

APPENDIX B. SUMMARY OF THE DATA COLLECTION PLANS

Exhibit B.1. Summary of the data collection plan for the SNMCS-II component

Instrument	Target completed sample size/ respondent	Mode	Estimated respondent burden	Target response rate (%) ^a	Estimated starting sample	Comments
Objective 1: Food Service Operations and School Nutrition Environments—Groups 1a, 1c, 2a, and 3						
SFA Director Survey (SNMCS-II)	446 SFA directors: 48 in Group 1c; 133 in Group 2a; 265 in Group 3	Web	45 minutes	62	722	Target response rates and starting sample for Groups 2a and 3 are for all data collections; SFA survey target response rate for these groups is likely to be higher.
SFA Director Survey (SNMCS-II+SFPS-IV)	88 SFA directors in Group 1a	Web	1.5 hours	53	165	Target response rate and starting sample assume formal recruiting for SFA Director Survey and food purchase data.
Objective 1: Food Service Operations and School Nutrition Environments—Groups 2a and 3						
SNM Survey	1,061 SNMs	Web	20 minutes	95	1,117	Integrated in the web-based Menu Survey.
Principal Survey	955 principals	Web	30 minutes	85	1,117	Target response rate is among schools with a completed School Planning Interview.
Observation Guide	1,061 schools	On-site observation	20 minutes (SNM)	100	1,061	Field staff will collect meal prices and details about serving lines/stations from SNMs and will conduct the observations.
Objective 2: Nutritional Quality of School Meals and Competitive Foods Sold by Food Service Departments—Groups 2a and 3						
Menu Survey	265 SNMs (Group 2a only)	Web	9 hours (including training)	95	279	Supported by video training, telephone, and online technical assistance and follow-up.
Objective 3: Meal Costs and Revenues —Group 3 and Outlying Areas; and Costs Associated with Household Applications—Group 3						
State Agency Indirect Cost Survey	47 State Education or CN Agency finance officers	Web	10 minutes	96	49	Completed in states where Group 3 SFAs are located.
SFA On-Site Cost Interview (G3)	294 SFA directors/business managers	In person	3.25 hours	66	446	The modules are (1) SFA Staff Salary and Time Allocation Grids, (2) Preliminary SFA Indirect Cost Survey, (3) Preliminary Food Service Expense Statement, (4) Off-Budget Staff Salary and Time Allocation Grids, and (5) Food Cost Worksheet.

Instrument	Target completed sample size/ respondent	Mode	Estimated respondent burden	Target response rate (%) ^a	Estimated starting sample	Comments
FOA SFA On-Site Cost Interview	31 SFA directors/business managers	Remote	3.25 hours	91	34	. The modules are (1) SFA Staff Salary and Time Allocation Grids, (2) Preliminary SFA Indirect Cost Survey, (3) Preliminary Food Service Expense Statement, (4) Off-Budget Staff Salary and Time Allocation Grids, and (5) Food Cost Worksheet.
LOA Cost Interview	3 SFA directors/business managers	In person	1.5 hours	100	3	Target response rate is among SFAs with a completed SFA Director Planning Interview. The modules are (1) SFA Staff Salary and Time Allocation Grids, (2) Preliminary SFA Indirect Cost Survey, (3) Preliminary Food Service Expense Statement, (4) Off-Budget Staff Salary and Time Allocation Grids, and (5) Food Cost Worksheet.
SFA Follow-Up Web Survey (G3)	265 SFA directors	Web	30 minutes	90	294	Target response rate is among SFAs with a completed SFA On-Site Cost Interview.
FOA SFA Follow-Up Web Survey	31 SFA directors	Web	30 minutes	100	31	Target response rate is among SFAs with a completed SFA On-Site Cost Interview.
LOA SFA Follow-Up Web Survey	3 SFA directors	Web	30 minutes	100	3	Target response rate is among SFAs with a completed SFA On-Site Cost Interview.
SFA Follow-Up Cost Interview (G3)	261 SFA directors/business managers	Telephone plus screen sharing	2 hours	89	294	Target response rate is among SFAs with a completed SFA On-Site Cost Interview. The modules are (1) Food Service Expense Statement Follow-Up, (2) Food Service Revenue Statement, and (3) Food Service Indirect Cost Follow-up Questionnaire.
FOA SFA Follow-Up Cost Interview	30 SFA directors/business managers	Telephone plus screen sharing	2 hours	97	31	Target response rate is among SFAs with a completed SFA On-Site Cost Interview. The modules are (1) Food Service Expense Statement Follow-Up, (2) Food Service Revenue Statement, and (3) Food Service Indirect Cost Follow-up Questionnaire.
LOA SFA Follow-Up	3 SFA directors/business managers	In person	1.75 hours	100	3	Target response rate is among SFAs with a completed SFA On-

Instrument	Target completed sample size/ respondent	Mode	Estimated respondent burden	Target response rate (%) ^a	Estimated starting sample	Comments
Cost Interview	Business managers					Site Cost Interview. The modules are (1) Food Service Expense Statement Follow-Up, (2) Food Service Revenue Statement, and (3) Food Service Indirect Cost Follow-up Questionnaire.
Menu Survey	796 SNMs (Group 3 only)	Web	9 hours (including training)	95	838	The Menu Survey collects the information needed to (1) estimate nutrient and food group content of reimbursable meals and assess compliance with nutrition standards, (2) examine how competitive foods sold by school food service departments compare to Smart Snacks standards, and (3) calculate food costs for reimbursable breakfasts, lunches, snacks, and suppers. Supported by video training and telephone and online technical assistance and follow-up.
FOA Menu Survey	138 SNMs	Web	9 hours (including training)	95	145	Supported by video training, telephone, and online technical assistance and follow-up.
LOA Menu Survey	3 SFA directors	Hardcopy	3.5 hours (including training)	100	3	Supported by telephone training, technical assistance and follow-up.
SNM Cost Interview ^b	796 SNMs	In person	90 minutes	95	838	
FOA SNM Cost Interview ^b	138 SNMs	Remote	90 minutes	57	242	
Principal Cost Interview	796 principals	In person	45 minutes	95	838	
FOA Principal Cost Interview	138 principals	Remote	45 minutes	57	242	
On-Site Self-Serve/Made-to-Order Bar Form ^c	120 schools	On-site observation	10 minutes	100	120	Completed by field staff in schools that have self-serve or made-to-order bars. The actual number of schools with such bars may vary.

Objective 4: Plate Waste—Group 3 (subsample)

Plate Waste Observations	4,140 lunches and	On-site observation	10 minutes	86	5,262 lunches,	SNMs will confirm menu items and portion sizes. Field staff will
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Instrument	Target completed sample size/ respondent	Mode	Estimated respondent burden	Target response rate (%) ^a	Estimated starting sample	Comments
	2,120 breakfasts in 138 schools across 69 SFAs	n	(SNM)		2,705 breakfasts	conduct the observations. The target completed sample size reflects the combination of completed tray observations and corresponding Menu Survey data.

Objective 4: Student Participation, Satisfaction, Dietary Intakes, and Food Security—Group 2a

AMPM (24-Hour Dietary Recall)	3,302 students	In person or telephone	40 to 55 minutes, depending on students' age	50	6,604	Target response rate is among students who complete the recall and Student Interview, and whose parents complete the Parent Interview. Recalls with elementary school students will include parental assistance. Second recalls will be completed by telephone with a subsample (n = 653).
Student Interview	3,302 students	In person	10 minutes	50	6,604	Target response rate is among students who complete the recall and Student Interview, and whose parents complete the Parent Interview.

Objective 4: Student Participation, Satisfaction, Dietary Intakes, and Food Security—Group 2a

Parent Interview	1,800 parents	Web or telephone	25 minutes	55	3,302	Target response rate is among parents of students who complete the recall and Student Interview.
Reimbursable Meal Sale Data Request Form	252 SNMs for 5,944 students	In person	10 minutes (SNM)	90	6,604 students from 279 schools	Target response rate is among students who complete the recall and Student Interview, and whose parents complete the Parent Interview. SNMs will provide POS report or complete hard-copy form to indicate whether sampled students obtained a reimbursable breakfast and/or lunch on the day referenced in the 24-hour recall.

^a Target response rates are among estimated released SFAs, schools, students, and parents.

^b Also includes interviews with SNMs and central kitchen supervisors in central and production kitchens that provide food to sampled schools to gather complete information about food service labor.

^c The target completed sample size is an estimate based on how schools in the sample operate meal service.

AMPM = Automated Multiple-Pass Method; CN = child nutrition; FOA = full OACS; LOA = limited OACS; OACS = Outlying Areas Cost Study; POS = point-of-sale; SFA = school food authority; SNM = school nutrition manager; SNMCS = School Nutrition and Meal Cost Study.

Exhibit B.2. Summary of the data collection plan for the SFPS-IV component

Instrument	Target completed sample size/ respondent	Mode	Estimated respondent burden	Target response rate (%) ^{a,b}	Starting sample	Comments
Objective 5: SFPS-IV—Groups 1a and 1b^b						
Quarterly Food Purchase Data	402 SFA directors	Electronic submital	6 hours	59	683	Includes food purchase data webinar. Completion of the SFA Director Survey and Quarterly Program Data Form, and provision of Quarterly Food Purchase Data, are needed to consider an SFA complete for the planned analyses. The instrument samples are based on completing with 88 G1a and 276 G2b SFAs using this definition.
Quarterly Program Data Form	402 SFA directors	Web	15 minutes	59	683	Data on meals claimed, food expenditure, non-program revenues, and top selling non-program foods.
SFA Director Survey (SFPS-IV)	276 SFA directors in Group 1b	Web	1.25 hours	53	518	Target response rate assumes joint recruiting for survey and food purchase data.
SFA Director Survey (SNMCS-II+SFPS-IV)	88 SFA directors in Group 1a	Web	1.5 hours	53	165	Target response rate and starting sample assume initial recruiting for SFA Director Survey and food purchase data. Lower target response rate than SNMCS-I due to expanded SFA Director Survey.
SFA Year-End Follow-Up Survey	362 SFA directors	Web	15 minutes	90	402	Starting sample is comprised of SFAs that completed the Quarterly Program Data Form and provided Quarterly Food Purchase Data. Data on food expenditure and nonprogram revenue.
USDA Quarterly Data Request	USDA FNS	Electronic submital	n.a.	n.a.	n.a.	USDA DoD Fresh Foods, processed foods ^c
SDA Quarterly USDA Foods data	49 SDA directors in States with Group 1a and 1b SFAs	Electronic upload	2 hours (30 minutes per quarter)	100	49	USDA Foods delivered for assigned quarter for sampled SFAs.

^a Target response rates are among estimated released SFAs, schools, students, and parents.

^b Target response rate will likely be higher for the SFA Director Survey than the Quarterly Food Purchase Data and Quarterly Program Data Form. Additional attrition for the SFA Year-End Follow-Up Survey is also likely.

^c While USDA will provide data on volume of USDA Foods raw ingredients used in processed end products, data on prices and amount of product purchased will be provided by SFAs.

DoD Fresh = USDA's Department of Defense Fruit and Vegetable Program; n.a. = not applicable; SDA = State Distributing Agency; SFA = school food authority; SFPS = School Food Purchase Study; USDA = U.S. Department of Agriculture.

Exhibit B.3. Summary of the data collection plan for the FFVP-II component

Instrument	Target completed sample size/ respondent	Mode	Estimated respondent burden	Target response rate (%) ^a	Starting sample	Comments
Objective 6: FFVP- Group 2b						
FFVP SNM Survey	100 SNMs	Web	30 minutes	90	111	Stand-alone survey, separate from the web-based Menu Survey administered in Group 2a. The sample sizes for the individual G2b instruments are based on completing the data collection with 100 SFAs, 100 schools, and 800 students for the planned analyses.
Observation Guide	100 schools in Group 2b	On-site observation	20 minutes (SNM)	100	111	Field staff will collect observational information about where FFVP snacks are served and eaten, who serves the snacks, nutrition promotion, and student consumption of snacks.
FFVP Menu Survey	100 SNMs	Hard copy	30 minutes	100	111	The FFVP Menu Survey will collect information needed to accurately code dietary recall data.
AMPM (In-School Intake Dietary Recall)	800 students	In person or telephone	18 minutes	50	1,600	
Student Interview	800 students	In person	12 minutes	50	1,600	
Reimbursable Meal Sale Data Request Form	100 SNMs for 800 students	In person	10 minutes	90	111 SNMs	Target response rate is among students who complete the recall and Student Interview. SNMs will provide POS report or complete hard-copy form to indicate whether sampled students obtained a reimbursable meal on the day referenced in the dietary recall.

^a Target response rates are among estimated released SFAs, schools, students, and parents.

AMPM = Automated Multiple-Pass Method; POS = point-of-sale; SFA = school food authority; SNM = school nutrition manager; FFVP = Fresh Fruit and Vegetable Program

Recruitment Procedures and Related Appendices

Groups 1a, 1b, 2a, 2b, and 3 recruitment

This section describes recruitment procedures for Groups 1a, 1b, 2a, 2b, and 3. Subsequent sections describe differences in procedures for FOA and LOA.

First, we will notify the seven FNS Regional Offices (RO) of the study (Appendix C02) and include the study overview (Appendix C03). We will ask the ROs to email the State Child Nutrition (CN) agency directors to inform them about the selected SFAs in their State and encourage their support of the study (Appendix C05). Then, we will email State CN agencies (Appendix C06) and copy RO staff a description of the study, the schedule for recruitment and data collection, and the information to be collected. We will attach copies of the study overview (Appendices C03 and C04) and a list of main and replacement sampled SFAs and schools in the State. We will ask the State to provide some information about SFA and school characteristics. We will also include a sample SFA notification email that States can send to sampled SFAs (Appendix C07). For instances in which the State has identified that food service management companies (FSMC) manage SFAs' school meals, we will contact the FSMCs to obtain their endorsement for the study. FSMCs will receive a study letter and email (Appendix C08), endorsement letter (Appendix C09), and a study overview (Appendix C03). Then, the study team will call the FSMCs to obtain their endorsement (Appendix C10). States and FSMCs will be invited to attend a webinar conducted by FNS and study leaders to learn more about the study and its importance (Appendix C11).

Sampled SFAs, except in Group 1c, will then be recruited to participate in the data collection. An initial mailing will be sent to the SFA director and school district superintendent of sampled SFAs; it will include an introductory letter and email from FNS (Appendix C12), study endorsement (Appendix C09), a study overview (Appendix C03), and, for Groups 2a, 2b, and 3, a list of sampled schools. Trained recruiters will call SFAs to describe the study in more detail and the role of SFAs in the data collection (Appendix C13). 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).

SFA directors in Groups 1a and 1b who agree to participate will complete the Food Purchase Planning Interview by telephone (Appendix C14) to confirm eligibility and gather preliminary information. SFAs in Groups 1a and 1b will be assigned to Quarter 1 (Q1), Q2, Q3, or Q4 to provide food purchase data and will be recruited on a rolling basis throughout SY 2024–2025. After recruitment, SFAs will be invited to attend a food purchase data webinar (Appendix C15) to receive training on how to provide their food purchase documentation.

SFA directors in Groups 2a, 2b, and 3 who agree to participate will complete the SFA Director Planning Interview by telephone (Appendix C16) to confirm eligibility and gather preliminary information. Responses will also determine which Group 3 SFAs and schools are eligible for plate waste observations. The study team will email the SFA directors a summary of the data collection plans (Appendix C17). For Group 3 SFAs, a description of data collection activities and respondents will also accompany the email (Appendix C18).

Following recruitment of SFAs in Group 2a, 2b, or 3, we will send emails about the study to principals (Appendix C19) and school nutrition managers (SNM; Appendix C20), plus the study overview (Appendix C03). We will then follow up with the principal to confirm the school visit and, for Groups 2a and 2b, identify a school liaison to facilitate student-level data collection and outline next steps (Appendix C21). We will also invite SNMs in Group 3 to complete a School Planning Interview on the web (Appendix C22), providing information needed to plan for on-site data collection. Approximately two weeks before in-person visits, all named SFA and school contacts in Group 2a, 2b, or 3 will receive a pre-visit reminder email about the visit (Appendix C23).

Student sampling in Groups 2a and 2b will initially be coordinated through the districts to streamline the process and establish a consistent approach across the districts' sampled schools. We will obtain student rosters to use in selecting the sample (Appendix D01). Otherwise, we will request the rosters directly from school liaisons. The liaisons will also be asked to complete the School Planning Interview on the web (Appendix C22).

We will contact Group 2a and 2b school liaisons before any direct outreach to parents and students. As authorized under the statutory exception at 20 U.S.C. 1232g(b)(1)(K), we will request contact information and key demographic information on the rosters to monitor whether the completed sample is representative of the student universe from which it was drawn. School liaisons will assist with the distribution of recruiting materials to the parents of selected students. The materials will be available in English and Spanish. We will provide schools with a sample endorsement letter and ask them to distribute the information about the study broadly to all families through the school's usual communication channels (Appendices D02/D03). For sampled students, we will typically mail a consent packet that includes an invitation letter (Appendices D04/D05); a study brochure (Appendices D06/D07); the endorsement letter signed by a school or district administrator (Appendices D02/D03); parent consent (Appendices D08/D09 and D10/D11) and child assent forms (Appendices D12/D13); and a postage-paid return envelope. If school districts agree, we plan to use a consent process that provides parents and students with the opportunity to decline to participate. Parents or students who do not wish to participate can return their signed forms in postage-paid return envelopes addressed to Mathematica. This opt-out approach, used successfully in SNMCS-I and authorized under a statutory exception at 20 U.S.C. 1232g(b)(1)(K), will yield the largest proportion of participating sample members while still protecting human subjects.

When active consent (in which the parent provides permission for the minor to participate in the study) is required by the school district, we will ask the liaison to assist in the consent return process by following up with parents directly or providing updated contact information for reaching the parent directly. In addition to collecting hard-copy consent forms, we will digitally record oral consents in districts that allow it.

FOA recruitment

When we notify ROs about Groups 1a, 1b, 1c, 2a, 2b, and 3, we will also include, for relevant ROs, an overview of FOA (Appendix E01). We will then email State CN agencies to describe the study, schedule, and procedures and to request information about the sampled SFAs and schools (Appendix E02). We will attach a copy of the study overview (Appendix E01) and the list of sampled SFAs and schools and request that States provide information about SFA and school characteristics. We will also include a sample SFA notification email that States/Territories can send to sampled SFAs (Appendix E03). During SY 2019–2020, an FSMC operated in some of the SFAs in Alaska. If it still has contracts with sampled SFAs, we will contact the FSMC with a study letter and email (Appendix C08), endorsement letter (Appendix C09), and a study overview (Appendix E01), followed by a call from the study team to obtain FSMC endorsement (Appendix C10).

We will then recruit SFAs following the procedures described in Section A.2.1. First, we will send an introductory letter and email from FNS (Appendix E04), the endorsement letter (Alaska and Hawaii only; Appendix C09), study overview (Appendix E01), and a list of sampled schools. Recruiters will then follow up by telephone (Appendix C13). SFA directors who agree to participate will complete the SFA Director Planning Interview (Appendix C16). Then, we will send the SFA director a post-planning email summarizing the data collection and respondents (Appendices E05 and C18).

Guam's SFA will likely contract with an FSMC for SY 2024–2025 that will be contacted during recruitment of Groups 1a, 1b, 1c, 2a, 2b, and 3; this FSMC will be recruited to participate in FOA. When we contact this FSMC (described in Section A.2.1), we will include information about FOA, including a recruitment letter and study overview (Appendices E01 and E04). We will call the FSMC manager in Guam to recruit participation (Appendix C13).

After SFAs are recruited, we will contact schools by sending introductory letters to principals (Appendix E06) and SNMs (Appendix E07) and enclose the study overview (Appendix E01). We will then follow up with the school principal and SNM to confirm the target week and ask SNMs a few questions from the School Planning Interview about working hours and internet connectivity (Appendix C22). All named contacts in each SFA will receive a reminder email to confirm the scheduled data collection activities (Appendix E08).

LOA recruitment

Outreach procedures to FNS ROs, Puerto Rico, and USVI for LOA will be the same as those described for FOA, except no FSMCs are involved in LOA, and Puerto Rico recruitment will be conducted in Spanish using translated contact materials (Appendices E09, E10, E11, E12, E13, E14, E15, E16, E17, and E18). We will recruit SFAs by following procedures like those described above for FOA:

- Send an email to State CN agencies to request information about the sampled SFAs (Appendices E02/E13), including study objectives (Appendices E01/E14) and sample SFA director notification (Appendices E03/E15).
- Send an introductory letter and email from FNS to SFA directors (Appendices E04/E16), including the study overview (Appendices E01/E14).
- Conduct follow-up telephone calls to SFA directors and superintendents (Appendices C13/E09).
- Invite SFA directors to attend a webinar to learn more about the study and its importance (Appendices C11/E10).
- Complete the SFA Director Planning Interview (Appendices C16/E11) and send the SFA director a summary of the data collection in a post-planning email (Appendices E05/E18) with a document describing specific activities and respondents (Appendices C18/E12).
- Send a reminder email to SFA directors and district business managers to confirm the scheduled interview (Appendices E08/E17).