Task #4: Evaluation of the Summer Food Service Program Enhancement Demonstrations

SUBTASK 4.5

2011 Demonstration Evaluation Report

FINAL

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Executive Summary

1. Introduction

Background. Authorized under the 2010 Agriculture, Rural Development, Food and Drug Administration and Related Agencies Appropriations Act (P.L. 111-80, 749[g]), the Food and Nutrition Service (FNS) in the United States Department of Agriculture (USDA) initiated two demonstration projects. The purpose was to develop and test methods of providing access to food for low-income children in urban and rural areas during the summer when school is not in session. One category of demonstration projects implements four types of enhancements to the traditional Summer Food Service Program ("eSFSP"): the Extending Length of Operation Incentive (2010-11), the Activity Incentive (2010-11), the Meal Delivery demonstration project (2011-12), and the Food Backpack demonstration project[1] (2011-12). The eSFSP demonstrations are being implemented and evaluated over three summers. The current report describes findings from the evaluation of the first and second summers.[2]

Investigators have found that food insecurity[3] is higher in the summer than during the regular school year (Nord & Romig, 2006). Moreover, in 2011, an average of 21 million children received free or reduced price lunches through the National School Lunch Program,[4] whereas peak July participation in the SFSP in 2011 was 2.3 million children.[5] Thus, the purpose of these four enhancement demonstrations is to reach a greater number of Summer Food Service Program (SFSP) eligible children and stabilize food security in the summer.

The Extending Length of Operation Incentive, implemented in the State of Arkansas in the summers of 2010 and 2011, provided an additional $0.50 per lunch at SFSP sites that offered meals

[1] Referred to in this report as the "Backpack demonstration project."

[2] Another evaluation authorized under the 2010 Agricultural, Rural Development, Food and Drug Administration and Related Agencies Appropriations Act is the Summer Electronic Benefits Transfer for Children (SEBTC) which uses the technologies of the Supplemental Nutrition Assistance Program (SNAP) and Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) to deliver benefits to eligible households. The purpose of SEBTC is to provide an additional approach to food access in the summer needed by children not adequately served by congregate feeding sites.

[3] Food insecurity is defined as "limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways" (USDA, 2011a).

[4] http://www.fns.usda.gov/pd/slsummar.htm

[5] http://www.fns.usda.gov/pd/sfsummar.htm

for 40 or more days in the summer.[6] The Activity Incentive demonstration project, implemented in Mississippi during 2010 and 2011, was designed to determine whether providing SFSP sponsors with additional funding to create recreational or educational activities at their sites would increase SFSP participation. Sponsors selected by the Mississippi State grantee were given a grant of up to $5,000 per site per year to implement enrichment activities at SFSP meal sites.

The Meal Delivery demonstration project was implemented in Delaware, Massachusetts, and New York in 2011 and is operating again in 2012. It offers food delivery to the homes or drop-off sites near homes of eligible children in rural areas. Only children identified by school districts as eligible for free or reduced price school meals can participate. The Backpack demonstration project was implemented in 2011 and is being implemented again in 2012. It provides weekend and holiday meals to children who are already participating in the SFSP. This project is being implemented in Arizona, Kansas, and Ohio. Children age 18 and younger, normally eligible to receive meals at SFSP sites, are eligible to receive meals under the Backpack demonstration project. Although sponsors of both the Meal Delivery and Backpack demonstrations are expected to participate in the SFSP, the meals provided to children participating in these demonstrations are consumed offsite and not at SFSP feeding sites.

Evaluation Goals. The specific goals of the evaluation were to assess the following:

1. The impact of each SFSP enhancement demonstration model on participation and meal service;[7]
2. The food security status among recipients of home delivered meals and backpacks;
3. The targeting accuracy[8] in the Meal Delivery and Backpack demonstrations;
4. The process of project implementation in each SFSP enhancement demonstration; and
5. The total and component specific costs of implementing and operating SFSP demonstrations.

[6] In 2011, special consideration was also given to some sponsors that were located in flooded areas of Arkansas where some of their sites were prevented from operating 40 or more days during the summer. Thus, the 40-day cutoff criterion was relaxed if sponsors operated in school districts where the number of weekdays of SFSP operation during the entire summer was less than 40 days long but they operated for every weekday for the remainder of the summer.

[7] Examined by Insight Policy Research (IPR) in 2010 and 2011.

[8] Whether those for whom the demonstration project food was intended actually consumed the food.

2. Design and Methodology

This study uses a mixed method research design to meet FNS evaluation goals. The design has three primary components: (1) a household questionnaire data collection (administered to parents or caregivers of Meal Delivery and Backpack demonstration project participants) and analysis, (2) site visits to all four types of demonstration projects and key informant interviews, and (3) cost data collection and analysis for all four types of demonstration projects. The first evaluation goal on participation and meal service was addressed by another contractor in a separate report.

The analysis of household questionnaire data consisted of a comparison of household food security (including food security for adults, children, and the entire household) between summer and fall 2011. The expectation was that, if the Meal Delivery and Backpack demonstration projects were successful, food security in the summer would be about the same as in the fall when children again were participating in free and reduced price breakfast and lunch programs. The design has no baseline comparison (i.e., ascertainment of food security prior to demonstration project implementation) and no comparison group.

Development of the sampling frame for the household questionnaire data collection consisted of the following: All Backpack demonstration sponsors and one Meal Delivery sponsor distributed forms to demonstration project participants to bring home to their parents or caregivers. The forms described the study and asked for contact information so parents or caregivers could be recruited for a telephone interview. The other three Meal Delivery sponsors provided Westat with a list of participants and parent contact information. Sponsors sent the completed forms and lists to Westat, and Westat staff entered parent/caregiver name and contact information into an Access database. The names and contact information were then turned over to Westat statisticians for sampling.[9]

Interviewers from Westat's Telephone Research Center (TRC) then administered a 30-minute telephone questionnaire to parents or caregivers of Meal Delivery and Backpack demonstration project participants in English or Spanish using computer-assisted telephone interviewing (CATI). The questionnaire included questions on targeting accuracy (whether those for whom the demonstration project food was intended actually consumed the food) and food security. The food security section of the questionnaire contained the same 18-item/30-day reference period food security module used in the December Supplement of the Current Population Survey.

[9] Sampling was not required in 2011.

To examine implementation of the four types of demonstration projects, Westat conducted site visits and key informant interviews using semi-structured interview guides. In summer 2011 project costs were also examined for all four types of demonstration projects, with sponsor level data for the Extending Length of Operation Incentive and Activity Incentive projects provided by State grantees. Westat obtained sponsor level data directly from Meal Delivery and Backpack demonstration project sponsors and also obtained State level costs of administering the grant from State grantees.

3. Summary of Key Findings

3.1 Household Questionnaire Data Collection and Analysis

In summer 2011 Westat completed 668 interviews (143 Meal Delivery and 525 Backpack). Eighty-two percent were conducted in English and 18 percent in Spanish. In fall 2011, a total of 471 interviews were completed (102 Meal Delivery and 369 Backpack), with the same English/Spanish distribution as in the summer (82 percent in English and 18 percent in Spanish).

The achieved sample sizes in the summer demonstrations were smaller than planned for Meal Delivery demonstrations due to fewer than expected households in the targeted project areas, as well as earlier than anticipated start and end dates of many of the Meal Delivery demonstrations. As a result, the minimum detectable differences for subgroup comparisons, which were planned to range from 4 to 8 percentage points, increased to 8 to 13 percentage points for a food insecurity prevalence of 5 to 25 percent. The sample interviewed for the Backpack demonstrations was larger than expected, increased in part to offset the lower sample size for Meal Delivery participants.

Cooperation rates[10] in the summer and fall were over 90 percent for both types of demonstration projects combined. In the summer, the overall response rate[11] among those for whom we had contact information was 69.2 percent. Fall data collection consisted of re-contacting those respondents who were interviewed or partially interviewed in the summer. The re-contact rate[12] was

[10] The proportion of all cases interviewed of all eligible units ever contacted.

[11] The number of complete interviews with reporting units divided by the estimated number of eligible reporting units in the sample.

[12] The estimated proportion of all eligible cases in which some responsible housing unit member was reached.

87.1 percent for both demonstrations combined. The response rate in fall 2011 was 78.0 percent for the Meal Delivery respondents and 76.0 percent for the Backpack respondents.

Estimated coverage (the number of children in families who returned a form with contact information as a percentage of the number who were estimated to have participated in the demonstration projects) was higher for Meal Delivery than Backpack (84.0 percent versus 28.7 percent). Due to low coverage in the Backpack demonstration project, non-respondent bias could potentially exist. If all or most Backpack participants had been covered in the survey, findings might have been different.

Key Findings for the Meal Delivery and Backpack Demonstrations

- About 50 percent of survey respondents reported that they missed at least one meal pick-up from a Meal Delivery drop-off site.
- Among households in which children participated in the Backpack demonstration at all, 61 percent took home backpacks on at least 75 percent of the weekends for which they were available.
- About 86 percent of all food items in both demonstration projects were consumed completely.
- Food consumption varied by type of food, with juice having the highest percent for "drank or ate it all" (95 percent) and vegetables and meat with the lowest percent (77 percent and 78 percent, respectively).
- 26 percent of food items were reported as being shared with others.
- Respondents reported that food was shared most often with children in the household in the demonstration project. The exception was vegetables which were mostly shared with an adult in the household.
- Among children, after adjusting for all other factors, there were no differences in food security in the summer and fall 2011. The key predictors for food secure children were participation in a Meal Delivery demonstration project, high annual household income (≥ $35,000 versus < $10,000), the perception by the respondent that food expenditures were the same in the summer as in the fall, and respondent interview within 7 days of demonstration project closure.
- In all comparisons between nationwide data on food security and demonstration project households, higher percentages of food secure households were found nationwide. This includes comparisons among households with children less than age 18 and comparable families receiving WIC and SNAP benefits in the previous 30 days.

Demonstration project participants. Among children who were reported by respondents to have participated in the two demonstration projects, about half were female and half male; 62 percent were between the ages of 5 and 11. In addition, 52 percent of telephone interview respondents were non-Hispanic white, and 69 percent lived in a home where only English was spoken. About 20 percent lived with a never married parent or guardian,[13] and 86 percent of respondent households participated in one or more nutrition assistance programs. About 72 percent of participants lived in a household in which the annual income was $25,000 or less, and 90 percent lived in a household with an income less than 185 percent of the poverty threshold.[14] In a comparison between Meal Delivery and

[13] 13.4 percent were not married and lived with a partner; 14 percent were widowed, divorced or separated.

[14] The 2010 poverty threshold for two adults and two children, obtained from the Bureau of Census website in 2011, was $22,113. 185 percent of the poverty threshold was $40,909.05.

Backpack participants, Backpack participants were younger than Meal Delivery participants, primarily due to eligibility requirements in which Meal Delivery participants had to be in school and eligible for free or reduced price meals, while the Backpack demonstration allowed preschool-age children to participate.

Meal Delivery families differed from Backpack families in a number of ways. For example, compared to Backpack families, Meal Delivery families had lower income and were more likely to participate in other nutrition assistance programs. More Meal Delivery respondents compared to Backpack respondents reported themselves to be non-Hispanic Black or non-Hispanic White and that only English was spoken at home. Differences in income-related factors may again be related to eligibility requirements of the two demonstration projects. Differences in race-ethnicity may be explained by the location of the demonstration projects. For example, location of one of the Backpack demonstration projects was in Arizona, which has a large Hispanic population.

Participation. A separate report examined the impact of enhancement demonstrations on participation at SFSP sites as measured by meals served and average daily attendance. In this report, participation is the extent to which children participated in the demonstrations (i.e., received meals or picked up backpacks each week). We did not expect demonstration project participants to participate every available week, and, in fact, we found that about 50 percent of survey respondents reported that they missed at least one meal pick-up from a Meal Delivery drop-off site. Among those who reported that at least one backpack was brought home, about 61 percent of households reported 75 percent or more participation in terms of the number of backpacks per child per week brought home.[15] Participation in the Backpack demonstration project was related to parent satisfaction with the healthiness of the food, the variety of the food, the convenience of the food, and the fact that members of the household liked the food. Participation also appeared to vary somewhat by income and by whether the household participated in another nutrition assistance program in addition to the demonstration project. Supplemental Nutrition Assistance Program (SNAP) participation – an indicator of low income -- appeared to be the single best predictor of Backpack participation.

Food consumption and sharing. Since food was consumed offsite in both the Meal Delivery and Backpack demonstration projects, targeting accuracy -- the extent to which the children who

[15] Backpack participation was calculated by using the number of backpacks that households were reported to have received and dividing this by the number of children in the household who participated in the demonstration project and again by the number of weeks that the demonstration project operated.

participated in the demonstrations ate the food themselves – was particularly important to examine. Thus, we examined food consumption and food sharing as indicators of targeting accuracy. If the food was reported as being shared, the questionnaire inquired about those with whom the food was shared. Food consumption was determined for each food item reported in the most recent meal or backpack and was found to vary substantially by type of food. Among all food items reported by respondents, juice had the highest percent for "drank or ate all" (95 percent), and vegetables and meat had the lowest (77 percent and 78 percent, respectively). About 86 percent of all reported food items in both demonstration projects were consumed completely, and 26 percent of items were reported as being shared with others.[16]

There was little difference in food consumption between the two types of demonstration projects. Among the items reported, only milk and juice showed any difference; milk consumption was slightly higher, as reported by Meal Delivery respondents, while consumption of juice was slightly higher according to Backpack respondents. Moreover, there was a consistent pattern of higher consumption among persons with lower economic means. For example, food consumption was highest for SNAP participants, households with less income versus more income, and less education versus more education.. Attitudes were also associated with food consumption, and consumption was higher among households that reported a higher level of satisfaction with the healthiness and convenience of the food provided.

As reported by survey respondents, when food was shared, it was most frequently shared with another child in the household who was in the demonstration or with an adult in the household, and less frequently with someone outside the household. In most cases, the ordering for food sharing was (1) a child in the household in the demonstration, (2) adults in the household, (3) a child in the household not in the demonstration, (4) pets, and (5) a friend outside the household (who may or may not have participated in the demonstration project). For example, 45 percent of milk items were reported as being shared with another child in the household in the demonstration; 35 percent with an adult in the household; 28 percent with a child in the household not in the demonstration; and 5 percent with friends (who may or may not have participated in the demonstration project). Sharing of fruit, bread/grains, and mixed food all followed this ordering. However, there were exceptions, such as vegetables, where 73 percent were shared with an adult in the household; 61 percent with another child in the household in the demonstration; and 16 percent with a child in the household not in the demonstration.

[16] Some respondents may not have understood the question on consumption because some items were reported as both consumed completely and shared. The question on consumption will be clarified in 2012 data collection.

Food Security. A variety of analyses were conducted on food security in this study -- to examine food security during summer 2011 compared to fall 2011, to compare food security between Meal Delivery and Backpack demonstration participants, and to identify predictors of food secure adults, children, and households. Due to small sample size and lack of baseline data and a comparison group, all results of these analyses should be considered preliminary and exploratory. Moreover, due to low coverage[17] in the Backpack demonstration project, non-respondent bias potentially exists. If all or most Backpack participants were covered, findings might have been different.

In a descriptive analysis that compared food security in summer 2011 with food security in fall 2011, we found that food security was the same in summer and fall for adults and households in the Meal Delivery demonstration project and adults, children, and households in the Backpack demonstration project. The percentage of food secure children was higher in the summer than in the fall in the Meal Delivery demonstration project.

When we compared food security between the Meal Delivery and Backpack demonstration projects in a descriptive analysis, there were greater percentages of food secure adults, children, and households in the Meal Delivery than in the Backpack demonstration in the summer. In the fall, food security was the same for both Meal Delivery and Backpack demonstrations in adults, children, and households.

We also evaluated whether food security varied by demographics and other characteristics (a covariate analysis). Statistically significant results of this analysis were then used in an adjusted analysis which allowed us to observe differences with respect to one variable while adjusting for others. The adjusted analysis for adults showed that being food secure may be slightly less likely in the summer than the fall; there was no difference in food security by type of demonstration; and adults were more likely to be food secure among higher household income levels (≥ $35,000 versus < $10,000) and less likely to be food secure in households if the respondent was never married and there was at least one non-English language spoken at home. The timing of the interview (whether the interview was conducted within 7 days of demonstration project closure or more than 7 days after project closure) was not a significant factor in adult food security after adjusting for all other variables.

[17]The number of children in families who returned a form with contact information as a percentage of the number who were estimated to have participated in the demonstration project

In children, food security was the same in the summer and fall 2011, after adjusting for all other factors. The key predictors for food secure children were participation in a Meal Delivery demonstration project, high annual household income (≥ $35,000 versus < $10,000), a perception by the respondent that food expenditures were the same in the summer as in the fall, and respondent interview taking place within 7 days of demonstration project closure after adjusting for all other factors.

In the adjusted analysis for household food security, there was no difference in food security status between summer and fall or by type of demonstration project. Predictors of food secure households were household income (the higher the income the more likely to be a food secure household) and the respondent never having been married. One or more non-English languages spoken in the home was a predictor of food insecure households. Interview timing was not a significant factor for household food security after adjusting for all other variables.

Findings on food security during summer 2011 were compared to the national food security measures developed from data collected in December 2010 using a 30-day reference period in an 18-item food security module (the same module used in this study). In all comparisons, food security was higher nationwide compared to households of participants in the two demonstration projects. Comparisons were also made between National benchmarks and household survey data in fall 2011 when the children were back in school and participating in the school lunch and breakfast programs. Differences in food security between demonstration project participants followed up in fall 2011 and food security nationwide were consistent with all comparisons with summer data. Food security was considerably lower in the Meal Delivery and Backpack demonstration projects than all U.S. households, households with children younger than age 18, and comparable families receiving WIC[18] and SNAP[19] benefits.

3.2 Site Visits and Key Informant Interviews

Site visits and key informant interviews provided in-depth information on the implementation of all four types of demonstration projects. The four types of demonstration projects differed in most aspects of implementation – recruitment and outreach, delivery of benefits, training and technical

[18] WIC: Special Supplement Nutrition Assistance Program for Women, Infants, and Children

[19] SNAP: Supplemental Nutrition Assistance Program

assistance, and monitoring – primarily due to the nature and requirements of each type of demonstration project.

Recruitment and outreach. In the Extended Length of Operation Incentive, selection of sponsors was based on an ability to stay open longer. In the Activity Incentive, sponsors were chosen based on their ability to identify sites that could offer incentives. In the Meal Delivery and Backpack demonstrations, State grantees selected sponsors (approved by FNS) based on their ability to recruit parents and children. To identify appropriate sponsors, the State grantee in the Extending Length of Operation Incentive demonstration first identified the parts of the State with the lowest income levels and greatest need (based on the percentage of families eligible for free or reduced price meals) and then attempted to recruit sponsors to keep their sites open longer within those low-income areas. Recruitment consisted of announcements at SFSP full day trainings, local town hall meetings, and SFSP application trainings. The State grantee in the Activity Incentive demonstration issued a Request for Application (RFA) to select sponsors to participate in this demonstration. Awardees would receive an incentive grant of up to $5,000 to offer educational or recreational activities at their site. The State identified areas of the State in most need. Outreach to sponsors to apply for the grant included an announcement at SFSP trainings, a mailout of a letter to potential sponsors, and distribution of a media release.

Meal Delivery sponsors worked first with schools to identify children who were eligible for free or reduced price meals. Outreach efforts then consisted of the distribution of flyers, invitational letters and packets to eligible families, and word of mouth. Backpack demonstration project outreach consisted of mailings to parents through schools, media releases, and distribution of flyers.

Delivery of benefits. Among the four types of demonstration projects, the type of benefits differed as well as the target of each type of benefit. For the Extending Length of Operation Incentive demonstration project, the benefit was an extra $0.50 per lunch for those sites open 40 or more days during the summer. Although the benefit was directed at sponsors as an inducement to stay open longer, the children were expected to benefit by the sites operating more days than usual. The benefit in the Activity Incentive demonstration was the provision of a grant to sponsors that would enable sites to fund activities. The activities were expected to draw more children and sustain their participation. The benefits in the Meal Delivery and Backpack demonstrations consisted of the food provided to the children participating in the projects during times when food was not typically provided in the SFSP (i.e., weekends and holidays) and in rural parts of the State not typically served by the SFSP.

Sponsors participating in the Extending Length of Operation Incentive demonstration reported that the extra $0.50 per lunch provided opportunities to operate on weekends, purchase more food to be able to serve more children, hire additional staff to assist with serving the children, and help to offset transportation costs. Additionally, the funds were used to host special events such as waterslide days, picnic days, and mascot costume parties with Mickey and Minnie Mouse. Thus, like the Activity Incentive demonstration project, some of the sites in the Extended Length of Operation demonstration project were also providing additional activities to participants.

In the Activity Incentive demonstration, the incentive was used for both indoor and outdoor activities onsite (e.g., arts and crafts, songs and poetry, cooking and sewing class, exercise sessions, field sports), as well as field trips to a variety of community activities (e.g., zoo, theater). Incentive funds were supplemented by community partner organizations that provided transportation for field trips, donations of gifts to use as game prizes, school and other supplies, and staffing.

Meal benefits were handled differently in the Meal Delivery and Backpack demonstration projects. All Meal Delivery sponsors used a drop-off location to distribute meals. In addition to using a drop-off location to deliver meals, the Massachusetts sponsor also delivered meals to some children's homes. Meal Delivery meals were prepared in one central location and then delivered to the sites or homes. Food was provided cold but could be warmed up at home. All food distributed in the Backpack demonstration projects was shelf stable and was distributed at SFSP sites.

Backpack projects varied by bag type. Some used reusable grocery bags, plastic grocery bags or zip top bags. Some of the Ohio and Arizona sponsors used actual backpacks which needed to be returned each week. Backpack or bag distribution occurred at the end of the week. If distribution was on Thursday, then meals for three days were provided in backpacks or bags. If distribution was on Friday, only two days' worth of meals were provided. Backpacks or bags were typically distributed by having the children line up and pick up a backpack or bag(s). As each child took a backpack or bag, staff or volunteers checked off backpack count forms at the site. Some of the foods provided by the Backpack demonstration required preparation at home before eating. For example, one sponsor provided all ingredients and recipes in the backpack so the foods could be assembled at home.

Training, Technical Assistance, and Monitoring. Training and technical assistance in the Extending Length of Operation Incentive and Activity Incentive demonstration projects were

specific to the SFSP. On the other hand, all Meal Delivery and Backpack sponsors received training that was specific to the demonstration project. All demonstration projects received monitoring from State grantees characterized by visits to each sponsor and site. Monitoring visits and ongoing technical assistance for the Extending Length of Operation Incentive and Activity Incentive were consistent with State visits and technical assistance typically provided for all SFSP sponsors and sites. Ongoing technical assistance to Meal Delivery and Backpack demonstrations were ad hoc and informal, with most State grantees and sponsors relying on email and telephone to answer questions on issues that arose.

Some sponsors provided nutritional information and educational materials to demonstration project participants and their families (e.g., in Delaware, Massachusetts, Kansas, and Ohio). A few Backpack projects also held parent orientations.

3.3 Cost Data Collection and Analysis

Cost data collection and analysis provided information on the cost per meal of each project, project startup costs and ongoing administrative costs. There was variation in how data were collected from each type of demonstration project and the data that were provided. Westat received cost data from five out of eight State grantees on their startup and administrative costs. We also received data on the costs to sponsors. The Extending Length of Operation Incentive and Activity Incentive had been collecting cost data from sponsors since 2010, and State grantees were concerned that an increase in the amount of data collected might undermine sponsor participation in 2011. Thus, the State grantees provided us with administrative data they had already collected from their sponsors. Meal Delivery and Backpack demonstration projects provided cost data directly to Westat and contained more details. It should also be noted that there was significant variation across sponsors both in format and completeness of the information that was reported.

As a result of these issues (i.e., incomplete data, inconsistent categorization of data, and wide variation in costs among sponsors within the Meal Delivery and Backpack demonstration projects), the 2011 cost data do not appear to be as reliable as anticipated. Thus, findings from the cost data analysis are contained in Appendix A for information only. These reliability issues are being addressed in 2012 data collection through more extensive training to State grantees and sponsors, earlier data collection, and immediate followup with questions about the data.

4. Study Strengths and Limitations

The study strengths were its mixed method research design and excellent sponsor cooperation. The mixed method research design – comprised of using a household telephone interview survey, site visits and key informant interviews, and a cost analysis – facilitated addressing the FNS evaluation goals on targeting accuracy, food security, implementation, and cost. Moreover, demonstration project sponsors and site coordinators were extremely committed to providing assistance to Westat by identifying potential participants in the evaluation, following up with non-respondents, organizing and being available for site visits and key informant interviews, and providing a variety of types of data, including data on costs, site operation dates, and estimated numbers of children participating in the demonstration projects.

Study limitations included:

- Lack of traditional baseline data and a control group;
- Difficulty in defining the eligible population (especially in the Backpack demonstration where many participants attended open SFSP sites, and it was not necessary to keep track of the children who attended);
- Difficulty ascertaining coverage (or the number of children in families who returned a form with contact information as a percentage of the number who were estimated to have participated in the demonstration projects), particularly in the Backpack demonstration project where the full universe of eligible participants was unknown;[20]
- Difficulties contacting parents or caregivers using contact information parents or caregivers had provided – About 20 percent of the parents/caregivers in the summer and 13 percent of parents/caregivers in the fall could not be reached;
- Wide variability in the cost data provided by each sponsor – in the method that we received the data, the nature of the data provided, as well as in format and completeness of reporting; and
- The inability to make meaningful comparisons between the Meal Delivery and Backpack demonstration projects because they were implemented in different States with different external environments – any differences that were found between

[20] Nevertheless, based on the estimated unique number of children who received meals or backpacks at each sponsor location and the number of families who submitted contact information, we were able to estimate coverage for each demonstration project. It appeared that coverage was considerably higher in the Meal Delivery demonstration (84 percent) compared to the Backpack demonstration (29 percent). Thus, findings from Meal Delivery respondents may be more representative of all Meal Delivery demonstration project participants compared to the representativeness of findings for Backpack participants. Moreover, there is potential non-response bias for findings relevant to the Backpack demonstration project.

demonstration projects are likely to be related to the demographic and other characteristics of the States in which they are located and not necessarily related to demonstration model.

5. Plans for 2012

This report covers the data collection and analysis for 2011 on four types of demonstration projects. Data collection for 2012 will cover only two types of projects – Meal Delivery and Backpack. We will again conduct the telephone household survey in the summer and fall of 2012, conduct site visits and key informant interviews, and collect and analyze cost data. Another year of data collection and analysis will allow us to make improvements on the collection of data on participation (as expressed by frequency of receipt of meals or backpacks) and targeting accuracy (as expressed by food consumption, sharing, and food spoilage). With larger sample size, the analysis of food security can also be improved. We will also be able to obtain a more in-depth understanding of demonstration project implementation and a more accurate understanding of the cost of demonstration project operations. Thus, findings in this 2011 report are considered preliminary, and few conclusions (within the limitations of the research design and methodology described above) can yet be drawn.

The household questionnaire has been revised to ascertain participation in the Meal Delivery and Backpack demonstration projects in a way that facilitates comparison between the two demonstrations. We also added a question on food spoilage to the questionnaire. We have assigned one Westat staff member per State to be in contact with demonstration project sponsors and site coordinators about data collection and follow-up to reduce sponsor burden. In addition to conducting analysis similar to that provided in this report, we will also compare our findings for 2012 data to findings in 2011 to determine whether findings are consistent from year to year.

To improve cost data collection, we plan additional training on the data collection forms that need to be completed and to collect data earlier and immediately follow up with questions about the data with sponsors and State grantees. We will also compare cost findings from 2011 with those in 2012 as well as findings from key informant interviews.

Introduction 1

1.1 Overview and Purpose of Demonstration Projects

The Summer Food Service Program (SFSP), administered by the Food and Nutrition Service (FNS) in the United States Department of Agriculture (USDA), provides nutrition benefits during the summer to children living in low-income areas. Despite aggressive efforts, data reveal that the SFSP reaches a fraction of the eligible child population and substantially less than the National School Lunch Program during the school year (USDA, 2010; Nord & Romig, 2006).

Authorized under the 2010 Agriculture, Rural Development, Food and Drug Administration and Related Agencies Appropriations Act (P.L. 111-80, 749[g]), FNS initiated a series of demonstration projects to develop and test methods of providing access to food for low-income children in urban and rural areas during the summer when school is not in session. The initiative is being implemented in three phases (USDA, 2011b). In summers 2010 and 2011, Phase 1 addressed the financial constraints that prevent some sponsors from staying open for long periods of time during the summer and the restrictions on funding enrichment activities that attract participants and sustain attendance at SFSP sites. Projects in Phase 1 (now complete) were the Extending Length of Operation Incentive and Activity Incentive demonstration projects. Phase 2 (summers 2011 and 2012) involved the implementation of two additional demonstration projects – Meal Delivery and Food Backpack[21]– to address the challenge of serving enough children to operate sustainably and the risk of hunger that comes when sites are not open 7 days a week. Phase 3 (summers 2011 and 2012) consists of the Summer Electronic Benefits Transfer for Children (SEBTC) which uses the technologies of the Supplemental Nutrition Assistance Program (SNAP) and Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) to deliver benefits to eligible households. The purpose of SEBTC is to provide an additional approach to food access in the summer needed by children not adequately served by congregate feeding sites.

The USDA's FNS engaged Westat to evaluate the effectiveness and efficiency of Phase 1 and 2 demonstration projects (also known as "Enhanced Summer Food Service Program [eSFSP]

[21] Referred to in this report as "Backpack demonstration project."

demonstrations") -- Extending Length of Operation Incentive, Activity Incentive, Meal Delivery, and Backpack. Operations for Phase 1 have ended. Phase 2 operations (Meal Delivery and Backpack) are continuing into summer 2012. This report represents the implementation of activities, costs, and outcomes for operations in 2011.

1.2 Background

The United States is one of the largest food producing countries in the world. Yet, in 2010, both children and adults were food insecure in 9.8 percent of households with children (Coleman-Jensen et al., 2011). This represents 3.9 million households in the United States. Moreover, about 386,000 households (representing about 1.0 percent of households) included one or more children reported to have reduced their food intake and disrupted their eating patterns at some time during the year (Coleman-Jensen et al., 2011a).

Food insecurity is defined as "limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways" (USDA, 2011a) and implies lack of consistent access to adequate food affecting food intake of one or more household members. Researchers have examined the causes of food insecurity among children and concluded that financial constraints are the underlying cause (Nord, 2009; Kirkpatrick & Tarasuk, 2010). Many low-income households do not have sufficient income or resources to meet all basic needs and must make choices about their budgets. Whereas the average family in the United States spends about 7 percent of its income on food at home (and about 5 to 6 percent on food away from home), those at the poverty line would have to spend about one-third of their income on food to obtain a minimally adequate diet (Weill, 2008).

Families with limited resources who already spend more than 20 percent of their income on food are most susceptible to chronic hunger and starvation and experience poor nutrition and health outcomes (Nord, 2009; Kirkpatrick & Tarasuk, 2010). Among children, food insecurity has been associated with adverse emotional, behavioral, academic, and cognitive performance, along with poor mental and physical quality of life (Cook et al., 2006).

Food and Nutrition Service Programs. The mission of FNS is to ensure that children and low-income families have access to food and a more healthful diet. Thus, FNS administers nutrition assistance programs for children and needy families, as well as programs that provide comprehensive

nutrition education. Examples of FNS nutrition programs, many of which have been in existence for decades, are the Supplemental Nutrition Assistance Program (SNAP), Special Supplemental Nutrition Program for Women, Infants and Children (WIC) program, the Child and Adult Care Food Program (CACFP), the National School Lunch Program (NSLP), the School Breakfast Program (SBP), and the Summer Food Service Program (SFSP).

The NSLP and SBP offer balanced meals at school at no cost or reduced cost to children living in households with limited resources. However, school-age children are more susceptible to food insecurity during the summer when they do not have access to meals provided at school (Nord & Romig, 2006). To fill this gap, the SFSP, which itself began in 1968 as a 3-year pilot that awarded grants to States,[22] was created to ensure that low-income children continue to receive nutritious meals when school is not in session. Through this program, approved sponsors provide free meals to children in areas with significant concentrations of low-income households. Eligible sponsoring organizations include schools; camps; units of Federal, State, or local government; and other community- or faith-based organizations. Most SFSP sponsors provide participating children with two meals a day, which is similar to what children receive during the school year. Sponsors receive Federal reimbursement from the USDA through their State administering agency to assist with the costs of preparing and serving meals at feeding sites.

The SFSP sites are classified into one of the following three categories:

1. **Open sites:** Operate in areas in which at least 50 percent of children live in households with incomes at or below 185 percent of the poverty line. Meals are served to all children at the open site.

2. **Enrolled sites:** Provide meals to children enrolled in an activity program at the site where at least half of the children are eligible for free and reduced price meals. Sponsors establish eligibility by documenting that at least 50 percent of enrolled children live in households with incomes at or below 185 percent of the poverty line. Thus, if it is determined that at least 50 percent of children enrolled in an activity program live in households with incomes at or below 185 percent of the poverty line, then all children attending that activity, no matter what their household income, can receive free or reduced price meals.

3. **Residential camp sites:** Sponsors operating residential camp sites are reimbursed only for meals served to children from households at or below 185 percent of the poverty line.

[22] http://www.fns.usda.gov/cnd/summer/about/program_history.html

Children who were eligible to receive meals at open or enrolled sites participated in three of the four types of demonstration projects being evaluated under this contract – Extending Length of Operation Incentive, Activity Incentive, and Backpack demonstration projects. Children eligible to receive free or reduced price meals in the NSLP were eligible for the Meal Delivery demonstration project.

Food Program Success. With more than 21 million children receiving free or reduced priced meals mostly through FNS meal programs (USDA, 2010), it is critical to have an understanding of the effectiveness of these programs. Studies have shown that these programs are successful in meeting the goal to offer at least one-third of the recommended daily allowance (RDA) for selected nutrients (Burghardt & Devaney, 1993; Gordon et al., 1995). Moreover, there is consistent evidence that participation in the NSLP and SBP has positive effects on dietary and calorie intake (Gleason & Suitor, 2003; Nord & Romig, 2006). School meal programs also appear to improve the purchasing power of participating households (Long, 1991; Wellisch et al., 1983; West & Price, 1976). The additional dollars appear to be contributing to the purchase of food for the rest of the family instead of going toward nonfood expenses. There is also some evidence, although mixed, that the NSLP and SBP have a positive effect on participants' achievement test scores and a mitigating effect on school absence and tardiness (Meyers et al., 1989; Dunifon & Kowaleski-Jones, 2003).

Evidence is still limited on the effect of school meal programs on the food security of those who receive free or reduced price meals. Since the most food-needy households self-select into school meal programs, most studies on the relationship of food security with participation in school meal programs have been unable to overcome this inherent bias. One study (Nord & Romig, 2006) used data from the Current Population Survey (CPS) Supplement to test the hypothesis that seasonal differences in food insecurity resulted in part from the "ameliorative effects" of the school year lunch program and the reduction of these effects during the summer. These investigators found that:

- Food insecurity was higher in the summer than during the regular school year.
- Among low-income households (below 185 percent of the poverty line), the seasonal difference in the prevalence of food insecurity with hunger was substantially greater in households with school-age children than in other households.
- Among households with school-age children, the seasonal difference was substantially smaller in States that provided a large number of free and reduced price NSLP and SFSP lunches in the summer relative to the number of free and reduced price NSLP lunches served during the school year. This association was weak and not statistically

> significant for low-income households without school-age children and for higher-income households with school-age children.

The authors suggested that a combination program (free and reduced price NSLP plus SFSP) that is about 53 percent of the size of the winter/spring NSLP (free and reduced price lunches) would eliminate the summer-to-April (school year) difference in the prevalence of food insecurity with hunger in households in school-age children. Therefore, a primary goal of the four demonstration projects is to increase access to food in the summer.

Several factors may account for the differences in participation rates between the NSLP and SFSP. While the NSLP is available nationwide, the SFSP is available only in areas with high concentrations of low-income children. Moreover, rates of poverty and food insecurity are among the highest in the country among families living in rural America (US Bureau of the Census, 2007). Yet, of all the SFSP sites, less than one-third are located in rural communities. Since school is mandatory for children, access to free and reduced priced meals is well within their proximity during the school year. While transportation to school is provided to those who need it, this is not the case for SFSP. Thus, not only are fewer rural children able to participate in the summer programs, but even when the programs are available in rural areas, children who live in these areas participate less than children who live in more urban areas. In a study sponsored by FNS on SFSP and the needs of nonparticipating children, it was noted that more than half of parents whose children were eligible did not participate because of lack of awareness of the site locations in their area and transportation issues (USDA, 2006).

Another explanation of the dramatic differences between program participation during the school year and summer is the shortage of SFSP sites. In a 2003 study on the SFSP, about 8 percent of sponsoring organizations did not offer the SFSP the following summer (USDA, 2003). In 2010, there were 34 summer food sites for every 100 school lunch programs (Boteach & Milam, 2010). To maintain a large number of sites, it is important for sponsors to continue offering the program and expanding the number of sites and for new sponsors to join SFSP. Households with nonparticipating SFSP-eligible children were more likely to be severely or moderately hungry. Moreover, a majority of the parents of participating SFSP eligible children reported that they relied on the program to provide breakfast (79 percent) and lunch (91 percent) for their children (USDA, 2006). This study also noted that all households with nonparticipating SFSP-eligible children would like their children to have access to a summer program that provides breakfast and lunch.

1.3 Overview of Demonstration Projects

FNS implemented four eSFSP demonstration projects -- under study by Westat (Table 1-1) -- to identify ways to reach a greater number of SFSP eligible children and stabilize food security in the summer. The Extending Length of Operation Incentive project, implemented in Arkansas, provided an additional $0.50 per lunch at SFSP sites that offered meals for 40 or more days in the summer.[23] The Activity Incentive demonstration project in Mississippi was designed to determine whether providing sponsors with additional funding to create recreational or educational activities at their sites would increase SFSP participation. Sponsors selected by the Mississippi State grantee were given a grant of up to $5,000 per site per year to implement enrichment activities at SFSP meal sites.

Two other demonstration projects began in the summer of 2011 and will continue in 2012 -- the Meal Delivery and Backpack demonstration projects. The Meal Delivery demonstration project offers breakfast and lunch delivery to the homes or drop-off sites near homes of eligible children in rural areas. Meal Delivery funding was awarded to State agencies in Delaware, Massachusetts, and New York, and only children identified by school districts as eligible for free or reduced price school meals were eligible to participate.

State agencies in Arizona, Kansas, and Ohio were awarded funds to implement the Backpack demonstration project. This project provides weekend and holiday meals to children who are already participating in the SFSP. Children, age 18 and younger, normally eligible to receive meals at SFSP sites, are eligible to receive meals under the Backpack demonstration project. Each site operates the SFSP for varying lengths of time and has varying start and end dates. Similarly, eligible children can choose to participate for the entire duration or a part of the duration the SFSP is offered. Although sponsors of both the Meal Delivery and Backpack demonstrations were expected to participate in the SFSP, the meals that were provided to children were consumed offsite and not at SFSP feeding sites.

[23] In 2011, special consideration was also given to some sponsors that were located in flooded areas of Arkansas where some of their sites were prevented from operating 40 or more days during the summer. Thus, the 40-day cutoff criterion was relaxed if sponsors operated in school districts where the number of weekdays of SFSP operation during the entire summer was less than 40 days long but they operated for every weekday for the remainder of the summer.

Table 1-1. Overview Description of Demonstration Projects

Characteristics	Type of demonstration project			
	Extending Length of Operation Incentive	Activity Incentive	Meal Delivery	Backpack
Years of operation	2010-11	2010-11	2011-12	2011-12
Location (State)	Arkansas	Mississippi	Delaware, Massachusetts, New York	Arizona, Kansas, Ohio
Sites Claiming Incentive Funding	2010 – 163 2011 – 200* (8 interviewed)	2010 – 22 2011 – 41** (6 interviewed)	Not applicable	Not applicable
Number of sponsors in 2011	97**	22**	4	16
Purpose	To determine whether intervention (i.e., incentive) can improve access to meals for low income children for a longer period of time during the summer	To determine whether intervention (i.e., incentive) can increase SFSP participation	To determine whether non-congregate meal service will increase SFSP participation and ensure a more consistent level of food security among rural, low income children at a sustainable cost	To evaluate if providing a supply of nutritionally-balanced foods on the days that children do not receive meals through the congregate SFSP will help maintain the nutritional status children gain from participating in the NSLP during the year
Intervention	Sponsors given additional $0.50 reimbursement per lunch served at sites open 40+ days during the summer	Sponsors given grant of up to $5,000 per site per year to plan and implement new enrichment activities at SFSP meal sites. Funds paid for equipment and other expenses	Approved sponsors developed ways to deliver summer meals to eligible children in rural areas	Funding provided to approved sponsors to provide food backpacks to take home with meals to cover the days that SFSP meals are not available, typically on weekends

*Due to flooding in some parts of Arkansas in 2011, the 40-day cutoff criterion was relaxed if sponsors operated in school districts where the number of weekdays of SFSP operation during the entire summer was less than 40 days long but they operated for every weekday for the remainder of the summer; data provided by Insight Policy Research (IPR).

**Data obtained from IPR.

Table 1-1. Overview Description of Demonstration Projects (continued)

Characteristics	Type of demonstration project			
	Extending Length of Operation Incentive	Activity Incentive	Meal Delivery	Backpack
Eligibility	Sponsors in the State that operated at least one SFSP meal service site	Sponsors in the State that operated at least one SFSP meal service site	▪ State agencies that administer the SFSP ▪ Sponsors approved by FNS ▪ Commitment to participate in SFSP and operation of demonstration project through summer 2012.	▪ State agencies that administer the SFSP ▪ Sponsors approved by FNS ▪ Commitment to participate in SFSP and operation of demonstration project through summer 2012 ▪ Successful sponsor operation of SFSP site in 2010
Sponsor requirements	▪ Sponsors open for 40+ days were automatically approved as demonstration project sponsors ▪ Provision of project data ▪ Compliance with evaluation	▪ Sponsors open for a minimum of 30 days during the summer could apply to receive demonstration funds ▪ Provision of project data ▪ Compliance with evaluation	▪ No more than 2 meals per child per day; no more than 4 days at one time ▪ Compliance with SFSP meal patterns or equivalent ▪ Provision of project data ▪ Compliance with evaluation	▪ Provision of backpacks or packages to carry food home ▪ Contents of backpacks - the same meal types (i.e. breakfast, lunch and/or supper) served at SFSP site ▪ Compliance with SFSP meal patterns or equivalent ▪ Provision of project data ▪ Compliance with evaluation

Table 1-1. Overview Description of Demonstration Projects (continued)

Characteristics	Type of demonstration project			
	Extending Length of Operation Incentive	Activity Incentive	Meal Delivery	Backpack
Eligibility of demonstration participant	Same as SFSP (children age 18 and younger)	Same as SFSP (children age 18 and younger)	▪ Children identified by school districts as eligible for free or reduced price school meals ▪ Parent or guardian consent required	▪ Same as SFSP ▪ Consent not required ▪ Sponsors required to notify parents or guardians of SFSP participants about program

Sponsors in the Meal Delivery and Backpack demonstration projects were selected by the States and approved by FNS. In the Meal Delivery demonstration project, parents of eligible children were required to return a signed consent form so their children could participate in the Meal Delivery demonstration project. The Backpack demonstration project did not require a signed consent. However, sponsors were required to notify parents about the Backpack demonstration project and describe the meals that would be provided.

1.4 Research Questions

The specific goals of this evaluation are to assess:

1. The impact of each eSFSP demonstration model on participation and meal service;[24]
2. The "targeting accuracy"[25] in the Meal Delivery and Backpack demonstration projects;
3. The food security status among recipients of delivered meals and backpacks;
4. The process of project implementation in each demonstration project; and
5. The total and component costs of implementing and operating demonstrations.

This study uses a mixed method research design to meet FNS evaluation goals. The design has three primary components: (1) a household questionnaire data collection (administered to parents or caregivers of Meal Delivery and Backpack demonstration project participants) and analysis, (2) site visits to all four types of demonstration projects and key informant interviews, and (3) cost data collection and analysis for all four types of demonstration projects. The first evaluation goal on participation and meal service was addressed in a separate report.

The analysis of household questionnaire data consisted of a comparison of household food security (including food security for adults, children, and the entire household) between summer and fall 2011. The expectation was that, if the Meal Delivery and Backpack demonstration projects were successful, food security in the summer would be about the same as in the fall when children again were participating in free and reduced price breakfast and lunch programs. The design has no

[24] Examined by Insight Policy Research (IPR) in 2010 and 2011.

[25] Targeting accuracy is defined as the extent to which a targeting scheme correctly selects those who should benefit from the program (according to the selection criteria), and correctly excludes those who should not benefit (USAID, 2008).

baseline comparison (i.e., ascertainment of food security prior to demonstration project implementation) and no comparison group.

The evaluation goals translate into research questions on participation in the demonstration projects, food consumption, including the issue of targeting accuracy, food security status, implementation of the demonstrations, and costs (Table 1-2). A separate contractor was engaged by FNS to analyze participation data related to meal counts and average daily attendance (ADA). In addition, using data from a telephone interview survey, Westat defined participation as the frequency in which demonstration project participants received meals or backpacks.[26] The research questions on participation in 2011 seek an understanding of those who participate in the demonstrations, whether their characteristics are different in the Meal Delivery and Backpack demonstrations, and the factors that are related to participation (e.g., demographic characteristics, participation in other nutrition programs, perception of change in food expenditure, and parent satisfaction with the food).

Table 1-2. Research Questions

Participation – frequency of receiving food (meals/backpacks)
1. What are the characteristics of those who participated in the demonstration projects?
2. Do the demonstration projects differ by these characteristics?
3. What factors are related to participation in the demonstration projects – Meal Delivery, Backpack, and both combined?
Food consumption/targeting accuracy
4. What did participants in the demonstration projects consume/not consume (food package content; foods consumed; food storage; food shared and left over)?
5. Does consumption/targeting accuracy differ by type of demonstration project?
6. What factors are related to food consumption/targeting accuracy?
Food security status
7. Is level of household food security among demonstration participants at least as high in the summer as it is in the fall?
8. What factors are related to household food security in the summer/in the fall?
9. What factors are related to differences in household food security between the summer and fall?
10. How does household food security among demonstration project participants in the summer/fall compare with the household food security of the US population?
Implementation
11. How does implementation differ among the four types of demonstration projects?
12. What factors are associated with efficient and innovative implementation?
13. What factors are associated with problems with implementation?
14. How can implementation be improved?
Costs
15. What are the costs of starting up each type of demonstration project?
16. What are the ongoing costs?

[26]Demonstration projects distributed backpacks, bags, or sacks. For the purpose of simplicity, we will use the term "backpacks" in this report.

Because meals distributed through the Meal Delivery and Backpack demonstration projects were consumed offsite (unlike the regular SFSP), participation in these demonstration projects does not always translate directly into consumption of the food that is provided. Thus, an essential outcome in this study is food consumption, and related to that, targeting accuracy. The United States Agency for International Development (USAID) defines targeting accuracy as the extent to which a targeting scheme correctly selects those who should benefit from the program (according to the selection criteria), and correctly excludes those who should not benefit (USAID, 2008). The indicators we used to address targeting accuracy are food storage, sharing, and leftover food. These indicators were expected to determine the extent to which the food may have been spoiled due to improper storage, shared, and/or left over (i.e., not consumed). Our research questions address the characteristics of participants who do and do not fully consume the foods provided, whether consumption/targeting accuracy differs by type of demonstration project, and whether other factors may be related to food consumption/targeting accuracy (e.g., demographic characteristics of demonstration project participants and respondents and participation in other nutrition programs).

Although participation in these demonstration projects is critical to obtaining access to food, food security status is the key outcome for the Meal Delivery and Backpack demonstrations. The concept of food security status is addressed with a telephone interview that determines food security status in households of children who participate in the Meal Delivery and Backpack demonstration projects. The primary research question is whether the level of household food security among demonstration participants is at least as high in the summer as it is in the fall (Question 7). We also examine the factors related to household food security in the summer and in the fall (Question 8), as well as the factors related to the differences in household food security between the summer and fall (Question 9).

To collect food security data from telephone interview respondents, we used the same 18-item 30-day reference period module of questions used by the U.S. Census Bureau (in a supplement to the Current Population Survey) to collect yearly household food security data for USDA's Economic Research Service (ERS). Thus, we were able to use the ERS data as a benchmark estimate for the food security of the U.S. population of low-income households (Question 10).

Research questions 1-10 relate to the evaluation of outcomes for the Meal Delivery and Backpack demonstration projects. Questions 11 through 14 address the implementation of all four types of demonstration projects by State agencies and sponsors, including the Extending Length of Operation Incentive and the Activity Incentive demonstration projects. Using a qualitative approach

to assessing the implementation of these demonstration projects, we addressed questions on how implementation differed among the four types of demonstration projects (Question 11), the factors that may be associated with efficient and innovative implementation (Question 12), the factors that may be associated with implementation challenges (Question 13), and ways in which implementation could be improved (Question 14).

Finally, questions on the cost of all four types of demonstration projects were addressed, including the costs of starting up each type of demonstration project and ongoing costs (Questions 15 and 16).

1.5 Contents of Report

This report begins with a description of the evaluation design and the methods used for each evaluation component—the household questionnaire analysis, site visits and key informant interviews, and cost analysis (Chapter 2). Chapter 3 describes the recruitment results for the household questionnaire component and includes a description of completion rates and characteristics of demonstration project participants at baseline (summer 2011). Results of data analysis are presented in Chapter 4 (for the household questionnaire) and Chapter 5 (for the key informant interviews during site visits). We end the report with a synthesis and discussion related to the original research questions that were posed in 2011, a discussion of the strengths and limitations of the study, and plans for 2012 (Chapter 6).

Due to a variety of reasons (e.g., incomplete data, inconsistent categorization of data, and wide variation in costs across sponsors), the 2011 cost data do not appear to be as reliable as anticipated. Thus, findings from the cost data analysis are contained in Appendix A for information only. These reliability issues are being addressed in 2012 data collection through more extensive training to State grantees and sponsors, earlier data collection, and immediate followup of questions on the data.

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Methods 2

2.1 Overview

This study uses a multi-mode design to answer the research questions posed in Chapter 1. The design has three primary components: (1) a household questionnaire data collection and analysis (Questions 1 – 10, Table 1-2) covering households of participants in the Meal Delivery and Backpack demonstration projects, (2) site visits and key informant interviews that focus on all four enhancement Summer Food Service Program (eSFSP) demonstration projects (Questions 11 – 14, Table 1-2), and (3) cost analysis (also targeted at all four eSFSP demonstration projects) (Questions 15 - 16, Table 1-2). This chapter describes the methods used for each component.

2.2 Household Questionnaire Analysis

The design for the household questionnaire data collection calls for the administration of telephone interviews at four points in time – summer and fall 2011 and summer and fall 2012. In summer 2011, we developed a sampling frame with assistance from demonstration project sponsors and site coordinators. Names and telephone numbers of potential respondents (parents or caregivers of children participating in the Meal Delivery and Backpack demonstration projects) were provided to Westat's Telephone Research Center (TRC) for recruitment and interview. This section describes the method for developing the sampling frame, recruitment goals, and overall results of TRC efforts in achieving those goals. We also describe the study outcomes and covariates ascertained by the household questionnaire and the methods used for analyzing household questionnaire data.

2.2.1 Developing the Sampling Frame

Development of the sampling frame consisted of obtaining the names of participating children and parents/caregivers from demonstration project sponsors and site coordinators and then entering parent/caregiver and participant names into an Access database. The names and contact information were then turned over to Westat statisticians for sampling, if needed.

The process for obtaining names was different for each type of demonstration project. Three out of four Meal Delivery sponsors, which were required to obtain consent for participation in the Meal Delivery demonstration project, sent Westat names and contact information of those who consented to participate in the demonstration project. The fourth Meal Delivery sponsor and all Backpack demonstration sponsors distributed a form about their demonstration project and the evaluation study and provided completed forms (containing names and contact information) to Westat. Meal Delivery and Backpack forms contained the following information:

- There is a summer food project (Meal Delivery or Backpack);
- There will be a study on the project to help improve it for next year;
- If your child participates in the food project and you fill out a form, you may be contacted for an interview;
- If you are interviewed, you will receive $20 for each interview (up to 4 interviews);
- You do not need to participate in the study for your child to receive the food; and
- All information you provide is confidential.

Sponsors and site staff were asked to keep track of how many forms were distributed; describe the demonstration project and the study to potential participants; urge children to give the form to their parent(s) and return the completed form; send completed forms to Westat; and help parents understand that this is a random study – that is, they may not get selected to participate in the study.[27] Sites were also asked to let parents know that they did not need a working telephone number to participate; the study would be able to provide them with a study cell phone if necessary.

2.2.2 Recruitment Goals

Interviews for the outcome evaluation thus far have been conducted in the summer and fall 2011. Planned sample size for summer was approximately 400 completed interviews for each demonstration project and, of those, about 300 expected completed interviews in the fall. Since the interval was short between the time that the sample was drawn and the start of the summer survey, sample losses (e.g., resulting from moves, loss of eligibility) prior to contacting households were expected to be relatively small (about 5 percent). Among the households that were determined to be

[27] Sampling was not necessary to achieve recruitment goals.

eligible for the study, it was also expected that there would be losses due to survey nonresponse (refusal, unavailable during field period, language problems, and non-working numbers).

Table 2-1 shows the actual sample obtained in summer 2011, the planned sample size for fall 2011 data collection, and the number that responded.

Table 2-1. Sample Sizes Achieved for Summer and Fall 2011 Data Collection

Demonstration project	Summer 2011			Fall 2011			
	Number sampled	Number eligible	Number responding	Number to be followed[1]	Expected eligible[2]	Expected responding[3]	Number responding
Meal Delivery	236	224	143	134	127	102	102
Backpack	766	747	525	514	488	391	365
Both projects	1,002	971	668	648	616	492	467

[1] Includes 13 partial completes. Partial completes that indicated they did not want to be interviewed again are not included.

[2] Assumes additional 5 percent loss between summer and fall 2011

[3] Assumes 80 percent fall followup response rate.

The achieved sample sizes in the summer demonstrations were smaller than planned for Meal Delivery demonstrations, due to fewer than expected households in the targeted project areas, as well as the earlier than anticipated start and end date to many of the Meal Delivery demonstrations. As a result, the minimum detectable differences for subgroup comparisons, which were planned to range from 4 to 8 percentage points, increased to 8 to 13 percentage points for a food insecurity prevalence of 5 to 25 percent. The sample interviewed for the Backpack demonstrations was larger than expected, increased in part to offset the lower sample size for Meal Delivery participants.

Respondents who completed or partially completed an interview in summer 2011 data collection were included in the study sample for fall 2011 data collection.[28] Since the time interval between summer 2011 and fall 2011 data collections was relatively short, it was estimated that there would be a further loss of no more than five percent due to moves or change of address, and a followup response rate of 80 percent among those households that could be contacted again. Under these assumptions, we targeted an estimated 492 households for fall 2011 interview (Table 2-1).

[28]Only partial interviews in which the food security module was completed were taken forward for interview in fall 2011.

Planned sample size for 2012 data collection is based on the number of completed interviews in fall 2011, the number expected to continue in the sample in summer 2012, and the number required in a supplemental sample in order to achieve a total number of completed interviews in summer 2012 of 198 Meal Delivery and 403 Backpack respondents (Table 2-2). The number of completed interviews in fall 2012 are estimated to be 188 Meal Delivery, 383 Backpack, and 571 across both demonstration projects.

Table 2-2. Planned Sample Size in 2012

Demonstration project	Continuing sample		Supplemental sample		Total sample				
	Retained from 2011	Exp. eligible[1]	Number sampled	Expected eligible[2]	Eligible cases	Exp. no. follow-up resp.[3]	Exp. no. supp. resp.[4]	No. resp. in summer	No. resp. in fall
Meal Delivery	102	81	200	190	271	65	133	198	188
Backpack	365	292	255	242	534	234	170	403	383
Both projects	467	373	455	432	806	299	303	601	571

[1] Assumptions: 20 percent loss rate between 2011 and 2012.

[2] Assumptions: 5 percent loss between time of sample selection and summer 2012.

[3] Assumptions: 80 percent followup response rate.

[4] Assumptions: 70 percent initial survey response rate.

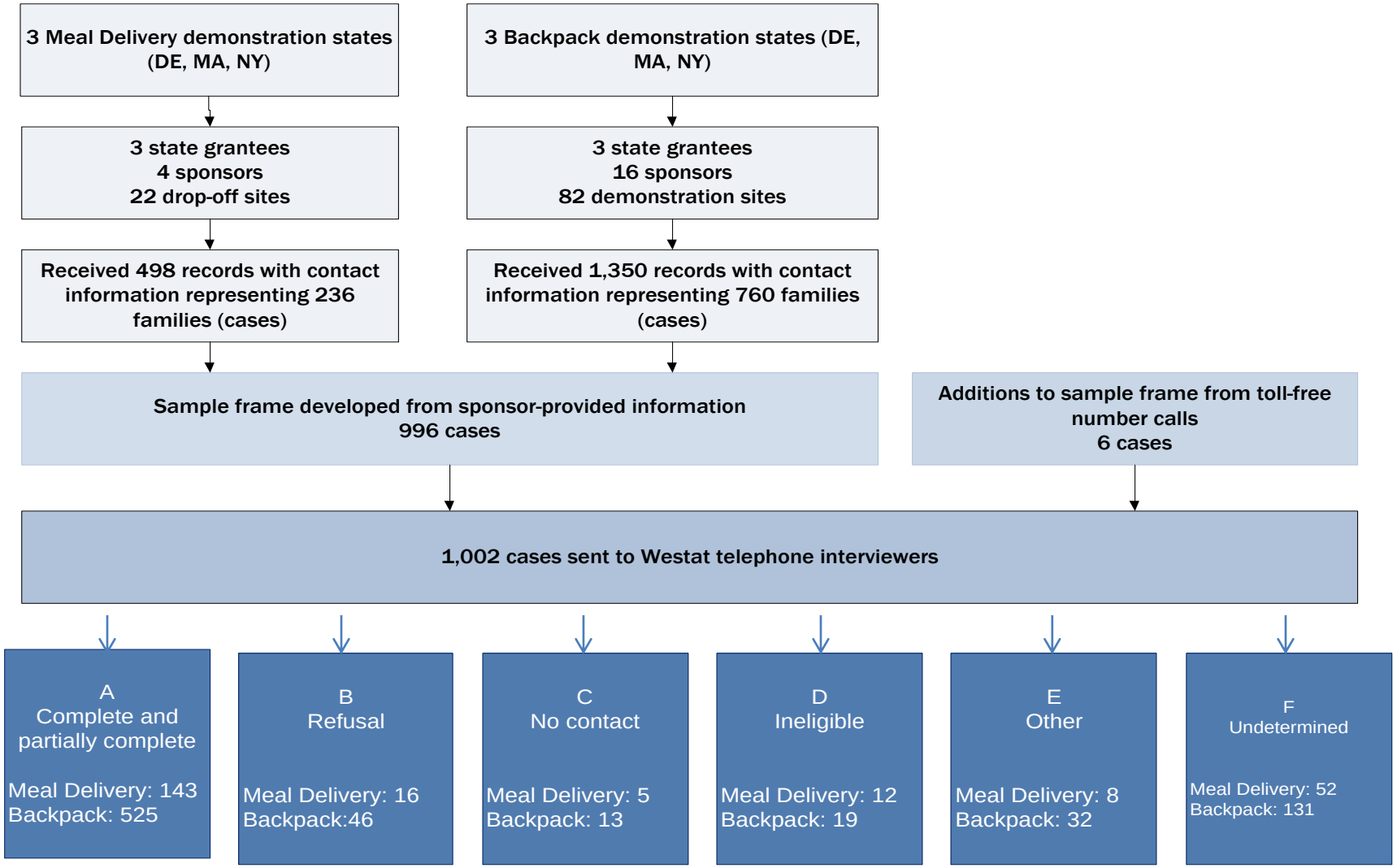
[5] Assumptions: 95 percent response rate for second interview.

2.2.3 Recruitment Results

Figure 2-1 summarizes the sampling frame development for summer 2011 interviews. These numbers appear again in Chapter 3 (Table 3-1a and 3-1b) when we describe in more detail recruitment results by sponsor.

The four Meal Delivery demonstration project sponsors in Delaware, Massachusetts, and New York provided 236 names and contact information for a parent or caregiver of 498 participating children (Figure 2-1). Arizona, Kansas, and Ohio Backpack sponsors implemented the demonstration project

Figure 2-1. Flow of Cases from Frame Development through End of Fall 2011 Telephone Interview Data Collection



using 16 sponsors and a total of 82 demonstration sites. We received the names of 760 parents or caregiver, representing 1,350 children, from 58 of these sites. For both demonstrations, a total of 1,002 cases were sent forward to telephone interviewers. All sponsors provided names and contact information for potential participants. Among a total of 22 Meal Delivery drop-off sites,[29] 19 (86.4 percent) submitted at least one form or name. Among 82 Backpack sites, 58 (70.7 percent) submitted at least one form. The percentage of sites submitting at least one form or name overall was 74.0 percent.

2.2.4 Description of Study Outcomes and Covariates: Household Questionnaire

Westat's TRC administered a 30-minute questionnaire (Appendix B) to parents or caregivers of demonstration project participants in English and Spanish. Household food security was the primary outcome of interest in the household questionnaire data. However, based on the literature and discussions with FNS, participation in the demonstration projects and the amount of food consumed (food consumption and targeting accuracy) were expected to have an association with food security. Therefore, these were also considered important study outcomes. Moreover, there were a number of covariates in the household questionnaire that were tested for their relationship with participation, food consumption/targeting accuracy, and household food security. This section describes the study outcomes of participation, food consumption/targeting accuracy, household food security, and their potentially associated covariates.

Participation. We expected there to be variation in the extent to which children participated in the demonstration projects throughout the summer. First, the demonstration projects themselves varied in when and how long they were open and providing food (Appendix C). Since site operations often were linked to other summer programs (e.g., Summer Bible Week, summer school), site operation ranged from as little as 8 days to as many as 82 days. All Meal Delivery sites operated for 45 days or longer, while seven and nine Backpack sites operated for less than 30 days and 30-44 days, respectively (Table 2-3). Thirty-eight Backpack sites operated for 45 days or more.

[29] Drop-off locations were not fixed and could change from week to week.

Table 2-3. Total Number of Calendar Days of Site Operation*

	Meal delivery	Backpack	Both demonstrations
< 30 days	0	7	7
30-44 days	0	9	9
45+ days	18	38	56
Total	18	54	72

* Includes only those sites of parents/caregivers who were interviewed.

In addition to the number of days each site was open, children varied in the extent to which they received meals from the Meal Delivery demonstration project or picked up backpacks or bags of food. We calculated a participation variable for each Backpack household based on the number of backpacks reported or the number of children in the household participating in the Backpack demonstration project, and the number of weeks of program operation (described in Section 2.2.4). Participation in the Backpack demonstration project was defined as bringing home at least one backpack. The Meal Delivery questionnaire did not ascertain the number of times meals were picked up or delivered.[30] However, it did ask about the frequency of meal delivery for home delivered meals and whether meals were not picked up on one or more occasions for meals delivered to a drop-off site.

Food Consumption/Targeting Accuracy. One of the most important differences between the SFSP and the Meal Delivery and Backpack demonstration projects is that food is eaten onsite at an SFSP feeding site, while the two eSFSP demonstration projects provided children with meals to be eaten at home. Thus, in the case of these demonstration projects it could not be assumed that the food provided by Meal Delivery and Backpack projects was entirely consumed or entirely consumed by the child participating in the demonstration project.

To account for such vagaries, we constructed variables on food consumption and targeting accuracy. Food consumption took into account the food and drinks the children were reported to have received in their most recent meal or backpack as recalled by parents/caregivers. Targeting accuracy was based on how each food item was stored,[31] whether it was shared, and with whom. Sharing inside the household was not expected to have an effect on household food security. Sharing outside the household could have a negative effect.

[30] In 2012 data collection, the question will be changed to ask the number of days and weeks each Meal Delivery participant received a meal.

[31] In 2012 data collection, instead of asking about food storage, we will ask whether any of the food was spoiled.

Household Food Security. As previously noted, the Economic Research Service (ERS) of the USDA reports yearly on household food security based on data collected by the U.S. Census Bureau using a supplemental questionnaire to the monthly Current Population Survey (CPS). The eSFSP Demonstration Evaluation collected data on household food security during summer 2011 using the same standard 18-item, 30-day reference period questionnaire used by the Census Bureau (see Appendix B, sections on "HH FOOD SECURITY" in the Household Questionnaires).

Covariates. Based on the literature and discussions with FNS, there were a number of variables thought to be related to participation, food consumption/targeting accuracy and household food security (Table 2-4). Thus, in addition to obtaining frequencies of these three study outcomes, such associations were tested and included in regression analyses as appropriate.

Table 2-4. Covariates Contained in Household Questionnaire for Each Study Outcome

Participation	▪ Type of demonstration ▪ Participation in other nutrition assistance programs in summer ▪ Perception of change in food expenditure ▪ Participant characteristics (age, gender) ▪ Respondent characteristics (gender, race, Hispanic or Latino, languages spoken, marital status, education, age, employment status) ▪ Languages spoken at home	▪ Household characteristics (age of household members, employment status of adults in household, annual household income, household member with difficulty in daily activity) ▪ Parent satisfaction (with healthiness of food, variety, convenience) ▪ Perception that household members liked food
Food consumption/ targeting accuracy	▪ Type of demonstration ▪ Participation in other nutrition assistance programs ▪ Perception of change in food expenditure – summer versus fall ▪ Perception of change in food expenditure – less due to summer food demonstration project ▪ Participant characteristics (age, gender) ▪ Respondent characteristics (marital status, education , employment status)	▪ Languages spoken at home ▪ Household characteristics (age distribution, household size, poverty threshold, household member with difficulty in daily activity, employment status, annual household income) ▪ Parent satisfaction (balanced and healthy foods, quantity, variety, amounts of fruits and vegetables, amount of meat, amount of milk and milk products, ate regular meals, ate fast food)
Household food security	▪ Type of demonstration ▪ Perception of change in food expenditure (summer versus fall; less due to summer food demonstration project) ▪ Participant characteristics (age, gender) ▪ Respondent characteristics (marital status, education, employment status) ▪ Languages spoken at home	▪ Participation in other nutrition assistance programs ▪ Annual household income ▪ Parent satisfaction with food (healthiness, variety, convenience) ▪ Perception that household members liked food ▪ Summer versus fall

2.2.5 Analytic Methods: Household Questionnaire

Analytic method varied by the type of data collected. Key informant data analysis was qualitative and consisted of the production of summaries of all key informant interviews and synthesis across key topic areas (e.g., outreach, provision of benefits, training and technical assistance). Cost data analysis consisted of the collection of cost data from State agency staff and sponsors and descriptive analysis of startup and ongoing costs per meal. The analytic methods used for the telephone interview data were more complex. The key components are described below.

Frequency of Use for Backpack Demonstration Project. In order to evaluate the frequency of use for the Backpack demonstration project (an indicator of participation), we calculated the number of backpacks that households were reported to have received and divided this by the number of children in the household who participated in the demonstration project and again by the number of weeks that the demonstration project operated:

$$\text{Backpack frequency} = \frac{\text{Number of backpacks reported / number of children in HH}}{\text{Weeks of program operation}}.$$

Some households were reported to have received more than 1 backpack per child per week of operation, which occurred because some sponsors gave out separate backpacks for breakfast and lunch. For some analyses (e.g., participation by covariate; Chapter 4), backpack frequency was calculated by household).

Participation questions in the Meal Delivery questionnaire could not ascertain the frequency of meal delivery. As noted, these questions will be changed in 2012.

Statistical Methods for p-values and Confidence Intervals. Most data were categorical in nature, so that chi-square tests were the primary method for computing significance tests (p-values). With several exceptions, standard Pearson chi-square tests were used. One exception was that exact tests were used in some instances due to small cell sizes. Another exception was that McNemar's test was used for data matched between summer and fall 2011.

A third exception was as follows. In cases where data were clustered within households, calculation methods were used that allowed intra-class correlation between observations. These cases included data collected from more than one child per household (participant age or gender), and other situations where data were collected on all household occupants (ages of all persons in household).

Another important example was the analysis of food consumption, where multiple reports of foods were given by each household (see below for further discussion). In all these situations, SAS PROC SURVERYFREQ was used to compute p-values and (where relevant) confidence intervals.

"All That Apply" Responses. In some cases, respondents were asked to check all responses that were valid. For example, respondents were asked to report on why the meals were sometimes not picked up (e.g., it takes too long to get to the drop-off site, lack of transportation, timing). These data were "dichotomized" into separate groups, each one consisting of a "yes" or "no" response. Separate significance tests were then carried out for each item, using chi-square tests as discussed above.

Food Consumption Data. A major part of the survey consisted of reporting what foods had been received, how they had been stored, whether they had been consumed or shared, and shared by whom. In analyzing these data, individual food items were taken as the analysis unit.

Thus, for example, "milk" was reported for all children participating in the demonstration projects 1,400 times. Each report was further classified as to how it was stored, whether it was consumed entirely or shared, and, if shared, with whom. These reports, along with the accompanying data about storage and consumption, were aggregated from different backpacks, children, and households and then analyzed across categories of storage and consumption. Because there were multiple reports per household, these data are correlated and thus were analyzed using PROC SURVEYFREQ as described earlier.

Food Security Calculation Method. Food security in households of demonstration project participants was determined using the cross-tabulation of findings for adults and children to categorize household food security (Coleman-Jensen et al., 2011a). The cross-tabulation methodology consists of categorizing food security for adults and children separately and then obtaining a household food security measure by determining the number of households which contain both children and adults who are food secure and the number of households with either a child or adult who is food insecure. Households with food insecure children and/or adults were categorized as food insecure.

Analysis of Food Security Data. Food security data was compared between demonstration projects and between the summer and fall time periods. In addition, there were comparisons involving whether data had been collected within 7 days of site closure or not (explained below). Data for each were compared between summer and fall; similarly, combined demonstration project

data were compared between summer and fall. Comparisons between time periods were matched; only respondents with data for both time points were included in these analyses.

Comparison of Food Security to National Benchmarks. To place household food security into perspective, we compared the household food security of demonstration project participants to data contained in the yearly ERS report on household food security (Coleman-Jensen et al., 2011b). Categories of food security consisted of food secure (comprised of high food security and marginal food security), low food security, and very low food security. ERS does not currently use a cross-tabulation methodology to ascertain household food security. Instead, a food secure household is one in which there are fewer than three food insecure responses to all 18 questions in the ERS survey. Thus, food security data that compare demonstration project participants and national data were calculated using the ERS methodology.

Modeling Methods. Multiple outcome logistic regression was used to model frequency of backpacks received per child per week. The outcomes in this model were the five categories used for backpack frequency.[32] Variables that were significantly associated with backpack frequency in simple chi-square tests ($p < 0.10$) were then modeled using the logistic regression.

A generalized linear model that adjusts for within-cluster correlation was used to fit logistic models for food security. Variables that were significantly associated with food security in simple chi-square tests were modeled using the logistic regression. Separate models were developed for adult, child, and household food security.

Timing of Interview. Although a number of sites were in operation in May 2011 (Appendix C), interviews could not begin until FNS received Office of Management and Budget (OMB) clearance. OMB approval was obtained on July 20, 2011, and summer telephone interviews began on July 22, 2011. Interviewing continued until September 7, 2011 for summer 2011 data collection. As a result of sites closing down throughout the summer at different times, 11.2 percent of Meal Delivery interviews and 52.4 percent of Backpack demonstrations were conducted more than seven days after demonstration project closure (Table 2-5). This timing is potentially problematic. The study design called for interviews within 7 days of site closure, since questions relating food security were intended to relate to the time during which the child received food from the project. Interviews conducted when the food was no longer being distributed might result in a level of food security

[32] (1) 1 or more backpacks per child per week; (2) at least 0.75 but less than 1 backpack per child per week; (3) at least 0.50 but less than 0.75 backpacks per child per week; (4) at least 0.25 but less than 0.50 backpacks per child per week; and (5) fewer than 0.25 backpacks per child per week

that was unrelated to the demonstration project. To address this issue, some analyses of food security categorize the sample by the timing of the interview.

Table 2-5. Timing of Completed Interviews by Type of Demonstration

Type of demonstration	Completed within 7 days of demonstration closure		Completed more than 7 days after demonstration project closure		Total	
	No.	%	No.	%	No.	%
Meal Delivery	127	88.8	16	11.2	143	100.0
Backpack	250	47.6	275	52.4	525	100.0
Both demonstrations	377	56.4	291	43.6	668	100.0

Other Issues. These analyses suffer from a number of limitations (discussed further in Chapter 6). First, comparisons between demonstration projects are problematic since the geographic areas used for the two types of projects were quite different. Thus, the study populations had different demographic characteristics. Although FNS is interested in determining differences between the two types of demonstration projects, in many cases it is not possible to meaningfully compare food security between demonstration projects since they could be due to a variety of demographic and/or geographic differences and not necessarily the demonstration project model.

A related problem is the lack of baseline data. If baseline data were available, then it might be possible to compare changes in food security between demonstrations, but such data are not available. Similarly, the test areas lack control populations that might also be used for comparison to assess changes in food security due to the interventions. In the absence of baseline data or comparison groups, the design does not allow conclusions regarding the impact of the summer demonstration programs on household food security per se, only on whether participation in the summer demonstration programs led to at least the same level of household food security as in the subsequent fall. Moreover, due to low coverage[33] in the Backpack demonstration project, non-respondent bias could potentially exist. If all or most Backpack participants had been covered in the survey, findings might have been different.

[33]The number of children in families who returned a form with contact information as a percentage of the number who were estimated to have participated in the demonstration projects

2.3 Key Informant Interviews

In addition to telephone interviews, the evaluation consists of site visits to demonstration projects and key informant interviews.

Methodology. We used semi-structured interview guides for key informant interviews (Appendix D). Interview guides addressed the measurement of several types of implementation processes, including selection of sponsors and sites, outreach or recruitment, delivery of benefits, training and technical assistance, and oversight and monitoring. We also asked key informants about the challenges to implementing the demonstration projects and how they tried to resolve these challenges. Interview guides contained general headings and open-ended questions and probes. Interviewers were trained to move through the interview guide to obtain all required information, but not necessarily in the same order or using the exact question wording. The training for use of the interview guides included interviewing techniques, such as redirecting strategies, as well as mock interview sessions. Other training consisted of the provision of background information on all components of the evaluation; background on the Summer Food Service Program (SFSP) conducted by a consultant to the project; background on each of the demonstration projects, and logistical procedures (e.g., planning the site visit, recording the interviews, and writing up findings).

Key Variables. Key informants were State grantees, sponsors, and site staff and volunteers. Each type of key informant served a different function and provided a different perspective on each interview item (Table 2-6). State grantees provided a high level overview of demonstration project operations from the grantee perspective. Sponsors were asked to provide their perspective on project operations, staffing and volunteer roles and responsibilities, participant outreach efforts, training and technical assistance, and project monitoring. Sites reported on process information from the perspective of those delivering food to demonstration participants (e.g., their roles and responsibilities, the procedures they used, training they received, descriptions of challenges they encountered, and ways in which they resolved those challenges).

Table 2-6. Key variables

Dates of operation	Oversight and monitoring
Outreach	Training and technical assistance
Selection of sponsors and sites	Demonstration innovations
Processes for providing demonstration benefits	Challenges and resolution of challenges
Administrative controls	

Procedures. A two-person team was deployed to demonstration projects in July and August, 2011. The process for developing the agenda began with the interview team contacting the State grantee to determine the week of the site visit. The options were presented, and the State grantee selected the week that was most practical for both the State and sponsors. Once the week was determined, the interview team scheduled the State grantee for the first interview on the agenda. The interview team then mapped out the location of each sponsor, including its distance and direction from the State agency. Using online navigation, the interview team proposed sponsor and site interviews taking into consideration driving time and the length of the interviews. The agenda allotted 2 hours for the State interview, 1 hour and 30 minutes for each sponsor interview and one hour for each site interview. The interviewers scheduled the agenda with an extra hour for additional driving time and transition from each interview (e.g., in case an interview started or ended late). In some cases, the distance between locations was up to 3 hours.

The Extending Length of Operation Incentive and Activity Incentive demonstrations had more than 100 sponsors each spread out across each State. Moreover, many sponsors were no longer in operation at the time of the site visits. Thus, the interview team identified sponsors among those still in operation based on geographic location while attempting to keep the set of sponsors visited as diverse as possible. For example, efforts were made to visit community-based organizations, school districts, parochial and non-parochial based centers, nonprofit organizations, child development centers, and community centers. Many of the sponsors also served as a site and thus were a "dual purpose" visit. For the Extending Length of Operation Incentive and Activity Incentive demonstrations, the interview team mapped a schedule that involved driving a "loop" that started at the State agency, involved driving a path through the State (up to 10 hours driving time) and ended back near the airport for departure. This process was completed in consultation with State grantees who provided feedback on driving feasibility and suggestions for ensuring diverse representation of sponsors.

For the Meal Delivery and Backpack demonstration projects, all sponsors were interviewed. The number of sites visited was based on geographic location and sites' schedule. While driving distance was a factor, efforts were made to visit sites in different parts of the State. A date for a site visit to Arizona could not be arranged during Arizona demonstration project operations. Thus, Westat conducted key informant interviews for the Arizona Backpack demonstration project by telephone.

Once the proposed agenda was drafted, the interview team shared the agenda with the State and sponsor staff for their review and feedback. Modifications to the agenda were made based on their schedules and recommendations (e.g., feedback on travel time between sponsors and/or sites). The

interview team sent the finalized agenda and interview guides to the State and sponsors prior to the site visit (see Appendix E for a sample agenda). In preparation for the site visit, the interview team reviewed the grant applications and other information about each State, sponsor, and site (e.g., websites, program information provided, etc.).

The interview team requested permission to record each interview. While both interviewers guided the discussions and took notes, one person took the lead on the interview while the second person focused on taking notes. The interview team alternated the lead roles through the site visit. During each interview, the interview team requested copies of materials that could provide further details on program operation and implementation (see Appendix F for a list of materials requested).

After the site visit, interviewers immediately sent a thank you email to the State grantee, sponsors, and site staff, and within one week, completed a summary of "first impressions" of the visit. The summary included details such as dates, sites visited, interview respondents, and a brief summary of each interview.

The final task was the completion of the site visit summary report. The interview team worked together to complete the report, and referred back to the audio recordings as needed. The summary report included a narrative summary for each section of the interview guide. The report focused on findings only and referenced materials received from the State, sponsor, and/or site.

2.4 Cost Analysis

Overview of Cost Data Collection. The evaluation of the eSFSP demonstrations includes an examination of costs of the demonstrations at the State and sponsor level. With assistance from the Food and Nutrition Service (FNS) and State grantees, Westat developed cost data collection instruments to collect State level costs of administering the demonstration projects and sponsor level costs of implementing ongoing demonstration activities. Both cost instruments included questions on initial startup costs and ongoing expenditures (Appendix G). Ongoing expenditures included personnel costs; cost of contracted services; building and facilities; other equipment, supplies, and materials; administrative and operational overhead; and other miscellaneous costs. Both the amount spent and the source of funding was requested. Respondents were asked to indicate whether expense items were donated (in-kind or volunteer). Initial startup costs were defined as program investment costs that occurred one time and were not included in normal monthly expenses. These costs included pre-program advertising, initial training, and recruiting and

hiring of personnel. Ongoing costs involved regular monthly expenditures. For each of the six components listed above, respondents were asked for the amount, the funding source, and whether the expense item was donated (in-kind or volunteer).

The procedures for collecting cost data differed slightly for those demonstrations begun in 2010 (Extending Length of Operation Incentive and Activity Incentive demonstration projects) and those begun in 2011 (Meal Delivery and Backpack demonstration projects).

Extending Length of Operation Incentive and Activity Incentive Demonstration Projects. As a result of the large number of sponsors in the Extending Length of Operation Incentive project in Arkansas and the Activity Incentive project in Mississippi, a decision was made to obtain 2011 sponsor level administrative data via State grantees instead of using the data collection tool. The State level cost of administering the grant was not available because States did not use a special charging account to bill hours they spent on the grant and instead incorporated the hours into their usual activities. Both State grantees stated that the cost of administering the data was minimal and "ignorable." The sponsor level data collected from these two demonstration projects consisted of the costs shown in Table 2-7.

Table 2-7. Cost Categories Supplied by the Extending Length of Operation Incentive and Activity Incentive Demonstration Projects

Extending length of Operations	Enhanced activities
▪ Administrative costs ▪ Operational costs ▪ In-kind donations ▪ Volunteers	▪ Salary ▪ Printing ▪ Utilities and rental equipment ▪ Supplies and equipment ▪ Nutrition education ▪ Contracted services ▪ Indirect cost ▪ Other

Meal Delivery and Backpack Demonstration Projects. The goal for the cost component of the Backpack and Meal Delivery demonstration projects was to obtain comprehensive cost information on initial startup costs, personnel expenditures; cost of contracted services; building and facilities; other equipment, supplies and materials; administrative and operational overhead; other miscellaneous costs; and volunteer and in-kind donations. The cost data from these demonstrations included grant funded activities as well as activities funded by other sources (e.g., another agency or in-kind volunteers). Westat obtained data from State grantees and all Meal Delivery and Backpack demonstration project sponsors.

Data Collection. To begin the cost data collection process, the Westat cost team conducted separate conference calls with each Meal Delivery and Backpack State grantee. During these meetings, State representatives were provided training on the cost instruments. State grantees shared the sponsor cost instrument with their sponsors during their respective kickoff meetings and requested sponsors to complete the cost instruments and forward cost data directly to Westat. Westat contact information was also shared with State representatives and sponsors in case of any questions or need for clarifications. Westat also obtained State level costs of administering the grant from State grantees.

Because the number of State grantees and project sponsors was small for the Meal Delivery and Backpack demonstration projects (a total of 6 State grantees and 20 sponsors), Westat staff were able to provide one-on-one assistance to sponsors in these demonstrations when they experienced difficulty completing the instrument or failed to complete the questionnaire within the requested timeframe. Nevertheless, data reliability issues remained (e.g., incomplete data, inconsistent categorization of data, and wide variation in costs among sponsors within the Meal Delivery and Backpack demonstration projects). As a result, findings from the cost data analysis are contained in Appendix A for information only. These reliability issues are being addressed in 2012 data collection through more extensive training to State grantees and sponsors, earlier data collection, and immediate followup of questions on the data.

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Recruitment Results and Sample Characteristics 3

Household questionnaire data were collected during summer 2011 when the Meal Delivery and Backpack demonstration projects were underway and in fall 2011 when children had returned to school and, in many cases, were participating in the breakfast and lunch programs offered at their school. This chapter discusses the results of recruitment of telephone interview respondents, as well as characteristics of the demonstration sites, demonstration project participants, questionnaire respondents, and participants' households. This chapter also describes the completion rates used in this study (cooperation, contact, refusal, ineligibility and response rate) and the method of calculation. These rates are presented for summer and fall 2011 and for each type of demonstration project.

3.1 Recruitment Results by Sponsor

In summer 2011, Westat received more than 1,800 records with contact information (Figure 2-1). Table 3-1a and 3-1b show the number of cases provided by sponsors for Meal Delivery and Backpack demonstrations, respectively. This information was used for identifying potential study participants for telephone interviews. All households with contact information were grouped by demonstration project and sorted at random into smaller replicates, or "release" groups, for the Telephone Research Center (TRC). However, all replicates were released in the course of sample enrollment and data collection. The results of interviewing are discussed in the next section.

To examine the extent to which the sample of households covers the actual number of children participating in the Meal Delivery and Backpack demonstrations, sponsors and sites were asked to provide the actual number of children who were receiving meals or backpacks (Table 3-1a and 3-1b, column 4). Estimated coverage (the percentage of forms received from participating families [times 1.9 children per family] to the number of children estimated to be participating in the demonstration projects) was higher for Meal Delivery than Backpack (84.0 percent versus 28.7 percent). However, response in summer data collection was better among Backpack cases than Meal Delivery (described below).

Table 3-1a. Estimated Number of Children and Number of Cases (Parent/Caregivers) by Sponsor – Meal Delivery Demonstration

State (1)	State agency recipient (2)	Sponsor(s) (3)	No. children in Meal Delivery demonstration* (4)	No. cases provided** (5)	Approximate coverage (%)*** (6)
DE	Delaware Department of Education (Dover, DE)	Food Bank of Delaware; Newark, DE	195	50	48.7
MA	MA Department of Elementary and Secondary Education (Malden, MA)	YMCA of Cape Cod; West Barnstable, MA	105	55	~100.0
NY	New York State Education Department (Albany, NY)	Food Bank of the Southern Tier; Elmira, NY	134	77	~100.0
		North Rose-Wolcott Central School District; Wolcott, NY	100	54	100.0
All Meal Delivery			534	236	84.0

* Information provided by sponsors or site coordinators; numbers were estimates based on an average over the week (in the case of Meal Delivery) and over the weeks of operation. Thus, this is an average of averages.

** Each case was a parent/caregiver, and up to five children could be listed for each parent/caregiver. There were 1.9 children per parent/caregiver in the sampling frame.

*** Calculation: (number of cases X 1.9)/number of children in demonstration.

Table 3-1b. Estimated Number of Children and Number of Cases (Parent/Caregivers) by Sponsor – Backpack Demonstration

State (1)	State agency recipient (2)	Sponsor(s) (3)	No. children in Backpack demonstration* (4)	No. cases provided** (5)	Approximate coverage (%)*** (6)
AZ	Arizona Department of Education (Phoenix, AZ)	Chandler Unified School District	902	169	35.6
		Litchfield Elementary School District	751	62	15.7
		Mesa Public Schools	226	29	24.4
KS	Kansas State Department of Education (Topeka, KS)	Arkansas City Unified School District 470	142	41	54.9
		Central Unified School District 462	75	12	30.4
		East Central Kansas Economic Opportunity Corp	66	15	43.2
		Gardner Edgerton Unified School District	150	19	24.1
		Lawrence Public Schools USD 497	460	32	13.2
		Topeka Public Schools	65	27	78.9
		United Methodist Church	55	18	62.2
OH	Ohio Department of Education (Columbus, OH)	Andrews House, Inc.	55	13	44.9
		Ashtabula County Children Services	226	64	53.8
		Community Action Organization of Scioto County	612	81	25.1
		Hamilton Living Water Ministry, Inc.	108	0	0.0
		Hocking Athens Perry Community Action Agency	946	53	10.6
		Whole Again International	232	131	~100.0
All Backpack			5,071	766	28.7

* Information provided by sponsors or site coordinators; numbers were estimates based on an average over the week (in the case of Meal Delivery) and over the weeks of operation.

** Each case was a parent/caregiver, and up to five children could be listed for each parent/caregiver. There were 1.9 children per parent/caregiver in the sampling frame.

*** Calculation: (number of cases X 1.9)/number of children in demonstration

Tables 3-2 and 3-3 show the results of data collection in the summer and fall 2011, respectively. The greatest nonresponse (14.9 percent) in the summer was from persons with a non-working telephone number. In the fall, 9.2 percent of the sample was from non-working numbers or respondent not found at the number dialed.

Table 3-2. Results of Summer 2011 Data Collection

		Meal Delivery		Backpack		Total	
	Final results of interviews	Number	Percent	Number	Percent	Number	Percent
A	Completed interview	126	53.4	509	66.4	635	63.4
A	Partial complete (at least one section beyond introduction)	17	7.2	16	2.1	33	3.3
B	Refused to participate	16	6.8	46	6.0	62	6.2
C	No contact (never reached a human)	5	2.1	13	1.7	18	1.8
D	Ineligible*	12	5.1	19	2.5	31	3.1
E	Maximum call attempts: Language**	0	0.0	9	1.2	9	0.9
E	Maximum call attempts: Other***	8	3.4	23	3.0	31	3.1
F	Non-working number	43	18.2	106	13.8	149	14.9
F	Respondent not found at number dialed	9	3.8	25	3.3	34	3.4
	Total	236	100.0	766	100.0	1,002	100.0

*Not eligible because child did not participate in demonstration, duplicate household, or child did not meet age criterion.

**Made numerous attempts but unable to complete because of a language/literacy problem.

*** Made numerous attempts, reached a human in the household, but field period closed before able to conduct the interview.

Table 3-3. Results of Fall 2011 Data Collection

	Final results of interviews	Meal Delivery		Backpack		Total	
		Number	Percent	Number	Percent	Number	Percent
A	Completed interview	102	76.1	365	71.0	467	72.1
A	Partial Complete (completed the food security section)*	0	0.0	4	0.8	4	0.6
B	Refused to participate	4	3.0	29	5.6	33	5.1
C	No Contact (never reached a human)	6	4.5	16	3.1	22	3.4
D	Ineligible**	3	2.2	25	4.9	28	4.3
E	Maximum Call Attempts: Language***	6	4.5	12	2.3	18	2.8
E	Maximum Call Attempts: Other****	1	0.7	14	2.7	15	2.3
F	Non-Working Number	12	9.0	47	9.1	59	9.1
F	Respondent not found at number dialed	0	0.0	1	0.2	1	0.1
	Duplicate	0	0.0	1	0.2	1	0.1
	Total	134	100.0	514	100.0	648	100.0

* Only respondents who completed the food security module in summer 2011 were included in fall 2011 data collection.

** Not eligible because child did not participate in demonstration, duplicate household, or child did not meet age criterion.

*** Made numerous attempts but unable to complete because of a language/literacy problem.

**** Made numerous attempts, reached a human in the household, but field period closed before able to conduct the interview.

3.2 Completion Rates

3.2.1 Calculation Formula

Westat disposition codes for telephone interview surveys and calculation of completion rates are consistent with the guidance provided by the American Association for Public Opinion Research (AAPOR) (AAPOR, 2011) (Tables 3-4 and 3-5).

Table 3-4. Description of Key Disposition Codes Contained in Completion Rate Formulas*

A	Complete and partially complete interviews	A partial complete is a questionnaire with at least one section complete beyond the introduction and deemed usable for analysis.
B	Refusals	Reached respondent but refused to be interviewed
C	No contacts	Interviewers never reached a human; reached answering machine, ring no answer, or busy signal
D	Ineligibles	Household never received a meal/backpack or was a duplicate case
E	Others	Non-interview because of language/literacy problem or unable to complete despite numerous call attempts
F	Undetermined	Non-working number or respondent not found

*Adapted from AAPOR, 2011.

Table 3-5. Definition and Formula for Telephone Interview Outcome Rates

Completion rate	Definition	Formula
Contact rate	The estimated proportion of all eligible cases in which some responsible housing unit member was reached.	(A + B + E)/[A + B + C + E + ((1-D%)*F)]
Cooperation rate	The proportion of all cases interviewed of all eligible units ever contacted.	(A)/(A + B + E)
Refusal rate	The estimated proportion of all cases interviewed of all eligible units ever contacted.	B/[A + (B + C + E) + ((1-D%)*F)]
Ineligibility rate	The proportion of contacted cases found to be ineligible	D/(A+B+D+E)
Response rate	The number of complete interviews with reporting units divided by the estimated number of eligible reporting units in the sample.	A/[A + B + C + E + ((1-D%)*F)]

*Adapted from AAPOR, 2011.

Using the number of completed and partially completed interviews (Table 3-6), we calculated five completion rates for data collection for each type of demonstration project: (1) contact rate, (2) cooperation rate, (3) refusal rate, (4) ineligibility rate, and (5) response rate (Table 3-7). Contact rates are the estimated proportion of all eligible cases in which some responsible housing unit member was reached. Cooperation rates are the proportion of all cases interviewed of all eligible units ever contacted. Refusal rates are the proportion of all cases in which a housing unit or the respondent refuses to be interviewed, or breaks off of an interview, of all potentially eligible cases. Ineligibility rates are the proportion of contacted cases found to be ineligible. Response rates are the number of complete interviews with reporting units divided by the number of eligible reporting units in the sample. All definitions and formulas in this study include partial completes in the numerator. Formulas for the contact, refusal and response rates include the estimated number of eligible cases among the unknown cases (1-D%) and also include no contacts, ineligibles, other disposition codes, and undetermined.

3.2.2 Completion Rate Results

Westat completed summer 2011 interviews on September 7, 2011. There were 143 completed Meal Delivery interviews (including partial completes), 136 in English, and seven in Spanish (Table 3-6). The two New York sponsors contributed the most Meal Delivery interviews (80 versus 34 in Delaware and 29 in Massachusetts). There were a total of 525 completed and partially completed interviews for the Backpack demonstration project – 409 (or 77.9 percent) in English and 116 (or

22.1 percent) in Spanish (Table 3-6). About one third of completed and partially completed interviews came from Arizona; Kansas contributed 119 or about 23 percent; and Ohio contributed 229 or 43.6 percent. In fall 2011, 102 and 369 interviews were completed in the Meal Delivery and Backpack demonstration projects, respectively (Table 3-6). Combining the two demonstrations, almost 18 percent were completed in Spanish.

Table 3-6. Number of Completed and Partially Completed Interviews by Language and Type of Demonstration Project

Interview language	Meal Delivery		Backpack		Both demonstrations	
	No.	Percent	No.	Percent	No.	Percent
Summer 2011						
English	136	95.1	409	77.9	545	81.6
Spanish	7	4.9	116	22.1	123	18.4
Total	143	100.0	525	100.0	668	100.0
Fall 2011						
English	97	95.1	291	78.9	388	82.4
Spanish	5	4.9	78	21.1	83	17.6
Total	102	100.0	369	100.0	471	100.0

Cooperation rates in the summer were just over 90 percent for both types of demonstration projects combined (Table 3-7). Even though only limited followup of non-respondents could take place due to closure of many site operations, the Backpack demonstration project nevertheless achieved a response rate of 70.6 percent. The response rate for the Meal Delivery demonstration was 64.6 percent. The overall response rate was 69.2 percent. The refusal rate for the Meal Delivery, Backpack, and both demonstration projects combined was 7.2 percent, 6.2 percent, and 6.4 percent, respectively.

Table 3-7. Completion Rates by Demonstration Type – Summer and Fall 2011 Data Collection

Completion rate	Meal Delivery (%)	Backpack (%)	Both demonstrations (%)
Summer 2011			
Contact rate	75.4	81.1	79.8
Cooperation rate	85.6	90.2	90.8
Refusal rate	7.2	6.2	6.4
Ineligibility rate	6.7	3.1	3.9
Response rate	64.6	70.6	69.2
Fall 2011			
Contact rate	86.4	87.3	87.1
Cooperation rate	90.3	87.0	87.7
Ineligibility rate	2.6	5.6	5.0
Refusal rate	3.1	6.0	5.4
Response rate	78.0	76.0	76.4

Fall data collection consisted of re-contacting those respondents who were interviewed in the summer and had completed at least the food security module. The re-contact rate was 87.1 percent for both demonstrations combined (Table 3-7). Among those who were re-contacted, cooperation was high – 90.3 percent, 87.0 percent, and 87.7 percent for Meal Delivery, Backpack, and both demonstrations, respectively. Refusal rates were low – 3.1 percent, 6.0 percent, and 5.4 percent. The response rate for the Meal Delivery sample in fall 2011 was 78.0 percent, 76.0 percent for the Backpack sample, and 76.4 percent for both demonstration projects combined.

3.3 Analytic Samples

Parents or caregivers who were respondents to the household questionnaire reported for the entire household, including all individuals living in the household and/or participating in the demonstration projects, in addition to reporting information on themselves. Some data analyses presented in this report includes information on respondents (e.g., demographic characteristics and their satisfaction with and perceptions of the demonstration project), while other analyses target project participants (often more than one per household). Finally, in a few cases, data are reported for all household members. Thus, the number of individuals contained in each analysis varies, depending upon the variable of interest and nature of the analysis.

Table 3-8 shows the number of households and participants included in the various analyses presented in this report. In summer 2011, there were 688 completed interviews representing 688 households. However, 24 households contained no person who brought home a meal or backpack in summer 2011; these households (representing 51 individuals) were eliminated from the analytic sample. In the fall, 15 households representing 30 individuals were eliminated for the same reason.

Table 3-8. Description of Analytic Samples

	Summer		Fall	
	Households	Project participants	Households	Project participants
Complete and partially complete interviews	668	1,502	471	1,033
Interviews eliminated because no person in the household received a meal or backpack in summer 2011	24	51	15	30
Interviews used	644	1,451	456	1,003
Participant data eliminated because the individual did not receive at least one meal or backpack in summer 2011 (other household member did)	–	37	–	16
Participant data used		1,414		987

The remaining 644 household interviews were included in all household-level data analysis (e.g., household food security). However, some participants in these households never actually brought home at least one meal or backpack in summer 2011. Data for these participants (37 in summer 2011 and 16 in fall 2011) were excluded from data analyses for participants (e.g., food consumption). Thus, 1,414 summer demonstration project participants were included in participant-level data analysis; 987 of these participants had fall interviews and were included in data analysis for fall 2011.

3.4 Site Characteristics

3.4.1 Weeks of Operation

The great majority of sites (90 percent) operated for at least 5 weeks, with 45 percent operating for 8 weeks or more (Table 3-9). Sites in the Meal Delivery demonstration project tended to operate for longer periods, with 72 percent operating for more than 8 weeks, while about 51 percent of Backpack demonstration sites operated for 5 to 8 weeks.

3.4.2 Geographic Distribution

Meal delivery sites operated in States in the Northeast (Massachusetts and New York) and Mid-Atlantic (Delaware) regions, while the Backpack demonstration sites operated in the Midwest (Kansas and Ohio) and Southwest (Arizona) (Table 3-9). As will be discussed in the next section, this geographic distribution results in contrasting demographic characteristics between the two types

of demonstration projects. The majority of Meal Delivery sites (about 56 percent) operated in New York State, while a majority of Backpack sites (50.9 percent) operated in Ohio.

Table 3-9. Demonstration Site Characteristics*

Characteristics	Meal Delivery		Backpack		Total		p-value of difference between MD and BP
	Number	Pct	Number	Pct	Number	Pct	
Duration of site operation							
4 weeks or less	0	0.0	7	13.2	7	9.9	0.0240
5 to 8 weeks	5	27.8	27	50.9	32	45.1	
More than 8 weeks	13	72.2	19	35.8	32	45.1	
Total	18	100.0	53	100.0	71	100.1**	
Location of demonstration site							
Arizona			12	22.6	12	16.9	
Delaware	5	27.8			5	7.0	
Kansas			14	26.4	14	19.7	
Massachusetts	3	16.7			3	4.2	
New York	10	55.6			10	14.1	
Ohio			27	50.9	27	38.0	
Total	18	100.0	53	100.0	71	100.0	

* Pertains only to sites of parents/caregivers who were interviewed.

** Does not equal 100 due to rounding.

3.5 Description of Sample

In this section we describe and compare the participant, respondent, and household characteristics of the Meal Delivery and Backpack sample that completed interviews in summer 2011 (Table 3-10). Characteristics of the sample that completed interviews in fall 2011 are contained in Appendix H.

Table 3-10 also reports various demographic characteristics and how they vary between the two demonstration projects. The two sets of demonstration project participants were similar in terms of participant and respondent gender, respondent age, and household size. However, age of demonstration project participants differed between the demonstration projects ($p < 0.0001$), with Backpack participants being somewhat younger, while Meal Delivery participants were more likely to have a household member who had difficulties with daily activities ($p = 0.0051$). The latter is consistent with the higher percentage of Meal Delivery respondents who reported being unable to work (19 percent versus 9 percent; $p = 0.0033$ for differences in employment status).

Table 3-10. Characteristics of Participants in Demonstration Projects, Respondents, and Household

Characteristics	Meal Delivery n	Meal Delivery pct	Backpack n	Backpack pct	Total n	Total pct	p-value of difference between MD* and BP*
Participant gender							
Female	166	53.4	537	48.7	703	49.7	0.2394
Male	145	46.6	566	51.3	711	50.3	
Total	311	100.0	1103	100.0	1414	100.0	
Participant age distribution							
18 years or older	8	2.6	9	0.8	17	1.2	<0.0001
12-17 years old	90	28.9	183	16.6	273	19.3	
8-11 years old	95	30.5	334	30.3	429	30.3	
5-7 years old	90	28.9	354	32.1	444	31.4	
Under 5 years old	28	9.0	223	20.2	251	17.8	
Total	311	100.0	1103	100.0	1414	100.0	
Respondent gender							
Male	9	6.5	27	5.5	36	5.7	0.6805
Female	130	93.5	461	94.5	591	94.3	
Total	139	100.0	488	100.0	627	100.0	
Respondent race/ethnicity							
Hispanic	12	8.7	162	33.3	174	27.8	<0.0001
Non-Hispanic Black	23	16.7	58	11.9	81	13.0	
Non-Hispanic White	95	68.8	230	47.2	325	52.0	
Other Race/Ethnicity	8	5.8	37	7.6	45	7.2	
Total	138	100.0	487	100.0	625	100.0	
Respondent–languages spoken at home							
English only	120	86.3	310	63.5	430	68.6	<0.0001
Spanish only	.	.	36	7.4	36	5.7	
Some other language only	2	1.4	2	0.4	4	0.6	
English and Spanish	10	7.2	118	24.2	128	20.4	
English and some other language	6	4.3	20	4.1	26	4.1	
English, Spanish, and some other language	1	0.7	2	0.4	3	0.5	
Total	139	100.0	488	100.0	627	100.0	
Respondent–marital status							
Married	54	39.1	266	54.5	320	51.1	0.0227
Not married but living with a partner	18	13.0	66	13.5	84	13.4	
Widowed	1	0.7	4	0.8	5	0.8	
Divorced	12	8.7	27	5.5	39	6.2	
Separated	14	10.1	30	6.1	44	7.0	
Never married	37	26.8	91	18.6	128	20.4	
Other	2	1.4	4	0.8	6	1.0	
Total	138	100.0	488	100.0	626	100.0	

*MD = Meal Delivery; BP = Backpack

Table 3-10. Characteristics of Participants in Demonstration Projects, Respondents, and Household (continued)

Characteristics	Meal Delivery n	Meal Delivery pct	Backpack n	Backpack pct	Total n	Total pct	p-value of difference between MD and BP
Respondent education							
Never attended/kindergarten only	.	.	4	0.8	4	0.6	0.0002
Elementary/Middle school (Grades 1-8)	5	3.6	49	10.1	54	8.7	
Some high school (Grades 9 through 11)	24	17.4	70	14.4	94	15.1	
High school graduate (Grade 12 or GED)	66	47.8	164	33.8	230	36.9	
Some college or technical school (College 1 to 3 years)	36	26.1	121	24.9	157	25.2	
College graduate (College 4 years or more)	7	5.1	77	15.9	84	13.5	
Total	138	100.0	485	100.0	623	100.0	
Respondent age							
20-25 years old	17	11.9	65	13.0	82	12.7	0.2678
26-30 years old	34	23.8	94	18.8	128	19.9	
31-35 years old	29	20.3	126	25.1	155	24.1	
36-40 years old	21	14.7	101	20.2	122	18.9	
41-50 years old	28	19.6	80	16.0	108	16.8	
51-80 years old	14	9.8	35	7.0	49	7.6	
Total	143	100.0	501	100.0	644	100.0	
Respondent employment status							
Employed	49	35.5	156	32.2	205	33.0	0.0033
Self-employed	6	4.3	16	3.3	22	3.5	
Out of work for more than 1 year	14	10.1	54	11.2	68	10.9	
Out of work for less than 1 year	13	9.4	37	7.6	50	8.0	
Homemaker	22	15.9	152	31.4	174	28.0	
Student	6	4.3	19	3.9	25	4.0	
Retired	2	1.4	5	1.0	7	1.1	
Unable to work	26	18.8	45	9.3	71	11.4	
Total	138	100.0	484	100.0	622	100.0	
Households by location of demonstration site							
Arizona	.	.	169	33.7	169	26.2	-
Delaware	34	23.8	.	.	34	5.3	
Kansas	.	.	116	23.2	116	18.0	
Massachusetts	29	20.3	.	.	29	4.5	
New York	80	55.9	.	.	80	12.4	
Ohio	.	.	216	43.1	216	33.5	
Total	143	100.0	501	100.0	644	100.0	
Household participation in other nutrition assistance programs							
Did not participate in any programs	3	2.1	84	17.2	87	13.8	<0.0001
Participated in only one program	32	22.9	129	26.4	161	25.6	
Participated in two programs	79	56.4	195	39.9	274	43.6	
Participated in three or more programs	26	18.6	81	16.6	107	17.0	
Total	140	100.0	489	100.0	629	100.0	

Table 3-10. Characteristics of Participants in Demonstration Projects, Respondents, and Household (continued)

Characteristics	Meal Delivery		Backpack		Total		p-value of difference between MD and BP
	Number	Pct	Number	Pct	Number	Pct	
Household size							
1 to 3 persons	46	32.4	130	26.2	176	27.6	0.3295
4 persons	35	24.6	119	24.0	154	24.1	
5 persons	29	20.4	134	27.0	163	25.5	
6 or more persons	32	22.5	113	22.8	145	22.7	
Total	142	100.0	496	100.0	638	100.0	
Household age distribution among all household members							
65 years or older	11	1.8	16	0.7	27	0.9	0.0047
18-64 years old	247	39.6	955	42.4	1202	41.8	
5-17 years old	294	47.1	949	42.1	1243	43.2	
Under 5 years old	72	11.5	334	14.8	406	14.1	
Total	624	100.0	2254	100.0	2878	100.0	
Household members with difficulty in daily activities							
Yes	43	30.3	93	18.8	136	21.4	0.0051
No	99	69.7	402	81.2	501	78.6	
Total	142	100.0	495	100.0	637	100.0	
Distribution of employment status among persons in household other than respondent (18 and older)							
Full-time	49	39.5	280	55.2	329	52.1	0.0028
Part-time	16	12.9	66	13.0	82	13.0	
Not employed	59	47.6	161	31.8	220	34.9	
Total	124	100.0	507	100.0	631	100.0	
Annual household income							
Less than $10,000	28	21.2	98	20.9	126	21.0	0.0068
$10,000 up to $15,000	14	10.6	62	13.2	76	12.6	
$15,000 up to $20,000	36	27.3	78	16.6	114	19.0	
$20,000 up to $25,000	29	22.0	86	18.3	115	19.1	
$25,000 up to $35,000	16	12.1	62	13.2	78	13.0	
$35,000 or more	9	6.8	83	17.7	92	15.3	
Total	132	100.0	469	100.0	601	100.0	
Households by poverty threshold*							
Less than 100% poverty threshold	92	69.7	291	62.0	383	63.7	0.0002
At 100% poverty threshold or less than 130% poverty threshold	24	18.2	54	11.5	78	13.0	
At 130% poverty threshold or less than 185% poverty threshold	13	9.8	65	13.9	78	13.0	
Equal to or greater than 185% poverty threshold	3	2.3	59	12.6	62	10.3	
Total	132	100.0	469	100.0	601	100.0	

* Households by poverty threshold were calculated by looking up the number of adults and children in the household reported by the respondent in the table of "Poverty thresholds by Size of Family and Number of Children" from the U.S. Census Bureau (http://www.census.gov/hhes/www/poverty/data/threshld/index.html) to find the 100% poverty threshold for that household. That value was multiplied by 1.3 and 1.85 to find the other two thresholds. Then the midpoint of the household income range reported by the respondent was compared to each of those values to determine the category into which it fell in the table.

Backpack households also reported more members who were employed and more frequently reported income of $35,000 or more. There were more Hispanic households in the Backpack demonstration project, with 33 percent Hispanic respondents versus 9 percent in the Meal Delivery demonstration. Similarly, 27 percent of households in the Backpack demonstration spoke Spanish (either as the only or a supplemental language) versus 8 percent in the Meal Delivery demonstration project ($p < 0.0001$ for differences in both race/ethnicity and languages spoken at home). Participants in both Meal Delivery and Backpack demonstration projects reported frequent use of other nutrition assistance programs, with the school lunch and SNAP programs being the most common, followed by the WIC program. Again, there were differences between the Meal Delivery and Backpack demonstration projects, with the former reporting more use of both the school lunch program and SNAP. Overall, about 98 percent of Meal Delivery subjects and about 83 percent of Backpack subjects participated in one or more nutrition assistance programs ($p < 0.0001$).

It is important to note these differences in demographics. As we will see in later chapters, food security and other study outcomes are strongly associated with socio-economic characteristics such as income, employment, and education. Demographic differences between the study participants make it difficult to interpret differences between the two types of demonstration projects.

Results for Household Questionnaire 4

4.1 Overview of Data Analysis

Analysis of the household questionnaire consisted of an examination of demonstration project site characteristics (described in Chapter 3), participation in the demonstration projects and other summer nutrition assistance programs, perception of food expenditures, food consumption and targeting accuracy, and household food security. We also examined a variety of indicators on satisfaction with the demonstration projects. Findings from this analysis are described below.

4.2 Participation in Demonstration Projects

We expected there to be variation in the extent to which children participated in the demonstration projects throughout the summer. First, the demonstration projects themselves varied in when and how long they were open and providing food. Since site operation was often linked to the length of summer programs (e.g., vacation Bible School Week or summer school operation), site operation ranged from as little as eight days in the case of one Backpack demonstration site in Ohio to 82 days in the case of another Backpack site in Ohio. (See Section 3.4 and Appendix C for details.)

In addition to the number of days each site was open, children varied in the extent to which they received food from the demonstration projects. For households participating in the Backpack demonstration, we calculated a participation variable based on the number of backpacks reported to have been received, the number of children in the household, and the number of weeks of demonstration project operation. (Participation in the Backpack demonstration project was defined as bringing home at least one backpack.) The Meal Delivery questionnaire did not ascertain the number of times meals were picked up or delivered. However, it did ask about the frequency of meal delivery for home delivered meals and whether meals were not picked up on one or more occasions for meals delivered to a drop-off site.[34]

[34]The questionnaire for 2012 data collection has been changed to ascertain the frequency in which meals were picked up or delivered.

4.2.1 Participation in Meal Delivery Demonstration

The Meal Delivery questionnaire contained specific questions related only to the Meal Delivery demonstration project. Based on these questions, it was found that 13.3 percent of project participants received their meal at home, whereas meals were picked up at a drop-off center by 86.7 percent (Table 4-1). About half reported that the meals were not picked up at some time. Reasons provided most often were that the timing of pickup was not convenient (29.0 percent), there was no transportation (16.1 percent), they forgot (16.1 percent), and they were on vacation or out of town (16.1 percent) (Table 4-1).

Table 4-1. Description of Meal Delivery Demonstration Projects

Descriptive Characteristics	Number	Pct
Type of meal delivery		
At home	19	13.3
Drop-off site	124	86.7
Total	143	100.0
Meals ever not picked up?		
Yes	62	50.4
No	61	49.6
Total	123	100.0
Reason meals ever not picked up?		
Timing of pickup not convenient	18	29.0
No transportation	10	16.1
Forgot	10	16.1
On vacation or out-of-town	10	16.1
Long wait for pickup	6	9.7
Doctor appointment conflicted or delayed	5	8.1
Medical emergency/hospitalized/sick	4	6.5
Work schedule conflicted	4	6.5
Confused about start date or site location	3	4.8
Too long to get to site	2	3.2
Arrived late	2	3.2
Family issues	2	3.2

4.2.2 Participation in Backpack Demonstration

Participants in the Backpack demonstration project also did not always participate fully. Table 4-2 shows the frequency of receiving backpacks for demonstration project participants. This measure was calculated by dividing the number of backpacks reported to have been brought home by the number of children in the household and the number of weeks the demonstration project was in operation (see methods in Chapter 2 for further detail). We also calculated the number of backpacks

per household per week of operation (Table 4-2). The two measures are similar and give similar results. However, it was necessary to calculate backpacks per household per week of operation for analyses based on households (such as the covariate analysis reported in Table 4-3).

About 37 percent of households reported one or more backpacks per child per week, indicating maximal demonstration project participation, while about 24 percent reported frequent participation (an average of three-fourths to one backpack per child per week). Thus, about 61 percent of households[35] reported 75 percent or better participation in terms of the number of backpacks per child per week brought home. At the household level, 58.0 percent[36] reported 75 percent or better participation. As noted above, both measures give similar results.

Table 4-2. Frequency of Receiving Backpacks, Calculated for Individual Participants and Households

	Participants*		Households**	
Frequency of receiving backpacks	Number	Pct	Number	Pct
1 or more backpacks per child per week	397	37.0	169	34.5
At least 0.75 but less than 1 backpack	260	24.3	115	23.5
At least 0.50 but less than 0.75 backpack	198	18.5	95	19.4
At least 0.25 but less than 0.50 backpack	141	13.2	74	15.1
Fewer than 0.25 backpack	76	7.1	37	7.5
Total	1,072	100.1***	490	100.0

* Average number of backpacks per child per week of demonstration project operation.

** Average number of backpacks per household per week of demonstration project.

***Does not equal 100.0 due to rounding.

Table 4-3 shows how backpack frequency varies with covariates. Participation in the Backpack demonstration project was related to parent satisfaction with the healthiness of the food ($p = 0.0156$), the variety of the food ($p = 0.0280$), the convenience of the food ($p = 0.0422$), and the fact that members of the household liked the food ($p = 0.0037$). Participation also appeared to vary somewhat by whether the household participated in another nutrition assistance program in addition to the demonstration project (e.g., participation in the Supplemental Nutrition Assistance Program [SNAP] was associated with more Backpack participation), employment status (more Backpack participation for those out of work or unable to work), income (more Backpack participation for those with lower income), and household poverty level.

[35] 37.0 percent + 24.3 percent = about 61 percent

[36] 34.5 percent + 23.5 percent = 58.0 percent

We fit a multivariate logistic regression model using the predictors listed above that were significantly associated with backpack frequency. However, a number of these characteristics have associations among themselves; for example, both SNAP participation and employment are associated with low income. No two predictors were significant when considered together in the same model, probably due in part to the associations between the predictors. We did not consider

Table 4-3. Participation by Covariate

	Backpacks per child per week of demonstration project operation*											
	Fewer than 0.25		0.25 up to 0.50		0.50 up to 0.75		0.75 up to 1		1 or more		Total	
Covariates	n	pct	n	pct	n	pct	n	pct	n	pct	n	p-value
Overall	37	7.5	74	15.1	95	19.4	115	23.5	169	34.5	490	.
Participation in other nutrition assistance programs												
Did not participate in any programs	10	11.9	14	16.7	17	20.2	20	23.8	23	27.4	84	0.0880
Participated in only one program	9	7.2	19	15.2	27	21.6	28	22.4	42	33.6	125	.
Participated in two programs	14	7.4	24	12.6	39	20.5	52	27.4	61	32.1	190	.
Participated in three or more programs	2	2.5	12	15.0	11	13.8	13	16.3	42	52.5	80	.
Perception of change in food expenditure–summer versus fall												
Same in summer as fall	15	10.2	21	14.3	24	16.3	26	17.7	61	41.5	147	0.1163
More in summer	18	7.3	37	14.9	51	20.6	60	24.2	82	33.1	248	.
Less in summer	2	2.5	10	12.3	18	22.2	26	32.1	25	30.9	81	.
Perception of change in food expenditure–less due to summer food program**												
Agree strongly	5	3.4	16	10.9	36	24.5	36	24.5	54	36.7	147	0.2523
Agree	15	7.0	33	15.3	38	17.7	49	22.8	80	37.2	215	.
Neither agree nor disagree	6	12.2	7	14.3	9	18.4	13	26.5	14	28.6	49	.
Disagree/ Disagree strongly	9	13.6	12	18.2	11	16.7	14	21.2	20	30.3	66	.
Participant age												
18 years or older	.	0.0	.	0.0	2	66.7	1	33.3	.	0.0	3	0.3195
12-17 years old	5	10.0	5	10.0	15	30.0	14	28.0	11	22.0	50	.
8-11 years old	14	8.5	20	12.1	30	18.2	37	22.4	64	38.8	165	.
5-7 years old	12	6.1	37	18.9	33	16.8	48	24.5	66	33.7	196	.
Under 5 years old	6	7.9	12	15.8	15	19.7	15	19.7	28	36.8	76	.
Participant gender												
Male only	12	8.1	29	19.5	30	20.1	27	18.1	51	34.2	149	0.5748
Female only	10	7.5	20	14.9	25	18.7	31	23.1	48	35.8	134	.
Both male and female	15	7.2	25	12.1	40	19.3	57	27.5	70	33.8	207	.
Languages spoken at home												
English only	22	7.2	41	13.4	64	21.0	72	23.6	106	34.8	305	0.9522
Spanish only or Other language only	4	10.5	6	15.8	6	15.8	7	18.4	15	39.5	38	.
Others	9	6.7	21	15.6	24	17.8	34	25.2	47	34.8	135	.

*Backpacks per child were calculated at the household level for this analysis.

**The question in the questionnaire read "Because the people in my household participated in the summer food program, I spent less money on food during the summer months than if s/he/they had not particpated in the program. Do you … (1) Agree strongly, (2) Agree, (3) Neither agree nor disagree, (4) Disagree, or (5) Disagree strongly?" This question was revised for summer 2012 data collection to be more specific to the demonstration project.

Table 4-3. Participation by Covariate (continued)

Covariates	Backpacks per child per week of demonstration project operation*											
	Fewer than 0.25		0.25 up to 0.50		0.50 up to 0.75		0.75 up to 1		1 or more		Total	
	n	pct	n	pct	n	pct	n	pct	n	pct	n	p-value
Respondent–marital status												
Married	19	7.3	44	16.8	58	22.1	63	24.0	78	29.8	262	0.2828
Not married but living with a partner	6	9.5	10	15.9	6	9.5	15	23.8	26	41.3	63	.
Never married	6	6.7	9	10.0	18	20.0	20	22.2	37	41.1	90	.
Widowed/ Divorced/ Separated/ Other	4	6.3	5	7.9	12	19.0	15	23.8	27	42.9	63	.
Respondent–education												
Not a high school graduate (11th grade or less)	8	6.8	17	14.4	21	17.8	26	22.0	46	39.0	118	0.8226
High school graduate (Grade 12 or GED)	11	6.7	21	12.9	30	18.4	37	22.7	64	39.3	163	.
Some college or technical school (College 1 to 3 years)	8	6.7	18	15.1	26	21.8	32	26.9	35	29.4	119	.
College graduate (College 4 years or more)	8	10.7	12	16.0	17	22.7	18	24.0	20	26.7	75	.
Respondent employment status												
Employed/Self-employed	17	10.0	22	12.9	44	25.9	43	25.3	44	25.9	170	0.0551
Out of work	4	4.5	14	15.7	12	13.5	22	24.7	37	41.6	89	.
Homemaker	8	5.4	23	15.6	28	19.0	36	24.5	52	35.4	147	.
Student/Retired/Unable to work	6	8.8	9	13.2	9	13.2	11	16.2	33	48.5	68	.
Annual household income												
Less than $10,000	4	4.3	13	14.0	16	17.2	16	17.2	44	47.3	93	0.0339
$10,000 up to $15,000	6	9.7	9	14.5	8	12.9	14	22.6	25	40.3	62	.
$15,000 up to $20,000	3	3.9	13	16.9	10	13.0	16	20.8	35	45.5	77	.
$20,000 up to $25,000	7	8.3	11	13.1	24	28.6	20	23.8	22	26.2	84	.
$25,000 up to $35,000	4	6.7	5	8.3	17	28.3	19	31.7	15	25.0	60	.
$35,000 or more	10	12.0	14	16.9	18	21.7	20	24.1	21	25.3	83	.
Households by poverty threshold												
Less than 100% poverty threshold	15	5.3	43	15.2	50	17.7	57	20.2	117	41.5	282	0.0187
Less than 130% poverty threshold	5	9.3	3	5.6	14	25.9	17	31.5	15	27.8	54	.
Less than 185% poverty threshold	6	9.4	12	18.8	16	25.0	15	23.4	15	23.4	64	.
Greater than or equal to 185% poverty threshold	8	13.6	7	11.9	13	22.0	16	27.1	15	25.4	59	.

*Backpacks per child were calculated at the household level for this analysis

Table 4-3. Participation by Covariate (continued)

Covariates	Backpacks per child per week of demonstration project operation*											
	Fewer than 0.25		0.25 up to 0.50		0.50 up to 0.75		0.75 up to 1		1 or more		Total	
	n	pct	n	pct	n	pct	n	pct	n	pct	n	p-value
Parent satisfaction with healthiness of food												
Very healthy	20	5.6	53	14.8	64	17.9	94	26.3	127	35.5	358	0.0156
Somewhat healthy/Not at all healthy**	16	12.4	20	15.5	31	24.0	21	16.3	41	31.8	129	.
Parent satisfaction with variety of food												
Agree strongly	15	6.9	27	12.4	33	15.2	52	24.0	90	41.5	217	0.0280
Agree	21	8.7	37	15.3	55	22.7	59	24.4	70	28.9	242	.
Neither agree nor disagree/ Disagree/ Disagree strongly	.	0.0	8	29.6	7	25.9	4	14.8	8	29.6	27	.
Parent satisfaction with convenience of food												
Agree strongly	21	7.5	42	15.0	46	16.4	65	23.2	106	37.9	280	0.0422
Agree	15	7.8	25	13.0	44	22.9	46	24.0	62	32.3	192	.
Neither agree nor disagree/ Disagree/ Disagree strongly	1	7.1	4	28.6	5	35.7	4	28.6	.	0.0	14	.
Parent satisfaction that household members like food												
Agree strongly	11	5.7	25	13.0	32	16.6	40	20.7	85	44.0	193	0.0037
Agree	23	8.7	36	13.7	56	21.3	70	26.6	78	29.7	263	.
Neither agree nor disagree/ Disagree/ Disagree strongly	3	10.0	10	33.3	7	23.3	5	16.7	5	16.7	30	.

* Backpacks per child were calculated at the household level for this analysis.

** Because only 2 of 624 respondents said the food was "not at all healthy" (see Table 4-11), we combined the last two categories.

interactions in the model. After reviewing various possible models, it appeared that SNAP participation was the single best predictor of backpack frequency (regression results not shown).

4.2.3 Overall Participation in the Demonstration Programs

It is difficult to make precise comparisons of participation in the demonstration projects due to differences between projects and how participation was measured. However, participation appears to have been roughly similar in the two demonstrations. About 50 percent of Meal Delivery participants who picked up meals from drop-off sites missed at least one meal. Similarly, about 63 percent of Backpack participants picked up less than one backpack per week.

4.3 Perception of Food Expenditures

The household questionnaire included two questions on the respondent's perception of the amount of money spent on food (Exhibit 4-1). First, respondents were asked to compare the amount spent on food during the school year and in the summer. Next they were asked to indicate the extent to which they agreed or disagreed with a statement that they spent less money on food during the summer months than if they had not participated in the summer program.

Exhibit 4-1. Questions on Food Expenditures

Compared with the amount of money you spend on food each month during the school year, would you say you spend:

- **The same amount on food in the summer months**
- **More on food in the summer months**
- **Less on food in the summer months**
- **REFUSED**
- **DON'T KNOW**

Because the people in my household participated in the summer food program, I spent less money on food during the summer months than if s/he/they had not particpated in the program. Do you

- **Agree strongly**
- **Agree**
- **Neither agree nor disagree**
- **Disagree**
- **Disagree strongly**
- **REFUSED**
- **DON'T KNOW**

For both demonstration projects combined, respondents reported higher food expenditures in the summer compared to the fall (52.7 percent) (Table 4-4). More than 75 percent of households in both demonstration projects reported that summer food expenditures were reduced because of the intervention demonstration projects.

Table 4-4. Perception of Food Expenditures

Perception of food expenditure	Meal Delivery n	Meal Delivery pct*	Backpack n	Backpack pct*	Total n	Total pct*	p-value of difference between MD** and BP**
Summer versus fall							
Same in summer as fall	38	27.5	150	30.9	188	30.1	0.7382
More in summer	75	54.3	254	52.3	329	52.7	
Less in summer	25	18.1	82	16.9	107	17.1	
Total	138	99.9	486	100.1	624	99.9	
Less due to summer food program							
Agree strongly	47	34.1	149	30.6	196	31.4	0.4468
Agree	64	46.4	220	45.2	284	45.4	
Neither agree nor disagree	15	10.9	51	10.5	66	10.6	
Disagree	8	5.8	54	11.1	62	9.9	
Disagree strongly	4	2.9	13	2.7	17	2.7	
Total	138	100.1	487	100.1	625	100.0	

* Some percentages do not add up to 100.0 due to rounding.

**MD = Meal Delivery; BP = Backpack

4.4 Food Consumption and Targeting Accuracy

Food consumption and targeting accuracy are related concepts. How much children are eating of the food they receive from the demonstration projects may be associated with where it is stored. Moreover, how much is consumed can be the mirror image of the extent to which it is shared with others.

A major part of the survey consisted of reporting on foods that had been received as part of the demonstration projects. We asked respondents to list the food items contained in the most recent meal delivery or backpack provided by the demonstration project to each child in the household, and then to indicate where each food was stored, the extent to which it was eaten or shared, and, if shared, with whom.

Note that all foods in the last backpack or delivered meal were reported for all 1,414 participants. A given meal could contain multiple food items of the same type. Thus, for example, "milk" was reported 1,400 times, fruit was reported 1,462 times, and so forth (Table 4-5a). The analysis unit for the data reported in this section (the "n" given in the tables) consisted of the individual reports of food, such as reports of milk, fruit, or vegetable food items. See Chapter 2 for more discussion.

Table 4-5a. Food Storage by Demonstration Project Participants

Food item	Total items reported	How stored							
		Refrigerator		Pantry		Counter		Other	
		n	pct (95% CI)*	n	pct (95% CI)*	n	pct (95% CI)*	n	pct (95% CI)*
Milk	1,400	1,337	95.5 (93.3, 97.2)	91	6.5 (4.5, 9.1)	20	1.4 (0.6, 2.7)	7	0.5 (-, -)
Fruit	1,462	1,055	72.2 (67.4, 76.6)	174	11.9 (9.2, 15.1)	317	21.7 (17.5, 26.4)	13	0.9 (0.3, 2.1)
Juice	838	776	92.7 (88.7, 95.6)	51	6.1 (3.2, 10.4)	11	1.3 (0.5, 2.7)	7	0.8 (-, -)
Vegetables	1,075	839	78.0 (73.0, 82.6)	226	21.0 (16.5, 26.1)	17	1.6 (0.7, 3.1)	1	0.1 (-, -)
Bread/grain	1,385	294	21.2 (17.6, 25.3)	850	61.4 (56.6, 66.0)	211	15.2 (12.1, 18.9)	13	0.9 (0.3, 2.1)
Meat	356	105	29.5 (21.6, 38.4)	221	62.1 (52.9, 70.7)	10	2.8 (0.6, 7.6)	6	1.7 (-, -)
Meat alternative[1]	632	395	62.5 (54.4, 70.1)	173	27.4 (20.5, 35.1)	46	7.3 (4.1, 11.8)	9	1.4 (-, -)
Mixed foods	2,129	814	38.2 (33.9, 42.7)	1,067	50.1 (45.5, 54.8)	209	9.8 (7.7, 12.3)	16	0.8 (0.3, 1.5)
Fruit, bread/grain[2]	11	4	36.4 (-, -)	1	9.1 (-, -)	7	63.6 (-, -)	0	0.0 (-, -)
Milk, juice, bread/grain[3]	7	5	71.4 (-, -)	3	42.9 (-, -)	0	0.0 (-, -)	0	0.0 (-, -)
Bread/grain, meat alternative[4]	340	150	44.1 (35.3, 53.2)	154	45.3 (36.5, 54.3)	37	10.9 (6.9, 16.1)	0	0.0 (-, -)
Meat, meat alternative[5]	80	12	15.0 (5.6, 30.2)	67	83.8 (68.8, 93.4)	1	1.3 (-, -)	0	0.0 (-, -)
Bread/grain, meat[6]	146	117	80.1 (66.4, 90.1)	29	19.9 (9.7, 34.1)	0	0.0 (-, -)	1	0.7 (-, -)
Bread/grain, meat, meat alternative[7]	44	44	100.0 (-, -)	0	0.0 (-, -)	0	0.0 (-, -)	0	0.0 (-, -)
Vegetables, bread/grain, meat, meat alternative[8]	318	157	49.4 (40.1, 58.7)	148	46.5 (37.4, 55.9)	8	2.5 (-, -)	0	0.0 (-, -)
Vegetables, bread/grain, meat[9]	162	19	11.7 (5.2, 21.8)	145	89.5 (81.9, 94.7)	2	1.2 (-, -)	0	0.0 (-, -)
Vegetables, meat[10]	46	3	6.5 (-, -)	42	91.3 (73.3, 98.7)	2	4.3 (-, -)	0	0.0 (-, -)

* The confidence interval (CI) was set to a blank if the cell frequency is fewer than 10 or the standard error of percentage is zero.

Table 4-5a. Food Storage by Demonstration Project Participants (continued)

Food item	Total items reported	How stored: Refrigerator n	Refrigerator pct (95% CI)*	Pantry n	Pantry pct (95% CI)*	Counter n	Counter pct (95% CI)*	Other n	Other pct (95% CI)*
Vegetables, meat, meat alternative[11]	25	1	4.0 (-, -)	20	80.0 (42.2, 97.9)	6	24.0 (-, -)	0	0.0 (-, -)
Fruit/juice dessert/snack[12]	157	29	18.5 (9.0, 31.9)	102	65.0 (51.8, 76.7)	14	8.9 (4.0, 16.6)	2	1.3 (-, -)
Dessert or snack[13]	793	273	34.4 (28.0, 41.3)	356	44.9 (38.2, 51.7)	132	16.6 (12.4, 21.6)	13	1.6 (0.6, 3.6)

* The confidence interval (CI) was set to a blank if the cell frequency is fewer than 10 or the standard error of percentage is zero

[1] Meat alternatives' include cheese, eggs, nuts, and legumes

[2] Breakfast bars

[3] Breakfast meals, including milk

[4] Bagels and cheese, cheese and crackers, cheese crackers, mac & cheese, other pasta and cheese, pizza; Burritos, beans & rice, bean tostada; Peanut butter sandwiches (with or without jelly), peanut butter and celery

[5] Baked beans, pork and beans, hot dogs and beans; Beef jerky with cheese, cheese and sausage, chicken salad

[6] Sandwiches with meat, chicken and pasta soup, tuna and crackers

[7] Sandwiches with meat and cheese

[8] Canned meals with cheese (e.g., Chef-Boy-ar-dee, Beef-a-roni), lasagna, ravioli, sandwiches and wraps with meat, cheese, and vegetables, tacos, chef salad

[9] Canned meals without cheese (e.g., Spaghettio's, spaghetti and meatballs, beef stew, soup, pasta bowls)

[10] Beef stew, chicken dinner, shrimp cocktail

[11] Chili (with or without beans)

[12] Sweet desserts with fruit (e.g., fruit pies, fruit cakes, fruit muffins, fruit bars), granola, trail mix

[13] Cookies, sweet crackers, candy, chocolate, muffins, pudding, sweet rolls, jelly, chips, pretzels, crackers

4.4.1 Food Storage

Table 4-5a shows the food items received by study participants, as reported by a parent or caregiver. There are eight major categories: milk, fruit, juice, vegetables, bread/grain, meat, meat alternative (e.g., cheese, eggs, nuts, legumes), and mixed foods. Altogether, there were 9,277 reports of food items, of which the most common were "mixed" (23 percent), fruit (16 percent), milk (15 percent), and bread/grain (15 percent). The "mixed" foods are items that contain more than one of the primary types, such as packaged foods that contain vegetables, cheese, and pasta. The "mixed" food category is further broken down into 10 mutually exclusive groups.

The storage methods vary substantially by food type (Table 4-5a). For example, about 96 percent of milk was stored in a refrigerator (95 percent confidence interval [CI] = 93 percent to 97 percent), while bread/grain items were predominantly stored in a pantry (61 percent; 95 percent CI = 57 percent to 66 percent).

Note that food storage categories are not mutually exclusive. Respondents were asked to identify places where food was stored, and all relevant places were checked by the interviewer. Thus, shelf-stable milk could be stored in a pantry until opened, after which it might be stored in a refrigerator. Bread might be stored in a pantry or on a counter. On the other hand, sometimes food items were not reported as having been stored, and thus were presumably consumed immediately. For example, respondents reported receiving 356 meat food items but reported storing them only 342 times, suggesting that about 4 percent of meat food items were consumed immediately. This also occurred with meat alternatives, bread/grains, and mixed foods.

4.4.2 Food Consumption and Sharing

Table 4-5b shows consumption and food sharing. The percentage of food items that were eaten varied substantially by type of food, with juice having the highest percent for "drank or ate all" (95 percent) and vegetables and meat having the lowest (77 percent and 78 percent, respectively). There was little difference in consumption between demonstration projects, though consumption of milk was slightly higher for Meal Delivery ($p = 0.0400$), and consumption of juice was slightly higher for Backpack ($p = 0.0548$).

Table 4-5b. Food Consumption and Sharing

Food item	Total items reported	Drank or ate all of the food							Shared the food						
		Meal Delivery		Backpack		Total		p-value*	Meal Delivery		Backpack		Total		p-value*
		n	pct	n	pct	n	pct		n	pct	n	pct	n	pct	
Milk	1,400	318	88.3	871	83.8	1,189	84.9	0.0400	77	21.4	231	22.2	308	22.0	0.8247
Fruit	1,462	358	86.5	933	89.0	1,291	88.3	0.1761	68	16.5	296	28.3	364	25.0	<0.0001
Juice	838	123	91.1	671	95.4	794	94.7	0.0548	25	18.5	94	13.4	119	14.2	0.1377
Vegetables	1,075	173	74.9	649	77.0	822	76.5	0.5397	56	24.2	503	59.6	559	52.0	<0.0001
Bread/grain	1,385	324	87.3	897	88.5	1,221	88.2	0.5736	42	11.4	264	26.1	306	22.2	<0.0001
Meat	356	40	74.1	237	78.5	277	77.8	0.4794	14	25.9	115	38.1	129	36.2	0.0930
Meat alternative[1]	632	99	84.6	427	82.9	526	83.2	0.7840	21	17.9	123	23.9	144	22.8	0.1807
Mixed foods	2,129	415	85.4	1,402	85.5	1,817	85.5	0.9416	69	14.2	388	23.6	457	21.5	<0.0001
Detailed breakdown of mixed foods into mutually exclusive groups															
Fruit, bread/grain[2]	11	1	100.0	10	100.0	11	100.0		0	.	1	10.0	1	9.1	-
Milk, juice, bread/grain[3]	7	2	33.3	1	100.0	3	42.9		1	16.7	1	100.0	2	28.6	
Bread/grain, meat alternative[4]	340	70	85.4	229	88.8	299	87.9		19	23.2	54	20.9	73	21.5	
Meat, meat alternative[5]	80	4	66.7	52	70.3	56	70.0		0	.	25	33.8	25	31.3	
Bread/grain, meat[6]	146	80	84.2	35	68.6	115	78.8		8	8.4	13	25.5	21	14.4	
Bread/grain, meat, meat alternative[7]	44	30	85.7	5	62.5	35	81.4		7	19.4	2	25.0	9	20.5	
Vegetables, bread/grain, meat, meat alternative[8]	318	124	87.9	137	77.4	261	82.1		18	12.9	43	24.3	61	19.3	

(table continued)

Table 4-5b. Food Consumption and Sharing (continued)

Food item	Total reported	Drank or ate all: Meal Delivery n	Meal Delivery pct	Backpack n	Backpack pct	Total n	Total pct	p-value	Shared food: Meal Delivery n	Meal Delivery pct	Backpack n	Backpack Pct	Total n	Total pct	p-value
Vegetables, bread/grain, meat[9]	162	9	100.0	117	76.5	126	77.8	-	0	.	53	34.6	53	32.7	-
Vegetables, meat[10]	46	9	100.0	36	78.3	36	78.3		0	.	10	21.7	10	21.7	
Vegetables, meat, meat alternative[11]	25	9	100.0	17	68.0	17	68.0		0	.	6	24.0	6	24.0	
Fruit/juice dessert/snack[1]	157	20	95.2	120	88.2	140	89.2		3	14.3	32	23.5	35	22.3	
Dessert or snack[13]	161	75	83.3	643	91.9	718	90.9		13	14.4	148	21.1	161	20.3	

* P-values test the association between the consumption or sharing of each food item and the type of demonstration project and are only calculated for major food types because there are too many small or empty cells in the detailed "mixed foods" categories.

[1] Meat alternatives' include cheese, eggs, nuts, and legumes

[2] Breakfast bars

[3] Breakfast meals, including milk

[4] Bagels and cheese, cheese and crackers, cheese crackers, mac & cheese, other pasta and cheese, pizza; Burritos, beans & rice, bean tostada; Peanut butter sandwiches (with or without jelly), peanut butter and celery

[5] Baked beans, pork and beans, hot dogs and beans; Beef jerky with cheese, cheese and sausage, chicken salad

[6] Sandwiches with meat, chicken and pasta soup, tuna and crackers

[7] Sandwiches with meat and cheese

[8] Canned meals with cheese (e.g., Chef-Boy-ar-dee, Beef-a-roni), lasagna, ravioli, sandwiches and wraps with meat, cheese, and vegetables, tacos, chef salad

[9] Canned meals without cheese (e.g, Spaghettio's, spaghetti and meatballs, beef stew, soup, pasta bowls)

[10] Beef stew, chicken dinner, shrimp cocktail

[11] Chili (with or without beans)

[12] Sweet desserts with fruit (e.g., fruit pies, fruit cakes, fruit muffins, fruit bars), granola, trail mix

[13] Cookies, sweet crackers, candy, chocolate, muffins, pudding, sweet rolls, jelly, chips, pretzels, crackers

Overall, about 86 percent of all reported food items were reported as consumed completely and 26 percent of items were reported as shared with others.[37] The percent of food items reported as shared ranged from 14 percent to 52 percent, with vegetables being shared the most and juice the least. There were striking differences by type of demonstration project, with more sharing by Backpack participants in every case, and strongly significant differences for fruit, vegetables, bread/grain, and mixed foods ($p < 0.0001$).

Table 4-5c shows how food was shared when it was reported to have been shared with others. Note that since food could be shared simultaneously with more than one person, the percentages in Table 4-5c do not sum to 100 percent.[38] In addition, the calculation of percentages does not include missing values. Moreover, because of the nature of the question, it is possible that a friend outside the household could also be an adult or a participant in the demonstration project.

Food was most frequently shared with another child or with an adult in the household, and less frequently with friends outside the household or pets. In most cases, the ordering for food sharing was (1) a child in the household in the demonstration, (2) adults in the household, (3) a child in the household not in the demonstration, (4) pets, and (5) a friend outside the household. For example, 45 percent of milk items were shared with another child in the household in the demonstration; 35 percent with an adult; 28 percent with a child in the household not in the demonstration; 13 percent with a pet; and 5 percent with friends. Sharing of fruit, bread/grains, and mixed food all followed this ordering. However, there were exceptions, such as vegetables, where 73 percent were shared with an adult; 61 percent with another child in the demonstration; and 16 percent with a child not in the demonstration.

Food sharing is also shown separately for the Meal Delivery and Backpack demonstration projects (Table 4-5d and 4-5e). There were no significant differences with whom the food was shared in the Meal Delivery demonstration project (Table 4-5d). In the Backpack demonstration (Table 4-5e), vegetables were shared most often with other children in the demonstration project and adults in the household, and juice most often with children in the household in the demonstration project.

[37] Some respondents may not have completely understood the question on consumption because some items were reported as both consumed completely and shared. The question on consumption will be clarified in 2012 data collection.

[38] Respondents were asked who the meal or backpack was shared with. Respondents could answer all that applied – children in the household who also get a meal or backpack, children in the household who don't get a meal or backpack, adults in the household, friends, pet, or someone else.

Table 4-5c. Recipient of Shared Food: Meal Delivery and Backpacks Combined

Food item	Total items reported as shared	Shared with whom?									
		Other child in the household				Adults in the household		Friends		Pets/other	
		In demonstration project		Not in demonstration project							
		n	pct	n	pct	n	pct	n	pct	n	pct
Milk	308	138	45.2	84	27.5	107	35.1	14	4.6	39	12.8
Fruit	364	184	51.0	117	32.4	151	41.8	16	4.4	32	8.9
Juice	119	49	41.9	53	45.3	12	10.3	7	6.0	10	8.5
Vegetables	559	339	60.6	88	15.7	407	72.8	9	1.6	31	5.5
Bread/grain	306	136	44.9	88	29.0	122	40.3	10	3.3	35	11.6
Meat	129	69	53.5	18	14.0	73	56.6	3	2.3	5	3.9
Meat alternative[1]	144	84	58.7	21	14.7	57	39.9	6	4.2	13	9.1
Mixed foods	457	185	40.7	110	24.2	166	36.5	33	7.3	52	11.4
p-value*		<0.0001		<0.0001		<0.0001		0.0143		0.0346	
Fruit, bread/grain[2]	1	0	.	0	.	1	100.0	0	.	0	.
Milk, juice, bread/grain[3]	2	0	.	1	50.0	0	.	1	50.0	0	.
Bread/grain, meat alternative[4]	73	28	38.4	19	26.0	27	37.0	4	5.5	5	6.8
Meat, meat alternative[5]	25	9	36.0	0	.	10	40.0	4	16.0	8	32.0
Bread/grain, meat[6]	21	9	42.9	1	4.8	8	38.1	3	14.3	0	.
Bread/grain, meat, meat alternative[7]	9	4	44.4	0	.	4	44.4	0	.	1	11.1
Vegetables, bread/grain, meat, meat alternative[8]	61	27	44.3	23	37.7	19	31.1	5	8.2	3	4.9
Vegetables, bread/grain, meat[9]	53	25	47.2	8	15.1	34	64.2	2	3.8	9	17.0
Vegetables, meat[10]	10	9	90.0	1	10.0	0	.	0	.	0	.
Vegetables, meat, meat alternative[11]	6	0	.	2	33.3	2	33.3	0	.	3	50.0
Fruit/juice dessert/snack[12]	35	9	25.7	7	20.0	16	45.7	4	11.4	4	11.4
Dessert or snack[13]	161	65	40.9	48	30.2	45	28.3	10	6.3	19	11.9

Table 4-5c. Recipient of Shared Food: Meal Delivery and Backpacks Combined (continued)

* P-values test for association between the food types and whether or not food was shared. For example, p = 0.0143 for testing food type by whether food was shared with a friend versus other recipients of sharing. Note that p-values are only calculated for major food types, because there are too many small or empty cells in the "mixed foods" categories.

[1] Meat alternatives' include cheese, eggs, nuts, and legumes

[2] Breakfast bars

[3] Breakfast meals, including milk

[4] Bagels and cheese, cheese and crackers, cheese crackers, mac & cheese, other pasta and cheese, pizza; Burritos, beans & rice, bean tostada; Peanut butter sandwiches (with or without jelly), peanut butter and celery

[5] Baked beans, pork and beans, hot dogs and beans; Beef jerky with cheese, cheese and sausage, chicken salad

[6] Sandwiches with meat, chicken and pasta soup, tuna and crackers

[7] Sandwiches with meat and cheese

[8] Canned meals with cheese (e.g., Chef-Boy-ar-dee, Beef-a-roni), lasagna, ravioli, sandwiches and wraps with meat, cheese, and vegetables, tacos, chef salad

[9] Canned meals without cheese (e.g, Spaghettio's, spaghetti and meatballs, beef stew, soup, pasta bowls)

[10] Beef stew, chicken dinner, shrimp cocktail

[11] Chili (with or without beans)

[12] Sweet desserts with fruit (e.g., fruit pies, fruit cakes, fruit muffins, fruit bars), granola, trail mix

[13] Cookies, sweet crackers, candy, chocolate, muffins, pudding, sweet rolls, jelly, chips, pretzels, crackers

Table 4-5d. Recipient of Shared Food - Meal Delivery Only

Food item	Total items reported as shared	Shared with whom?									
		Other child in the household				Adults in the household		Friends		Pets/other	
		In demonstration project		Not in demonstration project							
		n	pct	n	pct	n	pct	n	pct	n	pct
Milk	77	27	35.5	26	34.2	36	47.4	2	2.6	9	11.8
Fruit	68	23	33.8	22	32.4	27	39.7	3	4.4	11	16.2
Juice	25	3	12.0	11	44.0	7	28.0	1	4.0	5	20.0
Vegetables	56	15	26.8	12	21.4	28	50.0	1	1.8	12	21.4
Bread/grain	42	16	38.1	15	35.7	8	19.0	2	4.8	6	14.3
Meat	14	7	50.0	4	28.6	8	57.1	0	.	0	.
Meat alternative[1]	21	10	47.6	3	14.3	5	23.8	2	9.5	3	14.3
Mixed foods	69	22	31.9	20	29.0	25	36.2	3	4.3	5	7.2
p-value*		0.3607		0.3500		0.1414		—**		—**	
Milk, juice, bread/grain[3]	1	0	.	1	100.0	0	.	0	.	0	.
Bread/grain, meat alternative[4]	19	7	36.8	6	31.6	7	36.8	0	.	1	5.3
Bread/grain, meat[6]	8	3	37.5	1	12.5	1	12.5	3	37.5	0	.
Bread/grain, meat, meat alternative[7]	7	2	28.6	0	.	4	57.1	0	.	1	14.3
Vegetables, bread/grain, meat, meat alternative[8]	18	4	22.2	8	44.4	6	33.3	0	.	1	5.6
Fruit/juice dessert/snack[12]	3	0	.	1	33.3	0	.	0	.	2	66.7
Dessert or snack[13]	13	6	46.2	3	23.1	7	53.8	0	.	0	.

Table 4-5d. Recipient of Shared Food - Meal Delivery Only (continued)

* P-values test for association between the food types and whether or not food was shared. For example, p = 0.1414 for testing food type by whether food was shared with adults versus other recipients of sharing. Note that p-values are only calculated for major food types, because there are too many small or empty cells in the "mixed foods" categories.

** P-values cannot be calculated in columns with empty cells.

[1] Meat alternatives' include cheese, eggs, nuts, and legumes

[2] Breakfast bars

[3] Breakfast meals, including milk

[4] Bagels and cheese, cheese and crackers, cheese crackers, mac & cheese, other pasta and cheese, pizza; Burritos, beans & rice, bean tostada; Peanut butter sandwiches (with or without jelly), peanut butter and celery

[5] Baked beans, pork and beans, hot dogs and beans; Beef jerky with cheese, cheese and sausage, chicken salad

[6] Sandwiches with meat, chicken and pasta soup, tuna and crackers

[7] Sandwiches with meat and cheese

[8] Canned meals with cheese (e.g., Chef-Boy-ar-dee, Beef-a-roni), lasagna, ravioli, sandwiches and wraps with meat, cheese, and vegetables, tacos, chef salad

[9] Canned meals without cheese (e.g, Spaghettio's, spaghetti and meatballs, beef stew, soup, pasta bowls)

[10] Beef stew, chicken dinner, shrimp cocktail

[11] Chili (with or without beans)

[12] Sweet desserts with fruit (e.g., fruit pies, fruit cakes, fruit muffins, fruit bars), granola, trail mix

[13] Cookies, sweet crackers, candy, chocolate, muffins, pudding, sweet rolls, jelly, chips, pretzels, crackers

Table 4-5e. Recipient of Shared Food - Backpack Only

Food item	Total items reported as shared	Shared with whom?									
		Other child in the household				Adults in the household		Friends		Pets/other	
		In demonstration project		Not in demonstration project							
		n	pct	n	pct	n	pct	n	pct	n	pct
Milk	231	111	48.5	58	25.3	71	31.0	12	5.2	30	13.1
Fruit	296	161	54.9	95	32.4	124	42.3	13	4.4	21	7.2
Juice	94	46	50.0	42	45.7	5	5.4	6	6.5	5	5.4
Vegetables	503	324	64.4	76	15.1	379	75.3	8	1.6	19	3.8
Bread/grain	264	120	46.0	73	28.0	114	43.7	8	3.1	29	11.1
Meat	115	62	53.9	14	12.2	65	56.5	3	2.6	5	4.3
Meat alternative[1]	123	74	60.7	18	14.8	52	42.6	4	3.3	10	8.2
Mixed foods	388	163	42.2	90	23.3	141	36.5	30	7.8	47	12.2
p-value*		<0.0001		<0.0001		<0.0001		0.0143		0.0010	
Fruit, bread/grain[2]	1	0	.	0	.	1	100.0	0	.	0	.
Milk, juice, bread/grain[3]	1	0	.	0	.	0	.	1	100.0	0	.
Bread/grain, meat alternative[4]	54	21	38.9	13	24.1	20	37.0	4	7.4	4	7.4
Meat, meat alternative[5]	25	9	36.0	0	.	10	40.0	4	16.0	8	32.0
Bread/grain, meat[6]	13	6	46.2	0	.	7	53.8	0	.	0	.
Bread/grain, meat, meat alternative[7]	2	2	100.0	0	.	0	.	0	.	0	.
Vegetables, bread/grain, meat, meat alternative[8]	43	23	53.5	15	34.9	13	30.2	5	11.6	2	4.7
Vegetables, bread/grain, meat[9]	53	25	47.2	8	15.1	34	64.2	2	3.8	9	17.0
Vegetables, meat[10]	10	9	90.0	1	10.0	0	.	0	.	0	.

Table 4-5e. Recipient of Shared Food - Backpack Only (continued)

Food item	Total items reported as shared	Shared with whom?									
		Other child in the household				Adults in the household		Friends		Pets/other	
		In demonstration project		Not in demonstration project							
		n	pct	n	pct	n	pct	n	pct	n	pct
Vegetables, meat, meat alternative[11]	6	0	.	2	33.3	2	33.3	0	.	3	50.0
Fruit/juice dessert/snack[12]	32	9	28.1	6	18.8	16	50.0	4	12.5	2	6.3
Dessert or snack[13]	148	59	40.4	45	30.8	38	26.0	10	6.8	19	13.0

* P-values test for association between the food types and whether or not food was shared. For example, p = 0.0143 for testing food type by whether food was shared with a friend versus other recipients of sharing. Note that p-values are only calculated for major food types, because there are too many small or empty cells in the "mixed foods" categories.

[1] Meat alternatives' include cheese, eggs, nuts, and legumes

[2] Breakfast bars

[3] Breakfast meals, including milk

[4] Bagels and cheese, cheese and crackers, cheese crackers, mac & cheese, other pasta and cheese, pizza; Burritos, beans & rice, bean tostada; Peanut butter sandwiches (with or without jelly), peanut butter and celery

[5] Baked beans, pork and beans, hot dogs and beans; Beef jerky with cheese, cheese and sausage, chicken salad

[6] Sandwiches with meat, chicken and pasta soup, tuna and crackers

[7] Sandwiches with meat and cheese

[8] Canned meals with cheese (e.g., Chef-Boy-ar-dee, Beef-a-roni), lasagna, ravioli, sandwiches and wraps with meat, cheese, and vegetables, tacos, chef salad

[9] Canned meals without cheese (e.g, Spaghettio's, spaghetti and meatballs, beef stew, soup, pasta bowls)

[10] Beef stew, chicken dinner, shrimp cocktail

[11] Chili (with or without beans)

[12] Sweet desserts with fruit (e.g., fruit pies, fruit cakes, fruit muffins, fruit bars), granola, trail mix

[13] Cookies, sweet crackers, candy, chocolate, muffins, pudding, sweet rolls, jelly, chips, pretzels, crackers

4.4.3 Food Consumption and Sharing by Covariates

Appendix I contains a table that shows how food consumption and targeting accuracy vary by demographic characteristics. While there are some differences by demonstration project (slightly higher consumption for Meal Delivery) and source of information (highest for brochure/newsletter), there is a consistent pattern of higher consumption among persons with lower economic means. For example, consumption is highest for SNAP participants, households with less income versus more income, less education versus more education, and unmarried versus married. These patterns vary somewhat between food items, particularly for SNAP participation and marital status. However, education and income were significantly associated with consumption of every major food group considered here except meat, which had the lowest overall consumption rate at 78.2 percent.

Attitudes toward the food received were also associated with consumption. Consumption tended to be higher among households that reported a higher level of satisfaction with the healthiness and convenience of the food provided.

4.5 Food Security

4.5.1 Overview

Food security was examined in a number of ways. First, we compared food security of demonstration project participants between summer and fall 2011 – for Meal Delivery and Backpack demonstration projects separately.[39] In these comparisons, it was hypothesized that food security in summer would be similar to that in fall, since the purpose of the interventions was to replace food sources provided by school lunches and other school-year programs. Next, we compared food security between Meal Delivery and Backpack demonstration projects during summer 2011 and during fall 2011.[40]

[39] Findings for both demonstrations combined are contained in Appendix J.
[40] More detailed tables, including those that examine those interviewed within 7 days after the end of the demonstration project and those interviewed more than 7 days after the end of the demonstration project, are contained in Appendix K.

As noted in Section 2.2.5 above, the methodology for categorizing a household into food secure or food insecure is to first determine food security for adults and children in the household separately and then obtain a household food security measure by determining the number of households which contain both children and adults who are food secure and the number of households with either a child or adult who is food insecure. Households with food insecure children and/or adults were categorized as food insecure. Findings on food security are reported separately for adults, children, and the household.

We then examined the association between adult, child, and household food security and a variety of covariates (e.g., participation in other nutrition assistance programs; perception of change in food expenditure; participant age and gender; socio-demographic characteristics of the respondent and household; and parent satisfaction with the food in the demonstration project). The results of this analysis are described briefly, with detailed results shown in Appendix L. We then performed an analysis to evaluate food security status while adjusting for the covariates that were significantly associated. Finally, we compared food security in our study with national benchmarks published annually by USDA.

Note that due to small sample sizes for some subgroups (particularly for the Meal Delivery demonstration), lack of baseline data, and lack of a comparison group, all results of the analyses presented here should be considered preliminary and exploratory. Moreover, due to low coverage in the Backpack demonstration project, non-respondent bias could potentially exist. If all or most Backpack participants had been covered in the survey, findings might have been different.

4.5.2 Comparisons Between Summer and Fall

For the Meal Delivery demonstration project, the percent of food secure adults and households was about the same in summer 2011 as in fall 2011 (Table 4-6a). The percent of food secure children was greater in the summer than in the fall ($p=0.0047$). In the Backpack demonstration project (Table 4-6b), the percent of food secure adults was lower in the summer than the fall ($p=0.0090$) and about the same for children and households. When the demonstrations were combined (shown in Appendix J), the percentage of food secure adults was lower in the summer, reflecting the larger sample size for the Backpack demonstration. Food security was not significantly different between summer and fall for children and households when both demonstration projects were combined.

Table 4-6a. Meal Delivery: Food Security in Summer 2011 Compared to Fall, 2011

Food security	Summer 2011		Fall 2011		p-value
	Number	Percent	Number	Percent	
Adult					
Secure	91	64.1	63	61.8	p=0.6018
Insecure	51	35.9	39	38.2	
Total	142	100.0	102	100.0	
Child					
Secure	113	80.1	69	67.6	p=0.0047
Insecure	28	19.9	33	32.4	
Total	141	100.0	102	100.0	
Household					
Secure	88	62.4	57	55.9	p=0.1569
Insecure	53	37.6	45	44.1	
Total	141	100.0	102	100.0	

Table 4-6b. Backpack: Food Security in Summer 2011 Compared to Fall, 2011

Food security	Summer 2011		Fall 2011		p-value
	Number	Percent	Number	Percent	
Adult					
Secure	265	53.5	213	60.2	p=0.0090
Insecure	230	46.5	141	39.8	
Total	495	100.0	354	100.0	
Child					
Secure	313	63.6	224	63.5	p=0.9479
Insecure	179	36.4	129	36.5	
Total	492	100.0	353	100.0	
Household					
Secure	245	49.8	188	53.3	p=0.1713
Insecure	247	50.2	165	46.7	
Total	492	100.0	353	100.0	

4.5.3 Comparisons Between Meal Delivery and Backpack Demonstration Projects

In summer 2011, a greater percentage of adults (p=0.0276), children (p=0.0002), and households (p=0.0097) were food secure in the Meal Delivery demonstration project compared to the Backpack demonstration (Table 4-7a). In fall 2011, there were no significant differences between Meal Delivery and Backpack households (Table 4-7b).

4.5.4 Food Security by Covariates

In addition to season and type of demonstration project, we evaluated whether food security varied by demographics and other characteristics. This evaluation was done separately for summer and fall, and separately for adults, children, and households. Meal Delivery and Backpack demonstrations are combined. In this section, we present a brief summary; detailed tables are provided in Appendix L.

Though patterns and statistical significance vary by the group being considered (i.e., adult, child, or household), there are a number of general patterns:

- Food secure adults and households appear to be more likely when only English is spoken in the home. This was the case in both summer and fall;
- Food secure adults appear to be less likely for non-high school graduates (in the summer and the fall);
- Food insecure children and households were more likely among free or reduced price lunch recipients in the summer and fall;
- Food secure adults were more likely in the fall among younger demonstration project participants; food secure children were more likely in both the summer and fall among younger demonstration project participants; and food secure households were more likely in the fall among younger demonstration project participants; and
- Food secure adults, children, and households were more likely among those with higher income in the summer and fall.

These patterns were further evaluated in the adjusted model discussed in the next section.

Table 4-7a. Summer 2011: Meal Delivery vs. Backpack

	Meal Delivery		Backpack		
	Number	Percent	Number	Percent	p-value
Adult					
Secure	91	64.1	265	53.5	p=0.0276
Insecure	51	35.9	230	46.5	
Total	142	100.0	495	100.0	
Child					
Secure	113	80.1	313	63.6	p=0.0002
Insecure	28	19.9	179	36.4	
Total	141	100.0	492	100.0	
Household					
Secure	88	62.4	245	49.8	p=0.0097
Insecure	53	37.6	247	50.2	
Total	141	100.0	492	100.0	

Table 4-7b. Fall 2011: Meal Delivery vs. Backpack

	Meal Delivery		Backpack		
	Number	Percent	Number	Percent	p-value
Adult					
Secure	63	61.8	213	60.2	p=0.8187
Insecure	39	38.2	141	39.8	
Total	102	100.0	354	100.0	
Child					
Secure	69	67.6	224	63.5	p=0.4821
Insecure	33	32.4	129	36.5	
Total	102	100.0	353	100.0	
Household					
Secure	57	55.9	188	53.3	p=0.6537
Insecure	45	44.1	165	46.7	
Total	102	100.0	353	100.0	

4.5.5 Food Security – Adjusted Analysis

Overview

In this section, we discuss an analysis conducted to further assess the effects of the covariates described in Section 4.5.4. The analytic tool is logistic regression analysis, which allows us to see differences between summer and fall (for example) while adjusting for differences between households that participated at the two points in time. Tables 4-8a through 4-8c show the results of this analysis for adults, children, and household, respectively. Each of these tables provides the following column headings and data:

- Predictor: the predictors are the characteristics that are being used in the model to predict the food security status (food secure versus food insecure);
- Coefficient: this indicates how the predictor is related to food security. If the coefficient is positive the predictor indicates greater likelihood of being food secure, for those who have the predictor characteristic. If the coefficient is negative it indicates lower likelihood of being food secure, given possession of the characteristic;
- Standard (Std.) error: the standard error measures the variability of the estimated coefficient;
- Odds ratio (OR): the OR is another indication of the relationship between the predictor and food security. An OR greater than 1 indicates greater likelihood of being food secure for those with the predictor characteristic. An OR of less than 1 indicates less likelihood of being food secure for those with the predictor characteristic;
- 95% lower and upper confidence interval (CI) around the odds ratio: the 95% CI of the OR provides an estimate of the reliability of the OR by giving an upper and lower bound on the estimated OR;
- P-value: this value indicates whether the relationship between the predictor and being food secure is statistically significant. A p-value of less than 0.05 is usually considered to be statistically significant.

Table 4-8a. Adults: Logistic Regression of Food Security

Predictor	Coefficient	Std error	Odds ratio	95% lower CI odds ratio	95% upper CI odds ratio	p-value
Income between $10k ≤ $15k versus < $10k	-0.0464	0.2807	0.955	0.551	1.655	0.8688
Income between $15k ≤ $20k versus < $10k	0.3854	0.2483	1.470	0.904	2.392	0.1207
Income between $20k ≤ $25k versus < $10k	0.6318	0.2618	1.881	1.126	3.142	0.0158
Income between $25k ≤ $35k versus < $10k	0.3942	0.2837	1.483	0.851	2.586	0.1647
Income ≥ $35k versus < $10k	1.0615	0.3173	2.891	1.552	5.384	0.0008
Interviewed within 7 days after end of demo project in summer versus more than 7 days	0.0911	0.1807	1.095	0.769	1.561	0.6140
Languages spoken at home: At least 1 non-English versus English only (reference)	-0.5630	0.1779	0.570	0.402	0.807	0.0016
Marital status of respondent: Not married but living with a partner versus married (reference)	-0.3112	0.2491	0.733	0.450	1.194	0.2116
Marital status of respondent: Never married versus married (reference)	0.3943	0.2373	1.483	0.932	2.362	0.0965
Marital status of respondent: Divorced, separated or widowed versus married (reference)	-0.2681	0.2250	0.765	0.492	1.189	0.2334
Meal delivery versus Backpack	0.3130	0.2233	1.367	0.883	2.118	0.1610
Received subsidized lunch	-0.4430	0.2040	0.642	0.431	0.958	0.0299
Season: Summer versus Fall (reference)	-0.2259	0.0961	0.798	0.661	0.963	0.0187

Table 4-8b. Children: Logistic Regression of Food Security

Predictor	Coefficient	Std error	Odds ratio	95% lower CI odds ratio	95% upper CI odds ratio	p-value
Change in food expenditure, Same versus less in summer	0.6073	0.2633	1.836	1.096	3.075	0.0211
Change in food expenditure, More versus less in summer	0.0182	0.2387	1.018	0.638	1.626	0.9393
Income between $10k ≤ $15k versus < $10k	-0.0157	0.2865	0.984	0.561	1.726	0.9562
Income between $15k ≤ $20k versus < $10k	0.3927	0.2627	1.481	0.885	2.478	0.1350
Income between $20k ≤ $25k versus < $10k	0.5320	0.2656	1.702	1.012	2.865	0.0451
Income between $25k ≤ $35k versus < $10k	0.5724	0.3038	1.773	0.977	3.215	0.0595
Income ≥ $35k versus < $10k	1.1892	0.3318	3.284	1.714	6.293	0.0003
Interviewed within 7 days after end of demo project in summer versus more than 7 days	0.3738	0.1842	1.453	1.013	2.085	0.0425
Marital status of respondent: Not married but living with a partner versus married (reference)	-0.1632	0.2559	0.849	0.514	1.403	0.5237
Marital status of respondent: Never married versus married (reference)	0.4565	0.2439	1.579	0.979	2.546	0.0612
Marital status of respondent: Divorced, separated or widowed versus married (reference)	-0.2217	0.2289	0.801	0.512	1.255	0.3326
Meal delivery versus Backpack	0.4455	0.2371	1.561	0.981	2.485	0.0602
Received subsidized lunch	-0.4155	0.2165	0.660	0.432	1.009	0.0550
Season: Summer versus Fall (reference)	0.0804	0.1012	1.084	0.889	1.321	0.4265

Table 4-8c. Household: Logistic Regression of Food Security

Predictor	Coefficient	Std error	Odds ratio	95% lower CI odds ratio	95% upper CI odds ratio	p-value
Income between $10k ≤ $15k versus < $10k	-0.1559	0.2892	0.856	0.485	1.508	0.5900
Income between $15k ≤ $20k versus < $10k	0.3705	0.2520	1.448	0.884	2.374	0.1416
Income between $20k ≤ $25k versus < $10k	0.5706	0.2641	1.769	1.054	2.969	0.0307
Income between $25k ≤ $35k versus < $10k	0.5265	0.2916	1.693	0.956	2.998	0.0710
Income ≥ $35k versus < $10k	0.9953	0.3128	2.706	1.466	4.995	0.0015
Interviewed within 7 days after end of demo project in summer versus more than 7 days	0.2168	0.1815	1.242	0.870	1.773	0.2321
Languages spoken at home: At least 1 non-English versus English only (reference)	-0.5504	0.1806	0.577	0.405	0.822	0.0023
Marital status of respondent: Not married but living with a partner versus married (reference)	-0.1558	0.2505	0.856	0.524	1.398	0.5338
Marital status of respondent: Never married versus married (reference)	0.4619	0.2371	1.587	0.997	2.526	0.0513
Marital status of respondent: Divorced, separated or widowed versus married (reference)	-0.2942	0.2318	0.745	0.473	1.174	0.2043
Meal delivery versus Backpack	0.3391	0.2198	1.404	0.912	2.160	0.1229
Received subsidized lunch	-0.5705	0.2015	0.565	0.381	0.839	0.0046
Season: Summer versus Fall (reference)	-0.0872	0.0956	0.916	0.760	1.105	0.3615

Tables 4-8a through 4-8c give the results of the multivariate analysis for predictors of adult, child and household food security, respectively. Participants in each type of demonstration project were combined, including those who were interviewed within and after 7 days of demonstration project closure.[41] The predictors shown in each table were selected through a stepwise process. We started with the significant covariates discussed in Section 4.5.4. These variables were evaluated sequentially and those that remained significant (at $p < 0.10$) are shown in Tables 4-8a through 4-8c. In addition, interview timing (within 7 days of demonstration project closure or not), type of demonstration project (Meal Delivery versus Backpack), and summer versus fall season were included in all models.

Adult Food Security

This analysis shows adult food security when adjusted for demographic and other factors. This analysis suggests that being a food secure adult may be slightly less likely in the summer than the fall after adjusting for other covariates. This is indicated by the coefficient of –0.2259 (negative indicates lower food security) and the odds ratio of 0.798 (smaller than 1.0 suggests lower food security), as well as the p-value of 0.0187, which suggests that this result is statistically significant. However, there was no difference in adult food security by type of demonstration project ($p = 0.1610$). Food secure adults were more likely among higher household income levels and appeared to be less likely in households in which children received subsidized lunch. However, it is likely that school lunch participation is a proxy for other, unknown, factors not measured in this study. Interview timing was not a significant factor in adult food security.

Child Food Security

The adjusted analysis for child food security (Table 4-8b) does not show a difference between summer and fall or between demonstration projects, though being a food secure child in a household in which a child was a demonstration project participant was more likely among Meal Delivery participants compared to Backpack participants at a p-value approaching statistical significance ($p = 0.0602$). Household income was a strong predictor of child food security (the higher the income, the greater the likelihood of being food secure). Being a food secure child appeared to be less likely in households in which children participated in a subsidized school lunch program. However, this term was not strongly significant, and it is likely that school lunch participation is a proxy for other, unknown, factors not measured in this study. Being a food secure

[41] See Section 2.2.5 for a discussion of the interview timing issue. Because of the importance of this issue for analysis of food security, we included interview timing in all models.

child was more likely when respondents reported perceiving that they had the same food expenditures in the summer as in the fall compared to a perception that food expenditure was not the same (p=0.0211). Food secure children were more likely in those households where the respondent was interviewed within 7 days after demonstration project closure compared to those interviewed more than 7 days after project closure (OR = 1.453; p = 0.0425).

Household Food Security

The adjusted analysis for household food security (Table 4-8c) shows no difference between summer and fall, or by type of demonstration project. Household income and the respondent never having been married were significantly and positively associated with household food security, while speaking one or more non-English languages at home and children receiving a subsidized lunch were significantly associated with food insecurity. However, it is likely that receipt of a subsidized school lunch is a proxy for other, unknown, factors not measured in this study. Interview timing was not a significant factor for household food security.

4.5.6 Comparisons with National Benchmarks

The process of benchmarking is a form of evaluation to determine how well an organization is doing compared to achievements by the best organizations, or how well an organization is doing compared to others just like it. In the case of this evaluation, the purpose of benchmarking food security data among demonstration project participants to national data was to put our findings into perspective in the national arena, examine the credibility of our findings, and determine how food security of demonstration participants compared to food security among similar groups in the United States.

The data we selected against which to benchmark were the data collected for the Economic Research Service (ERS) by the Bureau of Labor statistics as part of its yearly survey on food security, collected in December 2010 (Coleman-Jensen et al., 2011a; Coleman-Jensen et al., 2011b). Questions in the ERS module on food security have a 12-month reference period (e.g., "*In the last 12 months, did you/you or other adults in your household ever cut the size of your meals or skip meals because there wasn't enough money for food?*") and a 30-day reference period (e.g., "*Now think about the last 30 days. During that time did you/you or other adults in your household ever cut the size of your meals or skip meals because there wasn't enough money for food?*").

Questions in the Westat telephone questionnaire to parents or caregivers of demonstration project participants only asked for a 30-day reference period. Thus, only national benchmarks pertaining to a 30-day reference period are included in this analysis (Coleman-Jensen et al., 2011b) (Table 4-10 and 4-11). The categories of food security we included consist of food secure (comprised of high food security and marginal food security), low food security, and very low food security. ERS does not currently use a cross-tabulation methodology (similar to the methodology used in the current study) to ascertain household food security. Instead, a food secure household is one in which there are fewer than three food insecure responses to all 18 questions in the CPS survey. Thus, the categorization of food security in Tables 4-6 through 4-8 and Appendices J, K, and L differ slightly from demonstration project values in Tables 4-9 and 4-10.

National food security data collected in December 2010 were compared to food security during summer 2011 (Table 4-9) and fall 2011 (Table 4-10). About 92 percent of all U.S. households in 2010 were food secure, compared to 60 percent of Meal Delivery households, 45 percent of Backpack households, and 48 percent of all households of demonstration project participants in summer 2011 (Table 4-9). Among households with children less than 18 years of age nationwide, 8 percent had low food security, and 3 percent had very low food security. All but one demonstration project participant household had children less than age 18.[42] Low food security and very low food security in Meal Delivery households were 26 percent and 14 percent, respectively. In Backpack households low and very low food security were 34 and 21 percent, respectively. In all demonstration project households, low and very low food security were 32 and 20 percent, respectively.

Since those participating in demonstration projects were, for the most part, from low income families, we used the receipt of WIC benefits in the previous 30 days and receipt of SNAP benefits in the previous 30 days as indicators of low income. In summer 2011, about 50 percent of project participant households that received WIC benefits in the previous 30 days were food secure, compared to 75 percent reported nationwide. Low food security was 30 percent in demonstration participant WIC households, compared to 19 percent nationwide. About 20 percent of WIC households of demonstration project participants had very low food security, compared to 6 percent throughout the United States.

[42] It is possible that the 18-year-old may have been age 17 during demonstration project operation.

Table 4-9. Household Food Security in Summer 2011: Comparison Between Demonstration Project Participants and National Benchmarks

	Demonstration Project participants*										National benchmarks**			
	Meal Delivery		Backpack		All participants		Received WIC*** benefits in previous 30 days		Received SNAP† benefits in previous 30 days		All U.S. households	Household with children < age 18	Received WIC*** benefits in previous 30 days	Received SNAP†† benefits in previous 12 months
Food security	n	pct	n	pct	n	pct	n	pct	n	pct	pct	pct	pct	pct
Food secure†††	85	59.9	221	44.6	306	48.0	80	49.7	150	46.6	91.8	88.8	74.9	70.6
High food security	47	33.1	135	27.3	182	28.6	47	29.2	87	27.0				
Marginal food security	38	26.8	86	17.4	124	19.5	33	20.5	63	19.6				
Low food security	37	26.1	168	33.9	205	32.2	49	30.4	94	29.2	5.1	8.1	19.0	18.5
Very low food security	20	14.1	106	21.4	126	19.8	32	19.9	78	24.2	3.1	3.1	6.1	10.9
Total	142	100.0	495	100.0	637	100.0	161	100.0	322	100.0	100.0	100.0	100.0	100.0

*Determination of food security categories was based on the methodology used by ERS in yearly reports.

**Data calculated by ERS using data from the December 2010 Current Population Survey (CPS) Supplement of Food Security (Coleman-Jensen et al., 2011); uses 30-day reference period.

***WIC: Special Supplement Nutrition Assistance Program for Women, Infants, and Children; analysis conducted among households with income less than 185 percent of poverty line and children under age 5 in household.

†SNAP: Supplemental Nutrition Assistance Program; analysis conducted among households with income less than 130 percent of poverty line and answered 'yes' to the question 'Did your family receive SNAP or food stamps in the past 30 days?'

††Among income less than 130 percent of poverty line.

†††Some totals may not equal 100 percent due to rounding.

Table 4-10. Household Food Security in Fall 2011: Comparison Between Demonstration Project Participants and National Benchmarks

	Demonstration Project participants*										National benchmarks**			
	Meal Delivery		Backpack		All participants		Received WIC*** benefits in previous 30 days		Received SNAP† benefits in previous 30 days		All U.S. households	Household with children < age 18	Received WIC*** benefits in previous 30 days	Received SNAP†† benefits in previous 30 days
Food security	n	pct	n	pct	n	pct	n	pct	n	pct	pct	pct	pct	pct
Food secure†††	56	54.9	183	51.7	239	52.4	63	51.6	121	51.9	91.8	88.8	74.9	70.6
High food security	30	29.4	102	28.8	132	28.9	35	28.7	61	26.2				
Marginal food security	26	25.5	81	22.9	107	23.5	28	23.0	60	25.8				
Low food security	25	24.5	109	30.8	134	29.4	40	32.8	68	29.2	5.1	8.1	19.0	18.5
Very low food security	21	20.6	62	17.5	83	18.2	19	15.6	44	18.9	3.1	3.1	6.1	10.9
Total	102	100.0	354	100.0	456	100.0	122	100.0	233	100.0	100.0	100.0	100.0	100.0

*All participants in demonstration projects are included in the fall 2011 analysis. Determination of food security categories was based on the methodology used by ERS in yearly reports.

** Data calculated by ERS using data from the Statistical Supplement of the December 2010 Current Population Survey (CPS) (Coleman-Jensen et al., 2011b); uses 30-day reference period.

***WIC: Special Supplement Nutrition Assistance Program for Women, Infants, and Children; among income less than 185 percent of poverty line; children under age 5 in household.

†SNAP: Supplemental Nutrition Assistance Program; among income less than 130 percent of poverty line; "Did your family receive SNAP or food stamps in the past 30 days?"

††Among income less than 130 percent of poverty line.

††† Some totals may not equal 100 percent due to rounding.

Among those receiving SNAP benefits in the previous 30 days nationwide, 71 percent were food secure, compared to 47 percent of those in the demonstration project sample in households that received SNAP benefits in the previous 30 days in summer 2011. Nationwide, low and very low food security among households receiving SNAP benefits within the past 30 days was 19 percent and 11 percent, respectively, compared to 29 percent and 24 percent among demonstration project households that received SNAP benefits in the previous 30 days.

Comparisons were also made between National benchmarks and household survey data in fall 2011 among all demonstration project respondents (Table 4-10). Differences between demonstration project food security in fall 2011 and food security nationwide were consistent in all categories with those described above for summer 2011. Food security was considerably lower in the Meal Delivery and Backpack demonstration projects than all U.S. households and households with children younger than age 18. WIC and SNAP families nationwide also had higher household food security compared to WIC and SNAP demonstration project households in fall 2011.

4.5.7 Summary of Food Security Findings

We compared food security status between summer and fall 2011 for Meal Delivery and Backpack demonstration projects separately and between Meal Delivery and Backpack demonstration projects in summer 2011 and in fall 2011. We then examined the association between adult, child, and household food security and covariates (e.g., participation in other nutrition assistance programs, socio-demographic characteristics of respondents and households). Using the statistically significant results from the covariate analysis, we then conducted an adjusted analysis to further assess the effects of one variable while adjusting for others. Finally, we compared food security status among demonstration project households to national benchmarks.

We found that summer season was associated with lower food security for adults but not for children or the household as a whole. Higher household income was a significant predictor of improved food security in all three models, while a non-English language spoken at home tended to predict lower food security. There were no strong differences between type of demonstration project. Interview timing was a factor in the child food security analysis but not for adults or households. In all comparisons between nationwide data on food security and demonstration project households, higher percentages of food secure households were found nationwide. This includes

comparisons among households with children less than age 18 and comparable families receiving WIC and SNAP benefits.

4.6 Satisfaction with Demonstration Projects

Table 4-11 shows the results of a series of questions about parent/caregiver satisfaction with the demonstration projects. Parents overwhelmingly agreed that the food was healthy (99.7 percent), had good variety (94.2 percent), was convenient (97 percent), and that household members liked the food (95 percent). There was no significant difference between demonstration projects. Backpack respondents were offered further questions about what their children liked about the demonstration project. Most named "food provided," while about 40 percent said they liked the activities or that their friends also attended (Table 4-11).

Table 4-11. Parent Satisfaction with Demonstration Projects

Parent satisfaction	Meal Delivery n	Meal Delivery pct	Backpack n	Backpack pct	Total n	Total pct	p-value of difference between MD* and BP*
Parent satisfaction with healthiness of food							
Very healthy	103	81.7	365	73.3	468	75.0	0.1260
Somewhat healthy	23	18.3	131	26.3	154	24.7	
Not at all healthy	.	.	2	0.4	2	0.3	
Total	126	100.0	498	100.0	624	100.0	
Parent satisfaction with variety of food							
Agree strongly	59	46.8	220	44.3	279	44.8	0.7099
Agree	58	46.0	250	50.3	308	49.4	
Neither agree nor disagree	4	3.2	11	2.2	15	2.4	
Disagree	4	3.2	14	2.8	18	2.9	
Disagree strongly	1	0.8	2	0.4	3	0.5	
Total	126	100.0	497	100.0	623	100.0	
Parent satisfaction with convenience of food							
Agree strongly	67	53.2	285	57.3	352	56.5	0.8399
Agree	56	44.4	197	39.6	253	40.6	
Neither agree nor disagree	2	1.6	6	1.2	8	1.3	
Disagree	1	0.8	7	1.4	8	1.3	
Disagree strongly	.	.	2	0.4	2	0.3	
Total	126	100.0	497	100.0	623	100.0	
Parent satisfaction that household members like food							
Agree strongly	43	34.4	197	39.6	240	38.6	0.4980
Agree	77	61.6	270	54.3	347	55.8	
Neither agree nor disagree	2	1.6	19	3.8	21	3.4	
Disagree	3	2.4	10	2.0	13	2.1	
Disagree strongly	.	.	1	0.2	1	0.2	
Total	125	100.0	497	100.0	622	100.0	
Respondent's perception of what Backpack participants liked about the demonstration project							
Food provided			346	69.6	346	69.6	
All of their friends attend this program			208	41.9	208	41.9	
Activities offered			196	39.4	196	39.4	
Backpack for the weekend			120	24.1	120	24.1	
Demonstration project staff			83	16.7	83	16.7	
Other			32	6.5	32	6.5	
Location			23	4.6	23	4.6	
Educational elements			15	3.1	15	2.4	
Timing			4	0.8	4	0.8	

*MD = Meal Delivery; BP = Backpack

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Results from Key Informant Interviews 5

5.1 Introduction

Site visits and key informant interviews constitute the implementation process evaluation component of this study. As part of this component, Westat conducted site visits and key informant interviews for all four types of demonstration projects to document the project infrastructure at the State, sponsor and site level; the processes put in place to implement the demonstration project (e.g., recruitment and outreach, preparation and distribution of food); and the result of those processes (e.g., meals delivered and backpacks distributed). The purpose of these site visits and interviews was to obtain the perspective of three different types of key informants – State agency grantees, sponsors, and site staff and volunteers – on project implementation.

Westat conducted interviews in person during site visits to seven States (Table 5-1). A total of 47 key informant interviews were conducted in July and August 2011. As noted previously, a date for a site visit to Arizona could not be arranged during Arizona demonstration project operations. Thus, Westat conducted key informant interviews for the Arizona Backpack demonstration project by telephone. Typically, a sponsor managed one or more sites. However, in some cases the sponsor agency also served as a site. In Arkansas, five of the sponsors we interviewed also served as a site (i.e., they were single site sponsors), and in Ohio, one of the sponsors was also a site.

Table 5-1. Key Informant Interviews by Type of Demonstration and Respondent

		Type of respondent			
Type of Demonstration	State	State officials	Sponsors	Sites	Total
Extending Length of Operation Incentive	Arkansas	1	8	0	9
Activity Incentive	Mississippi	1	6	1	8
Meal Delivery	Delaware	1	1	0	2
	Massachusetts	1	1	0	2
	New York	1	2	2	5
Backpack	Arizona*	1	3	0	4
	Ohio	1	6	1	8
	Kansas	1	7	1	9
Total		8	34	5	47

* Interviews conducted by telephone

A brief description of all demonstration projects is contained in Chapter 1 of this report. In this chapter we pick up from Chapter 1 with a more detailed description of each type of demonstration project and then summarize the key characteristics of sponsors and sites. We then describe sponsor and site selection; the roles and responsibilities of project sponsors and site staff and volunteers; outreach used by each type of demonstration project; the different ways in which demonstration benefits were provided; oversight and monitoring used in the projects; and training and technical assistance provided to sponsors, site staff and volunteers and the nutritional family education provided to parents and caregivers. We end the chapter with a description of the strengths and weaknesses of each type of demonstration project identified so far, and the challenges and solutions reported by key informants.

5.2 Demonstration Project Overview

The four types of demonstration projects and their sponsors are contained in Table 5-2. The Extending Length of Operation Incentive Project in Arkansas and the Activity Incentive in Mississippi were structurally part of the Summer Food Service Program (SFSP) in the State. Although sponsors of both the Meal Delivery and Backpack demonstrations were expected to participate in the SFSP, the meals that were provided to children as part of these demonstrations were consumed offsite and not at SFSP feeding sites.

Table 5-2. Demonstration Project Sponsors/Sites

Demonstration projects	Years of operation	State	Sponsors/sites
Extending Length of Operation Incentive	2010-11	Arkansas	2010 - 163 sites claimed incentive funding* 2011 – 200 sites claimed incentive funding**
Activity Incentive	2010-11	Mississippi	22 sites claimed reimbursement funding in 2010* 41 sites claimed reimbursement funding in 2011***
Meal Delivery	2011-12	Delaware	Food Bank of Delaware
		Massachusetts	YMCA of Cape Cod
		New York	Food Bank of the Southern Tier
			North Rose-Wolcott Central School District
Backpack	2011-12	Arizona	Chandler Unified School District
			Litchfield Elementary School District
			Mesa Public Schools
		Kansas	Arkansas City Unified School District 470
			Central Unified School District 462
			East Central Kansas Economic Opportunity Corporation
			Gardner Edgerton Unified School District
			Lawrence Public Schools Unified School District 497
			Topeka Public Schools
			United Methodist Church
		Ohio	Andrews House, Inc.
			Ashtabula County Children Services
			Community Action Organization of Scioto County
			Hamilton Living Water Ministry
			Hocking Athens and Perry Community Action
			Whole Again International

* Peterson et al., 2011.

** Data obtained from Insight Policy Research (IPR); due to flooding in some parts of Arkansas in 2011, the 40-day cutoff criterion was relaxed if sponsors operated in school districts where the number of weekdays of SFSP operation during the entire summer was less than 40 days long but they operated for every weekday for the remainder of the summer.

***Data obtained from IPR.

5.2.1 Extending Length of Operation Incentive Demonstration Project

The State of Arkansas received funding from the Food and Nutrition Service (FNS) in 2010 through the Extending Length of Operation Incentive demonstration project. The grant for this demonstration project was administered by the Arkansas Department of Human Services (DHS), Division of Child Care and Early Childhood Education. Westat met with the Associate Director of Program Operations, who provided primary oversight for the demonstration project and all relevant aspects of Arkansas' child nutrition program.

Arkansas is among the ten States in the US with the highest rates of childhood food insecurity and the lowest levels of SFSP participation (Arkansas Division of Childcare and Early Childhood Education, 2010). Much of this food insecurity is in Arkansas' Delta region, which encompasses more than half the State. Therefore, DHS primarily targeted sponsors located in its Delta counties. After a late start in 2010, the State was able to get an early start on the demonstration project for 2011. DHS worked with organizations such as the Governor's No Kid Hungry campaign and the State Department of Education to get the word out about the demonstration project and interest sponsors (those that did and did not previously participate in the SFSP). In 2011, 200 sites claimed incentive funding for operating 40 or more days during the summer.[43]

5.2.2 Activity Incentive Demonstration Project

Funding provided by FNS for summer meal programs does not cover the cost of onsite activities, but in 2010, FNS granted such funding to the State of Mississippi for this demonstration project. In 2010, 40 sites were selected to receive funding for enrichment and recreation activities (Peterson et al., 2011). However, due to a late start, only 22 sites claimed incentive funding in 2010. In 2011, 41 SFSP sites claimed Activity Incentive funding that enabled them to add enrichment activities to their summer meal programs. Leftover funds could be carried over to 2011. The State grantee reported that the State did not use all of the funds allocated for grants for this demonstration project. However, sponsors that were awarded grants used all of their grant funds.

[43]In 2011, special consideration was also given to some sponsors that were located in flooded areas of Arkansas where some of their sites were prevented from operating 40 or more days during the summer. Thus, the 40-day cutoff criterion was relaxed if sponsors operated in school districts where the number of weekdays of SFSP operation during the entire summer was less than 40 days long but they operated for every weekday for the remainder of the summer.

The Activity Incentive demonstration project was administered by the Office of Child Nutrition within the Mississippi State Department of Education, Office of Healthy Schools. Other divisions within the Office of Child Nutrition assisted with the administration of this demonstration project, including the Division of Training, the Division of Monitoring (conducted compliance audits), the Division of Finance (processed claims), and the Division of Purchasing (the State-wide purchasing center). The State's primary role was monitoring sponsors and processing payments, with a focus on maintaining fiscal controls, proper documentation, financial data and expenditures, appropriate costs, meal regulations, and site adherence to proposed activities.

The State also partnered with other State offices and community-level organizations. These included the Mississippi Office of Healthy Schools; Mississippi State Department of Health; Mississippi Department of Wildlife, Fisheries, and Parks; City Parks and Recreation Departments; Department of Human Services; Boys and Girls Clubs of Mississippi; Delta Leadership Consortium; and the Governor's Office.

5.2.3 Meal Delivery Demonstration Project

In 2011, Meal Delivery demonstration project funding was awarded to the States of Delaware, Massachusetts, and New York. The Delaware and Massachusetts project each had one sponsor (Table 5-2). Two sponsors implemented the Meal Delivery demonstration project in New York.

Delaware. The Meal Delivery demonstration project in Delaware was administered by the School Support Services Workgroup, a group within the Accountability and Assessment Branch of the Delaware Department of Education. The Workgroup oversees all school support services for learning that are not directly related to instruction or curriculum, including child nutrition programs, counseling services, school discipline, and school nursing services.

The Delaware Department of Education manages all child nutrition programs, including national breakfast and lunch programs, fruit and vegetable programs, SFSP, and the Child and Adult Care Food Program (CACFP). The State's two largest local stakeholders for child nutrition programs are the Food Bank of Delaware and the City of Wilmington. These stakeholders receive the most funding from the State and partner with the State on a variety of nutrition programs.

The Food Bank of Delaware applied for and was awarded grant funding under this demonstration project as a sponsor. The State agency's primary interactions with this sponsor during the

demonstration project were related to training and technical assistance, ensuring the nutritional integrity of meals, conducting quality control monitoring, and collecting budgetary and other data related to the demonstration.

Massachusetts. The Meal Delivery demonstration project provided the State of Massachusetts with opportunities to extend summer meals to a greater number of children living in its rural areas (Massachusetts Department of Elementary and Secondary Education, 2010). According to respondents, rural areas of Massachusetts have had difficulties in the past meeting eligibility thresholds for SFSP since children residing in these areas are spread out over a large geographic area. As a result, only a small number of summer meal sites have been available to children residing in rural Massachusetts, and those tend to be accessible to youth who either live within walking distance of the sites or who have a reliable source of transportation. The Meal Delivery demonstration project enabled youth that live in underserved, rural areas of the State who typically may not have access to summer meals to receive them. This is particularly true in Barnstable County, Massachusetts, where this demonstration project was implemented. Barnstable County has a limited number of summer meal sites, and very few eligible children participate. The Meal Delivery demonstration project enabled youth that live in this underserved, rural area of the State, who may not have access to summer meals, to receive them.

The Meal Delivery demonstration project was administered through the Nutrition, Health and Safety Program of the Massachusetts Department of Elementary and Secondary Education (ESE). The ESE has administered summer food programs since 1968, including after school snack and special milk programs, school lunch and breakfast programs, SFSP, and CACFP. There are currently 510 school lunch programs in schools across the State.

The Massachusetts Meal Delivery demonstration project had one sponsor, the YMCA of Cape Cod, which delivered meals to drop-off sites and children's homes in rural Barnstable County three days a week. Stakeholder/partners included:

- The State legislature which drove an outreach campaign to increase participation in the school lunch program and SFSP ($5 million procured toward those goals);
- Project Bread, the State's leading anti-hunger organization that raises millions of dollars for emergency food services and advocates for food service programs. ESE has had a relationship with Project Bread since the early 1990s. For this demonstration project, ESE worked with Project Bread to write the proposal and locate the sponsor and rural area (Barnstable). In addition, Project Bread helped the YMCA of Cape Cod develop a realistic budget based on Project Bread's experience in summer food programs. It was

also contracted to conduct the outreach for the food programs, provide grassroots outreach for ESE and some media outreach, and provide technical assistance to the summer feeding sites;

- Child Nutrition Outreach Program (CNOP), which provided incentive money for a wellness initiative that was tied into the demonstration project grant. Incentive money enabled the sponsor to have special events such as "Fun Fridays," when each meal bag contained a gift (e.g., a Frisbee, water bottle) for children; and
- Local police in Barnstable, MA, which monitored safety, crime, and site security for the demonstration project.

New York. The State of New York sought funding under the SFSP Meal Delivery demonstration project to help ensure that summer meals would be available to children from low income families that reside in rural areas of the State and to evaluate the impact that non-congregate (offsite) meal services had on SFSP participation (New York State Education Department, 2010). The project in New York was administered through the SFSP office in the New York State Education Department in Albany. This department oversees the operations and management of all child nutrition programs that are implemented for New York youth in grades K-12. The demonstration project was overseen and administered by the Coordinator of the New York State Child Nutrition Program Administration and her staff. These staff served as the primary contact point for the State's two sponsors and made sure projects operated in compliance with State and Federal requirements. The office had support from a number of key stakeholders, including Hunger Solutions, a prominent food advocacy group in the State; the New York School Association; and the New York State Food Policy Council.

The State grantee reported that she planned to have more than two sponsors participating in the demonstration project and that the late grant announcement, as well as the need to initially cover costs up front with their own funds, may have deterred some sponsors from applying. The two sponsors selected out of those that applied were Food Bank of the Southern Tier and North Rose-Wolcott Central School District (Table 5-2).

5.2.4 Backpack Demonstration Project

The States of Arizona, Kansas and Ohio each received funding through the Backpack demonstration project. Since SFSP meal sites do not operate seven days a week, project funding gave these States the means to provide summer meals to youth on days when meals are not available at SFSP meal sites.

Arizona. The Backpack demonstration project in Arizona is administered by the Arizona Department of Education, Health and Nutrition Services Division. This department operates the National School Lunch and Breakfast programs, the SFSP, and all child nutrition programs for the State, including the CACFP. The demonstration grant was administered by the School Nutrition Programs Director who works with the School Nutrition Program and the SFSP. The State partnered with the Hunger Advisory Council of Arizona, the Arizona Department of Economic Security, the Arizona Department of Health Services, county health departments, and the community at-large.

Three sponsor organizations, all school food authorities, participated in the demonstration project – Chandler Unified School District, Litchfield Elementary School District, and Mesa Public Schools (Table 5-2). All were located in the Phoenix metropolitan area and were regular participants in SFSP. The State grantee reported that sponsor organizations from the Phoenix area were specifically invited to participate in the demonstration project since food banks are particularly burdened in this region.

Kansas. According to the Kansas application to FNS, nearly 50 percent of children living in the State of Kansas are eligible for free or reduced price meals (Kansas State Department of Education, 2010). Yet, for every 100 children that participated in the National School Lunch Program in 2009, only about five percent participated in the SFSP. The State sought funding from the Backpack demonstration project to help expand participation in the SFSP and to provide food to children on days when SFSP meals are not available.

The Backpack demonstration project was administered through the Kansas State Department of Education (KSDE), Child Nutrition and Wellness Division. Kansas has a statewide task force on child nutrition -- the Kansas Food Security Task Force – which is a sub-committee of the Kansas Food Policy Council. The Kansas Food Security Task Force examines the problems of food insecurity and hunger among Kansas families. This organization partnered with the KSDE on the demonstration project. The State also partnered with food distribution services for project implementation, including Harvesters, the Wichita Food Bank, and the Kansas Food Bank.

When the KSDE learned about the demonstration grant opportunity, staff immediately sent information about it to organizations that participate in SFSP and received responses from eight potential sponsors. Seven of eight sponsor applicants were selected, who in turn sponsored a total of 14 feeding sites for the demonstration project throughout the State. Sponsors represented summer

feeding programs from five school districts (Arkansas City Unified School District 470, Central Unified School District 462, Gardner Edgerton Unified School District, Lawrence Public Schools Unified School District 497, and Topeka Public Schools), a community action organization serving low-income individuals in several Kansas counties (East Central Kansas Economic Opportunity Corporation), and a church (United Methodist Church) (Table 5-2).

Ohio. Ohio is among the top ten States in the nation with high rates of food insecurity. An increase in unemployment around the State has left many Ohio families with a need to seek emergency food services (Ohio Department of Education, 2010). The Backpack demonstration project was administered by the Ohio Department of Education, Office of Child Nutrition. This office serves youth from pre-Kindergarten to post high school graduation and oversees United States Department of Agriculture (USDA) programs such as the National School Lunch Program, SFSP, Team Nutrition, and other nutrition programs offered around the State. The office typically partners with the Ohio Department of Jobs and Family Services, the Department of Aging, the Department of Health, the Ohio State University Extension Office, and other State agency programs to administer its nutrition programs. The office partnered with Second Harvest, the main food bank in Ohio, to provide meals for the Backpack demonstration project.

The State received applications for demonstration grant funding from many of its SFSP sponsors, and six were selected. Selected sponsors (Andrews' House, Ashtabula County Children Services, Community Action Organization of Scioto County, Hamilton Living Water Ministry, Hocking Athens and Perry Community Action, and Whole Again International) (Table 5-2) were located in geographically dispersed and economically depressed areas of the State and represented community and faith-based organizations. Meal sites were located in urban areas and rural areas, as well as in Appalachia and wine country (remote rural regions).

5.3 Sponsors and Sites

Westat visited all State grantees and selected sponsors and sites in the Extending Length of Operation Incentive and Activity Incentive demonstration projects. Except for the Arizona Backpack demonstration project, all sponsors who implemented the Meal Delivery and Backpack demonstration projects also received site visits, and selected sites in the Meal Delivery and Backpack demonstration were also visited.

This section provides an overview of the sponsors and sites that were visited or interviewed for each type of demonstration project, based on findings from key informant interviews. Appendix M provides further detail on each sponsor and its sites.

5.3.1 Extending Length of Operation Incentive Demonstration Project

Westat organized a site visit to Arkansas where demonstration project sponsors were still in operation during the first week in August. Westat met with the State grantee and staff at eight SFSP sponsors and toured some of their affiliated feeding sites to learn about their operations and experiences with this demonstration project. With assistance from the State grantee, we selected sites that were still open and were located in different parts of the State. Seven of the sponsors also served as meal sites. The following sponsors from the Extending Length of Operation Incentive were visited:

- Building Futures
- City Youth Ministries
- First Trinity Church Pine Bluff
- Galilee/Regeneration Ministries
- New Zion Community Center
- Northside Redevelopment Center
- Shekinah Glory Outreach
- Victory Praise and Worship

Among the eight sponsors that Westat visited, six were churches or faith-based organizations; one was a community service organization that offers feeding programs to at-risk youth; and one was a community-based, non-profit service organization that offers a variety of after-school and summer programs for children. The number of meal sites these sponsors oversaw ranged from one to 12 and were located in churches, schools, community centers, parks and pools, and public housing complexes. All eight sponsors ran their SFSPs between June and August 2011, for an average of 45 days (range 40-58 days). All meal sites provided lunches, but many also offered breakfasts. One sponsor provided supper at some of its meal sites.

Youth that received summer meals through these programs were from low income families and lived in rural and urban areas of Arkansas' Delta region. Most programs targeted children who were eligible for free or reduced price school lunches. Youth tended to be between the ages of 1 and 18 years of age, with most participating children between Kindergarten and middle school age. While there was variation by sponsor and meal site location, most youth that were served at Arkansas meal sites were African-American, followed in number by Caucasian, Hispanic and Native American children. Most were primarily English-speaking, although a few sites served children who were Spanish-speaking. Many meal sites were walking distance from children's homes. A few sponsors provided transportation for children who lived too far to walk to the meal site. Sponsors and site staff reported that many children who did not have reliable transportation were often unable to attend meal programs regularly.

5.3.2 Activity Incentive Demonstration Project

Westat met with staff at six SFSP sponsor programs and two feeding sites to learn about their operations and experiences with the Activity Incentive demonstration project. All sponsors that Westat visited in this State had sites that offered activities funded by the Activity Incentive demonstration project in conjunction with the SFSP between June and July 2011. The sponsors primarily served African-American youth from low income households ranging in age from infancy to 18 years. Some sponsors and sites we visited included older youth and young adults with disabilities. Many of the sponsors and sites served youth that lived in urban areas around Jackson, Mississippi. However, there were a few that provided meals and activities to youth that lived in rural regions in the western part of the State. Feeding sites that were within walking distance to youths' homes or that were on the way to destinations that parents or guardians were already heading (e.g., work) tended to see more regular youth attendance than sites that required transportation to reach.

Among the six sponsors that Westat visited, the number of sites these sponsors oversaw ranged from one to seven. Five of the six sponsor locations that were visited served meals and provided enrichment activities at the organization/agency location. One sponsor served the meals and conducted activities in the public use area at an apartment complex on site. Sponsors were churches, daycare centers, community centers, non-profit organizations, and public housing and private apartment complexes. Among the six sponsor programs visited, two, which were both education-based, also provided meals through other FNS and USDA feeding programs.

5.3.3 Meal Delivery Demonstration Project

Delaware, Massachusetts and New York were visited in August, 2011. Delaware and Massachusetts operated the Meal Delivery demonstration project with one sponsor each. New York had two sponsors – Food Bank of the Southern Tier of New York and North Rose-Wolcott Central School District. Only Massachusetts dropped meals at individual homes (Table 5-3). The rest established drop-off locations so food could be picked up by a parent or guardian.[44]

Table 5-3. Overview of Meal Delivery Site Visits

State	No. sponsors	No. drop-off sites	Type of drop-off site
Delaware	1	8	▪ Apartments ▪ Home of community leader
Massachusetts	1	3	▪ Apartments ▪ Individual homes
New York	2	11	▪ 3 elementary schools ▪ 1 town hall ▪ 2 fire halls ▪ 4 churches ▪ 1 housing authority
Total	4	22	

Delaware. Westat met with staff at the Food Bank of Delaware to learn about their experiences with the Meal Delivery demonstration project. The Food Bank of Delaware is the only food bank in the State and serves all three Delaware counties. Two facilities - one in Newark and one in Milford – enable the Food Bank to directly assist communities. A community kitchen in the Newark facility provides a trade school for culinary arts, incorporates life skills, and enables students to earn a culinary certificate. Other programs the Food Bank administers include: SFSP, the CACFP, Statewide partnerships with hunger relief programs (shelters, food pantries, soup kitchens), a backpack program (not USDA funded), a volunteer program, Commodities Supplemental Food Program (CSFP, which provides food supplements to senior citizens), and SNAP-Ed classes throughout the State.

As required, all eight delivery sites were located in rural regions of the State; some were former SFSP sites and some were sites brought on specifically for the demonstration project. Locations for the meal sites included six affordable/subsidized housing complexes, a community center located within a housing development, and the personal home of a community leader, who was working on getting

[44] Note: Drop-off locations were not fixed and could change from week to week.

a church to serve as a future delivery location. Participating youth who received meal deliveries across the different sites tended to be between the ages of 5 and 16 (most between age 7 and 14), and represented a mix of Caucasian, African-American, and Hispanic children. A few delivery sites served children who were Spanish-speaking.

Massachusetts. The YMCA of Cape Cod was the sole sponsor for the demonstration project in Massachusetts. The YMCA of Cape Cod has a network of volunteers, receives in-kind donations and monetary donations, and is able to generate revenue (e.g., from renting campgrounds for special events) to help support various programs and initiatives. The YMCA of Cape Cod serves children and families and offers a variety of programs for preschool-aged through high school youth and young adults. All programming includes healthy eating and active lifestyle components, and the YMCA is involved in multiple childhood nutrition efforts, such as an after-school snack program for at-risk youth and childcare snack programs. The YMCA of Cape Cod has supported SFSP programs operated by other organizations for 6 years (e.g., providing oversight for closed enrolled sites, camp sites, and a vendor) and became an SFSP sponsor organization in 2010. The YMCA partnered in the demonstration project with the Department of Education and Project Bread. Community support for the project was also received from 4-H clubs, the University of Massachusetts cooperative extensions, the Boys and Girls Club, Cape Cod Children's Place, United Way, Barnstable Public Schools, WIC, local grocery stores, and individual contributors. Through these partners and networks, the YMCA was able to secure resources (including in-kind contributions) and conduct outreach in the community to facilitate participation.

The YMCA delivered meals to enrolled youth living in Barnstable County. The program was designed to provide summer meals for every day that participating children were out of school for the summer, so meal deliveries began on the last day of school in June and continued until the day before school started in August. A bulk meal drop was made at the community room of an apartment complex where many enrolled children resided, and all other meals were delivered directly to children's homes.

School age children who received meal deliveries through the demonstration project in this State were African-American, Caucasian, Asian, and Portuguese children. The sponsor reported that about 25 percent of participating children were from families that had immigrated to the United States. Languages spoken by the children included English, Spanish, and Portuguese.

New York. Westat met with staff from the two sponsor agencies in New York, both of which served rural areas in upstate New York.

Food Bank of the Southern Tier

The "Summer Food demonstration project" (this sponsor's name for the project) was administered by the Food Bank of the Southern Tier (FBST) in Elmira, New York. The FBST's parent organization is "Feeding America," a hunger relief network based out of Chicago that connects with local and national growers and the commercial food industry to distribute food locally through organizations like the FBST. The FBST is the central food pantry/warehouse in the Elmira region. It serves six counties and has partnerships with over 150 member agencies that include food pantries, soup kitchens, shelters, after-school programs and senior housing. The FBST moves about 7 million pounds of food through its partner network every year.

The FBST has sponsored the SFSP since 2005, and it participates in a variety of meal programs for children during the school year and in the summer. School year programs include a backpack program and "Kids Café," a free meal service and education program sponsored by Feeding America and administered through six community programs (e.g., Salvation Army, community centers). The FBST has 29 summer food sites for adults and children in the six counties it serves. Summer meal programs for children include the SFSP enhancement demonstration project; "Picnics in the Park," which offers free lunches for children at five parks around Elmira, New York; and open SFSP sites at various locations in five counties that provide children up to age 18 with snacks and supper while school is out.

While the FBST serves six counties, meal delivery efforts for this demonstration project focused on Schuyler County, New York. Schuyler County's poverty rate is among the highest of the six counties served by the FBST (New York State Education Department, 2010). Many families in the county have experienced unemployment (often due to loss of farms and related jobs in the area) and homelessness. The FBST reached out to its community partners, including schools and fire stations, to arrange locations around Schuyler County where the FBST could park one of its refrigerated trucks so families could pick up their child(ren)'s meals for the summer demonstration project.

Summer meal delivery was available to school age children up to age 18 living in Schuyler County, New York. Nearly 45 percent of the children in this county are qualified to receive free or reduced price school lunches, and these were the children targeted by the demonstration project. Participating children in this demonstration project were predominantly Caucasian and English-speaking. The three elementary schools that made their parking lots available as meal pickup sites

also offer free or reduced price school lunches during the year. Many of the children who participated in the Meal Delivery demonstration project were also enrolled in other summer meal programs sponsored by the FBST, and this enabled many of them to receive meals 7 days a week.

North Rose-Wolcott Central School District

The SFSP Summer Meal Delivery demonstration project operated out of the North Rose-Wolcott High School and was administered by the School Lunch Manager for the North Rose-Wolcott Central School District (CSD). The North Rose-Wolcott CSD has participated in SFSP for the past 4 years and in the National School Lunch Program for at least 8 years. The North Rose-Wolcott CSD maintains partnerships with local and national food banks including "Foodlink," a regional hunger prevention program/food bank in Rochester, New York. The School Lunch Manager reached out to various private groups and organizations in the county and identified volunteers in five Meal Delivery sites that would be accessible to many families living in different regions of the county's 160 mile radius. Four of the five sites were Methodist churches, and the fifth was a housing authority complex.

The Meal Delivery demonstration project ran between June 27 and August 19, 2011 and targeted children living in rural Wayne County, New York who were eligible for free or reduced price school lunches.

Youths who received meal deliveries through the CSD ranged from Kindergarteners to seniors in high school, with most being elementary school aged children. Most were Caucasian, which represented the core population in the county. For years, Haitian and Mexican families came to live temporarily in the county to work on local farms during the spring and summer. Most of those families had left the area by the time the demonstration project was launched, but the CSD hopes to include children from those families among the youth that receive meal deliveries through the project in 2012. The county has seen an increase in homelessness and poverty in recent years as jobs have diminished, especially on local farms. Some of the children who received meals through the demonstration project in 2011 were homeless.

5.3.4 Backpack Demonstration Project

Among the three States participating in the Backpack demonstration project (Arizona, Kansas, and Ohio), there were 16 sponsors and 82 sites (Table 5-4). Sponsors were school districts, a church, a non-profit agency, a faith-based organization, a food bank, and a county government agency. Feeding sites were at schools, recreation facilities, churches, and housing projects (Appendix M).

Table 5-4. Overview of Backpack Demonstration Project Site Visits

State	No. sponsors	No. sites	Type of sponsors
Arizona	3	18	▪ 3 School districts
Kansas	7	14	▪ 5 school districts ▪ 1 church ▪ 1 non-profit agency
Ohio	6	50	▪ Non-profit social service agency ▪ Faith-based organization ▪ Non-profit founded by a church to provide after school help to local children ▪ Non-profit agency that provides services to county residents ▪ Food bank and non-profit agency ▪ County government agency
Total	16	82	

Arizona. Westat conducted telephone interviews with staff from the three sponsor organizations in Arizona—Chandler Unified School District, Litchfield Elementary School District, and Mesa Public Schools. Eighteen feeding sites affiliated with these sponsors provided summer meals to children through the demonstration project.

Chandler Unified School District

The Chandler Unified School District Food and Nutrition Department administers all child nutrition programs for the Chandler school system, which serves youth living in the southeast portion of the Phoenix metropolitan area. Programming includes administration of the National School Lunch Program for about 30,000 students through 44 feeding sites and the SFSP. The School District has been sponsoring the SFSP for at least 15 years, and the staff member who coordinated the Backpack demonstration has 8 years of experience with SFSP.

The School District sponsored seven feeding sites for the demonstration project. All seven sites were elementary schools located in urban areas that ran summer school programs in June 2011, and all provided meals under SFSP. The seven elementary schools had been recognized in the community as places where youth "…hang out during the summer and families feel comfortable having their children there."

The majority of youth served by sites in the Chandler Unified School District were Hispanic or Caucasian between the ages of three and ten (youth up to age 18 were eligible). Most of the youth were English-speaking, but some had parents who did not speak English.

Litchfield Elementary School District

The Litchfield Elementary School District is a K-8 school system on the west side of Phoenix that serves approximately 10,000 children. The Backpack project was sponsored by the school district's food service program, which has offered the SFSP for 15 years and runs the FNS breakfast and lunch program during the school year. The school district partnered with the YMCA, the Boys and Girls Club and local churches to conduct outreach and pass the word along about the Backpack project around the community.

Backpacks were distributed between June 3 and July 22, 2011 through nine SFSP feeding sites. Seven were schools, and two were mobile feeding units (two buses that made stops at locations in the area for SFSP) called the "Nutrition Express." The buses enabled children who lived more than a mile from school to receive SFSP and backpack meals.

Mesa Public Schools

Mesa Public Schools is one of the largest school districts in Arizona. Located on the east side of Phoenix, it serves about 66,000 students through 50 elementary schools, 10 junior highs, and 6 high schools. This school district has been sponsoring the SFSP for about 20 years. The Backpack demonstration project was sponsored by the School Nutrition Department, which partnered with the City of Mesa, the YMCA, City of Grace Church, the Dairy Council of Arizona, and the State Department of Education to coordinate different elements of the demonstration project.

Two regular SFSP feeding sites - an elementary school and a community center – provided meals through the Backpack demonstration project. Both sites serve a largely Hispanic population in urban regions of Phoenix.

A majority of the youth who received backpacks were in grades K-8. About 60 percent were Hispanic, and the other 40 percent represented Caucasian, Black and Native American children. Most children spoke English and Spanish, and many had parents/guardians that spoke only Spanish.

Kansas. Westat met with staff at the seven sponsor organizations and two feeding sites in Kansas (Table 5.2). The seven sponsor organizations are:

- Arkansas City Public School District 470
- Central Unified School District 462
- East Central Kansas Economic Opportunity Corporation
- Gardner Edgerton Unified School District
- Lawrence Public Schools Unified School District 497
- Topeka Public Schools
- United Methodist Church

Among the seven sponsor organizations, one ran the Backpack Project in June 2011, four in June and July 2011, and two between June and August, 2011. Most sponsors represented public school systems, one was a community services program, and one was a church. All offered the SFSP, and many offered other FNS programs throughout the year. Meal sites were in schools, churches, and recreation centers and were located in urban, suburban and rural regions of the State.

Most youth that were served by the Backpack demonstration project in Kansas were Caucasian and English-speaking, but a few sponsors served African-American and Hispanic youth. Most were between elementary and high school age, although all sponsors accepted youth between 1 and 18 years old. Youth who lived too far from meal sites to walk to them had to rely on transportation to reach meal sites, and those who did not have reliable transportation were unable to attend regularly.

Ohio. Westat met with staff at the six sponsor organizations and two feeding sites in Ohio. The sponsors are:

- Andrews' House
- Ashtabula County Children Services
- Community Action Organization of Scioto County
- Hamilton Living Water Ministry, Inc.
- Hocking Athens and Perry Community Action
- Whole Again International

All sponsors and sites that Westat visited had offered meals through the Backpack demonstration project between June and August, 2011. Sponsors oversaw between one and 24 meal sites for the demonstration project. Sites were located in impoverished urban and rural areas of the State that were known to have great need for summer meals for children. Sponsor organizations represented non-profit community programs, faith-based organizations and public social services programs. Meal sites were in schools, churches, community centers, mental health programs, parks and recreation sites, and public housing.

Youth that received meals through the Backpack demonstration project in Ohio tended to be between Kindergarten and middle school age, although all sites served youth between the ages of 1 and 18. Most participating youth, particularly those who lived in rural areas, were Caucasian from low income families. A few sites primarily served African-American and Hispanic youth. Some children walked to the meals sites. There were some, especially in rural regions, who lived too far from the sites to reach them without transportation. Transportation to meal sites was available through one sponsor for youth who attended a summer enrichment program. However, that transportation was only available while that summer program was in session. Youth who either could walk to the meal site or who had reliable transportation were able to more regularly attend SFSP meals than those who lived far from the site and did not have transportation.

5.4 Sponsor and Site Selection

Sponsors in the SFSP are responsible for locating and recruiting eligible sites; hiring, training and supervising staff and volunteers; arranging for meals to be prepared or delivered; monitoring sites; preparing claims for reimbursement; and ensuring that the SFSP and sites are sustainable through community partnerships, fundraising, and volunteer recruitment. These same responsibilities were placed on the four types of demonstration projects. Typically, SFSP sponsors must be approved by

the State agency, and this was the case in the Extending Length of Operation Incentive and Activity Incentive demonstration projects. However, in the case of the Extending Length of Operation Incentive project, sponsors were automatically considered to be participating in the demonstration project if their feeding sites were open for 40 or more days during the summer.[45] Sponsors in the Activity Incentive demonstration projects were selected by the State agency to receive grants to fund recreational activities at feeding sites.

Although FNS made the final decision on sponsors for the Meal Delivery and Backpack demonstration projects, State agencies, nevertheless, selected sponsors to include as part of their application to FNS. Moreover, sponsors in all four types of demonstration projects were responsible for selecting feeding sites (where meals were served or delivered) or drop-off sites in the case of the Meal Delivery demonstration project. This section describes the process of sponsor and site selection for each of the four types of demonstration projects.

5.4.1 Extending Length of Operation Incentive Demonstration Project

Based on the percentage of families eligible for free or reduced price meals, the State of Arkansas identified the areas of the State most in need of the demonstration project. It was first determined whether there were existing SFSP sponsors in low-income areas, and if there were, those sponsors were encouraged to become eligible for receiving additional funding (by operating for 40 days or more during the summer). If there were no existing sponsors, the State director of the demonstration project conducted outreach and recruitment to identify appropriate sponsors.

In Arkansas, the sponsors we spoke to reported that they mostly identified demonstration sites based on need. Sponsor staff looked at basic demographics, number of children, and transportation to and from the proposed sites. In addition, the sponsors looked for sites with facilities large enough to serve the needs of the SFSP. One sponsor also took into consideration previous requests from organizations that expressed interest in feeding the children in the area.

[45] Or in the case of sites in flooded areas, operated throughout the summer for as many days as possible.

5.4.2 Activity Incentive Demonstration Project

In order to identify potential applicants for the Activity Incentive demonstration project, the State agency in Mississippi released a Request for Application (RFA). The RFA required that applicants be an existing SFSP sponsor and attend the training for all regular SFSP sponsors. CACFP grantees were excluded from consideration unless these grantees were also regular SFSP grantees. Applicants were asked to provide details on the activities they would implement if funded. A panel was convened by the State agency to review applications and select sponsors and sites to receive the Activity Incentive grant.

To select sites, most sponsors reached out to existing SFSP sites and/or sites that had previously participated in the SFSP and encouraged these sites to be a part of the demonstration project. In one case, the sponsor had received a request from an apartment manager for the sponsor to provide a program for the apartment residents similar to the Activity Incentive demonstration project. In another case, the sponsor conducted an informal needs assessment to identify the geographical area(s) with the greatest need and recruited sites from within those areas. In the case of two other sponsors, the organization served as both a sponsor and the site (i.e., they were single site sponsors), so site selection was not necessary. When asked if they would make any changes to the site selection process in the future, all sponsors indicated that they would not.

5.4.3 Meal Delivery Demonstration Project

The sponsor in Delaware reported conducting extensive outreach in the search to identify sites for the demonstration project. The sponsor sent informational mailings about the demonstration project to former SFSP grantees, housing authorities, hunger relief programs, and daycare centers. The sponsor identified some selection criteria, including availability of meal service facilities, capacity of the site to serve children, location in a rural area, and existence of at least 10 children per site that would be eligible and willing to participate in the demonstration project. When asked what they would change about the site selection process, the Delaware sponsor indicated that he would like to include more churches and community centers next year and would help potential sites better understand the difference between the regular SFSP and the demonstration project.

In Massachusetts, the sponsor (YMCA of Cape Cod) had a long history of working with the State on food programs. The State had previously implemented a home delivery pilot program with this sponsor and had worked with the sponsor in the SFSP for approximately 6 years. In addition, the

State was looking for a sponsor that was located in a rural area with a great need for a summer food program that included meal delivery.

To select sites for the Meal Delivery demonstration project, the Massachusetts sponsor capitalized on the strong community network already in place between the YMCA of Cape Cod and the community. The intent was to select apartment complexes with high numbers of eligible children in order to serve the greatest number of children per delivery stop. The sponsor was also aware of the many security issues and reviewed crime statistics in the different geographic areas. Once the apartment complexes and individual houses were selected, the sponsor created a delivery route.

The State agency in New York determined that sponsors for the Meal Delivery demonstration projects needed to have previous experience with USDA feeding programs and specifically SFSP. The State contacted three potential applicants and encouraged these organizations to submit an application to be a sponsor. Three applications were received, and two were approved by FNS. Respondents commented on the lack of time allotted for this selection process. It was their opinion that 3 weeks is not enough time for some of the smaller organizations to submit a competitive application. It was their hope that, next year, more time would be allowed, which would potentially open the demonstration project up to other organizations.

To select drop-off sites for the demonstration project, one sponsor in New York met with local food pantries and schools to identify areas in the selected county that would be accessible to families and had an appropriate place to park the truck for meal distribution. Sponsor staff met with community partners, including fire stations, schools, and other community organizations to arrange distribution locations. Respondents at one New York sponsor indicated that there was one part of the county that went underserved and, for next year, they hope to add a site in that area. The other sponsor in New York reported conducting outreach to leaders of community organizations to identify appropriate drop-off sites. Much of the outreach was conducted through personal relationships between the sponsor staff and the leaders of the community organizations. The sponsor made an effort to find sites in different parts of the State to reach a large and diverse population.

5.4.4 Backpack Demonstration Project

In Arizona, the choice of both sponsor and site was based on the apparent need and the State's perception of the ability to attract large numbers of children to the demonstration project. The State

agency invited specific organizations to apply to become sponsors for the Backpack demonstration project. In selecting sites, sponsors identified schools with the highest number of children eligible for free or reduced price lunch. In addition, sponsors looked for schools that offered summer school and tutoring.

The State agency in Kansas distributed information about the Backpack demonstration project to former SFSP grantees. A diverse group of eight grantees responded as interested in serving as a sponsor for the demonstration project, and seven were selected by FNS. These sponsors included large and small organizations, located in both urban and rural areas, established and new sponsors, schools, and private non-profit organizations.

Backpack sites in Kansas were selected based on the number of eligible children the site could access. Sponsors looked for sites with access to high numbers of children eligible for free or reduced price meals. In addition, sponsors selected sites that were considered to be centrally located for the target population and had a previous relationship with the SFSP. In one instance, the sponsor selected a site that could provide a discreet entrance and room in the school so children coming for meals could maintain some anonymity.

Ohio was the third Backpack demonstration project interviewed by Westat. The State agency in Ohio reported that it developed a list of potential sponsors for this demonstration project but that FNS made the final selections. Sponsors in Ohio selected existing SFSP sites to serve as Backpack demonstration project sites. In addition to experience with SFSP, other criteria important to the Ohio sponsors included organizations with higher than average numbers of children participating in SFSP and access to a diverse population of children in low income households.

5.5 Roles and Responsibilities

Roles and responsibilities for the SFSP are well-prescribed by FNS. State grantees are expected to identify sponsors and approve sponsor applications, conduct sponsor training, monitor SFSP operations, and process program payments. Sponsors are required to attend State training; locate and recruit eligible sites; hire, train and supervise staff and volunteers; arrange for meals to be prepared or delivered; monitor sites; prepare claims for reimbursement; and ensure that the SFSP and sites are sustainable through community partnerships, fundraising, and volunteer recruitment. It is the responsibility of all sites to manage a food service program. It is not uncommon for some of

the sponsors also to serve as a site (i.e., they are single site sponsors). In this case, sponsor staff fulfills both sponsor and site roles.

These same responsibilities were expected of State grantees, sponsors, and site staff and volunteers in all demonstration projects. However, roles and responsibilities were also geared to the specific components of the demonstration projects (e.g., delivering meals to drop-off sites, filling backpacks or bags with food, distributing backpacks, interacting with Westat evaluation staff). Many of those roles and responsibilities have already been covered in other chapters. A detailed description of the roles and responsibilities at the State, sponsor, and site level for each demonstration project is contained in Appendix N.

5.6 Outreach Targeted at Parents and Guardians

5.6.1 Extending Length of Operation Incentive and Activity Incentive Demonstration Project Outreach

Outreach for the Extending Length of Operation Incentive (Arkansas) and Activity Incentive (Mississippi) demonstration projects were targeted toward sponsors in the respective States. The State grantee in Arkansas was interested in informing existing sponsors about the incentive so they would keep their SFSP sites operating for 40 or more days. Outreach to sponsors took place at all SFSP full day trainings, town hall meetings, and SFSP application trainings. The outreach efforts included an explanation of the benefits of the demonstration project for the community as well as the sponsor.

For the State grantee in Mississippi, it was necessary to obtain applications from sponsors who were hoping to receive a grant to pay for activities at their SFSP sites. The State shared information about the demonstration project during SFSP trainings. Prior to the summer training, the State grantee mailed a letter (Exhibit 5-1) to potential sponsors and distributed a media release. The letter and media release encouraged sponsors to apply and urged them to help with "getting the word out" to help recruit viable sponsors.

Exhibit 5-1. Outreach Letter to Sponsors for Activity Incentive Demonstration Project

When school lunchrooms close for the summer, a significant number of children in low-income Mississippi communities could be as risk of hunger or poor nutrition because free and reduced price schools meals are not available. USDA's Summer Food Service Program is designed to bridge this nutrition gap. It reimburses organization for serving free, nutritious breakfasts, lunches or snacks to children in eligible low-income areas. However, the program continues to be underutilized, largely due to lack of willing operators and feeding sites. Last year, 1,088,713 free meals were serves to low income Mississippi children at a summer feeding site. Yet, the number of free and reduced price school lunches served to children in Mississippi during the school year was 53,596,518.

The responsibility of our children's health and well being should continue through school breaks. The **Summer Food Service Program** (SFSP) fills the nutrition gap that many students experience during school vacations. Unfortunately, the SFSP is not available in all of our state's economically-depressed areas where alternatives to school lunches are not readily available or where many children cannot afford them. The result is that many of our children are going hungry. To meet their needs, we need more sponsors of the program.

Mississippi is a leader in obesity among our youth and adult population. Evidence increasingly identifies higher levels of physical inactivity (watching television and computer screen time), lower levels of moderate physical activity (active play), and excessive consumption of sugar sweetened beverages as critical contributors to the ever higher rates of childhood obesity. It is our belief that by providing activities to children at summer feeding sites that we can take one additional step towards teaching and establishing patterns with children on the importance of physical exercise and proper nutrition.

Approved sponsors will have an opportunity to apply for competitive mini-grants up to $5000.00 through the SFSP Demonstration Project to plan and implement enrichment or recreational activities at SFSP meal sites. Activities and special events help draw children to meal sites and keep site participation high. The goal of this demonstration project is to provide sponsors with additional funding to create activities at their sites that will increase SFSP participation. Sponsors must agree to operate the site for 30 or more days.

I urge you to assist us in "getting the word out" to help us find viable sponsors of the SFSP and encouraging those who are already sponsors to add more SFSP sites. Coupled with physical activities and arts and crafts, the SFSP allows school breaks to be an extension of our commitment to our children's education.

If you would like to discuss the program further, please contact me 601-576-4954 or e-mail me at lphillips@mde.k12.ms.us , Mary Clayborne at mclayborne@mde.k12.ms.us, or Tina Thomas at tthomas@mde.k12.ms.us.
Sincerely,
Lenora Phillips, Director
CN Technical Assistance
LP:lp

5.6.2 Meal Delivery Demonstration Project Outreach

Outreach in the Meal Delivery demonstration project was conducted by all sponsors. Participation in the Meal Delivery demonstration project was limited to children eligible for free or reduced price lunch at their public school. Unlike the Backpack demonstration project, the enrollment process for Meal Delivery required verification of eligibility through the local school. As a result, Meal Delivery sponsors worked with the schools in their outreach efforts by first identifying children who were eligible for the Meal Delivery demonstration project and then providing outreach to gain parent/guardian interest in the demonstration project. Outreach efforts included the distribution of flyers, invitational letters, and packets to eligible families, as well as "word of mouth" (Table 5-5) (see Appendix O for examples of outreach materials). In addition, some of the Meal Delivery sponsors engaged in targeted outreach efforts in the community by working with organizations that serve families that would be eligible for the demonstration project, such as public aid and social service agencies. One sponsor printed information about the project on school menus.

Table 5-5. Summary of Outreach Efforts by Meal Delivery Sponsors

Meal Delivery Program Outreach Activities	Food Bank of Delaware (DE)	YMCA of Cape Cod (MA)	Food Bank of southern Tier (NY)	North Rose-Wolcott Central School District (NY)
Mailing to Families (via school or public aid agency)	✓		✓	✓
Food pantry postings/announcements			✓	✓
Distribution/posting of flyers	✓		✓	
Inform community organizations/church to announce	✓	✓	✓	✓
Distribution of materials by community organizations		✓	✓	
Press release, public service announcement (PSA)	✓	✓		
Collaboration with churches		✓		✓
Community kickoff event	✓			
Word of mouth by families		✓		✓

The most common forms of outreach in the Meal Delivery demonstration project were mailings to potentially eligible families and contacts with community organizations that serve potentially eligible families. Community organizations, in turn, made announcements and/or distributed materials to families. Collaboration with community organizations was a key component for identifying and recruiting eligible families (Table 5-6).

Table 5-6. Types of Collaborator Organizations Providing Outreach for the Meal Delivery Demonstration Project

Type of community organization	Food Bank of Delaware (DE)	YMCA of Cape Cod (MA)	North Rose-Wolcott Central School District (NY)	Food Bank of southern Tier (NY)
Social Services		✓		✓
Food programs/food pantry	✓	✓		
Schools/school districts		✓	✓	✓
Libraries		✓		
Medical/dental offices		✓		
Housing authority/services	✓	✓		
Churches	✓	✓	✓	
Businesses		✓		
Daycare centers	✓			

In their outreach efforts, sponsors focused on identifying eligible children who would benefit most from the Meal Delivery demonstration project. This was done by using multiple outreach strategies to reach a broad group of families. Sponsors did not focus on recruiting an ethnically diverse group of children but instead focused on identifying families with the greatest need. Moreover, in many cases the populations in the areas served were homogenous in terms of ethnicity, with the exception of one sponsor that served a multilingual community. One sponsor reported that an effort was made to recruit children up to the age of 18 by using the terms "kids" and "teens."

5.6.3 Backpack Demonstration Project Outreach

Sponsors also conducted outreach for the Backpack demonstration project. The focus was on informing parents and caregivers about the Backpack project. The most common outreach approach to attract participants consisted of mailings to parents through the school, media releases, and distribution of flyers (Table 5-7). Flyers, developed in collaboration with Westat, were distributed in local communities, at school, and during the first few weeks of the SFSP when they were distributed on most days of the week and inserted in backpacks or bags when children took home their weekend food. These flyers contained information on the Backpack demonstration project and also sought contact information for the evaluation. The primary targets for outreach were families who participated in the regular SFSP programs, although efforts were made to recruit additional families.

Table 5-7. Summary of Outreach Activity for the Backpack Demonstration Project

Outreach Activities	Number of Sponsors
Mailing to families (via school)	8
Media release (newspaper, newsletters, radio)	7
Distribution/posting of flyers	5
Word of mouth by families	4
Announcements at community events/churches	4
Mailing to families (via service or public aid agency)	1
Parent orientation/event	1

Outreach efforts were unique to each of the sponsors. For example, Community Action Organization in Scioto in Ohio used an automated telephone call system (using the local school's contact list) to contact families and leave messages about the demonstration project. At the Kansas Central Unified District 462, the sponsor developed "mini" commercials to perform at school events. The United Methodist Church in Kansas posted information about the demonstration project at the Common Boards (Bank and Chamber of Commerce). At the Litchfield Elementary School District in Arizona, the sponsor used electronic highway signs to advertise the SFSP. When families called about the SFSP, they were also informed about the Backpack demonstration project. Finally, the Mesa Public Schools sponsor used posters in local grocery stores.

5.7 Provision of Demonstration Benefits

Regardless of demonstration project or location, the main purpose of all demonstration projects was simple: to increase access to food in the summer in order to stabilize food security for children in need. Every key informant we interviewed stressed that feeding the children was why they worked so hard and that they knew these projects were such a valuable resource for their community. As one of the sponsors stated, "The bottom line is we've got to feed hungry children. Period. And if you have the passion – I have the passion – it's going to be a great program." Most sponsors reported taking pride in their menus and making a concerted effort to provide food that was both appealing to the children and healthy. Although "benefits" in each type of demonstration were handled differently, there were many commonalities that highlight their common mission to feed children in need.

This section describes the process that was used to provide demonstration project benefits to children. For the Extending Length of Operation Incentive demonstration project, the benefit was

the extra $0.50 per lunch for those sites open 40 or more days during the summer. Although the benefit was directed at sponsors, not children, the children were expected to benefit by the sites operating more days than usual. The benefit in Mississippi's Activity Incentive demonstration was the funding of activities which were expected to draw more children and sustain their participation. The benefits in the Meal Delivery and Backpack demonstrations consisted of the food provided to the children participating in the projects. Thus, we describe the incentives provided in the Extending Length of Operation Incentive and Activity Incentive demonstration projects and the nature of the food and food distribution in the Meal Delivery and Backpack demonstration projects.

An important similarity regarding the food provided by all demonstration projects is that they all followed USDA meal patterns, which are required for SFSP reimbursement. A reimbursable breakfast includes one serving of milk, one serving of fruit/vegetable, and one serving of grains/bread, while a reimbursable lunch includes one serving of milk, two servings of fruit/vegetable, one serving of grains/bread, and one serving of meat/meat alternative. Every sponsor developed menus that met the same federal regulations, although some States have their own regulations that go above and beyond those mandated by USDA. Although everyone was working within a similar framework, there was much diversity among the foods provided, often due to cultural preferences, local food availability in different parts of the country, and the way food needed to be distributed in each type of demonstration project.

Most sponsors reported that effort was made to accommodate allergies or special requests if they were made. Some sponsors played it safe by serving no peanut products, while others waited to see if a peanut allergy was reported. One sponsor indicated that there were three children with lactose intolerance for whom they had to provide soy milk. A majority of sponsors indicated that no special requests for vegetarian options or allergies were reported.

5.7.1 Extending Length of Operation Incentive Demonstration Project

The foundation of the Arkansas demonstration project was an extended length of time for the project to run throughout the summer. In exchange, the sponsors received higher reimbursement rates for lunch, which could facilitate greater flexibility in meal planning compared to the standard SFSP reimbursement rates. Arkansas' Department of Human Services reported that the sponsors were really "excited" about the extra money because it gave them opportunities to operate more than they could afford to in the past. Some were able to operate on the weekends, which previously did not happen. Additional ways in which sponsors that were interviewed reported the money was

used was to purchase more food to be able to serve more children, hire additional staff to assist with serving the children, and help to offset the transportation costs to carry food from site to site. Others used the additional funds to make the site more attractive to the children by purchasing Friday treats (e.g., ice cream or cake) to give to the children if they ate all their food during the week, or to host special events such as water slide days, picnic days, and mascot costume parties with Mickey and Minnie Mouse.

Table 5-8 provides operational details for the Extending Length of Operation Incentive demonstration sponsors visited by Westat, including the days in operation and the number of days sites were open during the summer.

Table 5-8. Operational Details for Extending Length of Operation Incentive Project, Summer 2011

Sponsor visited	Days in operation	No. days sites open in 2011
Building Futures, Inc.	Sites operated Monday through Friday; some operated on weekends (e.g., at church on Sunday).	▪ 1 site open 8 days ▪ 5 sites ranged from 47 – 68 days
City Youth Ministries, Inc.	All sites served Monday through Friday, and some were able to serve on Saturdays.	▪ 2 sites open 26 and 30 days ▪ 3 sites ranged from 44 – 54 days
First Trinity Church	Food was served Monday through Friday. In June they provided food every day.	▪ 2 sites – 42 and 52 days
Galilee/Regeneration Ministries, Inc.	Food was served Monday through Friday.	▪ 2 sites – 44 days each
New Zion Community Center	One site served Sunday through Friday while the other site served Monday through Friday.	▪ 2 sites – 41 and 56 days
Northside Redevelopment Center	All sites served food Monday through Friday with the exception of one site, which served food Monday through Thursday.	▪ 9 sites – 49 days each
Shekinah Glory Outreach	Food was served Monday through Saturday.	▪ 1 site – 59 days
Victory Praise and Worship	All sites served food Monday through Friday. One site served every day if they had staff/volunteers available.	▪ 2 sites – 40 days ▪ 1 site – 42 days

5.7.2 Activity Incentives Demonstration Project

The hallmark of the Activity Incentive demonstration project in Mississippi was the activity component funded by grants valued at up to $5,000 per site. Sponsors we interviewed organized both indoor and outdoor activities onsite, as well as field trips to a variety of community activities (e.g., the zoo, theater) (Table 5-9). Community partner organizations provided transportation for field trips, donations of gifts to use as game prizes, school and other supplies, and staffing.

Table 5-9. Activities* and Activity Implementation in Activity Incentive Demonstration Project

Sponsor	Activities	Activity implementation
Coahoma County School District	▪ Reading activity after breakfast ▪ Workshops (coloring, painting, arts and crafts, bead necklaces, hand puppets, sun catchers, yarn and popsicle sticks, picture frames, name signs, scriptures, word of the day) ▪ Dancing ▪ Music ▪ Theater	▪ Focus is on reading ▪ Children received free books from a book bank ▪ Once the children entered the center they could not leave until the end of the program ▪ Primary school teacher planned the activities and managed day-to-day implementation ▪ Community partners provided assistance with activities – Body shop provided transportation for field trips – Used community center fitness track – Day care center gave free sewing classes – Fountain of Life Outreach gave presentations on how to be productive citizens – Auto company provided fuel for transportation
Mississippians for Community Development	▪ Indoor activities (arts and crafts, informational discussions about nutrition and health) ▪ Outdoor activities (sports and field games) ▪ Field trips (Memphis Zoo and Chuck E. Cheese)	▪ Began with academic activities, but changed to "fun and games"
Northtown Child Development Center	▪ Color me Healthy curriculum (included singing about healthy foods, circle time activities, and games centered on healthy eating)	▪ Used an existing curriculum ▪ One individual oversaw activities for all seven sites ▪ Each meal site had an activity director

*Sponsors used multiple funding sources; not limited to USDA funds.

Table 5-9. Activities* and Activity Implementation in Activity Incentive Demonstration Project (continued)

Sponsor	Activities	Activity implementation
Operation Upward	▪ Arts and crafts ▪ Reading class ▪ Dance class ▪ "Reject all tobacco" (RAT) ▪ Violence prevention ▪ Safety education ▪ Human video ▪ Outdoor recreation class ▪ Cooking class ▪ Nutrition education	▪ Partnered with community organizations to provide activities (e.g., local fire and police department) ▪ Managed by youth leaders with adult supervision ▪ Youth served as model/mentor for children ▪ Two people taught each class ▪ Adult teachers for reading program ▪ Used USDA materials from website (e.g., Classroom Kids, Team Nutrition, Fruits and Vegetables Challenges)
The Salvation Army	▪ Field sports ▪ Human sphere ball ▪ Field day type games ▪ Water slides ▪ Arts and crafts	▪ Camp director/onsite coordinator ▪ Community partners provided assistance with activities – Donate toys and gifts to use as prizes – Worked with Youth Corp to recruit college students to assist
United Family Life Center	▪ Songs and poetry ▪ Exercise sessions ▪ Gym ▪ Academics ▪ Arts and crafts ▪ Bingo ▪ Sports (e.g., kickball, volleyball, softball) ▪ Nap	▪ A full summer day camp ▪ Four instructors served as coordinated and youth supervisors; responsible for running each of the age groups and preparing lessons for the academic periods ▪ Instructors supported by youth volunteers ▪ Office manager – staff member from City of Cleveland Parks and Recreation Commission ▪ Community partners provided assistance with activities – Parks and Recreation funded coaching position – Churches, businesses donated school and other supplies

*Sponsors used multiple funding sources; not limited to USDA funds.

In addition to the specific activities described above, one sponsor detailed creative strategies that were used to encourage children to eat foods. For example, to interest the children in eating tuna salad, the staff ran into the room with tuna salad shakers (tuna salad in cups). According to the staff, the children really loved it and found the tuna fun to eat. This staff was also able to encourage the children to eat baked tilapia, which the children initially rejected. Another site taught the children about the impact of eating healthy foods. Key informants reported that the children became eager to consume foods like milk and broccoli once they knew it could help improve their skin or build muscles.

5.7.3 Meal Delivery Demonstration Project

The Meal Delivery and Backpack demonstration projects approached food differently than the previous two demonstration projects because the food was not prepared daily or eaten onsite. All food for the Meal Delivery demonstration project needed to be packaged up for delivery. Outside vendors (such as Cisco) and a local food authority were used to procure the foods for these three Meal Delivery demonstration projects. Moreover, both Delaware and Massachusetts reported that they used State nutrition guidelines that went above and beyond what is required by USDA. For example, Delaware did not allow any sweet grains or fried foods.

In all three States, meals were prepared in one central location and then delivered to the sites and individual homes (Table 5-10). In Delaware and New York, all food was delivered to sites where the food was picked up by the child, parent, or proxy. Massachusetts delivered directly to homes and also had a pickup site.

Table 5-10. Operational Details for the Meal Delivery Demonstration Program, Summer 2011

State	Delivery location	Days in operation	Meals provided
Delaware	Pickup site	▪ Deliveries Monday through Friday, except for one site which operated only on Fridays ▪ On Fridays, all deliveries contained food for 3 days	Breakfast and Lunch
New York	Pickup site	▪ For the Food Bank of the Southern Tier, delivery only on Wednesdays; food provided for 4 days ▪ For the North Rose-Wolcott Central School District, delivery on Mondays; food provided for 4 days*	Breakfast and Lunch
Massachusetts	Pickup site and individual homes	▪ Deliveries on Mondays, Wednesdays, and Fridays ▪ On Mondays and Wednesdays food provided for 2 days; on Fridays, food provided for 3 days	Breakfast and Lunch

* Participants received an additional 2 days' worth of food funded by another organization.

Delaware reported that all meals were delivered in wax bags which had a sticker to inform the child or parent that the bag should be placed in the refrigerator until eaten. All bags were kept in coolers at the site until they were picked up. All the meals were cold. A typical breakfast consisted of milk, fruit (fresh or pre-packaged) and a bagel, muffin, or cereal. A typical lunch consisted of milk, fruit (fresh, pre-packaged, or raisins), and a sandwich on wheat bread. Peanut butter and jelly sandwiches, fresh fruit, and tuna were the most popular foods, according to key informants, while milk and raisins were the least popular. The Food Bank of Delaware viewed its menu as innovative because it was able to provide a lot of fresh fruits and whole grains.

Like Delaware, New York's Food Bank of the Southern Tier (FBST) provided all cold meals, which were delivered out of a refrigerated truck. Deliveries were made to five sites (parking lots in elementary schools and fire stations) on Wednesdays between the last week of June and August 31, 2011. One location at an outreach center was dropped as a pickup site, and the number of sites was cut back to five after the second week of deliveries. Only two families were receiving meals at the outreach center, so those families were assigned to a Wednesday pick up location nearby. The truck waited for 20 minutes in a parking lot at each site at a specified time of day for that location. Each family with an enrolled child was assigned a pickup location, date and time at a site closest to their residence. The FBST truck carried all meals to be delivered for that day, so a family could pick up their meals from another site if they could not get to their regular pickup site on time.

Foods were specifically chosen by the sponsor to have high shelf-stability and a low potential for food-borne illness. Breakfasts typically consisted of milk, cereal, juice, yogurt, and graham crackers. Lunches were typically milk, sandwiches with meat, peanut butter and jelly Uncrustables®, and fresh fruit or cut vegetables. Parents provided some feedback on the foods, relating that their children most enjoyed string cheese, yogurt, and the Uncrustables®.

At the North Rose-Wolcott CSD meals were delivered to sites on Mondays and Fridays (one delivery day assigned per site) in a North Rose-Wolcott CSD van equipped with coolers and refrigerated mats for perishables. On delivery days, volunteers at each site received the meal packages and handed them out to parents or guardians of enrolled children. Each child received two bags of food at delivery -- one bag contained 4 days' worth of breakfasts and lunches from the Meal Delivery demonstration project. A second bag contained food for 2 more days of breakfasts and lunches funded by Foodlink. In total, children received 6 days of breakfasts and lunches in their weekly meal delivery packages. Meals were delivered to the sites in coolers, and menu-planning focused on single servings of foods that did not require much preparation. The sponsor reported receiving positive feedback from the parents about the foods and how kid-friendly they were. Favorite food items included microwavable macaroni and cheese, Hot Pockets, and the Uncrustables®. This sponsor was the only one who did not provide individual servings of milk; children were provided with half a gallon of milk in each delivery.

In Massachusetts, the meals were delivered in a cooler bag with an ice pack. Although all meals were delivered cold, Massachusetts did provide some meals that required reheating. The Massachusetts sponsor appeared to provide more variety in her menus than the other two States. Breakfast items included the standard milk and fruit but also included items such as bagels, hard boiled eggs, yogurt, sausages, pancakes, and pigs in a blanket, in addition to cereal and muffins. There was also more

variation in lunch items. Fresh fruit and vegetables went beyond raisins and carrot sticks and included cucumber wedges, steamed summer squash, steamed broccoli, zucchini, and raw green pepper slices. Entrees included turkey/ham/roast beef and cheese sandwiches, meatball subs, chef salads with ranch dressing, herbed baked chicken, mozzarella and pita bread, hot dogs, chicken patties, veggie burgers, baked sweet potatoes, and chicken parmesan. The sponsor reported that hot meals like the baked chicken and meatballs were the most popular. The kitchen manager stated that he tried to prepare meals similar to what he would like to enjoy with his own family for dinner.

5.7.4 Backpack Demonstration Project

The Backpack demonstration project presented the greatest challenge to sponsors in terms of food delivery since all the food was required to be shelf-stable and needed to be able to be packaged ahead of time. Similar to the Meal Delivery demonstration project, none of the children ate their food at the site; all children picked up their bags and then consumed the food offsite. The operational necessity that the children eat at home provided some frustration to the sponsors since they were not able to illicit much feedback about the children's satisfaction with the foods. Some parents and children provided feedback to the site staff, but other sponsors had nothing other than "we haven't heard anything negative" to work from.

Operationally, even across multiple States, most of the Backpack demonstration projects ran in the same general manner. The children would be at the site for their regular SFSP meal, and then on a pre-determined backpack distribution day (the last day the site was in operation for the week) (Table 5-11) they would be able to pick up backpacks or bags of food to take home with them to supply them with meals on days the site was not open. As the children each took a backpack or bag, meal count forms were checked off by staff or volunteers at the site. Some sponsors in Ohio and Kansas actually used real backpacks. Arizona and some Kansas sponsors relied on either plastic or reusable grocery bags, and Topeka Public Schools in Kansas used the sealed clear plastic bags in which the food was packed. The type of bag used sometimes dictated the nuances of the distribution process.

Some sponsors, in order to ensure that the children returned their backpacks each week, kept lists with the children's names and checked off the name both when the backpack was picked up and returned. If a child did not return a backpack, he or she was still able to receive food the following week. Some additional sponsors who did not use backpacks also kept lists with the children's names, often as a result of this evaluation's desire to contact parents. However, this was not a requirement.

Table 5-11. Operational Details for the Backpack Demonstration Project, Summer 2011

Sponsor	Backpack distribution day	Meals provided	Bag type
Arizona			
Chandler Unified School District	Friday	Breakfast (2) and lunch (2)	Reusable grocery bags
Litchfield Elementary School District	Saturday (2 sites) Friday (1 site)	Breakfast (1) and lunch (1) were at the Saturday sites, lunch only at the Friday site	Plastic grocery bags
Mesa Public Schools	Thursday	Breakfast (3) and lunch (3)	Plastic grocery bags
Kansas			
Arkansas City Unified School District	Thursday	Lunch (3)	Backpack
Central Unified School District 462	Thursday	Lunch (3)	Backpack
East Central Kansas Economic Opportunity Corp	Thursday	Lunch (3)	Reusable grocery bags
Gardner Edgerton Unified School District	Friday	Breakfast (2) and lunch (2)	Reusable grocery bags
Lawrence Public Schools USD 497	Friday	Lunch (2)	Plastic grocery bags
Topeka Public Schools	Friday	Breakfast and lunch (2)	Sealed clear plastic bags
United Methodist Church	Thursday	Lunch (3)	Plastic grocery bags
Ohio			
Andrews House, Inc.	Friday	Lunch (2)	Backpack
Ashtabula County Children Services	Friday	Breakfast (2) and lunch (2)	Backpack
Community Action Association of Scioto County	Thursdays (at 3 sites) Friday (at 23 sites)	Lunch (3 lunches at the Thursday sites and 2 at the Friday sites)	Zip top bags
Hamilton Living Water Ministry, Inc.	Thursday	Lunch (3) and snack (3)	Backpack
Hocking Athens Perry Community Action Agency	Friday	Breakfast (2) and lunch (2)	Plastic grocery bags, children get their backpack to keep on the last distribution day
Whole Again International	Friday	Breakfast and lunch (2)	Backpack

Sponsors were typically responsible for menu planning. However, some of the Ohio sponsors indicated they left this task up to their vendor. Two of the Arizona sponsors reported that they put a lot of thought into their menus. One strove to think of things that were "kid-friendly" and that they knew children could prepare on their own. Another Arizona sponsor reported taking time to put together meals that were truly meals, and not just food, and that would be fun for the entire family.

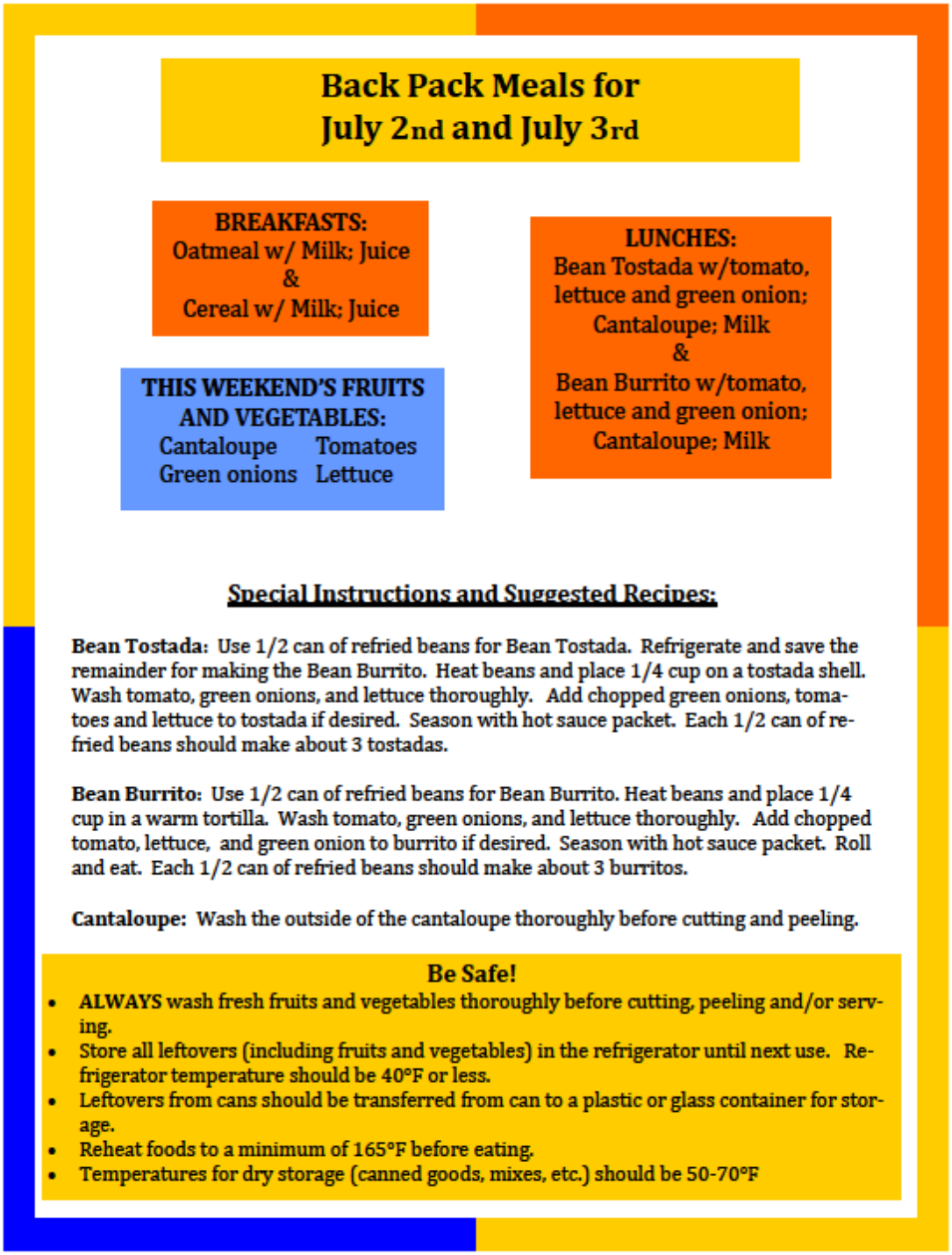
Food was procured differently by different sponsors. Vendors included local grocery stores. Some used larger food service companies or food providers that they used for SFSP or school year feeding. Some sponsors also procured food from local food banks. Some vendors prepared the backpacks themselves and delivered packed bags, while others simply delivered the food and the backpacks or bags were prepared at either the sponsor location or the site itself.

The requirement that Backpack demonstration project sponsors provide shelf-stable food led to the provision of more pre-packaged foods than the other demonstration projects. Pre-packaged foods tend to contain higher levels of preservatives and sodium than foods prepared fresh. A majority of sponsors lamented the need to provide shelf-stable milk since they thought that most children do not like it and they suspected that they were not drinking it. The sponsors also added that many of the children liked chocolate milk better than white milk.

In Ohio, breakfasts typically included cereal, cereal bars, or pop tarts, while lunches typically included peanut butter and jelly Uncrustables®, carrots and ranch dressing, meat and cheese sticks, peanut butter crackers, beef stew, Spaghetti O's with meatballs, chili, ravioli, and beanie weenies, as well as fresh fruit as available. Kansas menus were similar with commonly used breakfast foods including cereal, fruit cups, and granola bars. Commonly used lunch foods included Chef Boyardee products such as lasagna, beef ravioli, or macaroni and cheese, animal crackers/goldfish/pretzels/ sun chips/crackers, applesauce, fruit cups, cheese sticks, sunflower seeds, chunk chicken, and nacho chips with cheese.

Arizona had menus that were somewhat different than the other two States. The Arizona sponsors incorporated more fresh produce than the other States, including items such as oranges, apples, bananas, blueberries, strawberries, potatoes, cucumbers, watermelon, pears, peaches, broccoli, cauliflower, and zucchini. The Chandler Unified School District did something that none of the other sponsors did – it provided meals that needed to be assembled in the home by providing all the ingredients as well as recipes. An example menu (Exhibit 5-2) contains instructions and suggested recipes for bean tostado, bean burrito and cantaloupe.

Exhibit 5-2. Example of Backpack Menu from Chandler Unified School District (Arizona)



Back Pack Meals for July 2nd and July 3rd

BREAKFASTS:
Oatmeal w/ Milk; Juice
&
Cereal w/ Milk; Juice

LUNCHES:
Bean Tostada w/tomato, lettuce and green onion; Cantaloupe; Milk
&
Bean Burrito w/tomato, lettuce and green onion; Cantaloupe; Milk

THIS WEEKEND'S FRUITS AND VEGETABLES:
Cantaloupe Tomatoes
Green onions Lettuce

Special Instructions and Suggested Recipes:

Bean Tostada: Use 1/2 can of refried beans for Bean Tostada. Refrigerate and save the remainder for making the Bean Burrito. Heat beans and place 1/4 cup on a tostada shell. Wash tomato, green onions, and lettuce thoroughly. Add chopped green onions, tomatoes and lettuce to tostada if desired. Season with hot sauce packet. Each 1/2 can of refried beans should make about 3 tostadas.

Bean Burrito: Use 1/2 can of refried beans for Bean Burrito. Heat beans and place 1/4 cup in a warm tortilla. Wash tomato, green onions, and lettuce thoroughly. Add chopped tomato, lettuce, and green onion to burrito if desired. Season with hot sauce packet. Roll and eat. Each 1/2 can of refried beans should make about 3 burritos.

Cantaloupe: Wash the outside of the cantaloupe thoroughly before cutting and peeling.

Be Safe!

- **ALWAYS** wash fresh fruits and vegetables thoroughly before cutting, peeling and/or serving.
- Store all leftovers (including fruits and vegetables) in the refrigerator until next use. Refrigerator temperature should be 40°F or less.
- Leftovers from cans should be transferred from can to a plastic or glass container for storage.
- Reheat foods to a minimum of 165°F before eating.
- Temperatures for dry storage (canned goods, mixes, etc.) should be 50-70°F

5.8 Oversight and Monitoring

A key role of SFSP State grantees is to monitor SFSP operations. Sponsors, in turn, are responsible for monitoring sites. The same types of responsibilities were required in all four types of demonstration projects. Questions to key informants on oversight and monitoring explored the types of operations being monitored and systems in place for oversight and monitoring. Oversight and monitoring is described below for each of the four types of demonstration projects.

5.8.1 Extending Length of Operation Incentive and Activity Incentive Demonstration Projects

For the most part, the oversight and monitoring provided by the State agency to demonstration project sponsors and sponsors to sites was the same that would have been provided to all other SFSP sponsors and sites in the State. In Arkansas, where the Extending Length of Operation Incentive demonstration took place, the State agency monitored sponsors mostly through site visits, but also with telephone calls and emails. State visits were designed to monitor overall operations, and the State developed a form that was used for consistency of site visits. The form collected information such as the number of meals served and the daily billing of the sponsor. State monitors examined the sponsor's operations and administrative budget in order to document the costs of operating the demonstration project and also approved the menus used for meal production to ensure compliance with USDA guidelines and standards, as well as food safety practices.

Each of Arkansas' demonstration project sponsors received a site visit from the State within the first week of operations. State monitors also visited sites and used a form during the initial and subsequent visits that monitored all daily operational activities, including maintenance of food safety, meal preparation, and meal counting. The completed forms were returned to the sponsor who discussed the findings with the site staff and helped address problem areas, if any.

In the Activity Incentive demonstration, the technical assistance department of the State agency (Mississippi Department of Education, Office of Healthy Schools, Office of Child Nutrition) was responsible for oversight and management. Monitoring was primarily conducted through sponsor visits, but often followup telephone calls were necessary. The State used a monitoring form that was designed to collect the following data: number of operating days, number of meals prepared, average daily attendance, number of activities offered in each category (recreational, educational, and other),

number of different activities offered, cost by category and month, income to program, current and previous year's average daily participation by month, and new activities offered with grant funds.

Sponsor staff regularly visited the sites for oversight and monitoring purposes. Sites in Mississippi were given specific instructions on what could and could not be purchased with grant money, and this spending was monitored. The sponsor also provided the site with training on all grant requirements and guidelines.

In addition, it was reported that the sponsors and sites stayed in constant communication through emails, telephone calls, and text messages. Monitoring by the sponsor focused on reviewing site menus to ensure compliance with USDA meal pattern requirements, portion control guidelines, and nutritional value standards; daily meal counts for each meal; and food preparation safety. One of the sponsors reported requiring that the site send meal counts to the sponsor each day via text message. Another requirement was for the site to use measuring spoons and cups during food production to ensure compliance with food portion standards. At another site, children were required to sign in when they came to the site, allowing the site to easily monitor who was attending the activities.

5.8.2 Meal Delivery Demonstration Project

All Meal Delivery State grantees conducted site visits to each sponsor and focused on food safety, menus, budgeting, and other key operations of the demonstration project.

In Delaware, the State agency (Delaware Department of Education) reported providing oversight and monitoring for the sponsor on a range of issues. The State developed a contract with the sponsor for the exchange of monies. The sponsor was required to invoice the State and document spending. The sponsor was required to use Delaware nutritional value standards (reportedly higher than Federal standards) to develop the menus, and State staff regularly reviewed the menus for compliance. The State also required that the sponsor attach a food safety sticker to each meal, providing instructions on food safety and handling. State staff monitored the use of the stickers and visited the production sites to monitor food preparation. When meals were delivered, State and/or sponsor staff that was on site asked the children about the meals and collected information about general likes and dislikes regarding the food. The State required that the sponsor track the number of meals provided each day.

In an effort to provide oversight and monitoring to the sites, the sponsor in Delaware conducted three site visits for each site. Sponsor staff developed a checklist that was used during these site visits to monitor sanitation, proper food storage, and use of meal tracking forms.

The State agency in Massachusetts (Massachusetts Department of Elementary and Secondary Education, Nutrition, and Health or ESE) reported being in constant contact with the sponsor staff, assisting with issues that arose, answering questions, and providing guidance in implementing the demonstration project. ESE's School Nutrition Coordinator worked closely with the sponsor to monitor the budget and invoicing for the demonstration project. In addition, the coordinator was in constant contact with sponsor staff to monitor project retention rates and wait list procedures and to ensure that the maximum number of children possible was being served by the sponsor.

ESE required that the sponsor use the USDA food safety checklist to monitor compliance with food safety procedures. Use of the list was monitored by the School Nutrition Coordinator. Additionally, ESE requested that the State Department of Public Health conduct unannounced site visits to the sponsor production sites to ensure food safety compliance. ESE partnered with UMass Extension Learning to provide the sponsor with some training on developing menus that have high nutritional value. ESE also reported working closely with sponsors on developing the menus and providing feedback and suggestions on menus. ESE provided oversight on ensuring the safety of sponsor staff. All staff received background checks (e.g., sexual offender and driver record) to ensure site safety. In addition, ESE partnered with the local police to assist the sponsor in mapping the delivery route to avoid areas with high crime rates and select safe routes for the delivery van.

In New York, the State demonstration project coordinator conducted visits to each of the sponsors and their drop-off sites in August, 2010. On these visits, the State coordinator evaluated and validated budgets and costs and observed overall project operations and meal distribution. The State coordinator reviewed all sponsor materials (parent letters, information materials) as well as all management materials, such as Excel spreadsheets created to capture the required FNS data. All assistance was conducted via e-mail with the sponsors. Reportedly, this was a successful communication approach for them and they expect to use the same process next year.

New York sponsors also provided oversight and monitoring to organizations that prepared meals for later distribution to the sites. Sponsor staff provided the meal preparation organizations with information about appropriate foods for the menu to ensure that meals would meet Federal and State nutritional guidelines. They also developed and maintained a budget with these organizations and reported all costs to the State on a monthly basis. Sponsor staff developed a tracking form to

count the number of meals delivered each week and reported that data back to the State. Since all meals were prepared at locations that were already serving as SFSP production sites, food safety was seen to be covered by Federal and State safety guidelines. However, sponsor staff reported that they checked temperatures of the delivery truck. In addition, sponsor staff was present on all deliveries to observe the process. It was reported that they intend to have more volunteers involved in oversight and monitoring next summer.

The sponsors in New York collected feedback which they shared with the State. One sponsor had been getting a lot of feedback from the local food pantry, which reported that food pantry supplies were lasting longer. The food pantry believed this surplus was due to fewer people needing the food as a result of the Meal Delivery demonstration project. A second sponsor was planning to conduct a parent survey at the end of the summer.

5.8.3 Backpack Demonstration Project

All Backpack States implemented oversight and monitoring with the use of site visits. Other techniques included the use of standardized forms produced by the State, as well as frequent contact by telephone and email.

In Arizona, the State agency (Arizona Department of Education, Health and Nutrition Services Division) visited the sponsors prior to initial funding and approval of application. During these visits, the oversight and monitoring plans were laid out and expectations were set. Sponsors were expected to use the Arizona Grants Management System for tracking expenses, monitoring budgets, and applying for reimbursements. Sponsors were also expected to track daily meal deliveries and submit the numbers to the State. Content of the meals was dictated by the USDA standards, and sponsors were expected to comply with those standards. According to interview respondents, menus were designed to be appealing to children and were developed by the State and sponsor together. As SFSP sponsors, demonstration sponsors were required to submit paperwork documenting food safety compliance. Following the initial State agency site visit, communication between the State and sponsors consisted of email and telephone.

The three Arizona sponsors used similar approaches to oversee and monitor their sights. Sponsor staff reviewed and approved menus to ensure compliance with USDA meal pattern requirements. Site managers were ultimately responsible for food safety, but sponsors required that sites maintain temperature logs. The sponsors in Arizona required the sites to use daily meal count forms,

collecting data on the number of meals delivered each day. The meal count forms also helped the sites make sure that only one backpack was delivered per child and that, ultimately, backpacks went to the designated child.

The sites reported attending a training session for summer food service programs and also for the Backpack demonstration project. This second part of the training included information on procedures for distributing the backpacks.

In Kansas, the State agency (Kansas State Department of Education) visited each of the sponsor locations once. The State required that the sponsors use standard agency accounting reports to track spending, monitor budgets, and submit for reimbursements. Food safety and the nutritional value of the menu were dictated by USDA standards. The State agency required that the sponsors comply with those standards. The State and sponsors communicated frequently via email and telephone, reportedly in a "coaching" relationship. In addition, the State agency had regional consultants available to the sponsors.

Kansas sponsors reported that the State agency provided them with the tools for site oversight and monitoring, and sponsors conducted site visits as part of the oversight and monitoring. During these visits, the sponsors would check for the site's compliance with USDA meal pattern requirements, food nutrition content standards, and food safety requirements. The sponsors typically conducted their visits on Fridays, and they would count the bags remaining after delivery was complete. Some of the sponsors implemented a process at the sites to ensure that the backpacks were going to the appropriate children. Eligible, participating children were identified at each delivery. If a child wanted to store the backpack at the site until a later time in the day, the child's hand was marked for easy identification. In addition, site staff often tracked the number of backpacks being delivered.

In Ohio, the State agency (Ohio Department of Education) conducted site visits, telephone calls, and emails to engage in oversight and monitoring of the sponsors. The State monitored how money was spent by requiring sponsors to submit and maintain a budget. Daily meal counts for each meal service offered were monitored through an observation form in addition to an actual tracking form from each sponsor. Food safety and facility inspection was monitored through site visits from the State agency. Food nutrient content was monitored by requiring adherence to summer meal patterns. Sponsors stated that the appeal of individual foods to the children was largely unknown, although there was some feedback from parents, which seemed positive. Who was eating the food was also not known, although we were told that parents told them that the children participating in

the demonstration project were the ones eating the food. Sponsors also reported that the use of shelf stable food served to ensure that food was not left over or spoiled.

The sponsors in Ohio provided oversight and monitoring to the sites mostly through site visits but also through telephone calls and emails. Sponsors reported reviewing and approving the site menus to ensure compliance with the USDA meal pattern requirements as well as nutritional standards and portion control standards. Sponsors required sites to conduct daily meals counts for each meal service offered in order to track the number of meals provided each day. Site inspections were conducted to regulate food safety and, in some cases, unannounced visits were used to inspect the facilities. In general, the sponsors in Ohio used forms for oversight and monitoring (e.g., meal count forms, spending forms, food safety checklist) as well as site visits.

5.9 Training, Technical Assistance, and Family Education

It is the responsibility of the State grantee of an SFSP to train sponsors who, in turn, provide training to feeding site staff and volunteers. Such training was provided as part of the usual SFSP in the Extending Length of Operation Incentive and Activity Incentive demonstration projects. Because the Meal Delivery and Backpack demonstration projects were a departure from the typical SFSP, training and technical assistance were also different. Nevertheless, all four types of demonstration projects had three target audiences for training and technical assistance – sponsors who were provided with training and technical assistance from State agencies, sites who were provided with training and technical assistance from sponsors, and in some cases, families of participants who were provided with information on nutrition and healthy eating. Each is described below for each type of demonstration project.

5.9.1 Training and Technical Assistance to Sponsors Provided by the State Agencies

Training and technical assistance for grantees provided by State agencies is an integral part of the SFSP. These trainings are typically held in person at the State agency offices and are mandatory for all grantees and sponsors. State agencies for the Meal Delivery and Backpack demonstration projects supplemented their SFSP trainings with demonstration-specific information for those sponsors participating in the demonstration projects. Although the Extending Length of Operation Incentive

and Activity Incentive used the SFSP trainings as opportunities to recruit more sponsors, for the most part, SFSP training for these demonstrations was "business as usual."

In Arkansas, the Department of Human Services (DHS) offered formal, all-day trainings to all of its SFSP sponsors. Training topics included USDA rules and regulations, paperwork and record keeping, how to use the food buying guide, and menu requirements. Technical assistance was also provided for use of the online reporting system for submission of meal counts. Manuals were provided as part of the trainings. Since Arkansas' demonstration project did not contain any additional sponsor duties, the State grantee reported that the standard SFSP training was all that was needed. The sponsors reported that the trainings were helpful and informative and that there were no communication issues with the DHS. They also reported that they particularly liked using the online reporting system.

Mississippi's Department of Education offered a mandatory, formal training for all SFSP sponsors. The training was 1 day for returning sponsors and 2 days for new ones. Training topics included project operations, raising awareness of the SFSP, outreach materials, summer commodities, budgets and amendments to budgets, reimbursement rates, claims, and deadlines. Resources provided at the trainings include a newsletter with information about successes in child nutrition programs throughout the State, guidance on building local partners, flyer and handout templates that could be customized by each sponsor, and tips for increasing participation. All sponsors interviewed by Westat attended the State's training. None reported receiving demonstration-specific training from the State but indicated that the State was very responsive and helpful answering questions as they arose.

For its Meal Delivery demonstration project, the Delaware Department of Education (DOE) hosted an initial meeting with its sole demonstration sponsor, The Food Bank of Delaware. The meeting covered the establishment of the "rural" definition, guidelines and expectations, as well as the review and development of menus and forms. DOE also hired a consulting firm to assist with this project, and the consultants visited The Food Bank onsite. The consultants provided technical assistance and facilitated data collection required by the State.

The Massachusetts Department of Elementary and Secondary Education's (ESE) sole sponsor for this demonstration project was a new sponsor. The YMCA of Cape Cod received the annual SFSP training as a new sponsor but also received special training and assistance as the sponsor for the demonstration project. ESE reported that the YMCA of Cape Cod received extensive nutrition technical assistance to ensure that the meals were healthy and balanced. They also received

assistance with budgeting and outreach strategies. Resource materials provided by ESE included nutrition and administrative guidance, a site supervisor's guide, a monitor's guide, the SFSP guide, the SPSP sponsor toolkit (which includes a 16-page book plus a CD with information on media and outreach), and *Fresh from the Farm: The Massachusetts Farm to School Cookbook*. The YMCA of Cape Cod also received food safety training provided by the UMass Extension Nutrition Education Program, as well as support on preparing the grant, budgeting, planning, and management of the project from Project Bread, an ESE partner. The YMCA reported that it received ongoing support from and communication with ESE throughout the project.

In New York, the two sponsors (who are both experienced SFSP sponsors) received both the mandatory SFSP training and then more informal demonstration project specific training where issues were addressed on an as-needed and one-on-one basis.

Like the other States, the Arizona Department of Education offered all sponsors the mandatory 8-hour training for SFSP sponsors. In addition, Arizona sponsors received one-on-one informal Backpack demonstration project training. The informal training included the provision of demonstration requirements, menus, documentation, and technical assistance with the online Grants Management System that the sponsors used for reporting so they would receive their reimbursements. The State also conducted a pre-operation in-person visit with each sponsor. At this visit, sponsors were informed they would need to provide separate backpacks or bags for breakfast and lunch.[46] The late notification of this requirement was the only criticism that the Arizona sponsors reported in working with the State agency. Otherwise all communication was reported to have been open and excellent.

The Kansas State Department of Education provided its regular SFSP 1-day training to all sponsors. The training covered topics including Kansas food insecurity issues, sponsor responsibilities, menu requirements, food sources, budgeting, site determination, and oversight. The Backpack demonstration project coordinator also organized conference calls specific to the Backpack demonstration project. These calls focused on tracking and distribution and collection of forms for the evaluation. The State also provided regional consultants that were available for ongoing technical assistance throughout the project. State key informants noted that the calls and trainings provided an opportunity for sponsors to meet each other so they could reach out to each other if they desired.

[46] This was not an FNS requirement.

In contrast, Ohio approached training more informally. The State hosted an initial conference call that was described as more of a "welcome" than a training. Most of the sponsors reported that they received limited to no training from the State on the demonstration. Two sponsors reported that they received technical assistance on how to fill out the paperwork for reimbursements. Two sponsors reported they would have liked to have received more help from the State with food procurement.

5.9.2 Training and Technical Assistance to Sites Provided by Sponsors

Sponsors trained site staff and volunteers in a variety of ways. Some offered formal trainings that were modeled after the trainings they received from their State agencies, while others had quick, informal meetings. The level of training was dependent on the experience levels of the staff and the number of sites for which the sponsor was responsible. Sponsors with staff experienced in the SFSP or who took on the responsibilities of the site themselves reported that they could often "get by" with less training than those who were bringing on new staff or had numerous sites that could not be monitored on a daily basis. Many sponsors reported that their trainings were not a one-time session; most conducted ongoing training throughout the summer as issues arose or new staff or volunteers came on board.

All Arkansas sponsors interviewed by Westat conducted more formalized trainings with site staff and volunteers. There was no training specific to the demonstration. Many shared the State or USDA manuals with their workers and covered topics including site responsibilities, proper food preparation and portioning, the online recording procedures, and the serving schedule. One sponsor explained that she "trains [her staff] just like they trained us in Little Rock." Another sponsor met with the three site supervisors daily to discuss what was and was not working and which foods needed to be ordered. Similarly, all Mississippi sponsors provided SFSP training to their site staff and volunteers. Two of the sponsors reported that they made daily or regular visits to their sites to monitor activities and determine if more SFSP training was needed.

For the Meal Delivery demonstration projects, Delaware and New York reported training their site coordinators and volunteers. The Food Bank of Delaware trained its site coordinators on the logistics of the demonstration project as well as food safety and sanitation. The Food Bank of the Southern Tier trained site volunteers in a 10-minute instructional discussion prior to the first week of meal delivery. The sponsor reported that the kitchen staff and drivers did not require specific demonstration project training since they are year-round employees who already carry out similar

duties. The North Rose-Wolcott Central School District sponsor reported that she brought all site volunteers together for a meeting to discuss the scope of the project and its operations. She reported that she really wanted them to be excited about the project and proud to be a part of it.

The nature and extent of training varied among the Backpack demonstration project sponsors. All three Arizona sponsors reported conducting formal, in-person trainings with site staff. The training focused on project logistics as well as the necessary paperwork (both the meal count forms and information to assist Westat in the evaluation). The sponsor from the Chandler Unified School District reported that she needed to provide some unanticipated technical assistance to sites once they were informed by the State that they needed to have separate breakfast and lunch backpack distributions.[47] The Kansas sponsors reported informal trainings that mostly focused on how to pack the bags. In Ohio, training ranged from zero training from a sponsor who obtained packed backpacks from a vendor to 15-minute informal trainings on the specifics of packing the backpacks.

5.9.3 Family Education

Some sponsors provided more than just food – some used their projects as a way to incorporate food safety and nutritional information and provide educational materials. In Delaware, each meal delivery bag had a sticker reminding the child or parent to place the food in the refrigerator until it was eaten. This sponsor also gave out food safety flyers in the bags in the initial weeks of the demonstration project. In Massachusetts, the meal delivery bags also included fact sheets, nutrition newsletters, and other healthy nutrition tips. For example, one flyer introduced children to the USDA Food Pyramid, while another focused on milk and cheese – recipes that utilize them, storage guidelines, and the nutritional benefits. In Kansas, the Arkansas City Public Schools District partnered with Chartwell's Food Service, which provided paper games in the backpacks that were either just for fun or informational. In Ohio, Whole Again International also placed nutritional facts and games in the food bags. A few of the Backpack demonstration projects also held parent orientations in the beginning of the summer to increase participation in the project and explain what to do with the bags or backpacks when the children brought them home.

[47] This was not an FNS requirement.

5.10 Strengths, Weaknesses, and Innovations

In this section we describe the strengths and weaknesses of the demonstration projects, reported by key informants, as well as the innovations that were put in place.

5.10.1 Strengths and Weaknesses

Each of the demonstration projects was designed to engage children and their families in a different way. Although the different types of demonstration models come with their own strengths and weaknesses, the overarching strength expressed across the board from key informant interviews was the overwhelming belief that children were getting food to which they otherwise would not have access. Virtually everyone interviewed stressed the importance of this resource for their community and how grateful they were to be able to offer these projects to meet such a real need. Many noted that the number of participants and meals served had increased compared to the regular SFSP and that children and parents had specifically informed them of how beneficial the projects were for lessening the burden in their food insecure households during the summer.

Key informants also reported strengths that tended to be more specific to certain types of demonstrations projects. One of the reported strengths of Arkansas' project was its partnership with the Arkansas Department of Workforce Services. This partnership allowed the project to benefit from the requirement that parents who are receiving Temporary Assistance for Needy Families (TANF) must work. State officials described this partnership as a "win-win" since parents were able to volunteer at the feeding sites and count that toward job training. Arkansas was also very proud that breakfast participation had increased 25 percent with the demonstration project.

In Mississippi, the United Family Life Center, which was also the site, reported a change in the children's attitude over the course of the summer. Initially, the children at this site did not want to be there, but by the end we were told that they did not want to leave. It was reported that the children enjoyed the opportunity to meet new children that they did not know from school and enjoyed making new friends. In general, all Activity Incentive sponsors and sites reported that they kept the participants engaged in positive activities during the summer. The children also had the opportunity to learn about nutrition and healthy foods. The Salvation Army reported that it had children saying healthy foods were better than candy, and they asked for more fresh fruit and foods with protein. Northtown Child Development Center used the *Color Me Healthy* curriculum which included enjoyable ways to teach children how to eat healthy foods. The staff reported that they

aimed not simply to feed children, but also to truly change eating habits. We were told, for example, that one of the sponsors (not visited by Westat) used some of their demonstration funds to bring a traveling component of HealthWorks!, a nutrition and physical activity museum, to the site.

Since the Meal Delivery and Backpack demonstration projects were doing something different with food than the projects in Arkansas and Mississippi (i.e., allowing offsite consumption), their strengths and difficulties were also different. A strength mentioned by more than one Meal Delivery respondent was that it was less of a problem to find a location for a drop-off site compared to an SFSP site because the location did not need space to physically feed children on site. Additionally, they were able to serve many more children than they had been able to do in the past. Delaware specifically cited its use of housing complexes as a strength of its project because it allowed the project to bring food very close to the children's homes, but in a more cost effective way than door-to-door delivery. Most of the Delaware sites were also equipped with refrigerators so meals could be kept longer than the official pickup time, allowing parents to pick up food after work if they could not pick up the food during the day. The Food Bank of Delaware also reported that it thought the "grab and go" nature of the project was progressive since it mimicked how many people eat normally, such as getting take-out and bringing it home.

In Massachusetts, the main strengths identified included the YMCA's ability to provide meals for the entire summer and introduce children to new foods. The project also helped the YMCA to identify families that were in need of additional assistance and enabled families to eat meals together more often. Also, the Massachusetts project incorporated various activities during the summer. These included ice cream days, free swim days at the YMCA, poster contests, giving the children free potato and tomato plants that were donated by a local organic farm, and "Fun Fridays" that encouraged physical activity and gave families the opportunity to have fun together. Many of these activities were funded by non-FNS sources.

Since the New York State Department of Education is the longest running SFSP agency in the United States, key informants reported that their experience in running this project was a major strength of their project. They also highlighted that the demonstration project allowed them to reach a larger number of rural children than they otherwise would have and that the drop-off delivery nature of the project helped eliminate some of the stigma of the project, thus bringing in teenagers and older children at higher rates than the regular SFSP.

The Backpack sponsors also reported unique and unexpected positive outcomes. Wilson United Methodist Church staff reported that they were greatly moved when the children hugged their bags

and were delighted to be able to say they have their "own" food. Additionally, this sponsor noted that parents had reported that children who had difficulty taking medications that require being taken with a meal over the weekend could now take their medications on time everyday due to the Backpack demonstration project. The Community Action Organization of Scioto County indicated that parents could participate in more activities with their children on the weekends since they were saving money on food costs.

A common theme on the weakness side of the ledger, except for the Meal Delivery projects, was the lack of transportation to the sites, and thus a significant weakness and barrier to participation. Many children, especially those in rural areas, live farther than safe walking distance from the sites and therefore could not attend regularly, or attend at all. A few sponsors suggested that FNS could greatly improve project participation by offering transportation grants.

The main barrier noted by the Delaware project was not being able to provide food for non-school age children, a result of having to verify the participants through the school system. For New York, the main weakness was the compressed nature of the grant application process. State officials noted that they would like to see more sponsors involved in the future, but far fewer applied than they expected due to the short time window of the application process.

The Backpack demonstration project was spoken highly of by all those interviewed, but there was one overarching weakness that was reported in many interviews -- the bags can get very heavy. This was a particular concern for small children who needed to walk a long distance back to their homes carrying a heavy bag. Multiple 8 oz. containers of milk and juice, as well as bulky produce led to the bag(s) weighing more than a few pounds. This was a concern for both those sponsors using grocery bags as well as real backpacks.

In Kansas, several sponsors reported that in a few cases, there was some parental reluctance to allow their children to participate in the project due to perceived stigma and/or logistics in getting their children to and from the sites. In addition, some of the sites had difficulty finding adequate and secure storage space for the bags once they were prepared. Ohio sponsors also echoed the Kansas sentiment that some parents were reluctant to allow their children to participate in the project. In Ohio, the few cases of reluctance were due to perceived stigma. Additional weaknesses reported in Ohio were the dislike of the shelf-stable milk by the children and some sanitation issues with the backpacks.

5.10.2 Demonstration Project Innovations

Along with strengths and weaknesses, key informants also commented on innovations that they felt made their implementation of the demonstration project unique. Most sponsors relished the opportunity to brag a little bit about their hard work, although some were reluctant to comment on this topic, indicating that they did not know how other sponsors were running their projects, so they were unable to say how theirs was different. Many of these innovations would work for multiple projects, not just the one that it was originally connected with, while others were inevitably more specific to one project over others. Below is a list of reported innovations and the sponsor or State agency that developed it (Table 5-12).

Table 5-12. Innovations Reported by State Grantees and Sponsors*

Innovation	Sponsor – State grantee or sponsor
A Google map available on the website to show parents the locations of all the sites.	Arkansas
Making the last day of the project really special. Gifts and awards were given out to the children, staff, and volunteers. All the sites come together for a big picnic where they hand out school supplies, clothes, and toiletries to the children.	Regeneration Ministries, Inc. (Arkansas)
Door-to-door outreach for the project	Shekinah Glory Outreach (Arkansas)
Giving out cold treats such as frozen yogurt and popsicles on particularly hot days.	New Zion Community Center Victory Praise (Arkansas)
Incorporating popular TV characters into outreach and onsite materials.	Building Futures, Inc. (Arkansas)
Incorporating activities such as ballet, theater, pottery, and puppet shows.	Coahoma County School District (Mississippi)
Activities included end-of-the-project performance for family members, church members, and the community that involved singing, dancing, and skits, a peer-to-peer mentoring project, and a music group that the children formed themselves called THUGs – True Heroes Under God.	Operation Upward (Mississippi)
Tapping into partnerships with outside organizations to facilitate dividing up the responsibilities for outreach/technical assistance and oversight/monitoring so that the State agency could focus on compliance and monitoring primarily.	Massachusetts Department of Elementary and Secondary Education
Providing meals that adhered to nutrition guidelines that went above and beyond those required by USDA.	The Food Bank of Delaware
Conducting a nutritional analysis of the food being provided.	Massachusetts Department of Elementary and Secondary Education
Utilizing *Fresh From the Farm: The Massachusetts Farm to School Cookbook,* a resource for serving locally grown foods to students.	Massachusetts Department of Elementary and Secondary Education
Using a food truck or other mobile site as a way to deliver meals.	Food Bank of the Southern Tier (New York) and Litchfield Elementary School District (Arizona)
Providing ingredients and recipes so that children could prepare actual meals.	Chandler Unified School District (Arizona)
Using a nutritional model which incorporated things like carbohydrate points for diabetic children.	Kansas State Department of Education
Putting games into the backpacks that were educational or just for fun.	Arkansas City Public School District 470 (Kansas)
Use of pool passes (in-kind contributions) as incentives for attendance.	Lawrence Public Schools USD 497 (Kansas) and the YMCA of Cape Cod (Massachusetts)
Holding a parent orientation at the beginning of the project.	Whole Again International (Ohio) and Hamilton Living Water Ministry, Inc. (Ohio)

*Note: Sponsors used multiple funding sources for these activities, not limited to USDA funds.

Table 5-12. Innovations Reported by State Grantees and Sponsors* (continued)

Innovation	Sponsor – State Grantee or Sponsor
Having teens model the backpacks and talking them up as something "cool."	Hamilton Living Water Ministry, Inc. (Ohio)
Using community partnerships and networks to obtain donations of little extras for the backpacks such as shampoo, toothbrushes, and school supplies. They also used the backpacks as a means to promote other community resources such as the benefit bank.	Hocking Athens Perry Community Action Agency (Ohio)

*Note: Sponsors used multiple funding sources for these activities, not limited to USDA funds.

5.11 Challenges and Resolutions

As a means of learning how the demonstration projects might be improved in future years, we asked all key informants about their challenges and how they had resolved each challenge. Typically, this information was offered by the respondent unsolicited; key informants described various challenges as they described project implementation. In addition, there was a separate section of the interview guide that specifically asked about challenges and resolutions to those challenges. This section summarizes the challenges and resolutions offered by key informants implementing each type of demonstration project.

Extending Length of Operation Incentive Demonstration Project. Most of the challenges offered by key informants related to challenges with the traditional SFSP and not specifically to the demonstration project. Key informants offered two major challenges– lack of resources (and therefore, inability to provide transportation and feed parents in addition to children) and difficulties obtaining and retaining volunteers. In addition, the State grantee described three additional challenges for the demonstration projects -- weather (excessive heat) causing some sites to shut down early; low participation at some sites; and because the school year was extended due to the weather some sponsors operated fewer days during the summer.

Some sponsors also mentioned the challenge of finding and retaining volunteers, and this problem was accentuated with the increase in the number of days of operation. Volunteers required a certain amount of training before being able to work on the SFSP, and having to conduct that training each time there was volunteer turnover became a significant drain on the program. Despite the challenge of finding and retaining volunteers, having a good volunteer base was often cited as a resolution to many of the challenges, allowing projects to meet program needs with a limited budget.

One sponsor reported having significant difficulty securing sites for the demonstration project. Many of the apartment complexes in the sponsor's region did not have community centers or communal areas that could be used for meal setup. In addition, some potential sites were situated in low-income or project housing areas that were known for community violence. Because of these reasons, the sponsor was forced to select sites further away than anticipated, increasing food delivery costs.

Finally, some of the sponsors operated at sites owned by other organizations and, thus, had no control over how long the site could stay open. Although some of these sponsors had agreed to keep their sites open for 40 or more days, they were forced to close down because the owner did not wish to stay open.

Activity Incentive Demonstration Project. Mississippi's Activity Incentive demonstration project took on a number of inexperienced sponsors, so many of the challenges for this project were related to training, monitoring, and providing technical assistance about operation of the SFSP, which, according to the State grantee, was more time-consuming than anticipated. Key informants at the State level also noted the difficulty in recruiting sponsors that could effectively manage the requirements of the SFSP and/or the demonstration project. Among those that were recruited, some had never been involved with large-scale food production before and were unable to build an appropriate budget. Many of the newer sponsors were unprepared for the high cost of food and were not always financially stable enough to pay for food up front and be reimbursed later. Also, some of the sponsors did not always keep records as mandated by FNS.

Challenges to Mississippi sponsors appeared to be similar to those in the Arkansas project – limited resources, lack of transportation, and extreme temperatures (with participation numbers falling on extremely hot days). Respondents stated repeatedly that project implementation would have been easier if they were funded to provide transportation for the children. Often, demonstration sites were feeding children who did not live within walking distance and whose parents did not have access to a vehicle. In one case, project staff provided transportation for the children who lived near her, but mostly, sites were unable to provide transportation due to the cost.

There were a few challenges specific to the implementation of the demonstration project. As mentioned earlier, the State grantee did not use all of the funds allocated to fund grants to sponsors to pay for site activities. According to the State grantee, this may have happened because an insufficient number of sponsors met the State-mandated requirements. For example, in 2010, the

State (and not FNS) outlined restrictions on how the grant funds could be used (e.g., restrictions on spending grant money to purchase a television or a DVD player). In 2011, the State relaxed these restrictions to make more items eligible for purchase with grant funds. However, it was the State grantee's opinion that many sponsors simply elected not to apply again because they were denied previously. Another factor that she thought might have limited the number of participating sponsors was the requirement that the sponsors operate the demonstration project beyond the month of June or more than 30 days.

Staffing issues posed another challenge for the Activity Incentive demonstration project. During the time of demonstration project operations, the State agency experienced turnover at the bureau director level, as well as the loss of two key staff. These occurrences resulted in a major shift in roles and responsibilities. Remaining staff had to manage more projects due to staffing reduction. As a result, staff could not dedicate as much time as desired to focus exclusively on the demonstration project.

Meal Delivery Demonstration Project. Some of the challenges reported by key informants, for the most part, were out of their control to resolve – a late notice of funding; how to make sure that the meals delivered were being eaten by the eligible children; and what to do about others in the household who were hungry.

All State grantees and sponsors mentioned the late start date as an impediment to adequate outreach and recruitment. Others had concerns about refusing food to hungry parents or young children who were not eligible for the demonstration project, and they often wondered who would be eating the meals at home.

One sponsor felt that the project was understaffed and would have appreciated enough funding to hire an individual to handle administrative tasks, such as tracking expenses, maintaining meal logs, and providing data for FNS. These tasks were all conducted by the sponsor's existing staff, which, according to one respondent, was not a sustainable solution. Sponsors also were challenged by the process of verifying eligibility and, as a result, turned to the school system for assistance. Working closely with the schools gave staff the opportunity to learn the system and develop rapport with the schools. The plan for next year for one project is to adopt the process used by the schools but to do the verification onsite themselves.

Two projects faced opposite challenges arising from their difficulties estimating the number of children who would be eligible for their project. One sponsor reported that it was not able to reach

its goal of enrollment of 250 children, and, therefore, found themselves with extra meals (staff was able to circulate the excess into other summer food programs). The other sponsor quickly hit its enrollment goal and had the opposite problem of having to turn people away. Next year, they have budgeted for more children. Another issue experienced by one of the sponsors was an overlap between the summer school and the demonstration project, resulting in some staff working extremely long hours.

One sponsor reported a few meal delivery logistical challenges. When meal delivery began, sites were using paper bags to hold the meals. When the paper bags were placed in the coolers with the ice packs, the bags would get wet and rip. The solution to this problem was to purchase wax bags, which cost more for the project. Also, the sites experienced some difficulty finding space for all of the food for delivery on one day, which included meals for 3 days. Sites did not have enough space in the buildings for all of the coolers. One solution that helped alleviate the issue was to have some children come earlier to pick up the food, allowing the sites to eliminate some of the coolers.

Backpack Demonstration Project. Many of the challenges reported by State grantees and sponsors in the Backpack demonstration project were related to the backpacks themselves. Bags were reported to be too heavy (some weighing as much as six or seven pounds) and therefore cumbersome to carry home. In addition, if more than 1 day's worth of milk was placed in a backpack, it became almost too heavy for a small child to carry. At one project, the State grantee worked with the sponsors and sites to resolve the issue and decided to divide the food into two bags (breakfast and lunch), thereby spreading out the weight for the child. Sponsors also added less produce to the bags. Splitting the food into two bags created new challenges. The project had not budgeted for double the number of bags, and the sites had to recruit more volunteers to help with filling the bags with food.

Deciding what type of bag to purchase was a challenge for some sponsors. Initially, some of the backpacks were not being returned and when they were, there was often an issue with cleanliness (one sponsor's backpacks were returned with bugs). Therefore, the sponsors decided to purchase bags that were more "disposable" or were made from a material that was easily cleaned.

Sponsors struggled with the challenge of where to store the backpacks if the children were attending afternoon activities and would be returning for their backpacks later in the day. In one case, the sponsor tried to secure an empty classroom in a school to store the backpacks but was not always successful. Another problem was lack of space to both pack and store the backpacks because the

sites did not have large kitchens. Key informants reported that they did the best they could under difficult circumstances.

At the beginning of the demonstration project, one of the sponsors reported that some families were going to more than one site per day and collecting more than their allotted meals. The site supervisors confronted these families, and the issue appeared to be resolved. Other problems reported by Backpack sponsors were:

- Feeling uncomfortable about having to pay for much of the food upfront and receiving a reimbursement afterwards;
- Complex paperwork that required having to provide the sites with additional training to make sure that the paperwork was completed accurately;
- Being required to fill out different paperwork for two different food projects and keeping the reimbursement streams separate; and
- Keeping the food safe on very hot days (sponsors had to locate cool areas for backpack storage);

Maintaining the nutritional integrity of the meals while meeting the other requirements of the project was also a challenge to the demonstration projects (e.g., all had to provide shelf-stable milk, and some reported that they wanted the food to be "kid friendly" and grown or made in America).

Synthesis and Discussion 6

The Evaluation of the Summer Food Service Program (SFSP) Enhancement Demonstrations focused on four types of demonstration projects – Extending Length of Operation Incentive, Activity Incentive, Meal Delivery, and Backpack. The Extending Length of Operation Incentive, implemented in Arkansas, provided an additional $0.50 reimbursement per lunch to SFSP sites that offered meals for 40 or more days during the summer.[48] The expectation was that the additional reimbursement would be an incentive to SFSP sites to remain open longer, increase SFSP participation, and consequently give children increased access to food during the summer months. The second demonstration project consisted of funding sponsors to conduct inviting activities at SFSP feeding sites. The goal was similar -- to increase SFSP participation and access to food at SFSP sites.

The Meal Delivery demonstration project, which operated in rural areas of Delaware, Massachusetts, and New York where the SFSP was typically not accessible to children, was also intended to increase children's access to food by delivering food to their homes or to a drop-off site near their home. Such access was expected to stabilize food security during the summer months for those children participating in the demonstration project. The Backpack demonstration projects in Arizona, Kansas and Ohio were expected to provide access to nutritious meals on the days that SFSP feeding sites were not open – weekends and holidays. Moreover, like the Meal Delivery demonstration project, the goal of the Backpack demonstration project was to stabilize food security during the summer when children from low income households were unable to obtain free or reduced price meals through a school breakfast and lunch program.

The purpose of this chapter is to summarize the 2011 key findings of the evaluation of these four demonstration projects with regard to the sixteen research questions posed in Chapter 1. We also address the important strengths and limitations of this evaluation and describe the plans for the next round of data collection and analysis in 2012. Because data collection and analysis will take place again in 2012 (for Meal Delivery and Backpack demonstrations only), we will be able to make

[48] In 2011, special consideration was also given to some sponsors that were located in flooded areas of Arkansas where some of their sites were prevented from operating 40 or more days during the summer. Thus, the 40-day cutoff criterion was relaxed if sponsors operated in school districts where the number of weekdays of SFSP operation during the entire summer was less than 40 days long but they operated for every weekday for the remainder of the summer.

improvements on the analysis of participation in the Meal Delivery and Backpack demonstrations, targeting accuracy (as expressed by food consumption, sharing, and food spoilage), and food security, within the limitations of the research design and methodology described above. We will also be able to obtain a more in-depth understanding of demonstration project implementation and a more accurate understanding of the cost of the demonstration project operations. Thus, findings in this report are considered preliminary and few conclusions can yet be drawn.

6.1 Research Questions and Key Evaluation Findings

This section is organized by the 16 research questions posed in Chapter 1, grouped as relating to participation, food consumption/targeting accuracy, food security status, implementation, and costs.

6.1.1 Participation

Question 1: What are the characteristics of those who participated in the demonstration projects?

The findings on demonstration project participants represent the Meal Delivery and Backpack participants reported by respondents to the telephone questionnaire. Findings on participation (as measured by the number of meals distributed and average daily attendance [ADA]) were analyzed for FNS by Insight Policy Research (IPR) with administrative data. IPR reported on participation in 2010 (the first year of operation of the Extending Length of Operation Incentive and Activity Incentive demonstration projects) (Peterson et al., 2011) and will soon be releasing its 2011 report on all four types of demonstrations, including Meal Delivery and Backpack. Because administrative data were used, the data do not lend themselves to an analysis by participant characteristics.

As identified in telephone interviews with parents or caregivers of Meal Delivery and Backpack Demonstration project participants, the demographic characteristics of the participants, respondents, and households were as follows:

- 50 percent of demonstration project participants were female and 50 percent were male;
- 62 percent of participants were aged 5 to 11, with 19 percent between age 12 and 17 and 18 percent under age 5;

- 28 percent of respondents were Hispanic, 13 percent non-Hispanic Black, and 52 percent non-Hispanic white;
- 69 percent lived in homes where only English was spoken, with 6 percent Spanish only and 20 percent Spanish and English;
- 65 percent lived in homes where the parent or caregiver was married or living with a partner, while 20 percent lived with an unmarried parent or caregiver;
- 86 percent lived in households that participated in one or more nutrition assistance programs;
- 72 percent lived in a household in which the annual household was $25,000 or less; and
- 90 percent lived in households with an income that was less than 185 percent of the poverty threshold.[49]

Question 2: Do the demonstration projects differ by these characteristics?

There appeared to be greater participation in other nutrition assistance programs among Meal Delivery families, a greater percentage of Meal Delivery families with at least one person unable to work, lower annual household income among Meal Delivery families, and a higher percentage of Meal Delivery households living at or near poverty. Some of these differences may be accounted for by the eligibility criteria of the two types of demonstration projects. Meal Delivery eligibility required children to be eligible for free or reduced priced school meals, indicating low income and high need for nutrition assistance. In the case of the Backpack demonstration project, children age 18 and younger, normally eligible to receive meals at SFSP sites, were eligible to receive backpacks. Thus, Backpack participants could be younger than those receiving meals from the Meal Delivery demonstration project. Moreover, since SFSPs were located at open sites (where at least 50 percent of children live in households with incomes at or below 185 percent of the poverty line), it is possible that a number of children receiving backpacks would live in households with higher income compared to the Meal Delivery participants.

Differences in race/ethnicity may be explained by the location of the demonstration projects. For example, a high percentage of Hispanics in the Backpack demonstration project is likely due to one of the projects being located in Arizona, which has a large Hispanic population. Conversely, location of the Meal Delivery demonstration projects in rural parts o f Massachusetts, Delaware, and New

[49] The 2010 poverty threshold for two adults and two children, obtained from the Bureau of Census website in 2011, was $22,113. 185 percent of the poverty threshold was $40,909.05.

York State may at least partially account for the higher percentage of non-Hispanic whites in the Meal Delivery demonstration compared to the Backpack demonstration. Location of the projects also would explain the preponderance of English only spoken in the homes of Meal Delivery respondents and a greater percentage of Backpack respondents reporting English and Spanish spoken in their home.

Question 3: What factors are related to participation in the demonstration projects – Meal Delivery, Backpack, and both combined?

Backpack participation was calculated by using the number of backpacks that households were reported to have received and dividing this by the number of children in the household who participated in the demonstration project and again by the number of weeks that the demonstration project operated.

Participation in the Backpack demonstration project was related to parent satisfaction with the healthiness of the food ($p = 0.0156$), the variety of the food ($p = 0.0280$), the convenience of the food ($p = 0.0422$), and the fact that members of the household liked the food ($p = 0.0037$). Participation also appeared to vary somewhat by whether the household participated in another nutrition assistance program in addition to the demonstration project (e.g., participation in the Supplemental Nutrition Assistance Program [SNAP] was associated with more Backpack participation), employment status (more Backpack participation for those out of work or unable to work), income (more Backpack participation for those with lower income), and household poverty level. No two predictors were significant when considered together in the same model, probably due in part to the associations between the predictors. After reviewing various possible models, it appeared that SNAP participation was the single best predictor of Backpack participation.

The questions in the 2011 questionnaire on Meal Delivery participation were slightly different than questions for the Backpack demonstration so a similar analysis could not be performed for Meal Delivery participation. The Meal Delivery questionnaire for 2012 data collection has been changed so we will be able to answer questions of participation for the Meal Delivery demonstration in the next report.

6.1.2 Food Consumption/Targeting Accuracy

Question 4: What did participants in the demonstration projects consume/not consume (food package content; foods consumed; storage; food shared and left over)?

In order to examine food consumption and targeting accuracy, telephone interview respondents were asked first to list the contents in the most recent meals or backpacks provided to the children in their household. Data were then collected on the extent to which each food item was consumed and how each was stored. Food items were milk, fruit, juice, vegetables, bread/grain, meat, meat alternative (includes cheese, eggs, nuts, and legumes), and mixed foods (e.g., bread/grain and meat).

To further address targeting accuracy, we also asked about sharing food items, and if shared, with whom the food was shared. Reported food consumption varied substantially by type of food, with juice having the highest percent for "drank or ate all" (95 percent) and vegetables and meat having the lowest (77 percent and 78 percent, respectively). At least 85 percent of all food items were reported as having been consumed.

Across all food items, about 86 percent of all reported food items were consumed completely. However, 26 percent of items were reported as being shared with others (some items were reported as both consumed completely and shared). The percent of food items reported as shared ranges from 14 percent to 52 percent, with vegetables being shared the most and juice the least. There were striking differences by type of demonstration project, with more sharing by Backpack participants in every case, and strongly significant differences for fruit, vegetables, bread/grain, and mixed foods ($p < 0.0001$).

One of the ways we originally attempted to examine targeting accuracy was to examine whether the food was being appropriately stored (to examine the extent to which the food might spoil). However, in many cases there was not enough information reported on food items to accurately ascertain appropriate storage. For example, if a respondent reported simply that milk was in the backpack, it was not known whether or not the milk was shelf stable. If it was shelf stable, then storage on a shelf or counter would be entirely appropriate. Nevertheless, the information on storage provides a description of how families handled the food their children received. Food items like milk, fruit, juice, vegetables, and meat alternatives (which include cheese, eggs, nuts, and legumes) were mostly stored in the refrigerator; breads/grains, meats, and mixed foods were mostly stored in a pantry; and fruits were mostly stored in a refrigerator. Of all types of food items, the highest percent of counter storage went to fruits.

In 2012 data collection the questions in the questionnaire will ask more directly whether any of the food contained in meals or backpacks was spoiled instead of asking about storage.

Question 5: Does consumption/targeting accuracy differ by type of demonstration project?

There was little difference in food consumption between type of demonstration project. Among the items reported, only milk and juice showed any difference; milk consumption was slightly higher for Meal Delivery ($p = 0.0400$), while consumption of juice was slightly higher for Backpack participants ($p = 0.0548$). This difference might be explained by the fact that children in the Backpack demonstration project were receiving shelf-stable milk; thus, there was higher consumption of milk in the Meal Delivery demonstration.

Question 6: What factors are related to food consumption/targeting accuracy?

There is a consistent pattern of higher consumption among persons with lower economic means. For example, consumption is highest for SNAP participants, households with less income versus more income, less education versus more education, and unmarried versus married. Consumption was also higher among those who reported a higher level of satisfaction with the healthiness and convenience of the food provided.

To better understand targeting accuracy, the telephone questionnaire not only ascertained whether the food was shared (an indicator of targeting accuracy), but also asked for the recipients of the shared foods. Food was most frequently shared with another child in the household who was in the demonstration or with an adult in the household, and less frequently with friends outside the household or pets. In most cases, the ordering for food sharing was (1) a child in the household in the demonstration, (2) adults in the household, (3) a child in the household not in the demonstration, (4) pets, and (5) a friend outside the household (who may or may not have participated in the demonstration project). For example, 45 percent of milk items were shared with another child in the household in the demonstration; 35 percent with an adult in the household; 28 percent with a child in the household not in the demonstration; 13 percent with a pet; and 5 percent with friends (who may or may not have participated in the demonstration project). Sharing of fruit, bread/grains, and mixed food all followed this ordering. However, there were exceptions, such as

vegetables, where 73 percent were shared with an adult in the household; 61 percent with another child in the household in the demonstration; and 16 percent with a child in the household not in the demonstration. These findings may be consistent with children's food preferences. Since many children do not like vegetables, it is understandable that they might be shared with adults and not with another child.

6.1.3 Food Security Status

Question 7: Is level of household food security among demonstration participants at least as high in the summer as it is in the fall?

The design of this study did not establish a pre-demonstration baseline for food security in the spring when breakfast and lunch school programs were operating. However, we examined food security in summer 2011 when the demonstration projects were in operation and fall 2011 when children were back in school and able to benefit from school breakfast and lunch programs. We hypothesized that food security would at least be as high in the summer as in the fall. We did not expect it to be higher.

Overall, there was no difference in food security between summer and fall 2011 at the child or household level. There was some indication of lower food security in the summer than fall for adults. One reason may be that adults were giving some of their own food to their children. These findings support the study hypothesis but do not demonstrate a causal relationship between participation in the two demonstration projects and food security.

Question 8: What factors are related to household food security in the summer/in the fall?

Food security appears to be related to language spoken at home (higher adult and household food security for English-speaking households in the summer and fall), respondent education (lowest adult food security for non-high school graduates in the summer and fall), participant age (better child food security for younger children in the summer), and income (better food security in adults, children, and the household among higher income households in the summer and fall).

The timing of the interview was also a predictor for food security among children in the household. Food security was higher among children in the household when interviews were conducted within 7 days after demonstration project closure, compared to more than 7 days after project closure ($p = 0.0425$). This suggests that food security may be higher for children during or shortly after demonstration project operations when the 30-day coverage of the questionnaire largely overlaps with the dates of demonstration project operation. When it does not overlap, we see an apparent and immediate drop-off in food security.

Question 9: What factors are related to differences in household food security between the summer and fall?

We found no differences between summer and fall in household food security. We will revisit this question at the end of the next cycle when more matched household data are available for looking at changes between summer and fall within households.

Question 10: How does household food security among demonstration project participants in the summer/fall compare with the household food security of the US population?

The Economic Research Service (ERS) of the USDA reports yearly on household food security based on data collected by the U.S. Census Bureau using a supplemental questionnaire to the monthly Current Population Survey (CPS). Data from the most recent ERS data collection on food security (Coleman-Jensen et al., 2011a; Coleman-Jensen et al., 2011b) were used to compare with household food security among demonstration project participants. All national benchmarks pertain to a 30-day reference period for data collected in December, 2010. Comparisons of household survey data in summer 2011 among respondents interviewed within 7 days of demonstration project closure with National benchmarks indicate that:

- About 92 percent of all U.S. households were food secure, compared to 60 percent of Meal Delivery households, 45 percent of Backpack households, and 48 percent of all households of demonstration project participants.
- Among households with children less than 18 years of age nationwide (the target age for these demonstration projects), 8 percent had low food security, and 3 percent had very low food security. Low food security and very low food security in Meal Delivery households were 26 and 14 percent, respectively. In Backpack households low and very

low food security were 34 and 21 percent, respectively. In all demonstration project households, low and very low food security were 32 and 20 percent, respectively.[50]

- About 50 percent of project participant households interviewed and that received WIC benefits in the previous 30 days were food secure, compared to 75 percent of WIC recipients reported nationwide.[51]
- Low food security was 30 percent in demonstration participant WIC households, compared to 19 percent nationwide. About 20 percent of WIC households of demonstration project participants had very low food security, compared to 6 percent throughout the United States.
- Among those receiving SNAP benefits in the previous 30 days nationwide, 71 percent were food secure, compared to 47 percent of those in the demonstration project sample in households that received SNAP benefits in the previous 30 days.[52]
- Nationwide, low and very low food security among households receiving SNAP benefits within the past 30 days was 19 percent and 11 percent respectively, compared to 29 percent and 24 percent among demonstration project households that received SNAP benefits in the previous 30 days.

Comparisons were also made between National benchmarks and household survey data in fall 2011 among all demonstration project respondents, regardless of the timing of the interview. Differences between demonstration project food security in fall 2011 and food security nationwide were consistent in all categories with those described above for summer 2011. Food security was considerably lower in the Meal Delivery and Backpack demonstration projects than all U.S. households and households with children younger than age 18. WIC and SNAP families nationwide also had higher household food security compared to WIC and SNAP demonstration project households in fall 2011.

6.1.4 Implementation

Site visits and key informant interviews provided information on how the four types of demonstration projects were implemented. In addition to confirming some of the information collected by telephone household interview for the Meal Delivery and Backpack demonstration

[50] All but one demonstration project participant household had children less than age 18. It is possible that the 18-year-old may have been age 17 during demonstration project operation.

[51] WIC: Special Supplement Nutrition Assistance Program for Women, Infants, and Children; analysis was conducted among respondent households with income less than 185 percent of poverty line and children under age 5.

[52] SNAP: Supplemental benefits previous 12 months; analysis was conducted among respondent households with income less than 130 percent of poverty line.

projects, site visits and interviews were also able to provide an in-depth examination of what it was like to implement each of these projects from the perspective of the State grantee, sponsor, and site. Thus, we learned about recruitment of sponsors and sites, outreach to parents and caregivers, delivery of benefits, monitoring and oversight, and training and technical assistance.

Question 11: How does implementation differ among the four types of demonstration projects?

Implementation varied in many ways across the four demonstration projects, primarily due to the nature and requirements of each type of demonstration. The Meal Delivery project pre-enrolls children and families into the project and, for the most part, continued to serve the same children each week. In addition, the project "comes to them" even though it may be at a common drop-off site. As a result, project staff were more likely to know each participating family. Furthermore, they were better able to plan for meals on a weekly basis. On the other hand, Backpack projects were at "open sites." Whereas the staff may have known some of the participating children, different children may have participated in the SFSP from week to week, or even day to day. In some cases, this made it more challenging to plan the number of meals and staffing each week. The Activity Incentive demonstration was something of a combination of both. Many of these sponsors enrolled children in a camp-like program, but at the same time, the projects were open to any child who wanted to participate on a given day. Thus, most of the children could participate in project activities everyday, but there were a few "drop-ins." The Extending Length of Operation Incentive demonstration project was most similar to the traditional SFSP with the only distinction being that sites operated for longer periods of time during the summer.

The types of meals provided also varied across the four types of demonstration projects. The Backpack demonstration projects had the greatest challenges because the food had to be shelf stable. There was no control over how long the food was exposed prior to being stored in a refrigerator or any expectation that it would be refrigerated at all. As a result, meals were limited to foods that could not spoil. On the other hand, Meal Delivery sponsors delivered the meals at, or close to, the homes of demonstration participants and could be relatively certain that meals were exposed for a short period of time. Even then, it could not be assumed that the food would be stored appropriately. Delivery at or near the home enabled sponsors to provide more food variety and also enabled sponsors to include healthier foods and snacks.

The Activity Incentive and Extending Length of Operation Incentive demonstrations projects had the greatest flexibility among the four types of demonstration projects because in most cases the food was prepared and consumed the same day at congregate sites. Those providing the food could control the temperature of the food from the time it was prepared to the time it was consumed and also could tell whether and what the children were eating. Moreover, the Activity Incentive demonstration projects often included a complete hot meal. Likewise, the Meal Delivery demonstration projects typically included a full meal that could become a hot meal and often included instructions for reheating. Again, both had greater control over the exposure of the food which afforded more options.

While the Meal Delivery demonstration project typically provided more meals in a week to any one child, in many cases covering meals for 7 days of the week, the project was limited only to providing meals. The other demonstration projects had the opportunity to include interactions and activities with the children and parents. The Activity Incentive demonstration project incorporated both meals and enrichment activities that were funded by an FNS grant. Some of the Backpack demonstration projects also attempted to include simple activities to encourage the children to participate, although this was not funded by their FNS grant. Both the Activity Incentive and Meal Delivery demonstration projects also were able to educate children and families on nutrition and healthy eating practices.

The Backpack demonstration projects had to be creative in how they distributed meals to the children. Their implementation, including the selection of foods, was influenced by the bag type, the packaging within the bag, reusability of the bags, and the weight of the bag, since children had to walk home carrying the bags.

The meals covered also varied by demonstration project type. The Backpack projects had one distribution day because the demonstration project only covered meals for the weekend. The Meal Delivery projects were better able to provide meals for 7 days per week, as many of them had more than one distribution day. The Activity Incentive and Extending Length of Operation Incentive focused on providing meals onsite and were not able to provide meals for when the children were not at the SFSP.

Question 12: What factors are associated with efficient and innovative implementation?

We found that experience with the SFSP, good use of partnerships and volunteers, and innovative approaches to engage participates appeared to be associated with efficient and successful implementation. Despite the challenges noted by key informants, many of the experienced sponsors reported that they were accustomed to addressing similar challenges when operating their SFSP. Thus, the challenges were not a deterrent. Partnerships appeared to be a key factor for ensuring efficient implementation. Most were able to partner with local community organizations to help with outreach and provide additional funding or in-kind resources. For example, many sponsors secured donations of bags for the meal distributions. Other resources were used as special gifts and awards, as game prizes, or as farewell gifts for children at the end of the project operation.

Another key factor for efficient implementation was the use of volunteers—student volunteers in particular—and the coordination with volunteer organizations. Student volunteers are often eager and committed to making a difference in their community or helping those in need. Moreover, there is the added incentive of high school/college credit for their work, as well as the opportunity to demonstrate their community service on their college applications and/or resumes. Sponsors in Mississippi and Massachusetts had a long standing relationship with a university or volunteer organizations and were able to obtain high quality student volunteers from all over the country during the summer. These volunteers not only served as positive role models for participating children, but they also enabled the projects to increase their staff within their limited financial resources. In addition, one sponsor in Mississippi was able to secure other resources and donations (e.g., computers, books) through the relationship with the university. Insufficient staffing due to limited funds continued to be a challenge for smaller sponsors. Thus, the use of volunteer systems allowed the smaller organizations to leverage more resources for their project.

Finally, innovative approaches improved implementation by fostering greater interest and participation from both children and families. For example, some of the sponsors aimed to educate families on healthy eating by distributing materials on food safety and nutrition. Other sponsors hosted special events, field trips, and contests to maintain interest in the program. Special events included visits from community leaders and demonstrations from service professionals. The added benefits of these events and activities may have encouraged both parents and children to actively participate.

Question 13: What factors are associated with problems with implementation?

Challenges with implementation occurred at both the planning and implementation phase of these demonstration projects. Challenges at the planning phase included the process of identifying sponsors, sites and locations and recruiting participants. For the Activity Incentive demonstration, which attempted to recruit sponsors in especially low-income parts of the State, the State grantee reported that limited partnerships or networks in the neighborhoods of interest made the sponsor recruitment process problematic. As a result, the State was forced to recruit less experienced sponsors. Another factor associated with planning problems was the bureaucratic process for providing project approval. This more commonly was reported to have occurred in school districts. Whereas these bureaucratic processes likely cannot be eliminated as a factor, starting the planning process early can help minimize bureaucratic challenges that might have an impact on implementation. Finally, competing programs in the community may have had an impact on participation. One sponsor resolved this by working with the competing program in her community to agree on which age groups would participate in each program. As a result, each program targeted their program activities for specific age groups.

Challenges during program implementation were often related to participation levels from day to day, or week to week. Transportation continued to be the main barrier for ensuring consistent participation levels at all demonstration projects except Meal Delivery. A second factor was inadequate staffing, especially on days in which participation was high.

Lack of experience in conducting programs that provide non-congregate meals to children was also a factor that may be associated with problems during implementation. Many sponsors experienced unexpected challenges associated with the packaging of meals, use of bags, keeping the bags clean and free from bugs, and identification of a variety of foods that could be properly stored while still having appeal to children. Sponsors with more experience were creative in maintaining food appeal and food safety. Also, more experienced sponsors were less likely to incur unexpected costs due to the problems that ensued. One sponsor explained that meeting and consulting with other more experienced sponsors helped her demonstration project avoid unbudgeted expenses.

Question 14: How can implementation be improved?

Food content and participant engagement are two key components of implementation that can continually be improved for all types of demonstration projects. The types and variety of food provided can either encourage or discourage participation. Some sponsors tried to make the foods and meal time more interesting by conducting activities and providing materials that educate children about the benefits of healthy foods. Alternatively, for projects that are non-congregate, food distribution included handouts and flyers with games, activities, and/or recipes for the foods. Many of the sponsors reported that these activities were well-received. Project activities may serve to attract children and families to the site and thus increase participation. Those who provided activities reported that children were eager to come to the sites to engage in fun activities, even if it was just for a short period of time, and then return home with meals for the weekend.

Only one type of demonstration project – Activity Incentive – provided funds to conduct activities as an incentive for increasing participation. We were somewhat unimpressed with some of the activities that were offered by some sites under this project (e.g., a field trip to Chuck E. Cheese, naps). On the other hand, some sites were innovative in the types of activities they provided (e.g., cooking class, dance class, theater, a field trip to the zoo). One way to improve activities provided at sites might be to provide sponsors with a "best practices" guide of activities that have been used in the past and found to be enjoyable by children.

Sponsors in the Backpack demonstration project also seemed to have been challenged with the type of bag they used. Although there are pros and cons to the different types of bags, it does seem that use of actual backpacks caused many problems, including failure of the children to return them and problems in keeping them clean and bug-free. The sponsors that used reusable or plastic grocery bags had fewer problems.

It may be too early to provide definitive advice on how implementation can be improved for the Meal Delivery and Backpack demonstration projects. This was the first year of implementation, and the growing pains that State grantees and sponsors experienced in 2011 are currently being addressed in 2012. We look forward to learning how implementation has changed from one year to the next and the processes that were settled on for efficient and effective implementation.

6.1.5 Costs

FNS was also interested in determining the total and component costs of implementing and operating each type of demonstration project, including distinctions and comparisons by demonstration type among the organization incurring costs (Federal, State, local, provider); administrative startup costs; ongoing administrative costs of operations; and benefits costs. However, due to a variety of reasons (e.g., incomplete data, inconsistent categorization of data, and wide variation in costs among sponsors within the Meal Delivery and Backpack demonstration projects), the 2011 cost data do not appear to be as reliable as anticipated. Thus, findings from the cost data analysis are contained in Appendix A for information only. These reliability issues are being addressed in 2012 data collection through more extensive training to State grantees and sponsors, earlier data collection, and immediate followup of questions on the data. Question 15 (What are the costs of starting up each type of demonstration project?) and 16 (What are the ongoing costs?) will be addressed in the 2012 evaluation report.

6.2 Study Strengths and Limitation

6.2.1 Strengths

The study strengths consisted of its mixed method research design and excellent sponsor cooperation. For example, the mixed method research design – comprised of using a household telephone interview survey, site visits and key informant interviews, and a cost analysis – facilitated addressing the FNS evaluation goals on targeting accuracy, food security, implementation, and cost. A mixed method research design also enables us, as researchers, to confirm results in one method with results coming from a different method of data collection. Thus, not only did the key informant interviews provide an in-depth examination of demonstration project implementation, but we were also able to assess satisfaction and confirm some of the information reported by parents/caregivers in the household survey (e.g., foods provided, favorite foods, and outreach information).

One of the messages we received time and again from all State grantees and sponsors was the commitment they felt to helping children from low income families. This commitment to the children was not only reflected in their efforts to overcome many of the challenges that came their way, but it also translated into a strong commitment to assist in the evaluation. Sponsors and State grantees were convinced that these demonstration projects were filling a critical need, and they spent considerable time assisting Westat in identifying potential participants in the evaluation, following up

with non-respondents, organizing and being available for site visits and key informant interviews, and providing a variety of types of data, including data on costs, site operation dates, and estimated numbers of children participating in the demonstration projects.

6.2.2 Limitations

Despite these strengths, it is necessary to point out a number of limitations. These limitations include the lack of traditional baseline data and a comparison group; the difficulty in defining the eligible population (especially in the Backpack demonstration); coverage or representativeness of the sample; the inability to make meaningful comparisons between the Meal Delivery and Backpack demonstration projects; difficulties contacting parents/caregivers using contact information they had provided; completeness of cost data; and timing of summer 2011 interview.

Lack of Traditional Baseline Data and a Comparison Group. In order to directly examine the impact of the two summer demonstration projects on food security, it is necessary to understand food security before and after implementation of the demonstration interventions. In addition, to rule out the effects of other circumstances on the outcome variables (e.g., food security), one would want to have a comparison group as similar to the demonstration project groups as possible. The design of this study has neither a baseline nor control group comparison. Consequently, the design does not allow conclusions to be drawn regarding the impact of the summer demonstration projects on household food security per se, only on whether participation in the summer demonstration projects led to at least the same level of household food security as in the subsequent fall.

Defining the Eligible Population. Interpretation of any survey requires an understanding of the population from which survey participants are sampled. For the Meal Delivery demonstration project, the population was clear-cut – participants in the demonstration project were children who attended school and were eligible for free or reduced price lunches. In the case of the Backpack demonstration project, however, children at most sites could pick up a bag or backpack filled with food if they had attended the SFSP on the day backpacks were distributed. It was not necessary to sign up beforehand to receive a backpack or attend the SFSP on previous days of the week at most sites, and because all sites were open sites,[53] the description of the population was ill-defined, and the characteristics of those eligible to receive a backpack could not be clearly identified. This makes

[53] Open sites operate in areas in which at least 50 percent of children live in households with incomes at or below 185 percent of the poverty line. Meals are served to all children at the open site.

it harder to interpret the findings for the Backpack demonstration project compared to the interpretation for the Meal Delivery demonstration project.

Since only 70 percent of demonstration project sites submitted at least one form or name to Westat to assemble the sampling frame, they are not necessarily representative of all children who participated in the demonstration project.

Coverage or Representativeness of the Sample. Related to the issue of defining the eligible population is the extent to which the people participating in a survey are representative of the larger population. Meal Delivery sponsors knew exactly who and how many were participating in their demonstration project, and we were provided with the names and contact information from their lists of participants. When Meal Delivery parents provided spreadsheets or forms with contact information, we were confident that we knew the precise percentage of households that were covered in the telephone household survey.

On the other hand, Backpack demonstration project sponsors distributed forms that contained information on the evaluation study and a request for contact information. Completed forms were then sent to Westat to conduct the survey. Since most Backpack sites did not keep track of the names of children receiving a backpack or bag and forms were distributed more than once to parents and SFSP participants, it was not possible to know the actual number of children participating in the Backpack demonstration project. To try to gauge the approximate coverage for the Backpack demonstration project, we asked sponsors and site coordinators to estimate the number of children who received a backpack or bag at least once over the course of the summer. From this number, we estimated coverage for the Backpack demonstration (the number of families who returned a form with contact information as a percentage of the number who were estimated to have participated in the Backpack demonstration project). Not only were these numbers less reliable due to the nature of the eligibility requirements, but we also found much lower coverage in the Backpack demonstration (29 percent) compared to the Meal Delivery demonstration (84 percent).

Difficulties Contacting Parents and Caregivers. For the most part, we obtained good response to our telephone survey in the summer and fall 2011. Nevertheless, there were large numbers of individuals who could not be reached. Initially we assumed that there would be a substantial proportion of households that did not have a telephone and that we would overcome this challenge by providing cell phones to non-respondents. However, we learned from sponsors that many parents/caregivers had a disposable cell phone but they either did not want to use their own minutes, or more frequently they traded in their old cell phone (the one for which we had a

telephone number) for new phones with new numbers. Although Westat staff was able to provide study cell phones to respondents on site in about six cases (and then collect them after the interview), sponsors and site coordinators did not provide any cell phones to non-respondents. Thus, response rates were somewhat distorted by our inability to reach about 20 percent of the sample in the summer and 13 percent in the fall, and we continue to consider the best ways to reach non-respondents in 2012 data collection.

Reliability of Cost Data. There was wide variability in the cost data provided by each sponsor -- in the method that we received the data, the nature of the data provided, as well as in format and completeness of reporting. Better training and followup will take place in 2012 data collection.

Making Meaningful Comparisons between the Meal Delivery and Backpack Demonstration Projects. Meal Delivery grants were awarded to three States – Delaware, Massachusetts, and New York, all located in the eastern part of the United States and two of them located in the northeast. On the other hand, Backpack demonstrations took place in Arizona, Kansas, and Ohio, which are Midwestern and western States much larger than the Meal Delivery States. Each of these States has an entirely different demographic composition, including differences in languages spoken and race/ethnicity, as well as different sets of economic circumstances (e.g., unemployment rates). Although we have made comparisons by demonstration type for just about every analysis, it is important to note that any differences that are found are as likely (or more likely) to be related not to the type of demonstration but to the demographic and other differences among the States.

Timing of the Summer 2011 Interview. FNS received OMB clearance on July 20, 2011. This created a narrow window of time in which demonstration projects were operating and parents could be reached for an interview. Six sites had already closed down prior to July 20th, and by the end of July or early August most Backpack demonstration sites had ceased operations. Nevertheless, it was ultimately determined that parents/caregivers from all sites, whether or not demonstration project operations had ceased, should receive an interview if they agreed so they would be included in subsequent data collections.

In order to account for those individuals reporting on food security well after the demonstration project had ceased operations, we identified two groups of respondents – those interviewed within 7 days of demonstration project closure, and those interviewed after more than 7 days from closure. We used these breakdowns in a number of food security analyses, and, indeed, found that food security was higher in the group interviewed within 7 days of demonstration project closure for children, but not for adults or the full household.

6.3 Plans for 2012

This report covers the data collection and analysis for 2011 on four types of demonstration projects. Data collection and analysis for 2012 will cover only two types of demonstration projects – Meal Delivery and Backpack. With changes to the telephone questionnaire and another year of data collection and analysis, we will be able to improve the collection of data on participation and targeting accuracy (as expressed by food consumption, sharing, and food spoilage) and the analysis of food security. We will also be able to obtain a more in-depth understanding of demonstration project implementation and a more accurate understanding of the cost of the demonstration project operations in order to draw some meaningful conclusions within the limitations of the research design and methodology described above.

Meal Delivery and Backpack demonstration projects have already begun their 2012 operations. We are currently conducting summer 2012 telephone household survey, as well as site visits and key informant interviews. To improve 2012 cost data collection, we conducted training with all State grantees and sponsors, clarified each category in the cost data collection instruments, and explained the reasons for requiring specific categories of data. Cost data collection for 2012 recently began, and we intend to follow up with questions on the data as soon as possible. Moreover, we are currently in the process of planning 2012 fall data collection.

Demonstration project sponsors and site coordinators continue to play a critical role in following up non-respondents to the telephone household survey. We have assigned one Westat staff member per State to be in contact with demonstration project sponsors and site coordinators about data collection and followup to reduce the burden and confusion regarding data collection.

In addition to conducting analysis similar to that provided in this report, we intend to compare findings for 2012 data on food security to findings in 2011 to determine whether findings are consistent from year to year.

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