimated size of respondent universe | Initial sample | Target Complete | Expected response rate (%)a | SNMCS-I response rate (%)b,c |
| States | 49 | 49 | 47 | 96 | n.a. |
| Public SFAs | 14,675 | 887d | 522e | 60d | 82 |
| Schools (K–12) | 92,714 | 1,117d | 1,061 | 95d | 94 |
| Enrolled students (within schools participating in the National School Lunch Program) | 48,719,713 | 6,604 | 3,302 | 50 | 43 |
| Parents and guardians of enrolled students | 83,026,207f | 3,302 | 1,800 | 55 | 86 |
| Total | 131,853,358 | 11,959 | 6,732 | 16g | 29g |

Source: Common Core of Data file (CCD) 2017–2018 for the school and student counts and SFA Verification Collection Report (FNS-742), school year 2018–2019 for the SFA counts. These counts will be updated at the time of sampling using the latest versions of both the FNS-742 file and the CCD file. Zeidman et al. (2019)[[1]](#footnote-3) for the SNMCS-I weighted response rates.

Notes:Expected response rates reflect the percentage of eligible SFAs, schools, students, or parents/guardians.

n.a. = not applicable.

a Calculated by dividing the target number of completes by the initial sample.

b Expected response rates reflect the percentage of eligible SFAs, schools, students, or parents/guardians.

cAll sample groups are asked to participate in multiple data collection activities for SNMCS-II. The reported response rate from SNMCS-I reflects the primary data collection activity for the sample group. For SFAs, this is the SFA Director Survey; for schools, the Menu Survey; for students, the Student Interview; for parents, the Parent Interview.

d Does not include the Outlying Areas, for comparability with SNMCS-I.

e The certainty SFAs are included in Groups 1a, 2a, and 3 but are only counted once to get a unique number of SFAs equal to 522.

f This estimate assumes approximately 70 percent of children are in two-parent households.[[2]](#footnote-4)

g The overall response rates were estimated by multiplying the expected and prior response rates for the SFAs, schools, students, and parents.

Table B.1.2. Respondent universe for SFPS-IV component and expected and SFPS-III response rates

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sample group | Estimated size of respondent universe | Initial sample | Target Complete | Expected response rate (%) | SFPS-III response rate, (%)a |
| States | 49 | 49 | 49 | 100 | n.a. |
| Public SFAs | 12,635 | 683 | 364 | 53 | 67 |

Source: SFA Verification Collection Report (FNS-742), school year 2018–2019 for the SFA counts. SFPS-III response rates reported in the School Food Purchase Study-III Final Report, March 2012.[[3]](#footnote-5)

Notes:

n.a. = not applicable.

a SFAs are asked to participate in multiple data collection activities for SFPS-IV. The reported response rate from SFPS-III reflects the completion of both the procurement practices and food purchase surveys. For this study, these components together are analogous to completion of the SFA Director Survey (SFPS-IV component) and Quarterly Program Data Form and Food Purchase Request.

Table B.1.3. Respondent universe for FFVP evaluation component and expected and FFVP-I response rates

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sample group | Estimated size of respondent universe | Initial sample | Target Complete | Expected response rate (%) | FFVP-I response rate(%) |
| Public SFAs | See note | 159 | 100 | 63 | Not reporteda |
| Schools (K–12) | 7,499 | 111 | 100 | 90 | 86b |
| Enrolled students (within schools participating in the FFVP) | 2,417,338 | 1,600 | 800 | 50 | 80c |
| Total | 2,424,837 | 1,870 | 1,000 | 45d | 69d |

Source: FFVP respondent universe is estimated based on data reported in the School Meals Operations Study, State Agency Survey, SY 2022–2023. FFVP-I response rates are from the Evaluation of the Fresh Fruit and Vegetable Program (FFVP) Final Evaluation Report, March 2013.[[4]](#footnote-6)

Notes: Note that the size of the SFA respondent universe participating in FFVP is currently unknown at the national level but will be generated as part of the frame development process for the FFVP evaluation component, using data from States that are administering the program.

Expected response rates reflect the percentage of eligible SFAs, schools, or students. Students are eligible if the student was present at school on the target day and case was pursued (that is, not part of unattempted backup student sample).

a There is no response rate from the FFVP Final Evaluation Report that is comparable for the current study, which includes no SFA-level data collection. The expected response rate reflects eligible SFAs recruited for the study. The prior FFVP evaluation reported an 88 percent response rate for the district-level data of the SFA Director Web Survey and an 86 percent response rate for the school-level data of the SFA Director Web Survey.

b The reported response rate for schools reflects the percentage of schools that agreed to participate in the study, excluding the schools that were found to be ineligible for the study.

c The reported response rate for the enrolled students reflects the number of students who completed both the student survey and 24-hour dietary recall.

d The overall response rates were estimated by multiplying the expected and prior response rates for schools and students.

**B.1.2.**  **Outlying Areas** **Component: Alaska, Guam, Hawái, Puerto Rico, and USVI**

The Outlying Areas component respondent universe includes public SFAs and schools in Alaska, Guam, Hawaii, Puerto Rico, and USVI. The universe will be based on the combined FNS-742 and CCD. The estimated size of the respondent universe, along with the target completed sample sizes, is in Table B.1.4.

Table B.1.4. Respondent universe and sampling plan for each Outlying Area

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Full Outlying Areas approach (Alaska, Guam, Hawaii) | | | | Limited Outlying Areas approach (Puerto Rico, U.S. Virgin Islands) | | | | |
| Sample group | Estimated size of respondent universe | Initial sample | Expected response rate (%) | Target Complete | Estimated size of respondent universe | Initial sample | Expected response rate (%) | Target Complete |
| Public SFAs | 45 | 34 | 91 | 31 | 3 | 3 | 100 | 3 |
| Schools (K–12) | 727 | 242 | 57 | 138 | -- | -- | -- | -- |

Source: Simulations from the 2018–2019 FNS-742 file and 2017–2018 CCD file, with some data coming from the 2016–2017 CCD file except for sample sizes for Puerto Rico and USVI. The numbers in the table will be updated during sampling, using the most recent data available.

B.2. Describe the procedures for the collection of information including:

* **Statistical methodology for stratification and sample selection,**
* **Estimation procedure,**
* **Degree of accuracy needed for the purpose described in the justification,**
* **Unusual problems requiring specialized sampling procedures, and**

**Any use of periodic (less frequent than annual) data collection cycles to reduce burden.**

### B.2.1. Statistical methodology for stratification and sample selection

The sampling plan is shown in detail in Appendix L. The sampling plan will provide nationally representative estimates of SFAs, schools, students (and their parents), and meals in SY 2024-2025.In addition, the sample is designed to lead to estimates that are as comparable as possible with the estimates from SNMCS-I, SFPS-III, and, to a certain extent, FFVP-I, with the required levels of statistical precision. It is also designed to incorporate the Outlying Areas (Alaska, Guam, Hawaii, Puerto Rico, and USVI) as part of the SNMCS-II study component. Two expanding policy-relevant subgroups are also incorporated into the design: SFAs and schools that are in States with Healthy School Meals for All (formerly referred to as Universal School Meals) and those that participate in the CEP option.

### B.2.2. Estimation procedure

The weights will account for the probabilities of selection and observed differential response rates across various subgroups. We will also post-stratify weights so that they total benchmarks obtained from the most recent CCD and FNS-742 data by school-level characteristics. We will identify the specific variables used for post-stratification in consultation with FNS. However, potential post-stratification benchmark counts for both levels (SFA and school) could include attributes associated with the geographic location and characteristics of the SFA and school (such as FNS region and urbanicity), categorical representations of SFA and school size, and number of CEP schools, number of each school type (elementary, middle, and high), and categories for the percentage of students approved for free or reduced-price meals. Detailed descriptions of the weighting are also provided in Appendix L.

For all samples in this study, standard errors of estimates must account for the complex sample design. When making estimates, we will use statistical software that accounts for the sample design, using appropriate techniques to estimate the standard errors.

### B.2.3. Degree of accuracy needed for the purpose described in justification

This section presents the design effects and expected precision levels for SFA-, school-, and student-level estimates based on the target completed sample sizes for SNMCS-II and SFPS-IV. Table B.2.1 lists the expected design effects for the SFAs for both study components and for the FFVP evaluation component.

Table B.2.1. Average SFA and school-level design effects and completed sample sizes

| Study | Sampling unit | Average design effect (deff) | Sample size | Source |
| --- | --- | --- | --- | --- |
| SFPS-IV | SFA | 1.26 | 364 | Groups 1a and 1b |
| SNMCS-II | SFA | 1.38 | 522a | Groups 1a, 1c, 2a, and 3 |
|  | School | 2.23 | 796 | Group 3 |
|  | School | 2.83 | 1,061 | Groups 2a and 3 |
|  | Student | 5.20 | 3,302 | Group 2a |
|  | Parent | 5.20 | 1,800 | Group 2a |
|  | Lunch/breakfast | 5.00 | 4,140/2,120 | Group 3 |
| FFVP evaluation | School | 1.20 | 100 | Group 2b |
|  | Student | 2.50 | 800 | Group 2b |

a The certainty SFAs are included in Groups 1a, 2a, and 3 but are counted only once to get a unique number of SFAs equal to 522.

The sample size of 364 SFAs for SFPS-IV was designed to meet the precision of national estimates for population proportions of 50 percent and a difference of ±5 percentage points with a 90 percent confidence level for the overall estimates. This sample reflects the precision losses from using a complex design (e.g., unequal weighting and stratification of SFAs in Groups 1a and 1b). This sample size meets the precision target for a subpopulation of at least 25 percent of the total population with a proportion of 30 percent and a difference of ±10 percentage points with a 90 percent confidence level, shown in Table B.2.2.

Table B.2.2. Expected precision levels for SFA-level estimates for SFPS-IV

| Subgroups | Target completed   sample sizes | 90 percent CI half interval   (percentage points) |
| --- | --- | --- |
| **Number of schools** | | |
| 1–2a | 125 | 7.6 |
| 3–4a | 110 | 8.1 |
| 5 or morea | 129 | 7.4 |
| **Number of students** | | |
| 1–350 | 89 | 9.0 |
| 351–1,200a | 105 | 8.3 |
| More than 1,200a | 170 | 6.5 |
| **Urbanicity** | | |
| Urbana | 140 | 7.2 |
| Rurala | 224 | 5.6 |
| **Percentage of students in poverty** | | |
| 0 –17 percenta | 117 | 7.8 |
| 17–35 percenta | 207 | 5.9 |
| More than 35 percent | 39 | 13.5 |
| **FNS Region** | | |
| Mid-Atlantic | 34 | 14.5 |
| Midwesta | 76 | 9.7 |
| Mountain Plains | 51 | 11.8 |
| Northeast | 40 | 13.3 |
| Southeast | 47 | 12.3 |
| Southwest | 64 | 10.6 |
| West | 51 | 11.8 |
| **Percentage of students approved for free/reduced-price meals** | | |
| 0–45 percent | 221 | 5.7 |
| 46–63 percent | 84 | 9.2 |
| 64 percent or more | 59 | 11.1 |
| **HSMFA/CEP statusb** | | |
| SFAs in HSMFA States | 76 | 9.7 |
| Non-HSMFA SFAs with all CEP schools | 110 | 8.1 |
| All other SFAsa | 178 | 6.3 |
| **Total** | **364** | **4.4** |

Source: Simulations from the first iteration of SNMCS-II, using the 2018–2019 FNS-742 file and 2017–2018 CCD file, with some data coming from the 2016–2017 CCD file.

Notes: Confidence intervals (CI) are based on a 30 percent outcome. Charter SFAs are excluded from Objective 5.

a Subgroup represents 25 percent or more of the population.

b Nine states (California, Colorado, Maine, Massachusetts, Michigan, Minnesota, Nevada, New Mexico, and Vermont) currently have HSMFA; eight have permanent policies.[[5]](#footnote-7) We will update our estimates if this number changes before school year 2024-2025.

CEP = Community Eligibility Provision; CI = confidence interval; HSMFA = Healthy School Meals for All; SFA = school food authority

The sample size of 100 elementary schools participating in the FFVP evaluation component was designed to meet the precision of national estimates for population proportions of 30 percent and a difference of ±10 percentage points with a 95 percent confidence level for schools. The eight participating students per school will yield precision of ±5 percentage points. These precision estimates assume a design effect of 1.2 at the school level and 2.5 at the student level.

The expected SFA-level precision levels for SNMCS-I are shown in Table B.2.3 with the 95 percent confidence interval (CI) for 522 SFAs for a 30 percent population characteristic for SFA-level estimates for each subgroup, which is typical of outcomes observed in SNMCS-I. Precision calculations assuming a more conservative 50 percent population characteristic (not shown) are a bit larger but still within the desired precision for subgroup estimates of at least 25 percent of the population for nearly all subgroups. As shown, the sample design results in an expected precision level of ±4.6 percentage points for the overall sample of 522 SFAs and achieves precision levels of ±10 percentage points (or better) for any subgroups that make up 25 percent or more of the population. Based on results from SNMCS-I, the SNMCS-II study plan estimated (not shown) the average design effect of 1.38 from the probability proportion to size selection and the expected nonresponse adjustments for SFA-level estimates.

Table B.2.3. Expected precision levels for SFA-level estimates for SNMCS-II

|  |  |  |
| --- | --- | --- |
| Subgroups | Target completed   sample sizes | 95% CI half interval   (percentage points) |
| **Number of schools** | | |
| 1–2a | 168 | 8.8 |
| 3–4a | 148 | 9.4 |
| 5 or morea | 174 | 8.7 |
| **Number of students** | | |
| 1–350 | 121 | 10.0 |
| 351–1,200a | 142 | 9.3 |
| More than 1,200a | 231 | 7.3 |
| **Urbanicity** | | |
| Urbana | 205 | 7.7 |
| Rurala | 329 | 6.1 |
| **Percentage of students in povertyb** | | |
| 0–17 percenta | 170 | 8.5 |
| 17–35 percenta | 300 | 6.4 |
| More than 35 percent | 57 | 14.6 |
| **FNS region** | | |
| Mid-Atlantic | 50 | 15.6 |
| Midwest | 112 | 10.4 |
| Mountain Plains | 75 | 12.8 |
| Northeast | 59 | 14.3 |
| Southeast | 69 | 13.3 |
| Southwest | 93 | 11.4 |
| West | 75 | 12.8 |
| **Charter SFA** |  |  |
| Yes | 48 | 15.9 |
| **Percentage of students approved for free/reduced-price meals** | | |
| 0–45 percenta | 325 | 6.1 |
| 46–63 percent | 123 | 10.0 |
| 64 percent or more | 80 | 11.9 |
| **HSMFA/CEP statusc** | | |
| SFAs in HSMFA States | 112 | 10.0 |
| Non-HSMFA SFAs with all CEP schoolsa | 161 | 8.3 |
| All other SFAsa | 261 | 6.5 |
| **Total** | **534d** | **4.6** |

Source: Simulations from the first iteration of SNMCS-II, using the 2018–2019 FNS-742 file and 2017–2018 CCD file, with some data coming from the 2016–2017 CCD file.

Note: Confidence intervals are based on a 30 percent outcome.

a Subgroup represents 25 percent or more of the population.

b The percentage of students-living-in-poverty variable has a considerable amount of missing data; the totals here reflect the nonmissing cases.

c The simulations in the SNMCS-II study plan did not include SFAs with other universal free-meal provisions in the CEP SFA group.

d Total equals 534 because it includes the certainty SFAs in Groups 1a, 2a, and 3.

CEP = Community Eligibility Provision; HSMFA = Healthy School Meals for All; SFA = school food authority.

The expected precision levels for school-level estimates for Groups 2a and 3 are presented in Table B.2.4. For the sample of 1,061 schools (Groups 2a and 3 combined) that will complete the Menu Survey, SNM Survey, and Principal Survey, the expected precision level for a 30 percent population characteristic is ±4.6 percentage points for the overall sample and ±10 percentage points (or better) for any subgroups that make up 25 percent or more of the population. We also show in Table B.2.4 an expected precision level of ± 4.8 percentage points for the overall sample of 796 Group 3 schools that will be included in the study of meal costs and school food service revenues and precision levels of ±10 percentage points (or better) for any subgroups that make up 25 percent or more of the population.

Table B.2.4. Expected precision levels for school-level estimates

|  | Groups 2a and 3 combined | | Group 3 only | | |
| --- | --- | --- | --- | --- | --- |
| Subgroups | Target completed sample sizes | CI half interval (percentage points) | Target completed sample sizes | | CI half interval (percentage points) |
| **School type** | | | | | |
| Elementarya | 487 | 6.8 | 358 | | 8.0 |
| Middle | 241 | 9.7 | 188 | | 11.0 |
| High | 332 | 8.3 | 249 | | 9.6 |
| **Urbanicity** | | | | | |
| Urbana | 409 | 7.5 | 317 | | 8.5 |
| Rurala | 653 | 5.9 | 479 | | 6.9 |
| **Racial/ethnic distribution of students (mean %)** | | | | | |
| Non-Hispanic Black | 111 | 14.3 | 83 | | 16.6 |
| Non-Hispanic White | 663 | 5.9 | 495 | | 6.8 |
| Hispanic | 189 | 11.0 | 136 | | 13.0 |
| Other | 98 | 15.2 | 82 | | 16.7 |
| **Students approved for free/reduced-price meals** | | | | | |
| 0–45 percenta | 384 | 7.7 | 283 | 9.0 | |
| 46–63 percenta | 294 | 8.8 | 232 | 9.9 | |
| 64 percent or morea | 383 | 7.7 | 281 | 9.0 | |
| **FNS region** | | | | | |
| Mid-Atlantic | 87 | 16.2 | 60 | 19.5 | |
| Midwest | 226 | 10.0 | 179 | 11.3 | |
| Mountain Plains | 148 | 12.4 | 108 | 14.5 | |
| Northeast | 112 | 14.3 | 85 | 16.4 | |
| Southeast | 167 | 11.7 | 128 | 13.4 | |
| Southwest | 189 | 11.0 | 142 | 12.7 | |
| West | 132 | 13.1 | 94 | 15.6 | |
| **HSMFA/CEP status of schoolb** | | | | | |
| Schools in HSMFA States | 227 | 10.0 | 170 | 10.3 | |
| Non-HSMFA CEP schoolsa | 319 | 8.5 | 239 | 8.7 | |
| All other schoolsa | 516 | 6.7 | 387 | 6.8 | |
| **Total** | **1,061** | **5.1** | **796** | **5.2** | |

Source: Simulations from the first iteration of SNMCS-II, using the 2018–2019 FNS-742 file and 2017–2018 CCD file, with some data coming from the 2016–2017 CCD file. The numbers in the table will be updated during sampling using the most recent data available.

Notes: Confidence intervals are based on a 30 percent outcome. The level of precision for school estimates for the combined Group 2a and Group 3 samples is only slightly better than that for the Group 3 sample alone. This is because combining the two samples introduces an additional design effect at a final value of 2.48 relative to the design effect of 1.95 for the Group 3 sample alone (which incorporates the SFA design effect of 1.38). This phenomenon is a necessary consequence of meeting the sometimes competing precision requirements for each survey objective and the associated study components.

a Subgroup represents 25 percent or more of the population.

b CEP schools are drawn from both the all-CEP SFA stratum and the not-all CEP SFA stratum. The simulations in the SNMCS-II study plan did not include SFAs with other universal free-meal provisions in the CEP SFA group.

CEP = Community Eligibility Provision; HSMFA = Healthy School Meals for All.

Using the SNMCS-I meal cost data, the SNMCS-II study plan estimated that, for a school-based cost estimate of the national average meal cost of $2.36 (averaged over schools and accounting for the selection of SFAs) with a standard deviation of $0.98, the precision would be ± $0.105. The average design effect is estimated to be 2.23 in Group 3 and 2.83 in Groups 2a and 3 combined with the weighting adjustments described later in this chapter.

Table B.2.5 presents the expected precision levels for the student- and parent-level estimates in Group 2a and the tray-level estimates in Group 3. As shown, the sample design results in an expected precision level of ±3.9 percentage points (for a 50 percent population characteristic) for the overall sample of 3,302 completed student interviews in Group 2a and expected precision levels of ±10 percentage points (or better) for any subgroups that make up 25 percent or more of the population (for a 30 percent population characteristic).  For the parent interviews, the sample design results in an expected precision level of ±5.3 percentage points (for a 50 percent population characteristic) for the overall sample of 1,800 completed interviews in Group 2a and expected precision levels of ±10 percentage points (or better) for any subgroups that make up 25 percent or more of the population (for a 30 percent population characteristic).

For the plate waste observations in Group 3, the expected precision levels are ±3.4 and ±4.8 percentage points, respectively, for the overall samples of 4,140 lunch trays and 2,120 breakfast trays. Expected precision levels are ±10 percentage points (or better) for any subgroup representing 25 percent or more of the population.

Table B.2.5. Expected precision levels for student- and tray-level estimates for Groups 2a and 3

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Subgroups** | **Group 2a students** | | **Group 2a parents** | | **Group 3 plate waste observations** | | | |
| **Lunch** | | **Breakfast** | |
| **Target completed sample sizes** | **CI** | **Target completed sample sizes** | **CI** | **Target completed sample sizes** | **CI** | **Target completed sample sizes** | **CI** |
| **half interval (percentage points)** | **half interval (percentage points)** | **half interval (percentage points)** | **half interval (percentage points)** |
| **School type** | | | | | | | | |
| Elementarya | 1,549 | 5.2 | 844 | 7.0 | 1,456 | 5.8 | 745 | 8.4 |
| Middle | 754 | 7.5 | 411 | 10.1 | 1,365 | 6.0 | 700 | 8.6 |
| Higha | 1,000 | 6.5 | 545 | 8.8 | 1,318 | 6.1 | 675 | 8.8 |
| **Urbanicity** | | | | | | | | |
| Urbana | 2,154 | 4.4 | 1,174 | 6.0 | 2,451 | 4.4 | 1,256 | 6.7 |
| Rurala | 1,148 | 6.0 | 626 | 8.2 | 1,689 | 5.4 | 864 | 7.3 |
| **Race/ethnicity** | | | | | | | | |
| Non-Hispanic Black | 391 | 10.4 | 213 | 14.0 | 544 | 9.0 | 279 | 11.0 |
| Non-Hispanic Whitea | 2,166 | 4.4 | 1,181 | 6.0 | 2,808 | 4.0 | 1,440 | 4.9 |
| Hispanic | 557 | 8.7 | 303 | 11.8 | 634 | 8.3 | 325 | 10.2 |
| **Approved for free/reduced-price meals** | | | | | | | | |
| Yesa | 1,966 | 4.6 | 1,072 | 6.3 | 2,300 | 4.6 | 943 | 6.7 |
| Noa | 1,336 | 5.6 | 728 | 7.6 | 1,840 | 5.1 | 1,177 | 7.3 |
| **FNS region** | | | | | | | | |
| Mid-Atlantic | 337 | 11.2 | 184 | 15.1 | 332 | 12.1 | 170 | 17.0 |
| Midwest | 585 | 8.5 | 319 | 11.5 | 891 | 7.3 | 456 | 10.4 |
| Mountain Plains | 491 | 9.2 | 268 | 12.5 | 257 | 13.7 | 132 | 19.3 |
| Northeast | 343 | 11.1 | 187 | 15.0 | 421 | 10.7 | 216 | 15.1 |
| Southeast | 501 | 9.2 | 273 | 12.4 | 990 | 7.0 | 506 | 9.8 |
| Southwest | 587 | 8.5 | 320 | 11.4 | 692 | 8.4 | 355 | 11.7 |
| West | 458 | 9.6 | 250 | 13.0 | 557 | 9.3 | 285 | 13.1 |
| **HSMFA/CEP status of schoolb** | | | | | | | | |
| Schools in HSMFA States (regardless of CEP status) | 706 | 7.7 | 385 | 10.4 | 884 | 6.9 | 453 | 9.6 |
| Non-HSMFA CEP schoolsa | 991 | 6.5 | 540 | 8.8 | 1,242 | 5.8 | 636 | 8.1 |
| All other schoolsa | 1,605 | 5.1 | 875 | 6.9 | 2,013 | 4.6 | 1,031 | 6.4 |
| **Total** | **3,302** | **3.9** | **1,800** | **5.3** | **4,140** | **3.4** | **2,120** | **4.8** |

Source: Simulations from the first iteration of SNMCS-II, using the 2018–2019 FNS-742 file and 2017–2018 CCD file, with some data coming from the 2016–2017 CCD file. The numbers in the table will be updated during sampling using the most recent data available.

Note: Confidence intervals are based on a 30 percent outcome.

a Subgroup represents 25 percent or more of the population.

b CEP schools are drawn from both the all-CEP SFA stratum and the not-all CEP SFA stratum. The simulations from the SNMCS-II study plan did not include SFAs with other universal free-meal provisions in the CEP SFA group.

CEP = Community Eligibility Provision; HSMFA = Healthy School Meals for All.

The minimum detectable differences (MDDs) for school- and student- level comparisons between Group 2a and 2b fare presented in Table B.2.6 for a population outcome of 0.30. Because the sample design does not oversample non-FFVP schools and students in Group 2a, the MDDs presented are based on an estimate that about half the elementary schools in the Group 2a sample will not be participating in FFVP.

Table B.2.6. Estimated minimum detectable differences for school- and student- level comparisons for FFVP for a population outcome of 0.30.

|  |  |  |
| --- | --- | --- |
|  | FFVP (Group 2b)  (percentage points) | Non-FFVP (Group 2a)  (percentage points) |
| **Elementary Schools** | | |
| Sample Size | 100 | 65 |
| Design Effect | 1.2 | 2.8 |
| MDD (Group 2b to 2a) | 0.302 | |
| **Elementary Students** | | |
| Sample Size | 800 | 511 |
| Design Effect | 2.5 | 5.2 |
| MDD (Group 2b to 2a) | 0.148 | |

Note: This assumes 80 percent power and a type I error rate of 0.05.

### B.2.4. Unusual problems requiring specialized sampling procedures

There are no sampling problems that we consider to be unusual in nature, and the sampling methods are described in detail in the previous sections and Appendix L.

### B.2.5. Any use of periodic data collection cycles to reduce burden

To reduce the burden of SFAs selected to participate in the SFPS-IV, SFAs will be randomly assigned to provide data for only one-quarter of the calendar year. Weighting adjustments will be applied to allow quarterly data to represent the entire year.

B.3. Describe methods to maximize response rates and to deal with issues of non-response. The accuracy and reliability of information collected must be shown to be adequate for intended uses. For collections based on sampling, a special justification must be provided for any collection that will not yield "reliable" data that can be generalized to the universe studied.

Target response rates vary by type of data collection and respondent and are shown in Tables B1.1, B.1.2, and B.1.3. A wide range of methods will be used to maximize participation and reduce nonresponse in all aspects of data collection. The study team will undertake several activities to lay the groundwork for our intensive recruitment campaign, including securing endorsements and training the recruitment team. A comprehensive set of recruitment materials, discussed in depth in Section A.2, describes the purpose of the study in a straightforward way that stresses the important role each participating State, SFA, school, and individual will play in the study’s success. A study website to increase the legitimacy of the study will also be developed.

Gaining national, regional, and State/Territory support for the study is critical to our success in securing participation. The study team will seek an endorsement letter from a relevant professional organization (Appendix C09), and USDA will also provide a letter and email of support for recruiting FSMCs (Appendix C08) and SFAs for the study (Appendix C12). Such letters and emails will provide critical study support and recruitment leverage when reaching out to SFA directors. States, FSMCs, and SFAs will be invited to attend a webinar conducted by FNS and study leaders to learn more about the study and its importance (Appendix C11).

### B.3.1. SFA recruitment (Groups 1a, 1b, 2a, 2b, 3, and the Outlying Areas)

Recruiters will take part in a training for the specific group they are assigned to recruit. Training will cover project details, anticipated challenges, and expectations. With a full understanding of the project and its goals within the current environment of school food service, recruiters will impart a level of aptitude and professionalism in all communications with study participants. Recruiters will call SFA directors to confirm receipt of outreach materials, assess eligibility, describe study objectives, address any SFA concerns, explain the study timeline and participation requirements, and discuss incentives (Appendix C13). For the “certainty” SFAs, we will assign team members with recruitment experience and expertise in school food service to address challenges unique to recruiting these large SFAs. The study team will also locate any sample overlap with other projects and use existing relationships to help make recruiting more efficient. Because Guam and Hawaii will have one SFA each with many schools sampled, recruiters will enlist the help of the SFA directors to facilitate school recruiting.

Based on findings from the first Outlying Areas feasibility assessment approved by OMB on March 19, 2018, under *FNS Generic Clearance for Pre-Testing, Pilot, and Field Test Studies*, the study team will take further steps to promote a high response in the Outlying Areas. This includes providing ample time for SFAs and schools to complete study instruments and to complete workbooks of data to be collected ahead of the request so respondents can see specifically what information will be asked of them. In the absence of in-person visits to SFAs and schools in the Full Outlying Areas (FOA), the study team will also provide extra support through phone technical assistance. For Puerto Rico in the Limited Outlying Areas (LOA), the study team will also provide Spanish recruitment materials and will conduct recruitment calls in Spanish to accommodate SFA staff.

Following recruitment of SFAs, recruiters will leverage SFAs’ agreement to participate in the study to gain the support of school-level contacts. For Groups 2a, 2b, 3, and FOA, recruiters will work with principals and SNMs to understand school-specific context and requirements for data collection.

### B.3.2. Student and parent recruitment (Groups 2a and 2b)

The study team will enlist the help of school liaisons to disseminate information about the study to parents of sampled students, communicating the legitimacy and importance of the request. The study team will maximize parent consent rates by advocating for opt-out procedures wherever possible; if active consent is required, the study team will obtain verbal consent if districts allow it in addition to written consent. The study team will also enlist the help of school liaisons to maximize return rates for active consent forms by offering liaisons a larger stipend (described in Section A.9). Recruitment and consent materials will be provided in both English and Spanish. The study team will also ask school liaisons about Spanish-speaking parents or students, so bilingual interviewers can be appropriately assigned. The study team will train field interviewers to build rapport with students to maximize assent rates. Student weights will properly account for sampled students for whom parent consent is not obtained.

### B.3.3. Data collection

The study team will implement several strategies to minimize nonresponse during data collection. To streamline the data collection planning process, the study team will conduct planning interviews with SFAs to collect key data that informs subsequent activities. First, for SFAs with on-site data collection (mainland only), the study team will conduct quality assurance visits to ensure that interviewers are following study procedures and engaging effectively with district and school staff and students. The study team will use these visits to adjust any interviewer behaviors or procedures that appear to be adversely affecting response rates. Second, the study team will provide one-on-one technical assistance for complex or time-intensive data collection requests. Third, the study team will accommodate the schedules of SFAs and school staff when scheduling cost interviews, and the study team will strive to minimize disruptions to staff and students when the study team is working in schools. Fourth, the study team plans to offer incentives to respondents (described in Section A.9). Fifth, instruments will be offered in Spanish to study participants who are best able to respond in this language, including Outlying Areas respondents in Puerto Rico as well as parents and students. Finally, the study team will closely monitor response rates across instruments and activities and adapt our design to optimize response rates. The study team may use more intensive or frequent follow-up with subgroups that have lower response rates (for example, by calling selected sample members instead of sending email reminders) to avoid potential bias resulting from differential response.

### B.3.4. Dealing with response rates lower than 80 percent

The study team anticipates that the overall response rate for the study will not exceed 80 percent. In addition, despite the efforts described in the preceding sections, it is possible that response rates for individual instruments may fall below this threshold. In such cases, the study team will need to account for the potential that respondents to the various instruments may differ from nonrespondents in important ways. As described in Section B.2.2, the study team will calculate adjustments to the sampling weights to account for these differences as much as possible, using covariates available on the frame that are associated with (1) the propensity to respond and (2) the outcome variables of interest. To assess how well these nonresponse adjustments account for differences between respondents and nonrespondents, the study team will conduct nonresponse bias analyses for each set of weights that are used to meet the objectives of the study. The nonresponse bias analyses will summarize the response rates corresponding to each set of weights, assess the differences between respondents and nonrespondents overall and within subgroups of interest, and evaluate how much estimates using nonresponse-adjusted weights differ from the frame.

B.4. Describe any tests of procedures or methods to be undertaken. Testing is encouraged as an effective means of refining collections of information to minimize burden and improve utility. Tests must be approved if they call for answers to identical questions from 10 or more respondents. A proposed test or set of tests may be submitted for approval separately or in combination with the main collection of information.

The SNMCS-II and SFPS-IV instruments included in this submission are based on the instruments submitted and pre-tested in the previous SNMCS-II (OMB Control Number 0584-0648, expired 9/30/2022) and SFPS-IV ICRs (OMB Control Number 0584-0471, withdrawn 6/11/2021). Therefore, there was no need to conduct a comprehensive pre-test of all the instruments. To address changes incorporated into the current study, we conducted a pre-test in early 2024 focused on new or changed content and procedures for the SFPS-IV and FFVP study components, including:

* SFPS-IV component: Food Purchase Planning Interview (Appendix C14) and Quarterly Food Purchase and USDA Foods data collection (Appendices F01.05, F01.10, F01.01, F01.02); new content in the SFA Director Survey (Appendix F03.01 )
* FFVP component: FFVP SNM Survey (Appendix F04.02), FFVP Menu Survey (Appendix F02.04), Observation Guide (Appendix F07), Student Interview (Appendix F08.01)

Based on pre-test findings, we clarified question wording and response categories, edited instructions for respondents, and revised instruments to improve the flow of interviews. Respondent burden for the pre-test is included in the burden table (Appendix H) and the pre-test memo results are included in Appendix M.

B.5. Provide the name and telephone number of individuals consulted on statistical aspects of the design and the name of the agency unit, contractor(s), grantee(s), or other person(s) who will actually collect and/or analyze the information for the agency.

Mathematica will collect and analyze the information, in coordination with FNS. Table B.5.1 lists the individuals who consulted on statistical aspects of the design, data collection instruments, or procedures. The information request has also been reviewed by Jennifer Rhorer with the USDA National Agricultural Statistics Service (NASS) with reference to the statistical procedures. Those comments and the FNS response are in Appendix N.

Table B.5.1. Individuals consulted on data collection or analysis

|  |  |  |  |
| --- | --- | --- | --- |
| **Mathematica staff** | **Title** | **Phone** | **Email** |
| Phil Gleason | Project director | 202-264-3443 | [PGleason@mathematica-mpr.com](mailto:PGleason@mathematica-mpr.com) |
| Liz Gearan | Deputy project director | 617-301-8978 | [LGearan@mathematica-mpr.com](mailto:LGearan@mathematica-mpr.com) |
| Barbara Carlson | Senior statistician | 617-674-8372 | [BCarlson@mathematica-mpr.com](mailto:BCarlson@mathematica-mpr.com) |
| Sarah Forrestal | Senior researcher | 609-945-6616 | [SForrestal@mathematica-mpr.com](mailto:SForrestal@mathematica-mpr.com) |
| Sara Bardin | Senior researcher | 312-585-3315 | [SBardin@mathematica-mpr.com](mailto:SBardin@mathematica-mpr.com) |
| **USDA staff** | **Title** | **Phone** | **Email** |
| Marlana Bates, FNS | Program Analyst | 703-305-2388 | [Marlana.Bates@usda.gov](mailto:Marlana.Bates@usda.gov) |
| Brianna Bradley, FNS | Social Science Policy Analyst | 407-455-2440 | [Brianna.Bradley@usda.gov](mailto:Brianna.Bradley@usda.gov) |
| Ashley Chaifetz, FNS | Senior Analyst | 470-528-7717 | [Ashley.Chaifetz@usda.gov](mailto:ashley.chaifetz@usda.gov) |
| Darcy Gungor, FNS | Social Science Research Analyst | 703-305-4345 | [Darcy.Gungor@usda.gov](mailto:darcy.gungor@usda.gov) |
| Barbara Murphy, FNS | Director | 571-481-8253 | [Barbara.Murphy@usda.gov](mailto:Barbara.Murphy@usda.gov) |
| Jennifer Rhorer, NASS | Mathematical statistician | 202-720-3026 | [jennifer.rhorer@usda.gov](mailto:jennifer.rhorer@usda.gov) |
| Christina Riley, FNS | Senior Technical Advisor | 703-305-2601 | [Christina.Riley@usda.gov](mailto:Christina.Riley@usda.gov) |
| **Other staff** | **Title** | **Phone** | **Email** |
| John Czajka | Mathematica consultant | 240-593-2220 | [jczajka@mathematica-mpr.com](mailto:jczajka@mathematica-mpr.com) |
| Mary Kay Fox | Mathematica consultant | 781-552-9037 | [mfox@mathematica-mpr.com](mailto:mfox@mathematica-mpr.com) |
| Ronette Briefel | Mathematica consultant | 301-236-9033 | [rrb4321@aol.com](mailto:rrb4321@aol.com) |
| Mary Jo Tuckwell | Mathematica consultant | 715-559-8466 | [maryjo.tuckwell@yahoo.com](mailto:maryjo.tuckwell@yahoo.com) |
| Andrea Denning | Administrator | 614-774-5360 | [scraps34@aol.com](mailto:scraps34@aol.com) |
| John Endahl | Former senior program analyst at FNS | 571-251-8252 | [endahljohn@gmail.com](mailto:endahljohn@gmail.com) |
| Dora Rivas | School nutrition specialist– consultant | 956-266-8416 | [foodsystemsdr@gmail.com](mailto:foodsystemsdr@gmail.com) |

1. Zeidman, E., N. Beyler, E. Gearan, N. Morrison, K. Niland, L. Washburn, B. Carlson, D. Judkins, L. LeClair, M. Mendelson, T. Wommack, J. Carnagey, M. Murphy, and A. Williamson. “School Nutrition and Meal Cost Study: Study Design, Sampling, and Data Collection.” U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support. [↑](#footnote-ref-3)
2. Census.gov. “Historical Living Arrangements of Children.” November 2023. <https://www.census.gov/data/tables/time-series/demo/families/children.html>. [↑](#footnote-ref-4)
3. U.S. Department of Agriculture, Food and Nutrition Service, Office of Research and Analysis. “School Food Purchase Study-III,” by Nick Young et al. Project Officer: John R. Endahl. USDA, March 2012. [↑](#footnote-ref-5)
4. Bartlett S., L. Olsho, K. L. Patlan, M. Blocklin, and J. Klerman, et al. “Evaluation of the Fresh Fruit and Vegetable Program (FFVP).” Prepared by Abt Associates under contract no. AG-3198-D-09-0053. U.S. Department of Agriculture, Food and Nutrition Service, 2013. [↑](#footnote-ref-6)
5. Food Research and Action Center. “Healthy School Meals for All.” <https://frac.org/healthy-school-meals-for-all>. Accessed January 30, 2024. [↑](#footnote-ref-7)