# Summer Electronic Benefits Transfer for Children (SEBTC) Demonstration: Evaluation Findings for the Proof-of-Concept Year

Evaluation of the Summer EBT for Children

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Final Report

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E.1   Introduction

Children's development, health, and well-being depend on access to a safe and secure source of food. In 2010, 8.0 million households with children were food insecure[1] (one in five such households) and nearly half of these, 3.9 million, included children who were food insecure at times during the year (Coleman-Jensen et al., 2011). Nearly 8.5 million children lived in households with food-insecure children, and 1.0 million children lived in households with very low food security among children (VLFS-C).

To address needs in the summer, when school is out of session, the Summer Food Service Program (SFSP) provides meals and snacks to children who receive the National School Lunch Program (NSLP) or the School Breakfast Program (SBP) during the school year.[2] The SFSP enriches the lives of millions of low-income children in communities across the U.S., however, it reaches far fewer children than the school programs (FNS 2011a; Gordon and Briefel, 2003; Food Research and Action Center, 2011). Many communities also provide other types of food assistance and child programs during the summer months to meet the nutritional needs of low-income children. Locations and resources are limited, though, so there are still gaps in many communities.

As part of its efforts to end child hunger, the Food and Nutrition Service (FNS) of the U.S. Department of Agriculture (USDA) is studying alternative approaches to providing food assistance to children in the summer months. The 2010 Agriculture Appropriations Act (P.L. 111-80) authorized and provided funding for USDA to implement and rigorously evaluate the Summer Food for Children Demonstration, one component of which is the Summer Electronic Benefits Transfer for Children (SEBTC). FNS contracted with Abt Associates, Mathematica Policy Research, and Maximus to study how the demonstration program has unfolded over time and its impact on program participants.

The SEBTC benefit is provided to households with children in pre-kindergarten through 12th grade who are certified for free or reduced-price school meals in the demonstration school food authorities (SFAs).[3] The amount of the benefit—an approximately $60 value per month per eligible child in the household—is comparable to the combined cost of free lunches and breakfasts under the NSLP and SBP. Benefits are provided monthly on an Electronic Benefits

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[1] Food-insecure households are those with low or very low food security among adults or children or both.

[2] The NSLP and SBP provide subsidized meals to children in school. Children from low-income families obtain these meals free or at a reduced price (FRP). Children living in households with incomes at or below 130% of the poverty level are eligible to receive meals for free; those with incomes between 130 and 185% of poverty level are eligible for reduced-price meals.

[3] SFAs are responsible for the provision of school meals and can include one or more schools or districts.

Transfer (EBT) card and prorated for partial months. Benefits are administered by grantees in the summer for the period when schools are not in session.[4]

The SEBTC benefit is administered either using the State's existing EBT system for the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) or the EBT system for Supplemental Nutrition Assistance Program (SNAP). Grantees worked with their existing EBT vendors, which made modifications to the State's WIC or SNAP EBT systems. In WIC-model sites, participants can purchase a group of specific foods and specific quantities based on the existing WIC food packages and can only purchase them at WIC-authorized retailers. The WIC EBT cards can be used only in the State where they were issued. In contrast, participants in demonstration areas using the SNAP EBT systems can purchase a much wider foods. They can redeem $60 in benefits for SNAP-approved foods at any SNAP-authorized retailer in the country.

Grantees using their SNAP systems for SEBTC implemented either a "SNAP" model or a "SNAP-hybrid" model. In the "SNAP-hybrid" model, SEBTC benefits are automatically loaded onto the SNAP cards of current SNAP recipients and non-SNAP recipients receive a standard SNAP card that only includes SEBTC benefits. For the "SNAP" model, SEBTC households get SEBTC on a separate EBT card even if they also have a SNAP card.

In summer 2011, five grantees participated in the SEBTC demonstration:

- Windham and New London counties, Connecticut (SNAP model)
- Grand Rapids, Michigan (WIC model)
- Kansas City, Missouri (SNAP-hybrid model)
- Linn and Jefferson counties, Oregon (SNAP-hybrid model)
- El Paso County, Texas (WIC model)

The Connecticut and Oregon sites are predominantly rural, and the Michigan, Missouri, and Texas sites are urban or predominantly urban. The number of eligible children ranged from approximately 11,000 in Connecticut to 38,000 in Texas. Lead agencies were most often the State agency responsible for SNAP or for the National School Lunch and School Breakfast Programs. Each had a variety of partners, and included other State agencies as well as EBT vendors, School Food Service Authorities (SFAs), community organizations, and private contractors to help with planning and management. This report provides an evaluation of the SEBTC Demonstration in its first year. FNS undertook a "proof of concept" (POC) year of the SEBTC to test whether the summer benefit intervention can be implemented successfully by State and local grantees, and whether the initial evaluation, targeting 5,000 households, can be done with fidelity. The test of these two facets of the SEBTC approach helps enable a robust evaluation in its full implementation year in the summer of 2012. In the summer of 2012, the demonstration will expand to include 14 sites. Benefits will be offered to up to 75,000 children and the household data collection sample will include up to

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[4] The term "grantee" refers to the State agency or group of agencies implementing the demonstration.

27,000 households who will be surveyed before the intervention (i.e., during the school year) and again during the intervention (i.e., in the summer).

E.2   Evaluation Overview

The evaluation has five broad objectives:

1. To assess the feasibility of implementing the three different models of SEBTC benefit delivery
2. To examine the implementation of SEBTC, including approaches used, and the challenges and lessons learned during the demonstrations
3. To describe receipt and use of SEBTC benefits
4. To examine the impact of SEBTC benefits on children and their families' food security, food expenditures, use of other nutrition programs, and children's nutritional status
5. To determine and document the total and component costs of implementing and operating the demonstrations

For the impact analysis, the evaluation uses a random assignment design, assigning households to either receive the benefit (i.e., the treatment group) or be part of the comparison group (i.e., the control group), to provide the most credible and rigorous estimates of the impact of the demonstrations. For this analysis, households were interviewed in the spring, before the school year ended, and again in the summer. Survey questions related to, among other topics, food security, nutrition assistance program participation, and what children ate. To supplement the impact study, the evaluation includes an implementation and cost study. The evaluation also includes a detailed analysis of SEBTC transaction data, which describes patterns of household receipt and use of the summer benefits.

E.3   Major Findings

E.3.1. SEBTC Implementation and Use of Benefits

Despite the extremely fast-paced timeline, as well as budgetary and other pressures on the State governments, all five grantees were able to recruit and enroll households in spring and administer SEBTC benefits during the summer of 2011. One of the greatest challenges grantees faced during implementation was working with school districts to identify eligible children and compile household lists, in part due to unavailable or inaccurate data from school systems. Despite these issues, which caused delays, all of the grantees were able to obtain consent from at least the minimum number of children and families needed to be part of the demonstration and evaluation. In addition, all of the EBT vendors completed systems modifications needed to administer the SEBTC benefit.

In each of the sites, approximately 2,500 children were randomly assigned to receive benefits, for a total of approximately 12,500 across the five sites. Taken together, the five sites issued benefits to a total of 6,968 households with 12,463 children identified as eligible.

Among the households that were issued benefits, 90% used their benefits at least once during the demonstration. Numbers of households and children with benefits issued varied slightly among the sites. Considering all households assigned to receive the SEBTC benefit (both those who used it at least once and those who did not use it all), households redeemed an average of 80% of benefits issued for the summer. For the 90% of households that *participated* at all, i.e., made at least one SEBTC purchase, the mean amount *redeemed* was 89% of benefits. There was a difference in the amount of benefits redeemed between the sites depending on their approach (SNAP, SNAP-hybrid, or WIC). The SNAP-hybrid and SNAP sites had the highest mean redemption rates among participating households: 98% in Missouri; 99% in Oregon and 93% in Connecticut. The WIC-model States had substantially lower means (71% in Michigan and 85% in Texas).

SEBTC benefits were made available to households on their EBT cards on a monthly basis. While the mean amount redeemed among participating households was 89%, benefits were not always *exhausted* (i.e., completely used) at the end of any given month. Across all sites, 57% of households exhausted their benefits in at least one summer month, and 35% spent all of their benefits for the summer.

An important policy question relates to the percentage of households that would use SEBTC if it were available to all eligible households, should participation not be limited by demonstration or funding constraints. In order to calculate this rate, which could be considered a "coverage" rate, the evaluation team multiplied the proportion of the eligible population that consented to take part in the demonstration by the proportion of families who "took up" SEBTC. Using the participation rate as the definition of "take-up," the sites ranged from a coverage rate of 23.8% in Oregon to 81.9% in Missouri, with rates being higher in sites where a passive consent approach (i.e., households would be automatically included in the demonstration unless they asked to be excluded) was used.

E.3.2. Households in the Study and Impacts of SEBTC

Households who took part in the SEBTC demonstration were relatively disadvantaged, compared to the national population of households with children under 18. Reported mean household monthly income was $1,572, with 4% reporting no income that month. Nearly three-fourths of the households (72.6%) had monthly incomes below the federal poverty line,[5] ranging from 65.3% of households in Connecticut to 78.6% in Michigan. In contrast, in 2010, 18.3% of families with related children under 18 had incomes below the federal poverty line (U.S. Census Bureau, 2012). Over two thirds (69.5%) reported at least one employed adult in the household.

As other evidence of disadvantage relative to the national population, nearly two-thirds of the households (63.8%) reported receiving SNAP benefits and 16% reported using food

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[5] The Federal Poverty Level (FPL) is adjusted for household size. An FPL is calculated for the contiguous United States, Alaska, and Hawaii. The 2011 FPL for a family of 4 is $22,350 per year (i.e., $1,863 per month) in the 48 contiguous States.

pantries, kitchens, or other emergency food services at baseline prior to when SEBTC began. Nearly one quarter (23.5%) reported receiving WIC. During the summer, very few households (estimates using the control group only) reported that their children received NSLP or SFSP as their primary source of weekly lunch in the summer (2.1% and 4.6%, respectively).

Among the group taking part in the demonstration, SEBTC reduced very low food security among children (VLFS-C), the study's primary outcome, during the summer of 2011 (See Exhibit E.1). The prevalence of VLFS-C was reduced from 7.0% in the control group to 5.6% in the treatment group. Thus, SEBTC eliminated VLFS-C for about one-fifth of the children who would otherwise have experienced it. In these five sites, SEBTC advanced the demonstration's main goal, reducing children's very low food security in the summer. However, while the direction of the impact is not in question, the size must be viewed with caution; differential non-response among households within the treatment and control groups who experienced different levels of food security may result in an over-estimate or under-estimate of the impact. In addition, the demonstration areas are not representative of the entire nation. The expanded operations in 2012 provide an opportunity to explore whether these findings hold up when the demonstration grows from five to 14 sites.

Exhibit E.1   Impact on Food Security Among Children in Summer 2011: Prevalence Rates for Very Low Food Security

Difference=-1.5; SE=0.72; p-value=0.041

Source: SEBTC, Summer Survey, 2011 (n=5,225).

Note: The difference in the prevalence of very low food security among children between the treatment group and the control group of 1.5 percentage points appears to be larger than 7.0% (treatment group prevalence rate) minus 5.6% (control group prevalence rate) because of rounding. The prevalence rate in the treatment group is 7.02% and the prevalence rate in the control group is 5.55%, for which the difference is 1.47 percentage points.

Analyses of related measures of food security—general food insecurity among children plus measures of both severe and general food insecurity among adults and households as a whole—indicate similar proportional reductions in these broader measures. All of the food

security results are robust in terms of the direction of the impact. For example, food insecurity among children was reduced from 38 to 31% prevalence by the SEBTC intervention.

The level of VLFS-C in the control group, which did not receive SEBTC, remained steady between spring and summer, even though most children did not participate in SFSP or receive NSLP or SBP when attending summer school. Looking at the related general measure of food insecurity among children, the prevalence rate fell by a statistically significant 4 percentage points between spring and summer, from 43% in the spring to 39% in the summer. These findings are surprising, given children in the control group had limited access to federal child nutrition programs during the summer. It is not clear whether this finding reflects unusual or atypical characteristics of the participating SFAs, specific circumstances related to the spring and summer of 2011, or other circumstances. In 2012, with a larger sample size, it may be possible to develop a better understanding of spring and summer differences in households with food insecurity among children.

SEBTC also showed some impacts on children's nutritional intake. Based on responses to the summer survey, children in SEBTC ate more fruits and vegetables and more frequently ate whole grains during the summer than those in the control group, though positive changes in diet in other areas (reductions in baked goods and sugar-sweetened drink consumption and increases in the share of children drinking nonfat or low-fat milk) were not observed.

Children in households receiving SEBTC were 1.8 percentage points more likely than control households to eat lunch at home or other places where the household paid for the meal. Although all households, including those receiving SEBTC, continued to have access to SFSP, it is plausible that those who received SEBTC did not feel as much need to use SFSP as households in the control group, and, indeed, the available data suggest that SEBTC reduced household participation in SFSP by 1 percentage point. However, the reported use of SFSP in the control group is about half the national estimates. This may be due to respondents' inabilities to identify an SFSP site as well as the fact that several of the areas were selected for the SEBTC demonstration because of the relatively low level of SFSP availability in the summer.

SEBTC in the POC year showed no clear impact on households' food expenditures or use of the WIC program and a small impact on the use of the SNAP program, with families assigned to SEBTC more likely to be participating in SNAP. However, these findings must be viewed with caution, both because of sample sizes and ambiguities in the ways that household respondents answered the survey. The evaluation team will address both of these issues in the full demonstration year.

E.3.3. Costs of SEBTC

Grantees reported detailed data on SEBTC implementation costs related to program staffing, contractual relationships between agencies, benefit outlays, and indirect cost rates to support the cost analysis. States encountered several unanticipated demonstration costs.

Some tasks took more staff time than initially planned, particularly those related to the creation and cleaning of household files for random assignment. This caused many States to spend additional non-grant funds or to use in-kind resources from State staff or partner organizations.[6]

Administrative costs reflect start-up costs such as modifying several computer systems and databases, and developing consent and outreach materials including logos and card designs, and are typically highest in the first year of a new program. Administrative costs accounted for approximately half of total costs (i.e., benefit costs plus administrative costs), but the proportions varied considerably across sites. The average administrative cost of implementing the demonstration ranged from $210,683 in Connecticut to $716,040 in Michigan. SEBTC grant-funded costs ranged from $118,801 in Oregon to $607,189 in Michigan. (See Exhibit E.2.)

Exhibit E.2   Total Costs (Administrative + Benefits)

	Total administrative costs (grant + non-grant)		Benefits redeemed		Total costs	
	$	% of Total	$	% of Total	$	% of Total
Connecticut	210,683	38%	347,078	62%	557,760	100%
Michigan	716,040	74%	248,461	26%	964,501	100%
Missouri	307,386	47%	348,159	53%	655,545	100%
Oregon	311,828	42%	434,324	58%	746,151	100%
Texas	365,881	59%	256,634	41%	622,516	100%
All Sites	1,911,817	54%	1,634,656	45%	3,546,473	100%

Source: Cost data from grantees and subgrantees, 2011.

Note: Totals may not sum due to rounding.

The total cost of the demonstration (administrative plus benefit costs) ranged from $557,760 in Connecticut to $964,501 in Michigan (See Exhibit E.2). Almost all of the grant administrative costs (67 to 90%) occurred before the benefits were issued to families. Non-grant administrative costs were largely State staff costs. Texas was the exception, funding their State administrative staff time through the grant. As described earlier, each grantee had a combination of State and community partners. In general, working with local community partners was associated with lower administrative costs overall, while working with the private contractors (other than the EBT processor) was associated with higher costs.

Over the full summer, the cost per school-aged child (both administrative and benefit cost) in a household redeeming benefits was $311 on average, and ranged from $239 to $413 across sites. Administrative costs were higher in WIC-model sites, but redemption rates were lower, contributing to higher average costs for households redeeming benefits in WIC-model

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[6] Not all States estimated non-grant costs in their applications, but among those that did, they tended to underestimate them. For example, Connecticut estimated about $33,000 in non-grant costs in their application but reported $80,000.

sites compared to SNAP-model sites. However, because there are only five sites in the POC year, it is not possible to draw any definitive conclusions about the relative costs of the WIC- and SNAP-models.

E.4 Next Steps

The findings of the POC year are encouraging regarding the feasibility of the SEBTC approach and its potential effect on reducing VLFS-C in the summer months. The 2012 impacts, reflecting the full demonstration year results, will provide an opportunity to determine if the first-year findings hold up when the SEBTC approach is expanded to 14 sites and up to 27,000 surveyed households.

Chapter 1

Introduction

Children's development, health, and well-being depend on access to a safe and secure source of food. In 2010, 8.0 million households with children were food insecure[7] (one in five such households) and nearly half of these, 3.9 million, included children who were food insecure at times during the year (Coleman-Jensen et al., 2011). Nearly 8.5 million children lived in households with food-insecure children, and 1.0 million children lived in households with very low food security among children (VLFS-C).

To address needs in the summer, when school is out of session, the Summer Food Service Program (SFSP) provides meals and snacks to children who receive the National School Lunch Program (NSLP) or the School Breakfast Program (SBP) during the school year.[8] The SFSP enriches the lives of millions of low-income children in communities across the U.S., however, it reaches far fewer children than the school programs (FNS 2011a; Gordon and Briefel, 2003; Food Research and Action Center, 2011). Many communities also provide other types of food assistance and child programs during the summer months to meet the nutritional needs of low-income children. Locations and resources are limited, though, so there are still gaps in many communities.

As part of its efforts to end child hunger, the Food and Nutrition Service (FNS) of the U.S. Department of Agriculture (USDA) is studying alternative approaches to providing food assistance to children in the summer months. The 2010 Agriculture Appropriations Act (P.L. 111-80) authorized and provided funding for USDA to implement and rigorously evaluate the Summer Food for Children Demonstration, one component of which is the Summer Electronic Benefits Transfer for Children (SEBTC). FNS contracted with Abt Associates, Mathematica Policy Research, and Maximus to study how the demonstration program has unfolded over time and its impact on program participants.

This report provides an evaluation of the SEBTC Demonstration in its first year. FNS has undertaken a "proof of concept" (POC) year of the SEBTC to test whether the summer benefit intervention can be implemented successfully by State and local grantees, and whether the initial evaluation, targeting 5,000 households, can be done with fidelity. Testing these two facets of the SEBTC approach in the POC year will enable a robust evaluation in the full demonstration year. This introductory chapter, serving as a foundation for the rest of the report, details the issue of summer food insecurity among children, describes the goals

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[7] Food-insecure households are those with low or very low food security among adults or children or both.

[8] The NSLP and SBP provide subsidized meals to children in school. Children from low-income families obtain these meals free or at a reduced price (FRP). Children living in households with incomes at or below 130% of the poverty level are eligible to receive meals for free; those with incomes between 130 and 185% of poverty level are eligible for reduced-price.

and timeline of the SEBTC demonstration and its evaluation, and provides a road map for the remainder of the report.

1.1   Policy Context: Summer Food Insecurity among Children

Food security is defined as access by all members of the household at all times to enough food for an active, healthy life (Nord, 2009).[9] *Household* food security is determined by the food security status of the adults and the children living in the household. *Food secure* households are those in which both adults and children are food secure. *Food insecure* households are those in which the adults or children *or* both report limited access to food resulting in: a) reduced quality or variety of diet (low food security), or b) reduced food intake or disrupted eating patterns (very low food security). These levels of food insecurity are assessed for both the adults and the children living in the household, and also used to assess the total or full household.

In 2010 the prevalence of food insecurity among households with children and incomes at or below 185% of poverty was 39% nationwide, indicating food insecurity among adults or children or both (Coleman-Jensen et al., 2011). In food insecure households, parents often cut or skip their own meals to prevent their children from going without food, and when there is not enough food for everyone in the family, the children may also cut or skip meals. Households in which the children's regular meal patterns are disrupted or food intake is reduced to below the amount caregivers consider sufficient are characterized as having VLFS among children (VLFS-C), the most severe level of food insecurity (Nord, 2009). Nationwide, 20% of all households with incomes eligible for FRP meals were food insecure, and 2.1% had VLFS-C in 2010. Among households with incomes below the poverty line, the prevalence of food insecurity among children was 24% and VLFS-C, 2.8% (Coleman-Jensen et al., 2011).

An in-depth analysis of School Nutrition Dietary Assessment Study-III data on food security provides insights into household characteristics of food insecurity among school-age children (Potamites and Gordon, 2010). Nearly all lived in low-income households; 90% lived in households with incomes at or below 185% of poverty, and most (72%) were at or below 130% of poverty. Nearly all food insecure children (93%) participated in NSLP, 80% participated in SBP, half (46%) received Supplemental Nutrition Assistance Program (SNAP) benefits, and 19% were in families that had used emergency food services in the last month. Use of the latter is an important indicator of a household's strained resources and the risk of food insecurity.

Research on seasonal differences in food security among households with children is limited. One analysis of national data from the 1995 through 2001 Current Population Survey (CPS) suggests that food insecurity changes seasonally in States that provide fewer SFSP meals and

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[9] The food security status of each interviewed household is determined by the number of food-insecure conditions and behaviors reported by the household, using the standard 18-item, 30-day survey module developed by USDA (Economic Research Service, 2008).

summer school lunches. The reported effect among households with income less than 185% of the poverty line was a 1.1 percentage point higher rate of VLFS among adults (rather than children) in the summer compared to the school year (Nord and Romig, 2006). Other research suggests that low-income households with school-age children cope with food shortages in the summer by visiting food pantries in some local communities (Hoisington et al., 2006; Kempson et al., 2003). In the 2010 Feeding America survey, 30% of food pantries, 26% of emergency kitchens, and 7% of shelters reported seeing many more children accompanying adults during summer months (Mabli et al., 2010).

Nord and Romig (2006) conjecture that the seasonal differences in food security may be related to the reduction in school meals that were not offset by households' participation in SFSP. In order to provide a closer comparison with the SEBTC evaluation, the study team conducted a parallel analysis using data from the 1995-2001 CPS with two key differences, including (1) restricting the sample to households with annual income not exceeding 130% FPL and with at least one child ages 3 to 17,[10] and (2) using a 30-day measure of child food insecurity as the outcome measure instead of adult VLFS.[11] The analysis found, without controlling for household and child characteristics, that child food insecurity was higher in the summer (3.9%) compared with the spring (3.4%), and the difference was on the threshold of statistical significance (see Exhibit 1.1 below). Some of the spring/summer difference may be explained by child and household characteristics. After including covariates in the model, the difference in the spring/summer prevalence of child food insecurity increases slightly from 0.5 percentage points to 0.6 percentage points.

Exhibit 1.1   Prevalence of Child Food Insecurity, 1995-2001

	Spring	Summer	Difference	P-Value
Unadjusted prevalence	3.4%	3.9%	-0.5%	.074
Adjusted prevalence	3.1%	3.7%	-0.6%	.069

Source: Authors' analysis of data provided by Nord, used for Nord and Romig (2006)

Note: CPS child food insecurity was assessed as a positive indication on one of five items: cut size of children's meals (F12), children skipped meals (F13), children skipped meals three or more days (F13a), children were hungry (F14) and children did not eat for a whole day (F15). Sample is restricted to children in households with 130% FPL income or less and children ages 3 to 17.

[a] Marginal effects estimated at means of covariates.

[b] Logistic regression adjusted for gender and Hispanic ethnicity of child, household size, number of children (<18 years) in household, Census region, highest level of education in household.

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[10] The minimum age in the SEBTC evaluation is 3, and the child-specific items in the CPS food security instrument were restricted to children 17 years old or less.

[11] It was not possible to use the same measure used in the SEBTC evaluation, very low food security among children (VLFS-C), because of data availability, so an alternate measure was constructed, using five survey items which we refer to as CPS child food insecurity.

SFSP was implemented in 1968 to reduce the risk that children in low-income households would miss meals during the summer when they have little or no access to the NSLP and SBP.[12] In July 2010, approximately 9.5% of school-age children who were eligible for SFSP received it (Food Research and Action Center, 2011).[13] FNS is currently funding evaluations of demonstrations to strengthen SFSP, including home delivery of summer meals to children in rural areas, and providing food backpacks to children to cover days when SFSP sites are not operating. The effectiveness of providing grants to SFSP providers (sponsors) to enhance activities at sites, and financial incentives to encourage operation for more than 8 weeks are also being tested.[14]

The SFSP provides free, nutritious meals and snacks to help children age 18 and younger get the nutrition they need to grow, learn, and play throughout the summer months when school is not in session (FNS 2011a; Food Research and Action Center, 2011). Many of these programs provide not only food assistance for children, but also summer programs and activities that foster physical movement and social interaction—important factors in child development. Logistical and practical considerations still present barriers to SFSP serving more children during the summer. Because the program is operated by schools, local governments, and local community-based organizations in churches and recreation centers, finding additional operators and locations to dramatically expand it has been difficult. Furthermore, even in areas where substantial expansion of the SFSP may be feasible, rates of participation by eligible children would likely remain below those for the NSLP and SBP. An earlier evaluation reported several barriers to SFSP participation, such as lack of transportation to sites, lack of publicity about the program, limited site operation days/hours, lack of program activities, and parents' concerns about neighborhood safety (Gordon and Briefel, 2003). In addition, most SFSP sites operate for fewer than eight weeks, leaving low-income children without access to the program for some summer weeks.

1.2 The SEBTC Demonstration

In response to concern about food insecurity among low-income children during summer months, Congress provided $85 million to USDA to improve access to food for low-income children in the summer months when school is not in regular session (P.L. 111-80). In addition to the SFSP demonstrations described earlier, FNS planned and implemented a demonstration that uses the existing electronic benefit delivery systems for the SNAP and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) to enhance the food purchasing power of households with eligible children during the summer.

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[12] The SBP began as a pilot program in 1966 and was established as a permanent program in 1975 (http://www.fns.usda.gov/cnd/summer/about/program_history.html).

[13] Based on July average daily attendance figures for summertime NSLP participation reported by FNS, but not adjusted for absenteeism since summer absentee figures are not available for SFSP as they are for NSLP; estimate assumes that SFSP accounts for approximately 63% of summer nutrition meals. About 15% of eligible children participated in summer nutrition meals in 2010 (Food Research and Action Center, 2011).

[14] More information on these evaluations and projects can be found on the FNS website at http://www.fns.usda.gov/ora/.

More specifically, a benefit for eligible children in the summer months is delivered through the electronic benefits transfer (EBT) procedures used by the SNAP and WIC programs.

This benefit (SEBTC) supplements rather than replaces the SFSP programs in the demonstration areas. Many SFSP programs provide summer activities as well as food assistance, but one critical advantage of the SEBTC approach is that it does not require that children be physically present at sites where meals are served. By directly augmenting the food purchasing power of households with eligible children, FNS expects a higher proportion of the children will actually have greater access to food, thus achieving the ultimate goal of reducing the prevalence of food insecurity among children.

The SEBTC benefit is provided to households of children from pre-kindergarten through 12th grade who are certified for FRP school meals in the demonstration school food authorities (SFAs).[15] The amount of the benefit—an approximately $60 value per month per child in the household—is comparable to the cost of free lunches plus breakfasts under the NSLP and SBP. Benefits—provided monthly on an EBT card and prorated for partial months—are administered by grantees in the summer for the period when schools are not in session.[16]

The benefit is administered differently in sites using their WIC or SNAP EBT systems to deliver SEBTC. In sites using the WIC EBT systems, participants can purchase only foods prescribed in a special food package at WIC-authorized retailers. In addition, these SEBTC cards can be used only in the State where they were issued. The SEBTC package was specified by FNS based on existing WIC foods (see Appendix 1A), and includes milk, juice, cheese, cereal, eggs, whole wheat bread, beans, peanut butter, and canned fish. It also includes a $16 voucher for fresh fruits and vegetables. In 2011, the two sites implementing the WIC approach also worked with FNS to customize the package to meet the tastes of the local population (for example, substituting whole grain tortillas for whole wheat bread) and local food costs.

The SEBTC benefit is administered either using the State's existing EBT system for the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) or the EBT system for Supplemental Nutrition Assistance Program (SNAP). Grantees worked with their existing EBT vendors, which made modifications to the State's WIC or SNAP EBT systems. In WIC-model sites, participants can purchase a group of specific foods and specific quantities based on the existing WIC food packages and can only purchase them at WIC-authorized retailers. The WIC EBT cards can be used only in the State where they were issued. In contrast, participants in demonstration areas using the SNAP EBT systems can purchase a much wider variety of foods. They can redeem $60 in benefits for SNAP-approved foods at any SNAP-authorized retailer in the country.

Grantees using their SNAP systems for SEBTC implemented either a "SNAP" model or a "SNAP-hybrid" model. In the "SNAP-hybrid" model, SEBTC benefits are automatically loaded

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[15] SFAs are responsible for the provision of school meals and can include one or more schools or districts.

[16] The term "grantee" refers to the state agency or group of agencies implementing the demonstration.

onto the SNAP cards of current SNAP recipients and non-SNAP recipients receive a standard SNAP card that only includes SEBTC benefits. For the "SNAP" model, SEBTC households get SEBTC on a separate EBT card even if they also have a SNAP card. In the sites using the SNAP model, participants can redeem $60 in benefits for SNAP-approved foods at any SNAP-authorized retailer in the country. Participants can purchase a much wider range of foods than permitted in the WIC model, including meats, fish and poultry, all types of bread (not just whole wheat), and seeds and plants that produce food for the household to eat.[17]

The demonstration is being implemented in two phases. In the initial proof-of-concept (POC) phase in 2011, the demonstration was implemented by five grantees in five sites.[18] Two of them—Michigan and Texas—implemented the WIC model; two—Missouri and Oregon—implemented the SNAP-hybrid model; and Connecticut implemented the SNAP model (with a separate card for SEBTC). In Chapter 2 we provide additional information about the participating States, their partner agencies, and the SFAs. In a second phase, FNS expanded the size of the demonstration in 2012 by adding 9 new sites and roughly doubling the number of child beneficiaries at each site. In 2012, four of the five POC grantees will be implementing SEBTC in a second site, and there will be five new grantees, each implementing SEBTC in one site.

1.3   Overview of the Evaluation

In authorizing the Summer Food for Children Demonstrations, Congress directed USDA to conduct a rigorous independent evaluation. The evaluation design for the SEBTC demonstration includes three components: an impact study, an implementation study, and a cost study. Below we describe the evaluation objectives and research questions, the overall study design, and the purpose of and data sources used for this report.

1.3.1   Research Objectives

The evaluation has five broad objectives:

1. To assess the feasibility of implementing three different models: a separately operating program using the WIC system, a separately operating program using the SNAP system, and a hybrid system in which SEBTC benefits are included in benefits for SNAP participants
2. To examine the implementation of SEBTC, including approaches used, and the challenges and lessons learned during the demonstrations
3. To describe receipt and use of SEBTC benefits
4. To examine the impact of SEBTC benefits on children and their families' food security, food expenditures, household and family's use of other nutrition programs, and children's nutritional status

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[17] For a full list of SNAP-approved foods, visit the FNS website at http://www.fns.usda.gov/snap/faqs.htm#10.

[18] The term "site" refers to the local areas where the demonstration is being implemented.

5. To determine and document the total and component costs of implementing and operating the demonstrations to determine the overall costs and facilitate comparisons of different operational models

Each research objective is addressed in this First Year Evaluation Report. Two earlier reports, "Summer Electronic Benefits Transfer for Children: Early Experiences Through June 2011 of the Proof-of-Concept Year" (Bellotti et al., 2011); and "Congressional Status Report: Summer Electronic Benefits Transfer for Children Demonstrations" (Briefel et al., 2011), also presented findings on the first three objectives. The "Early Implementation" report presented findings about the first several months of implementation by the five POC grantees. The SEBTC Congressional Status report provided implementation details up through September and also described the characteristics of households taking part in the demonstration.

1.3.2   Evaluation Framework for the SEBTC Demonstration

Children's food security and nutritional status are outcomes associated with a complex set of inter-relationships between household resources to obtain adequate and safe foods for all household members, and the policies, nutrition assistance programs, and institutions (e.g., schools, child care facilities) in the community where the family lives and eats (Finney Rutten et al., 2010). Low-income families may experience reduced access to affordable and healthful foods such as fresh fruits and vegetables and whole grains (Beaulac et al., 2009). Those living in rural areas may face additional barriers including lack of transportation to attend SFSP and other summer nutrition programs (Wauchope and Stracuzzi, 2010). Children's consumption of affordable and healthy foods is associated with household socioeconomic characteristics, food availability, and access to food or meals (e.g., FRP meals, child care meals/snacks, SFSP meals/snacks).

Exhibit 1.2 illustrates how children's food security and nutritional status is related to nutrition policies and programs, community institutions, and household characteristics, and how the impact of the SEBTC may be determined by these factors. SEBTC provides a benefit to eligible households; it first affects household behaviors. Households may use the benefit to alter their food budget, grocery shopping practices, and/or eating practices at home or away-from-home. These household changes may affect the amounts and types of foods purchased by the household and therefore available to children living in the household. Children also consume meals at school and other locations outside the home. Ultimately, the availability of (or lack of) food affects children's food security and nutritional status. The goal of the SEBTC is to provide EBT benefits so that low-income households can spend more on food, improve diet quality and nutritional status, and reduce food insecurity among children.

Exhibit 1.2   Logic Model for the SEBTC Evaluation
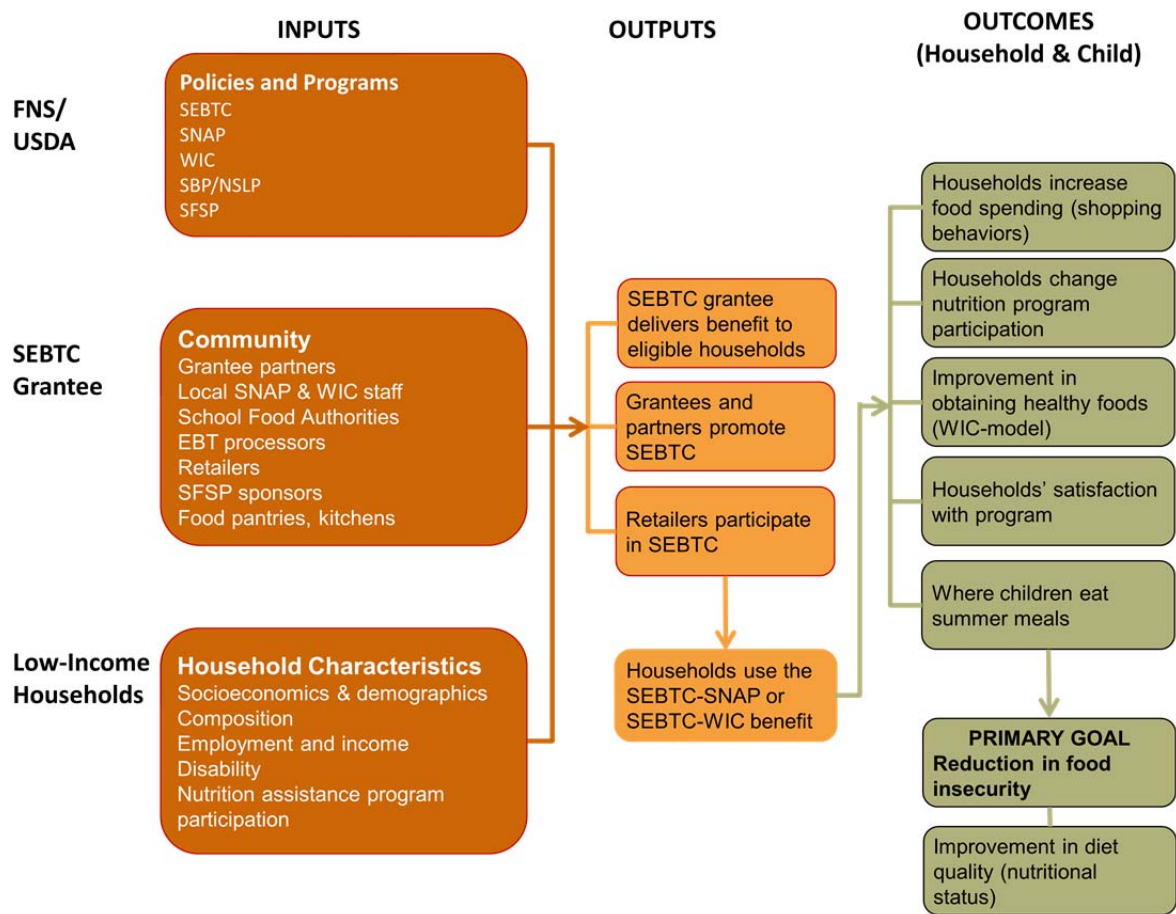
1.3.3   Previous Literature on Impacts of Benefits Similar to SEBTC on Household Food Expenditures and Food Security

SEBTC provides households with electronic vouchers for the purchase of food (SNAP-like benefits in SNAP-model sites; WIC-like benefits in WIC-model sites). Most low-income households already spend more on food than they receive in food assistance (e.g., SNAP, WIC, SFSP) (Southworth, 1945; Fraker et al., 1990; Trippe and Ewell, 2007). For them, a voucher for food is nearly cash; i.e., households in the treatment group could use the SEBTC benefit to replace current cash spending on food, freeing up resources for non-food expenditures.

The literature from SNAP suggests that while households do not spend all of their food assistance on food, they spend more than they would from increases in other sources of income. Specifically, recent estimates suggest that each dollar of SNAP benefit appears to increase food expenditures by 26 to 35 cents. This figure is considerably higher than standard estimates that 15 cents of each additional dollar of non-food assistance income are

spent on food.[19] An analogy to SEBTC might be interpreted as suggesting that one dollar of SEBTC benefits could increase total food expenditure by perhaps 30 cents at the household level.

Of most relevance is Nord's analysis of the impact of the increase in the value of the SNAP benefit by approximately 16%, as part of the 2009 federal stimulus legislation (ARRA/American Recovery and Reeinvestment Act of 2009). Nord (2010) estimated a resulting increase in food expenditures (5.4%) and a decrease in household food insecurity (by 2.2 percentage points). Nord and Prell (2011) also reported large impacts of the increased SNAP benefit on food security. They further estimate that the increase in SNAP benefits paid resulted in an increase in total food expenditures by 2.2 percent and a decrease in food insecurity for the household (VLFS-H or LFS-H) of 2.0 or 2.2 percentage points (depending on the method used).[20]

It is not evident that a dollar for dollar increase in food expenditures is necessary to alleviate food insecurity. Beyond income and food assistance, the efficiency of household food spending and food management affects food security. Household factors such as shoppers' knowledge about foods, family food preferences, and the nutritional value of purchased foods also play a role in food spending. There is also little research about the association between food expenditures and food insecurity at the most severe level – very low food insecurity among children. Further, while there is some information on low-income families' coping strategies to maintain food security, there is little or no information on how strategies change in the summer compared to the school year (Hoisington et al., 2002; Kempson et al., 2003).

1.3.4   Research Design

The evaluation uses a random assignment design to provide the most credible and rigorous estimates of the impact of the demonstrations. In the POC year, FNS provided funding for benefits for 2,500 children per site, totaling 12,500 children overall. The evaluation team surveyed approximately 1,000 household per site, as described further below.

To accomplish these tasks, FNS, the grantees, and the evaluation team began work in December 2010 to complete a series of tasks related to implementing the demonstration

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[19] The estimates in the text draw on Hanson (2010) as cited in Nord and Prell (2011). They note that the earlier review by Fox et al. (2004) had a higher upper bound: 25 to 50 cents. However, Nord and Prell (2011) call the lower range used in the text here "most relevant for current program conditions." Their preferred difference-in-differences results using ARRA appear to be slightly below the range implied by Hanson (2010) estimates. The slight underestimate would be consistent with estimation error (Nord and Prell's estimates have considerable estimation error and the extrapolation from the existing literature is not exact). Their results would also be consistent with other recent analyses (e.g., Wilde et al., 2009; Hoynes and Schnazenback, 2009; Meyerhoefer and Yang, 2011) that suggest estimates closer to 15 cents on the dollar.

[20] Specifically, they examine changes in food expenditure and food security from before to after the change, controlling for changes in food prices, and other changes in household conditions (income, employment, other household characteristics). In their preferred specification, they also compare to the changes in outcomes for the population just rich enough to be ineligible for SNAP (150% to 250% of FPL).

and evaluation before the end of the 2010-2011 school year when SEBTC benefits became available to households. Exhibit 1.3 lays out the flow of activities that had to be accomplished during 2011. First, FNS established eligibility rules and policy, and then participating SFAs had to identify eligible children, group them into households, and obtain consent to take part in in the demonstration and evaluation. Households that had one or more children certified for FRP meals and consented to be randomly assigned either to a benefit group that received the SEBTC benefit or to a non-benefit group that did not. In each demonstration site, grantees notified families if they were eligible to receive the benefit and began the process of loading benefits onto and distributing EBT cards. At the same time, the evaluation team selected a random subsample of households for the evaluation study, including a treatment group that would receive the benefit and a control group that would not. The evaluation team next surveyed the selected households before the end of the school year and again during the summer. These surveys gathered data for eligible households and children on household food security and food expenditures, children's food consumption and eating behaviors as measures of diet quality and nutritional status, as well as other outcome measures. Rigorous estimates of the impacts of the SEBTC will be made by comparing the values of these measures from the summer survey between treatment households and control households.

To supplement the impact analysis, the evaluation involves a detailed implementation study. Successful implementation of the demonstrations requires the involvement and cooperation of a number of State and local agencies and contractors in each demonstration site. The implementation study assessed the operational feasibility of the demonstration and identified the challenges encountered and lessons learned in the POC year. The evaluation team collected a variety of data from organizations involved in the demonstrations. These include information gathered during the team's technical assistance to grantees to implement the demonstration and the evaluation design, stakeholder interviews during two rounds of in-depth site visits to each grantee, telephone interviews toward the end of implementation, and administrative reports and documents. The evaluation also includes a detailed analysis of SEBTC transaction data. This analysis describes patterns of household receipt and use of the summer benefits. Through the benefit period, EBT processors transmitted administrative records to the evaluation team on benefit acceptance, usage, and other information on the full sample of households assigned to the benefit group.

Finally, a cost analysis provides information on the total and component costs of implementing and operating the demonstration. This analysis uses quarterly and annual administrative cost reports to identify expenditures of grant funds by the grantee and its partners for personnel and other resources used to implement and operate the demonstrations. Each grantee provided a quarterly report showing SEBTC amounts obligated and redeemed—for the reporting month and cumulatively for the year.

Exhibit 1.3   Flow of Activities in 2011 of FNS, Grantees, and Evaluation Team, Post Grant Award

USDA-FNS

Establish Eligibility Rules and Policy

State Grantee

Identify Eligible Children

Construct Household Lists

Obtain Consent

Evaluation Team

Evaluation Team

Random Assignment to Non-Benefit Group

Random Assignment to Benefit Group

Grantees

Notify Households

Evaluation Team

Select Evaluation Sample

Conduct Baseline Survey

Analyze and Report Baseline Data

Conduct Summer Survey

Analyze and Report Summer Survey Data

Provide Technical Assistance

Grantees

Notify Households[a]

Create EBT Cards/ Load SEBTC benefits

Distribute SEBTC Cards

Provide Training to Recipients and Vendors/Retailers

Provide Support Activities for EBT Cards

SEBTC = Summer Electronic Benefits Transfer (EBT) for Children

[a] Not all grantees notified the non-benefit group.

1.4. Purpose of and Data Sources for This Report

This report addresses the major research questions for the POC Year. These include the following:

1. What was the process of SEBTC program implementation? What is the feasibility of the SNAP and WIC models based on the POC demonstrations?
2. How were the SEBTC benefits used?
3. What are the characteristics of households that consented to take part in the SEBTC demonstrations? Did they vary by type of demonstration or whether the site used active or passive consent?
4. What is the impact of SEBTC on very low food security among children? Does this vary by demonstration model, SNAP participation, poverty status, number of children in the household, presence of an adolescent in the household, and race/ethnicity? How does the SEBTC impact the change in level of food security between the school year and summer?
5. What is the impact of SEBTC on the nutritional status of children? Does this vary by demonstration model, SNAP participation, poverty status, number of children in the household, presence of an adolescent in the household, and race/ethnicity?
6. How did participation in SEBTC affect household food expenditures?
7. How did participation in SEBTC affect nutrition program participation (WIC, SNAP, SFSP)?
8. How did participation in SEBTC affect where children ate meals during the summer?
9. What were the total and component costs of SEBTC?

The evaluation relies on several sources of data. To answer the first question, the evaluation team used three data sources, including (1) technical assistance visits and calls made principally to assist in the consent and random assignment process; (2) process study interviews with grantees and their key partners, including EBT processors; and (3) written documents, such as grant applications and materials used to obtain parental consent to be part of the demonstration.

To assess the monthly benefits issued and redeemed, the team used EBT data for households selected to receive the SEBTC benefit. EBT data for the all issuance cycles of the summer were used to assess activation and use of EBT benefits, redemption patterns, and exhaustion of benefits for the summer benefit period.

To answer research questions about the impact of SEBTC on food security, children's nutritional status, program participation, and other outcomes, the team analyzed household characteristics, food security, food expenditures, and nutritional status using data from both the spring (conducted before the school year ended), and summer surveys (conducted before the next school year started in the fall) of household respondents in the evaluation

sample. These surveys were conducted by telephone and took approximately 30 minutes to complete.

1.5   Report Contents

Exhibit 1.4 links the research objectives with research questions and the contents of this report. Beyond this introduction, findings in this report are presented in a series of six additional chapters. In Chapter 2, we provide an overview of the selected grantees and their partner agencies, describe the variations in the overall program models they chose to implement, and describe the implementation experiences and unanticipated challenges in the POC year. In Chapter 3 we describe households' use of EBT benefits. In Chapter 4 we describe characteristics of the study population, and in Chapter 5 we provide the results from the impact study. In Chapter 6 we assess the costs of SEBTC. Finally, in Chapter 7, we summarize and discuss key findings on implementation, grantees' costs in implementing the intervention, and benefit use in the POC year. The appendices provide supporting data tables and documentation.

Exhibit 1.4   Research Objectives and Questions for the SEBTC Demonstration

Evaluation Study Research Objectives	Research Questions Addressed in this Report	Chapter in this Report
1. To assess the feasibility of implementing three different models: a separately operating program using the WIC system, a separately operating program using the SNAP system, and a hybrid system in which SEBTC benefits are included in benefits for SNAP participants	What was the process of SEBTC program implementation? What is the feasibility of the SNAP and WIC models based on the POC demonstrations?	2
2. To examine the implementation of SEBTC, including approaches used, and the challenges and lessons learned during the demonstrations		
3. To describe receipt and use of the SEBTC benefits	How were the SEBTC benefits used?	3
4. To describe households that took part in the demonstration and examine the impact of SEBTC benefits on children and their families' food security, food expenditures, and children's nutritional status	What are the characteristics of households that consented to be part of the SEBTC demonstrations? Did they vary by type of demonstration or whether the site used active or passive consent?	4
	What is the impact of SEBTC on very low food security among children? Does this vary by demonstration model, SNAP participation, poverty status, number of children in the household, presence of an adolescent in the household, and race/ethnicity? How does the SEBTC impact the change in level of food security between the school year and summer?	5
	What is the impact of SEBTC on the nutritional status of children? Does this vary by demonstration model, SNAP participation, poverty status, number of children in the household, presence of an adolescent in the household, and race/ethnicity?	
	How did participation in SEBTC affect household food expenditures?	
	How did participation in SEBTC affect nutrition program participation (WIC, SNAP, SFSP)?	
	How did participation in SEBTC affect where children ate meals during the summer?	
5. To determine and document the total and component costs of implementing and operating the demonstrations to determine the overall costs and facilitate comparisons of different operational models	What were the total and component costs of SEBTC?	6

Chapter 2

Implementation of Summer EBT for Children

As with any new program, the first year of SEBTC implementation involved both successes and challenges. To provide support for FNS and the grantees moving forward, as well as to give context for the results of the net-impact and cost analyses presented in later chapters, the evaluation involved an in-depth implementation study. This chapter begins with an overview of the implementation study methodology and provides a summary of the grantees and the local context in which they implemented the demonstration. It then turns to the implementation study results, discussing the consent and random assignment process, training and support for households, SEBTC redemption rates and EBT system modifications, parent perceptions of the program, and other important contextual factors that influenced grantee experiences in the proof-of-concept (POC) year, designed to test the feasibility of the SEBTC models and the evaluation before a more wide scale implementation in Year 2 of the demonstration.

2.1   Research Questions and Key Findings

2.1.1   Research Questions

The implementation analysis addresses the first two research objectives: to assess the feasibility of implementing different models of SEBTC, including a separately operating program using the WIC system, a separately operating program using the SNAP system, and a hybrid system in which SEBTC benefits are included in benefits for SNAP participants; and to document the approaches used for SEBTC implementation, challenges, and lessons learned.

More specifically, after describing the data collection and methods used for the implementation study, this chapter addresses the research questions, "What was the process of SEBTC program implementation? What is the feasibility of the SNAP and WIC models based on the POC demonstrations." To do so, the chapter describes the following implementation activities:

- Nature of the POC grantees and demonstration areas;
- Timing and methods of informing families about the SEBTC demonstration;
- Obtaining consent to be part of the SEBTC demonstration and evaluation;
- Process for distributing cards to participating households;
- Participation rates;
- Training parents, retailers and others;
- EBT card distribution and replacements;
- Administrative controls to maintain program integrity;
- Process of de-activating of SEBTC cards and expungement of unused benefits;
- Perceptions of SEBTC among agency staff and households receiving SEBTC;
- Parental and community awareness of summer feeding options including the traditional SFSP; and

- Challenges encountered and resolved.

2.1.2   Key Findings

Key implementation findings are as follows:

- Despite the extremely fast-paced timeline, State budget and other issues, all five grantees were able to recruit and enroll households in spring and administer SEBTC benefits during the summer of 2011.
- One of the greatest challenges grantees faced during implementation was the identification of eligible children and the compilation of household lists, in part due to unavailable or inaccurate data from school systems. Despite these delays, all of the grantees were able to obtain consent from at least the minimum number of children and families needed to be part of the demonstration and evaluation. Household consent rates ranged from 88% to 98% in sites using passive consent and 24% to 37% in sites using active consent.
- All of the EBT vendors completed systems modifications needed to administer the SEBTC benefit. The greatest challenge for the EBT processors using the SNAP and SNAP-hybrid models involved benefit settlement through a separate line of credit.
- The five sites issued benefits to a total of 6,968 households with 12,463 children identified as eligible. Among the households that were issued benefits, 90% used their benefits at least once during the demonstration.
- After grantees delivered cards and activated benefits, the primary tasks that remained fell in late summer when grantees implemented procedures for expiration of benefits, expungement of funds, and card deactivation when the new school year began. Across the States, these processes generally ran smoothly.

2.2   Research Methods

This chapter focuses on the implementation experiences of the five POC grantees; whereas the following chapter provides detailed analysis of SEBTC benefit usage. To describe the implementation experiences of the five POC grantees, the evaluation team used three data sources, including (1) technical assistance visits and calls conducted to help with the start-up of demonstration activities; (2) spring, summer, and fall process study interviews with grantees and their key partners, including EBT processors; and (3) written documents, such as grant applications and materials used to obtain parental consent to be part of the demonstration.

First, the team gathered information from technical assistance efforts conducted from the start of the demonstration in December 2010 through the end of benefit administration in September 2011. Each grantee was assigned a team of Abt and Mathematica staff to help grantees understand and successfully implement the requirements of the evaluation. Evaluation site liaisons participated in routine teleconferences with grantees and their partners, exchanged emails as necessary, and conducted one round of technical assistance site visits per site in late January and early February 2011. These visits ranged from one to two days in length. Based on information gathered during all of these efforts, the evaluation site teams developed detailed documentation of their

understanding of site operations and the successes and challenges through the POC year for use in the analysis phase.

Second, for purposes of the process study data collection, the team conducted two rounds of in-depth site visits to each of the demonstration sites in spring 2011 and summer 2011, as well as a round of telephone interviews during the fall 2011. During both rounds of visits and the fall telephone calls, the team conducted interviews with staff members of the grantee and all its major partners. Spring interviews also included discussions with all or a subset of participating school food authorities (SFAs). The number of participating SFAs varied in each of the POC sites, including 1 SFA each in Michigan and Texas, 3 SFAs in Missouri, 9 SFAs in Oregon and 17 in Connecticut. The evaluation team conducted interviews with all participating SFAs in Texas, Michigan and Missouri as well as 5 in Connecticut and 5 in Oregon. To learn about the availability of other summer feeding programs and their interaction with the SEBTC and SFSP programs, summer interviews were also conducted with representatives from a total of 17 SFSP sponsors across all demonstration sites and one SFSP site manager from each sponsor across the five grantees. The team also interviewed 4 participating retailer organizations across two sites during the summer to learn about their experiences with SEBTC transactions. Finally, the evaluation team conducted interviews with each of the contractors operating the EBT systems in spring, summer, and fall 2011. Site teams created internal documents after each round of data collection that followed the protocol used for conducting interviews. These served as the primary source of data for the implementation study.

Third, to supplement our other data sources, the evaluation team reviewed a range of other written documents, including grant applications and related materials, outreach and marketing materials, consent and notification documents that were developed for the SEBTC demonstration, and materials used to train households on EBT procedures.

The evaluation team approached implementation study data collection and analysis as an iterative process. Throughout the technical assistance effort, and after each stage of process study data collection, site liaisons used standardized templates to create detailed summary documents. These documents drew from various sources, describing common themes and multiple perspectives about and experiences within the program. The summary documents were then used for cross-site analysis.

2.3   Description of the SEBTC Proof-of-Concept Sites

To provide context for the implementation of SEBTC in the POC year, this section describes variations in the organizational structures of the five State agencies that received SEBTC grants in the POC year. We provide an overview of the grantees and their partner agencies and describe the local areas where demonstration activities were implemented. Exhibit 2.1 is a snapshot of the major grantee characteristics discussed in the chapter.

Exhibit 2.1   The Grantees, Their Partners and Participating Local Areas

Grantee	Major State and Local Partners	Area Served	Number of SFAs	Urban/ Rural	Percent of Children Eligible/ Certified for FRP Meals[a]	Approximate Number of Eligible Children[b]	Program Model[c]
Connecticut Department of Social Services	CT State Department of Education End Hunger! Connecticut	Windham and New London Counties	17[d]	Mostly Rural	10 to 73	11,000	SNAP
Michigan Department of Education	MI Department of Community Health	Grand Rapids	1	Urban	80	16,000	WIC online
Missouri Department of Social Services	MO Department of Health and Senior Services MO Department of Elementary and Secondary Education Local Investment Commission	Kansas City	3	Mostly Urban	78	20,000	SNAP-hybrid
Oregon Department of Human Services	Partners for a Hunger-Free Oregon Oregon Hunger Task Force Oregon Food Bank Oregon State University Extension Service Oregon Department of Education	Linn and Jefferson Counties	10	Mostly Rural	51	13,000	SNAP-hybrid
Texas Department of Agriculture Texas Department of State Health Services	West Texas Food Bank of El Paso Ysleta Independent School District	El Paso County	1	Mostly Urban	83	38,000	WIC offline

Source: Grant proposal documents and technical assistance efforts with grantees, 2011.

[a] Approximations based on information on children eligible or certified for FRP meals provided in grant proposals.

[b] Calculation based on information in grant proposals and provided by grantees during technical assistance efforts.

[c] Missouri and Oregon used a SNAP-hybrid model, which means that SEBTC benefits are loaded onto existing EBT cards for those households already receiving SNAP. Under the SNAP-hybrid model only households who are not on SNAP are issued a new card. In Connecticut, a separate SEBTC card is issued to all households issued benefits using existing SNAP EBT systems. In the WIC sites, Michigan uses a conventional online system that uses a central host computer to store food prescription balances and authorize purchases, so transactions are processed via an online connection to the host. Texas uses an offline system with "smart cards" that have an embedded chip that includes the information about the specific foods available to the card holder and does not have real-time communication with the EBT host system during the transaction.

[d] The Connecticut grantee initially proposed to enroll 23 contiguous SFAs. During the course of early implementation, six decided not to participate, leaving a final count of 17 SFAs.

2.3.1   Grantee Organizational Structures

When awarding the POC grants, FNS gave the States flexibility to choose the agency or agencies to lead the effort and serve as official grantee, as well as latitude to define the organizational roles of other State and local partners, and to decide which contiguous SFAs to include. Exhibit 2.1 is a summary of each of the POC grantee agencies and its partners and the characteristics of participating localities. (Appendix 2A includes a map of the local demonstration area in each State.)

Planning and implementing SEBTC in the POC year was a large undertaking, requiring the involvement of several State offices. Three of the five States—Connecticut, Missouri, and Oregon—chose the agency that administers the SNAP or WIC program as the lead grantee. One—Texas—decided on co-leads with the WIC agency working in collaboration with the agency that administers the NSLP and SFSP. The last grantee—Michigan—selected the State education agency that administers NSLP and SFSP to serve as the lead.

Additional agencies and local community organizations were also involved in each of the five States (see Major State and Local Partners in Exhibit 2.1). Three States, in addition to Michigan, included the State education agency as a partner on the grant, and its involvement varied from working intensely with SFAs and local partners on the consent process to simply advising the lead agency in program design and administration. In Michigan and Texas, the WIC agencies also played a large role in implementing the demonstration since they administer the benefit through the WIC EBT system. In Missouri, the grant manager is from a partner agency and reports directly to the governor's office, instead of being a staff member from the lead grantee agency. Four of the grantees also chose to partner with local community organizations to help with outreach, participant training, and encouraging household to take part in the demonstration.

For the 2011 POC year, FNS required in its Request for Applications (RFA) that grantees select one or more SFAs to participate in the demonstration (see Number of SFAs in Exhibit 2.1). Each demonstration area had to include at least 10,000 eligible children and, if more than one SFA was selected, the SFAs had to be geographically contiguous. All five grantees met or exceeded this FNS requirement, with the number of eligible children in the target areas ranged from about 11,000 in Connecticut to about 38,000 in Texas.[21]

2.3.2   Variations in the SEBTC Model Across Grantees

FNS issued two separate RFAs to engage States to implement summer benefits through either the SNAP or WIC EBT systems in the POC year (FNS, 2010a, 2010b). For grantees who

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[21] As grantees were deciding which areas to include, they had to consider FNS guidance that Provision 2 and Provision 3 schools were excluded from the POC year. In these schools, all students receive free lunch without applying for them or being directly certified in the current school year. FNS chose to exclude these schools because student-level data on FRP eligibility are not available. FNS may consider adding special provision schools in future years. For more information on Provisions 2 and 3, visit the FNS website at http://www.fns.usda.gov/cnd/governance/prov-1-2-3/Prov1_2_3_FactSheet.htm.

proposed to use their SNAP systems, a second decision was whether to administer SEBTC by loading benefits on existing EBT cards for those who were already receiving SNAP (the "SNAP hybrid" model); or to issue separate SEBTC cards for all households selected to receive SEBTC (the "SNAP" model) whether or not they also had a SNAP EBT card.

As shown in Exhibit 2.1, Connecticut, Missouri, and Oregon were awarded grants to offer benefits using SNAP EBT systems. Of these, Missouri and Oregon chose the "SNAP-hybrid" approach and Connecticut the "SNAP approach". In Connecticut, all households, regardless of whether they also received SNAP benefits, were issued a separate SEBTC card. Missouri and Oregon use a common EBT processor for the SNAP program.

The other two States—Michigan and Texas—used WIC EBT systems to administer the SEBTC benefit. The RFA allowed for States using the WIC model to provide EBT benefits using existing WIC EBT cards, if the household was already participating in WIC (FNS 2010b). In the POC year, neither State chose to issue SEBTC benefits on a WIC-hybrid card; instead, SEBTC benefits were issued on a new EBT card. In Michigan and Texas, each household selected to receive SEBTC received one food package per eligible school-age child per summer month.

Regardless of the model chosen by each grantee, the duration of SEBTC benefits was directly tied to the school calendars in each demonstration area. The goal of SEBTC is to provide nutritional assistance when children do not have access to NSLP and SBP; therefore, the time period for the benefit lies between the end of the 2010-2011 school year and beginning of the subsequent school year. For grantee areas with multiple SFAs, FNS indicated that grantees could issue benefits as early as the date that the first participating SFA let out for summer and stop benefits on the day when the summer break ended for the last participating SFA (FNS, 2010a, 2010b). Across the five POC sites, the duration of benefits for the POC year averaged 85 days with a total average benefit amount of $170 per child (Exhibit 2.2).

Exhibit 2.2   Duration of the Summer Benefit

State	Last Day of School 2010-2011 (range across schools)	First Day of School 2011-2012 (range across schools)	First Day of Benefits	Last Day of Benefits	Number of Summer Benefit Days	Total Amount of Summer Benefit per Eligible Child
Connecticut	6/9/2011-6/24/2011[a]	9/6/2011	6/17/2011	9/5/2011	81	$158
Michigan	6/10/2011	9/10/2011	6/11/2011	9/9/2011	91	$180
Missouri	5/31/2011-6/15/2011	8/16/2011-8/17/2011	6/1/2011	8/17/2011	78	$154
Oregon	6/6/2011	9/6/2011	6/7/2011[b]	9/5/2011	91	$178
Texas	6/10/2011	8/22/2011	6/1/2011[c]	8/21/2011	82	$180

Source: Dates gathered during technical assistance efforts with the grantees, 2011. Amount of summer benefit calculated based on those dates.

[a] Three of the school districts in Connecticut were scheduled to close prior to June 17, representing 3% of the student enrollment of the participating school districts. Although school end dates were subsequently delayed in some schools until June 24th, FNS allowed the State to keep the June 17th as the benefit start date because the majority of eligible children were out of school by that date.

[b] Oregon benefits were loaded onto EBT cards and available to households on June 1st; however, benefits were prorated based on the June 7th start of the summer.

[c] Benefits were available to households on June 1st in Texas.

2.3.3   Overview of the Demonstration Sites and Local Context

The nature of the demonstration areas participating in SEBTC can influence both the implementation of the demonstration and its impact on the participating households with school-age children. In the POC year, characteristics of demonstration areas varied greatly. To provide context, this section describes variation in local characteristics in terms of geographic area, availability of food retailers, and availability of nutrition education programs.

Geographic Area

The five POC sites included urban areas (Michigan, Texas, and Missouri), and relatively large, predominantly rural areas (Connecticut and Oregon). The Oregon demonstration area includes an Indian Tribal Organization (ITO). The size of the local population in the demonstration areas varied from just over 136,000 residents in the two counties served in Oregon to 750,000 in El Paso.[22]

Characteristics of SFSP in Demonstration Area

Within the POC demonstration areas, SFSP sponsor agencies were typically schools or community-based organizations, camps, churches, and army bases. Most sponsors administered several sites within the local communities. The local site venues included parks, libraries, housing complexes, and community centers and some sites delivered meals using mobile food trucks. Most SFSP local sites in the demonstration areas qualify as "open"

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[22] In Texas, the participating SFA—Ysleta Independent School District—is one of nine in El Paso County.

sites and can serve any child who seeks services because they can demonstrate that at least 50% of children living in the local area are eligible for FRP school meals. SFSP sites in the demonstration areas operated anywhere from one week to all summer in 2011. Aside from sites in the demonstration areas serving one-week long summer camp children, the minimum period of time that SFSP sites operated was at least a quarter of the summer for the Michigan site, a third of the summer for Connecticut and Oregon sites, and half of the summer for Missouri and Texas sites.[23] All States except for Texas had some SFSP sites open all summer in the demonstration area; In the Texas demonstration area, sites were open for a maximum of 8 out of 10 summer weeks.

SFSP sponsors in Connecticut, Michigan, and Oregon reported during site visit interviews that they experienced State-wide increases in SFSP participation in 2011 due to aggressive marketing, new sites opening, and families in greater need. All of the SFSP sites in demonstration areas had the same or higher 2010 participation rates (as reported in their grant applications) as in their States overall.[24] Stakeholders in all five demonstration areas agreed that gaps remain in the availability and accessibility of summer food service programs for children. Stakeholders from all demonstration areas listed barriers to access consistent with a national evaluation of SFSP and other research findings (Gordon and Briefel, 2003; FNS, 2011). For instance, process study respondents from local SFSP sponsors and SFSP site managers in demonstration areas reported that some working parents discouraged children who could not be accompanied by other adults from leaving their homes to get to SFSP sites. At the institutional level, stakeholders reported that local agencies were hesitant about applying to be sponsors because they lack information about the best locations to attract adequate participation. Rural locations, such as those in Oregon and Connecticut, have fewer and more dispersed SFSP sites and may not be accessible to families by public transportation. Michigan also reported that unsafe urban neighborhoods may deter parents from allowing their children to travel to SFSP sites alone. Finally, many schools that traditionally provide venues for NSLP or SFSP services lack the funding to administer summer school and other programs.

Characteristics of Participating SFAs

To provide contextual information about how the participating SFAs compared to others in the country, using the Common Core of Data (National Center for Education Statistics (NCES), 2012), we compared the SFAs participating in SEBTC with national estimates (Exhibit 2.3). Taken together, the SFAs were located in areas with relatively higher rates of households living below the poverty line, greater ethnic and racial diversity and higher proportions of children receiving FRP meals, with rates being between 29% and 43% higher

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[23] The length of the summer ranged from 9-11 weeks in Missouri, 10 weeks in Texas, 10-13 weeks in Connecticut, and 13 weeks in both Michigan and Oregon.

[24] SFSP participation rates in the demonstration areas varied from 7% to 30%, while state-level participation rates varied from 7% to 16% (Food Research and Action Center, 2011). Although reported rates of participation in SFSP in the summer survey were low--on average, 4.6% over the five sites (see Chapter 4)—these may reflect parent under-reporting, or the fact that administrative SFSP data cover July only, while many interviews took place in August, when SFSP programs are less available.

in the demonstration areas than nationally. For instance, while 11.4% of households nationally had incomes below federal poverty guidelines, the household poverty rate in demonstration areas was 15.6%. Differences in percent of school-aged children from minority populations (46.7% compared to 66.5%) and receiving FRP (46.7% compared to 60.3%) were of similar magnitude. Rates for the two sites located in rural areas (Connecticut and Oregon), selected in part because of limited availability of SFSP, were closer to, or somewhat below, the national average.

Exhibit 2.3   Characteristics of Demonstration Areas Compared to the National Average

Percent Households with Incomes Below Federel Poverty Line[a]

Area	Percent
National Average	11.4%
All Sites	15.6%
Connecticut	8.1%
Michigan	15.0%
Missouri	16.9%
Oregon	11.1%
Texas	22.0%

Percent Children Eligible for FRP Meals[c]

Area	Percent
National Average	46.7%
All Sites	60.3%
Connecticut	39.1%
Michigan	86.0%
Missouri	72.5%
Oregon	51.4%
Texas	59.6%

Percent School-Age Children Who Are Minority[b]

Area	Percent
National Average	46.5%
All Sites	66.5%
Connecticut	24.0%
Michigan	80.6%
Missouri	89.0%
Oregon	24.5%
Texas	94.8%

Source: National Center for Educational Statistics, Common Core of Data (NCES, 2012)

[a] Percentage of population with annual household income not exceeding the Federal Poverty Level, as measured in the Census 2000.

[b] Percentage of enrolled children (pre-K to Grade 12) who are black, Asian/Pacific Islander, American/Indian/Alaskan Native, Hispanic or two or more races.

[c] Percentage of enrolled children eligible for FRP meals.

Availability of Food Retailers in Demonstration Areas

The impact of SEBTC benefits on children's food security and nutritional status is, in part, dictated by the degree to which the SEBTC benefit can be used to purchase foods from local retailers. In fact, data provided by FNS on retailers approved for the SNAP and WIC programs in the five POC areas indicate a greater availability of food retailers in relation to the population for SEBTC in Connecticut and Missouri, compared to the other three demonstration areas. Exhibit 2.4 shows that the total number of approved retailers varied from 137 in Oregon to 257 in Missouri. However, when considering the number of eligible households in the local area in relation to those retailers, Connecticut and Missouri have a lower ratio, indicating greater availability of food retailers than other sites. When looking solely at large supermarkets, households in Connecticut, Missouri, and Oregon have lower ratios of eligible households to available retailers, suggesting greater access.[25]

Despite these quantitative findings, qualitative data from State and local partner interviews indicated that the local context is important when considering how easily families can access approved food retailers. Respondents in Connecticut, Missouri, and Oregon reported several factors as limiting access, including the rural nature of participating communities in two of these States, lack of public transportation, and the existence of food deserts in highly populated areas. Respondents in Michigan and Texas reported fewer barriers, but there were some, including language barriers among customers, and retailers not offering food delivery services. Although demonstration areas in each State had farmers markets, those in Michigan and Texas do not accept WIC EBT cards, and only some markets in Connecticut, Missouri, and Oregon accept SNAP EBT cards.

Exhibit 2.4   Availability of Food Retailers in Demonstration Areas

	Approximate Number of Eligible Households	Total Number of Stores [a]	Ratio of Households to Stores	Number of Supermarkets [b]	Ratio of Households to Supermarkets
Grantees Implementing WIC Approach					
Michigan	11,000	165	67	15	733
Texas	20,000	186	108	17	1,176
Grantees Implementing SNAP or SNAP-hybrid Approaches					
Connecticut	8,000	167	48	30	267
Missouri	11,000	257	43	32	344
Oregon	9,000	137	66	18	500

Source: FNS database of authorized SNAP retailers in the five POC States provided as of April 2011.

[a] Total number of stores includes all SNAP authorized retailers located within the school districts that constitute the demonstration sites, as of April 2011.

[b] Number of supermarkets includes stores classified as supermarkets or superstores.

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[25] The analysis looked specifically at large supermarkets since they generally carry a larger selection of healthful food at lower prices than smaller grocery stores and convenience/corner stores (Treuhaft and Karpyn, 2010).

Nutrition education is not a component of the SEBTC nor the evaluation, but it is useful to consider the general level of opportunities for nutrition education in the local community since it might influence SEBTC benefit take-up and how the benefits are used. Generally, grantees and their partners reported limited availability of nutrition education during the summer months. Some reported opportunities include the Expanded Food and Nutrition Education Program and counseling or website content associated with the WIC and SNAP programs. States also reported some nutrition education opportunities through such community venues as churches, health settings, YMCAs, and garden clubs that are funded by health advocacy organizations, health insurance providers, and grants from the Centers for Disease Control and Prevention. Less common were nutrition education components linked to SFSP and Kids Café.[26]

2.4 Consent, Random Assignment, and Providing SEBTC Benefits to Households

Before administering SEBTC benefits, grantees had to identify those children eligible to receive the benefit, conduct outreach to their parents and guardians, and obtain their consent to be part of in the demonstration and evaluation. Those households that consented were randomly assigned to either receive or not receive the benefit. Grantees and their partners were then charged with issuing and distributing SEBTC benefits on new or existing EBT cards, and, in some cases, providing support to households on their use of the benefit. This section describes those processes along with training provided to local retailers who accepted the benefit in their stores.

2.4.1 Identifying Eligible Children and Households

As a first step toward implementation, grantees had to identify children in the demonstration area who were certified for FRP meals, and therefore eligible for the summer benefit. Because the program is administered to households, child-level data had to be grouped into households. These household-level data were needed for three purposes: (1) the initial mailing to obtain household consent to be part of the demonstration, (2) random assignment for receipt of the benefit, and (3) sampling and surveying households for the evaluation. The time needed for, and complexity of, this process were highly influenced by the types and quality of data available from the participating school districts, as well as the level of sophistication of grantees' management information systems.

The success of the SEBTC demonstration and its evaluation relied on the ability of grantees and their partners to develop accurate lists of eligible households and ensure that contact information was up-to-date. Even if the demonstration were not being rigorously evaluated, this step is vital. If grantees are successful in these tasks, the full eligible population has a

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[26] Kids Café programs provide free meals and snacks and nutrition education to low-income children at locations where they already congregate in the after school hours (Feeding America, 2011).

chance to take part in the demonstration, and, if selected, benefits in the correct amounts can be issued. For the evaluation, correct listings of households and contact information are essential for random assignment and also to enable high response rates for the survey, which is the principal source of outcome data.

All five grantees were able to identify eligible children and compile household lists with the assistance of the evaluation team; however, this was one of the most problematic processes during early implementation. All of the grantees and SFAs anticipated the need to prepare lists of eligible children. However, most encountered unexpected difficulties relating to the data available in school systems. Most SFAs have multiple student databases containing relevant demographic and contact information on eligible children and their households; NSLP and student records data often are housed separately and are collected or updated at different times, with one source often being more accurate than the other. Due to privacy concerns, the student record data, thought to be the most accurate, were not made available to grantees prior to the consent process. The SFAs also demonstrated different levels of sophistication in their ability to manipulate their data and therefore were not always able to provide the grantee and evaluator with the most up to date information. Some of the grantees also included duplicate records of the same households and children on the lists, sometimes with slightly different contact information, so that it was not always clear if there was one household or two unique households.

In addition to issues related to providing and obtaining the most up-to-date information, grantees faced two additional challenges when forming lists of consenting households. The first was deciding when multiple families should be regarded as one household. The goal was to avoid inadvertently recording one family as two separate households and therefore only part of the family would potentially receive the benefit. The second challenge involved addressing the differences in data from NSLP applications which group children by family versus data from direct certification which do not cluster children by family. Both of these challenges are discussed in detail in the study's first two reports (Briefel et al., 2011; Bellotti et al., 2011).

Also contributing to the challenge of the task was the need to resolve details of eligibility for SEBTC benefits. The Request for Application (RFA) for the POC year specified that all children in kindergarten through 12th grades certified for FRP meals were eligible for the SEBTC benefit (FNS 2010a, 2010b). However, as participating SFAs began developing lists, questions arose about the eligibility of specific student populations, including graduating 12th graders and children enrolled in pre-kindergarten, and other groups of children who are eligible for FRP meals, including children enrolled in foster care, homeless youth, and emancipated youth. The grantees also required guidance on how to handle situations when families claimed to have more children than were listed on consent materials, and whether and how to issue benefits for families who moved out of the demonstration area. FNS provided feedback to grantees on eligibility as these cases emerged.

2.4.2 Obtaining Household Consent

As described earlier, households with children eligible to receive the SEBTC benefit had to consent to take part in the demonstration and evaluation before their names could be submitted for random assignment. All of the grantees successfully completed the consent process and obtained at least the minimum number of households needed so that (1) the benefit could be issued to 2,500 children, and (2) approximately 1,000 households (from both the benefit and non-benefit group) would take part in the evaluation.[27] Exhibit 2.5 provides the number of eligible and consenting children and households per site.

Exhibit 2.5   Consent Rates by Grantee

Grantee	Approximate Number of Eligible Households in Demo Area	Approximate Number of Eligible Children in Demo Area	Percentage of Households that Consented	Percentage of Children in Households that Consented
Passive Consent Grantees				
Missouri	10,864	19,745	89	89
Texas	20,236	38,291	98	99
Active Consent Grantees				
Connecticut	8,011	11,117	30	38
Michigan	10,603	16,417	37	47
Oregon	8,923	12,758	24	35

Source: Data obtained through technical assistance efforts and files submitted by grantees for random assignment, Spring 2011.

Three grantees—Connecticut, Michigan, and Oregon—chose to use an "active" consent process: households had to return a signed form if they wanted to "opt in" or have the opportunity to receive the benefit. Households that did not return the form were excluded from the study. Two grantees—Missouri and Texas—chose a "passive" consent process: households had to return a signed form if they wished to "opt out" or take part in the demonstration and evaluation.[28] Those that did not return the form were automatically included in the study.

The issues encountered during the consent process differed between States that used active consent and those that used passive consent. Grantees that used passive consent (Missouri and Texas) were more likely to achieve high numbers of "consenting" households, given that few families (1-2%) chose to opt out of the demonstration. However, it is not clear whether the households that did not opt out had actually chosen to take part, or had ignored or never received the consent mailing. In Missouri, letters to more than 10% of families were

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[27] In order for 1,000 completed interviews, the evaluation team asked for an initial sample of 2,000 households. More information on the data collection approach is found in Appendix 1.C.

[28] As discussed later in this chapter, in Texas, in order to get the benefit card, household heads had to be in contact with the grantee and receive training. However, whether or not they actively took this step, they already had consented to have a chance to receive the benefit and have their contact information released to the evaluator, and could not be eliminated from the evaluation sample without biasing the random assignment design.

returned because of bad addresses and those families were removed from the study sample because they did not have a chance to opt out and would not receive a benefit card sent by mail. In Texas, the postal service did not return any mail with incorrect addresses for the consent mailing, which is not uncommon when there are large mailings, although, as noted below, it did return 15% of the mail sent by the grantee notifying families that they received the benefit, indicating that some portion of households included in the study never received the opportunity to opt out.

By contrast, the active consent process ensured that families received a consent letter and actively desired a chance to receive the SEBTC benefit. However, many households that would have desired the benefit in active consent sites may not have opened the consent materials, understood the information, or taken the time to return forms even though they would have used the benefit if issued to them. As a result, consent rates for active consent sites were lower than some grantees anticipated (from 24 to 37% of eligible households). Many grantees and SFAs were inexperienced with the process of obtaining consent from families to take part in a demonstration, and furthermore, it appeared that grantees, partners, and SFAs put varying levels of effort into the consent process. A more intense level of outreach applied consistently may have yielded higher rates in the active consent sites. The consent rates could potentially be higher in these sites in the Full Demonstration year, as more households may be aware of SEBTC than in the POC year.

2.4.3 Notifying Households of the SEBTC Benefit

Once grantees developed the list of consenting households and random assignment was conducted, grantees had to notify households that would be receiving the benefit and provide information on next steps. All five grantees notified families assigned to the demonstration group by the middle of May 2011. Two of the grantees had to contact households in the demonstration group a second time prior to issuing the benefit, to obtain additional information (parents' dates of birth, for example, parent social security number, or other information), which made it difficult to issue cards before the end of the school year. All grantees had at least some letters returned as undeliverable. The proportion of returned notification letters reached as high as 15% (in Texas), although some of these families were subsequently located.

2.4.4 Issuing Benefits

Once households were notified and additional information was obtained, if necessary, grantees enrolled households and their children into the demonstration so benefits could be administered. At the end of the school year, all of the sites had completed the required steps for all or most of the households assigned to receive the benefit. Getting to that stage, however, was not without challenges.

For the grantees using the SNAP systems to issue SEBTC benefits, children who were randomly assigned to the benefit group and their parents or guardians had to be matched manually to State eligibility systems before benefits could be issued. This matching was not always straightforward because some data elements needed for matching (such as parents'

dates of birth) are not part of school records and had to be obtained from parents or found otherwise. The manual processes used to match children to parents or guardians created the potential for human error, and, indeed, resulted in some inconsistencies when information was matched or updated, and issues with duplicate or dropped cases.

Once households were matched to the State database, States using SNAP systems to issue SEBTC benefits either manually entered all SEBTC cases into their State eligibility system before a file was transferred to the EBT processor for benefit administration or manually entered SEBTC benefit amounts into the EBT administrative terminal to administer the benefit. Again, this manual process required significant staff time and was subject to data entry errors. States with WIC systems used other approaches: Texas developed a program that loaded the file of selected households into the SEBTC database for issuing cards and benefits; Michigan developed a system mirroring the WIC eligibility system so SEBTC cases could be identified, set up, and issued benefits.

In Connecticut, one of the two States that needed additional information after notification, the grantee was still missing required information at the end of June (approximately two weeks after the school year ended) from 196 of the households (14%) assigned to the demonstration and was unable to issue cards to them at that time. The State continued attempts through the end of July to contact households that had not returned the required information. While three households responded that they no longer wanted the benefit or had moved out of the demonstration area, the grantee and its partners were able to obtain required information from 90 additional households, leaving 7% that could not be located.

Texas required households to attend in-person training to receive their card. Through the first week of benefits, 858 households (56%) had attended training and received a card. Through continued efforts by the grantee and its partners, the State was eventually able to distribute cards to all but 234 (15%) at trainings. In total, the State partner conducted 27 one-hour sessions in either English or Spanish, each attended by 20 to 100 participants. They also followed up with individual trainings on request, in the local office or the participant's home. The training went well overall, but the grantee and its partners suggested that in the second year of the demonstration, families already on WIC could participate in a separate, shorter training focusing only on SEBTC program aspects. In addition to cards not distributed at trainings, 26 households declined the benefit and 122 households moved out of the demonstration area, for a total of 382 of households (25%) not receiving the benefit (households that declined the benefit or moved out of the demonstration area are not counted in computing the proportion of households that were not trained).

Michigan also hosted one 30-minute training session for households who were selected for the benefit but attendance was not required to receive an SEBTC card. The grantee cited low attendance and also reported that parts of the presentation that relied on videos, created for a special SEBTC website, did not occur because families did not have easy access to the internet at home. Families were instructed to use the website to watch the videos at a later time, if possible (e.g., at home, at a local library or at a friend's home).

2.4.5　　Benefit Participation (Take-Up) Rates and Use

EBT system data were used to determine benefit participation rates, also known as take-up rates (described in Chapter 3). Over the period of the POC demonstration, the five grantees issued benefits to a total of 6,968 households with 12,463 children identified as eligible, as shown in Exhibit 2.6. Numbers of households and children with benefits issued varied slightly among the sites. In each of the sites, approximately 2,500 children were randomly assigned to receive benefits. The number of households containing these children ranged from 1,245 in Oregon to 1,527 in Texas, due mainly to differences in household size. Overall, there were 1.79 children per household issued benefits, ranging from 1.62 in Texas to 2.02 in Oregon. The exact numbers of households and children also varied due to two factors encountered after random assignment. First, some households could not be located or declined the benefit, so benefits were not issued to them (as discussed earlier). This explains why Connecticut and Texas issued benefits to fewer than 2,500 children. Second, when households were notified, some identified additional eligible children in their households, while others indicated that eligible children to whom benefits were to be issued were part of a different household.

Exhibit 2.6　　Benefit Participation by State for All Months

State	# Households Issued	# Children Issued	# Households Participating	% Households Participating	# Children In Households Participating	% Children in Households Participating	# Children per Household
Connecticut	1,357	2,416	1,305	96.2%	2,337	96.7%	1.78
Michigan	1,360	2,505	1,248	91.8%	2,333	93.1%	1.84
Missouri	1,479	2,546	1,349	91.2%	2,342	92.0%	1.72
Oregon	1,245	2,516	1,232	99.0%	2,497	99.2%	2.02
Texas	1,527	2,480	1,135	74.3%	1,903	76.7%	1.62
All States	6,968	12,463	6,269	90.0%	11,412	91.6%	1.79

Source: EBT transaction data for SEBTC, summer 2011

Note: Counts are unduplicated and include all households or children with activity during any month.

Among the households that were issued benefits, 90.0% used their benefits (i.e., redeemed them) at least once during the demonstration. This is considered the benefit "participation" or "take-up rate." The participation rate was confirmed by the summer survey findings. Among survey respondents in the benefit group (i.e., the treatment group), 92% of households reported receiving the SEBTC benefit and 96% of those households reported using it at least once, suggesting a participation rate of 88% among the survey sample. A small proportion, about 7%, reported some stigma or embarrassment but still chose to use the benefit. (See Appendix 2B for information on these survey responses.)

The household participation rate as calculated by EBT system data was over 90% in all sites except Texas, where it was 74.3% principally due to issues locating parents and the requirement that they attend in-person training to receive their SEBTC card. In the other States, households that could not be reached or declined to respond to requests for information usually were not issued benefits and thus were not counted in computing the

participation rate. However, even when such households are counted, the gap between assigned and participating households was the largest in Texas.

There were smaller differences in participation among the other sites, where the rate varied from 91.2% in Missouri and 91.8% in Michigan to 96.2% in Connecticut and 99.0% in Oregon. In general, participation was lower in sites with passive consent (Missouri and Texas) and in sites with the WIC model (Michigan and Texas). The two sites with the highest participation rates, Connecticut and Oregon, were SNAP model States with active consent. Among the SNAP model sites, the proportion of households already receiving SNAP was also a factor. As discussed in more detail later in Chapter 3, SNAP households in Connecticut, Missouri and Oregon participated and redeemed benefits at higher rates than non-SNAP households.

An important policy question relates to the percentage of households that would use SEBTC if it were available to all eligible households, should participation not be limited by demonstration or funding constraints. In order to calculate this rate, which could be considered a "coverage" rate, we multiplied the proportion of the eligible population that consented to take part in the demonstration by the proportion of families who "took up" SEBTC, using the participation rate as the definition of "take-up." The coverage rate ranged among the sites from 23.8% in Oregon to 81.9% in Missouri. The two passive consent sites, with a naturally higher consent rate, had by far the highest coverage rate (Exhibit 2.7). Note that while the participation rate was lower in Texas than in the other sites, the coverage rate was higher. If SEBTC were offered as a formal program, the passive consent process could be considered to be somewhat parallel to automatically enrolling families, and the active consent process to applying to receive SEBTC. While the three active consent sites imply substantially lower potential coverage, the fact that SEBTC was offered for the first time must be taken into account when looking at the consent rate. If SEBTC were a formal program, it may be possible that higher percentages of eligible households would apply to receive the benefit.

Exhibit 2.7   Potential SEBTC Coverage

State	Household Consent Rate	SEBTC Redemption Rate	Potential SEBTC Coverage Rate
Connecticut	29.7%	96.7%	29.0%
Michigan	37.4%	93.1%	34.4%
Missouri	89.2%	92.0%	81.9%
Oregon	24.0%	99.2%	23.8%
Texas	98.4%	76.7%	75.9%

Sources: Information from Grantees and EBT transaction data for SEBTC, summer 2011

2.4.6   Providing Participant Supports After Benefit Administration

Once households were issued cards, grantees and their partners provided support to families and continued dealing with a range of issues and special cases as households attempted to activate their cards and use their benefits. All five States used the existing SNAP or WIC customer support telephone numbers to address EBT card issues (discussed later in this chapter under the EBT System Modifications section), and four also instituted

new SEBTC telephone numbers to answer questions from families in the benefit group. Michigan provided additional supports to families, including a SEBTC website and a third phone number for questions about eligibility, but found that there were not many users of the website and the three phone numbers were confusing. Texas provided in-person customer support through the local partner that provided training.

Survey responses suggest that few households required support or experienced problems accessing benefits. More than 96% of treatment households responding to the survey gave excellent, very good, or good ratings on the ease of obtaining the SEBTC card, the directions for using the card, and the ease of using the card to get food. Also 93% reported ease of resolving problems with their cards (See Appendix 2B.)

Three States (Oregon, Michigan, and Missouri) tracked the questions posed by households on their hotlines: Oregon received about 50 calls and Michigan and Missouri received between 800 and 1,100. High call volumes were attributed to numerous hang-ups and non-demonstration families wanting to know how to sign up for SEBTC. Many calls were also from consenting households inquiring about whether they were selected for the benefit, and, as previously noted, from non-benefit group households confused about the spring survey. In addition, a smaller number of households assigned to the benefit group asked why they had not yet received EBT cards, reported problems with EBT card activation, or asked which foods could be purchased with SEBTC cards.

All five States reported at least some challenges related to PINs, whether they were automatically generated and sent to households (Missouri and Texas) or guardians could choose their own PINs (Connecticut, Michigan, and Oregon). Reported problems included parents' difficulty remembering PIN numbers or understanding the verification of identity, or how to enter the PIN number. Households unable to PIN their cards or change their PIN were instructed to contact a member of the demonstration team for one-on-one assistance.

All five States also received requests from some households to add benefits to their card because eligible children in their family were not accounted for, although only Missouri reported this as a common issue. In some cases, the children who had not been included in the original benefit issuance attended private or charter schools; in other cases, there was an error in the SFA's list of eligible children or in the process of grouping children into households. After learning about such requests, FNS determined in late May 2011 that grantees could issue benefits for these additional children. Four of the five developed procedures to add benefits for these children. The remaining grantee did not provide benefits for these children as they did not believe them eligible under FNS rules. Oregon's SNAP system addressed instances when a child in a SNAP household moved to another household or changed guardians, as this is the way the system is set up for all SNAP cases. If the household composition in the SNAP case changed in the State database, the SEBTC benefits were automatically adjusted.

2.4.7 Efforts to Encourage Use of Benefits

States with available time and resources made efforts to encourage the use of SEBTC benefits. Three grantees (Missouri, Texas, and Oregon) sent reminders to households either by mail or text message with the date when their benefits would expire or to draw down the funds before they were no longer available. Oregon provided clients with the most upfront notice, by sending letters about five weeks prior to the end of the summer. Missouri sent their letters two weeks prior to expiration and Texas contacted clients one week prior to expiration.

Two States (Missouri and Texas) made efforts beyond sending reminders. Beyond sending expiration notifications, Missouri actively encouraged households to use their benefits during the summer period. The grantee's community partner reached out to individual households that had not yet accessed their benefits to determine the reasons and found that many of these households did not speak English and that prevented them from understanding the demonstration materials and nature of the program. A smaller proportion reported that they simply did not want the benefit. There were no cases identified where the guardians told the community partner that they had not received the card. Texas conducted a community event to encourage use of benefits and healthy eating.

Connecticut and Michigan did not send any additional notices about benefit expiration. Both grantees indicated that they had notified parents through mailed materials at the beginning of the process that the benefits would expire on a given date, so they did not feel any additional notification was necessary. (Detailed analysis of benefit usage is found in Chapter 3.)

2.4.8 Training Retailers

Beyond participants, retailers redeeming SNAP or WIC benefits could also potentially be affected by SEBTC. All five States informed retailers about the demonstration to prepare them for potential questions from customers or cashiers. The grantees distributed letters to retailer locations and printed press releases in retailer association newsletters that described SEBTC and addressed retailers' potential questions.

Both WIC States also hosted in-person training for retailers during the week before the benefit period began. During the trainings, demonstration staff discussed that SEBTC cards should read like WIC EBT cards despite the different logos, gave retailers guidelines about whether to process a WIC or SEBTC cards first, explained how the program could potentially increase grocers' WIC vendor business, and discussed which food items were included in the SEBTC food package. Texas hosted three training sessions with 72 of the 78 retailers in the demonstration area attending, as well as a follow-up training for the staff at one superstore. Michigan hosted two training sessions with 32 of 76 retailers. Retailers who did not attend training said the written documentation was sufficient. None of the three SNAP States provided retailer training beyond distributing letters and press releases mentioned above because the SEBTC benefits were redeemed in the same way as SNAP benefits, requiring no modification of EBT systems or cashier procedures at retailers.

Retailers in all States were able to use the existing SNAP and WIC helpline phone numbers if they had questions about SEBTC. Michigan and Oregon also supplied retailers with SEBTC help lines, although they reported very few calls to these numbers. Michigan also dedicated a part of the SEBTC website to the retailer audience.

2.4.9   Community Awareness of Other Summer Feeding Options

In all five States, the agency responsible for administering SFSP was the grantee or a partner in the SEBTC demonstration. As FNS intended, States reported viewing the two programs as complementary, rather than in competition. States reported various ways in which SFSP was promoted among SEBTC households. SFSP staff members and advocates typically played an advisory role during the grant application process and demonstration planning phase. Moreover, Oregon used the demonstration as an opportunity to actively promote SFSP among the eligible population during the notification process, in which all households in both the benefit and non-benefit groups received information about how to access SFSP sites. Texas had an active SFSP marketing campaign. Connecticut and Michigan expressed interest in this type of cross-marketing to promote awareness and participation in the 2011-2012 demonstration year.

However, few of the local SFSP sponsors and site managers who were interviewed for the evaluation were aware that the SEBTC demonstration was being implemented unless they were SFAs directly involved in demonstration start-up activities. Non-SFA sponsors who were aware of the program had few details or expressed misperceptions about the nature of and eligibility criteria for the program.

Based on fall interviews with State staff, all respondents believed that SEBTC did not seem to affect the attitudes of parents or children toward SFSP programs.

2.5   EBT System Modifications and Strategies to Maintain Program Integrity

The majority of households who were assigned to the benefit group received an EBT card and used at least a portion of their benefits during the summer months. To make this happen, EBT processors needed to undertake a number of system modifications. This section discusses EBT issuance and redemption patterns across the five sites during the POC year. It also describes the EBT system modifications needed to facilitate benefit issuance, processes used to ensure program integrity, and end-of-the-summer activities to finalize the demonstration.

2.5.1   EBT System Modifications and Support Activities for EBT Cards

Conventional online EBT is similar to a debit card transaction in that it uses a magnetic stripe card and requires a PIN to authenticate the transaction. The transaction is sent at the time of the purchase through commercial credit/debit networks for authorization by the EBT system's central (or "host") computer. SNAP EBT, as implemented by all States and

territories, follows this model. As with credit/debit cards, SNAP cards are portable, meaning that a card issued in one State can be used in any State. SNAP benefits may be used only to purchase food items at SNAP retailer locations that are authorized by FNS.[29]

WIC EBT is a different type of transaction. The WIC program issues a tailored set of foods to each recipient from a list of those that are authorized by each State's WIC program. WIC EBT systems must therefore assure that only specific WIC "allowable foods" prescribed for an individual are paid for with the benefit card. A State with WIC EBT may use online transaction technology, similar to the way that SNAP EBT systems operate, or an offline transaction using a "smart card." A smart card has an embedded chip that includes information about the specific foods available to the card holder and a processor.[30] The Michigan SEBTC grantee is using an online system. The Texas grantee is using an offline, or smart card, approach.

Each of the States and their respective EBT processors and contractors completed any necessary system modifications in time to issue SEBTC cards and benefits at the end of the 2010-2011 school year.[31] These modifications may have included (1) account setup, (2) card issuance and re-issuance, (3) benefit processing, (4) cardholder support, (5) benefit expiration and expungement, and (6) benefit settlement and reconciliation. Diagrams illustrating the processes and data flow for EBT issuance, procurement, and settlement are provided in Appendix 2C.

Account Setup

Two types of modifications were necessary to enable account setup processes for SEBTC. First, systems in all five States required a new SEBTC program designation so SEBTC funds or WIC food items purchased with SEBTC funds could be tracked within the systems from issuance through redemption and settlement. Second, both States using WIC technologies also required new software to originate accounts and issue SEBTC benefits to the EBT systems without meeting all the issuance rules of the WIC program. States using SNAP technologies did not modify their systems beyond the program designation. Two of these States were able to use a direct file transfer from their State SNAP eligibility systems to set up SEBTC accounts; the third used a manual data entry process through the SNAP EBT administrative terminal function to avoid enrolling SEBTC participants in their State SNAP system.

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[29] See http://www.fns.usda.gov/snap/retailers/store-eligibility.htm for more information on SNAP retailer eligibility.

[30] Because the WIC EBT purchase transaction occurs between the smart card and the card acceptance terminal, there is no real-time communication with the EBT host system during the transaction. As a result, the transaction is referred to as an off-line transaction.

[31] Because the types of allowable purchases mimic SNAP and WIC Program food types, no changes were required to retailer electronic cash register systems, point of sale hardware or software, or third party processor systems, or to the Michigan and Texas WIC Universal Product Code (UPC) databases.

Card Issuance and Re-issuance

As previously noted, cards were issued by mail by four of the five grantees; in Texas they were distributed in-person after participants attended training. Of note, Connecticut had to issue cards a second time because of an error: it sent the company that produced the EBT cards a different account number than was sent to the EBT processor for account setup and benefit issuance and the first cards distributed did not work. Although this problem was identified on the first day of benefit use and new cards were mailed the next day, this created confusion for households and delayed receipt of benefits by a few days. The error may have also reduced the rate of participation in the first month. In another State, about 40 cards were also issued to SEBTC participants with the incorrect program logo; new cards were re-issued quickly, and these households were told they could use either card.

Replacement cards for online systems were handled according to the State's existing procedures. The online system replaces cards overnight, and, therefore, cards are replaced faster than in the offline system. Texas used an offline system in which lost and stolen cards were reported directly to the State WIC program for re-issuance of replacement cards since the local WIC clinics that normally re-issue cards were not involved with SEBTC. Once benefits were loaded onto cards, the cards were shipped back to the local partner to distribute.

Account Processing

Each EBT processor had to establish a new sub-account within its system to separate SEBTC benefits and funds from SNAP and WIC and, in SNAP-hybrid sites, establish rules for families that received both SEBTC and SNAP about which benefits were to be used first. For these latter States, the EBT processors used a "first-in first-out" process that draws down funds when a SEBTC recipient who is also receiving SNAP uses a card based on the order that benefits were issued. If a household was receiving both SNAP and SEBTC, any existing SNAP balance prior to the SEBTC benefit issuance would have to be drawn down before the household could access SEBTC. During the summer months, the processors issued SEBTC benefits before SNAP benefits to allow SEBTC to have first priority for use. In the State using a separate SNAP and SEBTC card, card accounts contain only SEBTC benefits. In this case, although benefits are drawn on a first-in first-out basis but with only one benefit type, priorities do not apply.

Cardholder Support

EBT processors required few changes in cardholder support in the four grantee States using online EBT for SEBTC. Processors provided new scripts for live customer service representatives to answer cardholder questions. One EBT processor also changed its integrated voice response (IVR) to point SEBTC program cardholders to PIN selection functions. In addition, two EBT processors added messages to their IVR prompts to inform callers that enrollment was closed after customer service representatives received calls from parents and guardians asking how they could enroll in the program. Since Texas (the State using the off-line EBT system) decided that WIC customer service staff would re-issue cards

instead of staff at the WIC clinics, it trained three customer service representatives to respond to cardholder requests and to handle card re-issuance. Across all five States, processors reported little if any change from normal call center volumes, with the exception of the one EBT processor fielding calls during the first few days after the initial mailing of invalid cards in one State.

Benefit Expiration and Expungement

When benefits are issued through an EBT system, the processor must ensure that unused benefits are expired or expunged and can no longer be accessed by the participant.. Expiration of benefits applies to WIC and means that benefits cannot be used after a specified date. Expungement of benefits applies to SNAP and usually occurs if SNAP benefits have not been accessed for a period of one year.

WIC benefits are issued with a beginning and end date and expire as of the end date. A benefit package is issued for a period of one month (or pro-rated if issued for a period of less than one month). Once WIC benefits reach their expiration date, they are no longer available to the participant but remain in the system. The WIC SEBTC demonstration followed this same model with benefits issued for one month periods, expiring before the first day of the next summer month and with the last month's benefits expiring on the last day before the first day of school.

SNAP benefits do not have a predetermined expiration date; instead, EBT systems expunge SNAP benefits if they remain unused for a period of one year. Because SEBTC demonstration benefits must expire on a specified date (at the beginning of the new school year), EBT system modifications were needed for the three grantees using a SNAP-model approach to cause SEBTC benefits to expire on a specified date. The benefits were then expunged at a later time, thereby ensuring that SNAP program benefits remained in the account until transactions such as manual vouchers have cleared. Two grantees also modified their eligibility systems to indicate the SEBTC expiration but one state did not. This State had to train its staff to look at the EBT system, not the eligibility system to determine expiration if a participant inquired about their account.

Settlement and Reconciliation

The settlement and reconciliation processes are the final steps in benefit administration. For SNAP, EBT systems post a SNAP issuance file each day to a special account, called a letter of credit (LOC). Each day, the EBT system posts a LOC file to this account to draw the funds necessary to settle payments to retailers accepting SNAP transactions. At the same time, EBT systems create and post a redemption data file to the Store Tracking and Redemption Subsystem II (STARS), which FNS uses to monitor retailer redemption activity. The amount paid to the EBT processor's account for settlement to retailers must reconcile against the amount paid to retailers in STARS.

The U.S. Treasury Department and FNS require that SEBTC funds be tracked, settled, and reconciled separately from SNAP because monies are coming from two different funding

sources. For SNAP EBT systems to automate the settlement process, a separate SEBTC LOC must be posted daily to the special account and a separate file for SEBTC redemptions must be sent to STARS. However, it was not clear when grantees were responding to the RFA that separate LOC and STARS files would be required. The two SNAP EBT processors were able to accommodate this change after negotiations with FNS, although one had to rely on a manual process for one of its States.[32]

The settlement and reconciliation processes are slightly different for the WIC EBT systems. The WIC State Agency estimates the funds that will be used based on past redemption data and posts a daily LOC to a special account. These funds are then placed in the State's designated settlement bank, which may be the State Treasury. For the SEBTC demonstration, it was the State's responsibility to create separate LOCs and post these funds to the settlement account. As processors did not need to settle these funds to retailers separately, no modifications to the WIC EBT systems were needed. The WIC EBT systems drew funds as necessary for WIC and SEBTC settlement. WIC EBT processors did not need to report retailer settlement to STARS; instead, WIC State Agencies reconciled funds and reported the reconciliation back to FNS.

2.5.2 Administrative Controls to Maintain Program Integrity

Most grantees did not establish separate administrative processes to maintain program integrity for SEBTC cases but instead relied on current SNAP/WIC systems for detecting and preventing fraud. As discussed below, grantees considered whether to implement procedures to prevent fraud and abuse committed by participants, as well as the EBT system controls used to prevent fraud and abuse that could be committed by EBT retailers. In neither case were instances reported during the POC year.

Preventing Participant Fraud

While there were no cases reported of participant fraud, four of the grantees said that detecting fraud would be very difficult because the program does not require households to be in direct contact with eligibility staff. If any fraud was reported or suspected, however, all of the grantees agreed they would use the same procedures to investigate the reports as they use for the SNAP/WIC programs. The Texas grantee, however, believed that participant fraud would be difficult to commit because of the SEBTC program requirement of personal identification before receiving a card. In that site, clients had to attend in-person training to receive their card, and replacement cards were given only after the client presented a photo ID as well as identification and information about the child.

Over the course of the summer, none of the grantees received reports of participant fraud or abuse. Through client calls, some grantees heard about "questionable" situations that could have been potentially fraudulent, but none of these rose to the level of investigation. A few sites also discussed issues with children moving out of the household during the

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[32] Two of the three SNAP States (Oregon and Missouri) contract with the same EBT processor.

summer, but had little ability to know when this was happening or the degree to which it was prevalent.

EBT System Controls

EBT processors use the same controls to monitor the integrity of SEBTC transactions and retailer activity as they do for SNAP and WIC, and none reported any instances of suspected fraud or abuse related to the demonstration during the POC year. The controls they maintain are similar to those used by the credit/debit industry. All purchase transactions require the presence of the card and the entry of a PIN. For online EBT, the PIN is encrypted by the POS device prior to transmission to the host for verification. For offline EBT, the PIN is encrypted by the POS and verified by the card's chip. The system also verifies that the purchase is conducted at an authorized retailer location, is conducted on a card acceptance terminal recognized by the system, the purchase amount does not exceed the account balance (SNAP) or the food item is approved and the quantity does not exceed the allowed quantity (WIC), and that benefits have not expired. All WIC food item UPCs are matched to the State agency's electronic food list in the cash register. EBT processors also check for transactions outside of common parameters, for example transactions of even dollar amounts, repeated transactions within a limited time period, and repeated key-entered transactions from one retailer location.[33]

2.5.3   End of Summer Activities

After the grantees delivered cards and activated benefits, there was little work for staff until late summer. At that time, all grantees implemented procedures for expiration of benefits, expungement of funds, and card deactivation when the new school year began. Generally, this process ran smoothly and required little time from the grantee staff and EBT processors to complete.

Expiration and Expungement

As discussed earlier, at the end of the summer, SEBTC benefits were set to expire on the day prior to the start of the 2011-2012 school year so that cardholders could no longer access benefits. Then, for the States using the SNAP EBT systems, EBT processors had to expunge or remove the remaining balances of SEBTC accounts from the EBT system after routine processing occurred. Exhibit 2.8 provides the dates that benefits were expired and then, for the SNAP sites, expunged. For SNAP systems, the benefits were assigned an expiration date in the EBT host system. For WIC benefits, the current month's benefits were issued with a pre-assigned expiration date so there is no expungement needed. Prior to expunging benefits, the processors allowed time (ranging from 25 and 62 days) for retailers to submit manual vouchers and for disputes, if any, to be addressed and settled.

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[33] In online EBT, if a card is damaged, the retailer may key-enter the card number to conduct the transaction.

Exhibit 2.8   Benefit Expiration and Expungement Dates

SEBTC Program	Expired Benefits	Expunged Benefits
Connecticut SNAP	September 5, 2011	September 30, 2011
Michigan WIC	September 9, 2011	Not applicable
Missouri SNAP	August 16, 2011	October 17, 2011
Oregon SNAP	September 5, 2011	November 6, 2011
Texas WIC	August 21, 2011	Not applicable

Source: Information from grantees, summer 2011.

Note: Under the WIC model, benefits are assigned monthly and expire at the end of each month. Therefore, they are not expunged as with the SNAP model.

All processors indicated that the expiration and expungement processes were conducted as anticipated. After benefits were expunged, the EBT systems accounts balanced. However, the SNAP processor without automated reconciliation had to manually submit one more account management agent (AMA) adjustment for each of its States, decreasing the value of the SEBTC level of credit (LOC) and putting value into the SNAP LOC.

Generally, grantees believed that the SEBTC recipients understood the benefit expiration process across the sites; however, most grantees received calls from at least some parents either after they received the notification letters or after benefits ended. Missouri received a few calls from parents confused because they thought the benefits would run through the end of August, instead of mid-August. They also heard from some SNAP clients who wanted to make sure their SNAP benefits would not expire at the same time the SEBTC benefits did. Both Connecticut and Oregon received calls from parents wondering why their benefits ended. Neither Michigan nor Texas reported receiving any calls from parents about the close-out process.

Card Deactivation

Grantees and their EBT vendors had to determine whether and when to deactivate cards used for SEBTC benefits. This process was handled differently based on the SEBTC program model and whether the vendors used online or offline systems. The sites implementing the SNAP-hybrid model expect that cards held by existing SNAP participants will continue to be used for SNAP. Following the SNAP rules built into the system, cards issued to non-SNAP participants will remain active until there is no activity in the account for 360 days. By contrast, the sites implementing the SNAP model and the WIC online model indicated that, while all SEBTC card accounts were deactivated, the cards could, in theory, be used again if the accounts are re-activated for the summer of 2012 but anticipate that it will be more cost effective to issue new cards to all participants in 2012.

With its offline WIC system, Texas had a slightly different process for card deactivation. While SEBTC benefits were automatically set to expire at the end of the calendar month, Texas "hot carded" all 2011 SEBTC cards as an added precaution, with the expectation that

new cards would be issued to participants in 2012.[34] In an offline system, if a card is reported lost or stolen or if a card is deactivated, the card number is placed on a hot card list (HCL). The HCL is then made available for download by retailers so that the retailer's system can validate or reject a card prior to its use. Retailers are encouraged to download the HCL at least once per day. For SEBTC, Texas mistakenly set a deactivation date of the last day of benefit use, resulting in reports that a few cardholders were not able to access remaining benefits on that day. The problem could not be corrected in sufficient time. Texas acknowledged that benefit expiration was a sufficient safeguard and will wait to hot card SEBTC cards until the end of the month during 2012.

2.6   Other Factors Influencing Implementation

A range of other factors affected the implementation of the SEBTC demonstration, including the relationships established between State and local partners, the budget and staff time required, and the very condensed timeline for the demonstration.

2.6.1   State and Local Partnerships and Communication Flow

One of the key challenges in issuing the SEBTC benefit was that it necessitated collaboration between two systems that generally operate separately—FRP meals eligibility and either SNAP or WIC. This required the reconciliation of different federal and State program rules and approaches, such as definitions of households, required information from guardians, and other data requirements. It also meant that staff in several agencies had to work together, often for the first time. In many cases, there were unanticipated systems issues, related to the types of information required by SNAP or WIC and FRP systems, and different organizational cultures. During this POC year, grantees and their partners worked hard to overcome those inconsistencies and to create a system where different programs worked together to achieve a common goal.

Although there were organizational challenges, all of the grantees and major partners were clear that the ultimate goal was the successful launch of the SEBTC program in the demonstration area. To achieve this, States took a variety of approaches to dividing responsibilities across participating organizations. While many were comfortable with the division of labor, key staff members in some sites appeared to have differing opinions on the success and appropriateness of those approaches. Four States had anticipated that at least one of their major partners would have been more involved in the demonstration than turned out to be the case. Also, staff members in three sites questioned choices about which State agency was the most appropriate to lead the program.

Despite these issues, most participating agencies recognized both the strengths and weaknesses of each partner, and developed strategies to successfully implement the

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[34] In an offline system, the 2011 card would have to be returned to the WIC agency to be reloaded with benefits for use in 2012. Since SEBTC cards are loaded by the card issuer in an automated process, reloading existing cards would require a labor-intensive process.

demonstration accordingly. All States indicated that the staff members at various agencies generally worked well together and were able to strengthen current or develop new relationships among partner agencies. Frequent communication from very early stages of implementation aided this process.

The extent and quality of communication with participating SFAs also varied across grantees, creating some inconsistencies in how SFAs approached the development of lists of eligible children and households as well as the consent process. In States with only a single participating SFA, the SFA was an active partner from the start of the demonstration, and expectations for its involvement were clear. In States with more than one participating SFA, some of the SFAs appeared to be less clear about grantee expectations and the processes to be followed for key tasks. At the same time, grantees had less information than needed about how SFAs were approaching the consent process.

2.6.2 Level of Effort Needed, State Budget Issues, and Competing Demands for State Staff Time

States compensated for budget-related challenges by leveraging additional time and resources from State and local partners. At least one major partner in four of the five States reported that the grant budget was not sufficient because they had not anticipated the level of effort required during the first few months of the demonstration, particularly for EBT systems changes and household list preparation. Most States recommended that at least one full-time staff member be dedicated to the demonstration to serve as the point person for all partners and to keep the project on track. The use of grant budgets is discussed in more detail in Chapter 6.

State budget concerns and natural disasters affected implementation in four of the five States. Early retirements and layoffs in Connecticut and Texas required demonstration staff to take on additional responsibilities that limited the time they could spend on SEBTC. Mandatory furloughs in Oregon limited staff time for the demonstration as well. In both Connecticut and Missouri, staff from several of the lead agencies had to assist in emergency aid efforts related to several natural disasters, and, therefore, had to spend significant in-kind hours to successfully complete demonstration activities.

2.6.3 The Pace of Implementation

The implementation pace was extremely fast in this POC year. Grants were awarded in December 2010, and summer benefits were to begin before the middle of June 2011. With less than six months to complete preparations, the grantees and their partners displayed tremendous perseverance in their efforts to meet established schedules. When facing issues or questions requiring resolution, they demonstrated an ability to adapt to change, and generally communicated quickly and effectively to move the demonstration to the next stage.

Yet, most grantees expressed some frustration about the timeline, especially when unanticipated requirements emerged. Staff in these States and local areas felt that with

more time they could have anticipated more of the challenges, developed more effective ways of conducting implementation, and tapped other resources. In this first year, some steps in the implementation process took longer than expected, particularly the creation and cleaning of household files for random assignment.

Chapter 3

Use of Summer EBT for Children

In this chapter we present patterns of SEBTC benefit use at the household level, using the SEBTC transaction data for all of the months of the POC demonstration. For these findings, we use data from EBT systems, which track the SEBTC benefits of participating households. The systems provide data on when and where benefits were used, the amount spent for each transaction, the proportion of benefits used each month, and for those households that exhausted the benefit, when this occurred. The analyses include summary statistics for use by all households issued benefits and modeling of use by households in the treatment group that responded to the summer household survey.

3.1   Research Questions and Key Findings

3.1.1   Research Questions

The specific research questions for the analysis of households' use of SEBTC were:

1. To what extent did families use the EBT benefits (participation and redemption rates)?
2. What are the patterns of benefit exhaustion?
3. What are the patterns of food choices in the WIC sites?
4. What are the shopping patterns across different types of stores?
5. What was the relationship of benefit take-up, redemption, and exhaustion to site and household characteristics?

We conducted two sets of analyses of SEBTC data to answer these questions. First, we computed aggregate statistics using all transaction data for all households issued benefits in the five POS sites. This analysis of the full demonstration data also included separate statistics for SNAP and non-SNAP households in the SEBTC-SNAP model sites.[35] Second, we estimated regression models of benefit take-up, redemption, and exhaustion using the characteristics of the survey respondents, including demographics, nutrition assistance program participation, and food security. We present the results of these analyses in this chapter, after first explaining the data files used in the analyses.

3.1.2   Key Findings

▪ Over the summer, 11,412 children lived in households that redeemed SEBTC benefits, representing 91.6% of all children issued benefits. Households redeemed a total of $1.6

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[35] EBT data did not identify SNAP participation status for households in the WIC sites or WIC participation status in any site.

million in SEBTC benefits, with an average of $235 per household. The average amount redeemed per household ranged from $168 in Texas to $349 in Oregon.

- Households assigned to receive the benefit (including both who used the benefit at least once – i.e., "participated" – and those that did not use any benefits at all) redeemed an average of 80.4% of benefits issued for the summer. For the 90% of households that participated at all, i.e., made at least one purchase with SEBTC, the mean amount redeemed was 89.4% of benefits.

- The SNAP hybrid sites had the highest mean redemption rates among participating households: 97.7% in Missouri, 99.0% in Oregon. The mean redemption rate in Connecticut, the SNAP site, was 93.4%. By contrast, the WIC states had substantially lower means (70.5% in Michigan and 85.2% in Texas).[36]

- Among the three SNAP model sites, SNAP households were more likely to participate (98.7% redeemed some benefits versus 87.0% for non-SNAP households) and redeemed more of their benefits (95.9% versus 82.9%).

- Across all sites, 57% of households *exhausted* their benefits (i.e., used all of their benefits) in at least one month, and 34.9% spent all of their benefits for the summer. Among households that exhausted their benefits, on average the benefits were spent 10.3 days after they were issued. In the SNAP model States, SNAP households were almost twice as likely to spend all of their benefits compared to non-SNAP households.

- Analysis controlling for differences in household demographics, receipt of food assistance, and food security before the demonstration supports the expectation that the SNAP-hybrid model is likely to have the highest redemption and exhaustion rates, and that sites with active consent are likely to have higher participation rates (i.e., redeemed benefits at least once) than those with passive consent. With only five sites, however, these findings are only exploratory and not conclusive.

3.2   Research Methods

3.2.1   Data Files for EBT Transaction Analysis

For all five sites, we obtained and analyzed records of SEBTC transactions for the period of the POC demonstration. Benefits were issued on a monthly basis. Connecticut issued benefits for four monthly cycles, with separate benefits for each month from June through September. The other States issued benefits for three cycles. The August cycle in Oregon included benefits for the first five days of September. The period from the first benefit issuance availability to the expiration of benefits varied, depending on the start and end

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[36] Since the SNAP hybrid model (used in Missouri and Oregon) links SEBTC benefits to households' existing SNAP EBT cards, SEBTC redemptions were automatic when those cards were used. In contrast, the pure SNAP model (used in Connecticut) issues benefits to cards separate from SNAP, and beneficiaries thus chose which card to use. This element of choice may contribute to the small observed differences between the SNAP hybrid model and the pure SNAP model in measures based on redemption activity, including the number of households redeeming at least some of the benefits, the number of households redeeming all of the benefits, and the average total redemption per household. Differences in redemption activity between either SNAP model and the WIC-based distribution systems were larger.

dates for summer school vacation. In Connecticut, Missouri, and Texas, the last cycle was less than 30 days; this cutoff appears to have affected benefit redemption in Connecticut and Texas. The dates covered by the data included in this report are listed in Exhibit 3.1.

Exhibit 3.1   Period of the Issuance Cycles of SEBTC Benefits, By Site

State	SEBTC Model	June Period	July Period	August Period	Total Days of Benefits
Connecticut[a]	SNAP	06/17/11-06/30/11 (14 days)	7/1/11-7/31/11 (31 Days)	8/1/11-8/31/11 + 9/1/11-9/5/11 (36 days)	81
Michigan[b]	WIC	06/11/11-07/10/11 (30 days)	7/11/11-8/10/11 (31 days)	8/11/11-9/09/11 (30 days)	92
Missouri	SNAP-Hybrid	05/31/11-06/29/11 (30 days)	6/30/11-7/30/11 (31 days)	7/31/11-8/17/11 (18 days)	79
Oregon[c]	SNAP-Hybrid	06/01/11-06/30/11 (30 days)	7/1/11-7/31/11 (31 days)	8/1/11-9/5/11 (36 days)	97
Texas	WIC	06/01/11-06/30/11 (30 days)	7/1/11-7/31/11 (31 days)	8/1/11-8/21/11 (21 days)	82

Source: FNS communications with States and EBT transaction data, 2011.

[a] Connecticut issued benefits for September separately, so the August period comprised two cycles. Oregon issued benefits for September along with August benefits.

[b] Michigan benefits for June were issued on 6/11/11 and first available on 6/12/11. The last Michigan transactions were settled on 9/12/11.

[c] Oregon benefits for June were prorated for 23 days from 6/8 – 6/30, based on the end of the school. Oregon issued August and September benefits together.

Grantees using a SNAP model provided data on the date, time, and dollar value of each credit and debit to the account. Credits include issuances, returns credited by retailers, and adjustments for processing errors. Debits include purchases, cancelled issuances, and adjustments. A purchase transaction represents the total amount spent in a particular location at one time for any number of SNAP-eligible items.

Grantees using the WIC model also provided data on the date, time, and dollar value of each transaction. The data for these sites also permit the analysis of redemptions at the food category level. Unlike the SNAP data, the WIC data have separate issuance transactions indicating the quantity issued for each category of foods. In Michigan there is a set of issuance transactions for each child in the household even though the benefits for children in the same households are combined. In Texas there is a single set of issuance transactions for each card, and each household usually received one card. In the WIC data, for each time a household made a purchase, there is a separate transaction record for each category of foods purchased with data indicating the quantity and the dollar amount paid to the retailer for the food items. The original issuance data did not include the dollar value of benefits issued, so the average cost per unit for each food category was imputed, based upon the redemption data.[37] The approach is described in Appendix 3A.

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[37] The cost per unit redeemed for each month was used to estimate the value of benefits issued in that month; thus the imputed dollar value of the food package varied from month to month.

3.2.2   Analysis Approach

To support analysis of shopping patterns by store type, the transaction data were merged with retailer data files from FNS indicating the store type. For the analysis, we combined some of the FNS retailer categories into a smaller set. Definitions of these categories are provided in Section 3.7. The FNS data were provided in April 2011 and included all retailers authorized to accept SNAP in the five demonstration States at that time. Thus, the files did not include any retailers authorized after April, nor did they include authorized retailers in other States, although the SEBTC cards using the SNAP systems could be used at any SNAP-authorized retailer in the country.

For the analysis of redemptions by households in the treatment group (i.e., the evaluation subsample of all households receiving the benefit), the evaluation team merged the transaction data with the household demographics obtained in the spring or summer survey. The methods for this analysis are discussed in Section 3.9.

The sections that follow present the patterns of participation, redemption, and exhaustion of benefits, based on summary statistics for EBT transactions for all households issued benefits. In addition to overall patterns of redemptions, the chapter includes details of WIC redemptions by food category and comparative statistics for SNAP and non-SNAP households in the SNAP model sites.

3.3   Household Participation in SEBTC

As described in Chapter 2, over the period of the POC demonstration, the five sites issued benefits to a total of 6,968 households with 12,463 children identified as eligible, and, among the households that were issued benefits, 90.0% used their benefits at least once during the demonstration, which is defined as "participating in," or "taking up," SEBTC. The participating households included 91.6% of children who were issued benefits.

The number and percentage of households participating in SEBTC varied from month to month, peaking in July, as shown in Exhibit 3.2. Participation was lowest by all measures in June, when 82.9% of households and 85.4% of children participated. In all sites except Texas, the monthly participation rate increased from June to July. The monthly participation rate among households declined from 87.3% in July to 85.5% in August. The overall household participation rate of 90.0% exceeded the rate in any single month, indicating that the composition of the group of participating households varied from month to month. The percentage of *children* participating was consistently higher than the *household* participation rate, in each month and overall, indicating that households with more eligible children participated at a higher rate.

Possible factors for non-participation include: lost or undelivered cards, difficulties using cards, moving out of the State, and not wanting or needing the benefit. The known household characteristics associated with participation were explored through modeling of this variable in Section 3.9. These data do not include specific barriers to participation,

although they do include household characteristics that may be associated with the level of interest in the benefit.

Exhibit 3.2   SEBTC Participation by Month for All States

Month	# Households Issued	# Children Issued	# Households Participating	% Households Participating	# Children In Households Participating	% Children in Households Participating
June	6,872	12,244	5,695	82.9%	10,456	85.4%
July	6,945	12,415	6,067	87.3%	11,103	89.4%
August	6,935	12,396	5,943	85.5%	10,932	88.1%
All Months	6,968	12,463	6,269	90.0%	11,412	91.6%

Source: SEBTC transaction data, summer 2011

Note: Counts are unduplicated and include all households or children with activity during any month.

3.4   Households' Redemption of Benefits

Across the five sites, over $1.9 million in SEBTC benefits were issued in total, and $1.6 million in benefits were redeemed, as shown in Exhibit 3.3. The mean amount issued per child for the entire summer ranged from $145 in Michigan to $175 per child in Oregon, depending on the value of the monthly benefit package and the length of the benefit period.

The total redeemed ranged from $248,461 in Michigan to $434,324 in Oregon. Similarly, the mean benefit redeemed per child ranged from $99 in Michigan to $173 in Oregon.[38] Both of these measures were larger in the SNAP model sites than in the WIC model sites. Variation in the mean amount redeemed *per child* was related to differences in the percentage of benefits redeemed, discussed below, and also to variation in the amount issued per child. Differences in mean amounts *per household* also reflect the differences across sites in household size and number of children per household.

Exhibit 3.3   Dollar Amount of SEBTC Benefits Redeemed, by State for All Months

State	Benefits Issued			Benefits Redeemed		
	Total	Mean per Household	Mean Per Child	Total	Mean per Household	Mean Per Child
Connecticut	$381,468	$281	$158	$347,078	$256	$144
Michigan	$362,708	$267	$145	$248,461	$183	$99
Missouri	$386,136	$261	$152	$348,159	$235	$137
Oregon	$440,908	$354	$175	$434,324	$349	$173
Texas	$389,605	$255	$157	$256,634	$168	$103
All States	$1,960,825	$281	$157	$1,634,656	$235	$131

Source: SEBTC transaction data, summer 2011

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[38] The mean redeemed per household and per child reported in the text and subsequent exhibits were computed by averaging redemption totals for individual households for the summer of 2011. These measures respectively give each household, or each child, equal weight. If the total redeemed by all households is divided by the total issued, this results in a different value for the percentage redeemed, because households with more benefits redeemed a higher percentage.

The total amounts issued and redeemed, and the means per household and per child rose from June to July and then declined in August (Exhibit 3.4). One contributing factor was that June was a partial month of benefits in Connecticut, and August was a partial month in Missouri. In contrast, the August benefit for Connecticut and Oregon (as reported here) included benefits for the partial month of September.

Exhibit 3.4   Dollar Amount of SEBTC Benefits Redeemed, by Month for All States

Month	Benefits Issued			Benefits Redeemed		
	Total	Mean per Household	Mean Per Child	Total	Mean per Household	Mean Per Child
June	$577,033	$84	$47	$457,916	$67	$37
July	$702,485	$101	$57	$608,160	$88	$49
August	$681,307	$98	$55	$568,579	$82	$46
All Months	$1,960,825	$281	$157	$1,634,656	$235	$131

Source: SEBTC transaction data, summer 2011

The average household issued SEBTC redeemed 80.4% of benefits issued (Exhibit 3.5). The rate takes into account all households to whom benefits were issued, including households who were issued a card but then declined it or did not pick it up. The average redemption rate for all households issued benefits ranged from 63.3% in Texas to 98.0% in Oregon. As with the participation rate, the redemption rate was lower in the WIC sites (Michigan's was 64.7%) and in the passive consent sites (Missouri's was 89.1%, slightly less than the 89.8% rate in Connecticut). More discussion of the WIC redemptions by food category, and how these compare to the State's traditional WIC programs, is found in Section 3.5.

The distribution of all households (both participating and non-participating) by redemption rate shown in Exhibit 3.5 provides further insight into household benefit use. Across all sites, 10.0% of households had no redemptions. The passive consent sites had the largest percentages of households with no redemptions (8.8% in Missouri and 25.7% in Texas). The smallest percentages of households with no redemptions were in Connecticut (3.8%) and Oregon (1.0%).

Exhibit 3.5   Percentage of SEBTC Redeemed, by State for All Months, All Households

State	Mean Percentage of Dollars Redeemed	Percentage of Households Redeeming					
		0% of Benefits	>0 and <=25% of Benefits	>25 and <=50% of Benefits	>50 and <=75% of Benefits	>75 and <100% of Benefits	100% of Benefits
Connecticut	89.8%	3.8%	0.5%	0.7%	3.0%	72.8%	19.1%
Michigan	64.7%	8.2%	4.1%	13.1%	26.9%	43.1%	4.6%
Missouri	89.1%	8.8%	0.1%	0.7%	0.5%	33.5%	56.4%
Oregon	98.0%	1.0%	0.0%	0.5%	1.0%	9.2%	88.2%
Texas	63.3%	25.7%	1.4%	3.1%	12.0%	46.0%	11.7%
All States	80.4%	10.0%	1.2%	3.6%	8.8%	41.4%	34.9%

Source: SEBTC transaction data, summer 2011

Note: The mean percentage of dollars redeemed represents the mean of the percentage of benefits for the summer redeemed by each household.

At the other end of the distribution, just over one-third (34.9%) of all households exhausted their benefits. (The definition of benefit exhaustion was slightly different between SNAP and WIC model sites.) [39] The percentage of households exhausting their benefits (i.e., redeeming 100%) ranged from just 4.6% in Michigan and 11.7% in Texas to 56.4% in Missouri and 88.2% in Oregon.

Across all of the sites, the largest percentage (41.4%) of households redeemed between 75% and 100% (but not all) of their benefits. Connecticut had the largest percentage of participating households (75.7%) in this range. Possible factors for this result include: first, a substantial number of Connecticut households received their June benefits in July; and second, the redemption rate for the partial month of September was quite low (as discussed below.)

Exhibit 3.6 provides a chart to illustrate the percentage distribution of all households issued SEBTC, including both participating and non-participating households, according to the share of benefits redeemed over the summer, by State and overall. This exhibit highlights the contrasts among the States at opposite ends of the scale of redemption rates: the small share of households with no redemptions (the yellow bars) except in Texas, and the wide range among States in the share of households redeeming all of their benefits.

Exhibit 3.7 presents redemption rates for participating households only (i.e., those households who used the card at least once). Among these households, the redemption rates were very similar in Missouri and Oregon, the top two States, both of which used the SNAP-hybrid approach. Michigan was the only State with an average redemption rate of less than 85%. The contrast between Michigan and Texas, the two States using the WIC approach, is striking. Michigan participants averaged 70.5% redemption and had the largest percentages of participating households in the lowest three quartiles, with 48.0% redeeming less than 50% of benefits and only 5.0% redeeming 100%. Thus, partial redemption by participating households is the most important factor behind the low average redemption rate for all households in Michigan. In Texas, however, participants averaged 85.2% redemption; only 6.1% redeemed less than 50% of benefits, and 15.8% redeemed all of their benefits. The types of food items redeemed in each of these two States are described below.

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[39] In the WIC sites, households were considered to have exhausted their benefits if they redeemed their entire credit for fruits and vegetables ($14 in Michigan and $16 in Texas) and if they redeemed enough of their benefits in all other food categories that they could not purchase any more. For some food categories, such as cereal, the benefit was denominated in ounces, and allowable package sizes varied. As a result, it was possible to have several ounces of the benefit left, but not enough to buy another package of the minimum size.

Exhibit 3.6   Distribution of All Households Issued Benefits by Percentage of SEBTC Benefits Redeemed Across All Summer Months
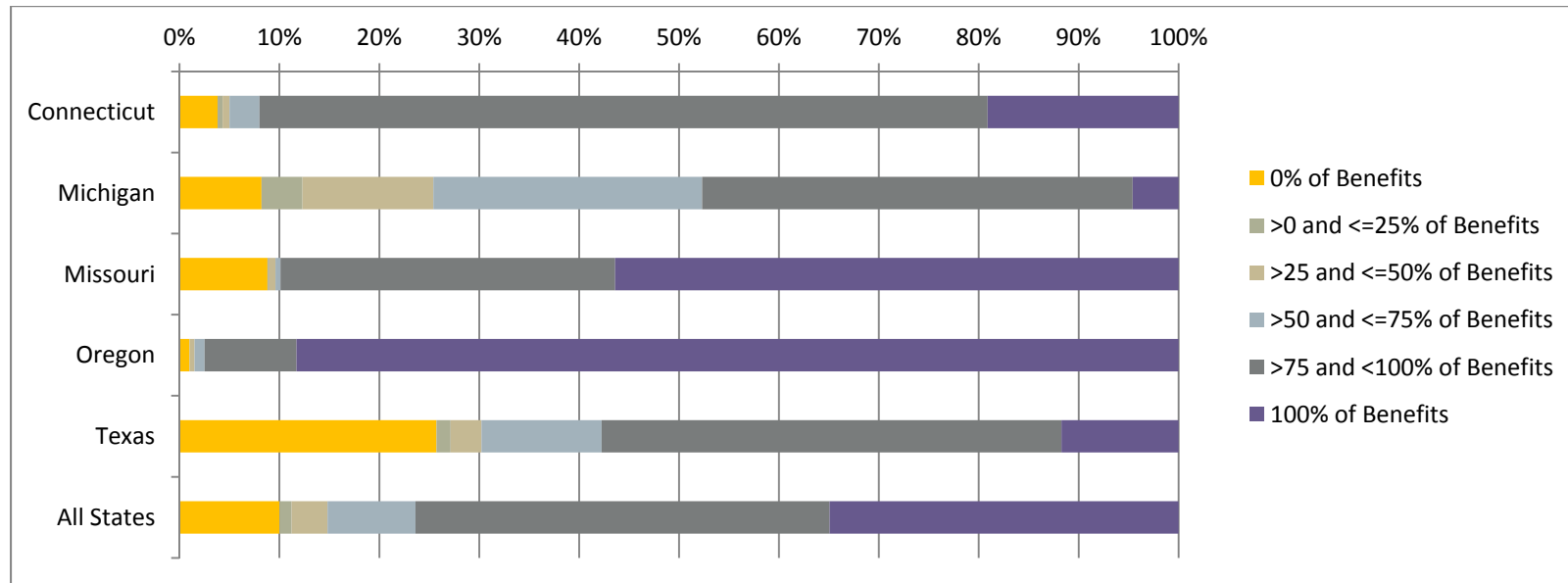
Source: SEBTC transaction data, summer 2011

Exhibit 3.7   Percentage of SEBTC Redeemed by State for All Months, Participating Households (at least one redemption)

State	Mean Percentage of Dollars Redeemed	Percentage of Households Redeeming				
		>0 and <=25% of Benefits	>25 and <=50% of Benefits	>50 and <=75% of Benefits	>75 and <100% of Benefits	100% of Benefits
Connecticut	93.4%	0.5%	0.8%	3.1%	75.7%	19.8%
Michigan	70.5%	4.5%	14.3%	29.3%	47.0%	5.0%
Missouri	97.7%	0.1%	0.7%	0.6%	36.8%	61.8%
Oregon	99.0%	0.0%	0.5%	1.1%	9.3%	89.1%
Texas	85.2%	1.9%	4.2%	16.2%	61.9%	15.8%
All States	89.4%	1.4%	4.0%	9.8%	46.1%	38.8%

Source: SEBTC transaction data, summer 2011

Note: The mean percentage of dollars redeemed represents the mean of the percentage of benefits for the summer redeemed by each household.

The average redemption rate for all households issued benefits rose from 76.0% in June to 80.2% in July, then fell back to 76.0% in August (Exhibit 3.8). Participating households had about the same redemption rates in June and July, but more households redeeming benefits at least once in July than in June. The decline in the overall redemption rate in August reflects declines in both the monthly participation rate (i.e., using EBT for at least one transaction in that month) and the redemption rate (i.e., the amount of benefits redeemed in that month) among participating households. The redemption rate among participating households was 91.7% in June and 91.9% in July, but only 88.8% in August. All States except Oregon had declines in the monthly percentage of benefits redeemed by all households from July to August. The largest drop was from 66.6% to 55.8% in Texas, where August was the only month when benefits expired before the end of the calendar month. It is possible that a substantial number of households did not understand the early expiration date although, as reported in Chapter 2, grantees believed that most guardians understood that benefits would end when the school year began. Connecticut, Michigan, and Missouri had drops of about 3 to 4 percentage points from July to August.

In Connecticut, August and September benefits were issued separately, and households redeemed an average of 88.9% in August but only 40.8% in September. Hurricane Irene in late August may have affected September redemptions. However, analysis of daily transaction data indicates that redemption activity was steady over the five days of benefit availability in Connecticut, contrasting with the usual pattern of a peak immediately after issuance followed by a steady drop in daily transaction volume. This analysis suggests that an important cause of the under-redemption in September was that many households did not know when the benefits would expire.

Exhibit 3.8   Percentage of SEBTC Redeemed, by Month for All States

Month	Mean Percentage of Dollars Redeemed		Percentage of Households Redeeming					
	All Households	Participating Households (With Any Redemptions)	0% of Benefits	>0 and <=25% of Benefits	>25 and <=50% of Benefits	>50 and <=75% of Benefits	>75 and <100% of Benefits	100% of Benefits
June	76.0%	91.7%	17.1%	1.0%	2.8%	6.2%	28.8%	44.0%
July	80.2%	91.9%	12.7%	1.1%	3.0%	6.5%	31.8%	44.9%
August	76.0%	88.8%	14.5%	1.6%	3.7%	8.1%	36.3%	35.9%
All Months	80.4%	89.4%	10.0%	1.2%	3.6%	8.8%	41.4%	34.9%

Source: SEBTC transaction data, summer 2011

Note: The mean percentage of dollars redeemed represents the mean of the percentage of benefits for the summer redeemed by each household. For each month, the percentage of benefits redeemed by each household is based on the benefits available, including remaining benefits from the prior month and benefits issued during the month. Thus, on a month-by-month basis, unspent benefits may be counted two or three times. As a result, the mean percentage of benefits redeemed for the summer is greater than the mean percentage for any month.

3.5   WIC Redemptions by Food Category

In the WIC model States, the redemption rates varied substantially among the nine food categories (Exhibits 3.9a and 3.9b). The redemption rate for all households issued SEBTC was computed as the proportion of all benefits issued that were redeemed (an aggregate measure) and differs from the mean for individual households.[40] For each food category, the redemption rate is an indication of the relative desirability among households of the WIC-approved foods in the category. In addition, the overall redemption rate is relevant for program officials seeking to estimate the cost of the SEBTC food package. By this measure, the four most popular food categories in Michigan were juice, eggs, milk, and fruits and vegetables (all with 75% of benefits or more redeemed); in Texas they were eggs, cheese, juice, and milk (all over 66.6% redeemed). Michigan had the wider range in the percentage of benefits redeemed by food category, from 41.8% of grain products (bread, tortillas, rice, and oatmeal) to 79.9% of juice.[41] The range in Texas was much smaller, from 59.0% of fish to 71.0% of eggs. While Texas generally had lower redemption rates among all households issued benefits (both participating and non-participating) for most food categories, there were two exceptions: redemption rates for beans and peanut butter and for grain products were higher in Texas than in Michigan.

Among participating households (those that redeemed some or all benefits), the proportion of benefits redeemed in every food category and overall was higher in Texas. The overall redemption rate among participating households was 85.8% in Texas, compared with 73.6% in Michigan, though participation was lower in Texas (as discussed above, but participating households redeemed more of their benefits). The proportion of benefits redeemed by participating households ranged across food categories in Texas from 76.9% of fish to 92.5% of eggs. In Michigan, the range was from 44.9% of grain products to 85.8% of juice. The greatest differences in the proportion of benefits redeemed were for cheese, cereal, beans and peanut butter, and grain products.

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[40] The mean of household redemption rates weights all households equally. The ratio of total benefits redeemed to total benefits issued is essentially a weighted average, with households that get more benefits having more weight.

[41] The percentages of benefits redeemed in Exhibits 3.9a and 3.9b are calculated by taking the total benefits redeemed and dividing by the total benefits issued. Thus, the percentage redeemed for all foods is not the average for individual households, which is reported in Exhibit 3.5.

Exhibit 3.9a   Percentage of SEBTC Benefits Redeemed: All Households and Participating Households, by Food Category in Michigan

Food Category	Units	Per Child	% Benefits Redeemed		
			All Households	Participating Households (With Any Redemptions)	WIC Program Redemptions, July 2011
Milk	Gallons	2	77.3%	83.0%	92.5%
Cheese	Lbs	0.5	70.2%	75.4%	79.6%
Eggs	Dozens	1	79.0%	84.9%	82.6%
Juice (64 oz bottle or equivalent)	Containers	1	79.9%	85.8%	86.9%
Cereal	Ounces	36	66.4%	71.3%	76.5%
Dry or canned beans & peanut butter	Units	1.5	52.8%	56.7%	63.7%
Fish (canned tuna/salmon)	Oz	15	62.5%	67.1%	71.4%
Grain products (bread, tortillas, rice, and oatmeal)	Lbs	2	41.8%	44.9%	72.1%
Fruits and vegetables	$	14	75.6%	81.2%	88.6%
Total			68.5%	73.6%	(n.a.)

Source: SEBTC transaction data, summer 2011 and data reported by grantee on all WIC redemptions, July 2011

Note: The percentage redeemed for households with redemptions was approximated by multiplying the overall redemption rate by the ratio of total children to children in redeeming households. n.a. = not available

Exhibit 3.9b   Percentage of SEBTC Benefits Redeemed: All Households and Participating Households, by Food Category in Texas

Food Category	Unit	Per Child	% Benefits Redeemed		
			All Households	Participating Households (With Any Redemptions)	WIC Program Redemptions,July 2010
Milk	Gallons	3	66.7%	87.0%	81%
Cheese	Lbs	1	69.8%	91.0%	83%
Eggs	Dozens	1	71.0%	92.5%	87%
Juice (64 oz bottle or equivalent)	Containers	1	68.9%	89.7%	77%
Cereal	Oz	36	66.9%	87.2%	72%
Dry or canned beans & peanut butter	Units	2	61.0%	79.4%	63%
Fish (canned tuna/salmon)	Oz	18	59.0%	76.9%	(n.a.)
Grain products (bread, tortillas, rice, and oatmeal)	Lbs	3	62.2%	81.1%	64%
Fruits and vegetables	$	16	66.6%	86.9%	78%
Total			65.9%	85.8%	(n.a.)

Source: SEBTC transaction data, summer 2011 and data reported by grantee on all WIC redemptions, July 2010

Note: The percentage redeemed for households with redemptions was approximated by multiplying the overall redemption rate by the ratio of total children to children in redeeming households. n.a. = not available

Exhibits 3.9a and 3.9b also provide contextual information about redemption rates for all households in the regular WIC program in Michigan and Texas. SEBTC households with redemptions in Texas redeemed higher percentages in every food category. In Michigan, on the other hand, participating SEBTC households redeemed lower percentages than WIC participants in every food category except eggs.[42] There is no definitive reason for these differences. However, both the differences in SEBTC redemptions between sites and the differences between WIC and SEBTC redemptions in Michigan are may indicate that in-person training (as in Texas SEBTC and both States' WIC programs) is more effective at promoting full use of benefits than the remote training methods used in Michigan's SEBTC program.

3.6   Differences in Participation and Redemption between SNAP and non-SNAP Households

In the SNAP model States, there were important differences in participation and redemption between SNAP and non-SNAP households. As we discuss below, SNAP households were more likely to participate and redeemed more of their benefits. These differences appear to be related to how SEBTC was implemented. In all three sites, the grantee used existing information on SNAP households to set up SEBTC accounts; more information was needed from non-SNAP households. Because Missouri and Oregon used the SNAP hybrid model, linking SEBTC benefits to households' existing SNAP EBT cards, SEBTC redemptions were automatic when those cards were used. In addition, Oregon's special outreach to SNAP households during the consent process, described in Chapter 2, may have increased the proportion of eligible SNAP households giving consent and, therefore, the proportion of households issued benefits who were already receiving SNAP.

SNAP households outnumbered non-SNAP households in all three SNAP model States (Exhibit 3.10). Over 70% of all households issued benefits in these sites received SNAP. The participation rate for SNAP households was 98.7% overall, ranging from 97.0% in Connecticut to 100.0% in Oregon. For non-SNAP households, the overall participation rate was 87.0%, ranging from 73.9% in Missouri (the one passive consent site among the three) to 95.0% in Connecticut (1 point higher than in Oregon).

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[42] For Michigan, comparisons of SEBTC and WIC redemptions for fish and whole grains must be interpreted with caution due to differences in how benefits are issued and redeemed.

Exhibit 3.10   Household SEBTC Participation by SNAP Status by State for All Months

State	SNAP Status	Issued # Households	Participating # Households	Participating % Households
Connecticut	SNAP	800	776	97.0%
	non-SNAP	557	529	95.0%
Missouri	SNAP	1,027	1,015	98.8%
	non-SNAP	452	334	73.9%
Oregon	SNAP	1,029	1,029	100.0%
	non-SNAP	216	203	94.0%
All SNAP States	SNAP	2,856	2,820	98.7%
	non-SNAP	1,225	1,066	87.0%

Source: SEBTC transaction data, summer 2011

SNAP households redeemed more of their SEBTC benefits, on average, than non-SNAP households, and were much more likely to use all of their benefits. The average redemption rate for SNAP households was 95.9%, as compared with 82.9% for non-SNAP households, as shown in Exhibit 3.11. Almost two-thirds of SNAP households (62.5%) redeemed all of their SEBTC benefits for the summer, while just one-third (33.1%) of non-SNAP households did so. In both groups, if households redeemed some but not all of their benefits, they redeemed at least 75% of their benefits.

In general, the differences in average redemption rates across States between SNAP and non-SNAP households mirror the differences in participation rates, with one exception: non-SNAP households in Connecticut participated more often but redeemed less of their benefits than in Oregon. Of the three SNAP-model States, Connecticut had the lowest mean redemption rate for SNAP households (90.8%), while Missouri had the lowest mean redemption rate for non-SNAP households (71.7%). Oregon had the highest redemption rates for both categories (99.2% for SNAP and 92.1% for non-SNAP). Oregon also had by far the most households redeeming all of their benefits: 94.6% of SNAP households and 57.9% of non-SNAP households.

These results indicate that the SNAP-hybrid model leads to higher participation and redemption among SNAP households, based on comparing rates in Missouri and Oregon (the SNAP-hybrid-States) with those in Connecticut (the SNAP model with the separate SEBTC card). This is to be expected, because use of SEBTC benefits is automatic when SNAP households use their hybrid EBT cards. For non-SNAP households, the results are inconclusive; participation of non-SNAP households in SNAP-hybrid sites was both the lowest (Missouri) and the highest (Oregon). However, given the small number of sites and the mixed results, the study cannot draw any conclusions from these data about the relative merits of the two SNAP models, especially for non-SNAP households.

Both SNAP and non-SNAP households followed the overall pattern of redemption rates over time: rising from June to July and falling less markedly from July to August (Exhibit 3.12).

Exhibit 3.11   Distribution of SNAP and non-SNAP Households by Percentage SEBTC Redeemed, All Months by State

State	SNAP Status	N	Mean Percentage of Dollars Redeemed	Mean Percentage of Households Redeeming					
				0% of Benefits	>0 and <=25% of Benefits	>25 and <=50% of Benefits	>50 and <=75% of Benefits	>75 and <100% of Benefits	100% of Benefits
Connecticut	SNAP	800	90.8%	3.0%	0.4%	1.0%	2.5%	76.6%	16.5%
	non-SNAP	557	88.5%	5.0%	0.7%	0.4%	3.8%	67.3%	22.8%
Missouri	SNAP	1,027	96.7%	1.2%	0.0%	0.6%	0.5%	31.5%	66.2%
	non-SNAP	452	71.7%	26.1%	0.2%	0.9%	0.7%	38.1%	34.1%
Oregon	SNAP	1,029	99.2%	0.0%	0.0%	0.4%	1.1%	4.0%	94.6%
	non-SNAP	216	92.1%	6.0%	0.0%	0.9%	0.9%	34.3%	57.9%
All SNAP States	SNAP	2,856	95.9%	1.3%	0.1%	0.6%	1.3%	34.2%	62.5%
	non-SNAP	1,225	82.9%	13.0%	0.4%	0.7%	2.1%	50.7%	33.1%

Source: SEBTC transaction data, summer 2011

Exhibit 3.12   Distribution of SNAP and non-SNAP Households by Percentage SEBTC Redeemed, All States by Month

Month	SNAP Status	N	Mean Percentage of Dollars Redeemed	Mean Percentage of Households Redeeming					
				0% of Benefits	>0 and <=25% of Benefits	>25 and <=50% of Benefits	>50 and <=75% of Benefits	>75 and <100% of Benefits	100% of Benefits
June	SNAP	2739	91.4%	6.6%	0.7%	0.7%	1.1%	12.9%	78.1%
	non-SNAP	1246	65.0%	30.6%	0.5%	1.8%	3.5%	26.4%	37.2%
July	SNAP	2679	95.7%	2.4%	0.5%	0.8%	1.0%	16.2%	79.1%
	non-SNAP	1385	78.8%	17.0%	0.4%	2.1%	3.0%	36.0%	41.4%
August	SNAP	2658	92.8%	3.1%	0.4%	0.9%	2.3%	28.9%	64.4%
	non-SNAP	1403	77.3%	16.1%	0.4%	0.9%	3.0%	46.8%	32.9%
All Months	SNAP	2,856	95.9%	1.3%	0.1%	0.6%	1.3%	34.2%	62.5%
	non-SNAP	1,225	82.9%	13.0%	0.4%	0.7%	2.1%	50.7%	33.1%

Source: SEBTC transaction data, summer 2011

July was also the peak month for benefit exhaustion (redeeming all benefits) for both groups, while August was the low month for this measure. The distribution of redemption rates for SNAP households was mostly stable over time, but non-participation (redeeming no benefits) among non-SNAP households fell dramatically from 30.6% in June to 17.0% in July and even lower at 16.1% in August. This pattern might indicate that the non-SNAP households became more familiar or comfortable with using their benefits over time, but other factors (such as differences in availability of other resources) might also explain the changes.

3.7   Shopping Patterns by Store Type

We analyzed SEBTC participants' shopping patterns by linking the redemption data with FNS and State data on retailer store types, as described in Section 3.2. The key measure was the percentage of all benefits redeemed by stores of each type. This measure is an aggregate percentage for each site, not a household-level mean.

Stores were classified according to the store type assigned by FNS. To simplify the presentation, we combined supermarkets and superstores (i.e., big-box type stores larger than supermarkets) into a single "supermarket" category. Similarly, grocery stores of different sizes were combined into a single category, as were the various types of convenience stores. The "other" store type includes the various specialty store types (meat, seafood, produce, and bakery) as well as miscellaneous other store types (such as buying co-ops). The "unknown" store type appears for stores that were not matched to the FNS data for the State. This happened if the store was authorized after April 2011, or if the store was out of State.

The retailer classification in Michigan is based on the State WIC agency's database since data from retailers could not be merged with the FNS data to obtain the FNS store type.[43] Thus, there may be some inconsistencies in how similar stores are classified between Michigan and the other States.

Supermarkets accounted for over half of redemptions in every State and 76.9% overall (Exhibit 3.13). This percentage ranged from 52.0% in Michigan to 85.6% in Oregon; all three SNAP sites had supermarket redemption rates above the overall average. Grocery and convenience stores had similar shares overall but very different shares across the States. (The grocery store redemptions in Michigan may include other store types, due to data limitations described above.) Other store types rarely had redemptions, and only Missouri and Oregon had any redemptions in farmers' markets – despite the timing of the demonstration in summer. Across all States combined, the shares of redemptions in each store type were very consistent from month to month (Exhibit 3.14).

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[43] For Michigan, FNS numbers in the FNS retailer file were not the same as those in the Michigan EBT transaction data.

Exhibit 3.13   Percentage of SEBTC Redeemed by Store Type, by State for All Months

State	Supermarkets	Grocery	Convenience	Farmers Markets	Other	Unknown
Connecticut	87.0%	1.6%	5.8%	0.00%	0.7%	5.0%
Michigan	52.0%	48.0%	0.0%	0.00%	0.0%	0.0%
Missouri	79.8%	3.5%	10.4%	0.10%	1.0%	5.1%
Oregon	85.6%	2.5%	6.6%	0.03%	3.3%	1.9%
Texas	68.5%	12.0%	12.9%	0.00%	0.0%	6.6%
All States	76.9%	10.9%	7.2%	0.03%	1.2%	3.7%

Source: SEBTC transaction data, summer 2011

Exhibit 3.14   Percentage of SEBTC Redeemed by Store Type, by Month for All States

Month	Supermarkets	Grocery	Convenience	Farmers Markets	Other	Unknown
June	75.1%	12.8%	7.8%	0.02%	1.2%	3.2%
July	77.4%	10.3%	7.2%	0.05%	1.1%	3.9%
August	77.7%	10.1%	6.8%	0.02%	1.4%	3.9%
All Months	76.9%	10.9%	7.2%	0.03%	1.2%	3.7%

Source: SEBTC transaction data for summer 2011

3.8   Benefit Exhaustion

When households redeem all of their benefits, this event can be viewed two ways. On the one hand, it indicates that the household values the benefits enough to redeem them; this perspective makes benefit exhaustion a positive outcome from the perspective of program implementers. However, benefit exhaustion also provides evidence of hardship; i.e., such households may be constrained from meeting their full demand for food by the limits of the benefit and their other resources. In particular, exhausting benefits before the end of the month may be related to food insecurity, and the sooner the benefits are exhausted, the more days remain in the month when household food supply might be inadequate. Therefore, we examined the prevalence of benefit exhaustion and the patterns in the number of days from the date of issuance to the date of benefit exhaustion (i.e., how long the benefit lasted). [44] In the SNAP hybrid sites (Oregon and Missouri), the SEBTC system automatically drew down SEBTC benefits before SNAP benefits. In the other sites, participants with SEBTC and SNAP benefits chose which benefits to use first. It should be noted, therefore, that the SEBTC transaction data do not provide any information on food purchases with other resources, so for SNAP households, benefit exhaustion before the end of the month in Connecticut, Texas, and Michigan may merely indicate that the households

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[44] For SNAP States, a household was defined as exhausting its benefits if it redeemed 100% of the available benefit for the month. In the WIC sites, households were considered to have exhausted their benefits if they redeemed their entire credit for fruits and vegetables ($14 in Michigan and $16 in Texas) and if they redeemed enough of their benefits in all other food categories that they could not purchase any more. For some food categories, such as cereal, the benefit was denominated in ounces, and allowable package sizes varied. As a result, it was possible to have several ounces of the benefit left, but not enough to buy another package of the minimum size.

chose to use the SEBTC benefit before their SNAP benefits. More generally, benefit exhaustion may be viewed as the result of a choice to use SEBTC before other resources.

Across all sites, over half (57.0%) of households exhausted their SEBTC benefits in at least one month (Exhibit 3.15). Michigan had the lowest percentage of households with any benefit exhaustion (7.3%) while Oregon had the highest (94%). Over two-thirds of households exhausted their benefits in all three SNAP model sites. Benefit exhaustion happened more than five times as often in Texas (36.1%) than in Michigan (7.3%) but still far less than in Connecticut (66.5%) and Missouri (84.2%). The difference between the WIC and SNAP model sites is as expected, given the difference between the models: WIC only authorizes specific foods, while SNAP benefits have few restrictions on eligible foods.

Households that exhausted their benefits did so 10.3 days on average after the beginning of the issuance cycle (usually the first of the month); half of all benefit exhaustion events occurred 8 days or less after the start of the cycle. The average days to benefit exhaustion ranged from 6.7 in Oregon to 24.7 in Michigan in those instances when benefits were exhausted. In both Connecticut and Oregon, 25% of benefit exhaustions took place 3 days or less after the start of the cycle. In contrast, the 25th percentile was at 22 days in Michigan and 14 days in Texas.

Exhibit 3.15   Exhaustion of SEBTC Benefits by State for All Months

State	Exhausted Benefits Once or More Often		Days to Benefit Exhaustion				
	# Households	% Households	Mean	25th Percentile	Median	75th Percentile	Maximum
Connecticut	903	66.5%	9.6	3	8	14	30
Michigan	99	7.3%	24.7	22	27	29	30
Missouri	1246	84.2%	11.3	5	10	16	31
Oregon	1171	94.1%	6.7	3	5	8	35
Texas	551	36.1%	19.2	14	20	27	30
All States	3970	57.0%	10.3	4	8	15	35

Source: SEBTC transaction data for summer 2011

Note: Statistics on days to benefit exhaustion are based on all months in which a household spent their entire balance by the end of the month. Thus, households that exhausted their benefits every month by the end of the month are counted three times in computing the mean and distribution of days to benefit exhaustion. The August benefit cycle lasted 36 days in Connecticut and Oregon.

3.9   Relationship of Participation, Redemption, and Exhaustion to Site and Household Characteristics

To better understand the site and demographic factors that affect SEBTC benefit use, modeling was used to determine the relationship of these factors to the four measures of SEBTC benefit previously described with aggregate data:

- The participation rate, i.e., percentage of all households that were issued benefits that redeemed any benefits,

- The redemption rate, i.e., percentage of benefits redeemed by participating households,
- The exhaustion rate, i.e., percentage of all households that were issued benefits that redeemed all of their benefits, and
- Time to exhaustion, i.e., the number of days elapsed from when benefits are issued to when they are exhausted, among households that exhausted their benefits.

The regression analysis shows that the basic differences in use of SEBTC benefits across sites in the aggregate data persist after controlling for demographic characteristics, food security, and food assistance program participation as of the time of the spring survey. In addition, the analysis identifies some outcomes that are related to baseline SNAP or FRP breakfast participation, or both. The results suggest that households that have previously participated in food assistance programs are more likely to exhaust their SEBTC benefits. Finally, several key demographic characteristics appear to be associated with participation, redemption, and benefit exhaustion.

The balance of this section first describes the methods used in the modeling, and then presents the results of the analysis. More details on methods and results are presented in Appendix 3B.

3.9.1 Regression Analysis Approach

To conduct the regression analysis of benefit use, the team merged the EBT transaction data with data on the characteristics of households in the treatment group. The resulting data set represents the treatment group households who responded to either the spring or summer survey and gave consent for access to their individual EBT records.[45] Thus, the respondents are self-selected both as survey respondents and through the consent process. The study used characteristics measured in the spring before the SEBTC demonstration and weighted the data to adjust for sampling and non-response.[46] Around 16% of the sample did not respond in the Spring. Therefore, missing values were imputed using multiple imputation so that we would not bias the results by excluding the Spring non-respondents. The imputation procedure leads to an increase in the standard errors of the parameter estimates which affects the ability of the model to detect statistically significant relationships between the outcome and explanatory variables. Nevertheless, the results do suggest associations between the outcomes and some key demographic variables.[47]

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[45] Transaction data used in the aggregate analysis did not contain individual identifiers that could be linked with the survey sample. To simplify the initial consent process, access to identified transaction data when households consented to share their information for random assignment was not requested. Therefore, consent was requested in the survey.

[46] For households that did not respond to the spring survey, we imputed missing values using sequential regression multiple imputation. See Appendix 3B for details on the imputation method.

[47] Among the explanatory variables, relative income has a sizeable number of missing values for households that completed the spring survey, which further reduces the model's ability to detect an association between income and the outcome variables.

The sample of households used in the regression analyses consists of households that consented to allow the evaluation study to use their EBT data. Of the 3,647 households in the treatment group, 3,033 households gave consent, and the team was able to match survey data to EBT transaction data for a total of 2,991 households.

An important goal of the analysis was to explore the extent to which site differences observed in the aggregate data were primarily due to socio-demographic differences or to SEBTC implementation practices in each site. Therefore, all models included controls for site effects and variance components at the site level.

The data for redemption, benefit exhaustion, and time till exhaustion had monthly records for each household. The redemption rate model includes, for each month, participants who redeemed their benefits. The time to exhaustion model includes, for each month, only those participants who exhausted their benefits for the calendar month. For the three models using monthly data, we included controls for the month, given the observed variation by month in the aggregate data. As shown in Exhibit 3.1, the number of days in the monthly issuance cycles varied by month and by site. Therefore the evaluation team also controlled for the length of the cycle period.

The participation data had only one observation per household for the entire summer, so month effects for this outcome were not estimated. The continuous outcome variables (the redemption rate and days to benefit exhaustion) were based on ordinary least-squares (OLS) regression models, and the binary outcome variables were based on logistic regression models.

The results presented in this section, particularly the differences between models of implementing SEBTC are far from conclusive and should be interpreted with caution. The results use cross-sectional data with a relatively small set of demographic variables and only five sites. It is quite possible that the results could be explained by unobserved differences among the sites. The full demonstration in 2012 will provide a more robust set of data to examine these relationships. Nevertheless, the evaluation team was able to test whether the relationships in the aggregate data are supported by the regression analysis.

Below, the regression estimates for the site and time effects are explained along with the implications of the results. In the discussion below, the standard for statistically significant results is the 5% level. Odds ratios are computed from estimated coefficients in logit models.

Section 3.9.3 discusses the findings regarding the effects of food security, SNAP participation, and WIC participation. Section 3.9.4 addresses the roles of household demographic characteristics. These findings are based on models that include demographic characteristics, food security, and SNAP and WIC participation prior to the demonstration. Each section presents just the estimates for a subset of the variables. The complete models are presented in Appendix 3B.

3.9.2   Site Effects on Benefit Use

Exhibit 3.16 summarizes the site effects and month effects estimated by the regression analysis. For the benefit redemption rate and the days to benefit exhaustion, the table provides the estimated change (in the units of the dependent variable) for a change of one unit in each control variable. For example, being in Connecticut is associated with an increase in the redemption rate by 5.2 percentage points and with a reduction in the number of days to benefit exhaustion by 8.6 days (among households that exhausted benefits), relative to Texas (the excluded category in the model), holding all other factors in the model constant.

Exhibit 3.16   Summary of Site and Time Effects on SEBTC Participation, Redemption, and Exhaustion

	Participation Odds Ratio[a]	Redemption Rate Estimated Coefficient[b]	Exhaustion Odds Ratio[a]	Days to Exhaustion Estimated Coefficient[b]
Connecticut	5.82***	5.17***	2.60***	-8.62***
Michigan	2.73***	-13.95***	0.12***	5.67***
Missouri	4.26***	10.79***	9.75***	-6.09***
Oregon	27.06***	8.06***	19.29***	-12.23***
June		2.26***	1.39***	2.11***
July		1.00**	1.20**	1.95***
Number of days in cycle		0.22***	1.04***	0.35***
Average number of monthly observations[c]	2853	7707	8560	3778

Source: SEBTC transaction data, summer 2011 *** $P \leq 0.01$ ** $0.01 < P \leq 0.05$ * $0.05 < P \leq 0.10$

Note: States displayed are relative to Texas and months are relative to August.

[a] As explained in the text, an odds ratio greater than 1 indicates that the odds of the outcome (participation or exhaustion) are greater than in the excluded category (Texas relative to the other states, and August relative to the other months), and the greater the odds ratio, the higher the odds of the outcome.

[b] The estimated coefficient of the site effect in the models of continuous outcomes (redemption rate and days to exhaustion) is the difference (in units of the outcome) between the site and the excluded site (Texas) after controlling for the other variables in the model.

[c] This is the average number of observations used across the 15 imputed datasets. The number of observations differs for each imputed dataset because some observations were dropped if the number of adults was less than 1. Number of adults is calculated by the difference between the imputed values of household size and number of children, which may differ across the imputed datasets for a given household.

For the participation and exhaustion rates (the binary outcomes), the table provides the odds ratios for the variables. An odds ratio of greater than one indicates that the variable is associated with increased odds of the outcome; an odds ratio less than one indicates that the variable is associated with reduced odds of the outcome. As an example, for the participation model, the estimated odds ratio for participation by Oregon households is 27.06. This means that the odds of participation (i.e., the participation rate divided by the non-participation rate) in Oregon are 27.06 times the odds in Texas, after controlling for

differences in household characteristics. Again, Texas is the excluded or "comparison" category in the models.

The sites using the SNAP model (Connecticut, Missouri, and Oregon) had higher participation, redemption and exhaustion rates than the sites using the WIC model (Michigan and Texas). Households in the SNAP sites also exhausted their benefits more quickly (as shown by the negative effects on days to exhaustion). This is the expected pattern in States using the SNAP-hybrid model, where SEBTC is used automatically when a SNAP participant uses his or her EBT card, without any special action being necessary. However, the finding that the Connecticut (the non-hybrid SNAP model) also had higher participation, redemption, and exhaustion rates suggests that other factors may have contributed to this difference, such as ease of use and choice of foods. Comparison of the regression results with the aggregate data highlights the importance of controlling for demographic differences when comparing outcomes across sites. [48]

Among sites using SNAP or WIC models, the sites with active consent had higher participation rates than passive consent sites. The SNAP sites with active consent, Connecticut and Oregon, had higher participation rates than in Missouri. Among the WIC sites, Michigan had active consent and a higher participation rate than Texas. This is the expected result as active consent eliminated households from the demonstration that did not want the benefit or could not be located, two factors that led to non-participation in the passive consent sites.

Among the SNAP sites, the two using the SNAP hybrid model (Missouri and Oregon) had higher redemption and benefit exhaustion rates than Connecticut, the site with a separate SEBTC-SNAP card. This result is consistent with more benefit use related to automatic benefit redemption in the hybrid model sites, described above.

Comparing the months of the demonstration, June and July had higher benefit exhaustion rates than August (the omitted month in the model), and June had a higher redemption rate than either July or August. In two sites (Connecticut and Texas), there was evidence from daily transaction data patterns that confusion about the end of the final benefit period led participants to leave benefits unused. Not surprisingly, the model indicates that when the benefit period was longer, participants were more likely to exhaust their benefits, but they took longer to do so.

3.9.3   Effects of Food Security and Program Participation on Benefit Use

As shown in Exhibit 3.17, households experiencing low food security in the spring, before SEBTC benefits were issued, redeemed more of their SEBTC benefit (at the 5% significance

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[48] In the regression model, the odds of participating   were higher in Missouri than in Michigan after controlling for other factors (compared to the aggregate unadjusted data showing that Michigan had a slightly higher participation rate than Missouri, 91.8% compared to 91.2%; see Exhibit 2.6).

level), and there is weak evidence that these households exhausted their benefits sooner.[49] There is no significant relationship between low food security in the spring and participation and benefit exhaustion. None of the relationships were statistically significant for households with VLFS at the p< .05 level. Thus, prior food security status does not appear to influence the take-up of SEBTC during the summer, but it does appear to affect redemption by participating households and may affect the rate of benefit exhaustion for those who exhaust their benefits. There is no evidence that these effects are different for households with very low food security.

Households with prior SNAP and FRP breakfast participation were more likely to exhaust their SEBTC benefits. Moreover, households with prior SNAP exhausted their benefits sooner. Prior participation in SNAP and FRP breakfast does not appear to be related to SEBTC participation or redemption rate. There is no statistically significant indication that households that participated in WIC had different participation, redemption, or benefit exhaustion patterns.

Exhibit 3.17   Summary of Food Security and Program Participation Effects on SEBTC Participation, Redemption, and Exhaustion

	Participation Odds Ratio	Redemption Rate Estimated Coefficient	Benefit Exhaustion Odds Ratio	Days to Exhaustion Estimated Coefficient
Food insecure households[a]	1.22	1.06**	1.00	-0.55*
Very low food security – household	0.96	-0.06	0.93	-0.15
Free/reduced priced breakfast	1.48	1.08	1.34**	-0.52
SNAP household[b]	1.11	-0.32	1.51***	-1.38***
WIC household[b]	1.35	-0.14	1.11	0.39
n [c]	2853	7707	8560	3778

Source: SEBTC transaction data, summer 2011.

[a] Households categorized as either experiencing low food security or very low food security.

[b] Households' program participation at baseline, before SEBTC benefits were issued.

[c] This is the average number of observations used across the 15 imputed datasets. See Appendix 3C for further details.

*** P ≤ 0.01   ** 0.01 < P ≤ 0.05   * 0.05 < P ≤ 0.10

3.9.4   Effects of Demographic Characteristics on Benefit Use

The regression analysis provides insight into household demographic characteristics that are related to use of SEBTC. Below, we identify the demographic factors related to each of the four outcomes. Significant findings shown in Exhibit 3.18 are listed below.

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[49] A description of the construction of the household measure of food security is found in Chapter 5. Readers may note that the estimated participation odds ratio for households with very low food security spring is less than 1, suggesting that these households were less likely than others to participate. However, this conclusion is not be appropriate because the estimate is not statisticallydifferent from 1.

- Two demographic factors significantly reduced the odds of SEBTC participation, according to the model results: being Hispanic and having more adults in the household.
- With respect to an increased rate of SEBTC benefit redemption, the two factors associated were the age of the oldest child and if the head of the household has less than a high school education.
- With respect to a decreased rate of SEBTC benefit redemption, there were two associated factors: being non-Hispanic black and living in a household with only a male caretaker.
- Households with a Hispanic caretaker were less likely to exhaust their benefits.
- Benefit exhaustion was faster in households where the household respondent had less than a high school education.
- Household characteristics associated with slower rates of benefit exhaustion include being Hispanic, whether an adult household member was employed, and the age of the oldest child.

Exhibit 3.18   Summary of Household Demographic Effects on SEBTC Participation, Redemption and Benefit Exhaustion, and Days to Exhaustion of Benefits

	Participation Odds Ratio	Redemption Rate Estimated Coefficient	Benefit Exhaustion Odds Ratio	Days to Exhaustion Estimated Coefficient
Black	0.92	-3.66***	0.92	0.37
Hispanic	0.50**	0.14	0.68***	1.37***
Less than a high school education	1.09	1.57***	1.12	-0.82**
Number of adults	0.80**	-0.07	0.93*	-0.05
Only female caretaker	0.98	-0.83*	1.08	0.18
Only male caretaker	1.53	-3.69**	0.91	1.44
Age of oldest child less than 21 years	1.04	0.20***	1.01	0.09**
Number of children	1.06	0.13	1.00	0.07
Employment status	1.42	-0.14	0.98	0.67**
Relative income to poverty line	1.53	-1.17*	0.90	0.44
Relative income to poverty line squared	0.89	0.18	1.01	-0.06
n	2853	7707	8560	3778

Source: SEBTC transaction data, summer 2011

*** P ≤ 0.01   ** 0.01 < P ≤ 0.05   * 0.05 < P ≤ 0.1

These analyses have two broader implications. First, they suggest the usefulness of looking at regression adjusted impacts, rather than raw differences across sites. Most notably, the aggregate data indicated a lower participation rate in Missouri than in Michigan, but Missouri households were more likely to participate after controlling for differences in demographic characteristics and other baseline characteristics. Thus, demographic differences across sites can obscure the effects of the sites implementation strategies. Secondly, the regression analyses point out lower participation and exhaustion rates among Hispanic households, which may be due to cultural factors or to program factors. These

results suggest the utility of further focus on participation among Hispanics as the demonstration is expanded in 2012.

Chapter 4

Characteristics of Households in the SEBTC Demonstration

This chapter describes the characteristics of households taking part in the SEBTC demonstration areas, drawing largely from surveys of over 5,000 households prior to the end of the school year and during the summer. It sets important context to help understand and interpret the impacts of SEBTC that are discussed in the subsequent chapter.

4.1   Research Questions and Key Findings

4.1.1   Research Question

The major research question addressed by this chapter is:

> What are the characteristics of households that took part in the SEBTC demonstrations? Were they balanced between the treatment and control groups?

Some of the characteristics described in this chapter could be affected by receiving SEBTC, such as where children usually eat lunch, or use of SNAP or WIC. These estimates are based on summer responses from the control group or on the responses from both the treatment and control groups in the spring instead of during the summer, whichever is most appropriate. The following chapter answers questions related to the impact of SEBTC on these characteristics.

4.1.2   Key Findings

Households taking part in SEBTC the demonstration had the following characteristics:

- Almost half of the households reported having more than one adult (47.2%), and almost half of the households (49.5%) had one adult who was female. In terms of race/ethnicity, the largest group identified themselves as Hispanic (40.5%) with the next largest group being non-Hispanic white (32.7%). The mean number of children in the households (both school age and younger) was 2.4.
- In terms of income, households were relatively disadvantaged, compared to the national population. Reported mean household monthly income was $1,572, with 3.8% reporting no income that month. Nearly three-fourths of the households (72.6%) had monthly incomes below the federal poverty line,[50] ranging from 65.3% of households in

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[50] The Federal Poverty Level (FPL) is adjusted for household size. An FPL is calculated for the contiguous United States, Alaska, and Hawaii. The 2011 FPL for a family of 4 is $22,350 per year (i.e., $1,863 per month) in the 48 contiguous States.

Connecticut to 78.6% in Michigan. Over two thirds (69.5%) reported at least one employed adult in the household.

- Respondents reported that, during the summer, nearly 90% of children (estimates using control group only) usually ate lunch at home during the previous 30 days. Seven percent reported that children usually ate at school or an identified SFSP site. Some respondents also indicated that children who usually ate lunch at home also ate elsewhere. When including these secondary locations, 13% of children usually or sometimes ate lunch at a school or identified SFSP site.

- Nearly two-thirds of the households (63.8%) reported receiving SNAP benefits in the spring, prior to when SEBTC began. Nearly one quarter (23.5%) reported receiving WIC. During the summer, very few households (estimates using control group only) reported that their children received NSLP or SFSP as their primary source of weekly lunch in the summer (2.1% and 4.6% respectively).

- Tests of balance indicate that there was no difference between households consented to be in the demonstration sample, selected to receive SEBTC, and those not selected. Tests also indicate that the subsample selected to receive the household survey (i.e., the treatment and control group), was also balanced.

Chapter 4 first describes the random assignment process, survey response rates, and data collection approach and the survey instrument. It then describes key characteristics of households in the demonstration.

4.2 Overview of Random Assignment and Household Survey Data Collection

4.2.1 Conducting Random Assignment

As described in Chapter 2, the process of consent and random assignment required several steps. First, participating SFAs constructed lists of households with children certified for FRP meals. After obtaining consent from families (by either passive or active processes) the SFAs sent the lists to the evaluation team. The team then randomly assigned the families to be in the benefit group or non-benefit group, with the objective of assigning 2,500 children to receive the benefit. Next, the team randomly selected an evaluation subsample of households from the benefit and non-benefit group to participate in the household survey.

The essence of random assignment is that otherwise identical units are assigned "randomly"—that is, the equivalent of a coin toss—to either the benefit group or the non-benefit group. If the random assignment process is done successfully, the two groups should not differ systematically in any of their background characteristics, measured or unmeasured. As a result, any subsequent differences in outcomes between the two groups that are statistically significant (that is, not due to chance variations) can be interpreted confidently as impacts of the intervention.

To assess whether the randomization process was successful in achieving balanced groups, balance tests for the benefit and non-benefit group (and for the subsample selected for the evaluation) were conducted using information obtained from the grantees about children's characteristics (age, grade, gender, school lunch status, and so on). Using this information, key joint tests showed no evidence of imbalance. (See Appendix 4A for more details.)

4.2.2 Response Rates

Exhibit 4.1 shows the weighted response rates in the spring, again in the summer, and by site. (See Appendix 4B for details about the sampling plan and computation of the weighted response rate.) The survey achieved a 67.5% weighted response rate in the spring and a 66% response rate in the summer. Across all the sites, the summer response rate among households in the treatment group was 71.6%, compared to 60.5% in the control group. The overall summer response rate varied substantially by site, with the highest response rates in Michigan and Oregon (78% and 71%, respectively) and the lowest in Missouri (52%). The two major reasons for the relatively high degree of variation among sites were the quality of contact information and the length of the field period, which ranged from 22 to 52 days, depending on the site. Several sets of weights were constructed to correct for differences between the treatment and control group households with completed interviews.

Exhibit 4.1   Weighted Response Rates, All Sites and by Site, Spring and Summer POC Year

Weighted Response Rates	All Sites	Connecticut	Michigan	Missouri	Oregon	Texas
All Cases - Spring	67.5%	64.2%	73.0%	61.6%	71.1%	68.2%
All Cases – Summer	66.0%	69.9%	78.4%	51.8%	70.6%	60.0%
Treatment – Spring	70.6%	66.5%	76.9%	65.8%	75.6%	69.2%
Treatment – Summer	71.6%	74.6%	83.8%	55.6%	76.0%	68.7%
Control – Spring	64.4%	61.9%	69.1%	57.4%	66.7%	67.2%
Control – Summer	60.5%	65.2%	73.0%	47.9%	65.2%	51.6%

Source: Spring and Summer Household Samples, 2011

4.2.3 Household Survey Data Collection

For both the spring and the summer surveys, telephone calls were made from the evaluation team's call centers using computer-assisted telephone interviewing (CATI). Prior to the CATI calls, advance letters were mailed to households selected for the evaluation sample. These letters provided information about the study and stated that the interviews were voluntary and would not affect the receipt of any benefits, and that the findings would be confidential. A telephone number for additional questions was also provided.

Data collection efforts included in-house and field locating. If the information from the grantees' household lists was inaccurate or incomplete, additional efforts were needed to find alternative telephone numbers and addresses through in-house locating efforts (e.g., using web searches of telephone and address data bases). Some of the nonrespondents to the CATI interviews were assigned to field location. If a respondent was located in the field, he or she was then connected to the call center to complete the survey.

4.2.4 Survey Instrument

Household surveys were administered in the spring and during the summer by telephone. Both took approximately 30 minutes to complete. The survey was conducted in English or Spanish. The spring survey included questions on household characteristics, household participation in nutrition assistance programs, household food security, monthly food expenditures, and children's nutrition program participation, breakfast eating, and food consumption. Interviews were conducted with the adult respondent in the household who knew the most about what the focal child[51] ate and drank. Respondents received a $10 incentive (gift card) for completing the spring survey. During the summer, the second survey collected similar information, with the exception of some questions about household characteristics, which were not asked if a respondent had already completed a spring survey. In addition, the summer survey also asked questions related to the guardian's perceptions of and satisfaction with the SEBTC benefit, which were asked if the household had been assigned the SEBTC benefit. Respondents received a $10 incentive (gift card) for completing the summer survey.

A copy of the spring and summer survey instruments can be found in Appendix 4C.

4.3 Household Characteristics

The exhibits in this chapter are summary findings for the study population that completed a summer interview. They are representative of the study population in the POC year.[52] The sample is not nationally representative, nor necessarily representative of the FRP population as a whole. In fact, as described in Chapter 2, compared to estimates of the national population, the demonstration areas tend to include a higher proportion of households living below the poverty line, a higher proportion of students who are racially and ethnically diverse, and a higher proportion of students eligible for FRP meals. These and additional characteristics for both the total study population and for each site are provided in Appendix 4D. In some cases, for characteristics that might be influenced by the SEBTC intervention, such as household's participation in federal nutrition programs or places where children ate during the summer, either the household characteristics in the spring or for the control group in the summer were used, whichever was most appropriate.

4.3.1 Household Size and Composition

In what follows, we present average estimates across all sites. We also test for variation across sites, and only mention differences if they meet the p-value standard of below .05, suggesting strong evidence of variation. Across all five sites, the mean number of people in

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[51] One eligible child per sampled household was randomly selected to be the focus of the child-level questions.

[52] These estimates are very similar to those reporting in the POC Year Congressional Status Report (Briefel et al., 2011). They do not match exactly because respondents to the summer 2011 survey were not exactly the same as the respondents to the baseline survey.

the household was 4.4, ranging from 4.2 to 4.6 (p<0.001).[53] (Exhibit 4.2; Appendix Table 4D.1). This number includes all reported adults and all children, including younger children who were not eligible for SEBTC. Almost half of the households reported having more than one adult (47.2%), and almost half (49.5%) had one adult who was female. The remaining households (3.2%) had one adult who was male. Household composition varied significantly across sites, with Missouri reporting almost two-thirds (62.5%) of its households with one female adult, compared to Oregon (37.8%) (Appendix Table 4D.1).

The mean number of children in households was 2.4, and this included children of all ages-—those attending school and certified for FRP school meals, younger children who had not yet started school, and any other children living in the household.[54] The mean number of children was similar across sites (See Appendix Table 4D.1).

4.3.2   Household Income

Eligibility rules specifically limit participation in the SEBTC program to those certified for FRP lunch (that is, at or below 185% of the federal poverty line). It would therefore be expected that the survey sample would be relatively disadvantaged, and, in fact, mean monthly household income in the last month prior to the summer survey was $1,572, with 3.8% reporting no income that month (Exhibit 4.2). Nearly three-fourths of the survey population (72.6%) had monthly incomes below the FPL,[55] ranging from 65.3% of households in Connecticut to 78.6% in Michigan (Appendix Table 4D.1).[56] In keeping with the fact that the demonstration areas included higher levels of household poverty when compared to national estimates (see Chapter 2), the proportion of households with children below the poverty line in this study population is substantially greater than the 56% reported among children certified for FRP school meals in the 2005-06 school year (Ponza et al., 2007).

4.3.3   Other Household Characteristics

Most respondents had at least one employed adult in the household (69.5%; Exhibit 4.2). Texas reported the highest percentage of employed adults (77.5%) and Missouri reported the lowest (63.9%). About 29% of households reported a person with a physical or mental disability, and this varied significantly across sites: 17.1% of households in Texas and 37.0% of households in Oregon (Appendix Table 4D.1).

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[53] A *p* value of .05 or lower indicates strong evidence of variation among sites. Differences among sites are only mentioned if the *p* value meets the standard of below .05.

[54] Children were defined as 18 years or younger or still in school (if older than age 18) and living with an adult in a household. Households also included group homes if children living in the home were certified for FRP school meals.

[55] The Federal Poverty Level (FPL) is adjusted for household size. An FPL is calculated for the contiguous United States, Alaska, and Hawaii. The 2011 FPL for a family of 4 is $22,350 per year (i.e., $1,863 per month) in the 48 contiguous States.

[56] In comparison, 20.1% of families with children reported being under the poverty level nationally based on the 2009 CPS (Census Bureau 2010, Table 4, p. 15).

Exhibit 4.2   SEBTC Household Characteristics in POC Sites, 2011

Characteristic	Estimate	SE
Household Size[a]		
Mean number of people in household	4.4	0.02
Household Composition[a]		
Household with one adult, female	49.5%	0.80
Household with one adult, male	3.2%	0.29
Household with more than one adult	47.2%	0.79
Number of Children[a]		
1 child	23.6%	0.60
2 children	33.6%	0.70
3 or more children	42.8%	0.68
Mean number of children in household	2.4	0.02
Last Month Household Income[a]		
Median	$1,297	25.16
Mean	$1,572	21.29
No income (Last Month)	3.8%	0.31
Last Month Household Income[a]		
Below poverty line[b]	72.6%	0.72
101-130 percent of poverty line[b]	13.0%	0.53
131-185 percent of poverty line[b]	9.7%	0.48
Above 185 percent of poverty line[b]	4.7%	0.37
At least one employed adult	69.5%	0.74
Any person with a physical or mental disability	29.0%	0.72

Source: SEBTC, Summer Survey, 2011 (n=5,237)

[a] The respondent reported the household's characteristics and circumstances in the last 30 days (and last month for income). Means and medians include households with zero income.

[b] Poverty level was calculated based on reported household income last month before taxes, household size, and the HHS poverty guidelines (http://aspe.hhs.gov/poverty/11poverty.shtml).

4.3.4   Characteristics of the Survey Respondents

In addition to describing characteristics of their households, respondents also provided information on personal characteristics. Most of the summer survey respondents were female (89.6%) and approximately 70% were between the ages of 30 and 49 (Exhibit 4.3). There was some age variation across sites: one-quarter of Michigan respondents were between the ages of 18 and 29 and Texas had the smallest proportion of respondents in that age category (12.9%). Texas had the highest proportion of respondents over 50 years of age (17.1%); Michigan reported the lowest (9.6%) (See Appendix Table 4D.2, for site-level details.)

In terms of race/ethnicity, the largest group identified themselves as Hispanic (40.5%) with the next largest group being non-Hispanic white (32.7%) (Exhibit 4.3). Michigan was the most racially and ethnically diverse with approximately equal proportions of respondents reporting being Hispanic, non-Hispanic black, and non-Hispanic white; Texas was the least racially diverse, with 94.2% of respondents reporting being Hispanic (See Appendix Table 4D.2.)

In terms of education attainment, the population was roughly evenly divided between those who did not complete high school , those who completed high school (or GED), and those who had at least some college (Exhibit 4.3). Michigan had the highest proportion of respondents who had not completed high school (41.8%) (See Appendix Table 4D.2).

Slightly over half the respondents reported being single (52.6%, including never married, separated or divorced, or widowed), with the remaining reporting they were married or living with a partner (47.3%) (Exhibit 4.3). Substantial variation existed across the sites: Oregon had the highest proportion of respondents married or living with a partner (59.5%), and Missouri the lowest (33.6%) (See Appendix Table 4D.2).

4.3.5 Characteristics of Children Certified for FRP Meals

The survey gathered information specifically about children in the sample certified for FRP meals, and thus eligible for SEBTC. These children were approximately equally distributed throughout school-age years; a small percentage was pre-school age (Exhibit 4.3). These younger children were enrolled in a school-based pre-school, and received subsidized meals from NSLP or SBP or another source of support, and were therefore eligible for the SEBTC demonstration.

The summer survey asked respondents whether their children usually ate lunch at home, Monday through Friday. If respondents indicated that their children ate elsewhere, they were then asked follow-up questions as to where. Respondents were also asked a second set of questions about other places their children ate.

Exhibit 4.3   Characteristics of SEBTC Respondents and Children Certified for Free or Reduced-Price Meals in POC Sites, 2011

Characteristic	Percent	SE
Gender		
Female (Respondent)	89.6	0.49
Male (Respondent)	10.4	0.49
Age of Respondent[a]		
18-29 years	17.6	0.62
30-39 years	44.1	0.79
40-49 years	26.1	0.70
50-59 years	9.1	0.46
60 years or older	3.2	0.31
Race/Ethnicity of Respondent[b]		
Hispanic	40.5	0.73
Non-Hispanic black	22.1	0.66
Non-Hispanic white	32.7	0.68
Other, non-Hispanic	4.7	0.31
Education Level of Respondent[c]		
Less than high school	32.5	0.74
Completed high school (or GED)	29.5	0.73
Some college (including 2-year degree)	31.4	0.75
Four-year degree or higher	6.6	0.40
Marital Status of Respondent		
Married	37.4	0.76
Living with partner	9.9	0.47
Separated or divorced	25.4	0.70
Widowed	2.4	0.24
Never married	24.8	0.70
Age of Children[a]		
3-4 years	3.0	0.31
5-8 years	31.8	0.83
9-12 years	31.2	0.83
13-15 years	18.8	0.71
16-17 years	10.2	0.57
>17 years	5.0	0.40

Source: SEBTC, Summer Survey, 2011 (n=5,237).

[a] Age of respondent and children were calculated from date of birth and the date the survey was administered.

[b] Responses to the separate race and ethnicity questions were combined to create a race/ethnicity variable, according to OMB reporting rules (See http://www.whitehouse.gov/omb/fedreg_race-ethnicity).

[c] Education level categories were condensed from the survey response categories to create those displayed.

To gain a sense of where children from the sample would typically eat in the absence of SEBTC, we provide information below for children in the control group. (The impact of SEBTC on whether or not parents pay for children's meals and on program participation is provided in Chapter 5.) Almost 90% of the control group respondents reported that, during the prior 30 days, their school-aged children usually ate lunch at home (Exhibit 4.4). Of those that reported that children usually ate at another location, 7.2% indicated that their children ate at a school or site that could be identified as using SFSP. Less than 4% of respondents

indicated that their children usually ate lunch at a friend's or relative's home, another program (some of which may be administered by an SFSP sponsor), or another place, such as work, or a fast food restaurant. There was some variation across sites in terms of the participation in school or an identified SFSP site, with 2.7% in Texas reporting that children usually ate at these locations, compared to 9.7% in Missouri (See Appendix Table 4D.3.)

Exhibit 4.4   Where Children Usually Ate Lunch, Monday through Friday, Summer 2011 (Control Group Only)

Location	Percent	SE
At home	89.5	0.80
At friend's or relative's home	1.1	0.31
School or Identified SFSP site	7.2	0.68
Another program (camp, church, playground, daycare)	1.6	0.31
Other (work, other place, don't know/refused)	0.5	0.16

Source: SEBTC, Summer Survey, 2011 (n=2,305)

If respondents indicated that their children usually ate at home, they were then asked where else children ate. Over half (55.7%) of respondents in the control group did not name an additional location. Of the remaining respondents, the majority (58.7%) indicated that their child ate at a friend or relative's home. Approximately 13% of respondents indicated that respondents ate lunch at a school or identified SFSP site (See Exhibit 4.5).

Exhibit 4.5   Secondary Place Where Children Usually Ate Lunch if They Most Often Ate at Home, Summer 2011 (Control Group Only)

Location	Percent	SE
At friend's or relative's home	58.7	2.00
School or Identified SFSP site	13.3	1.37
Another program (camp, church, playground, daycare not coded as SFSP))	6.9	0.93
Other (work, other place, don't know/refused)	21.1	1.68

Source: SEBTC, Summer Survey, 2011 (n=929)

In total, 12.5% of all control group respondents (including those that did not name an additional location where their children ate lunch) reported that a school or SFSP site was either the child's primary or secondary source of lunch from Monday through Friday.[57] This reported rate of participation is similar to national rates of program participation, which estimate that 15% of children who receive FRP meals during the school year receive either the school lunch program in summer school or SFSP (Food Research and Action Center, 2011).

Respondents in the control group who indicated that children usually did not receive a free meal through a program were asked if there was a program in their neighborhood that

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[57] Among the control group (n=2,305), 4.6% of households reported that their child ate at an SFSP site, an additional 2.6% reported that school was the primary location where their child ate, and an additional 5.3% reported that school was the secondary location where their child ate.

provided free meals to children during the summer months. Forty-two percent of these respondents from the control group said they were aware of such a program. Of these respondents, nearly 30% indicated that there was a logistical barrier to attending (29.3%), such as transportation difficulties, or their child was ineligible (3.5%) (Exhibit 4.6). Thirty-two percent indicated that the food served at home better fit their child's food preferences or nutritional needs and 12% indicated that they did not like some aspect of the program, besides the free meals served.

Exhibit 4.6   Reasons Provided for Why Children Did Not Attend Known Programs Providing Free Meals, Summer 2011 (Control Group Only)

Location	Percent	SE
Food at home better meets child need/preference	31.5	1.88
Does not like other aspects of the program	12.0	1.30
Logistical barriers to attending	29.3	1.88
Child is not eligible	3.5	0.64
Other	10.4	1.25

Source: SEBTC, Summer Survey, 2011 (n=944)

4.3.6   Participation in Nutrition Assistance Programs

Household Program Participation

Since SEBTC potentially has an impact on households' participation in federal nutrition programs, information from the spring survey is used here to describe program participation. In addition to participation in NSLP and SBP, in the spring, approximately three-quarters of households (73.5%) reported participating in at least one federal nutrition assistance program in the 30 days prior to the interview (Exhibit 4.7). Respondents most commonly reported using SNAP (63.8%), followed by WIC (23.5%). Participation rates varied across sites, with the highest proportion of Oregon respondents reporting participation in SNAP (75.4%). Michigan respondents reported the highest participation in WIC (32.2%) (See Appendix Table 4D.6). Overall, grantees' choice of the SNAP or WIC models for the SEBTC demonstration does not appear to be associated with the nutrition assistance programs in which the SEBTC households participated.

Participation in Summer Programs for School-Aged Children

In addition to being asked about the household's participation in federal nutrition programs, in the summer, respondents also were asked about their children's participation in SBP and NSLP (if they reported that the child ate lunch at summer school) and summer backpack programs. As described earlier, reported information on other locations where children ate lunch was used to determine if the location was an SFSP site in the local area. In the control group, more than 90% of children were reported not to participate in any summer nutrition program—neither SBP, NSLP, SFSP, nor a backpack program (Exhibit 4.7). The highest

reported participation was for SFSP (4.6%), about half the national average of 9.5% for SFSP participation in 2010 (Food Research and Action Center, 2011).[58]

Exhibit 4.7   Reported Participation in Household and Child Nutrition Programs in POC Sites, Summer 2011

Characteristics	Percent	SE
Household Benefits Prior to any Receipt of SEBTC[a]		
Reported receiving SNAP[b]	63.8	0.83
Reported receiving WIC[c]	23.5	0.72
Reported receiving food from food pantry/food bank	14.7	0.59
Reported receiving food at emergency kitchen	1.7	0.22
Reported receiving none of the above	26.5	0.77
Children's Benefits During the Summer 2011[d]		
Reported receiving NSLP[e]	2.1	0.30
Reported receiving SBP[f]	1.4	0.23
Reported meals at an identified SFSP site[g]	4.6	0.59
Reported receiving backpack program	2.4	0.38
Reported receiving none of the above	91.4	0.72

Source for Household Benefits: SEBTC spring survey, 2011 (n= 5,837 treatment and control)

Source for Children's Benefits: SEBTC summer survey (n= 2,348 control)

Note: Proportions for household benefits are based on household weights and proportions for children's benefits are based on child-level weights.

[a] Respondents reported benefits use in the spring survey. The respondent reported if anyone in the household or if the focal child received food assistance from any of the programs in the last 30 days, for the control group only. Estimates are based on the full sample of summer respondents who had completed a spring survey.

[b] Supplemental Nutrition Assistance Program.

[c] Special Supplemental Nutrition Program for Women, Infants and Children.

[d] Summer Sample, control group only

[e] National School Lunch Program. Respondents reported if their child received NSLP during the summer months (reported for control group only)

[f] School Breakfast Program. Respondents reported if their child received SBP during the summer months (reported for control group only)

[g] Summer Food Service Program site. Respondents reported that over the last 30 days that their child usually attended a program that could be identified as an SFSP site (reported for control group only).

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[58] As noted in Chapter 2, administrative data on SFSP participation in the demonstration sites (based on July participation) suggest higher participation rates (as high as 30% in the Missouri site). This discrepancy may reflect under-reporting by parents, an SFSP program reported by parents that could not be verified as SFSP, and/or the fact that SFSP programs tend to be less available in August, when many summer interviews took place.

Chapter 5

Impact of SEBTC on Children's Food Security, Nutritional Status, and Other Outcomes

5.1 Research Questions and Key Findings

The primary goal of the SEBTC demonstration is to improve children's food security and nutritional status in the summer by providing households with children certified for free or reduced-price meals during the school year with resources to buy food. In this chapter, we measure demonstration effects on a variety of food-related outcomes for both children and their households. All estimates use the experiment's randomly assigned control group, which did not receive SEBTC benefits, to establish what outcomes would have been for SEBTC recipients (the treatment group) without the intervention in the five POC sites.

5.1.1   Research Questions

This chapter provides the results of the impact analysis of the effects of SEBTC on food security among children, children's nutritional status, and other major outcomes associated with food security. Specifically, the chapter addresses five research questions:

1. What is the impact of SEBTC on very low food security among children (VLFS-C)? How does this vary by demonstration model, SNAP participation, poverty status, number of children in the household, presence of an adolescent in the household, and race/ethnicity? How does the SEBTC affect the change in the level of food security between the school year and summer?
2. What is the impact of SEBTC on the nutritional status of children? Does this vary by demonstration model, SNAP participation, and race/ethnicity?
3. How did participation in SEBTC affect household food expenditures?
4. How did participation in SEBTC affect household and children's participation in other nutrition programs, including SNAP, WIC, and SFSP?
5. How did participation in SEBTC affect where children ate meals during the summer?

5.1.2 Key Findings

The major findings of the analysis of SEBTC's impact in the POC year are as follows:

- SEBTC reduced very low food security among children (VLFS-C), the study's primary outcome, during the summer of 2011. The prevalence of VLFS-C was cut from 7.0% in the control group to 5.6% in the treatment group. In these five sites, SEBTC advances the demonstration's main goal, reducing children's very low food security in the summer.
- Analyses of related measures of food security—general food insecurity among children plus measures of both severe and general food insecurity among adults and households as a whole—indicates similar proportional reductions in these broader measures. Most notably, food insecurity among children was reduced from 38 to 31%. All of the food security results are robust using alternate impact estimation methods and, for one or more of the six measures of food insecurity used in this analysis, impacts occur in four of the five demonstration sites.
- The level of VLFS-C in the control group, which did not receive SEBTC, remained steady between spring and summer, even though most children did not participate in SFSP or receive NSLP or SBP (when attending summer school). For the broader measure of food insecurity among children, the prevalence rate fell by a statistically significant 4.2 percentage points between spring and summer, from about 43% in the spring to 39% in the summer. These findings are surprising, given children in the control group had limited access to federal children's nutrition programs during the summer.
- Variations in the size of SEBTC's impact on VLFS-C by demonstration model, SNAP participation, race/ethnicity, and other population subgroups cannot be sharply distinguished; however, statistical power to make such distinctions is limited in the POC year.
- Based on responses to the summer survey, children in SEBTC ate more fruits and vegetables and more frequently ate whole grains during the summer than those in the control group, though positive changes in diet in other areas (reductions in baked goods and sugar-sweetened drink consumption and increases in the share of children drinking nonfat or low-fat milk) were not reported.
- Available data on food expenditures made it necessary to estimate lower and upper bounds on the true impact in this area. The lower bound shows no impact on food expenditures, while the upper bound indicates an impact of as much as $10 per-person per month in WIC sites and as much as $26 per-person per month in SNAP sites. The evaluation interprets these results as a whole as inconclusive due to data ambiguities.
- SEBTC was estimated to increase participation in SNAP by 3.5 percentage points during the summer, while reducing SFSP participation by 1.3 percentage points. While it appears that WIC usage also increased in the treatment group, the household composition of respondents who said they were WIC participants in the summer but not in the spring indicate that they may not be eligible for the WIC program, and many were confusing regular WIC with SEBTC that used the WIC model for distribution.
- In a related measure of families' strategies for feeding their children during the summer, children in SEBTC households were 1.8 percentage points more likely than control

households to eat lunch at places where the household paid for the whole meal, most often at home.

For the five POC year sites taken together, these estimates provide very strong evidence that SEBTC improved VLFS-C as well as suggestive evidence of effects for other measures of food insecurity examined. While random assignment is considered the gold standard for estimating policy impacts, evaluation results in a small number of purposively selected sites do not necessarily generalize to the nation as a whole. For the full demonstration year, the study will include 14 sites and an evaluation sample of approximately 27,000 households, allowing more robust examination of variation across sites and across demographic groups. If results from the full demonstration year are on average consistent with these POC year results, then it will be more plausible to extrapolate the results to the nation as a whole.

The balance of this chapter presents this set of results in detail, as follows. The next section briefly discusses data and methods. The subsequent section presents results on food security, the study's primary outcome. Three later sections present estimates of the impact of SEBTC on other outcomes: children's nutritional status; household food expenditures; and where children ate lunch during the summer (including SFSP or other summer food programs) along with participation in other nutrition assistance programs (including SNAP and WIC).

5.2   Data and Methods

Chapter 4 provides details about the sample design and household data collection. This section provides an overview of the impact analysis data and methods. Additional methodological details are provided in Appendix 5A.

5.2.1   Analytic Approach

Unless otherwise noted, the analyses in this chapter follow the natural analysis strategy for a random assignment design; i.e., the analyses compare survey outcomes for the treatment group to outcomes for the control group as measured during the summer (the "cross-sectional" sample). Unless otherwise noted, all statistical significance measures (p-values) are for two-sided hypothesis tests, to allow detection of unexpected negative effects and offsetting favorable and unfavorable effects in different domains. In general, the results are described as statistically significant if the p-value is less than 0.05; i.e., this result would occur in only 1 in 20 samples if there was truly no impact.

Estimates are regression-adjusted and standard errors account for the analysis weights and the stratified sample design. Appendix 5B describes construction of the analysis weights, which adjust for both unequal probabilities of selection and possible nonresponse bias. Appendix 5C defines the variables used in the regression adjustment and provides descriptive statistics of those variables as well as of the outcome variables used in this

chapter. Appendix 5D presents supplementary results (some of which are discussed, but not presented, in the body of the chapter).

The chapter also reports analyses of SEBTC impacts in subsets of sites and for subgroups of participating households. For those analyses, the approach starts with testing for differences in impacts across sites or subgroups. If the test does not reject the null hypothesis of equal impacts, subgroup results are not discussed. For these tests, the study uses a slightly weaker standard of evidence (p-value of .10, rather than a p-value of .05 as in other analyses in this chapter); this allows more extensive analysis of demonstration effects on subgroups of sites or participants than the stricter standard would allow.

While most of the analyses use survey data for the summer, there are several exceptions. For some of the analysis related to household food expenditures, EBT data on SEBTC expenditures were appended to survey responses of the treatment group. Other analyses compare spring-to-summer changes in food security in the treatment group to spring-to-summer changes in food security in the control group to understand how SEBTC affects trends. These analyses only include households that responded to both the spring and summer surveys (the "panel" sample). As described in the previous chapter, separate weights were constructed for the cross-sectional sample, the panel sample, and the sample for which EBT data on SEBTC use were appended to the survey data.

5.2.2   Confirmatory and Exploratory Outcomes

This chapter reports impact estimates for many outcomes: several food security measures, two food expenditure measures, multiple nutrition measures, and various program participation measures. In addition, for some of these outcomes, the chapter also describes impacts on subgroups, including subgroups defined by the SEBTC model used by the site (i.e., the SEBTC-SNAP or SNAP-hybrid model or the SEBTC-WIC model) and, at the household level, SNAP participation, poverty status, number of children in the household, presence of an adolescent in the household, and respondent's race/ethnicity. Along with the estimates of impact, the chapter reports conventional standard errors and p-values for all impact estimates. For subgroups, the chapter reports tests for differences in impact. For reasons we discuss immediately below, we refer to these test results as "unadjusted" or "unadjusted for multiple comparisons."[59]

This large number of tests is problematic.   Conventional standard errors are appropriate only for a single test of the statistical significance of SEBTC's impact on that particular outcome in that particular model or subpopulation. Given the large number of outcomes and subgroups examined, the meaning of an entire set of statistical tests must be considered as a whole rather than treating each statistical test as an isolated examination of a single demonstration impact (Schochet 2008, 2009). This is because estimating impacts on a large number of outcomes using conventional statistical tests raises the probability of finding

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[59] All of the standard errors are adjusted for the complex sample design and weighting. In this context, "unadjusted" refers specifically to the issue of multiple comparisons.

statistically significant results in one or more tests due to sampling error, when in fact no impacts at all occurred, resulting in misinterpretation of results.

One correction for this problem is to adjust the conventional standard errors to take into account the fact that multiple tests of significance were conducted. However, this approach to correcting for multiple comparisons substantially decreases the study's ability to detect true impacts of any given size, reducing statistical power. The result is that few (if any) impacts are likely to be significant—even when the intervention truly affects many outcomes (see Schochet 2008, 2009).

This chapter takes an alternative approach in which the evaluation team specifies—before seeing the results—which outcomes are of primary interest. Such analyses are termed "confirmatory" and the reported statistical tests are corrected for multiple comparisons; other analyses are termed "exploratory" and the reported statistical tests are not corrected for multiple comparisons and are therefore interpreted with caution. In particular, confirmatory findings that tightly control the risk of "false positive" findings across multiple tests can be treated—when they produce statistically significant findings—as strongly *confirming* that SEBTC had an impact, whereas exploratory findings only suggest that impacts may have occurred given that the risk of "false positives" is substantially higher in these analyses.

Thus, before seeing any of the POC outcome data, FNS and the evaluation team specified very low food security among children (VLFS-C) as the primary outcome and the corresponding statistical test of an effect on this outcome as confirmatory. The study design specified that all other outcomes would be treated as exploratory and analysis of impacts on these outcomes can provide only suggestive evidence of additional effects if statistically significant findings emerge. This approach yields the smallest possible minimum detectable effect (MDE) for the confirmatory outcome, thus maximizing the evaluation's ability to prove the desired result in the POC year: that a SEBTC benefit has in fact reduced VLFS-C in the initial set of sites where it was implemented.

Consistent with this designation of VLFS-C as the sole confirmatory outcome (and all other outcomes as exploratory), conclusions about the success of the intervention can only be based on the statistical tests for VLFS-C. If a statistically significant impact on VLFS-C is found for the overall sample, there is strong evidence for positive impacts of SEBTC. Results for other exploratory outcomes can then be used to shed light on the main finding and suggest areas for further consideration. If no statistically significant impact on VLFS-C is found, the study did not find strong evidence of positive impacts, whatever the results of the significance tests conducted in the exploratory analyses.

5.3   SEBTC Impacts on Summer Food Security

A major goal of the study is to establish whether SEBTC reduces the most severe level of food insecurity among children (VLFS-C). As described in Chapter 1, *food insecure*

households are those in which the children or adults or both report limited access to food resulting in: a) reduced quality or variety of diet (low food security), or b) reduced food intake or disrupted eating patterns (very low food security).

Results presented in this section establish that SEBTC reduced VLFS-C in the summer of 2011, on average, in the five POC sites. Thus, the study presents strong evidence that SEBTC achieved its primary goal in the POC sites.

Consistent with the results for VLFS-C, exploratory estimates of the impact of SEBTC on other measures of food security, including a broader measure of food security among children and measures of food security for adults and households as a whole, consistently show improvements in food security at conventional levels of statistical significance (but, note that these are exploratory outcomes and, as such, the tests of statistical significance are uncorrected for multiple comparisons). The food insecurity impact findings from the POC year are reported in the next five subsections.

When interpreting findings on food security and other summer outcomes, an important factor to consider is the study's survey response rates for the different waves of data collection. As pointed out in Chapter 4, the study achieved a 67.5% weighted response in the spring and a 66.0% weighted summer response rate. In the summer, there was a differential response rate between the treatment group and the control group (71.6% versus 60.5%). Statistical weights used in the analysis corrected for non-response bias as much as possible based on observable differences between respondents and non-respondents in each of the treatment and control groups independently (see Appendix 5B). A simulation of potentially *remaining* bias which makes different assumptions about which types of families did not respond suggests that it is highly unlikely that the summer impact estimates are due entirely to differential non-response bias. However, it is possible that non-response to the summer survey may lead to overestimation of the magnitude of those impacts.[60]

5.3.1 Impacts on Very Low Food Security Among Children

On average, across all POC sites, SEBTC significantly reduced very low food security among children (VLFS-C) in the summer of 2011 by 1.5 percentage points, from a condition affecting 7.0% of children in the control group, which did not receive SEBTC, compared to 5.6% of children in the treatment group, which did receive the benefit (see Exhibit 5.1). Thus, SEBTC

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[60] The study team conducted a series of simulations to assess the extent to which non-response patterns would have had to differ among groups of families at different levels of food security in the treatment and control groups in order for the entire measured summer impact to be a data artifact and therefore not real. The results of those simulations led the study team to conclude that the magnitude of difference in the pattern of non-response among these groups—and how those response rates would have to have been affected by assignment to the treatment group (rather than the control group)—were highly implausible. These simulations took account of the possibility that the spring-to-summer decline in food insecurity for the control group reported in Section 6.3.4 below might also be an artifact of nonresponse patterns in the panel sample and found that possibility to be unlikely as well. For the Full Demonstration Year, design changes are being made to attempt to increase the response rates; in particular, increasing the incentive in the summer from $10 to $25 for completed interviews.

eliminated VLFS-C for about one-fifth of the children who would otherwise have experienced it. Bearing in mind the cautions about differential non-response noted in the previous section, this statistically significant confirmatory finding constitutes evidence that SEBTC achieved its primary goal of reducing VLFS-C, on average, across the five POC sites. As noted in Chapter 2, however, the demonstration areas are not representative of the entire nation. The expanded operations in 2012 provide an opportunity to explore whether these findings hold up when the demonstration grows to nine additional sites.

Exhibit 5.1   Impact on Food Security Among Children in Summer 2011: Prevalence Rates for Very Low Food Security

Very Low Food Security (VLFS-C)

Control: 7.0%
Treatment: 5.6%

Difference=-1.5; SE=0.72; p-value=0.041

Source: SEBTC, Summer Survey, 2011 (n=5,225).

Note: The difference in the prevalence of very low food security among children between the treatment group and the control group of 1.5 percentage points appears to be larger than 7.0% (treatment group prevalence rate) minus 5.6% (control group prevalence rate) because of rounding. The prevalence rate in the treatment group is 7.02% and the prevalence rate in the control group is 5.55%, for which the difference is 1.47 percentage points.

5.3.2   Impacts on Other Measures of Household Food Security

After establishing SEBTC's impact on the confirmatory outcome of VLFS-C, the study team also assessed the degree to which SEBTC had an impact on other measures of household food security. The team had two major reasons for doing so. First, it was important to establish if the reduction in VLFS-C was accompanied by improvements in other household measures of food security. If VLFS-C declined, it is important to know if the SEBTC's impact was strong enough that a broader measure of food insecurity among children, which includes children who have either low food security (LFS-C) or VLFS-C, would also decline. Second, given the research base that indicates that adults first protect the food security of their children before their own (Institute of Medicine, 2011; Nord, 2009), it is of interest to establish whether the impact of SEBTC was strong enough for food security among adults to also shift as a result of SEBTC. (All of these analyses of other food security measures should

be considered exploratory and therefore not held to the same standard as the VLFS-C result, which confirmed a demonstration impact.)

The exploratory analysis suggests that SEBTC had an effect on food insecurity among children, broadly defined (Exhibit 5.2). This effect was roughly proportional to that reported earlier for VLFS-C, a one-fifth reduction. In particular, the prevalence of food insecurity among treatment group children was 30.6% in the summer of 2011 compared to 37.9% in the control group. This contrast suggests that SEBTC removed about 7% of SEBTC children from food insecurity during the summer in the five POC sites.

Exhibit 5.2   Impact on Food Security Among Children in Summer 2011: Prevalence Rates for Food Insecurity
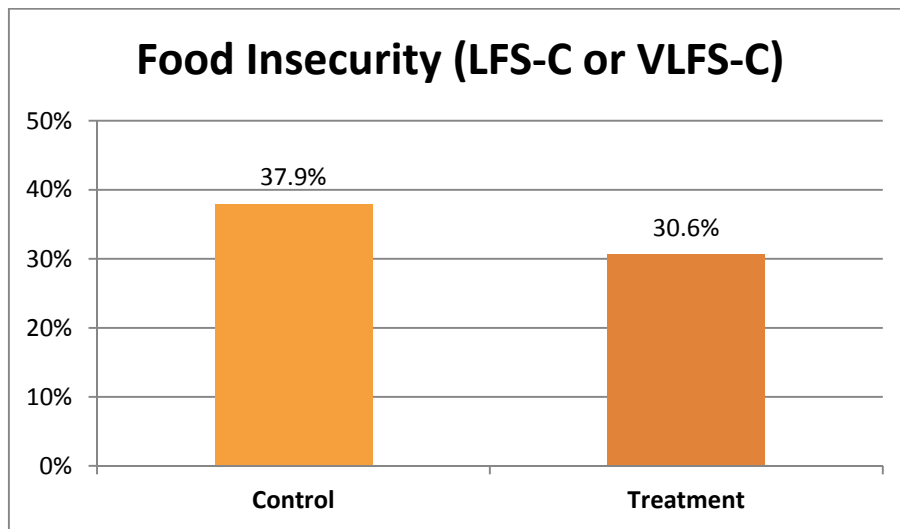
Difference=-7.3; SE=1.38; p-value=<0.001

Source: SEBTC, Summer Survey, 2011 (n=5,225).

Exhibit 5.3 repeats the findings on summer food security of children from Exhibit 5.1 and then provides four new measures: food insecurity and very low food security among adults, and food insecurity and very low food security for entire households.[61] In addition to affecting food security among children in the household, this evidence suggests that SEBTC caused reductions in food insecurity and very low food security for adults, as well as for households as a whole. All of these effects are proportionately similar to those found for

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[61] This study uses a method of coding food security status called the adult/child cross-tabulation approach, which differs slightly from that in USDA reports using the CPS data. The adult/child cross-tabulation approach, which has been under development at USDA as a means of eliminating a misclassification that affects a small percentage of cases, has been recommended by USDA for the current study. The approach used does not affect the number of households classified as VLFS-C, the main outcome, but does slightly alter the total percentage of households classified as VLFS or food insecure.

children, meaning that overall SEBTC eliminated about one-fifth of the food insecurity of individuals and households in the participating population.[62]

Exhibit 5.3   Impact on Food Security Among Children, Adults, and Households in Summer 2011: Prevalence Rates for Very Low Food Security and Food Insecurity

Outcome	Sample Size	Treatment Group Prevalence	Control Group Prevalence	Impact on Prevalence Rate (T/C Difference)	SE	p-value
Very low food security—children	5,225	5.6%	7.0%	-1.5**	0.72	0.041
Food insecure—children	5,225	30.6%	37.9%	-7.3***	1.38	<0.001
Very low food security—adults	5,226	16.0%	21.7%	-5.7***	1.15	<0.001
Food insecure—adults	5,226	37.2%	46.6%	-9.4***	1.43	<0.001
Very low food security—household	5,226	17.5%	23.0%	-5.5***	1.17	<0.001
Food insecure—household	5,226	42.9%	51.4%	-8.6***	1.44	<0.001

Source: SEBTC, Summer Survey, 2011.

*p<.10 **p<.05 ***p<.01

5.3.3   Impacts on Food Security by Site

As described in the earlier section, the study established that SEBTC resulted in statistically significant reductions in many measures of food insecurity when all five POC sites are considered together. However, POC sites differ in terms of their characteristics, SEBTC models used (i.e., the two SNAP models or the WIC model), SEBTC participation and redemption rates, and participant characteristics. It is of interest, therefore, to consider whether impacts of SEBTC on measures of food insecurity among children vary by site: first, to establish that one or two sites did not drive overall results, and second, to learn more about whether impacts in a particular site were statistically significant, understanding that, given only five sites, it would not be possible to establish why SEBTC appeared to be more effective in one site than in another.

Site-specific analyses suggest that SEBTC reduced VLFS-C in two sites, Michigan and Oregon, although these findings have only marginal statistical significance (see top panel of Exhibit

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[62] All of the results on food insecurity and very low food security are relatively robust. Appendix 5D, Exhibit 5D.1.1, presents impact findings derived as differences in mean outcomes between the treatment and control groups without any adjustment for chance baseline differences through regression analysis. Unadjusted estimates are very similar in magnitude to the findings presented in the text but somewhat less precisely estimated. Appendix 5D, Exhibit 5D.1.2, provides results based on a linear regression model rather than a logistic regression model. Results using linear regression are almost identical to those reported here. Finally, Appendix 5D, Exhibit 5D.1.3, reports results for the 18 individual items that comprise the food security scale. These results show SEBTC to have significantly reduced food insecurity for virtually all of the individual items collected.

5.4). In both these states, plus Texas, significant findings suggest that SEBTC reduced food insecurity among children (i.e., VLFS-C plus LFS-C; see bottom panel of Exhibit 5.3). These analyses, which show potentially favorable effects on food insecurity in almost all instances (i.e., treatment group food insecurity levels below those of control group levels, though not always statistically significantly so) affirm that the overall effects on child food security reported earlier are not concentrated in just one or two sites but encompassed most or all of the five POC sites.

Appendix 5D (Exhibits 5D1.4–5D.1.7) presents results by site for the other food security measures: food insecurity and very low food security among adults, and food insecurity and very low food security for entire households. These site-level estimates are also consistently in the expected direction and statistically significant in most sites. Only Missouri fails to show statistically significant evidence of SEBTC impacts for any of the six food security measures examined. We do not have information that would explain this distinction, although different impacts for the different SEBTC models generally—SEBTC-SNAP versus SEBTC-WIC—are computed and discussed in a later section of the chapter.

Exhibit 5.4   Impact on Food Security Among Children in Summer 2011: Prevalence Rates for Very Low Food Security and Food Insecurity by Site

Outcome/Site	Sample Size	Treatment Group Prevalence	Control Group Prevalence	Impact on Prevalence Rate (T/C Difference)	SE	p-value
Very Low Food Security - Children	5,225	5.6%	7.0%	-1.5**	0.72	0.041
Connecticut	1,115	5.6%	4.4%	1.1	1.23	0.364
Michigan	1,199	5.6%	8.4%	-2.8*	1.43	0.051
Missouri	871	4.5%	5.8%	-1.2	1.47	0.398
Oregon	1,086	5.5%	8.6%	-3.1*	1.63	0.060
Texas	954	3.6%	4.4%	-0.8	1.00	0.421
Food Insecurity- Children	5,225	30.6%	37.9%	-7.3***	1.38	<0.001
Connecticut	1,115	31.2%	35.6%	-4.4	2.85	0.125
Michigan	1,199	29.3%	38.6%	-9.4**	2.71	0.001
Missouri	871	31.4%	32.0%	-0.6	3.46	0.872
Oregon	1,086	23.9%	32.9%	-9.0***	1.95	<0.001
Texas	954	30.7%	38.0%	-7.3**	3.55	0.040

Source: SEBTC, Summer Survey, 2011

*p<.10 **p<.05 ***p<.01

Note: The analysis of impacts by site was done separately for each site. The covariates were not constrained to have the same relationship with the outcome in each site and in the pooled analysis. For this reason, the overall impact estimate is not a weighted average of the within-site impact estimates.

5.3.4   Changes in Child Food Security between the School Year and the Summer

As indicated in Chapter 1, very little is known about changes in levels of food security among school-age children between the school year and the summer. The major prior study

compared levels of *adult* food security among households with school-age children between the school year and the summer (Nord and Romig, 2006), using CPS data from 1991 to 2005. As reported in Chapter 1, the study team's analysis of the same data finds small and borderline statistically significance increases for children (p=.06). Hence, the current evaluation provides an opportunity to gain additional insight on changes in food security between the school year and the summer for the types of households that qualify for, and would participate in, a SEBTC-type benefit—i.e., a specific population in the POC sites. Of particular policy interest is the impact of SEBTC on the change in children's food security between the school year, when they have access to free or reduced-price meals, and summer, when—absent SEBTC—many children have limited access to federal nutrition programs.

The change in levels of food security among households in the control group, which did not have access to SEBTC, provides insight about what happens in the absence of an SEBTC-type benefit. In addition, the difference in the extent of spring-to-summer change in the treatment group and the change in the control group (i.e., the difference in differences) indicates whether any natural or policy-induced shifts are altered by the availability of the SEBTC benefit. It would be expected to observe a difference in differences between the treatment and control group, given the impact of SEBTC on VLFS-C and other measures of food security discussed in the previous section, but it is still informative to see in what way summer impacts emerged from contrasting spring-summer trends for the two samples.

Accordingly this subsection describes school-year-to-summer changes in food security for children in the control group (i.e., in the absence of SEBTC), in the treatment group (i.e., with SEBTC), and for the treatment group relative to the control group (i.e., the SEBTC effect on this change). This analysis uses the panel sample, which includes the households that completed both a spring and a summer survey. Since it is a slightly different sample, the summer prevalence estimates here do not match exactly the corresponding prevalence estimates provided in the first two rows of Exhibit 5.4.

Considering first the most severe measure of child food insecurity, Exhibit 5.5 shows a stable prevalence of VLFS-C between spring and summer for the control group (fourth column), which did not receive SEBTC benefits. Approximately 8% of control group children experienced VLFS-C in both time periods, and the change over time in this measure is not statistically significant. In contrast, overall food insecurity (VFLS-C plus LFS-C) among control group children (Exhibit 5.6, fourth column) falls by a statistically significant 4.2 percentage points between spring and summer, suggesting about a one-tenth drop-off from a prevalence rate of around 43% in spring to a prevalence rate of about 39% in the summer. These findings are counter to the CPS analysis presented in Chapter 1 suggesting that, nationally, children's food insecurity increases in the summer (a point to which we return below). However, spring-to-summer changes for children have not been studied much, apart from qualitative and anecdotal reports of increased summer food insecurity.

With SEBTC available to the treatment group (third column of both exhibits) both measures show statistically significant downward trends. Specifically, VLFS-C falls from 6.9% prevalence to 5.5% while general food insecurity drops from 42.4 to 29.4%. The second of these trends constitutes a sharply accelerated downward trend for the treatment group compared to the control group for food insecurity, with the one-tenth reduction among control group children becoming a nearly one-third reduction for treatment group children.

Exhibit 5.5   Spring-to-Summer Change in Prevalence of Very Low Food Security Among Children in 2011

Measurement Point(s)	Sample Size	Treatment Group Prevalence	Control Group Prevalence	Impact on Prevalence Rate (T/C Difference)	SE	p-value
Spring	4,056	6.9%	7.5%	-0.6	0.91	0.549
Summer	4,056	5.5%	8.0%	-2.5***	0.89	0.005
Spring-to-summer change	4,056	-1.4***	0.5	-1.9*	1.08	0.081
SE		0.63	0.80			
p-value		0.008	0.551			

Source: SEBTC, Spring and Summer Surveys, 2011

*p<.10 **p<.05 ***p<.01

Exhibit 5.6   Spring-to-Summer Change in Prevalence of Food Insecurity Among Children in 2011

Measurement Point(s)	Sample Size	Treatment Group Prevalence	Control Group Prevalence	Impact on Prevalence Rate (T/C Difference	SE	p-value
Spring	4,056	42.4%	42.9%	-0.6	1.79	0.738
Summer	4,056	29.4%	38.9%	-9.5***	1.75	<0.001
Spring-to-summer change	4,056	-12.9***	-4.2***	-8.7***	1.83	<0.001
SE		1.12	1.24			
P-value		<0.001	0.001			

Source: SEBTC, Spring and Summer Surveys, 2011

*p<.10 **p<.05 ***p<.01

Again, these results must be viewed with some caution due to the differential response rate, corrected for, as much as possible, with sample weights. There is some chance that the results are overstated although the study team concluded it is highly unlikely that non-response bias changed the direction of the results.[63]

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[63] As described in an earlier footnote (in Section 6.3.1) the evaluation team carried out simulations that concluded that the degree of differential non-response between control group members whose true food security trend was favorable versus unfavorable necessary to reverse the direction of this result is highly implausible.

Given that child nutrition programs are less accessible and available in the summer than during the school year, the control group findings of no change from spring to summer in VLFS-C and a 4 percentage point drop in the more general measure of children's food insecurity are surprising (if nothing else were to change in the summer) and certainly important since so little research has been conducted in this area. It is not clear if these patterns are due to the unique sample of household types that participated in SEBTC in the POC year, or due to factors related to measurement error. The study team found no evidence of measurement error. [64] The study team also looked for evidence that other changes in family circumstances between spring and summer could account for the change in food security in the control group—such as shifts in household size or composition, employment, food expenditures, income and use of SNAP, WIC, or SFSP. No such evidence was found.[65] In the full demonstration year, the sample will include 14 sites and it will be important to see if the same food security findings hold and if the data reveal more information about their origins.

The difference in the spring-to-summer trend between the two groups (third row of the fifth column of Exhibits 5.5 and 5.6) provides another way to estimate the impact of SEBTC. Although both the samples and estimation methods are slightly different, the estimate of impact is similar. For VLFS-C, the treatment group prevalence declines by 1.4 percentage points, which is 1.9 percentage points different from the control group's 0.5 percentage point increase. For overall food insecurity among children, the decline in the treatment group is about 8.7 percentage points more than in the control group. These estimates of impact are slightly larger than the corresponding estimates for the simple summer treatment/control differences (for VLFS-C: 1.9 vs. 1.5; for food insecurity among children: 8.7 vs. 7.3).[66]

5.3.5   Impacts on Food Security for Subgroups

There is little suggestion of differential impacts across subpopulations of demonstration participants for either of the child food security measures (see Appendix Tables 6D.12 and 6D.13). Specifically, the evaluation team considered how the impact of SEBTC on food insecurity among children might vary with several observable characteristics: WIC-model vs. SNAP-model, poverty, participation in SNAP during the spring, number of children in the

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[64] One potential measurement error of concern was the possibility that closely spaced repeat administration of the 30-day food security question battery skewed how families responded in the second, summer administration (even though the team is unaware of any published findings documenting measurement error due to short time intervals between administration of this battery, which has been widely used in other research). The team conducted an analysis of the potential impact elapsed time between spring and summer administration on responses in the second wave for control group members of the panel sample. This analysis did not provide any supporting evidence of such measurement error.

[65] It is possible that households misreported changes in one or more of the circumstances listed here, or that other circumstances changed that were not captured by the survey between spring and summer.

[66] Additional results reported in Appendix 5D (Exhibits 5D.1.8 - 5D.1.11) indicate that the findings for spring to summer change are robust to alternative analysis methods. They are present in many of the individual items that comprise the food security measures for children and they do not appear to be specific to one or two sites.

household, presence of adolescents in the household, respondent race, respondent ethnicity. For each set of subgroups, the study tested whether impacts might vary. For VLFS-C across the six subgroups, only ethnicity showed even weak evidence of differential impacts (the data suggested that impacts might be smaller for Hispanics). For food insecurity among children (i.e., VLFS-C plus LFS-C) there are only two cases of weak evidence for differential impacts (impacts may be larger for the poor vs. the near poor and for families with 3 or more children vs. families with 1 or 2 children). All of these results must be considered suggestive only, given that confirmatory proof of effectiveness was sought only for VLFS-C for the full sample.

Given the suggestive status of these results, the evaluation team concludes that there is little evidence of differential subgroup impacts of SEBTC on children's food security. It should be noted, however, that the sample sizes in the POC year have very limited power to detect differential subgroup impacts even in an exploratory analysis without multiple comparisons adjustments.

5.4   Impact of SEBTC on Children's Nutritional Status

During the POC year, the study found some suggestive evidence that SEBTC improved some indicators of children's nutritional status. We proxy for nutritional status using food frequency questions drawn from the 2009-2010 National Health and Nutrition Examination Survey (NHANES). The foods included in the household survey have been shown to be associated with nutritional risk among school-age children and to reliably assess consumption of dietary factors recommended in the *Dietary Guidelines for Americans* (Newby, 2007; Briefel et al., 2008; Reedy and Krebs-Smith, 2010; Taveras et al., 2010). Specifically, we consider six proxies or dietary indicators of nutritional status.

1. Servings[67] per day of fruits and vegetables
2. Servings per day of fruits and vegetables, excluding fried potatoes
3. Frequency of consumption of whole grains (e.g., cereals, whole-grain breads and tortillas)
4. Frequency of consumption of baked goods (e.g., cookies, cake, pie, doughnuts, or brownies)
5. Frequency of consumption of sugar-sweetened drinks (e.g., soda, fruit-flavored beverages, sports drinks)
6. Whether the child usually drank non-fat or low-fat milk during the last 30 days

Greater intake of non-fat or low-fat milk, fruits, vegetables (non-fried) and whole grains is associated with a healthier diet. Cookies, cake, pie, doughnuts, brownies, and sugar-sweetened drinks are major sources of children's discretionary calories and are indicative of

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[67] Servings of fruits and vegetables are measured in cup equivalents defined by the 2010 *Dietary Guidelines for Americans* (1 serving is 1 cup raw or cooked fruit or vegetables, vegetable juice, or fruit juice; 2 cups leafy green vegetables; or 1/2 cup dried fruit).

a less healthful diet (Malik et al., 2006; Pereira, 2006; Vartanian et al., 2007; Reedy and Krebs-Smith, 2010). In the spring and summer surveys, respondents were asked to report how often children ate these food items over the last 30 days. We then used scoring procedures developed by the National Cancer Institute (NCI) to convert the respondents' reported consumption of children's fruit and vegetable items into daily servings of fruits and vegetables.[68] The coding algorithms use the MyPyramid cup equivalents defined in the 2010 *Dietary Guidelines for Americans* (USDA and HHS, 2010).

The exploratory evidence suggests that the SEBTC intervention leads to a statistically significant increase in daily servings of fruits and vegetables (excluding fried potatoes) (Exhibit 5.7). The size of this increase, 0.3 cup equivalents, results in the treatment group eating 3.3 servings (cup equivalents) per day. This estimate is almost identical to the estimate for fruits and vegetables including fried potatoes, indicating no change in the consumption of fried potatoes. There is a small but statistically significant increase of 0.1 in average daily frequency of consumption of whole grains, with the treatment group consuming whole grains 0.7 times per day, compared to the control group consuming whole grains 0.6 times per day. There is no evidence of an increase in non-fat/low-fat milk consumption or of a reduction in consumption of baked goods or sugar-sweetened drinks.

Disaggregating by program model and participant characteristics provides a complementary perspective (see Appendix Exhibits 5D2.1 - 5D6.2.6). For fruits and vegetables and whole grains, impacts are larger in the WIC-model sites (Michigan and Texas) than in the SNAP-model sites. Exploratory tests provide some indication of differential impacts by program model. The measured impact is larger in the nutritionally desirable direction in the WIC-model sites than in the SNAP-model sites for fruits and vegetables, baked goods, and sugar-sweetened drinks but not for whole milk or whole grains. For instance, in the WIC-model sites, children in the treatment group consumed 0.4 more daily servings of fruits and vegetables, and in the SNAP-model sites, the difference was 0.2 servings per day. While these findings suggest that households in these sites purchase more foods consistent with the SEBTC-WIC allowable foods, other factors related to site characteristics may account for these differences.

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[68] The coding procedures for the 2009-2010 NHANES Multifactor Diet Screener were not available online at the time in which this report was completed, but NCI had completed the fruit and vegetable algorithm and made it available to the study team to use for this analysis. The following website provides information about an older version of fruit and vegetable coding procedures used for a similar dietary instrument: http://riskfactor.cancer.gov/diet/screeners/fruitveg/scoring/allday.html. For the other dietary factors shown in Exhibit 5.7, the evaluation team used the reported frequency of food consumption to estimate the daily number of times the foods in the category were consumed in the past 30 days.

Exhibit 5.7   Impact of SEBTC on Children's Food Consumption in Summer 2011

Outcome	Sample Size	Treatment Group Consumption	Control Group Consumption	Impact on Food Consumption (T/C Difference)	SE	p-value
Fruits and vegetables (servings per day)	4,982	3.4	3.1	0.3***	0.06	<0.001
Fruits and vegetables, without fried potatoes (servings per day)	4,996	3.3	3.0	0.3***	0.05	<0.001
Whole grains (times per day)	5,148	0.7	0.6	0.1***	0.02	<0.001
Baked goods (times per day)	5,178	0.3	0.4	0.0	0.02	0.639
Sugar-sweetened drinks (times per day)	5,111	1.1	1.2	-0.1	0.05	0.194
Usually drank nonfat/low-fat milk (%)	5,023	13.8%	15.0%	-1.2	0.01	0.260

Source: SEBTC, Summer Survey, 2011

*p<.10 **p<.05 ***p<.01

The analysis of dietary data for subgroups of participants provides only minimal evidence of differential impacts on nutritional status. There is no suggestion of differential impacts by poverty level or household's SNAP participation in the spring. Across the different nutritional status outcomes, impacts varied by the number of children in the household for fruits and vegetables and sugar-sweetened drinks only). However, the direction of the change for larger versus smaller families in terms of an improvement in dietary quality differed for the two outcomes.[69]

5.5   Impact on Household Food Expenditures

The logic model for the SEBTC program, provided in Chapter 1, implies the following pathway: Families receive the SEBTC benefit, allowing them to spend more on food, thereby improving food security and nutritional status. To examine the first link in this chain, the household survey asked families about their food shopping practices and monthly food expenditures in the summer of 2011. These data allow exploratory analysis of the impact of SEBTC on how much households spent on food in the 30 days prior to their interview.

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[69] Specifically, there was a larger healthful impact on fruits and vegetables for children in larger families but a larger healthful impact on consumption of sugar-sweetened drinks for smaller families.

To ascertain food expenditures, households responding in the summer were asked to report on their food spending over the last 30 days. The analysis assumed that all SNAP participants would include their SNAP benefits when estimating expenditures, but because the WIC food items are not part of shopping totals, it was assumed that households did *not* report on the value of WIC. Therefore, for sites using the SEBTC-WIC model, it is unlikely that households include their SEBTC benefit in their reported food expenditures. Households in SNAP-model sites may or may not have included SEBTC expenditures in their reporting, with it being more likely that they did so in the SNAP hybrid sites (Missouri and Oregon) than in Connecticut where benefits were issued on a separate card. These ambiguities about the measures complicate the analysis.[70]

To address these ambiguities the study team separated the sites into the sites using the SEBTC-SNAP models and the sites using the SEBTC-WIC model and then measured food expenditures in two ways: using monthly per-person food expenditures reported on the survey only, which for treatment group households is presumably a lower bound on what households actually spend on food inclusive of their SEBTC benefits (due to omission of these benefits in at least the WIC sites), and using the sum of survey reports plus SEBTC expenditures documented in the demonstration's EBT transaction data, which for the treatment group is presumably an upper bound on expenditures inclusive of SEBTC benefits (due to possible double-counting of SEBTC benefit amounts in the SNAP sites). Control group data are not subject to these ambiguities, so do not skew the impact comparison in either direction. As a result, we expect the "Survey Responses Only" findings in the top panel of Exhibit 5.8 to be a lower bound on the demonstration's impact on food expenditures and the "Sum of Survey Responses and EBT Data" findings in the bottom panel of Exhibit 5.8 to be an upper bound on that impact.

This approach shows no impact at the lower bound but shows a statistically significant impact at the higher bound, with SEBTC resulting in increased food expenditures per person by $10.48 (p=.034)in the WIC sites and $26.20 in the SNAP and SNAP-hybrid sites (p<.001). As the impact likely falls between the upper and lower bounds, the results are inconclusive.

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[70] The survey was revised for the full demonstration year in 2012 in order to limit these ambiguities.

Exhibit 5.8   Impact of SEBTC on Monthly Household Food Expenditures Per Person in Summer 2011, by SEBTC Model

SEBTC Model	Sample Size	Expenditures in Treatment Group	Expenditures in Control Group	Impact on Expenditures (T/C Difference)	SE	p-value
Survey Responses Only (Matched EBT sample)						
WIC	1,898	$135.52	$140.67	- $5.15	4.84	0.288
SNAP and SNAP hybrid	2,717	$151.08	$150.58	$0.50	4.01	0.900
Sum of Survey Responses and EBT Data (Matched EBT sample)						
WIC	1,898	$151.29	$140.81	$10.48**	4.94	0.034
SNAP and SNAP hybrid	2,717	$176.91	$150.71	$26.20***	4.06	<0.001

Source: SEBTC, Summer Survey and EBT transaction data for SEBTC benefits, Summer 2011

Note: Control group households receive $0 in EBT benefit, thus estimates of control group expenditures appear lower in the analysis using survey responses only than in the analysis using survey responses and EBT data. Although actual values for the control group are the same in both analyses, the exhibit reports regression-adjusted means, calculated using parameter estimates for all covariates in the model. Because the parameter estimates for the covariates (e.g., spring food security measures, household characteristics, respondent characteristics) differ slightly in the two analyses, estimated expenditures for the control group are slightly different.

*p<.10 **p<.05 ***p<.01

5.6   Household Participation in Nutrition Assistance Programs, and Whether Children's Households Paid for Lunch

SEBTC may affect how households use other existing nutrition assistance programs, including SFSP, SNAP and WIC used to help feed their children during the summer. The available data suggest that SEBTC significantly affected household participation in other food and nutrition programs by lowering participation in SFSP by 1 percentage point. The analysis also may suggest that WIC and SNAP increased by 3 to 4 percentage points (Exhibit 5.9), however, there may be some reason to call into question at least the impact of SEBTC on WIC participation. Each of these points is discussed below.

It seems plausible that households that receive SEBTC did not feel as much need to use SFSP as households in the control group (See Appendix Exhibit 5D.3.1.) This direction of difference was evident in all five POC sites, but statistically significant only in Oregon. In addition, control group households who were notified that they did not receive SEBTC were also reminded by some grantees that SFSP remained available to them, which may have therefore artificially increased their participation in the program. However, as discussed in Chapter 4, the reported use of SFSP in both the control group is about half the national estimates of the same factor.

SEBTC is estimated to have produced statistically significant increases in WIC and SNAP participation. The WIC finding may be the result of reporting error on the part of treatment group households. As mentioned above, there is evidence that some SEBTC households mistakenly answered the question about WIC participation in the affirmative for reasons

that would not apply to control group members. WIC is a program for pregnant women and mothers of infants, and for children under age 5. Despite these factors defining the conventional WIC participation families, a much higher number of treatment group families in the panel sample than control group families reported WIC participation in the summer having not reported it in the spring. Of the added families on the treatment group side, most (71%) had no child under age 5. In contrast, just 26% of control group families reporting WIC entry between spring and summer lacked young children. This suggests that—at the later point in time, having received an SEBTC benefit—some treatment group respondents misreported receipt of SEBTC as WIC participation, creating the appearance of many more WIC recipients in the summer (and of many more WIC entrants since spring when the same misperception could not have arisen). In fact, two thirds of the treatment group participants who reported new use of WIC came from the two States that used the SEBTC-WIC model (See Appendix Exhibit 5D.3.3a and b for more details). As a result, we interpret the estimated positive impact on WIC participation in the summer as illusory rather than a true impact of SEBTC.

The household survey data provide no parallel way to test whether families in the treatment group over-reported summer participation in the SNAP program—eligibility for SNAP is not conditioned on age of children. As a result, we are unable to either confirm or deny the possibility that the apparent SEBTC impact on SNAP participation during the summer is illusory, although this possibility we have to entertain given that some states used the SNAP model of SEBTC benefit delivery.

Exhibit 5.9   Impact on Participation in Nutritional Assistance Programs and Whether Children's Households Paid for Lunch in Summer 2011

Outcome	Sample Size	Percent of Treatment Group	Percent of Control Group	Impact on Percent (T/C Difference)	SE	p-value
Participation in SFSP	5213	2.9%	4.2%	-1.3**	0.56	0.022
Participation in SNAP	5193	67.4%	63.9%	3.5***	1.26	0.005
Participation in WIC	5205	24.6%	22.1%	2.6**	1.07	0.016
Household paid for lunch	5117	93.3%	91.5%	1.8**	0.91	0.042

Source: SEBTC, Summer Survey, 2011

*p<.10 **p<.05 ***p<.01

As stated above, SEBTC may have resulted in households relying on fewer free or subsidized meals for their children. In addition to obtaining children's meals through formal programs, parents may rely on friends and relatives to protect the food security of their children. Therefore, using information about where children usually ate lunch in the summer (described in Chapter 4), the team constructed a variable indicating if households paid for the children's lunches (e.g., the child ate at home or in a restaurant) or if lunch was

subsidized or provided for free (e.g., the child ate with friends, family, at school, or in a program known to be SFSP). [71]

Consistent with the finding regarding use of SFSP, the findings suggest that, taking both formal and informal supports together, households in the treatment group were more likely than those in the control group to pay for children's summer lunches. This direction of difference appears in all five sites but is statistically significant in only Missouri and Oregon (see Appendix Exhibit 5D.3.4).

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[71] From the total sample, 544 households (10.4%) reported that the child usually ate lunchtime meals somewhere other than home. Among these households, 70 households (12.9%) provided answers where it could not be determined if the meals were subsidized. The 70 households represent 1.3% of the total sample.

Chapter 6

Costs of Implementing Summer EBT for Children in the POC Year

During the POC year, demonstration sites were by definition implementing the SEBTC program for the first time. As part of the POC evaluation, the evaluation team analyzed data on program costs submitted by each grantee. This chapter describes the research questions addressed by the cost analysis, data collection and analysis methods, and findings regarding the total and unit costs of the demonstrations, components of cost, and differences across the five POC sites.

One goal of the cost analysis in the POC year is to shed light on the feasibility and cost of expanding the SEBTC program. For several reasons, costs for a pilot year are likely to be higher than costs for a fully implemented program, including: one-time start-up costs, efficiencies gained with experience, and economies of scale in delivering program services more widely. At the same time, if cost tracking improves over time, costs unmeasured or poorly measured in this analysis may be identified, which might push up the cost estimates. These are just some examples of why the results presented here may not generalize to a larger scale implementation. Comparisons of costs realized in the full implementation year to costs in the POC year will provide more insights into "start-up" versus "ongoing" costs.

An even more important caution is that, in assessing factors that may affect program costs across sites, data are only available for five sites in the POC year and these sites differ on a wide range of characteristics. Average costs across five POC sites may not be a good indicator or proxy for costs for implementing a broader program in many sites nationwide. Thus, these results should be seen as exploratory, providing a foundation for more detailed analysis in the full implementation year.

6.1   Research Questions and Key Findings

6.1.1   Research Questions

In the full evaluation and, to the extent possible, in the POC year, the key research questions for the cost analysis are as follows:

- What were the total administrative costs of SEBTC, overall, by demonstration approach (WIC vs. SNAP), and by site? How were costs distributed across the pre-implementation period (before benefits were available) and the summer benefit period and after?
- What proportions of administrative costs were incurred by State agencies (grantees and State partners), SFAs, community partners funded under the grant, and other community partners? What costs were incurred by contractors, including EBT processors?

- What types of administrative costs were funded through the SEBTC grants and what types involved in-kind or matching resources from States, non-profit partners, or other parties?
- What were the total costs of SEBTC, including both administrative and benefit costs? What percentage of costs were administrative, overall, by approach, and by site?
- What was the average and range of costs per school-aged child and per household, overall, by demonstration approach, and by site?

In the full demonstration year, we will also incorporate impact estimates to consider the relative cost-effectiveness of SEBTC across the demonstration sites.

6.1.2   Key Findings

Key findings are as follows:

- The average administrative cost of implementing the demonstration ranged from $210,683 (Connecticut) to $716,040 (Michigan). SEBTC grant-funded costs ranged from $118,801 (Oregon) to $607,189 (Michigan). The total cost of the demonstration (administrative plus benefit cost) ranged from $557,760 (Connecticut) to $964,501 (Michigan).
- Almost all of the grant administrative costs (67 to 90%) occurred before the benefits were issued to families.
- Non-grant administrative costs were largely State staff costs. Texas was the exception, funding their State administrative staff time through the grant.
- Sites varied in the functions performed by local community partners and by private contractors (other than the EBT processor). In general, working with local community partners was associated with lower administrative costs overall, while working with the private contractors was associated with higher costs.
- Administrative costs accounted for approximately half of total costs (i.e., benefit costs plus administrative costs), but the proportions varied considerably across sites. The level of administrative costs reflects start-up costs such as modifying several computer systems and databases, as well as developing consent and outreach materials including logos and card designs. Cost data for the POC sites in the full demonstration year (i.e., second year of operation) will make it possible to assess the magnitude of start-up costs, as well as any costs and savings from scaling up the program.
- Over the full summer, the cost per school-aged child (both administrative and benefit cost) in a household redeeming benefits was $311 on average, and ranged from $239 to $413 across sites.

6.2 Research Methods

6.2.1 Data Collection

Data used to analyze administrative costs were collected in conjunction with the process study data collection. During process study site visits, the site liaisons collected detailed data on program staffing, contractual relationships between agencies, and activities handled by each agency over time. In addition, they asked grantee staff to provide data from their accounting systems on SEBTC implementation costs charged to the SEBTC grant from FNS. They also requested estimates of the costs of any resources used to implement SEBTC but not funded under the grant. The evaluation team provided a sample report format that grantee staff could fill in, but emphasized that they could receive equivalent data in other formats, if it was easier for grantees to provide their internal reports. After receiving each set of cost reports, site liaisons discussed the meaning of each item as needed during the next site visit or call, or sent questions to the grantee's cost data contact via e-mail. The cost templates asked for information on staff members who worked on SEBTC, hours worked or percentage of full-time devoted to the project, hourly salary and fringe benefit rates, and other direct costs such as printing and mailing. They also asked grantees to provide their indirect cost rate if applicable. In addition, the study team had access to the budgets and budget narratives included in the grant applications for the POC year.

Interviews during site visits or phone calls provided three types of information: (1) explanations needed to interpret the quantitative reports, (2) qualitative information on types of costs that are not readily measurable or that could not be tracked precisely, such as volunteered time or the value of resources provided in-kind, and (3) impressions of the adequacy of program funding and of what could be improved.

A final data source was the EBT transaction data discussed in Chapter 3. Data on the dollar value of benefits redeemed, numbers of households with benefits issued and redeemed, and numbers of children with benefits issued and redeemed reported in Chapter 3 were used for the cost analysis.

The evaluation team encountered several challenges in collecting and analyzing the cost data:

- Grantees' staff members had difficulty estimating time worked but not charged to the grant in some agencies, as they were not asked to track it separately, and SEBTC tasks were often episodic.
- Costs for subgrantees were not necessarily invoiced in the same quarter they occurred. The evaluation team decided to focus on costs before and after the initial benefits became available to families at the start of the summer (i.e., between late May and early June). For all sites, this occurred at some point near the middle of the second quarter. Appendix 6A describes the assumptions made in dividing costs into pre-benefit period (winter/spring) costs and benefit period or after (summer/fall) costs.

- Grantees and subgrantees spent time working with evaluation staff, preparing data files and reports for the evaluation, and so forth, and this time could not be separated from the time they spent implementing the demonstration. However, many tasks for the evaluation would also occur in a non-evaluation context, including preparing lists of eligible children, combining the lists into households, and obtaining consent to share school data with SNAP or WIC agencies.

6.2.2 Analysis Approach

In analyzing costs and benefits of an intervention such as SEBTC, economists consider the perspectives of a wide range of stakeholders, including the children and their families, the State agencies, the local schools and communities, and taxpayers in general. The benefits delivered in the SEBTC program are the foods obtained with SNAP-SEBTC or WIC-SEBTC cards by eligible and participating families, and the resulting improvements in food security and/or in the nutritional status of the children (and of their families, to the extent some of the food is shared or other food is more available for other family members). Staff at the State agencies, SFAs, and community partners also valued these benefits, both as giving the emotional satisfaction of helping those in need, and possibly in terms of leading to a healthier, more productive community and school environment. These benefits will ultimately be assessed in the impact analysis.

Costs of the intervention are minor from the point of view of the participating families—mostly the time and any "hassle" in figuring out how to use the cards and in resolving any problems (which were rare). Relative to school meals, there is also the cost of time needed to prepare and serve the food to the children. Costs to the government and non-profits involved in setting up and delivering the benefits (and implicitly to taxpayers or community members who donate time or money) are basically equal to the value of the benefits plus the administrative costs of the demonstration at all levels. Commercial partners, such as EBT contractors, are assumed to roughly break even on the special services needed for the demonstration, but their costs are administrative costs to the government. Retailers are assumed not to incur additional transaction costs from the demonstration.

This analysis assesses the administrative costs of providing the SEBTC benefits, as well as the cost of the benefits (foods) provided. As noted, the former are the key costs to society, but from the perspective of a government agency such as FNS, with limited tax dollars to spend, the food costs of the program are also important. Exhibit 6.1 provides an overview of the different types of cost components used in the analysis for this chapter.

Exhibit 6.1   Components of SEBTC Demonstration Costs

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                          ┌─────────────────────┐
                          │     Total Costs      │
                          └─────────────────────┘
                             │                 │
                  ┌──────────────────┐    ┌─────────────────────┐
                  │ Administrative   │    │ Redeemed Benefitsᵃ   │
                  │     Costs        │    └─────────────────────┘
                  └──────────────────┘
                     │            │
```

Grant Costs		Non-Grant Costs	
Pre-Benefit Period	Benefit Period	Pre-Benefit Period	Benefit Period
• State Agencies Direct/Indirect • EBT Vendor • School Districts • Non-Profit Contractors Direct/Indirect • For Profit Contractors	• State Agencies Direct/Indirect • EBT Vendor • School Districts • Non-Profit Contractors Direct/Indirect • For Profit Contractors	• State Agencies Direct/Indirect • School Districts • Non-Profit Contractors Direct/Indirect	• State Agencies Direct/Indirect • School Districts • Non-Profit Contractors Direct/Indirect

ᵃ Average costs are also reported based on benefits issued and redeemed per household and per child.

Implementation of the demonstration in the POC year was on a fast schedule and involved organizations learning to work together that had not done so previously. Administrative costs were, on average, about equal to the costs of the benefits provided, and comprised both start-up costs and ongoing costs, with the majority of costs derived from start-up activities. At the same time, each State and its partner agencies handled the demonstration somewhat differently and worked in very different contexts, leading to a wide range in costs across the sites. This combination of factors -- an accelerated schedule, use of private contractors, start-up costs of setting up relationships with subgrantees, and variability in implementation processes used in each site contributed to relatively high administrative costs in the POC year

6.3   Total Administrative Costs and Grant-Funded Administrative Costs

Administrative costs, both total (grant and non-grant) and grant, varied widely across sites. Total administrative costs ranged from $210,683 in Connecticut to $716,040 in Michigan (Exhibit 6.2). Grant-funded administrative costs ranged from $118,801 in Oregon to $607,189 in Michigan (Exhibit 6.3). All sites reported similar but lower grant expenditures than were estimated in their proposals (not shown), so the wide range in grant-funded expenses was expected.[72] Overall, Michigan had higher administrative costs than other sites,

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[72] Details of the cost analysis for each of the five sites are included in Appendix 6B. This report reflects costs reported for the four quarters of 2011.   Grantees reported their cost information for the fourth quarter of

which likely results from multiple factors. Such factors are presented in more detail throughout the chapter, but include Michigan's reliance on experienced private contractors to carry out many of the demonstration activities and the system changes they made to the WIC system to allow for processing SEBTC benefits. System changes were recorded as pre-benefit period costs, and could lead to decreased costs in the full implementation year. Estimated non-grant expenditures were also substantial, ranging from $51,539 in Texas to $193,026 in Oregon. The percentage of total costs that were non-grant administrative costs was lowest in Texas (14%) and highest in Oregon (62%) (Exhibit 6.4). In general, non-grant costs tended to be larger in States with lower grant expenditures, leading to less variation across the sites in total costs. The major non-grant costs in all sites were costs of State agency staff time, but some community partners also reported costs not funded by the grant. Finally, indirect costs not covered by the grant (at least as some of the States interpreted the rules) were included in non-grant costs if a federally-approved indirect cost rate was available (See Appendix 6B).

6.3.1 Distribution of Administrative Costs by Agency and Time Period

The wide variation in administrative costs across the POC sites may be due to factors related to the demonstration design--such as the number of school districts in the demonstration, the structure of the State's EBT system, the use of passive or active consent, the role of community partners, the types of administrative costs that were covered by grant funds, and the use of a WIC model versus a SNAP model—as well as many other factors that may be idiosyncratic to particular States or localities, such as differences in the organization and size of State governments or to local school districts such as differences in geography of the demonstration areas and in the populations served. This section describes the distribution of costs by agency and by time period for each site and across the five demonstration sites.

Costs by Agency

Costs were incurred by grantees and their partner State agencies, by SFAs participating in the demonstration, by EBT contractors (except in Texas, which operates its own EBT system), by other private contractors, and (in three of the five States) by local non-profit partners (two with grant funding).The distribution of costs across these various actors varied considerably across sites.

2011 in February-March 2012; all costs are up to date as of 4/2/12 for all grantees except Oregon, where staff sent a correction to their report on 4/3/12 that has been incorporated.

Exhibit 6.2   Total Administrative Cost (Grant and Non-Grant) by Agency and Time Period

		Connecticut		Michigan		Missouri		Oregon		Texas		All Sites	
		$	% of total	$	% of total	$	% of total	$	% of total	$	% of total	$	% of total
Pre-benefit period	State agencies	39,420	19%	82,313	11%	41,296	13%	184,002	59%	100,154	27%	447,184	23%
	EBT vendor	85,175	40%	51,300	7%	111,612	36%	0	0%	N/A	N/A	248,087	13%
	School district(s)	44,188	21%	10,718	1%	1,673	1%	4,872	2%	4,370	1%	65,821	3%
	Other non-profit contractors	2,063	1%	0	0%	59,291	19%	0	0%	62,108	17%	123,462	6%
	Other for-profit contractors	0	0%	422,717	59%	0	0%	0	0%	58,650	16%	481,367	25%
	Direct costs - pre-benefit period	**170,846**	**81%**	**567,048**	**79%**	**213,872**	**70%**	**188,873**	**61%**	**225,283**	**62%**	**1,365,921**	**71%**
Benefit period	State agencies	32,039	15%	55,618	8%	68,837	22%	103,313	33%	28,006	8%	287,812	15%
	EBT vendor	7,242	3%	8,717	1%	4,063	1%	1,701	<1%	N/A	N/A	21,723	1%
	School district(s)	0	0%	11,317	2%	0	0%	0	0%	0	0%	11,317	1%
	Other non-profit contractors	556	<1%	0	0%	12,062	4%	0	0%	79,797	22%	92,416	5%
	Other for-profit contractors	0	0%	73,340	10%	0	0%	0	0%	0	0%	73,340	4%
	Direct costs - benefit period	**39,837**	**19%**	**148,992**	**21%**	**84,962**	**28%**	**105,014**	**34%**	**107,803**	**29%**	**486,608**	**25%**
Total	Total direct costs	210,683	100%	716,040	100%	298,833	97%	293,888	94%	333,086	91%	1,852,529	97%
	Indirect costs	**0**	**0%**	**0**	**0%**	**8,553**	**3%**	**17,940**	**6%**	**32,795**	**9%**	**59,288**	**3%**
	Total Administrative Costs	**210,683**	**100%**	**716,040**	**100%**	**307,386**	**100%**	**311,828**	**100%**	**365,881**	**100%**	**1,911,817**	**100%**

Source: Cost data from grantees and subgrantees, 2011.

Note: Totals may not sum due to rounding.

Connecticut: State agencies are the Connecticut Department of Social Services and CT State Department of Education. The site includes 17 school districts but only 10 had reported costs. End Hunger Connecticut! is the site's community partner.

MI: State agencies are the Michigan Department of Education and Michigan Department of Community Health, WIC Division. The site includes one district, Grand Rapids Public Schools. Major subcontractors included Three Sigma Software, Novo Dia Group, and Loeffler Associates, plus two small contractors for videography and website and logo design and drafting of materials.

Missouri: The State agency is the Department of Health and Human Services. The site includes three SFAs. The Local Investment Commission (LINC) is the site's community partner. OR: The Department of Human Services is the state agency involved in the grant. The site includes 10 School Districts. No local partners or contractors were used for the demonstration. Texas: State Agencies are the Texas Department of Agriculture and Texas Department of State Health Services. The site includes one school district, Ysleta independent school district. West Texas Food Bank is the site's community partner and Solisystems is a subcontractor.

Exhibit 6.3   Total Grant Costs by Agency and Time Period

		Connecticut		Michigan		Missouri		Oregon		Texas		All Sites	
		CT total	% of total	MI total	% of total	MI total	% of total	OR total	% of total	TX total	% of total	total	% of total
Pre-benefit period	State agencies	0	0%	16,385	3%	11,403	5%	75,122	63%	100,155	32%	203,066	15%
	EBT vendor	85,175	65%	51,300	8%	111,612	50%	0	0%	0	0%	248,087	18%
	School district(s)	32,018	25%	10,718	2%	0	0%	4,872	4%	4,370	1%	51,978	4%
	Other non-profit contractors	0	0%	0	0%	40,090	18%	0	0%	49,598	16%	89,688	6%
	Other for-profit contractors	0	0%	422,717	70%	0	0%	0	0%	58,650	19%	481,367	35%
	Direct costs—pre-benefit period	**117,193**	**90%**	**501,120**	**83%**	**163,105**	**73%**	**79,994**	**67%**	**212,773**	**68%**	**1,074,185**	**77%**
Benefit period	State agencies	5,929	5%	12,695	2%	51,183	23%	19,166	16%	28,006	9%	116,979	8%
	EBT vendor	7,242	6%	8,717	1%	4,063	2%	1,701	1%	0	0%	21,723	2%
	School district(s)	0	0%	11,317	2%	0	0%	0	0%	0	0%	11,317	1%
	Other non-profit contractors	0	0%	0	0%	5,148	2%	0	0%	66,711	21%	71,859	5%
	Other for-profit contractors	0	0%	73,340	12%	0	0%	0	0%	0	0%	73,340	5%
	Direct costs—benefit period	**13,170**	**10%**	**106,069**	**17%**	**60,394**	**27%**	**20,867**	**18%**	**94,717**	**30%**	**295,218**	**21%**
Total	Total direct costs	130,363	100%	607,189	100%	223,500	100%	100,861	85%	307,490	98%	1,369,403	98%
	Indirect costs	0	0%	0	0%	0	0%	17,940	15%	6,852	2%	24,792	2%
	Total administrative costs	**130,363**	**100%**	**607,189**	**100%**	**223,500**	**100%**	**118,801**	**100%**	**314,342**	**100%**	**1,394,195**	**100%**

Source: Cost data from grantees and subgrantees, 2011.
Note: Totals may not sum due to rounding.

Exhibit 6.4   Total Grant and Non-Grant Administrative Costs by Site

	Connecticut		Michigan		Missouri		Oregon		Texas		All Sites	
	$	% of Total	$	% of Total	$	% of Total	$	% of Total	$	% of Total	$	% of Total
Grant costs	130,363	62%	607,189	85%	223,500	73%	118,801	38%	314,342	86%	1,394,196	73%
Non-grant costs	80,319	38%	108,851	15%	83,886	27%	193,026	62%	51,539	14%	517,621	27%
Total administrative costs	210,683	100%	716,040	100%	307,386	100%	311,828	100%	365,881	100%	1,911,816	100%

Source: Cost data from grantees and subgrantees, 2011. Note: Totals may not sum due to rounding.

State Agencies

As described in Chapter 2, State staff conducted most of the work compiling household lists, obtaining consent, and entering households into the EBT system. Some of this time was charged under the grant, but the majority was not. Michigan used grant funds to cover one State staff member, but relied on a private contractor funded through the grant to perform tasks other sites delegated to State staff. Oregon had the highest proportion of total administrative costs for State agency staff (92%). Because costs for the Oregon EBT contractor are not included, their total costs are understated; therefore the proportion incurred by the State agencies is overstated. In addition, they did not work with any community partners.

Sites that used grant funds to cover a limited number of State staff members' labor costs (Connecticut and Missouri) tended to have lower administrative grant costs while sites that used grant funds to cover a large portion of State labor costs or to pay contractors to take on project management had higher total administrative grant costs (see Exhibits 6.2 and 6.3). In Connecticut, grant funds were only used to cover overtime labor expenses for State staff. In Oregon, grant funds were used for the salary of the lead staff member. Similar to Oregon, in Missouri, grant funds were used to cover the lead staff member, overtime and one temporary staff person. Although Michigan also limited grant funds to one State staff person, the site differed from Connecticut, Missouri and Oregon in that it relied on a private contractor to handle project management, which other sites delegated to State staff. Michigan's grant costs made up 85% of their total administrative cost and it was the most costly site. Texas used grant funds to cover all State staff time and had the second highest grant costs. Texas grant costs were 86% of their total administrative costs.[73]

School Food Authorities

Grantees relied on the assistance of SFAs to identify eligible households and typically provided some funding to them. SFA costs were small, 1-3% of total administrative costs, except in Connecticut. Missouri did not reimburse the SFAs for any costs, as they relied on their community partner, LINC, to create the lists of eligible students. Connecticut and Oregon had 10 or more participating SFAs. Connecticut also differed from other sites, with SFA costs comprising 21% of their administrative costs (and 25% of their grant costs); these higher costs reflected the large number of SFAs and the need in Connecticut to do an additional set of mailings to obtain Social Security Numbers so participants could be entered into the SNAP data system, as described in Chapter 2.

EBT Contractors

As described in Chapter 2, Texas performed EBT processing internally, relying on a subcontractor only for developing and creating the cards.[74] The other sites relied on their regular EBT vendors, who generally needed to make minor adjustments to their processing

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[73] See Appendix 6B for more information on State-specific costs.

[74] In Texas, the cards were then sent to the West Texas Food Bank for distribution to families.

systems to process SEBTC benefits and to track them separately. As noted, Oregon could not separately report their EBT contractor's development costs for SEBTC, as these costs were not charged to the grant, but to the contractor's existing contract with the State. Oregon and Missouri used the same EBT contractor, FIS, and they split the costs of programming work that was common to both States. However, there were special features of each State's system that needed to be adjusted as well. Discussions with Oregon staff and FIS staff suggest that Oregon's EBT development costs were probably the same or less than Missouri's. All sites other than Texas were billed for regular processing during the benefit period. Charges per case-month for EBT cases were the same as for regular SNAP or WIC cases, and the total amount of those fees was small (one to three percent of overall administrative costs).

Other for-Profit Subcontractors

Michigan was the main user of for-profit subcontractors. The Michigan WIC program worked with two major subcontractors, one that provided project management, and another that created a much-simplified version of the Michigan WIC eligibility system for SEBTC. Both contractors performed similar roles in the development and operations of the Michigan WIC EBT system. The amount paid to these contractors was about seven times as much as the amount paid to Michigan's EBT processor, ACS (see Appendix 6B). In addition, the Michigan Department of Education used several small subcontractors/consultants. The most important of these coordinated work with Grand Rapids Public Schools (GRPS), as she had been the foodservice director there for many years. Other small subcontractors included a videographer and a graphic designer with a nutrition background. These three small subcontractors worked with State agency staff to develop the SEBTC logo, website, and instructional videos posted on the website.

Connecticut and Texas also had subcontractors who prepared and issued the EBT cards for SEBTC. These were the only other commercial subcontractors used by the grantees.

Non-Profit Community Partners

Three grantees involved non-profit, community partners in the SEBTC demonstration. The work of the two major partners (Texas's West Texas Food Bank and Missouri's LINC, as described in Chapter 2) was mostly funded under the grant. The other community partner used by a grantee—End Hunger Connecticut! (EHC)-- helped with outreach, but was not funded under the grant. EHC reported modest non-grant costs, but used mostly volunteers.[75]

6.3.2   Timing of Administrative Costs

SEBTC sites incurred the majority of their administrative grant costs prior to the start of the benefit period (from 67 to 90%) (Exhibit 6.3). Some of the pre-benefit costs were likely one-time start-up costs in that they involved figuring out how to implement the program and setting up needed processes, while other costs, such as making lists of eligible families and

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[75] The value of volunteer labor was not included in cost estimates.

obtaining consent, must be repeated each year. Some start-up costs are unrelated to the number of beneficiaries, leading to a higher-than-typical per case administrative cost estimate in the first year of a demonstration or program (FNS, 2006; FNS, 2008; Logan and Klerman, 2008). Since the POC sites will also be included in the second year of the evaluation, it will be more feasible to separate one-time start-up costs from annual preparations at that time.

The entities involved in implementing the demonstration incurred their costs at different times. Among the State agencies, two of the five sites (Connecticut and Michigan) had a roughly even split between the pre-benefit period and benefit period in State agency staff costs. Oregon and Texas were the two sites that differed in how State agency costs were distributed across the two time periods, with a higher proportion of costs incurred during the pre-benefit period. In Texas, State costs in the earlier period comprised 27% of total administrative costs and State costs in the later period comprised 8% of total administrative costs. In Oregon, costs from the earlier period comprised 59%, versus 33% in the later period (Exhibit 6.2). Missouri was the one site where the pre-benefit period State costs were lower than the benefit period (13% of total administrative costs compared to 22%.

In all five sites, essentially all of the SFAs' involvement took place during the pre-benefit period. As described in Chapter 2, in all sites, the SFAs' major role was providing lists of households and distributing and collecting consent forms, which happened during the school year. Michigan was the only site in which the SFA incurred costs during the benefit period and the amount was about the same as in the pre-benefit period, but small (over both periods, SFA costs in Michigan were about 3% of total costs). The SFA helped respond to participant questions through a local helpline during the summer, including providing Spanish speakers to return calls. They also helped locate households that did not use their cards.

EBT vendor costs, not surprisingly, also were largely pre-benefit period costs. Prior to the distribution of benefits, development work was necessary to allow for the EBT systems to process SEBTC benefits. In Texas, where EBT processing was handled by the State WIC agency, the development of the cards was outsourced to Solisystems, as are the cards for the regular WIC program. Ongoing EBT contractor costs, which covered monthly processing of the benefits, were very small, as noted earlier.

As with SFAs and EBT vendors, the costs of other contractors and community partners were higher during the pre-benefit period in the four sites that used community partners or contractors. Texas had the smallest variation in this category of costs between the pre-benefit and benefit periods, with 33% of its total administrative costs incurred by its subcontractors prior to benefits and 22% during the benefit period.

In both Texas and Missouri, much of the community partner's benefit period costs arose from responding to questions from families after the distribution of benefits and from helping locate families that had not activated their cards.

6.4 Total Costs (Administrative Plus Benefits) Per Household and Child

From the perspective of the federal, State, and local governments (including school districts), the total cost of the SEBTC demonstration is the sum of administrative costs and benefit costs. For the SEBTC sites, on average, administrative costs were 54% of total costs (Exhibit 6.5). Ongoing USDA programs such as SNAP have a much lower proportion of costs from administrative costs at 4.7% in 2011 (FNS, 2011b), but SEBTC was both small in scale and new, as noted earlier (FNS, 2011a).

6.4.1 Average Costs (Administrative Plus Benefits) Per Household and Per Child

Average costs per household issued benefits are of interest because SEBTC benefits are distributed at the household level, and because impacts are measured primarily at the household level. Although the impact estimates are based on the survey sample, that sample is a random subsample of all households issued benefits, and thus the average costs for such households are appropriate for comparison to impacts. (See Chapter 5 for more details about the impact analysis.) At the same time, the school-aged children in the eligible households are the target of the intervention, and it is thus of interest to examine average costs per child as well as per household.

Benefit costs per household and child were higher in sites using the SNAP model than in those using the WIC model, due to higher benefit redemption rates, making average overall costs in WIC-model and SNAP-model sites (combining benefit and administrative costs) more similar than administrative costs. For example, Texas, a site using the SEBTC-WIC model, has the lowest average total cost for households issued benefits due to low benefit redemption rates (Exhibit 6.6). It has the second lowest cost when considering children issued benefits. Oregon, a site using the SEBTC SNAP-hybrid approach, ranked higher in average costs per household and per child when benefits were counted, as it had the highest levels of participation and of redemptions among those who participated (see Chapter 3).

Exhibit 6.5   Total Costs (Administrative + Benefits)

	Connecticut		Michigan		Missouri		Oregon		Texas		All Sites	
	$	% of Total	$	% of Total	$	% of Total	$	% of Total	$	% of Total	$	% of Total
Total administrative costs (grant + non-grant)	210,683	38%	716,040	74%	307,386	47%	311,828	42%	365,881	59%	1,911,817	54%
Benefits redeemed	347,078	62%	248,461	26%	348,159	53%	434,324	58%	256,634	41%	1,634,656	45%
Total costs	557,760	100%	964,501	100%	655,545	100%	746,151	100%	622,516	100%	3,546,473	100%

Source: Cost data from grantees and subgrantees, 2011.

Note: Totals may not sum due to rounding.

6.4.2 Costs Per Household and Child of Benefits Issued Versus Benefits Redeemed

Costs per households or children *issued* benefits tell us the cost of *offering* the SEBTC program per household or per child. Costs per household or child *redeeming* benefits tells us how much it costs on average to *reach* a household or child with SEBTC program benefits (food). As noted earlier, average costs per participant can be higher-than-typical in the first year of a demonstration or program are due to one-time start up efforts and fixed costs that will not change when the program grows.

Not only were administrative costs higher in WIC sites, but redemption rates were lower. Thus, WIC-based SEBTC average costs for households that redeemed benefits were proportionately higher than SNAP-based SEBTC average costs, relative to the ratio of WIC-based costs to SNAP-based costs for households issued benefits.

Exhibit 6.6   Average Cost Per Household and Child Issued Benefits

Sites	Households Issued Benefits			Children Issued Benefits	
	Total Cost ($)	Number of Households	Average cost per Household ($)	Number of Children	Average Cost per Child ($)
Connecticut	557,760	1,357	411	2,416	231
Michigan	964,501	1,360	709	2,505	385
Missouri	655,545	1,479	443	2,546	257
Oregon	746,151	1,245	599	2,516	297
Texas	622,516	1,527	408	2,480	251
All Sites	3,546,473	6,968	509	12,463	285

Source: Cost data from grantees and subgrantees, 2011.

Exhibit 6.7   Average Cost Per Household and Child with Benefits Redeemed

Sites	Households Redeeming Benefits			Children in Households Redeeming Benefits	
	Total Cost ($)	Number of Households	Average Cost per Household ($)	Number of Children	Average Cost per Child ($)
Connecticut	557,760	1,305	427	2,337	239
Michigan	964,501	1,248	773	2,333	413
Missouri	655,545	1,349	486	2,342	280
Oregon	746,151	1,232	606	2,497	299
Texas	622,516	1,135	548	1,903	327
All Sites	3,546,473	6,269	566	11,412	311

Source: Cost data from grantees and subgrantees, 2011.

Chapter 7

Discussion and Conclusions

The Food and Nutrition Service (FNS) has undertaken a "proof of concept" (POC) year of the SEBTC to test two facets of the SEBTC approach vital to the long-run success of the policy and its evaluation:

- Whether the summer benefit intervention can be implemented successfully by the State and local grantees entrusted with its actuation in the POC year; and
- Whether the initial evaluation, targeting 5,000 households, can be done with fidelity, enabling a robust evaluation in the full demonstration year.

The POC test achieved both of these goals. The five POC year grantees collectively administered SEBTC to nearly 7,000 households, representing nearly 12,500 children, the target number initially specified by FNS when it awarded the 2011 grants. The evaluation team successfully implemented random assignment; collected process, cost, and EBT data; and interviewed more than 5,000 households before the 2010-2011 school year ended and again in the summer of 2011. The initial evaluation based on these data and summarized in this report provides valuable insights into SEBTC implementation, challenges, and successes—and on the intervention's costs. The accompanying impact analysis provides evidence that SEBTC achieved its main objective, reducing very low food security among children (VLSF-C). The evaluation also produced suggestive evidence of other favorable effects on broader food security measures and on two of six indicators of nutritional status of children.

This chapter summarizes key findings on SEBTC implementation and benefit use, and on the costs incurred by the POC sites in setting up and implementing the intervention. It also provides findings on the first year impacts of SEBTC on children's food security and other outcomes.

7.1 SEBTC Program Implementation

The POC grantees and their partners implemented a brand new program, requiring efforts to set up and operate a variety of administrative processes for the first time. Grantees needed to identify the households eligible for the evaluation and inform them of the SEBTC benefit. From there, they had to gain households' consent to take part in a random assignment evaluation. These first steps were not simple; for instance, grantees needed to communicate effectively to households the parameters of a new program and its EBT technology and, given random assignment, there was no guarantee that they would receive the SEBTC benefit even if they consented. Next, grantees had to modify SNAP and WIC EBT procedures and systems to equip them to issue SEBTC benefits. Since SEBTC is issued according to NSLP program rules and practices, those modifications had to resolve differences between NSLP

and either SNAP or WIC policies and practices. Just as importantly, because SEBTC derives its funds from sources independent from SNAP or WIC, fully separate and transparent lines of accounting had to be maintained even while in two States (Missouri and Oregon) SEBTC benefits are included with SNAP on the same benefit cards. Grantees and their partners then had to take the practical steps needed to issue new EBT cards or load benefits onto existing cards for households representing 2,500 children in each site. Because this was the first time SEBTC benefits were issued, the process often involved much manual effort that perhaps would be automated if the program were adopted on a permanent basis.

Grantees had to achieve these results in an extremely short time frame. Grant awards were announced in December 2010 and benefits had to be issued five to six months later, depending upon the length of the school years of participating SFAs. Despite the extremely fast timeline, several natural disasters, and state budget crises, all five grantees were able to successfully administer SEBTC benefits during the summer of 2011 to most households targeted to receive them. They did so facing several challenges specifically related to implementing a new program. One of the greatest was the creation of accurate lists of eligible households, and—from that—accurate lists of households consenting to take part in the demonstration. The quality of the data available in school systems and, in some cases, grantees' own data entry practices, created challenges in working toward these goals. The time needed to resolve issues with data quality caused delays in the consent and random assignment process, shortening the time available to get SEBTC benefits into the hands of the guardians of participating children in the demonstration treatment group.

Despite these challenges, all of the POC year grantees were able to obtain consent from the minimum required number of children and families for the demonstration and evaluation. Household consent rates ranged from 88% to 98% in sites using passive consent and from 24% to 37% in sites using active consent. The passive consent process best simulates how households would be enrolled in an ongoing program that relies on school records to identify participants, and the active consent process best simulates a program that requires families to apply in order to receive benefits. However, it is important to remember that the self-initiated enrollment rate in an ongoing program could be considerably higher than the active consent rate in the POC year. The latter involved a first-time benefit being offered by grantees new to the process of recruiting families to take part in an evaluation rather than a program. If SEBTC were an ongoing program without an evaluation component, the application rate among eligible households might be higher. It will be interesting to see if the consent rate for the POC sites increases among SFAs that were part of the POC year when those grantees move into a second year of demonstration operations and evaluation.

All of the grantees also succeeded in implementing procedures for the expiration or expungement of remaining benefits, and card deactivation. These processes generally ran smoothly.

7.2. SEBTC Benefit Issuance and Use

The five POC year grantees issued benefits to a total of 6,968 households with 12,463 children, very close to the goal for the POC year of issuing benefits to households representing 12,500 children. Among the households that were issued benefits 90% used them at least once during the summer of 2011 to buy food.

Analysis of EBT data indicates distinct patterns of usage. Most of the households that used the SEBTC benefits at least once used most of the SEBTC benefits issued to them, as attested by the 89% usage rate of households that used any of their allotment. These findings suggest that eligible families with a desire to take advantage of an SEBTC-type benefit (as represented by those using the EBT card at least once) likely will use most or all of the benefit offered to them in an ongoing program.

Despite this high overall redemption rate, rates varied substantially depending on whether sites used the "SNAP-hybrid model" (in which SEBTC benefits were loaded onto existing cards of SNAP participants and non-SNAP participants receive a SNAP card loaded with SEBTC benefits only) or a "WIC model" (in which a new SEBTC benefit card can be used only for a specific list of WIC-allowable foods). The SNAP-hybrid sites had the highest redemption rates among participating households—98% of benefits available to those households were used in Missouri and 99.0% in Oregon. This contrasts with lower redemption rates in the WIC model sites—71% in Michigan and 85.2% in Texas. These findings make sense: for the households already participating in SNAP in the SNAP-hybrid sites, EBT rules were set to ensure that SEBTC benefits were exhausted first before SNAP benefits. However, the redemption rate was also high for Connecticut, which used the SNAP model where SEBTC benefits were issued on a separate card (as opposed to the SNAP-hybrid model where SNAP and SEBTC benefits are issued on the same card to SNAP recipients). Under this approach, households that used their SEBTC benefits at least once redeemed 93.4% of the full benefit value. Thus, both SNAP-SEBTC models produced higher redemption rates than the SEBTC WIC model.

The more than 15 percentage point difference in redemption rates between the WIC model sites—Michigan and Texas—was interesting to note in the POC year. The full demonstration year, during which there will be additional sites using the SEBTC WIC model, will provide an opportunity to learn more about patterns of redemption and how they relate to implementation practices and other site and population characteristics.

Even though a very high percentage of SEBTC benefits were redeemed, a lower percentage of participating households redeemed all of their benefits. In fact, across all sites, only 57% of households assigned to receive the benefit exhausted it in at least one of the summer months, and 35% spent all of their benefits for the entire summer. In all three SNAP model sites, SNAP households were almost twice as likely to spend all of their SEBTC benefits as non-SNAP households. The fact that few households redeemed all their benefits may imply that, for many households, the SEBTC benefit amount was sufficient to meet their needs.

However, it may also imply that non-SNAP households were unaccustomed to using EBT benefit cards, which suggests that, if they participated in SEBTC over several years, their rate of benefit exhaustion might be closer to that of SNAP households.

7.3   Impacts of SEBTC

The impact analysis relies on a random assignment design, considered the gold standard for estimating the impacts of programs and policies—i.e., for determining in this case how much difference the SEBTC benefit makes to child and household outcomes compared to a "control group" level that represents what those outcomes would have been absent SEBTC. All evidence indicates that random assignment was implemented with fidelity in the POC year. Therefore, the impact analysis for the POC year provides a high quality estimate of the impact of SEBTC for those settings included in the first year of program administration.

7.3.1   Impacts on Children's Food Insecurity

The impact analysis provides evidence that SEBTC reduced very low food security among children (VLFS-C) during the summer of 2011 for the five POC sites combined. The prevalence of VLFS-C was cut from 7.0% to 5.6%. Further, analysis of related measures of food security among children as well as measures of adult and household food security, reinforce the evidence that SEBTC helped some households avoid food insecurity for their children and other members. All of the food security results are based on robust and exploratory analysis methods and occurred in four of the five sites for one or more of the six measures of food insecurity examined. While the existence of food security impacts is not in doubt, their size might be exaggerated by differential response rates for treatment and control group members with different levels of summer food security.

There is evidence that SEBTC improved VLFS-C for the treatment group. However, to put the impact into perspective, it is useful to consider national prevalence rates. As noted in Briefel, et al. (2011), levels of food insecurity in the POC sites during the 2011 school year were higher than national estimates for similar households (i.e., those with school age children and income below 130% FPL). The SEBTC spring sample had a VFLS-C rate of 7.3%; the corresponding national estimate is 2.6%. Therefore, while SEBTC demonstrated a significant impact, VLFS-C among the treatment group was more than twice as large as corresponding national estimates.

In addition, as is common, the POC year involved random assignment in a small number of purposively selected sites. Therefore, these results do not necessarily generalize to the nation as a whole, nor will impacts necessarily be the same in the full demonstration year. In summer 2012, the study will include 14 sites and an evaluation sample of approximately 27,000 households, allowing more robust examination of variation across sites and across demographic groups. If results from the full demonstration year are on average consistent with these POC year results and do not vary too much across sites and across demographic groups, then it will be more plausible to extrapolate the results to the nation as a whole.

The estimates of changes in VLFS-C and other measures of household food security for the control group between spring and summer provide important context as to how limited availability of federally sponsored children's nutrition programs could affect VLFS-C, as well as the broader measure of food insecurity among children, (i.e., both VLFS-C and LFS-C). The study found that the level of VLFS-C in the control group remained steady between spring and summer, even though most children in the control group did not receive either SFSP or FRP meals in summer school. For the broader measure of food insecurity among children, the prevalence rate fell by a statistically significant 4.2 percentage points between spring and summer, suggesting about a one-tenth drop-off from a prevalence rate of around 43% in spring to a prevalence rate of about 39% in the summer. The measured size of this drop-off—though not its existence—may have been exaggerated by differential survey response rates among households with different spring-to-summer food security patterns.

However, the finding of any reduction in food security in the summer is surprising, given the logical assumption that children would experience more food insecurity in the summer, when school-based nutrition programs are limited. However, the research base on seasonal differences in food security among school-age children is very limited. Further, research indicates that, in general, adults do whatever they can to protect the food security of their children (Nord, 2009; Institute of Medicine, 2011), so parents, lacking access to school-based nutrition programs, may make different trade-offs during the summer than during the school year to ensure that their children do not go hungry. In addition, there is limited information about how the food security instrument works when used as a repeated measure with the same households; repeated administration in a short time frame may affect responses.

The study team reviewed spring-to-summer changes in household circumstances, using available study data, that might help explain the decline, such as potential reductions in the number of household members or increases in household income, but could find no corroborating evidence. It is not clear whether this finding reflects unusual or atypical characteristics of the participating SFAs, specific circumstances related to the spring and summer of 2011, or other circumstances. In 2012, with a larger sample size, it may be possible to develop a better understanding of spring and summer differences in households with food security among children.

7.3.2 Impacts on Households' Food Expenditures, Children's Nutritional Status, and Household's Participation in Federal Nutrition Programs

The conceptual model of how SEBTC affects children's food security posits that, as a first step, SEBCT will cause households to purchase more food during the summer, resulting in reduced food insecurity among children in that period. In the POC year, the study was inconclusive about whether or not households increased food expenditures and therefore was unable to demonstrate this pathway. This result may be in part due to limitations of the available information on household food expenditures, even when self-reported survey information was supplemented with EBT data on expenditures of the SEBTC benefit. Revision to the household survey should improve available measures of food expenditures in the full demonstration year.

In addition to confirming that SEBTC results in improvements in VLFS-C, the POC year provides evidence that suggests children ate more fruits and vegetables in the summer and more frequently ate whole grains in that period because of SEBTC, though positive changes in diet in other areas (reductions in baked goods and sugar-sweetened drink consumption and increases in the share of children drinking nonfat or low-fat milk) were not demonstrated. Considering that most children do not meet dietary recommendations for fruits and vegetables or whole grains, these finding indicate dietary changes in the right direction.

Finally, the POC year evidence suggests that SEBTC may modestly increase participation in the federal SNAP program during the summer by 3.5 percentage points, while slightly reducing SFSP participation by 1.3 percentage points. The increase in SNAP participation could have helped to boost the impact of SEBTC on VLFS-C, in that more households in the treatment group than the control group took up SNAP between the spring and the summer. The 1.3 percentage point difference in SFSP usage may reflect less need for other forms of nutritional assistance among families receiving SEBTC. A small increase in WIC participation and in family payment of the full costs of summer lunches for their children were also suggested by available POC year data. However, while the study found an impact on WIC participation, data on the ages of children suggest this may be the result of misreporting by households.

7.4   SEBTC Costs

For the SEBTC SNAP model sites (Connecticut, Missouri, and Oregon), the amount of SEBTC allocated per eligible child was $60 per summer month when school was not in session. Given the different lengths of the summer periods among the five sites, the summer maximum SEBTC amount per child varied between $154 and $180. However, the mean *redeemed* amount per child ranged from $99 to $173 across the sites, with an overall mean amount of $131. The figure in most sites was well below the maximum available benefits. This was for two reasons. First, as stated before, only 57% of households used all of their benefits in any one month. Second, the average cost of the SEBTC WIC-allowable foods in the two WIC sites was lower than $60 per month per child. However, the costs of the SEBTC benefit itself comprised only about half of the overall cost of SEBTC in the POC year. The cost per school-aged child in a participating household was $311 on average, and ranged from $239 to $413 across sites.

While administrative costs accounted for 54% of total costs on average, this percentage varied considerably across sites. It ranged from a low of 38% in Connecticut to a high of 74% in Michigan.[76] The overall percentage is much higher than for other ongoing federal nutrition

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[76] These initial costs should be interpreted with caution since administrative costs for new programs include fixed costs unrelated to caseload and start-up costs such as EBT system changes that are not incurred in subsequent years of program expansion. Further, smaller pilot studies on EBT system implementation found that initial administrative costs were a higher proportion of total costs than after nationwide expansion (FNS, 1994, 2003;Logan and Klerman, 2008).

assistance programs such as SNAP and WIC. This level of administrative costs likely reflects start-up costs such as modifying several computer systems and databases to interface with each other and developing consent and outreach materials including logos and card designs. In addition, resources were needed at the beginning of the year to identify eligible households and get their consent to take part in the demonstration, a resource cost that would apply in a permanently established program. Cost data for the POC sites in the full implementation year (i.e., second year of operation) may make it possible to assess the magnitude of these start-up costs, as well as better gauge the costs of scaling up the program to serve at least twice as many households per site.

7.5   Overview and Next Steps

The findings of the POC year are encouraging regarding the feasibility of the SEBTC approach and its potential effect on reducing VLFS-C in the summer months. Expansions to larger samples and more grantee sites in the coming year will allow the research team to revisit the research questions addressed by the above-summarized findings and further equip FNS to make data-informed decisions about additional implementation plans for this summer nutrition benefit for children. In particular, the full demonstration year results, encompassing 14 sites and approximately 27,000 surveyed households, will provide an opportunity to see if the first-year findings hold up in a broader application of the SEBTC approach and to more conclusively analyze impacts on subpopulations of participating households and test ancillary hypotheses concerning the origins of any overall impact findings that emerge at that time.

References

The American Association for Public Opinion Research. 2011. Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys. 7th edition. Deerfield, IL: Author.

Beaulac J, Kristjansson E, Cummins S. 2009. A Systematic Review of Food Deserts, 1966-2007. *Preventing Chronic Disease*, 6(3), A105.

Bellotti J, Collins A, Owens C, Cabili C, Logan C, Climaco C, Paxton N, Relich P, Patrabansh S. 2011. Summer Electronic Benefits Transfer for Children: Early Experiences Through June 2011 of the Proof-of-Concept Year. Submitted to the U.S. Department of Agriculture, Food and Nutrition Service. Cambridge, MA: Abt Associates.

Briefel R, Collins A, Bellotti J, Klerman J, Logan CW, Cabili C, Rowe G, Greece J, Owens C, Weiss A. 2011. Congressional Status Report: Summer Electronic Benefits Transfer for Children Demonstrations. Submitted to the U.S. Department of Agriculture, Food and Nutrition Service. Cambridge, MA: Abt Associates.

Briefel RR, Dodd AH, Cabili C, Suitor CW. 2008. *Application of adult-based dietary guidelines to children: Evidence, knowledge gaps and policy implications.* Report to the U.S. Department of Health and Human Services, Assistant Secretary for Planning and Evaluation. Washington, DC: Mathematica Policy Research.

Coleman-Jensen Al, Nord M, Andrews M, Carlson S. 2011. Household Food Security in the United States in 2010. Economic Research Service Report No. 125. Washington, DC: Economic Research Service.

Feeding America. 2011. Kids Café. Available at: http://feedingamerica.org/how-we-fight-hunger/programs-and-services/child-hunger.aspx.

Finney Rutten LJ, Yaroch AL, Colon-Ramos U, Johnson-Askew W, Story M. 2010. Poverty, food insecurity, and obesity: A conceptual framework for research, practice, and policy. *Jnl of Hunger & Environmental Nutrition* 5:4, 403-415.

Food and Nutrition Service. 1994. The Evaluation of Maryland EBT Demonstration: Final Results. Available at: http://www.fns.usda.gov/ora/menu/Published/snap/FILES/ProgramOperations/MarylandEBT.htm.

Food and Nutrition Service. 2008. Food Stamp Electronic Benefit Transfer Systems. A Report to Congress. Alexandria, VA: Food and Nutrition Service.

Food and Nutrition Service. 2010a. Request for Application. Summer Electronic Benefits Transfer for Children (SEBTC). Supplemental Nutrition Assistance Program (SNAP) Model. Summer 2011 Demonstrations. Available at:

http://www.fns.usda.gov/ora/menu/DemoProjects/SummerFood/2011/SEBTCSNAP
Model_RFA.pdf.

Food and Nutrition Service. 2010b. Request for Application. Summer Electronic Benefits
Transfer for Children (SEBTC). Special Supplemental Nutrition Program for Women,
Infants and Children (WIC) Model. Summer 2011 Demonstrations. Available at
http://www.fns.usda.gov/ora/menu/DemoProjects/SummerFood/2011/SEBTCWICM
odel_RFA.pdf

Food and Nutrition Service. 2011a. Evaluation of the 14 State Summer Food Service Program
Pilot Project. Available at: http://www.fns.usda.gov/ora/menu/published/CNP/FILES
/SFSPPilot.htm. 2011a.

Food and Nutrition Service. 2011b. Supplemental Nutrition Assistance Program Participation
and Costs. Available at: http://www.fns.usda.gov/pd/SNAPsummary.htm. 2011b.

Food Research and Action Center. 2011. Hunger Doesn't Take A Vacation. Available at:
http://frac.org/pdf/summer_report_2011.pdf.

Fox MK, Hamilton W, and Lin B. 2004. Effects of Food Assistance and Nutrition and Health:
Volume 3, Literature Review, Food Assistance and Nutrition Research Report No. 19-
3. Washington, DC: U.S. Department of Agriculture, Economic Research Service.
Available at: http://www.ers.usda.gov/publications/fanrr19-3/fanrr19-3c.pdf

Fraker TM, Long SK, Post CE. 1990. Analyses of the 1985 Continuing Survey of Food Intakes
by Individuals. Volume I, Estimating Usual Dietary Intake, Assessing Dietary
Adequacy, and Estimating Program Effects: Applications of Three Advanced
Methodologies Using FNS's Four-Day Analysis File. Alexandria, VA: USDA, Food and
Nutrition Service.

Gordon A, Briefel R. 2004. Feeding Low-income Children When School is Out. The Summer
Food Service Program: Executive Summary. Food Assistance and Nutrition Research
Report, no. 30. Washington, DC: U.S. Department of Agriculture, Economic Research
Service.

Groves RM. 2006. Nonresponse rates and nonresponse error in household surveys. *Public
Opinion Quarterly* 70, 646–75.

Hanson K. 2010. The Food Assistance National Input-Output Multiplier (FANIOM) Model and
Stimulus Effects of SNAP. Report ERR-103. U.S. Department of Agriculture, Economic
Research Service. Available at: http://www.ers.usda.gov/publications/err103.

Hoisington A, Schultz JA, Butkus S. 2006. Coping Strategies and Nutrition Education Needs
Among Food Pantry Users. *Journal of Nutrition Education and Behavior* 34, *326-333,*
2006.

Hoynes HW, Schanzenbach DW. 2010. Work Incentives and the Food Stamp Program NBER Working Paper No. 16198. Available at: http://www.nber.org/papers/w16198.

Institute of Medicine. 2011. Hunger and Obesity: Understanding a Food Insecurity Paradigm—Workshop Summary. Washington, DC: National Academies Press.

Izrael D, Battaglia M, Frankel M. 2009. Extreme Survey Weight Adjustment as a Component of Sample Balancing (a.k.a. Raking). Presented at the 2009 SAS Global Forum. Available at: http://www.abtassociates.com/Page.cfm?PageID=40858&FamilyID=8600.

Kempson K, Keenan DP, Sadani PS, Adler A. 2003. Maintaining Food Sufficiency: Coping Strategies Identified by Limited-resource Individuals Versus Nutrition Educators. *Journal of Nutrition Education and Behavior* 35, 170-188.

Logan C, Klerman JA. 2008. Feasibility of Assessing Causes of State Variation in Food Stamp Program Administrative Costs. Cambridge, MA: Abt Associates.

Mabli J, Cohen R, Potter F, Zhao Z. 2010. *Hunger in America 2010: National report prepared for Feeding America.* Princeton, NJ: Mathematica Policy Research.

Malik V, Schulze M, Hu F.2006. Intake of Sugar-sweetened Beverages and Weight Gain: A Systematic Review. *American Journal of Clinical Nutrition*, 84(2), 274–288.

Meyerhoefer CD, Yang M. 2011. The Relationship between Food Assistance and Health: A Review of the Literature and Empirical Strategies for Identifying Program Effects. *Appl. Econ. Perspect. Pol.* 33(3), 304-344. First published online August 11, 2011, doi:10.1093/aepp/ppr02.

National Center for Education Statistics. 2012. Common Core of Data [Interactive database]. Washington, DC: Author. Available at: http://nces.ed.gov/

National Cancer Institute. 2009. Dietary factors & food items included in the Multifactor Diet Screener in NHANES 2009-10. Available at: http://riskfactor.cancer.gov/studies/nhanes/relationship.html.

Newby PK. 2007. Are dietary intakes and eating behaviors related to childhood obesity? A comprehensive review of the evidence. *Journal of Law, Medicine, & Ethics* 35(1), 35-60.

Nord M. 2009. *Food Insecurity in Households with Children: Prevalence, Severity, and Household Characteristics*. EIB-56. Washington, DC: U.S. Department of Agriculture, Economic Research Service.

Nord M. 2011. Psychometric Assessment of Food Security Response Data in the SEBTC Study. Working Paper. Washington, DC: U.S. Department of Agriculture, Economic Research Service.

Nord M, Prell M. 2011. *Food Security Improved Following the 2009 ARRA Increase in SNAP Benefits.* Report ERR-116. U.S. Department of Agriculture, Economic Research Service.

Nord M, Romig K. 2006. Hunger in the summer: Seasonal food insecurity and the National School Lunch and Summer Food Service Programs. *Journal of Children and Poverty* 12(2):,141-158.

Pereira M. 2006. The Possible Role of Sugar-sweetened Beverages in Obesity Etiology: A Review of the Evidence. *International Journal of Obesity*, 30(S3), S28-S36.

Ponza, Michael, Phil Gleason, Eric Grau, John Hall, Lara Hulsey, and Quinn Moore. 2007. *NSLP/SBP Access, Participation, Eligibility, and Certification Study. Erroneous Payments in the NSLP and SBP Volume II: Sampling and Data Analysis Appendices, Final Report.* Princeton, NJ: Mathematica Policy Research, Inc.

Potamites E, Gordon A. 2010. Children's Food Security and Intakes from School Meals. Contractor and Cooperator Report No. 61. Washington, DC: U.S. Department of Agriculture, Economic Research Service.

Reedy J, Krebs-Smith S. 2010. Dietary Sources of energy, solid fats, and added sugars among children and adolescents in the United States. *Journal of the American Dietetic Association* 110, 1477-1484.

Schochet PZ. 2008. Guidelines for testing in impact evaluations of educational interventions. Princeton, NJ: Mathematica Policy Research.

Schochet PZ. 2009. An Approach for Addressing the Multiple Testing Problem in Social Policy Impact Evaluations. *Evaluation Review* 33(6), 537-567.

Southworth HM. 1945. The Economics of Public Measures to Subsidize Food Consumption. *Journal of Farm Economics* 27, 38-66.

Taveras EM, Gillman MW, Kleinman K, Rich-Edwards JW, Rifas-Shiman SL. 2010. Racial/ethnic Differences in Early-life Risk Factors for Childhood Obesity. *Pediatrics* 125, 686-5.

Trippe CS, Ewell D. 2007. An Analysis of Cash Food Expenditures of Food Stamp Households. Report to the U.S. Department of Agriculture, Food and Nutrition Service. Washington, DC: Mathematica Policy Research.

U.S. Census Bureau. 2012. Current Population Survey, 2011 Annual Social and Economic Supplement. Table POV07: Families With Related Children Under 18 by Number of Working Family Members and Family Structure: 2010. Available at: http://www.census.gov/hhes/www/cpstables/032011/pov/new07_100_01.htm Retrieved April 26, 2012.

U.S. Department of Agriculture and U.S. Department of Health and Human Services. 2010. *Dietary Guidelines for Americans, 2010.* 7th Edition, Washington, DC: U.S. Government Printing Office.

Vartanian L, Schwartz M, and Brownell K. 2007. Effects of Soft Drink Consumption on Nutrition and Health: A Systematic Review and Meta-analysis. *American Journal of Public Health*, 97(4), 667–675.

Wilde PE, Troy LM, Rogers BL. 2009. Food Stamps and Food Spending: An Engel Function Approach. *American Journal of Agricultural Economics* 91(2), 416-430. Available at SSRN: http://ssrn.com/abstract=1375799.

Appendices

Appendix 1A

SEBTC Food Package in Sites Implementing the WIC Model

Exhibit 1A.1   SEBTC Food Package in Sites Implementing the WIC Model

WIC Food Group	Substitutes or Food Subgroups	WIC Package for 1-4 Year Olds		Summer EBT for Children Package	
		Quantity	Unit	Quantity	Unit
Juice		128	oz	64	Oz
Milk, lowfat/nonfat		13	qt	12	Qt
	Cheese	1	lb	1	Lb
Cereal, all		36	oz	36	Oz
Eggs		1	doz	1	Doz
Cash value voucher		6	$	16	$
Bread, whole wheat		2	lb	3	Lb
Beans, dry		0.33	lb	0.50	Lb
	Bean, canned	21	oz	32	Oz
	Peanut butter	6	oz	18	Oz
Canned fish, all		0	oz	18	Oz
WIC Food Group	Substitutes or Food Subgroups	FYI 2011 Food Package Cost in Dollars ($)		FYI 2011 Food Package Cost in Dollars ($)	
Juice		7.47		3.74	
Milk, lowfat/nonfat		12.14		11.21	
	Cheese	4.53		4.53	
Cereal, all		7.77		7.77	
Eggs		1.55		1.55	
Cash value voucher		6.00		16.00	
Bread, whole wheat		4.43		6.65	
Beans, dry		0.51		0.76	
	Bean, canned	1.52		2.29	
	Peanut butter	0.87		2.62	
Canned fish, all		0.00		2.94	
		$46.81		$60.06	

Source: Provided by the USDA, FNS in December 2010.

Note: Cash voucher is for fresh fruits and vegetables

State Maps for SEBTC Grantees in the POC Year

Connecticut SEBTC POC Year
School District Boundary (2010), ZIP Codes (2009)

Legend:
- School District Boundary
- Intersecting ZIP Codes
- Non-Intersecting ZIP Codes

Stafford School District
Thompson School District
Ashford School District
Putnam School District
Willington School District
Killingly School District
Mansfield School District
Hampton School District
Coventry School District
Brooklyn School District
Chaplin School District
Windham School District
Plainfield School District
Scotland School District
Columbia School District
Canterbury School District
Lebanon School District Sprague School District
Franklin School District
Lisbon School District
Griswold School District
Norwich School District
Bozrah School District

Michigan SEBTC POC Year
School District Boundary (2010), ZIP Codes (2009)

Legend:
- School District Boundary
- Intersecting ZIP Codes
- Non-Intersecting ZIP Codes

Grand Rapids Public Schools
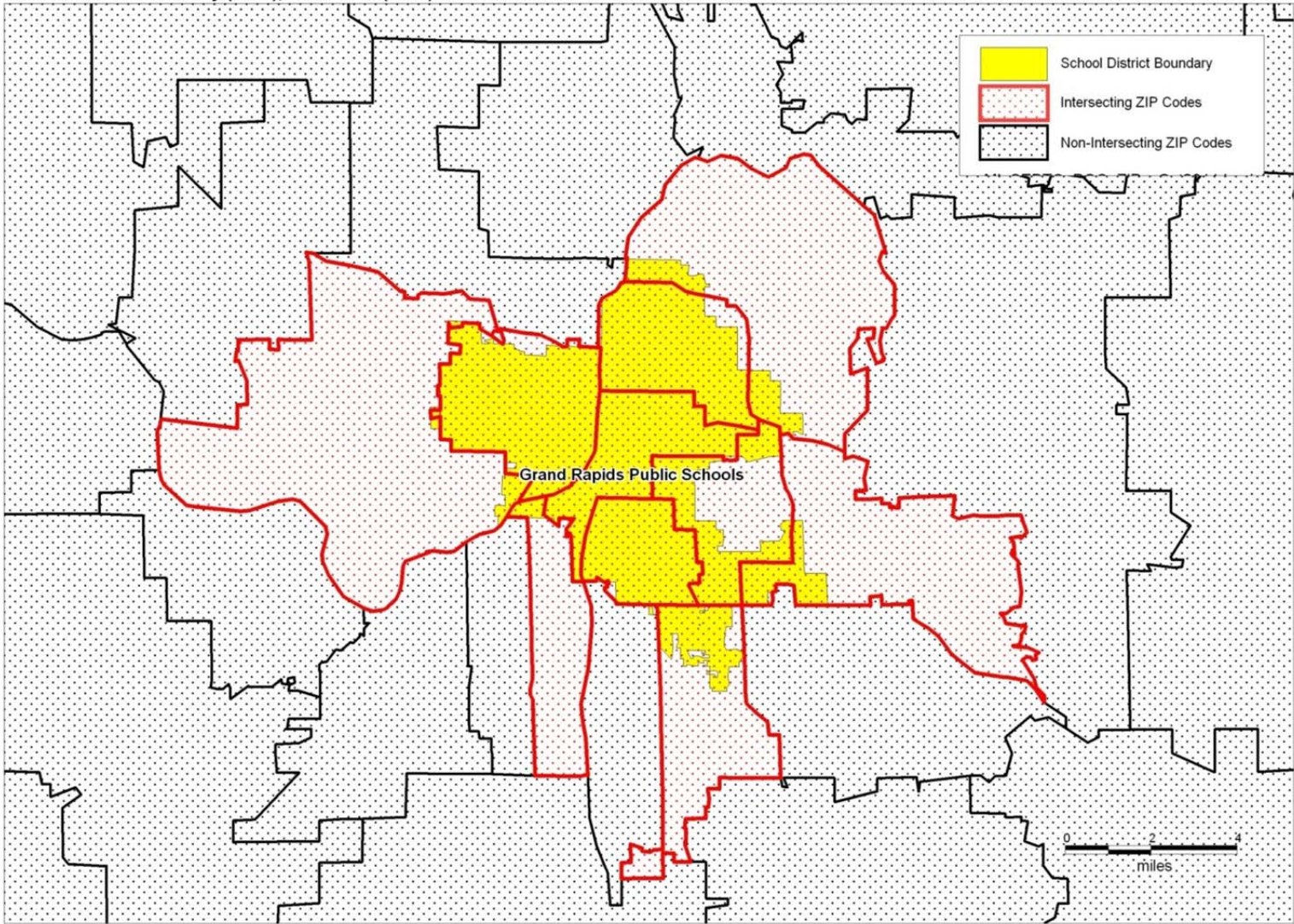
Missouri SEBTC POC Year
School District Boundary (2010), ZIP Codes (2009)

School District Boundary

Intersecting ZIP Codes

Non-Intersecting ZIP Codes

64053

64052

Kansas City School District

64133

Center 58 School District

Hickman Mills C-1 School District

64081

61146

64030

64149

Oregon SEBTC POC Year
School District Boundary (2010), ZIP Codes (2009)

Legend:
- School District Boundary
- Intersecting ZIP Codes
- Non-Intersecting ZIP Codes

Jefferson County School District 509J

Santiam Canyon School District 129J

Scio School District 95

Greater Albany School District 8J

Lebanon Community School District 9

Culver School District 4

Central Linn School District 552

Sweet Home School District 55

Harrisburg School District 7J

0   15   30
miles

Texas SEBTC POC Year
School District Boundary (2010), ZIP Codes (2009)

Ysleta Independent School District

	School District Boundary
	Intersecting ZIP Codes
	Non-Intersecting ZIP Codes

0   5   10
miles

Parents' Perception of Ease of SEBTC Benefit Use: Responses from the Household Survey, Summer 2011

Exhibit 2B.1   Ease of Benefit Use—All 5 POC Sites Combined

Card Usage	Percent of Households Rating the SEBTC Benefit as Excellent, Very Good, or Good	SE
Ease of obtaining the EBT card for SEBTC[a]	96.3	0.50
Directions for using the EBT card for SEBTC[a]	96.2	0.50
Ease of using the EBT card to get food	96.5	0.38
Ease of resolving problems with the EBT card	93.9	0.60

Source: SEBTC, Summer Survey, 2011 (n=2,581).

Data in table pertains only to respondents in the treatment group who reported using their SEBTC benefits at least once since receiving them.

[a] Respondents do not include those in SNAP-hybrid sites who were currently receiving SNAP.

Exhibit 2B.2   Ease of Benefit Use—Connecticut

Card Usage	Percent of Households Rating the SEBTC Benefit as Excellent, Very Good, or Good	SE
Ease of obtaining the EBT card for SEBTC	96.8	0.90
Directions for using the EBT card for SEBTC	99.2	0.35
Ease of using the EBT card to get food	98.5	0.53
Ease of resolving problems with the EBT card	95.3	1.16

Source: SEBTC, Summer Survey, 2011 (n=537).

Data in table pertains only to respondents in the treatment group who reported using their SEBTC benefits at least once since receiving them.

Exhibit 2B.3   Ease of Benefit Use—Michigan

Card Usage	Percent of Households Rating the SEBTC Benefit as Excellent, Very Good, or Good	SE
Ease of obtaining the EBT card for SEBTC	93.6	1.10
Directions for using the EBT card for SEBTC	91.6	1.20
Ease of using the EBT card to get food	91.5	1.18
Ease of resolving problems with the EBT card	87.7	1.52

Source: SEBTC, Summer Survey, 2011 (n=613).

Data in table pertains only to respondents in the treatment group who reported using their SEBTC benefits at least once since receiving them.

Exhibit 2B.4   Ease of Benefit Use—Missouri

Card Usage	Percent of Households Rating the SEBTC Benefit as Excellent, Very Good, or Good	SE
Ease of obtaining the EBT card for SEBTC [a]	96.5	2.22
Directions for using the EBT card for SEBTC [a]	96.8	2.38
Ease of using the EBT card to get food	97.7	0.73
Ease of resolving problems with the EBT card	95.8	1.40

Source: SEBTC, Summer Survey, 2011 (n=407).

Data in table pertains only to respondents in the treatment group who reported using their SEBTC benefits at least once since receiving them.

[a] Respondents do not include those currently receiving SNAP.

Exhibit 2B.5   Ease of Benefit Use—Oregon

Card Usage	Percent of Households Rating the SEBTC Benefit as Excellent, Very Good, or Good	SE
Ease of obtaining the EBT card for SEBTC [a]	96.9	1.78
Directions for using the EBT card for SEBTC [a]	98.2	1.28
Ease of using the EBT card to get food	98.0	0.64
Ease of resolving problems with the EBT card	95.5	1.27

Source: SEBTC, Summer Survey, 2011 (n=558).

Data in table pertains only to respondents in the treatment group who reported using their SEBTC benefits at least once since receiving them.

[a] Respondents do not include those currently receiving SNAP.

Exhibit 2B.6   Ease of Benefit Use—Texas

Card Usage	Percent of Households Rating the SEBTC Benefit as Excellent, Very Good, or Good	SE
Ease of obtaining the EBT card for SEBTC	98.8	0.52
Directions for using the EBT card for SEBTC	97.7	0.94
Ease of using the EBT card to get food	96.5	0.95
Ease of resolving problems with the EBT card	96.4	1.20

Source: SEBTC, Summer Survey, 2011 (n=466).

Data in table pertains only to respondents in the treatment group who reported using their SEBTC benefits at least once since receiving them.

Appendix 2C

EBT Process for SEBTC Models

2C.1 SEBTC Using SNAP and SNAP-Hybrid Models

The following Exhibit 2C.1 illustrates the basic process of using SNAP EBT to issue, redeem and reconcile SEBTC benefits. Each State using SNAP EBT had variations of this model, as explained within this appendix.

Exhibit 2C.1   Flow Chart of SEBTC Issuance Using SEBTC SNAP and SNAP-Hybrid Models
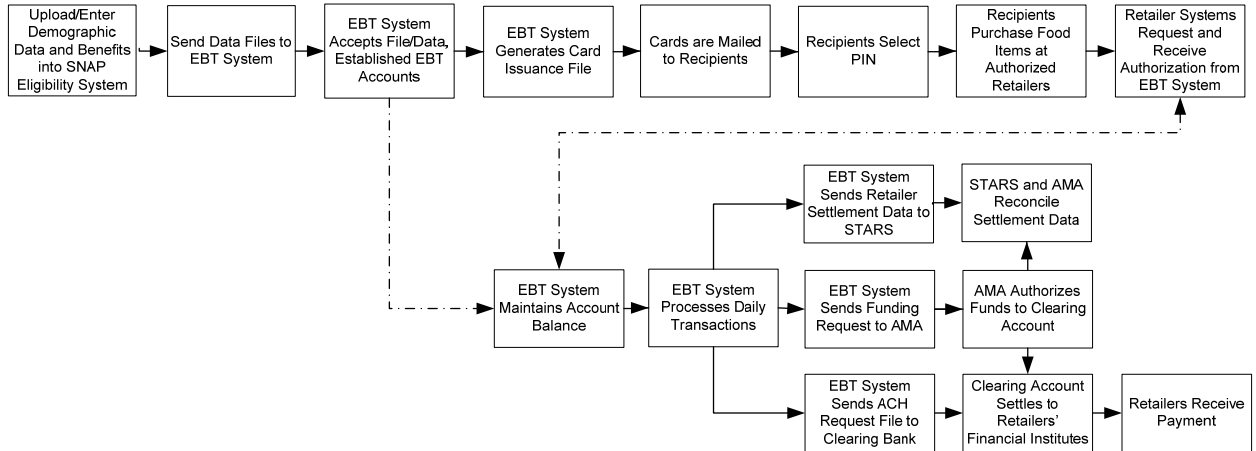
Connecticut

Connecticut uses a separate vendor, L1 Credentialing, for card fulfillment services. Card fulfillment includes producing the card and mailing the card to the SEBTC head of household, and including any mailers and notifications within the card mailer. In Connecticut, the SNAP eligibility system sent a card issuance file to L1 Credentialing and an account set-up and benefit file to JPMorgan Chase. Once cards were issued, L1 Credentialing sent JPMorgan Chase a file with the cards' primary account numbers (PANs) associated with each SEBTC account. L1 also produced the SEBTC replacement cards.

Missouri

Missouri did not enter SEBTC data into their SNAP eligibility system. Instead, they entered SEBTC demographic and benefit data manually, directly into the EBT system.   In this hybrid model, Missouri matched SEBTC cases against existing SNAP cases prior to entering data into the system. For those SEBTC participants that had SNAP accounts, Missouri identified the

account and simply added the SEBTC benefit. FIS, the Missouri EBT processor, did not create an automated process for reconciliation for the 2011 POC. Instead, it made manual adjustments to the Store Tracking and Redemption Subsystem II (STARS) and AMA to balance SNAP and SEBTC payments.

Oregon

In this hybrid model, Oregon matched SEBTC cases against existing SNAP cases prior to entering data into their eligibility system. For those SEBTC participants that had SNAP accounts, Oregon identified the account and added the SEBTC benefit to the SNAP account. FIS, the Oregon EBT processor, did not create an automated process for reconciliation for the 2011 POC. Instead, it made manual adjustments to STARS and AMA to balance SNAP and SEBTC payments.

2C.2 SEBTC Using WIC Models

Michigan: Using WIC EBT Online Technology

For the 2011 POC, only one SEBTC grantee, Michigan, used online WIC EBT to deliver benefits to SEBTC participants. Exhibit 2C.2 illustrates the online WIC EBT process flow. As shown, the primary difference between SNAP EBT and online WIC EBT is in the way funds flow and data is reported to FNS.[1]

Exhibit 2C.2   Flow Chart of SEBTC Issuance Using WIC Online Technology
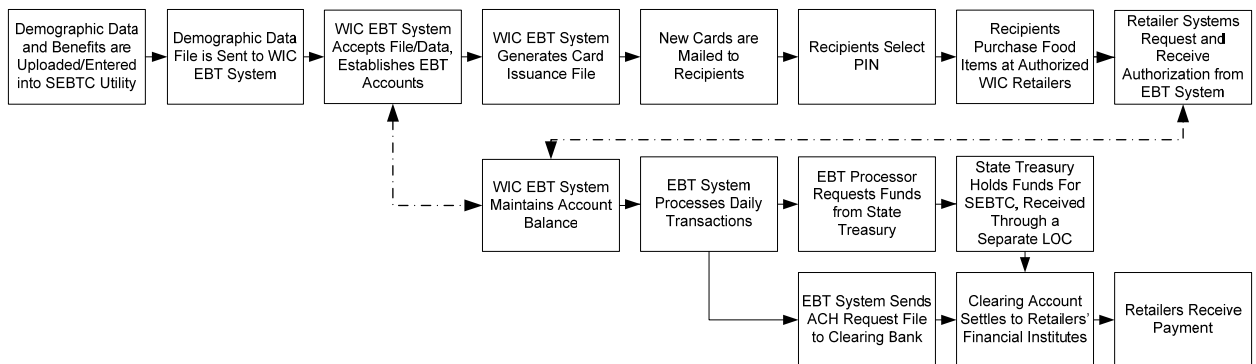
Michigan (and Texas) both created SEBTC "utilities", applications that are a subset of functions of their WIC management information systems (MIS). These were used to by-pass the rules associated with WIC issuance, which includes limitations on a child's age (5 and under) and certain medical data.

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[1] WIC State Agencies provide FNS with a reconciliation report at the end of each month.

Texas: Using WIC EBT Offline Technology

For the 2011 POC, only Texas used offline WIC EBT to deliver benefits to SEBTC participants. Exhibit 2C.3 illustrates the offline WIC EBT process flow.

Exhibit 2C.3   Flow Chart of SEBTC Issuance Using WIC Offline Technology
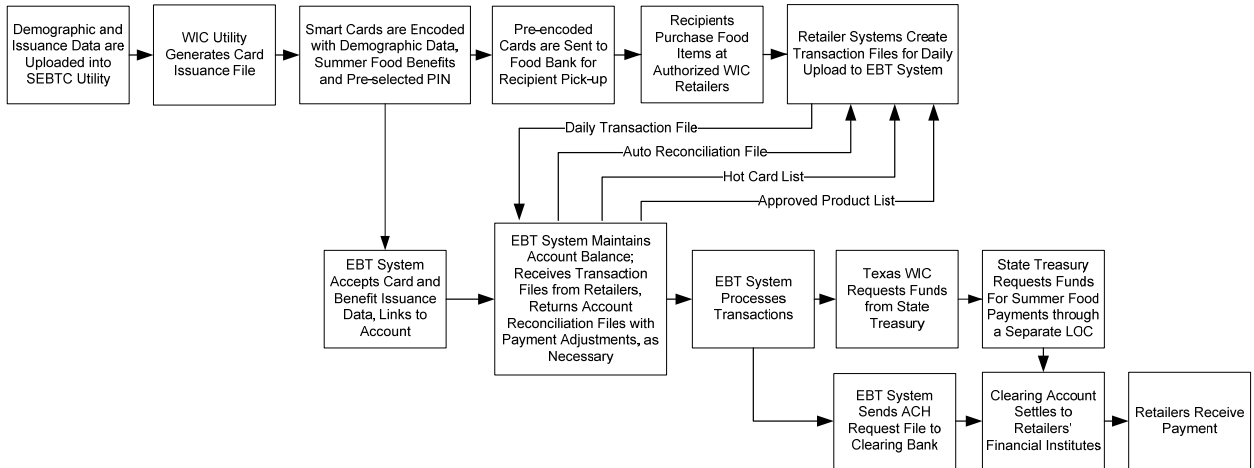
As shown, there are major differences between online and offline EBT in the way data is transmitted.   There is no real-time connection between retailer systems and the EBT system. Instead, batch files are transferred between the two systems, usually on a daily basis, so that retailers can upload the day's transactions to the EBT system and receive a reconciliation file, hot card list, and approved product list from the EBT system. Also note that Texas self-processes – operates and maintains its own WIC EBT system. This process modifies the request for funds as being from Texas WIC and not an outside processor.

There are other variations possible with WIC EBT. For example, Texas decided to issue cards pre-encoded with benefits and a PIN. Alternatively, the cards could be issued over-the-counter with the PIN selection being made by the participant. This is the way WIC clinics issue cards to WIC participants.

Appendix 3A

Supplementary Information on SEBTC-WIC Benefit Issuance and Use

Exhibits 3A.1 and 3A.2 present supplementary information on benefit issuance and use in the SEBTC-WIC model sites, Michigan and Texas. The tables provide information on the dollar value and quantity of benefits issued and redeemed for each food category and overall. In addition, the percentage of benefits redeemed and number of households with redemptions are provided for each food category and overall. The data are summed over the three months of the POC demonstration.

The WIC issuance data provided by the sites did not provide the dollar value of benefits. We imputed the value for each food category for each month using the average cost per unit from the redemption data for that month. (The units are specified in Exhibits 3A.1 and 3A.2.) Because we used monthly average unit costs for the foods, the value of the package varied from month to month, even though the quantity did not. The overall unit costs for the summer, shown here, are the unweighted averages of the unit costs in each of the three months. Once we calculated the value of benefits in each food category, we summed these values to compute the total value of benefits issued. The percentage of benefits redeemed was calculated on a dollar value basis.

Exhibit 3A.1 Benefit Issuance and Use in Michigan, by Food Category

Food Category	Unit	Per Child	Unit Cost	Issued		Redeemed		Percent Dollar Benefits Redeemed		Households with Redemptions in Category	
				Dollars	Units	Dollars	Units	All Households	Households with Any Redemptions	Number	Percent
Milk	Gal	2	$3.1919	$47,936	15,018	$37,060	11,610	77.3%	83.0%	1,226	90.1%
Cheese	Lbs	0.5	$5.7691	$21,660	3,754.5	$15,202	2,635	70.2%	75.4%	1,111	81.7%
Eggs	Dozen	1	$1.6327	$12,259	7,509	$9,691	5,939	79.0%	84.9%	1,217	89.5%
Juice (64oz bottle or equivalent)	Bottle	1	$3.5025	$26,300	7,509	$21,009	5,999	79.9%	85.8%	1,211	89.0%
Cereal	Oz	36	$0.2445	$66,092	270,324	$43,900	179,560	66.4%	71.3%	1,192	87.6%
Dry or canned beans and peanut butter	Unit	1.5	$2.3546	$26,520	11,263.5	$14,002	5,954	52.8%	56.7%	1,125	82.7%
Fish (canned tuna/salmon)	Oz	15	$0.1869	$21,051	112,635	$13,153	70,335	62.5%	67.1%	1,054	77.5%
Grain products (bread, tortillas, rice, and oatmeal)	Lbs	2	$2.3814	$35,763	15,018	$14,967	6,281	41.8%	44.9%	1,101	81.0%
Fruits and vegetables	$	14	$1.0000	$105,126	105,126	$79,477	79,477	75.6%	81.2%	1,239	91.1%
Overall				$362,708	548,157	$248,461	367,790	68.5%	73.6%	1,248	91.8%

Exhibit 3A.2   Benefit Issuance and Use in Texas, by Food Category

Food Category	Unit	Per Child	Unit Cost	Issued Dollars	Issued Units	Redeemed Dollars	Redeemed Units	Percent Dollar Benefits Redeemed All Households	Percent Dollar Benefits Redeemed Households with Any Redemptions	Households with Redemptions in Category Number	Households with Redemptions in Category Percent
Milk	Gal	3	$3.1202	$69,661	22,326	$46,489	14,908	66.7%	87.0%	1,131	74.1%
Cheese	Lbs	1	$4.1691	$31,026	7,442	$21,660	5,202	69.8%	91.0%	1,125	73.7%
Eggs	Dozen	1	$1.5277	$11,370	7,442	$8,072	5,297	71.0%	92.5%	1,124	73.6%
Juice (64oz bottle or equivalent)	Bottle	1	$2.4339	$18,113	7,442	$12,471	5,123	68.9%	89.8%	1,114	73.0%
Cereal	Oz	36	$0.1824	$48,869	267,912	$32,707	179,244	66.9%	87.2%	1,119	73.3%
Dry or canned beans and peanut butter	Unit	2	$1.9422	$28,908	14,884	$17,621	9,099	61.0%	79.5%	1,102	72.2%
Fish (canned tuna/salmon)	Oz	18	$0.1753	$23,486	133,956	$13,860	79,036	59.0%	76.9%	1,097	71.8%
Grain products (bread, tortillas, rice, and oatmeal)	Lbs	3	$1.7560	$39,205	22,326	$24,399	13,912	62.2%	81.1%	1,114	73.0%
Fruits and vegetables	$	16	$1.0000	$119,072	119,072	$79,355	79,355	66.6%	86.9%	1,132	74.1%
Overall				$389,710	602,802	$256,634	391,176	65.9%	85.8%	1,135	74.3%

Appendix 3B

Regression Analysis of the Relationship of Participation, Redemption, Exhaustion of Benefits, and Time to Benefit Exhaustion to Site and Household Characteristics

3B.1 Overview of Methods

This appendix presents the approach to modeling the relationship of household characteristics to the four measures of SEBTC benefit usage that were described with aggregate data in Chapter 3 of the report:

- The participation rate, i.e., percentage of households that redeem any benefits
- The redemption rate, i.e., percentage of benefits redeemed by participating households
- The exhaustion rate, i.e., percentage of all households that redeem all of their benefits
- Time to exhaustion, i.e., the number of days elapsed from when benefits are issued to when they are exhausted, among households that exhaust their benefits.

A household is considered to have participated in SEBTC if they redeemed benefits at any time in the summer. The redemption rate is the percentage of benefits redeemed as a share of total available benefits for the month. The redemption rate analysis does not include households that did not redeem for a given month. For SNAP States, available benefits also include balances carried over from the previous month's cycle, whereas in WIC States, benefits expire at the end of the monthly cycle.

The benefit exhaustion analysis examines the incidence of households exhausting their benefits every monthly cycle as well as the corresponding number of days that elapsed till the benefit was exhausted. For SNAP States, a household exhausted their benefits if they redeemed 100% of the available benefit for the month. In the WIC sites, households were considered to have exhausted their benefits if they redeemed their entire credit for fruits and vegetables ($14 in Michigan and $16 in Texas) and if they redeemed enough of their benefits in all other food categories that they could not purchase any more. For some food categories, such as cereal, the benefit was denominated in ounces, and allowable package sizes varied. As a result, it was possible to have several ounces of the benefit left, but not enough to buy another package of the minimum size.

The outcome variables and their definitions are listed in Exhibit 3B.1 below.

Exhibit 3B.1   EBT Outcome Variables

Outcome Variable Name	Definition
Participation	Whether the household participated in SEBTC or not
Percent redeemed	Redemptions as a percentage of available benefits for the month. Available benefits may include balances carried over from the previous month for SNAP States.
Benefit exhaustion	Whether the household exhausted benefits or not during the month
Days until exhaustion	Number of days until benefit is exhausted

Household characteristics such as demographic characteristics, household composition, educational attainment, employment status and relative monthly income, and food security status are hypothesized to have an association with the outcome variables. Baseline characteristics are used, as measured in the spring before the SEBTC demonstration. Missing values for all controls are imputed using multiple imputations, which is described in more detail below. The specific household control variables used in the analysis and their definitions are listed in Exhibit 3B.2, and the rationale for inclusion in the models is listed in Exhibit 3B.3.

3B.2 Multiple Imputation Procedure

Missing values are imputed using Sequential Regression Multiple Imputation (SRMI), a procedure that can handle complex data structures that comprise different types of variables, such as the survey data that include continuous, count, and categorical variables. The basic strategy is to create imputations through a sequence of multiple regressions, varying the type of regression model by the type of variable being imputed. For example, the distribution of continuous variables is estimated using a normal linear regression model, while the distribution of binary variables is estimated using a logistic regression model. Covariates include all other variables observed or imputed for an individual. The imputations are defined as draws from the joint posterior predictive distribution specified by the regression models with a flat or non-informative prior distribution for the parameters in the regression models (Raghunathan et. al., 2001). The software used for the imputation is IVEWare developed by the Institute for Social Research at University of Michigan.

Nonresponse in the spring survey accounted for most of the missing values, around 16% of the sample. Therefore, variables from the sampling frame and summer survey were used to augment the spring variables in the imputation procedure. For race and Hispanic origin, summer values are used to fill in for missing values. This was done before the imputation procedure. Any remaining missing values were imputed by multiple imputation. The final pass of multiple imputation uses summer values of one household head (female), age of caregiver, age of oldest child, education, employment status and income. It also uses number of children from the sampling frame. It is important to emphasize that all control variables are spring (pre-demonstration) values.

Appropriate minimum and maximum bounds were imposed on continuous variables. For example, the age of the oldest child less than 21 years was restricted to be between 1 and

20, inclusive. Number of adults was calculated by using the full set of observations after imputation for household size and number of children. If the value for number of adults, which is computed by subtracting number of children from household size, fell below 1 that observation was dropped. Around 4% of the sample was dropped due to observations that fell outside this bound.

Fifteen datasets were imputed, and regression analyses were conducted on each dataset. The parameter estimates and standard errors from the imputed datasets were combined and adjusted using the MIANALYZE procedure in SAS.

Exhibit 3B.2 Household-level Control Variables (All from spring 2011 except as noted)

Control Variable Name	Definition
Black	Primary caretaker is a Non-Hispanic black or African-American
Hispanic	Primary caretaker is of Hispanic or Latino origin
Less than a high school education	Primary caretaker did not complete high school
Number of adults in household	Number of adults living in household
Only female caretaker	Household is single female-headed
Only male caretaker	Household is single male-headed
Age of oldest child less than 21 years	Age of oldest child less than or equal to 20 years
Number of children	Number of children in household that are less than 18 years old, or over 18 years old but still in high school
Employment status	At least one adult in household has been employed in the past 30 days
Income relative to poverty line	Ratio of household's monthly income (capped at $12,500) to poverty threshold, based on household's sample size
Food insecurity in spring—household	Household food security at spring-2 level. Coded as 0=Secure/Marginally Secure, 1=Low/Very Low Food Security
Very low food security in spring—household	Household very low food security at spring-2 level. Coded as 0=Secure/Marginally Secure/Low Food Security, 1=Very Low Food Security
Free/Reduced breakfast	Focal child received free or reduced price breakfast at school in the past 30 days
SNAP household	At least one person in household is currently receiving SNAP benefits
WIC household	At least one person in household received food or benefits from the WIC program in the past 30 days.

Source: SEBTC Spring Survey, 2011. Race and Hispanic origin of primary caretaker were imputed from summer survey when missing from spring survey. Imputation of missing values for other variables uses data from spring and summer surveys.

Exhibit 3B.3. Rationale for Including Household-level Control Variables

Response Variable Name	Rationale
Black	Black or Hispanic households are historically disadvantaged populations.
Hispanic	On one hand, language barriers may prevent households from taking advantage of the program, while on the other hand, those that do redeem benefits may redeem more given that they have fewer opportunities than white non-Hispanic households.
Less than a high school education	The caregiver's education may be related to the volatility of income and employment, access to resources and networks of assistance, and to the ability to understand and participate in the program.
Number of adults	We expect that households with more adults may have more sources of assistance from elsewhere and may have a lower incidence of participation and redemption.
Only female caretaker	Households with a single caretaker may be more time-constrained and therefore less able to take advantage of the program. On the other hand, they may have fewer resources and therefore more motivation to participate and more need to redeem benefits. Stigma associated with participation may be stronger for households headed by two adults. Thus the expected impact on participation and redemption is uncertain.
Only male caretaker	
Age of oldest child less than 21 years	Older children have greater nutrient intake requirements. Therefore households who have older children are expected to be more likely to participate and redeem benefits.
Number of children	We expect households with more children to need the benefits more. Therefore we expect to see more children associated with a higher incidence of participation and redemption.
Employment status	Employed household are more stable households and may therefore be more likely to remain in the demonstration area and participate in the program. On the other hand employed households may not need to participate as much.
Relative income to poverty line	We expect poorer households need the program more and therefore have a higher incidence of participation, redemption, and benefit exhaustion.
Low food security in spring—household	We expect households that are more food insecure to need the program more.
Very low food security in spring—household	Households with very low food security may need the program more. This measure may be more volatile than low food security, so that spring status is not predictive of need in the summer. Very low food security may be predictive of households that have barriers to accessing resources and thus are less able to take advantage of the program.
Free/Reduced breakfast	Households that participate in free/reduced breakfast programs are more familiar with these programs and are therefore more likely to participate.
SNAP household	SNAP households in the hybrid sites use the same card for SNAP and SEBTC. Participation rates in SNAP vary substantially across sites. SNAP/WIC participation makes households more familiar with EBT and may facilitate SEBTC participation.
WIC household	

Source: SEBTC Spring and Summer Surveys, 2011

3B.3 Sample

The sample of households used in the regression analyses consists of households that consented to the evaluation team using their EBT data. We were able to retrieve EBT data for a total of 2991 consenting households. The distribution of consenting households with matched EBT Account numbers are shown in Exhibit 3B.4.

Exhibit 3B.4   Consenting households with EBT data by site

Site	Consenting HH's that have a matched EBT #
Connecticut	640
Michigan	694
Missouri	497
Oregon	623
Texas	537
Total	2991

Source: SEBTC Spring and Summer Surveys, 2011

Household observations are weighted to the population of eligible households provided by the sites. Weights are calculated for consenting households that completed the spring or summer survey. The weights are computed as the reciprocal of the probability of selection of the household and adjusted to site control totals. The weight totals for each site were equalized so that each site contributed the same combined weight.

For the participation rate model, there is one record per household. For other models, households have multiple observations, up to one for each month. For the redemption model, a household has an observation for each month in which they redeemed. For the benefit exhaustion model, a household has an observation for each month they were issued benefits. For the days till exhaustion model, a household has an observation for each month in which it exhausted benefits. In the analysis of the various models, not all observations are used. Records were dropped records due to illogical values for number of adults. For each model, the average number of observations across the fifteen imputed datasets are shown in Exhibit 3B.5. The number of observations used in each of the 15 imputed datasets is displayed in Exhibit 3B.6

Exhibit 3B.5   Observations used

Model	Average number of observations used
Participation	2853
Redemption rate	7707
Benefit exhaustion	8560
Days until exhaustion	3779

3B.4 Participation Model Estimation

Participation is a binary variable and therefore modeled as a logistic regression on household characteristics with site controls. The logistic model predicts the log of odds, or the log of the ratio of the probability of participation to the probability of not participating in the program.

Log(odds) = log(p/1-p), where p=probability of participating in the program.

The odds ratio can be interpreted as the 'relative risk' of participating when a control variable increases by one unit. In the case of a binary control, Oregon (OR) for instance, the odds ratio is the relative likelihood (odds) of a household in Oregon participating the program divided by the relative likelihood of a similar household in the excluded site, which is Texas in all the models.

Odds ratio of OR household =

$$\frac{(p/1\text{-}p) \text{ for OR} = 1}{(p/1\text{-}p) \text{ for OR} = 0} = 27.06$$

In other words the relative likelihood of a household in Oregon participating in the program is 27.06 times the relative likelihood of a household in Texas participating the program.

3B.5 Model Estimations

Redemption Rate Model Estimation

Redemption rate is a continuous variable between 0 and 100 that represents the percentage of available benefits redeemed by the household during the monthly cycle. In addition to the household-level variables in Table 3.B.6, the model controls for the benefit months, number of days in the benefit cycle, as well as the sites. Ordinary Least Squares is used to predict the redemption rate. The coefficients in the model can be interpreted as the percentage point change in the percentage of benefits redeemed when the control variable increases by one unit.

Benefit Exhaustion Model Estimation

Benefit exhaustion is also modeled as a logistic regression controlling for household-level variables, site, month, and cycle length. The odds of benefit exhaustion is the probability that the household exhausts their benefits for the month relative to the probability that the household does not exhaust their benefits.

Days till Exhaustion Model Estimation

This model includes only those observations for households that exhausted their benefits. Days till exhaustion is measured in days and is predicted using Ordinary Least Squares with household-level variables and site, month, and cycle length controls.

Exhibit 3B.6 shows the complete specification of the four models with combined results from the 15 imputed datasets.

Exhibit 3B.6   Complete Specification of the Four Models

Parameter	1. Participation Rate		2. Redemption Rate		3. Benefit Exhaustion Rate		4. Days Until Exhaustion	
	Odds Ratio		Parameter estimate		Odds Ratio		Parameter estimate	
CT	5.82	***	5.166	***	2.604	***	-8.620	***
MI	2.729	***	-13.946	***	0.115	***	5.671	***
MO	4.256	***	10.793	***	9.748	***	-6.087	***
OR	27.064	***	8.062	***	19.293	***	-12.234	***
June			2.257	***	1.393	***	2.111	***
July			1.000	**	1.200	**	1.954	***
Number of days in benefit cycle			0.224	***	1.037	***	0.346	***
Black	0.920		-3.663	***	0.920		0.366	
Hispanic	0.497	**	0.138		0.680	***	1.366	***
Less than a high school education	1.088		1.567	***	1.121		-0.816	**
Number of adults	0.801	**	-0.073		0.928	*	-0.048	
Only female caretaker	0.984		-0.830	*	1.083		0.179	
Only male caretaker	1.527		-3.691	**	0.913		1.438	
Age of oldest child less than 21 years	1.035		0.202	***	1.007		0.091	**
Number of children	1.060		0.127		1.000		0.069	
Employment status	1.420		-0.136		0.981		0.672	**
Relative income to poverty line	1.532		-1.169	*	0.896		0.437	
Relative income to poverty line squared	0.886		0.180		1.005		-0.064	
Low food security in spring—household	1.222		1.055	**	0.996		-0.555	*
Very low food security in spring—household	0.955		-0.059		0.930		-0.153	
Free/Reduced breakfast	1.481		1.083		1.335	**	-0.523	
SNAP household	1.111		-0.319		1.509	***	-1.375	***
WIC household	1.346		-0.136		1.113		0.388	
Number of observations used								
Imputation 1	2841		7672		8523		3752	
Imputation 2	2867		7735		8601		3775	

Parameter	1. Participation Rate	2. Redemption Rate	3. Benefit Exhaustion Rate	4. Days Until Exhaustion
	Odds Ratio	Parameter estimate	Odds Ratio	Parameter estimate
Imputation 3	2865	7737	8595	3791
Imputation 4	2859	7728	8577	3780
Imputation 5	2844	7676	8532	3774
Imputation 6	2856	7723	8568	3780
Imputation 7	2854	7710	8562	3775
Imputation 8	2850	7710	8550	3786
Imputation 9	2866	7747	8598	3804
Imputation 10	2851	7699	8553	3764
Imputation 11	2848	7701	8544	3767
Imputation 12	2847	7697	8541	3786
Imputation 13	2836	7652	8508	3732
Imputation 14	2875	7754	8625	3819
Imputation 15	2840	7670	8520	3772

*** $P \leq 0.01$; ** $0.01 < P \leq 0.05$; * $0.05 < P \leq 0.1$

References

Trivellore E. Raghunathan T.E, J.M. Lepkowski, J. Van Hoewyk, P. Solenberger. "A Multivariate Technique for Multiply Imputing Missing Values Using a Sequence of Regression Models," *Survey Methodology*, June 2001.

Appendix 4A

SEBTC Random Assignment and Balance Testing

4A.1 Overview

The process of consent and random assignment required several steps. First, participating SFAs constructed lists of households with children certified for FRP meals. After obtaining consent from families (by either passive or active processes) the SFAs sent the lists to the evaluation team. The team then randomly assigned the families to be in the benefit group or non-benefit group, with the objective of assigning 2,500 children to receive the benefit. Next, the team randomly selected a subsample of households from the benefit and non-benefit group (that is, the treatment and control groups) to participate in the household survey, with the objective of obtaining at least 5,000 spring interviews. This appendix provides information about the degree to which the random assignment process successfully (1) assigned families to the benefit and non-benefit groups and (2) selected the subsample for the survey (the treatment and control groups).

Before households were randomized, the sample was stratified to ensure there was balance between benefit and non-benefit groups in the number of eligible children in the household (grouping households with 1 child, with 2 children and with 3 or more children) and among SFAs (or groups of SFAs in Connecticut and Oregon), if there were more than one in a demonstration area (See Briefel et al., 2011).

After the sites sent lists of consenting households to the evaluation team, the lists were further processed, with particular attention paid to two issues: (1) identification of duplicate records and (2) creation of households. When in doubt, possibly separate units/"households" were merged for randomization to preclude some members of the household being inadvertently assigned to the benefit group while other members were not.

Once the processing of the final household lists and stratifying the sample were completed, households were randomly selected to reach the target number of children in the benefit group (that is, 2,500 per site). Given that the sites were of different size, 2,500 children per site in the benefit group required different fractions of all children randomly assigned to the treatment group. In practice, an initial sample was drawn and a global F-test computed to assure that there were no systematic differences in observed characteristics between the benefit and non-benefit groups (described below). If the global F-test suggested evidence of imbalance (although random) because the value was at or below the 0.050, or if the sample draw resulted in many fewer than 2,500 children in the benefit group, a new random sample was drawn. (Because a stratification group was "households with 3 or more children," it was

not possible to randomly assign households and get the exact number of 2,500 children.) This process resulted in the following number of sample draws per site: one sample in Oregon and Connecticut, 2 in Michigan, 3 in Texas, and 13 in Missouri.[1]

To assess whether the randomization process was successful in achieving balanced groups, balance tests were conducted using information obtained from the grantees about children's characteristics (age, grade, gender, school lunch status, and so on). Individual grantees were able to provide between 8 and 13 spring characteristics. The results of the balance tests for characteristics available for each of the five grantees are shown in Exhibit 4A.1 (cells are blank when information was unavailable from a grantee). Considering single statistics, there is some limited evidence of imbalance;[2] the key joint test of all characteristics together, however, shows no evidence of imbalance. Specifically, the global F-test considers all of the results jointly (allowing for correlation between the outcomes) to test the balance between the benefit and non-benefit groups. Across the five sites, the p-values for these global F-test were greater than the conventional 0.050 cutoff.

Using the same data from the grantees, the evaluation subsample was also tested for balance, and as shown in Exhibit 4A.2, across the five sites, and again met the F test for balance. Further tests of balance between respondents in the treatment and control group in spring, particularly on measures of household food security also show no evidence of imbalance (see Briefel et al., 2011 for more detail).

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[1] One of the rejected samples in Texas and Missouri was due to failed F-tests; the others were due to sample size. In Michigan, the rejected sample was also due to a failed F-test. Missouri was one of the first sites for which random assignment was conducted. Households were randomized multiple times in order to "hit" the target of 2,500 children in the benefit group. Later, the process was substantially improved to handle the stratum that included households with 3 or more children so as to avoid multiple randomizations.

[2] With a large enough number of characteristics, some of the characteristics would be expected to differ between the benefit/non-benefit groups merely based on chance. At the conventional 0.05 cutoff, there are no indications of imbalance in Connecticut (out of 10 the characteristics), Missouri (out of 8 characteristics), and Oregon (out of 8 characteristics); there is one indication of unbalance in Michigan (out of 12 characteristics), and 2 indications of unbalance in Texas (out of 13). (See Appendix Table E.1). Note that these counts consider the fact that the characteristics are categorical. They, therefore, delete one category from each characteristic, because the sum of the probabilities across each characteristic must be 100%.

Exhibit 4A.1   Balance Tests for Random Assignment into the Benefit and Non-Benefit Group: Summer EBT for Children, POC Year

Characteristics	Connecticut			Michigan			Missouri			Oregon			Texas		
	SEBTC	Non-SEBTC	p-value	SEBTC	Non-SEBTC	p-value	SEBTC	Non-SEBTC	p-value	SEBTC	Non-SEBTC	p-value	SEBTC	Non-SEBTC	p-value
Number of households	1,405	978	Not Applicable	1,280	2,685	Not Applicable	1,380	9,293	Not Applicable	1,202	939	Not Applicable	1,318	18,605	Not Applicable
Number of children	2,501	1,743	Not Applicable	1,502	5,207	Not Applicable	2,505	16,845	Not Applicable	2,503	1,949	Not Applicable	2,507	35,283	Not Applicable
Free or Reduced- Price Meal Certification Type															
Percent directly certified				67.9%	68.3%	0.8275							45.0%	46.4%	0.2835
Percent applied				32.1%	31.7%	0.8275							54.9%	53.3%	0.2207
Percent OTHER													0.1%	0.3%	0.0971
Household NSLP Status (Free or Reduced Price)															
Percent free				94.5%	94.7%	0.7451	91.6%	91.2%	0.5518				87.3%	87.0%	0.7761
Percent reduced price				5.5%	5.3%	0.7451	8.4%	8.8%	0.5518				12.7%	13.0%	0.7848
Age of Children Eligible for SEBTC															
Percent ages 1-5	10.5%	12.0%	0.1796	15.7%	16.7%	0.3908	11.9%	12.1%	0.8830	8.2%	9.3%	0.2309	9.3%	9.0%	0.7359
Percent ages 6-12	63.7%	64.1%	0.8349	59.9%	60.2%	0.8272	53.9%	54.0%	0.9037	56.5%	55.4%	0.5129	49.4%	48.6%	0.4872
Percent ages 13-17	24.3%	22.0%	0.1427	18.2%	18.5%	0.8076	28.9%	29.0%	0.9109	32.7%	33.0%	0.8431	36.0%	36.8%	0.5301
Percent 18 or older	1.5%	1.8%	0.4720	6.1%	4.6%	0.0238	5.3%	4.9%	0.4729	2.6%	2.3%	0.6120	5.3%	5.6%	0.5611
Gender of Children Eligible for SEBTC															
Percent female	47.2%	46.8%	0.8072	49.4%	47.7%	0.2335	50.0%	49.6%	0.7164	48.6%	48.0%	0.7316	45.9%	48.2%	0.0457
Percent male	52.6%	53.1%	0.7893	50.6%	52.3%	0.2335	50.0%	50.4%	0.7164	51.4%	52.0%	0.7316	54.1%	51.8%	0.0442
Grade of Children Eligible for SEBTC															
Percent prekindergarten & kindergarten	12.7%	14.1%	0.2341	21.5%	22.0%	0.6834	18.0%	18.1%	0.9216	12.6%	14.4%	0.1391	13.2%	13.5%	0.7627
Percent grades 1 - 5	49.3%	49.7%	0.8231	46.9%	47.1%	0.9031	39.1%	39.5%	0.7939	42.6%	40.5%	0.1986	36.5%	35.5%	0.3905
Percent grades 6-8	24.4%	22.8%	0.2482	14.7%	15.2%	0.6362	20.8%	20.2%	0.5362	22.4%	23.3%	0.5245	20.7%	20.9%	0.7995
Percent grades 9 -12	13.6%	13.4%	0.8996	16.9%	15.8%	0.2961	22.0%	22.2%	0.8620	22.0%	21.8%	0.9205	29.6%	30.1%	0.6746
Race and Ethnicity															
Percent Caucasian	46.5%	46.7%	0.9238	20.2%	19.5%	0.5970							3.3%	3.2%	0.8515

Characteristics	Connecticut			Michigan			Missouri			Oregon			Texas		
	SEBTC	Non-SEBTC	p-value	SEBTC	Non-SEBTC	p-value	SEBTC	Non-SEBTC	p-value	SEBTC	Non-SEBTC	p-value	SEBTC	Non-SEBTC	p-value
Percent black	5.1%	6.2%	0.2131	37.4%	37.0%	0.8367							1.6%	1.5%	0.8567
Percent Hispanic	27.8%	27.7%	0.9526	34.5%	35.5%	0.5652							83.9%	83.9%	0.9929
Percent other	20.7%	19.4%	0.4537	7.9%	8.0%	0.8990							11.2%	11.4%	0.8497
Children's Language															
Percent English										84.9%	85.4%	0.7223			
Percent Spanish										15.1%	14.6%	0.7223			
Joint F-test		F=0.69	0.7310		F=0.70	0.7555		F=0.22	0.9868		F=0.52	0.8424		F=0.84	0.6219

Source: Data from SFAs in POC Demonstration Areas.

*Note: These shares are calculated by computing shares for each household based on the list of eligible children and then averaging them for the SEBTC and non-SEBTC groups. Cells are empty in cases where data are not available from the participating SFA. For instance, Michigan, Missouri, and Texas provided information about percentages of children were eligible for free or for reduced-price meals. Connecticut and Oregon did not.

Exhibit 4A.2   Balance Tests for Random Assignment into the Evaluation Sample: Summer EBT for Children POC Year

Characteristics	Connecticut			Michigan			Missouri			Oregon			Texas		
	Treatment	Control	p-value	Treatment	Control	p-value	Treatment	Control	p-value	Treatment	Control	p-value	Treatment	Control	p-value
Number of households	992	992		1,000	1,000		1,000	1,000		940	940		1,000	1,000	
Number of children	1,753	1,743		1,931	1,903		1,783	1,756		1,958	1,949		1,793	1,778	
Free or Reduced- Price Meal Certification Type															
Percent directly certified				67.6%	68.2%	0.7721							49.3%	51.3%	0.3713
Percent applied				32.4%	31.8%	0.7721							50.6%	48.4%	0.3254
Percent OTHER													0.1%	0.3%	0.3171
Household NSLP Status (Free or Reduced Price)															
Percent free				94.8%	94.8%	1.0000	91.2%	92.1%	0.5042				89.3%	89.6%	0.8272
Percent reduced price				5.2%	5.2%	1.0000	8.8%	8.0%	0.5042				10.7%	10.4%	0.8272
Age of Children Eligible for SEBTC															
Percent ages 1-5	10.4%	11.3%	0.5191	15.7%	16.8%	0.5052	11.0%	11.7%	0.6219	8.8%	9.3%	0.7589	6.4%	6.5%	0.9275
Percent ages 6-12	64.5%	65.2%	0.7289	59.1%	60.6%	0.4941	53.7%	52.2%	0.5018	55.1%	55.7%	0.7846	51.5%	50.1%	0.5314
Percent ages 13-17	23.7%	21.5%	0.2530	19.0%	17.7%	0.4529	30.2%	30.9%	0.7342	33.5%	33.0%	0.8194	34.6%	36.1%	0.4832
Percent 18 or older	1.5%	2.0%	0.3957	6.2%	4.9%	0.2044	5.1%	5.2%	0.9195	2.6%	2.0%	0.4366	7.5%	7.3%	0.8644
Gender of Children Eligible for SEBTC															
Percent female	48.9%	45.8%	0.1758	50.8%	48.5%	0.3039	49.8%	49.9%	0.9644	47.7%	47.8%	0.9632	45.5%	48.0%	0.2628
Percent male	51.1%	54.2%	0.1758	49.2%	51.5%	0.3039	50.2%	50.1%	0.9644	52.3%	52.2%	0.9632	54.5%	52.0%	0.2628
Grade of Children Eligible for SEBTC															
Percent prekindergarten & kindergarten	12.2%	13.9%	0.2558	21.6%	21.7%	0.9567	17.2%	19.0%	0.2961	13.2%	14.3%	0.4888	14.2%	13.1%	0.4740
Percent grades 1 - 5	50.1%	50.5%	0.8572	45.4%	47.8%	0.2822	38.7%	36.4%	0.2885	40.8%	40.3%	0.8130	36.0%	37.3%	0.5466
Percent grades 6-8	24.1%	22.6%	0.4251	15.6%	15.0%	0.7095	21.4%	21.3%	0.9565	23.0%	23.6%	0.7916	20.4%	21.8%	0.4432
Percent grades 9 -12	13.7%	13.1%	0.6917	17.4%	15.5%	0.2520	22.7%	23.3%	0.7500	22.9%	21.9%	0.5749	29.4%	27.8%	0.4288
Race and Ethnicity															
Percent white	46.4%	46.5%	0.9640	20.7%	19.5%	0.5034							3.4%	3.1%	0.7054
Percent black	5.3%	6.4%	0.2907	36.3%	36.6%	0.8892							2.1%	1.6%	0.4070
Percent Hispanic	27.4%	27.3%	0.9597	35.3%	35.7%	0.8518							83.1%	84.8%	0.3006
Percent other	21.0%	19.9%	0.5393	7.7%	8.2%	0.6796							11.4%	10.5%	0.5195

Characteristics	Connecticut			Michigan			Missouri			Oregon			Texas		
	Treatment	Control	p-value	Treatment	Control	p-value	Treatment	Control	p-value	Treatment	Control	p-value	Treatment	Control	p-value
Children's Language															
Percent English										84.5%	85.4%	0.5618			
Percent Spanish										15.5%	14.6%	0.5618			
Joint F-test	F= 0.74	0.6897		F= 0 .21	0.9895		F = 0.42	0.9287		F=0.30	0.9647		F=0.72	0.7408	

Source: Data from SFAs in POC Demonstration Areas.

*Note: These shares are calculated by computing shares for each household based on the list of eligible children and then averaging them for the SEBTC and non-SEBTC groups. Cells are empty in cases where data are not available from the participating SFA. For instance, Michigan, Missouri, and Texas provided information about percentages of children were eligible for free or for reduced-price meals. Connecticut and Oregon did not.

Appendix 4B

Sample Design and Response Rates

4B.1 Sample Design

The household survey used a two-phase sampling plan (Exhibit 4B.1). The first phase was telephone data collection and the second phase was in-person field location. The sample design involved dividing treatment and control group samples in each site into *replicates* or random subsamples. The sample was released for data collection on a replicate-by-replicate basis. All replicates were included in the telephone data collection effort (phase 1). Half the replicates were marked as eligible for in-person locating (phase 2) (see Exhibit 4B.2). Only phase 1 non-respondents in replicates eligible for phase 2 were included in phase 2.

Exhibit 4B.1   Two-Phase Sampling Plan
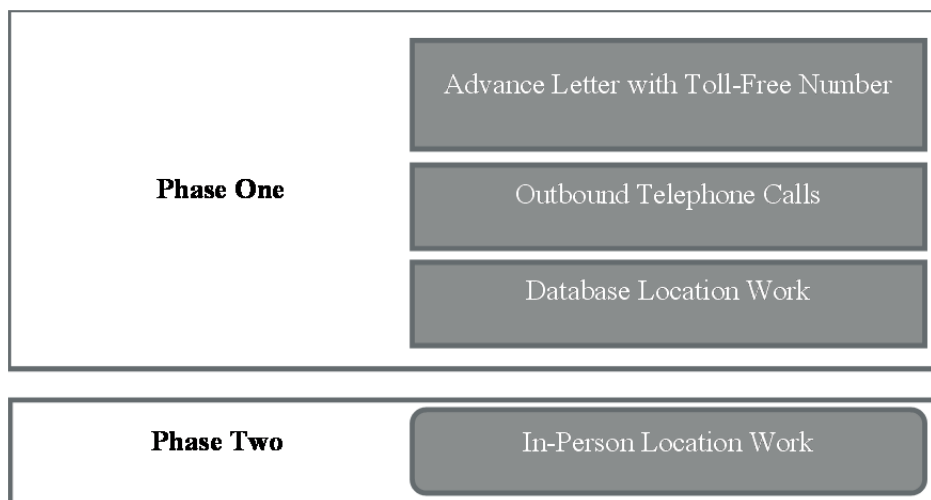
Exhibit 4B.2   Spring Replicate Eligibility for In-Person Locating (Phase 2)

	Connecticut	Michigan	Missouri	Oregon	Texas	All Sites
Cases NOT eligible for in-person location	974	1000	989	933	1000	4896
Cases eligible for in-person location	1000	1000	991	856	1000	4847
Sub-sampling rate	0.507	0.500	0.501	0.478	0.500	0.497
Phase-Two Weight	**1.974**	**2.000**	**1.998**	**2.090**	**2.000**	**2.010**

Because we exceeded our target number of spring interviews we dropped three replicates, representing 252 cases, from the summer data collection. This results in a slightly different sub-sampling rate for the summer wave (Exhibit 4B.3).

Exhibit 4B.3   Summer Replicate Eligibility for In-Person Data Collection (Phase 2)

	Connecticut	Michigan	Missouri	Oregon	Texas	All Sites
Cases NOT eligible for in-person location	900	900	989	855	1000	4644
Cases eligible for in-person location	1000	1000	991	856	1000	4847
Sub-sampling rate	0.526	0.526	0.501	0.500	0.500	0.511
Phase-Two Weight	**1.900**	**1.900**	**1.998**	**1.999**	**2.000**	**1.958**

The two-phase design was selected as a cost saving measure; in-person data collection is substantially more expensive than telephone data collection. Designating replicates as field-eligible prior to the start of data collection allowed us to work within the short data collection schedule by moving cases to the field immediately as the case finished the telephone protocol, rather than sub-sampling non-respondents after all the telephone work was completed.

AAPOR guidelines on two-phased sample designs are more complicated than the usual single-phase sample design. We have assigned weights (w) to households in the second phase sample that are the inverse of the eligibility for in-person follow-up (see Exhibit 4B.3).

As shown in Exhibit 4B.4 below, using spring all-sites data as an example, the sample is broken into three primary components:

1.   first-phase (telephone) respondents,

2.   first-phase non-respondent households, and

3.   households not eligible for the interview/benefit.

     The first- phase non-respondent households are then divided into

     (a)   households not selected for second phase sample and

     (b)   households selected for second phase sample.

Households selected for the second phase are then further divided into the following:

  ▪ second phase sample households that complete the interview,
  ▪ second phase sample households that do not complete the interview, but are confirmed households, and
  ▪ second phase sample households that do not complete the interview and were not confirmed households.

Exhibit 4B.4   Two-Phase Sampling Response Rate Weights (Using All Spring Cases as an Example)

	Sample Component	Sample Size	Relative Sampling Weight	Weighted Count
1	First phase sample households interviewed by telephone	5271	1	5271
2	First phase non-respondent households	4368		
	First phase non-respondent households not selected for second phase sample	2251	0	0
	First phase non-respondent households selected for second phase sample	2117		
	Second phase sample households that complete the interview	566	2.010	1137.7
	Second phase sample households that do not complete the interview - Confirmed Households	404	2.010	812.0
	Second phase sample households that do not complete the interview - Not Confirmed Households	1147	2.010	2305.5
3	Total Screen-Outs (Not Eligible)	104		
	Total completed interviews	5837		
	Total sample size of households	9743		

4B.2 Response Rates

Exhibit 4B.5 provides the disposition of cases and response rates for the spring survey.

Using AAPOR Response Rate 4, the unweighted response rate is:

Response Rate [AAPOR 4] = (I+P) / (I+P +O+R +e(UO))

Eligibility Rate [e] = (I+P+O+R)/(I+P+O+R+NC)

Where:

I=Complete interview

P=Partial interview

R=Refusal and break-off

NC=Non-contact

O=Other

UO=Unknown, other

E=Estimated proportion of cases of unknown eligibility that are eligible

And the weighted response rate, to adjust for the two phase design, is:

Response Rate [AAPOR 4] = $(I_w + P_w) / (I_w + P_w + O_w + R_w + e(UO_w))$

Using the full survey data from Exhibit 4B.4, the response rate is:

RR4 = (5271+1137.7) / (5271+1137.7+812.0+0.984(2305.5) = 67.5%

Exhibit 4B.5   Disposition of Cases and Response Rates for the Spring Survey, 2011

Summary Disposition	Connecticut	Michigan	Missouri	Oregon	Texas	All Sites
Complete	1210	1273	1002	1181	1126	5792
Partial[a]	9	7	17	4	8	45
Incomplete	77	72	123	84	104	460
Refusal	40	51	58	36	72	257
Screen-Out (Not Eligible)	6	21	26	13	38	104
Household Confirmed[b]	1342	1424	1226	1318	1348	6658
Incomplete	309	420	501	308	420	1958
No Contact	237	95	146	117	161	756
Refusal	86	61	107	46	71	371
Household Not Confirmed[c]	632	576	754	471	652	3085
Total	1974	2000	1980	1789	2000	9743
Eligibility Rate[d]	99.60%	98.50%	97.90%	99.00%	97.20%	98.40%
Unweighted Response Rates						
All Cases	62.00%	65.00%	52.60%	66.90%	58.30%	60.90%
Phone-Only Replicates	60.00%	56.10%	43.00%	62.90%	48.20%	53.90%
Phone and Field Replicates	64.00%	73.80%	62.20%	71.30%	68.50%	67.90%
Weighted Response Rates						
All Cases	64.20%	73.00%	61.64%	71.11%	68.18%	67.50%
Treatment (weighted)	66.54%	76.86%	65.76%	75.56%	69.18%	70.60%
Control (weighted)	61.91%	69.12%	57.44%	66.70%	67.19%	64.40%

Source: SEBTC Spring Survey, 2011.

[a] Represents cases that began the interview but broke-off the interview after section F (food security) or later and did not complete the interview at a later time.

[b] Indicates that a household respondent was reached and verified that they were the selected household where the focal child resided.

[c] Indicates that no household respondent was located and reached to verify whether it was the selected household where the focal child resided.

[d] Indicates proportion of confirmed households meeting the eligibility requirements for the survey.   (1-(Screen-Out/Household Confirmed))

Exhibit 4B.6 provides the disposition of cases and response rates for the summer survey. Given the difficulty predicting response with a truncated field period, and in consultation with FNS, we fielded almost all available sample records. It was determined that reaching the target number of completes was more important than maximizing response rate during the POC year (This will not be the case in the Demonstration year). We completed 5,792 interviews during the spring survey. Because we exceeded our spring target we limited our summer data effort by dropping three replicates; one each in Connecticut, Michigan and Oregon. We completed 5,244 summer interviews.

Exhibit 4B.6   Disposition of Cases and Response Rates for the Summer Survey, 2011

Summary Disposition	Connecticut[f]	Michigan	Missouri	Oregon	Texas	All Sites
Complete	1113	1201	869	1091	970	5244
Partial [a]	7	5	5	3	4	24
Incomplete	322	234	510	227	440	1733
Refusal	142	147	144	122	135	690
Screen-Out (Not Eligible)	21	45	45	27	73	211
Household Confirmed[b]	*1605*	*1632*	*1573*	*1470*	*1622*	*7902*
Incomplete	233	236	311	212	269	1261
No Contact	49	24	83	23	100	279
Refusal	13	8	13	6	9	49
Household Not Confirmed [c]	*295*	*268*	*407*	*241*	*378*	*1589*
Total [d]	1900	1900	1980	1711	2000	9491
Eligibility Rate [e]	98.69%	97.24%	97.14%	98.16%	95.50%	97.33%
Unweighted Response Rates						
All Cases	59.73%	65.27%	45.44%	65.14%	51.00%	57.03%
Phone-Only Replicates	48.87%	50.38%	39.61%	60.34%	41.30%	47.71%
Phone and Field Replicates	69.50%	78.75%	51.27%	69.92%	60.74%	65.98%
Weighted Response Rates						
All Cases	69.91%	78.36%	51.78%	70.62%	60.00%	66.02%
Treatment (weighted)	74.61%	83.78%	55.59%	76.03%	68.71%	71.57%
Control (weighted)	65.18%	73.01%	47.89%	65.22%	51.57%	60.49%

Source: SEBTC Summer Survey, 2011.

[a] Represents cases that began the interview but broke-off the interview before section F (food security) and did not complete the interview at a later time.

[b] Indicates that a household respondent was reached and verified that they were the selected household where the focal child resided.

[c] Indicates that no household respondent was located and reached to verify whether it was the selected household where the focal child resided.

[d] Spring Screen-Outs and Hard Refusals were not fielded in the summer, but are included in this table. Three replicates were dropped from the summer data collection effort. Other than those three replicates all spring records appear in this table, even if the cases were not fielded in the summer.

[e] Indicates proportion of confirmed households meeting the eligibility requirements for the survey.   (1-(Screen-Out/Household Confirmed)).

[f] Hurricane Irene hit Connecticut near the end of data collection disrupting in-person data collection for several days.

Household Survey Instruments, Spring and Summer 2011

Reference No.:
OMB No.: 0584-0559
Expiration Date: 03/31/2014

Summer Electronic Benefit Transfer for Children

Spring Baseline Questionnaire - FINAL

April 28, 2011

Abt

Abt Associates Inc.

MATHEMATICA
Policy Research, Inc.

A1.   Hello, my name is _____ and I'm calling on behalf of the U.S. Department of Agriculture, Food and Nutrition Service.

May I please speak to

[%UFName % ULName]?

[INTERVIEWER NOTE: REFER TO FAQ'S TO ANSWER ANY QUESTIONS, INCLUDING CONTENT OF SURVEY]

SPEAKING TO [NAME OF PARENT]....................... 1   **GO TO A2**
[NAME OF PARENT] COMES TO PHONE 2   **GO TO A2**

NOT A GOOD TIME.. 4   **SCHEDULE CALLBACK**

[IF INBOUND CALL]
SI1   Just in case we are disconnected, what telephone number can I reach you at to complete the interview?
         Provided phone number 1   **SKIP TO A2**
         (VOL) respondent will call back................................ 2   **SKIP TO A2**
         Don't know.. 8   **SKIP TO A2**
         Refused 9   **SKIP TO A2**

QUALIFIED LEVEL 1: SI1=1

[IF SAMPLE FLAGGED AS CELL PHONE]
SC1 Are you in a safe place to talk right now?
IF DRIVING VOLUNTEERED, CODE AS 2USE LL INTRO FOR LL CALLBACKS

         Yes, safe place to talk 1
         No, call me later 2   **SCHEDULE CALLBACK**
         No, CB on land-line 3   **RECORD NUMBER,**
         SCHEDULE CALLBACK
         (VOL) on landline 4   **SKIP TO A2**
         Don't know... 8
         Refused 9

[IF SAMPLE FLAGGED AS CELL PHONE]
SC2 Are you driving?

         No... 1
         Yes, call me later... 2   **SCHEDULE CALLBACK**
         Don't know.. 8
         Refused 9

A2.   We are conducting a research study about the food choices of children and their families for the U.S.D.A, Food and Nutrition Service. The study will help the government make its child nutrition programs better for school-age children. We are trying to reach the parent or adult in the household who knows the most about what [CHILD NAME] eats.

A3.   Are you the parent or adult in the household who knows the most about what [CHILD NAME] ate over the last 30 days?

[IF R ANSWERS "PROBABLY" OR "AS MUCH AS ANYONE ELSE," ENTER "1,YES."]

YES 1   **GO TO A4.3**

YES, BUT NOT AVAILABLE NOW 2   **GO TO CALLBACK**

NO 3

DON'T KNOW 8

REFUSED 9

A4.1   What is the name of the parent or adult who knows the most about what [CHILD NAME] ate over the last 30 days?

ENTER NAME OF PARENT/ADULT: _____

DON'T KNOW 8

REFUSED 9

QUALIFIED LEVEL 2: (A3=1 OR 2) OR (GAVE NAME IN A4.1)

A4.2   May I speak with (him/her)?

YES 1

YES, BUT NOT AVAILABLE NOW 2   **GO TO CALLBACK**

CANNOT COME TO PHONE.................................... 3   **GO TO CALLBACK**

(VOL) Not available at this phone number 4   **GO TO UPDATE PHONE**

DON'T KNOW 8   **GO TO CALLBACK**

REFUSED 9   **GO TO REFUSAL**

2

A4.3   **[READ IF A4.2=1]** Hello, my name is _____ and I'm calling on behalf of the U.S.D.A., Food and Nutrition Service. We are conducting a research study about the food choices of children and their families.

[READ TO ALL:] Are you at least 18 years old?

YES 1		
NO.. 2	**TERMINATE (tipso11)**
DON'T KNOW/REFUSED 8	**TERMINATE (tipso10)**

QUALIFIED LEVEL 3: A4.3=1

[READ TO ALL:]
A4.4   The interview will take approximately 25 minutes. It has questions about your child's food choices as well as general questions about you and your household. Your answers will help the government make its child nutrition programs better for school-age children. As a way of saying thank you, we will give you a $10 gift card when we are finished.

Your participation in this interview is voluntary and you may stop at any time. Your benefits will not be affected if you choose not to participate. If you take part, you may refuse to answer any questions. If you take part, your answers won't change any benefits you may receive from any agency.

All the information you give us will be kept confidential to the extent allowed by law. Your name will not be attached to any of your answers. Your information will be used only in combination with information from other households for research purposes

A5.   Do you have any questions before I begin?

[*REFER TO FAQ'S TO ANSWER ANY QUESTIONS*]

YES.. 1
NO.. 2
DON'T KNOW.. 8
REFUSED... 9

A5.1   If now is a good time for you and you are willing to participate, I'd like to begin my questions.

YES, IT'S A GOOD TIME AND I'M WILLING.................1	**GO TO B1**
YES, I'M WILLING BUT NOT AVAILABLE NOW...........2	**SCHEDULE CALLBACK**
DON'T KNOW 8	
REFUSED TO PARTICIPATE.................................. 9	**GO TO REFUSAL**

A6.   May we call you back at another time?

      YES 1   **SCHEDULE CALLBACK**

      NO 2   **GO TO REFUSAL**

      DON'T KNOW 8   **SCHEDULE CALLBACK**

      REFUSED 9   **GO TO REFUSAL**

TIMING 1

SECTION B: HOUSEHOLD CHARACTERISTICS

The first few questions are about the people you live with.

QUALIFIED LEVEL 4: REACHES B1

B1.   Including yourself, how many people live in your household? Don't forget to include non-relatives who live here and, of course, babies and small children. Also include persons who usually live here but are temporarily away for reasons such as: vacation, traveling for work, or in the hospital. Do not include children living away at school.

_____ Number of people **[RANGE 1-20]**

DON'T KNOW... 88

REFUSED... 99

[If B1=1:]
B1a. Just to confirm, you are the only person living in the household. There are no children, non-relatives, or people who usually live there but are currently away?

YES, CONTINUE 1   **GO TO C1**

NO, CORRECT NUMBER 2

B1.1   Do all the people in your household buy and share food together?

YES.. 1   **GO TO B2**

NO.. 2

DON'T KNOW... 88

REFUSED... 99

B1.2   How many people in your household buy and share food together?

[PROGRAMMER NOTE: IF B1 NE 88/99 B1.2 CANNOT BE GREATER THAN B1]

_____ Number of people

DON'T KNOW... 88

REFUSED... 99

B2.   How many of those (IF B1.1=1, FILL NUMBER FROM B1, OTHERWISE, FILL NUMBER FROM B1.2) people are children age 18 or younger or over 18 but still in high school?

       [**IF B1.1 AND B1.2 = 88 OR 99**, READ:] How many people in your household are children age 18 or younger or over 18 but still in high school?

[PROGRAMMER NOTE: B2 CANNOT BE GREATER THAN B1/B1.2]

       _____ Number of children **[RANGE 1-20]**   **GO TO B4**

       NO CHILDREN IN HOUSEHOLD.................................. 00   **GO TO C1**

       DON'T KNOW.. 88

       REFUSED.. 99

B2.1   Is there at least one child living in your household?

       YES.. 1

       NO.. 2   **GO TO C1**

       DON'T KNOW.. 8   **GO TO REFUSAL**

       REFUSED.. 9   **GO TO REFUSAL**

B4.   I'd like to make a list of the first names or initials of the children, age 18 or younger, and those over 18 but still in high school. What is the name of the (first/nth) child?

[IF 1 CHILD READ:] What is the name of the child age 18 or younger, or over 18 but still in high school living in your household?

PROGRAMMER: CREATE GRID, USING B2 FOR NUMBER OF CHILDREN IF B2<88. IF B2=88,99 ALLOW UP TO 20.

B5.   Please tell me the birth date of each child starting with [CHILD #1]. [IF 1 CHILD, READ:] Please tell me the birth date of [CHILD #1].

       |__|__| / |__|__| / |__|__|__|__|
       MONTH   DAY   YEAR

       DON'T KNOW... 8

       REFUSED... 9

COMPUTE PROGRAMMED VARIABLE FOR NUMBER OF KIDS IN HOUSEHOLD.

IF B2<88, NUMBER OF KIDS=B2.

IF B2>20 AND B2.1=1, NUMBER OF KIDS=B4.

IF B2>20 AND B2.1=2, NUMBER OF KIDS=0.

[IF B2 > 1 OR ((B2=88 OR B2= 99) AND B4 TOTAL > 1)]

B3. How many of these children are in grades pre-K through 12 in your public school system?

[**PROGRAMMER NOTE**: B3 CANNOT BE GREATER THAN B5]

_____ENTER NUMBER OF CHILDREN IN PRE-K-12 (RANGE 0-20)

DON'T KNOW... 88
REFUSED.. 99

[IF B2 = 1 OR ((B2 = 88 OR B2 = 99) AND B4 TOTAL = 1)]

B3A. Is that child in grades pre-K through 12 in your public school system?

YES... 1

NO.. 2

DON'T KNOW... 88
REFUSED.. 99

CREATE PROGRAMMED VARIABLE COMBINING B3 AND B3A

TIMING 2

7

SECTION C: CHILD DEMOGRAPHICS

QUALIFIED LEVEL 5: REACHES C1

For the next set of questions, we are going to focus on [CHILD NAME].

C1.   Is [CHILD NAME] a boy or girl?

[ASK IF THEY HAVE NOT ALREADY MENTIONED CHILD'S SEX]

BOY 1

GIRL... 2

DON'T KNOW... 8

REFUSED... 9

[ASK IF B1 NE 1]

C1a.   Does [CHILD NAME] currently live in this household?

YES 1

NO.. 2

DON'T KNOW 8

REFUSED 9

[ASK IF C1A=2 OR (B1=1) OR ((B2=0) OR (B2.1>1))]

C2.   Please tell me [CHILD NAME]'s birth date.

|__|__| / |__|__| / |__|__|__|__|
MONTH   DAY   YEAR

DON'T KNOW... 8

REFUSED... 9

C3.   Is [CHILD NAME] of Hispanic or Latino origin?

YES... 1

NO... 2

DON'T KNOW... 8

REFUSED... 9

C4. I am going to read a list of five race categories. Please choose one or more races that you consider [CHILD NAME] to be. American Indian or Alaska Native; Asian; Black or African America; Native Hawaiian or other Pacific Islander; White?

<u>MARK ALL THAT APPLY</u>

AMERICAN INDIAN OR ALASKA NATIVE 1

ASIAN..2

BLACK OR AFRICAN AMERICAN...............................3

NATIVE HAWAIIAN OR
OTHER PACIFIC ISLANDER 4

WHITE 5

DON'T KNOW 8

REFUSED 9

TIMING 3

[IF C1A NE 1, GO TO F1]

SECTION D: DIETARY BEHAVIORS – CHILD

D1.   During the last 30 days, did [CHILD NAME] usually eat breakfast each day?

       YES.. 1

       NO... 2

       DON'T KNOW... 8

       REFUSED.. 9

These questions are about the different kinds of foods [CHILD NAME] ate or drank during the last 30 days. First, I'm going to ask you about the types of items [CHILD NAME] usually drinks at mealtimes and between meals. When answering, please include meals and snacks eaten at home, at school, in restaurants, and anyplace else. During the last 30 days, how often did [CHILD NAME] drink…

D2.   100% pure fruit juice, such as orange, mango, apple, grape, and pineapple juice? Do not include fruit-flavored drinks with added sugar or fruit juice you made at home with added sugar.

(You can tell me per day, per week or per month.)

[INCLUDE: ONLY 100% PURE JUICES.

DO NOT INCLUDE: FRUIT-FLAVORED DRINKS WITH ADDED SUGAR, LIKE CRANBERRY DRINK, HI-C, LEMONADE, KOOL-AID, GATORADE, TAMPICO (tam-pee-koh), AND SUNNY DELIGHT]

     0__NEVER

     1__ PER DAY (RANGE 1-300)

     2__ PER WEEK (RANGE 1-300)

     3__ PER MONTH (RANGE 1-300)

     8 DON'T KNOW/NOT SURE

     9 REFUSED

[IF DAY>4 OR WEEK>28 OR MONTH>120: You said (display # of times) per (display unit). Is that correct?]

     1__ YES, CONTINUE

     2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D2.1   During the last 30 days, how often did [CHILD NAME] drink <u>sweetened fruit drinks,</u> sports or energy drinks, such as Kool-Aid, lemonade, Hi-C, cranberry drink, Gatorade, Red Bull, or Vitamin Water? Include fruit juices you made at home with added sugar.

Do <u>not</u> include diet drinks or artificially sweetened drinks.

(You can tell me per day, per week or per month.)

0__NEVER

1__ PER DAY (RANGE 1-300)

2__ PER WEEK (RANGE 1-300)

3__ PER MONTH (RANGE 1-300)

8 DON'T KNOW/NOT SURE

9 REFUSED

[IF DAY>4 OR WEEK>28 OR MONTH>120: You said (display # of times) per (display unit). Is that correct?]

1__ YES, CONTINUE

2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D2.2   (During the last 30 days, how often did [CHILD NAME] drink):

<u>Regular soda or pop that contains sugar</u>? Do <u>not</u> include diet soda.

(You can tell me per day, per week or per month.)

[INCLUDE: MANZANITA (man-*zuh*-nee-t*uh*) AND PENAFIEL (pen-yah-fee-EL) SODAS.

DO NOT INCLUDE DIET OR SUGAR-FREE DRINKS. DO NOT INCLUDE JUICES OR TEA IN CANS.]

0__NEVER

1__ PER DAY (RANGE 1-300)

2__ PER WEEK (RANGE 1-300)

3__ PER MONTH (RANGE 1-300)

8 DON'T KNOW/NOT SURE

9 REFUSED

[IF DAY>4 OR WEEK>28 OR MONTH>120: You said (display # of times) per (display unit). Is that correct?]

1__ YES, CONTINUE

2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D2.3   (During the last 30 days, how often did [CHILD NAME] have):

Milk (either to drink or on cereal)?

Do not include soy milk or small amounts of milk in coffee or tea.

(You can tell me per day, per week or per month.)

[INCLUDE: SKIM, NO-FAT, LOW-FAT, WHOLE MILK, BUTTERMILK, AND LACTOSE-FREE MILK. ALSO INCLUDE CHOCOLATE OR OTHER FLAVORED MILKS.

DO NOT INCLUDE: CREAM.]

       0__NEVER   **SKIP TO D3**

       1__ PER DAY (RANGE 1-300)

       2__ PER WEEK (RANGE 1-300)

       3__ PER MONTH (RANGE 1-300)

       8 DON'T KNOW/NOT SURE

       9 REFUSED

[IF DAY>4 OR WEEK>28 OR MONTH>120: You said (display # of times) per (display unit). Is that correct?]

       1__ YES, CONTINUE

       2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D2.3.1 What type of milk did [CHILD NAME] usually have? Was it whole or regular milk, 2% fat or reduced-fat milk, 1% or 1/2% fat or low-fat milk, or fat-free, skim, nonfat milk? Do not include soy milk or rice milk.

[IF RESPONDENT CANNOT PROVIDE USUAL TYPE, CODE ALL THAT APPLY.]

[IF RESPONDENT MENTIONS CHOCOLATE OR OTHER FLAVORED MILKS, ASK: DO YOU KNOW IF IT IS WHOLE, 2%, 1% OR NONFAT MILK?]

       WHOLE MILK 1

       2% FAT MILK OR REDUCED-FAT MILK...................... 2

       1% OR 1/2% FAT MILK.. 3

       FAT-FREE, SKIM, NONFAT MILK 4

       DON'T KNOW... 8

       REFUSED.. 9

TIMING 4

Now I'm going to ask you about some kinds of food [CHILD NAME] ate during the last 30 days, including mealtimes and snacks.

D3.   During the last 30 days, how often did [CHILD NAME] eat <u>hot or cold cereal</u>?

(You can tell me per day, per week or per month.)

<div style="margin-left:2em;">

0__NEVER   **SKIP TO D4**

1__ PER DAY (RANGE 1-300)

2__ PER WEEK (RANGE 1-300)

3__ PER MONTH (RANGE 1-300)

8 DON'T KNOW/NOT SURE

9 REFUSED

</div>

[IF DAY>3 OR WEEK>21 OR MONTH>90: You said (display # of times) per (display unit). Is that correct?]

<div style="margin-left:2em;">

1__ YES, CONTINUE

2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

</div>

D3.1   During the last 30 days, what kind of cereal did [CHILD NAME] usually eat?

[PROBE FOR CLARITY IF NEEDED: BRAND, NAME AND VARIETY]

_____ (GAVE CEREAL TYPE)

<div style="margin-left:2em;">

DON'T KNOW.. 88   **GO TO D4**

REFUSED... 99   **GO TO D4**

</div>

D3.2   Was there another cereal that [CHILD NAME] ate?

<div style="margin-left:2em;">

YES.. 1

NO.. 2   **GO TO D4**

DON'T KNOW.. 8   **GO TO D4**

REFUSED... 9   **GO TO D4**

</div>

D3.3   During the last 30 days, what <u>second</u> kind of cereal did [CHILD NAME] usually eat?

[PROBE FOR CLARITY IF NEEDED: BRAND, NAME AND VARIETY]

_____ (GAVE CEREAL TYPE)

DON'T KNOW... 388
REFUSED.. 399

TIMING 5

D4. (During the last 30 days, how often did [CHILD NAME] have:)

<u>Fruit</u>?

Include fresh, frozen or canned fruit. Do **not** include juices.

(You can tell me per day, per week or per month.)

[DO NOT INCLUDE: DRIED FRUITS].

0__NEVER
1__ PER DAY (RANGE 1-300)
2__ PER WEEK (RANGE 1-300)
3__ PER MONTH (RANGE 1-300)
8 DON'T KNOW/NOT SURE
9 REFUSED

[**IF DAY>3 OR WEEK>21 OR MONTH>90**: You said (display # of times) per (display unit). Is that correct?]

1__ YES, CONTINUE
2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D5.	During the last 30 days, how often did [CHILD NAME] eat <u>a green leafy or lettuce salad</u>, with or without other vegetables?

	(You can tell me per day, per week or per month.)

	[INCLUDE: SPINACH SALADS]

		0__NEVER

		1__ PER DAY (RANGE 1-300)

		2__ PER WEEK (RANGE 1-300)

		3__ PER MONTH (RANGE 1-300)

		8 DON'T KNOW/NOT SURE

		9 REFUSED

[IF DAY>3 OR WEEK>21 OR MONTH>90: You said (display # of times) per (display unit). Is that correct?]

		1__ YES, CONTINUE

		2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D6.	During the last 30 days, how often did [CHILD NAME] eat <u>any kind of fried potatoes</u>, including French fries, home fries, or hash brown potatoes?

	(You can tell me per day, per week or per month.)

	[DO NOT INCLUDE: POTATO CHIPS]

		0__NEVER

		1__ PER DAY (RANGE 1-300)

		2__ PER WEEK (RANGE 1-300)

		3__ PER MONTH (RANGE 1-300)

		8 DON'T KNOW/NOT SURE

		9 REFUSED

[IF DAY>3 OR WEEK>21 OR MONTH>90: You said (display # of times) per (display unit). Is that correct?]

		1__ YES, CONTINUE

		2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D7.   During the last 30 days, how often did [CHILD NAME] eat <u>other kind of potatoes</u> such as mashed potatoes, sweet potatoes, or potato salad?

(You can tell me per day, per week or per month.)

[INCLUDE: ALL TYPES OF POTATOES EXCEPT FRIED. INCLUDE POTATOES AU GRATIN, AND SCALLOPED POTATOES].

0__NEVER

1__ PER DAY (RANGE 1-300)

2__ PER WEEK (RANGE 1-300)

3__ PER MONTH (RANGE 1-300)

8 DON'T KNOW/NOT SURE

9 REFUSED

[**IF DAY>3 OR WEEK>21 OR MONTH>90**: You said (display # of times) per (display unit). Is that correct?]

1__ YES, CONTINUE

2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D8.   (During the last 30 days, how often did [CHILD NAME] eat:)

Refried beans, baked beans, beans in soup, pork and beans or any other type of cooked dried beans? Do <u>not</u> include green beans.

(You can tell me per day, per week or per month.)

[INCLUDE: SOYBEANS, KIDNEY, PINTO, GARBANZO, BLACK BEANS, LENTILS, BLACK-EYED PEAS, COW PEAS, AND LIMA BEANS. INCLUDE CANNED BEANS.]

0__NEVER

1__ PER DAY (RANGE 1-300)

2__ PER WEEK (RANGE 1-300)

3__ PER MONTH (RANGE 1-300)

8 DON'T KNOW/NOT SURE

9 REFUSED

[**IF DAY>3 OR WEEK>21 OR MONTH>90**: You said (display # of times) per (display unit). Is that correct?]

1__ YES, CONTINUE

2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D9. (During the last 30 days), not including what you just told me about lettuce salads, potatoes, cooked dried beans how often did [CHILD NAME]:)

Eat other vegetables?

(You can tell me per day, per week or per month.)

[DO NOT INCLUDE: RICE

EXAMPLES OF OTHER VEGETABLES INCLUDE: TOMATOES, GREEN BEANS, CARROTS, CORN, CABBAGE, BEAN SPROUTS, COLLARD GREENS, AND BROCCOLI. INCLUDE ANY FORM OF THE VEGETABLE (RAW, COOKED, CANNED, OR FROZEN).]

      0__NEVER

      1__ PER DAY (RANGE 1-300)

      2__ PER WEEK (RANGE 1-300)

      3__ PER MONTH (RANGE 1-300)

      8 DON'T KNOW/NOT SURE

      9 REFUSED

[**IF DAY>3 OR WEEK>21 OR MONTH>90**: You said (display # of times) per (display unit). Is that correct?]

      1__ YES, CONTINUE

      2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D10.(During the last 30 days, how often did [CHILD NAME] have:)

Mexican-type <u>salsa</u> made with tomato?

(You can tell me per day, per week or per month.)

[INCLUDE**:** ALL TOMATO-BASED SALSAS.]

    0__NEVER

    1__ PER DAY (RANGE 1-300)

    2__ PER WEEK (RANGE 1-300)

    3__ PER MONTH (RANGE 1-300)

    8 DON'T KNOW/NOT SURE

    9 REFUSED

[IF DAY>3 OR WEEK>21 OR MONTH>90: You said (display # of times) per (display unit). Is that correct?]

    1__ YES, CONTINUE

    2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D11.   (During the last 30 days, how often did [CHILD NAME] eat:)

<u>Pizza</u>? Include frozen pizza, fast food pizza, and homemade pizza.

(You can tell me per day, per week or per month.)

    0__NEVER

    1__ PER DAY (RANGE 1-300)

    2__ PER WEEK (RANGE 1-300)

    3__ PER MONTH (RANGE 1-300)

    8 DON'T KNOW/NOT SURE

    9 REFUSED

[IF DAY>3 OR WEEK>21 OR MONTH>90: You said (display # of times) per (display unit). Is that correct?]

    1__ YES, CONTINUE

    2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D12.　(During the last 30 days, how often did [CHILD NAME] have:)

Tomato sauce such as with spaghetti or noodles or mixed into foods such as lasagna? Please do not count tomato sauce on pizza.

(You can tell me per day, per week or per month.)

> 0__NEVER
>
> 1__ PER DAY (RANGE 1-300)
>
> 2__ PER WEEK (RANGE 1-300)
>
> 3__ PER MONTH (RANGE 1-300)
>
> 8 DON'T KNOW/NOT SURE
>
> 9 REFUSED

[**IF DAY>3 OR WEEK>21 OR MONTH>90**: You said (display # of times) per (display unit). Is that correct?]
> 1__ YES, CONTINUE
>
> 2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D13.　(During the last 30 days, how often did [CHILD NAME] eat:)

Cheese? Include cheese as a snack, cheese on burgers, sandwiches, and cheese in foods such as lasagna, quesadillas, or casseroles. Please do not count cheese on pizza.

(You can tell me per day, per week or per month.)

[INCLUDE: MACARONI AND CHEESE, ENCHILADAS

DO NOT INCLUDE: CREAM CHEESE OR CHEESES MADE FROM NON-DAIRY FOODS, SUCH AS SOY OR RICE, OR CHEESE ON PIZZA.]

> 0__NEVER
>
> 1__ PER DAY (RANGE 1-300)
>
> 2__ PER WEEK (RANGE 1-300)
>
> 3__ PER MONTH (RANGE 1-300)
>
> 8 DON'T KNOW/NOT SURE
>
> 9 REFUSED

[**IF DAY>3 OR WEEK>21 OR MONTH>90**: You said (display # of times) per (display unit). Is that correct?]
> 1__ YES, CONTINUE
>
> 2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D14.   (During the last 30 days, how often did [CHILD NAME] eat:)

Canned tuna or other canned fish (including in salads, sandwiches or casseroles)?

(You can tell me per day, per week or per month.)

            0__NEVER
            1__ PER DAY (RANGE 1-300)
            2__ PER WEEK (RANGE 1-300)
            3__ PER MONTH (RANGE 1-300)
            8 DON'T KNOW/NOT SURE
            9 REFUSED

[IF DAY>3 OR WEEK>21 OR MONTH>90: You said (display # of times) per (display unit). Is that correct?]
            1__ YES, CONTINUE
            2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D15.   (During the last 30 days, how often did [CHILD NAME] eat:)

Eggs? Do not include egg whites only or egg substitutes.

(You can tell me per day, per week or per month.)

[INCLUDE: EGGS IN SALADS, QUICHE, AND SOUFFLÉS
DO NOT INCLUDE: EGGS IN BAKED GOODS AND DESSERTS.]

            0__NEVER
            1__ PER DAY (RANGE 1-300)
            2__ PER WEEK (RANGE 1-300)
            3__ PER MONTH (RANGE 1-300)
            8 DON'T KNOW/NOT SURE
            9 REFUSED

[IF DAY>3 OR WEEK>21 OR MONTH>90: You said (display # of times) per (display unit). Is that correct?]
            1__ YES, CONTINUE
            2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D16.   (During the last 30 days, how often did [CHILD NAME] have:)

Peanut butter**?**

(You can tell me per day, per week or per month.)

[INCLUDE: PEANUT BUTTER ON BREAD, CRACKERS, FRUIT, OR VEGETABLES.

DO NOT INCLUDE: PEANUT BUTTER IN BAKED GOODS]

       0__NEVER
       1__ PER DAY (RANGE 1-300)
       2__ PER WEEK (RANGE 1-300)
       3__ PER MONTH (RANGE 1-300)
       8 DON'T KNOW/NOT SURE
       9 REFUSED

[**IF DAY>3 OR WEEK>21 OR MONTH>90**: You said (display # of times) per (display unit). Is that correct?]
       1__ YES, CONTINUE
       2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D17.   (During the last 30 days, how often did [CHILD NAME] eat:)

Whole grain bread (and tortillas) including toast, rolls and in sandwiches? Whole grain breads include whole wheat, rye, oatmeal and pumpernickel. Do not include white bread.

(You can tell me per day, per week or per month.)

       0__NEVER
       1__ PER DAY (RANGE 1-300)
       2__ PER WEEK (RANGE 1-300)
       3__ PER MONTH (RANGE 1-300)
       8 DON'T KNOW/NOT SURE
       9 REFUSED

[**IF DAY>3 OR WEEK>21 OR MONTH>90**: You said (display # of times) per (display unit). Is that correct?]
       1__ YES, CONTINUE
       2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D18.   (During the last 30 days, how often did [CHILD NAME] eat:)

Cookies, cake, pie, doughnuts, or brownies? Do not include sugar-free kinds.

(You can tell me per day, per week or per month.)

[INCLUDE: LOW-FAT KINDS, TWINKIES AND HOSTESS CUPCAKES

DO NOT INCLUDE: ICE CREAM AND OTHER FROZEN DESSERTS OR CANDY]

    0__NEVER
    1__ PER DAY (RANGE 1-300)
    2__ PER WEEK (RANGE 1-300)
    3__ PER MONTH (RANGE 1-300)
    8 DON'T KNOW/NOT SURE
    9 REFUSED

[**IF DAY>3 OR WEEK>21 OR MONTH>90**: You said (display # of times) per (display unit). Is that correct?]
    1__ YES, CONTINUE
    2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D19.   How confident are you that the food and drinks you just told me about included those that [CHILD NAME] had at school, home, or other places? Would you say very confident, somewhat confident, not too confident, or not at all confident?

    VERY CONFIDENT 1
    SOMEWHAT CONFIDENT.. 2
    NOT TOO CONFIDENT.. 3
    NOT AT ALL CONFIDENT 4
    DON'T KNOW... 8
    REFUSED.. 9

TIMING 6

SECTION E: PROGRAM PARTICIPATION – CHILD

E1.   During the last 30 days, did [CHILD NAME] get free or reduced price breakfasts at school?

    YES.. 1
    NO.. 2
    DON'T KNOW.. 8
    REFUSED... 9

E2.   During the last 30 days, did [CHILD NAME] get free or reduced price lunches at school?

    YES.. 1
    NO.. 2
    DON'T KNOW.. 8
    REFUSED... 9

E3.   During the last 30 days, did [CHILD NAME] get food through a backpack food program for children?

    [IF NEEDED: THE BACKPACK FOOD PROGRAM PROVIDES FOOD FOR CHILDREN TO TAKE HOME OVER WEEKENDS AND HOLIDAYS]

    YES.. 1
    NO.. 2
    DON'T KNOW.. 8
    REFUSED... 9

E4.   During the last 30 days, did [CHILD NAME] participate in an after school meal or snack program for children?

    YES.. 1
    NO.. 2
    DON'T KNOW.. 8
    REFUSED... 9

TIMING 7

SECTION F: FOOD SECURITY – HOUSEHOLD

[PROGRAMMER NOTE: SELECT APPROPRIATE FILLS DEPENDING ON NUMBER OF ADULTS AND CHILDREN IN THE HOUSEHOLD. DEFAULT TO MULTIPLE ADULTS AND MULTIPLE CHILDREN IN HOUSEHOLD.**]**

QUALIFIED LEVEL 6: REACHES F1

The next questions are about the food eaten in your household in the last 30 days and whether you were able to afford the food you need.

F1.   Now I'm going to read you several statements that people have made about their food situation. For these statements, please tell me whether the statement was <u>often</u> true, <u>sometimes</u> true, or <u>never</u> true for your household in the last 30 days.

The first statement is "We worried whether our food would run out before we got money to buy more." Was that often true, sometimes true, or never true for your household in the last 30 days?

OFTEN TRUE 1

SOMETIMES TRUE.. 2

NEVER TRUE... 3

DON'T KNOW... 8

REFUSED.. 9

F2.   "The food that we bought just didn't last, and we didn't have money to get more." Was that often, sometimes, or never true for your household in the last 30 days?

OFTEN TRUE 1

SOMETIMES TRUE.. 2

NEVER TRUE... 3

DON'T KNOW... 8

REFUSED.. 9

F3.   "We couldn't afford to eat balanced meals." Was that often, sometimes, or never true for your household in the last 30 days?

OFTEN TRUE 1

SOMETIMES TRUE.. 2

NEVER TRUE... 3

DON'T KNOW... 8

REFUSED.. 9

PROGRAMMER: IF AFFIRMATIVE RESPONSE (I.E., "OFTEN TRUE" OR "SOMETIMES TRUE") TO ONE OR MORE OF QUESTIONS F1-F3, THEN CONTINUE TO F4; OTHERWISE, SKIP TO F9.

F4.   In the last 30 days, 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?

YES.. 1

NO.. 2   **SKIP TO F5**

DON'T KNOW... 8   **SKIP TO F5**

REFUSED.. 9   **SKIP TO F5**

[ASK IF F4=1]
F4a. In the last 30 days, how many days did this happen?

_____ Number of days **[RANGE 1-30]**

DON'T KNOW... 88

REFUSED.. 99

F5.   In the last 30 days, did you ever eat less than you felt you should because there wasn't enough money for food?

YES.. 1

NO.. 2

DON'T KNOW... 8

REFUSED.. 9

F6.   In the last 30 days, were you ever hungry but didn't eat because there wasn't enough money for food?

YES.. 1

NO.. 2

DON'T KNOW... 8

REFUSED.. 9

F7.   In the last 30 days, did you lose weight because there wasn't enough money for food?

YES.. 1

NO.. 2

DON'T KNOW... 8

REFUSED.. 9

PROGRAMMER: IF AFFIRMATIVE RESPONSE TO ONE OR MORE OF QUESTIONS F4-F7, THEN CONTINUE TO F8. OTHERWISE, SKIP TO F9.

F8. In the last 30 days, did [you/you or other adults in your household] ever not eat for a whole day because there wasn't enough money for food?

YES.. 1

NO.. 2 **SKIP TO F9**

DON'T KNOW... 8 **SKIP TO F9**

REFUSED... 9 **SKIP TO F9**

[ASK IF F8=1]
F8a. In the last 30 days, how many days did this happen?

_____ Number of days **[RANGE 1-30]**

DON'T KNOW... 88

REFUSED... 99

SELECT APPROPRIATE FILLS DEPENDING ON NUMBER OF ADULTS AND NUMBER OF CHILDREN IN THE HOUSEHOLD.

[ASK F9-F15 IF C1a=1 OR (C1a >1 AND (B2<88 OR B2.1=1)). ELSE SKIP TO G1]

F9. Now I'm going to read you several statements that people have made about the food situation of their children. For these statements, please tell me whether the statement was often true, sometimes true, or never true in the last 30 days for [your child/children living in the household who are under 18 years old or 18 or older but still in high school].

"[I/We] relied on only a few kinds of low-cost food to feed [my/our] [child/ children] because [I was/we were] running out of money to buy food." Was that often, sometimes, or never true for your household in the last 30 days?

OFTEN TRUE 1

SOMETIMES TRUE... 2

NEVER TRUE... 3

DON'T KNOW... 8

REFUSED.. 9

F10. "[I/We] couldn't feed [my/our] child/children] a balanced meal, because [I/we] couldn't afford that." Was that often, sometimes, or never true for your household in the last 30 days?

OFFTEN TRUE 1
SOMETIMES TRUE 2
NEVER TRUE 3
DON'T KNOW 8
REFUSED 9

[SINGLE ADULT/SINGLE CHILD: My child was]
[MULTIPLE ADULTS/SINGLE CHILD: Our child was]
[SINGLE OR MULTIPLE ADULTS/MULTIPLE CHILDREN: The children were]
F11. "[My child was /Our child was/The children were] not eating enough because [I/we] just couldn't afford enough food." Was that often, sometimes, or never true for your household in the last 30 days?

OFFTEN TRUE 1
SOMETIMES TRUE 2
NEVER TRUE 3
DON'T KNOW 8
REFUSED 9

PROGRAMMER: IF AFFIRMATIVE RESPONSE (I.E., "OFTEN TRUE" OR "SOMETIMES TRUE") TO ONE OR MORE OF QUESTIONS F9-F11, THEN CONTINUE TO F12. OTHERWISE, SKIP TO G1.

F12. In the last 30 days, did you ever cut the size of [your child's/any of the children's] meals because there wasn't enough money for food?

YES 1
NO 2
DON'T KNOW 8
REFUSED 9

F13. In the last 30 days, did [your child/any of the children] ever skip meals because there wasn't enough money for food?

YES 1
NO 2   **SKIP TO F14**
DON'T KNOW 8   **SKIP TO F14**
REFUSED 9   **SKIP TO F14**

[ASK IF F13=1]
F13a. In the last 30 days, how many days did this happen?

_____ Number of days **[RANGE 1-30]**

DON'T KNOW.. 88

REFUSED.. 99

F14.   In the last 30 days, [was your child/were the children] ever hungry but you just couldn't afford more food?

YES.. 1

NO.. 2

DON'T KNOW.. 8

REFUSED.. 9

F15.   In the last 30 days, did [your child/any of the children] ever not eat for a whole day because there wasn't enough money for food?

YES.. 1

NO.. 2

DON'T KNOW.. 8

REFUSED.. 9

TIMING 8

[ASK ALL]

SECTION G: SHOPPING AND EATING BEHAVIOR – HOUSEHOLD

Now, I'd like to ask some questions about shopping for food and eating at restaurants.

G1.   First I'll ask you about money spent at supermarkets or grocery stores. Then we will talk about money spent at other types of stores.

During the last 30 days, how much money [did your family/did you] spend at supermarkets or grocery stores, including Wal-mart, Target, and Kmart? Please include purchases made with SNAP benefits or food stamps. (You can tell me per week or per month.)

[RECORD "0" IF NO MONEY WAS SPENT]

0__NO MONEY SPENT	**GO TO G4**	
1__ PER WEEK [RANGE $1-$9,999]		
2__ PER MONTH [RANGE $1-$9,999]		
8 DON'T KNOW/NOT SURE	**GO TO G4**	
9 REFUSED	**GO TO G4**	

G2.   Was any of this money spent on nonfood items such as cleaning or paper products, pet food, cigarettes or alcoholic beverages?

YES... 1		
NO... 2	**GO TO G4**	
DON'T KNOW.. 8	**GO TO G4**	
REFUSED... 9	**GO TO G4**	

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G3.   About how much money was spent on nonfood items? (You can tell me per week or per month.)

       PROGRAMMER: AMOUNT CANNOT BE MORE THAN THE AMOUNT ENTERED ON QUESTION G1.

[RECORD "0" IF NO MONEY WAS SPENT]

       0__NO MONEY SPENT

       1__ PER WEEK [RANGE $1-$9,999]

       2__ PER MONTH [RANGE $1-$9,999]

       8 DON'T KNOW/NOT SURE

       9 REFUSED

G4.   During the last 30 days, [did your family/did you] spend money on food at stores other than grocery stores? These other stores could include convenience stores like 7-11 or Mini Mart, stores like Costco or Sam's Club, dollar stores, bakeries, meat markets, vegetable stands, or farmer's markets. Please do not include stores that you have already told me about. Please include purchases made with SNAP benefits or food stamps.

YES... 1		
NO.. 2	**GO TO G6**	
DON'T KNOW.. 8	**GO TO G6**	
REFUSED.. 9	**GO TO G6**	

G5.   About how much money [did your family/did you] spend on <u>food</u> at these types of stores during the last 30 days? Please include purchases made with SNAP benefits or food stamps. (Please do not include any stores you have already told me about.) (You can tell me per week or per month.)

[RECORD "0" IF NO MONEY WAS SPENT]

    0__NO MONEY SPENT

    1__ PER WEEK [RANGE $1-$9,999]

    2__ PER MONTH [RANGE $1-$9,999]

    8 DON'T KNOW/NOT SURE

    9 REFUSED

G6.   During the last 30 days, how many times did your family <u>eat food from a fast food restaurant</u>? Include fast food meals at home, or at fast food restaurants, carryout, or drive thru. (You can tell me per week or per month.)

[IF NEEDED, SAY: "SUCH AS FOOD YOU GET AT MCDONALD'S, KFC, PANDA EXPRESS, OR TACO BELL."]

    0__NEVER

    1__ PER WEEK [RANGE 1-99]

    2__ PER MONTH [RANGE 1-99]

    8 DON'T KNOW/NOT SURE

    9 REFUSED

G7.   During the last 30 days, how many times did your family usually <u>eat food at other kinds of restaurants</u>? (You can tell me per week or per month.)

[IF NEEDED, SAY: "SUCH AS FOOD YOU GET AT APPLEBEE'S, CHILI'S, TGI FRIDAYS, ETC."]

       0__NEVER

       1__ PER WEEK [RANGE 1-99]

       2__ PER MONTH [RANGE 1-99]

       8 DON'T KNOW/NOT SURE

       9 REFUSED

[**PROGRAMMER:** IF G6 AND G7=0, GO TO H1]

G8.   About how much money [did your family/did you] spend on <u>food at all types of restaurants</u> including fast food restaurants during the last 30 days? (You can tell me per week or per month.)

       0__NO MONEY SPENT

       1__ PER WEEK [RANGE $1-$9,999]

       2__ PER MONTH [RANGE $1-$9,999]

       8 DON'T KNOW/NOT SURE

       9 REFUSED

TIMING 9

SECTION H: PROGRAM PARTICIPATION – HOUSEHOLD

H1.   Next, I'm going to read the names of some programs that provide food or meals to individuals or households.

H1.1   In the last 30 days did you or anyone in your household receive food or benefits from the Women, Infants and Children program called WIC?

> YES... 1
>
> NO.. 2   **GO TO H1.3**
>
> DON'T KNOW.. 8   **GO TO H1.3**
>
> REFUSED.. 9   **GO TO H1.3**

H1.2a   How many women or children in the household got WIC foods or benefits?

> _____ Number of women or children **[RANGE 1-20]**
>
> DON'T KNOW.. 88   **GO TO H1.3**
>
> REFUSED.. 99   **GO TO H1.3**

[ASK IF H1.2A=1]
H1.2ba Is that person who got WIC foods or benefits an infant less than 1 year old?

> YES... 1 **[CODE AS 1 IN H1.2B]**
>
> NO.. 2
>
> DON'T KNOW.. 88
>
> REFUSED.. 99

[ASK IF H1.2A>1 AND NOT DK/REF]
H1.2b   How many of those [NUMBER FROM H1.2a] people who got WIC foods or benefits are infants less than 1 year old?
> _____ Number of infants **[RANGE 0-20]**
>
> DON'T KNOW.. 88
>
> REFUSED.. 99

CREATE PROGRAMMED VARIABLE COMBINING H1.2BA AND H1.2B

H1.3   In the last 30 days did you or anyone in your household receive food from food pantries or food banks?

> YES... 1
>
> NO.. 2
>
> DON'T KNOW.. 8
>
> REFUSED.. 9

H1.4   In the last 30 days did you or anyone in your household receive meals at local soup kitchens or emergency kitchens?

        YES... 1

        NO.. 2

        DON'T KNOW... 8

        REFUSED... 9

H2.   Are you [IF MULTIPLE PEOPLE IN HOUSEHOLD: or others in your household] receiving [IF CT, OR, OR TX, FILL WITH "SNAP benefits (formerly known as food stamps"; IF MO, FILL WITH: "Food Stamp Program benefits"; IF MI, FILL WITH: "Food Assistance Program benefits"] now?

        YES... 1

        NO.. 2   **GO TO H6**

        DON'T KNOW... 8   **GO TO H6**

        REFUSED... 9   **GO TO H6**

H3.   How long have you (and your household) been receiving [IF CT, OR, OR TX, FILL WITH "SNAP benefits (formerly known as food stamps"; IF MO, FILL WITH: "Food Stamp Program benefits"; IF MI, FILL WITH: "Food Assistance Program benefits"]?

RANGE 1 -

        1__ DAYS [RANGE 1-365]

        2__ WEEKS [RANGE 1-52]

        3__ MONTHS [RANGE 1-12]

        4__YEARS [RANGE 1-50]

        888 DON'T KNOW/NOT SURE

        999 REFUSED

H4.   What is the amount of the [IF CT, OR, OR TX, FILL WITH "SNAP benefits (formerly known as food stamps"; IF MO, FILL WITH: "Food Stamp Program benefits"; IF MI, FILL WITH: "Food Assistance Program benefits"] you receive per month?

        _____ Enter amount [$1 - $9999]

        DON'T KNOW... 8

        REFUSED... 9

H5.	How many weeks do your [IF CT, OR, OR TX, FILL WITH "SNAP benefits (formerly known as food stamps"; IF MO, FILL WITH: "Food Stamp Program benefits"; IF MI, FILL WITH: "Food Assistance Program benefits"] usually last?

[CODE ANY ANSWER GREATER THAN 8 WEEKS AS 8]

_____ Enter number of weeks (range 0-8)　　　**GO TO I1**

DON'T KNOW .... 88　**GO TO I1**

REFUSED .... 99　**GO TO I1**

H6.	Do you (or others in your household) currently receive monthly Native American Food Commodities as part of the Food Distribution Program on Indian Reservations (FDPIR)?

YES 1

NO 2

DON'T KNOW 8

REFUSED 9

TIMING 10

I1. Now, I have a few questions about you.
[RECORD GENDER FROM OBSERVATION.]
[ONLY IF NECESSARY – ASK: Because it is sometimes difficult to determine over the phone, I
     am asked to confirm with everyone…Are you male or female?]

      MALE 1

      FEMALE.. 2

      DON'T KNOW.. 8

      REFUSED... 9

I2.   What is your relationship to [CHILD NAME]?

      READ ONLY IF NECESSARY: Are you [CHILD NAME's]…

      BIOLOGICAL/ADOPTIVE PARENT 1

      STEP-PARENT... 2

      GRANDPARENT 3

      GREAT GRANDPARENT 4

      SIBLING/STEPSIBLING 5

      OTHER RELATIVE OR IN-LAW 6

      FOSTER PARENT.. 7

      OTHER NON-RELATIVE.. 8

      PARENT'S PARTNER 9

      DON'T KNOW.. 88

      REFUSED.. 99

I3.   Are you of Hispanic or Latino origin?

        YES.. 1

        NO.. 2

        DON'T KNOW... 8

        REFUSED.. 9

I4.   I am going to read a list of five race categories. Please choose one or more races that you consider yourself to be. American Indian or Alaska Native; Asian; Black or African American; Native Hawaiian or other Pacific Islander; White?

                                                    MARK ALL THAT APPLY

        AMERICAN INDIAN OR ALASKA NATIVE 1

        ASIAN...2

        BLACK OR AFRICAN AMERICAN...............................3

        NATIVE HAWAIIAN OR
        OTHER PACIFIC ISLANDER 4

        WHITE 5

        DON'T KNOW 8

        REFUSED 9

I5.   What is your current marital status? Are you now married, divorced, separated, widowed, never married, or living with a partner?

        MARRIED 1

        SEPARATED OR DIVORCED...................................... 2

        WIDOWED.. 3

        NEVER MARRIED 4

        LIVING WITH PARTNER... 5

        DON'T KNOW.. 8

        REFUSED.. 9

I6.   Please tell me your birth date.

        |___|___| / |___|___| / |___|___|___|___|
        MONTH   DAY   YEAR

        DON'T KNOW.. 8

        REFUSED.. 9

I6.1 What is the <u>highest</u> grade or level of school you have <u>completed</u> or the <u>highest degree you have received</u>?

    [ENTER HIGHEST LEVEL OF SCHOOL.]

NEVER ATTENDED/KINDERGARTEN ONLY	0
1ST GRADE	1
2ND GRADE	2
3RD GRADE	3
4TH GRADE	4
5TH GRADE	5
6TH GRADE	6
7TH GRADE	7
8TH GRADE	8
9TH GRADE	9
10TH GRADE	10
11TH GRADE	11
12TH GRADE, NO DIPLOMA	12
HIGH SCHOOL GRADUATE	13
GED OR EQUIVALENT	14
SOME COLLEGE, NO DEGREE	15
ASSOCIATE DEGREE: OCCUPATIONAL, TECHNICAL, OR VOCATIONAL PROGRAM	16
ASSOCIATE DEGREE: ACADEMIC PROGRAM	17
BACHELOR'S DEGREE (EXAMPLE: BA, AB, BS, BBA)	18
MASTER'S DEGREE (EXAMPLE: MA, MS, MEng, MEd, MBA)	19
PROFESSIONAL SCHOOL DEGREE (EXAMPLE: MD, DDS, DVM, JD)	20
DOCTORAL DEGREE (EXAMPLE: PhD, EdD)	21
DON'T KNOW	88
REFUSED	99

I7.   The next questions are about your current job or business. Were you working in the last 30 days?

YES	1	**GO TO I9**
NO	2	
DON'T KNOW	8	
REFUSED	9	

I8.   Was any other adult in the household working in the last 30 days?

        YES... 1

        NO.. 2

        DON'T KNOW.. 8

        REFUSED... 9

I9.   Please tell me if you have access to a working refrigerator?

        YES... 1

        NO.. 2

        DON'T KNOW.. 8

        REFUSED... 9

I10.   What was your household's total income <u>last month</u> before taxes? Please include all types of income received by all household members last month, including all earnings, Social Security, pensions, child support, and cash welfare benefits such as TANF (TAH-nif) and SSI. Do not include the value of SNAP benefits or food stamps, WIC, Medicaid, or public housing.

        NO INCOME ....0 **GO TO I12**

        GAVE ANSWER .... 1 [RANGE $1 – 99,999] **GO TO I12**

        DON'T KNOW.. 8

        REFUSED... 9

I11.   Some people find it easier to select an income range. Please stop me when I reach your household's total income for <u>last month</u>. Was it…

        Less than $500, ... 1

        $500 to less than $1,000,............................... 2

        $1,000 to less than $1,500,............................ 3

        $1,500 to less than $2,000,............................ 4

        $2,000 to less than $2,500,............................ 5

        $2,500 to less than $3,000,............................ 6

        $3,000 or more?... 7

        DON'T KNOW.. 8

        REFUSED... 9

I12. And, what was your household's total income last year before taxes? Please include all types of income received by all household members last year, including all earnings, Social Security, pensions, child support, and cash welfare benefits such as TANF (TAH-nif) and SSI. Do not include the value of SNAP benefits or food stamps, WIC, Medicaid, or public housing.

NO INCOME .... 0 **GO TO I14**

GAVE ANSWER .... 1 [RANGE $1 – 999,999] **GO TO I14**

DON'T KNOW... 8

REFUSED... 9

I13. Some people find it easier to select an income range. Please stop me when I reach your household's total income for last year. Was it…

Less than $10,000, ... 1

$10,000 to less than $20,000,....................................... 2

$20,000 to less than $35,000,....................................... 3

$35,000 to less than $50,000,....................................... 4

$50,000 to less than $75,000,....................................... 5

$75,000 to less than $100,000,..................................... 6

$100,000 to less than $150,000 or, ... 7

$150,000 or more?... 8

DON'T KNOW... 88

REFUSED... 99

I14. Has a doctor or other health care professional ever told you or anyone in your household that they had a disability? By disability, I mean a physical or mental impairment.

YES... 1

NO... 2

DON'T KNOW... 8

REFUSED... 9

TIMING 11

SECTION J: ADDITIONAL CONTACT INFORMATION

QUALIFIED LEVEL 6: REACHES J1

J1. [IF QKEY NE XXXXXXXX_i:] Thank you very much for your time. You have helped us greatly with this important study. We will send you a $10 gift card within the next few weeks and I'd like to confirm your mailing address.

J1. [IF QKEY=XXXXXXXX_i:] Thank you very much for your time. You have helped us greatly with this important study. The field interviewer will give you your $10 gift card. While we have you on the phone, we would like to confirm your mailing address.

[ASK ALL:]
J1a. According to our records we have…

>   [IF A3=1, FILL NAME FROM FILE. ELSE, FILL FROM A4.1]

>   [FILL STREET ADDRESS FROM SAMPLE FRAME]

>   [FILL CITY, STATE, ZIP CODE FROM SAMPLE FRAME]

>   NAME AND ADDRESS IS CORRECT 1   **GO TO J2**

>   NAME AND ADDRESS NEEDS UPDATING................. 0

>   UPDATE: NAME

>   UPDATE: STREET ADDRESS:

>   _____

>   _____

>   CITY: _____

>   STATE: _____

>   ZIP CODE: _____

J2. We would also like to conduct a follow up interview in a couple of months to see how you are doing during the summer. If you participate in this follow up survey, you will receive another $10 gift card for participating in that interview.

In case we can't reach you at this number, would you please tell me another phone number?

>   PHONE NUMBER: |__|__|__| - |__|__|__| - |__|__|__|__|

>   NO ADDITIONAL PHONE AVAILABLE......................... 1

>   (VOL) GAVE INTERNATIONAL PHONE NUMBER 2

>   REFUSED TO PARTICIPATE IN FOLLOW-UP
>   INTERVIEW .... 9 → **GO TO K1**

[ASK J2.A IF RESPONDENT PROVIDES PHONE IN J2, OTHERWISE SKIP TO J2.B]

J2.a.   What type of phone number is this?

> HOME 1
> CELL 2
> WORK 3
> OTHER, SPECIFY 4
> DON'T KNOW 8
> REFUSED 9

J2.b. Do you have an email address that we can reach you at?

> EMAIL ADDRESS:_____
> NO EMAIL ADDRESS AVAILABLE 2
> DON'T KNOW 8
> REFUSED 9

J2.1.   Will [CHILD NAME] be staying with you for most of the summer?

> YES... 1   **GO TO J3**
> NO... 2
> DON'T KNOW 8   **GO TO J3**
> REFUSED 9   **GO TO J3**

J2.2.   Will [CHILD NAME] be staying at someone else's home, staying in different homes, or staying some place else for most of the summer?

> SOMEONE ELSE'S HOME 1
> DIFFERENT HOMES 2   **GO TO J3**
> SOME PLACE ELSE (SPECIFY:) 3   **GO TO J3**
> DON'T KNOW 8   **GO TO J3**
> REFUSED 9   **GO TO J3**

J2.3.   Please give me the name and telephone number of the person [CHILD NAME] will be staying with for most of the summer.

> [BE SURE TO VERIFY SPELLING]

> ENTER FIRST NAME: _____

> DON'T KNOW 8
> REFUSED 9

J2.4. What is [J2.3 FIRST NAME] [J2.3 LAST NAME]'s telephone number, beginning with the area code?

|__|__|__| - |__|__|__| - |__|__|__|__|

(VOL) GAVE INTERNATIONAL PHONE NUMBER 2

DON'T KNOW... 8

REFUSED.. 9

J2.5. And what is [J2.3 FIRST NAME] [J2.3 LAST NAME]'s relationship to you?

RELATIONSHIP:_____

DON'T KNOW... 8

REFUSED.. 9

[PROGRAMMER NOTE: IF RESPONDENT PROVIDES AN ADDITIONAL PERSON IN J2.3, ONLY ASK FOR 2 RELATIVES OR FRIENDS]

J3. In case we have trouble reaching you (or [J2.3 FIRST NAME] [J2.3 LAST NAME]) in a couple of months, please give me the names and telephone numbers of [two/three] relatives or friends who would know where you could be reached.(Please give me the names of persons not currently living in the household.

J3a2 and J3a3

FOR SECOND AND THIRD PERSON, READ: May I have the name of another relative or friend who would know where you could be reached?

[BE SURE TO VERIFY SPELLING]

REFERRING TO PERSON (1, 2 OR 3)

ENTER FIRST NAME: _____

DON'T KNOW... 8

REFUSED.. 9

ENTER LAST NAME: _____

DON'T KNOW... 8

REFUSED.. 9

REFERRING TO PERSON (1, 2 OR 3)

J4.   What is this person's telephone number, beginning with the area code?

|___|___|___| - |___|___|___| - |___|___|___|___|

(VOL) GAVE INTERNATIONAL PHONE NUMBER 2

DON'T KNOW.. 8
REFUSED.. 9

REFERRING TO PERSON (1, 2 OR 3)

J5.   And what is [NAME FROM ABOVE]'s relationship to you?

RELATIONSHIP:_____

DON'T KNOW.. 8
REFUSED.. 9

TIMING 12

[IF IN CONTROL GROUP AND SITE WITH ACTIVE CONSENT, GO TO K2]

SECTION K: RELEASE OF RECORDS

[READ IF RESPONDENT IN TREATMENT GROUP:]
K1.If you are selected to receive the Summer EBT card, we would like your permission to look at your records on when and where you used your card [for Texas & Michigan…and, what types of food you bought]. This will help us to evaluate how the Summer EBT program is working.

[READ IF PASSIVE CONSENT:]
We would also like your permission to have the [name of school district] provide us with information from your child/children's National School Lunch application as well as some administrative information from your child's school records. This data will include items such as age, grade level and other administrative information. It will not include academic or disciplinary information.

[TO BE READ AFTER FIRST OR SECOND PARAGRAPH:]
Your records will only be used for this study. All information collected during the survey will be kept private, as required by law. Releasing your records is completely voluntary, and you may refuse. If you refuse, it will not affect any government assistance you may be receiving. Would you be willing to release these records?

> YES... 1
>
> NO... 2

[READ TO ALL]
K2There is minimal risk to participating in this study. The main risk is a violation of confidentiality, but procedures are in place to protect your information. Finally, if you have any questions about this study or your rights as a participant, I can give you a telephone number to call. This completes the survey!

[ONLY IF NEEDED: THE PROJECT DIRECTOR AT ABT ASSOCIATES CAN BE REACHED AT 855-281-6385]

TIMING 13

Summer Electronic Benefit Transfer for Children

Summer Questionnaire

July 6, 2011

Abt

Abt Associates Inc.

MATHEMATICA
Policy Research, Inc.

A1.   Hello, my name is _____ and I'm calling on behalf of the U.S. Department of Agriculture, Food and Nutrition Service.

May I please speak to

[%UFName % ULName]?

[INTERVIEWER NOTE: REFER TO FAQ'S TO ANSWER ANY QUESTIONS, INCLUDING CONTENT OF SURVEY]

SPEAKING TO [NAME OF PARENT]	1	**GO TO CHECKPOINT**
[NAME OF PARENT] COMES TO PHONE	2	**GO TO CHECKPOINT**
NOT A GOOD TIME	4	**SCHEDULE CALLBACK**

QUALIFIED LEVEL 1 A1=1 OR 2

[IF INBOUND CALL]
SI1   Just in case we are disconnected, what telephone number can I reach you at to complete the interview?

Provided phone number	1	**GO TO CHECKPOINT**
(VOL) respondent will call back	2	**GO TO CHECKPOINT**
Don't know	8	**GO TO CHECKPOINT**
Refused	9	**GO TO CHECKPOINT**

QUALIFIED LEVEL 2: SI1=1

[IF SAMPLE FLAGGED AS CELL PHONE]
SC1 If we have reached you on a cell phone, are you in a safe place to talk right now?
IF DRIVING VOLUNTEERED, CODE AS 2USE LL INTRO FOR LL CALLBACKS

Yes, safe place to talk	1	
No, call me later	2	**SCHEDULE CALLBACK**
No, CB on land-line	3	**RECORD NUMBER,**
SCHEDULE CALLBACK		
(VOL) on landline	4	**GO TO CHECKPOINT**
Don't know	8	
Refused	9	

[IF SAMPLE FLAGGED AS CELL PHONE]
SC2 Are you driving?

Yes, call me later	1	**SCHEDULE CALLBACK**
No	2	
Don't know	8	
Refused	9	

CHECKPOINT: IF BLINE=1, GO TO A7.
**   IF BLINE =2, GO TO A2.**

A2.   We are conducting a scientific research study about the food choices of children and their families for the U.S. Department of Agriculture, Food and Nutrition Service. The study will help the government make its child nutrition programs better for school-age children. We are trying to reach the parent or adult in the household who knows the most about what [CHILD NAME] eats.

A3.   Are you the parent or adult in the household who knows most about what [CHILD NAME] ate over the last 30 days?

INTERVIEWER: IF R ANSWERS "PROBABLY" OR "AS MUCH AS ANYONE ELSE," ENTER "1," "YES."

YES.. 1	GO TO A4.3
YES, BUT NOT AVAILABLE NOW................................ 2	GO TO CALLBACK
NO.. 3	
FOCAL CHILD NOT LIVING IN HOUSEHOLD 4	GO TO A4.3
DON'T KNOW.. 8	
REFUSED.. 9	

A4.1   What is the name of the parent or adult who knows most about what [CHILD NAME] ate over the last 30 days?

ENTER NAME OF PARENT/ADULT:

_____

DON'T KNOW.. 8

REFUSED.. 9

QUALIFIED LEVEL 3: (A3=1 OR 2) OR (GAVE NAME IN A4.1)

A4.2   May I speak with (him/her)?

YES 1	
YES, BUT NOT AVAILABLE NOW 2	**GO TO CALLBACK**
CANNOT COME TO PHONE.................................... 3	**GO TO CALLBACK**
(VOL) Not available at this phone number 4	**GO TO UPDATE PHONE**
DON'T KNOW 8	**GO TO CALLBACK**
REFUSED 9	**GO TO REFUSAL**

A4.3 **[READ IF A3=4]** That's OK, we still have some questions you can answer.

[READ IF A4.2=1] Hello, my name is _____ and I'm calling on behalf of the U.S.D.A., Food and Nutrition Service. We are conducting a research study about the food choices of children and their families.

[READ TO ALL:] Are you at least 18 years old?

YES 1

NO 2   **TERMINATE (tipso11)**

DON'T KNOW/REFUSED 8   **TERMINATE (tipso10)**

QUALIFIED LEVEL 4: A4.3=1

A4.4 For quality assurances purposes, this call may be monitored or recorded.

The interview will take approximately 25 minutes. It has questions about your child's food choices as well as general questions about you and your household. Your answers will help the government make its child nutrition programs better for school-age children. As a way of saying thank you, we will give you a $10 gift card when we are finished.

Your participation in this interview is voluntary and you may stop at any time. Your benefits will not be affected if you choose not to participate. If you take part, you may refuse to answer any questions. If you take part, your answers won't change any benefits you may receive from any agency.

All the information you give us will be kept confidential to the extent allowed by law. Your name will not be attached to any of your answers. Your information will be used only in combination with information from other households for research purposes

A5. Do you have any questions before I begin?

[REFER TO FAQ'S TO ANSWER ANY QUESTIONS]

YES 1

NO 2

DON'T KNOW 8

REFUSED 9

A5.1 If now is a good time for you and you are willing to participate, I'd like to begin my questions.

YES, IT'S A GOOD TIME AND I'M WILLING 1   **GO TO B1**

YES, I'M WILLING BUT NOT AVAILABLE NOW 2   **SCHEDULE CALLBACK**

DON'T KNOW 8

REFUSED TO PARTICIPATE .... ….9   **GO TO REFUSAL**

A7.   We are conducting a scientific research study about the food choices of children and their families for the U.S. Department of Agriculture, Food and Nutrition Service. The study will help the government make its child nutrition programs better for school-age children.

A8.   For quality assurance purposes, this call may be monitored or recorded.

The interview will take approximately 25 minutes. It has questions about your child's food choices as well as general questions about you and your household. Your answers will help the government make its child nutrition programs better for school-age children. As a way of saying thank you, we will give you a $10 gift card when we are finished.

Your participation in this interview is voluntary and you may stop at any time. Your benefits will not be affected if you choose not to participate. If you take part, you may refuse to answer any questions. If you take part, your answers won't change any benefits you may receive from any agency.

All the information you give us will be kept confidential to the extent allowed by law. Your name will not be attached to any of your answers. Your information will be used only in combination with information from other households for research purposes.

A9.1   Do you have any questions before I begin?

[REFER TO FAQ'S TO ANSWER ANY QUESTIONS]

YES.. 1

NO.. 2

DON'T KNOW... 8

REFUSED... 9

A9.2   If now is a good time for you and you are willing to participate, I'd like to begin my questions.

YES, IT'S A GOOD TIME AND I'M WILLING.................1   **GO TO B1**

YES, I'M WILLING BUT NOT AVAILABLE NOW...........2   **SCHEDULE CALLBACK**

DON'T KNOW 8

REFUSED TO PARTICIPATE................................... ….9   **GO TO REFUSAL**

A10.   May we call you back at another time?

       YES 1   **SCHEDULE CALLBACK**

       NO 2   **GO TO REFUSAL**

       DON'T KNOW 8   **SCHEDULE CALLBACK**

       REFUSED 9   **GO TO REFUSAL**

TIMING 1

SECTION B: HOUSEHOLD CHARACTERISTICS VERIFICATION

CHECKPOINT: **IF BLINE =1, GO TO B6.**
                               IF BLINE =2, ASK B1.

QUALIFIED LEVEL 5: REACHES B1

The first few questions are about the people you live with.

B1.   Including yourself, how many people live in your household? Don't forget to include non-relatives who live here and, of course, babies and small children. Also include persons who usually live here but are temporarily away for reasons such as: vacation, traveling for work, or in the hospital. Do not include children living away at school.

         |___|___| Number of people **[RANGE 1-20]**

         DON'T KNOW... 88
         REFUSED.. 99

[If B1=1:]
B1a.   Just to confirm, you are the only person living in the household. There are no children, non-relatives, or people who usually live there but are currently away?

         YES, CONTINUE 1   **GO TO C1**

         NO, CORRECT NUMBER 2

B1.1   Do all the people in your household buy and share food together?

         YES.. 1   **GO TO B2**
         NO.. 0
         DON'T KNOW... 88
         REFUSED... 99

B1.2   How many people in your household buy and share food together?

[PROGRAMMER NOTE: IF B1 NE 88/99 B1.2 CANNOT BE GREATER THAN B1]

         |___|___| PEOPLE

         DON'T KNOW... 88
         REFUSED... 99

B2.   How many of those (IF B1.1=1, FILL NUMBER FROM B1, OTHERWISE, FILL NUMBER FROM B1.2) people are children age 18 or younger or over 18 but were still in high school during the most recently completed school year?

        [IF B1.1 AND B1.2 = 88 OR 99, READ:] How many people in your household are children age 18 or younger or over 18 but were still in high school during the most recently completed school year?

[PROGRAMMER NOTE: B2 CANNOT BE GREATER THAN B1/B1.2]

        _____ Number of children **[RANGE 1-20]**   **GO TO B4**

        NO CHILDREN IN HOUSEHOLD................................. 00   **GO TO C1**

        DON'T KNOW.. 88

        REFUSED.. 99

B2.1   Is there at least one child living in your household?

        YES... 1

        NO.. 2   **GO TO C1**

        DON'T KNOW.. 8   **GO TO REFUSAL**

        REFUSED.. 9   **GO TO REFUSAL**

B4.   I'd like to make a list of the first names or initials of the children, age 18 or younger, and those over 18 who were still in high school during the most recently completed school year. What is the name of the (first/nth) child?

        [IF 1 CHILD READ:] What is the name of the child age 18 or younger, or over 18 but was still in high school during the most recently completed school year living in your household?

   PROGRAMMER: CREATE GRID, USING B2 FOR NUMBER OF CHILDREN IF B2<88. IF B2=88,99 ALLOW UP TO 20.

B5.   Please tell me the birth date of each child starting with [CHILD #1]. [IF 1 CHILD, READ:] Please tell me the birth date of [CHILD #1].

        |__|__| / |__|__| / |__|__|__|__|
        MONTH   DAY   YEAR

        DON'T KNOW.. 8

        REFUSED.. 9

COMPUTE PROGRAMMED VARIABLE FOR NUMBER OF KIDS IN HOUSEHOLD.

IF B2<88, NUMBER OF KIDS=B2.
IF B2>20 AND B2.1=1, NUMBER OF KIDS=B4.
IF B2>20 AND B2.1=2, NUMBER OF KIDS=0.

[IF B2 > 1 OR ((B2=88 OR B2= 99) AND B4 TOTAL > 1)]

B3.   How many of these children were in grades pre-K through 12 in your public school system during the most recently completed school year?

[**PROGRAMMER NOTE**: B3 CANNOT BE GREATER THAN B4]

_____ENTER NUMBER OF CHILDREN IN PRE-K-12 (RANGE 0-20) **GO TO C1**

DON'T KNOW.. 88   **GO TO C1**

REFUSED.. 99   **GO TO C1**

[IF B2 = 1 OR ((B2 = 88 OR B2 = 99) AND B4 TOTAL = 1)]
B3A.   Was that child in grades pre-K through 12 in your public school system during the most recently completed school year?

YES.. 1   **GO TO C1**

NO.. 2   **GO TO C1**

DON'T KNOW.. 88   **GO TO C1**

REFUSED.. 99   **GO TO C1**

CREATE PROGRAMMED VARIABLE COMBINING B3 AND B3A

[ASK B6-B7.3 IF BLINE =1. IF BLINE =2, GO TO C1]

B6.   According to my records from our last interview, [IF HHNUMB>1: there were [HHNUMB] people in your household that buy and share their food together. IF HHNUMB=1: you bought food just for yourself. Is that still correct?
YES.. 1   **GO TO B7.1**
NO.. 2
DON'T KNOW.. 8
REFUSED.. 9

[IF HHNUMB=1 AND B6=1, GO TO C1A]

B6.1   Including yourself, how many people live in your household? Don't forget to include non-relatives who live here and, of course, babies and small children. Also include persons who usually live here but are temporarily away for reasons such as: vacation, traveling for work, or in the hospital. Do not include children living away at school.

_____Number of people **[RANGE 1-20]**

DON'T KNOW.. 88

REFUSED.. 99

[If B6.1=1:]
B6.1a. Just to confirm, you are the only person living in the household. There are no children, non-relatives, or people who usually live there but are currently away?
YES, CONTINUE 1   **GO TO C1A**
NO, CORRECT NUMBER 2

B6.1.1   Do all the people in your household buy and share food together?

YES...1   **GO TO B7.1**

NO...2

DON'T KNOW...8

REFUSED...9

B6.1.2 How many people in your household buy and share food together?

[PROGRAMMER NOTE: IF B1 NE 88/99 B6.1.2 CANNOT BE GREATER THAN B6.1]

_____ Number of people **[RANGE 1 – 20]**

DON'T KNOW.. 88

REFUSED.. 99

B7.1   How many of those (IF B6=1, FILL NUMBER FROM HHNUMB, OTHERWISE, FILL NUMBER FROM B6.1) people are children age 18 or younger or over 18 but were still in high school during the most recently completed school year?

[**IF B6 AND B6.1 = 88 OR 99**, READ:] How many people in your household are children age 18 or younger or over 18 but were still in high school during the most recently completed school year?

[PROGRAMMER NOTE: B7.1 CANNOT BE GREATER THAN B6.1 OR B6.1.2]

_____ Number of children **[RANGE 1-20]**   **GO TO B7.3**

NO CHILDREN IN HOUSEHOLD................................. 00   **GO TO C1A**

DON'T KNOW.. 88

REFUSED.. 99

B7.2   Is there at least one child living in your household?

YES...1

NO...2   **GO TO C1A**

DON'T KNOW...8   **GO TO REFUSAL**

REFUSED...9   **GO TO REFUSAL**

COMPUTE PROGRAMMED VARIABLE FOR NUMBER OF KIDS IN HOUSEHOLD.

IF B7.1<88, NUMBER OF KIDS=B7.1.
IF B7.1>20 AND B7.2=1, NUMBER OF KIDS=B7.3.
IF B7.1>20 AND B7.2=2, NUMBER OF KIDS=0.

[IF B7.1 > 1 OR (B7.1=88 OR 99)]

B7.3.   How many of these children were in grades pre-K through 12 in your public school
             system during the most recently completed school year?

             [**PROGRAMMER NOTE**: B7.3 CANNOT BE GREATER THAN B7.1]

             _____ENTER NUMBER OF CHILDREN IN PRE-K-12 (RANGE 0-20)

             DON'T KNOW.. 88
             REFUSED... 99

[IF B7.1 = 1]

B7.3A. Was that child in grades pre-K through 12 in your public school system during the most
       recently completed school year?
             YES... 1
             NO... 2
             DON'T KNOW.. 88
             REFUSED... 99

TIMING 2

SECTION C: CHILD DEMOGRAPHICS

CHECKPOINT: IF BLINE =1, ASK C1A ONLY AND GO TO NEXT SECTION.
IF BLINE =2, GO TO C1.

QUALIFIED LEVEL 6: REACHES C1

For the next set of questions, we are going to focus on [CHILD NAME].

C1.   Is [CHILD NAME] a boy or girl?

[ASK IF THEY HAVE NOT ALREADY MENTIONED CHILD'S SEX]

> BOY 1
> GIRL... 2
> DON'T KNOW... 8
> REFUSED... 9

ASK ALL
C1a.   During the past 30 days, how many days did [CHILD NAME] live in this household?

IF RESPONDENT SAYS EVERYDAY, ENTER 30.

_____ Number of days **[RANGE 1-30]**

> NONE.. 0
> DON'T KNOW.. 88
> REFUSED... 99

CHECKPOINT: IF BLINE =1, AND C1A>0 AND <88, GO TO D1
IF BLINE =1, AND C1A=0 OR (88 OR 99) GO TO F1
IF BLINE =2 GO TO C2

[ASK IF C1A=0 OR (B1=1) OR ((B2=0) OR (B2.1>1))]
C2.   Please tell me [CHILD NAME]'s birth date.

|__|__| / |__|__| / |__|__|__|__|
MONTH   DAY   YEAR

> DON'T KNOW.. 8
> REFUSED... 9

C3.   Is [CHILD NAME] of Hispanic or Latino origin?

> YES.. 1
> NO.. 2
> DON'T KNOW.. 8
> REFUSED... 9

11

C4.   I am going to read a list of five race categories. Please choose one or more races that you consider [CHILD NAME] to be. American Indian or Alaska Native; Asian; Black or African America; Native Hawaiian or other Pacific Islander; White?

<u>MARK ALL THAT APPLY</u>

AMERICAN INDIAN OR ALASKA NATIVE 1

ASIAN..2

BLACK OR AFRICAN AMERICAN...............................3

NATIVE HAWAIIAN OR
OTHER PACIFIC ISLANDER 4

WHITE 5

DON'T KNOW 8

REFUSED 9

[IF BLINE =2 AND C1A=0 OR (C1A=88 OR 99) GO TO F1]

TIMING 3

SECTION D: DIETARY BEHAVIORS – CHILD

D1.   During the last 30 days, did [CHILD NAME] usually eat breakfast each day?

        YES... 1

        NO.. 2

        DON'T KNOW.. 8

        REFUSED... 9

These questions are about the different kinds of foods [CHILD NAME] ate or drank during the last 30 days. First, I'm going to ask you about the types of items [CHILD NAME] usually drinks at mealtimes and between meals. When answering, please include meals and snacks eaten at home, at school, in restaurants, and anyplace else. During the last 30 days, how often did [CHILD NAME] drink…

D2.   100% pure fruit juice, such as orange, mango, apple, grape, and pineapple juice? Do not include fruit-flavored drinks with added sugar or fruit juice you made at home with added sugar. (You can tell me per day, per week or per month.)

        INCLUDE: ONLY 100% PURE JUICES

        DO NOT INCLUDE: FRUIT-FLAVORED DRINKS WITH ADDED SUGAR, LIKE CRANBERRY DRINK, HI-C, LEMONADE, KOOL-AID, GATORADE, TAMPICO (tam-pee-koh), AND SUNNY DELIGHT.

            0__NEVER

            1__ PER DAY **[RANGE 1-300]**

            2__ PER WEEK **[RANGE 1-300]**

            3__ PER MONTH **[RANGE 1-300]**

            8 DON'T KNOW/NOT SURE

            9 REFUSED

        [**IF DAY>4 OR WEEK>28 OR MONTH>120**: You said (display # of times) per (display unit). Is that correct?]
            1__ YES, CONTINUE
            2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D2.1   During the last 30 days, how often did [CHILD NAME] drink <u>sweetened fruit drinks</u>, sports or energy drinks, such as Kool-Aid, lemonade, Hi-C, cranberry drink, Gatorade, Red Bull, or Vitamin Water? Include fruit juices you made at home with added sugar.

Do **not** include diet drinks or artificially sweetened drinks. (You can tell me per day, per week or per month.)

    0__NEVER

    1__ PER DAY **[RANGE 1-300]**

    2__ PER WEEK **[RANGE 1-300]**

    3__ PER MONTH **[RANGE 1-300]**

    8 DON'T KNOW/NOT SURE

    9 REFUSED

[**IF DAY>4 OR WEEK>28 OR MONTH>120**: You said (display # of times) per (display unit). Is that correct?]

    1__ YES, CONTINUE

    2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D2.2   (During the last 30 days, how often did [CHILD NAME] drink):

<u>Regular soda or pop that contains sugar</u>? Do <u>not</u> include diet soda. (You can tell me per day, per week or per month.)

INCLUDE: MANZANITA (man-zuh-nee-tuh) AND PENAFIEL (pen-yah-fee-EL) SODAS.

DO NOT INCLUDE DIET OR SUGAR-FREE DRINKS. DO **NOT** INCLUDE JUICES OR TEA IN CANS.

    0__NEVER

    1__ PER DAY **[RANGE 1-300]**

    2__ PER WEEK **[RANGE 1-300]**

    3__ PER MONTH **[RANGE 1-300]**

    8 DON'T KNOW/NOT SURE

    9 REFUSED

[**IF DAY>4 OR WEEK>28 OR MONTH>120**: You said (display # of times) per (display unit). Is that correct?]

    1__ YES, CONTINUE

    2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D2.3   (During the last 30 days, how often did [CHILD NAME] have):

Milk (either to drink or on cereal)? Do not include soy milk or small amounts of milk in coffee or tea. (You can tell me per day, per week or per month.)

INCLUDE: SKIM, NO-FAT, LOW-FAT, WHOLE MILK, BUTTERMILK, AND LACTOSE-FREE MILK. ALSO INCLUDE CHOCOLATE OR OTHER FLAVORED MILKS.

DO NOT INCLUDE: CREAM

        0__NEVER

        1__ PER DAY **[RANGE 1-300]**

        2__ PER WEEK **[RANGE 1-300]**

        3__ PER MONTH **[RANGE 1-300]**

        8 DON'T KNOW/NOT SURE

        9 REFUSED

[IF DAY>4 OR WEEK>28 OR MONTH>120: You said (display # of times) per (display unit). Is that correct?]

        1__ YES, CONTINUE

        2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D2.3.1 What type of milk did [CHILD NAME] usually have? Was it whole or regular milk, 2% fat or reduced-fat milk, 1% or 1/2% fat or low-fat milk, or fat-free, skim, nonfat milk? Do not include soy milk or rice milk.

IF RESPONDENT CANNOT PROVIDE USUAL TYPE, CODE ALL THAT APPLY.

IF RESPONDENT MENTIONS CHOCOLATE OR OTHER FLAVORED MILKS, ASK: Do you know if it is whole, 2%, 1% or nonfat milk?

        WHOLE MILK 1

        2% FAT OR REDUCED FAT MILK............................... 2

        1% OR 1/2% FAT MILK 3

        FAT-FREE, SKIM, NONFAT MILK 4

        DON'T KNOW 8

        REFUSED 9

TIMING 4

Now I'm going to ask you about some kinds of food [CHILD NAME] ate during the last 30 days, including mealtimes and snacks.

D3.   During the last 30 days, how often did [CHILD NAME] eat <u>hot or cold cereal</u>? (You can tell me per day, per week or per month.)

        0__NEVER   **SKIP TO D4**

        1__ PER DAY **[RANGE 1-300]**

        2__ PER WEEK **[RANGE 1-300]**

        3__ PER MONTH **[RANGE 1-300]**

        8 DON'T KNOW/NOT SURE

        9 REFUSED

[IF DAY>3 OR WEEK>21 OR MONTH>90: You said (display # of times) per (display unit). Is that correct?]

        1__ YES, CONTINUE

        2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D3.1   During the last 30 days, what kind of cereal did [CHILD NAME] usually eat?

[PROBE FOR CLARITY IF NEEDED: BRAND, NAME AND VARIETY]

[INTERVIEWER: RECORD INFORMATION FOR ONLY 1 CEREAL]

_____ (GAVE CEREAL TYPE)

        DON'T KNOW.. 88   **GO TO D4**

        REFUSED... 99   **GO TO D4**

D3.2   Was there another cereal that [CHILD NAME] ate?

        YES... 1

        NO.. 2   **GO TO D4**

        DON'T KNOW.. 8   **GO TO D4**

        REFUSED... 9   **GO TO D4**

D3.3   During the last 30 days, what <u>second</u> kind of cereal did [CHILD NAME] usually eat?

[PROBE FOR CLARITY IF NEEDED: BRAND, NAME AND VARIETY]

[INTERVIEWER: RECORD INFORMATION FOR ONLY 1 CEREAL]

_____ (GAVE CEREAL TYPE)

DON'T KNOW.. 388
REFUSED... 399

TIMING 5

D4.   During the last 30 days, how often did [CHILD NAME] have:

 <u>Fruit</u>? **Include** fresh, frozen or canned fruit. Do **not** include juices. (You can tell me per day, per week or per month.)

DO NOT INCLUDE: DRIED FRUITS

0__NEVER
1__ PER DAY **[RANGE 1-300]**
2__ PER WEEK **[RANGE 1-300]**
3__ PER MONTH **[RANGE 1-300]**
8 DON'T KNOW/NOT SURE
9 REFUSED

[**IF DAY>3 OR WEEK>21 OR MONTH>90**: You said (display # of times) per (display unit). Is that correct?]
1__ YES, CONTINUE
2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D5.   During the last 30 days, how often did [CHILD NAME] eat <u>a green leafy or lettuce salad</u>, with or without other vegetables? (You can tell me per day, per week or per month.)

[INCLUDE: SPINACH SALADS]

0__NEVER
1__ PER DAY **[RANGE 1-300]**
2__ PER WEEK **[RANGE 1-300]**
3__ PER MONTH **[RANGE 1-300]**
8 DON'T KNOW/NOT SURE
9 REFUSED

[IF DAY>3 OR WEEK>21 OR MONTH>90: You said (display # of times) per (display unit). Is that correct?]

        1__ YES, CONTINUE

        2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D6.   During the last 30 days, how often did [CHILD NAME] <u>eat any kind of fried potatoes</u>, including French fries, home fries, or hash brown potatoes? (You can tell me per day, per week or per month.)

     [DO NOT INCLUDE: POTATO CHIPS]

        0__NEVER

        1__ PER DAY **[RANGE 1-300]**

        2__ PER WEEK **[RANGE 1-300]**

        3__ PER MONTH **[RANGE 1-300]**

        8 DON'T KNOW/NOT SURE

        9 REFUSED

[IF DAY>3 OR WEEK>21 OR MONTH>90: You said (display # of times) per (display unit). Is that correct?]

        1__ YES, CONTINUE

        2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D7.   During the last 30 days, how often did [CHILD NAME] eat <u>other kind of potatoes</u> such as mashed potatoes, sweet potatoes, or potato salad? (You can tell me per day, per week or per month.)

     [INCLUDE: ALL TYPES OF POTATOES EXCEPT FRIED. INCLUDE POTATOES AU GRATIN, AND SCALLOPED POTATOES].

        0__NEVER

        1__ PER DAY **[RANGE 1-300]**

        2__ PER WEEK **[RANGE 1-300]**

        3__ PER MONTH **[RANGE 1-300]**

        8 DON'T KNOW/NOT SURE

        9 REFUSED

[IF DAY>3 OR WEEK>21 OR MONTH>90: You said (display # of times) per (display unit). Is that correct?]

> 1__ YES, CONTINUE
>
> 2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D8.   (During the last 30 days, how often did [CHILD NAME] eat):

Refried beans, baked beans, beans in soup, pork and beans or any other type of cooked dried beans? Do <u>not</u> include green beans. (You can tell me per day, per week or per month.)

[INCLUDE: SOYBEANS, KIDNEY, PINTO, GARBANZO, BLACK BEANS, LENTILS, BLACK-EYED PEAS, COW PEAS, AND LIMA BEANS. INCLUDE CANNED BEANS.]

> 0__NEVER
>
> 1__ PER DAY **[RANGE 1-300]**
>
> 2__ PER WEEK **[RANGE 1-300]**
>
> 3__ PER MONTH **[RANGE 1-300]**
>
> 8 DON'T KNOW/NOT SURE
>
> 9 REFUSED

[IF DAY>3 OR WEEK>21 OR MONTH>90: You said (display # of times) per (display unit). Is that correct?]

> 1__ YES, CONTINUE
>
> 2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D9.   (During the last 30 days, not including what you just told me about lettuce salads, potatoes, cooked dried beans, how often did [CHILD NAME] eat):

<u>Other vegetables</u>? (You can tell me per day, per week or per month.)

[DO NOT INCLUDE: RICE

EXAMPLES OF OTHER VEGETABLES INCLUDE: TOMATOES, GREEN BEANS, CARROTS, CORN, CABBAGE, BEAN SPROUTS, COLLARD GREENS, AND BROCCOLI. INCLUDE ANY FORM OF THE VEGETABLE (RAW, COOKED, CANNED, OR FROZEN).]

> 0__NEVER
>
> 1__ PER DAY **[RANGE 1-300]**
>
> 2__ PER WEEK **[RANGE 1-300]**
>
> 3__ PER MONTH **[RANGE 1-300]**
>
> 8 DON'T KNOW/NOT SURE
>
> 9 REFUSED

[IF DAY>3 OR WEEK>21 OR MONTH>90: You said (display # of times) per (display unit). Is that correct?]

                1__ YES, CONTINUE

                2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D10.   (During the last 30 days, how often did [CHILD NAME] have):

Mexican-type <u>salsa</u> made with tomato? (You can tell me per day, per week or per month.)

[INCLUDE**:** ALL TOMATO-BASED SALSAS.]

                0__NEVER

                1__ PER DAY **[RANGE 1-300]**

                2__ PER WEEK **[RANGE 1-300]**

                3__ PER MONTH **[RANGE 1-300]**

                8 DON'T KNOW/NOT SURE

                9 REFUSED

[IF DAY>3 OR WEEK>21 OR MONTH>90: You said (display # of times) per (display unit). Is that correct?]

                1__ YES, CONTINUE

                2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D11.   (During the last 30 days, how often did [CHILD NAME] eat):

<u>Pizza</u>? Include frozen pizza, fast food pizza, and homemade pizza. (You can tell me per day, per week or per month.)

                0__NEVER

                1__ PER DAY **[RANGE 1-300]**

                2__ PER WEEK **[RANGE 1-300]**

                3__ PER MONTH **[RANGE 1-300]**

                8 DON'T KNOW/NOT SURE

                9 REFUSED

[IF DAY>3 OR WEEK>21 OR MONTH>90: You said (display # of times) per (display unit). Is that correct?]

          1__ YES, CONTINUE

          2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D12.   (During the last 30 days, how often did [CHILD NAME] have):

Tomato sauce such as with spaghetti or noodles or mixed into foods such as lasagna? Please do not count tomato sauce on pizza. (You can tell me per day, per week or per month.)

          0__NEVER

          1__ PER DAY **[RANGE 1-300]**

          2__ PER WEEK **[RANGE 1-300]**

          3__ PER MONTH **[RANGE 1-300]**

          8 DON'T KNOW/NOT SURE

          9 REFUSED

[IF DAY>3 OR WEEK>21 OR MONTH>90: You said (display # of times) per (display unit). Is that correct?]

          1__ YES, CONTINUE

          2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D13.   (During the last 30 days, how often did [CHILD NAME] eat):

Cheese? Include cheese as a snack, cheese on burgers, sandwiches, and cheese in foods such as lasagna, quesadillas, or casseroles. Please do not count cheese on pizza. (You can tell me per day, per week or per month.)

[INCLUDE: MACARONI AND CHEESE, ENCHILADAS

DO NOT INCLUDE: CREAM CHEESE OR CHEESES MADE FROM NON-DAIRY FOODS, SUCH AS SOY OR RICE, OR CHEESE ON PIZZA.]

          0__NEVER

          1__ PER DAY **[RANGE 1-300]**

          2__ PER WEEK **[RANGE 1-300]**

          3__ PER MONTH **[RANGE 1-300]**

          8 DON'T KNOW/NOT SURE

          9 REFUSED

[IF DAY>3 OR WEEK>21 OR MONTH>90: You said (display # of times) per (display unit). Is that correct?]

     1__ YES, CONTINUE

     2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D14.   (During the last 30 days, how often did [CHILD NAME] eat):

<u>Canned tuna or other canned fish</u> **(**including in salads, sandwiches or casseroles)? (You can tell me per day, per week or per month.)

     0__NEVER

     1__ PER DAY **[RANGE 1-300]**

     2__ PER WEEK **[RANGE 1-300]**

     3__ PER MONTH **[RANGE 1-300]**

     8 DON'T KNOW/NOT SURE

     9 REFUSED

[IF DAY>3 OR WEEK>21 OR MONTH>90: You said (display # of times) per (display unit). Is that correct?]

     1__ YES, CONTINUE

     2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D15.   (During the last 30 days, how often did [CHILD NAME] eat):

<u>Eggs?</u> Do <u>not</u> include egg whites only or egg substitutes. (You can tell me per day, per week or per month.)

[INCLUDE: EGGS IN SALADS, QUICHE, AND SOUFFLÉS
DO NOT INCLUDE: EGGS IN BAKED GOODS AND DESSERTS.]

     0__NEVER

     1__ PER DAY **[RANGE 1-300]**

     2__ PER WEEK **[RANGE 1-300]**

     3__ PER MONTH **[RANGE 1-300]**

     8 DON'T KNOW/NOT SURE

     9 REFUSED

[IF DAY>3 OR WEEK>21 OR MONTH>90: You said (display # of times) per (display unit). Is that correct?]

     1__ YES, CONTINUE

     2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D16.   (During the last 30 days, how often did [CHILD NAME] have):

Peanut butter? (You can tell me per day, per week or per month.)

[INCLUDE: PEANUT BUTTER ON BREAD, CRACKERS, FRUIT, OR VEGETABLES.

DO NOT INCLUDE: PEANUT BUTTER IN BAKED GOODS]

    0__NEVER
    1__ PER DAY **[RANGE 1-300]**
    2__ PER WEEK **[RANGE 1-300]**
    3__ PER MONTH **[RANGE 1-300]**
    8 DON'T KNOW/NOT SURE
    9 REFUSED

[**IF DAY>3 OR WEEK>21 OR MONTH>90**: You said (display # of times) per (display unit). Is that correct?]
    1__ YES, CONTINUE
    2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D17.   (During the last 30 days, how often did [CHILD NAME] eat):

Whole grain bread (and tortillas) including toast, rolls and in sandwiches? Whole grain breads include whole wheat, rye, oatmeal and pumpernickel. Do not include white bread. (You can tell me per day, per week or per month.)

    0__NEVER
    1__ PER DAY **[RANGE 1-300]**
    2__ PER WEEK **[RANGE 1-300]**
    3__ PER MONTH **[RANGE 1-300]**
    8 DON'T KNOW/NOT SURE
    9 REFUSED

[**IF DAY>3 OR WEEK>21 OR MONTH>90**: You said (display # of times) per (display unit). Is that correct?]
    1__ YES, CONTINUE
    2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D18.   (During the last 30 days, how often did [CHILD NAME] eat):

Cookies, cake, pie, doughnuts, or brownies? Do <u>not</u> include sugar-free kinds. (You can tell me per day, per week or per month.)

[INCLUDE: LOW-FAT KINDS, TWINKIES AND HOSTESS CUPCAKES

DO NOT INCLUDE: ICE CREAM AND OTHER FROZEN DESSERTS OR CANDY]

      0__NEVER
      1__ PER DAY **[RANGE 1-300]**
      2__ PER WEEK **[RANGE 1-300]**
      3__ PER MONTH **[RANGE 1-300]**
      8 DON'T KNOW/NOT SURE
      9 REFUSED

[IF DAY>3 OR WEEK>21 OR MONTH>90: You said (display # of times) per (display unit). Is that correct?]
      1__ YES, CONTINUE
      2__ NO, CORRECT NUMBER PER DAY/WEEK/MONTH

D19.   How confident are you, that the food and drinks you just told me about included those that [CHILD NAME] had at school, home, or other places? Would you say very confident, somewhat confident, not too confident, or not at all confident?

VERY CONFIDENT 1
SOMEWHAT CONFIDENT... 2
NOT TOO CONFIDENT.. 3
NOT AT ALL CONFIDENT 4
DON'T KNOW.. 8
REFUSED.. 9

TIMING 6

SECTION E: PROGRAM PARTICIPATION – CHILD

E1.1   During the last 30 days did [CHILD NAME] usually eat lunchtime meals at home Monday to Friday?

        YES..1   **GO TO E5**

        NO..2

        DOES NOT EAT LUNCH..3   **GO TO E5**

        DON'T KNOW...8   **GO TO E5**

        REFUSED..9   **GO TO E5**

E1.2   During the last 30 days, where did [CHILD NAME] usually get lunch Monday to Friday?

IF NEEDED, SAY: "A friend's home, a relative's home, etc."

INTERVIEWER: IF RESPONDENT MENTIONS MORE THAN ONE PLACE, PROBE FOR THE PLACE CHILD WENT TO MORE FREQUENTLY.

                                                              <u>MARK ONE</u>

        FRIEND'S HOME..1   **GO TO E5**

        RELATIVE'S HOME..2   **GO TO E5**

        SCHOOL...3

        CAMP (LOCAL) 4   **GO TO E4**

        CAMP (SLEEP AWAY) 5   **GO TO E4**

        CHURCH, SYNAGOGUE, OR MOSQUE......................6   **GO TO E4**

        DAYCARE...7   **GO TO E5**

        PLAYGROUND...8   **GO TO E4**

        WORK..9   **GO TO E4.2**

        OTHER PLACE..10   **GO TO E4**

        DON'T KNOW...88   **GO TO E5**

        REFUSED..99   **GO TO E5**

E1.3   At any time during the last 30 days did [CHILD NAME] attend summer school?

        YES..1

        NO..2   **GO TO E5.2**

        DON'T KNOW...8   **GO TO E5.2**

        REFUSED..9   **GO TO E5.2**

E2.   During the last 30 days, did [CHILD NAME] usually get a complete school lunch at this summer school?

YES... 1

NO... 2

DON'T KNOW.. 8

REFUSED... 9

E3.   During the last 30 days, did [CHILD NAME] usually get a complete breakfast at this summer school?

YES... 1 **GO TO E5**

NO... 2 **GO TO E5**

DON'T KNOW.. 8 **GO TO E5**

REFUSED... 9 **GO TO E5**

PROGRAMMER: IF E1.2 = 4, 5, 6, 8, OR 10 ASK E4

E4.   Please tell me the name of the [FILL WITH PLACE FROM E1.2] and the city where it's located.

NAME: _____

CITY:_____

DON'T KNOW.. 8

REFUSED... 9

E4.1   Were the meals [CHILD NAME] received at [FILL WITH PLACE FROM E1.2] free?

YES... 1   **GO TO E5.2**

NO... 2   **GO TO E5**

DON'T KNOW.. 8   **GO TO E5**

REFUSED... 9   **GO TO E5**

E4.2   Were the meals [CHILD NAME] received at work free?

YES... 1

NO... 2

DON'T KNOW.. 8

REFUSED... 9

E5.   Is there a program in your neighborhood that provides free meals to children during the summer months?

        YES.. 1

        NO.. 2   **GO TO E6**

        DON'T KNOW... 8   **GO TO E6**

        REFUSED... 9   **GO TO E6**

E5.1   Why doesn't [CHILD NAME] go to that summer program?

                                                        <u>MARK ALL THAT APPLY</u>

        PREFERS TO EAT AT HOME..................................... 1   **GO TO E6**

        DOESN'T LIKE THE FOOD THEY SERVE 2   **GO TO E6**

        FOOD SERVED DOESN'T MEET CHILD'S

        DIETARY NEEDS 3   **GO TO E6**

        NOT INTERESTED IN ACTIVITIES AT PROGRAM 4   **GO TO E6**

        HAS FEW OR NO FRIENDS AT PROGRAM................ 5   **GO TO E6**

        NO TRANSPORTATION TO PROGRAM...................... 6   **GO TO E6**

        DON'T LIKE LOCATION OF PROGRAM 7   **GO TO E6**

        DON'T LIKE ORGANIZATION THAT

        RUNS THE PROGRAM 8   **GO TO E6**

        HAS A JOB/WORKS.. 9   **GO TO E6**

        GOES TO SUMMER SCHOOL 10   **GO TO E6**

        OTHER (SPECIFY).. 11   **GO TO E6**

        DON'T KNOW.. 88   **GO TO E6**

        REFUSED.. 99   **GO TO E6**

E5.2   How many weeks during the last 30 days has [CHILD NAME] participated in <mark>this</mark> ~~the~~ summer program ~~that provided meals~~?

        |__|__| WEEKS **[RANGE 1-4]**

        8 DON'T KNOW/NOT SURE

        9 REFUSED

27

E5.3   How many days a week does [CHILD NAME] usually participate in this summer
       program?

       PROBE: Your best estimate is fine.

       |___| DAYS A WEEK **(RANGE 1 – 7)**

       DON'T KNOW... 88
       REFUSED.. 99

PROGRAMMER: IF E1.1=1, insert "home" in fill, otherwise insert PLACE FROM E1.2. IF (E1.2
= 88 or 99) or (E1.1=3 or 8 or 9), begin question with "during the last 30 days…

E6. Excluding [{home) /(FILL WITH PLACE FROM E1.2 that you've told me about)], during the
last 30 days where (else) did [CHILD NAME] get lunchtime meals Monday to Friday?

                                                        <u>MARK ONE</u>
               FRIEND'S HOME... 1
               RELATIVE'S HOME.. 2
               SCHOOL... 3
               CAMP (LOCAL) 4
               CAMP (SLEEP AWAY) 5
               CHURCH, SYNAGOGUE, OR MOSQUE 6
               DAYCARE... 7
               PLAYGROUND.. 8
               WORK.. 9
               SOME OTHER PLACE 10
               DOES NOT EAT LUNCH.. 11
               NO OTHER PLACE 12
               DON'T KNOW.. 88
               REFUSED.. 99

E6.1   During the last 30 days, did [CHILD NAME] receive food through a backpack food
       program for children?

[IF NEEDED: THE BACKPACK FOOD PROGRAM PROVIDES FOOD FOR CHILDREN TO
       TAKE HOME OVER WEEKENDS AND HOLIDAYS]

               YES... 1
               NO... 2
               DON'T KNOW.. 8
               REFUSED.. 9

TIMING 7

SECTION F: FOOD SECURITY – HOUSEHOLD

[PROGRAMMER NOTE: SELECT APPROPRIATE FILLS DEPENDING ON NUMBER OF ADULTS AND CHILDREN IN THE HOUSEHOLD. DEFAULT TO MULTIPLE ADULTS AND MULTIPLE CHILDREN IN HOUSEHOLD.]

QUALIFIED LEVEL 7: REACHES F1

The next questions are about the food eaten in your household in the last 30 days and whether you were able to afford the food you need.

F1.   Now I'm going to read you several statements that people have made about their food situation. For these statements, please tell me whether the statement was **often** true, **sometimes** true, or **never** true for your household in the last 30 days.

The first statement is "We worried whether our food would run out before we got money to buy more." Was that often true, sometimes true, or never true for your household in the last 30 days?

OFTEN TRUE	1
SOMETIMES TRUE	2
NEVER TRUE	3
DON'T KNOW	8
REFUSED	9

F2.   "The food that we bought just didn't last, and we didn't have money to get more." Was that often, sometimes, or never true for your household in the last 30 days?

OFTEN TRUE	1
SOMETIMES TRUE	2
NEVER TRUE	3
DON'T KNOW	8
REFUSED	9

F3.   "We couldn't afford to eat balanced meals." Was that often, sometimes, or never true for your household in the last 30 days?

OFTEN TRUE	1
SOMETIMES TRUE	2
NEVER TRUE	3
DON'T KNOW	8
REFUSED	9

PROGRAMMER: IF AFFIRMATIVE RESPONSE (I.E., "OFTEN TRUE" OR "SOMETIMES TRUE") TO ONE OR MORE OF QUESTIONS F1-F3, THEN CONTINUE TO F4; OTHERWISE, SKIP TO F9.

F4. In the last 30 days, 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?

YES... 1
NO.. 2
DON'T KNOW... 8   → *GO TO* F5
REFUSED.. 9

[ASK IF F4=1]
F4a. In the last 30 days, how many days did this happen?

|__|__| DAYS **[RANGE 1 – 30]**

DON'T KNOW... 88
REFUSED.. 99

F5. In the last 30 days, did you ever eat less than you felt you should because there wasn't enough money for food?

YES... 1
NO.. 2
DON'T KNOW... 8
REFUSED.. 9

F6. In the last 30 days, were you ever hungry but didn't eat because there wasn't enough money for food?

YES... 1
NO.. 2
DON'T KNOW... 8
REFUSED.. 9

F7. In the last 30 days, did you lose weight because there wasn't enough money for food?

YES... 1
NO.. 2
DON'T KNOW... 8
REFUSED.. 9

PROGRAMMER: IF AFFIRMATIVE RESPONSE TO ONE OR MORE OF QUESTIONS F4-F7, THEN CONTINUE TO F8. OTHERWISE, SKIP TO F9.

F8.   In the last 30 days, did [you/you or other adults in your household] ever not eat for a whole day because there wasn't enough money for food?

YES... 1
NO.. 2
DON'T KNOW... 8   → *GO* TO F9
REFUSED... 9

[ASK IF F8=1]
F8a.   In the last 30 days, how many days did this happen?

|__|__| DAYS **[RANGE 1 – 30]**

DON'T KNOW... 88
REFUSED... 99

SELECT APPROPRIATE FILLS DEPENDING ON NUMBER OF ADULTS AND NUMBER OF CHILDREN IN THE HOUSEHOLD.

[SKIP F9-F15 ONLY IF (C1A=0 AND ((B2=0) OR (B2.1=2) OR (B7.1=0) OR (B7.2=2) OR (HHNUMB=1 AND B6=1))) OR (C1A=0 AND (B1=1 OR B6.1=1)).

F9.   Now I'm going to read you several statements that people have made about the food situation of their children. For these statements, please tell me whether the statement was often true, sometimes true, or never true in the last 30 days for [your child/children living in the household who are age 18 or younger or over 18 but were still in high school during the most recently completed school year].

"[I/We] relied on only a few kinds of low-cost food to feed [my/our] [child/the children] because [I was/we were] running out of money to buy food." Was that often, sometimes, or never true for your household in the last 30 days?

OFTEN TRUE 1
SOMETIMES TRUE.. 2
NEVER TRUE... 3
(VOL) No kids in household 4   **GO TO G1**
DON'T KNOW... 8
REFUSED... 9

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F10. "[I/We] couldn't feed [my/our] child/the children] a balanced meal, because [I/we] couldn't afford that." Was that often, sometimes, or never true for your household in the last 30 days?

OFTEN TRUE.. 1

SOMETIMES TRUE... 2

NEVER TRUE.. 3

DON'T KNOW.. 8

REFUSED.. 9

[SINGLE ADULT/SINGLE CHILD: My child was]
[MULTIPLE ADULTS/SINGLE CHILD: Our child was]
[SINGLE OR MULTIPLE ADULTS/MULTIPLE CHILDREN: The children were]

F11. "[My/Our child was/The children were] not eating enough because [I/we] just couldn't afford enough food." Was that often, sometimes, or never true for your household in the last 30 days?

OFTEN TRUE.. 1

SOMETIMES TRUE... 2

NEVER TRUE.. 3

DON'T KNOW.. 8

REFUSED.. 9

PROGRAMMER: IF AFFIRMATIVE RESPONSE (I.E., "OFTEN TRUE" OR "SOMETIMES TRUE") TO ONE OR MORE OF QUESTIONS F9-F11, THEN CONTINUE TO F12. OTHERWISE, SKIP TO G1.

F12. In the last 30 days, did you ever cut the size of [your child's/any of the children's] meals because there wasn't enough money for food?

YES.. 1

NO.. 2

DON'T KNOW.. 8

REFUSED.. 9

F13. In the last 30 days, did [your child/any of the children] ever skip meals because there wasn't enough money for food?

YES.. 1

NO.. 2   **GO TO F14**

DON'T KNOW.. 8   **GO TO F14**

REFUSED.. 9   **GO TO F14**

[ASK IF F13=1]

F13a. In the last 30 days, how many days did this happen?

|__|__| DAYS **[RANGE 1 – 30]**

DON'T KNOW.. 88

REFUSED.. 99

F14. In the last 30 days, [was your child/were the children] ever hungry but you just couldn't afford more food?

YES.. 1

NO.. 2

DON'T KNOW.. 8

REFUSED.. 9

F15. In the last 30 days, did [your child/any of the children] ever not eat for a whole day because there wasn't enough money for food?

YES.. 1

NO.. 2

DON'T KNOW.. 8

REFUSED.. 9

TIMING 8

[ASK ALL]

<div style="background:#e8e8e8">

SECTION G: SHOPPING AND EATING BEHAVIOR – HOUSEHOLD
</div>

QUALIFIED LEVEL 8: REACHES G1

Now, I'd like to ask some questions about shopping for food and eating at restaurants.

G1.   First I'll ask you about money spent at supermarkets or grocery stores. Then we will talk about money spent at other types of stores.

During the <u>last 30 days</u>, how much money [did your family/did you] spend at <u>supermarkets or grocery stores</u>, including Walmart, Target, and Kmart? Please include purchases made with SNAP benefits or food stamps. (You can tell me per week or per month.)

[RECORD "0" IF NO MONEY WAS SPENT]

0__NO MONEY SPENT	**GO TO G4**
1__ PER WEEK **[RANGE $1-$9,999]**	
2__ PER MONTH **[RANGE $1-$9,999]**	
8 DON'T KNOW/NOT SURE	**GO TO G4**
9 REFUSED	**GO TO G4**

G2.   Was any of this money spent on <u>nonfood items</u> such as cleaning or paper products, pet food, cigarettes or alcoholic beverages?

YES... 1	
NO... 2	
DON'T KNOW... 8	→ *GO TO* G4
REFUSED.. 9	

G3.   About how much money was spent on nonfood items? (You can tell me per week or per month.)

[RECORD "0" IF NO MONEY WAS SPENT]

   0__NO MONEY SPENT

   1__ PER WEEK **[RANGE $1-$9,999]**

   2__ PER MONTH **[RANGE $1-$9,999]**

   8 DON'T KNOW/NOT SURE

   9 REFUSED

G4.   During the last 30 days, [did your family/did you] spend money on food at stores other than grocery stores? These other stores could include convenience stores like 7-11 or Mini Mart, stores like Costco or Sam's Club, dollar stores, bakeries, meat markets, vegetable stands, or farmer's markets. Please do not include stores that you have already told me about. Please include purchases made with SNAP benefits or food stamps.

   YES.. 1
   NO.. 2
   DON'T KNOW.. 8   → *GO TO* G6
   REFUSED... 9

G5.   About how much money [did your family/did you] spend on food at these types of stores during the last 30 days? Please include purchases made with SNAP benefits or food stamps. (Please do not include any stores you have already told me about.) (You can tell me per week or per month.)

[RECORD "0" IF NO MONEY WAS SPENT]

   0__NO MONEY SPENT

   1__ PER WEEK **[RANGE $1-$9,999]**

   2__ PER MONTH **[RANGE $1-$9,999]**

   8 DON'T KNOW/NOT SURE

   9 REFUSED

G6. During the last 30 days, how many times did your family eat food from a fast food restaurant? Include fast food meals at home, or at fast food restaurants, carryout, or drive thru. (You can tell me per week or per month.)

[IF NEEDED, SAY: Such as food you get at McDonald's, KFC, Panda Express, or Taco Bell.]

> 0__NEVER
>
> 1__ PER WEEK **[RANGE 1-99]**
>
> 2__ PER MONTH **[RANGE 1-99]**
>
> 8 DON'T KNOW/NOT SURE
>
> 9 REFUSED

G7. During the last 30 days, how many times did your family usually eat food at other kinds of restaurants? (You can tell me per week or per month.)

[IF NEEDED, SAY: Such as food you get at Applebee's, Chili's, TGI Fridays, etc.]

> 0__NEVER
>
> 1__ PER WEEK **[RANGE 1-99]**
>
> 2__ PER MONTH **[RANGE 1-99]**
>
> 8 DON'T KNOW/NOT SURE
>
> 9 REFUSED

[PROGRAMMER: IF G6 AND G7=0, GO TO G9.]

G8. About how much money [did your family/did you] spend on food at all types of restaurants including fast food restaurants during the last 30 days? (You can tell me per week or per month.)

> 0__NO MONEY SPENT
>
> 1__ PER WEEK **[RANGE $1-$9,999]**
>
> 2__ PER MONTH **[RANGE $1-$9,999]**
>
> 8 DON'T KNOW/NOT SURE
>
> 9 REFUSED

G9. Please tell me if you have access to a working refrigerator?

> YES.. 1
>
> NO.. 2
>
> DON'T KNOW.. 8
>
> REFUSED... 9

TIMING 9

H1.   Next, I'm going to read the names of some programs that provide food or meals to individuals or households.

H1.1   In the last 30 days did you or anyone in your household receive food or benefits from the Women, Infants and Children program called WIC?

YES.. 1
NO.. 2
DON'T KNOW... 8   → *GO TO* H1.3
REFUSED.. 9

H1.2a How many women or children in the household got WIC foods or benefits?

|__|__| WOMEN AND CHILDREN **[RANGE 1-20]**

DON'T KNOW.. 88

REFUSED... 99

[ASK IF H1.2A=1]
H1.2ba Is that person who got WIC foods or benefits an infant less than 1 year old?

YES.. 1 **[CODE AS 1 IN H1.2B]**

NO.. 2

DON'T KNOW... 8

REFUSED.. 9

[ASK IF H1.2A>1 AND NOT DK/REF]
H1.2b How many of those [NUMBER FROM H1.2a] people who got WIC foods or benefits are infants less than 1 year old?
            _____ Number of infants **[RANGE 0-20]**

DON'T KNOW.. 88

REFUSED... 99

CREATE PROGRAMMED VARIABLE COMBINING H1.2BA AND H1.2B

H1.3.   In the last 30 days did you or anyone in your household receive food from food pantries or food banks?

>   YES.. 1

>   NO... 2

>   DON'T KNOW.. 8

>   REFUSED... 9

H1.4.   In the last 30 days did you or anyone in your household receive meals at local soup kitchens or emergency kitchens?

>   YES.. 1

>   NO... 2

>   DON'T KNOW.. 8

>   REFUSED... 9

H2.   Are you (or others in your household) receiving [IF CT, OR, OR TX, FILL WITH "SNAP benefits (formerly known as food stamps"; IF MO, FILL WITH: "Food Stamp Program benefits"; IF MI, FILL WITH: "Food Assistance Program benefits"] now?

>   YES.. 1 → GO TO H6

>   NO... 2

>   DON'T KNOW.. 8

>   REFUSED... 9

H2.1.   Have you (or others in your household) applied for [IF CT, OR, OR TX, FILL WITH "SNAP benefits (formerly known as food stamps"; IF MO, FILL WITH: "Food Stamp Program benefits"; IF MI, FILL WITH: "Food Assistance Program benefits"] in the last 30 days?

>   YES.. 1

>   NO... 2

>   DON'T KNOW.. 8

>   REFUSED... 9

H5.   Do you (or others in your household) currently receive monthly Native American Food Commodities as part of the Food Distribution Program on Indian Reservations (FDPIR)?

>   YES.. 1

>   NO... 2

>   DON'T KNOW.. 8

>   REFUSED... 9

TIMING 10

38

[PROGRAMMER: IF SAMPLED HOUSEHOLD IS IN THE TREATMENT GROUP, ASK H6. OTHERWISE, GO TO I1.]

[ASK H6 IF TC=1]
H6.   According to my records, you've received special summertime food benefits for your (child/children). Is that correct?

YES.. 1

NO.. 2   GO TO I1

[FOR OREGON AND MISSOURI ONLY]
NOT AWARE OF RECEIPT OF SPECIAL
SUMMERTIME BENEFITS... 3   GO TO I1

TOLD STATE WE DIDN'T WANT/NEED THEM 4   GO TO H19

DON'T KNOW... 8

REFUSED.. 9

H6.1.   Have you used these summer benefits since you received them about 30 days ago?

YES.. 1

NO.. 2   GO TO H19

DON'T KNOW... 8

REFUSED.. 9

PROGRAMMER: IF SAMPLED HOUSEHOLD IS IN MISSOURI OR OREGON AND H2=1 (RECEIVES SNAP), GO TO H8; IF SAMPLED HOUSEHOLD IS IN MI OR TX, GO TO H9. FOR ALL OTHERS, ASK H7.

[ASK H7 – H7.2 IF ((MARKET=14 OR 15) AND H2 NE 1) OR MARKET=11]
H7.   What was the total monthly amount of the special summertime food benefits you received just for your (child/children)?

$ |__|__|__| AMOUNT **[RANGE $0 - $999]**

DON'T KNOW... 8888
REFUSED... 9999

H7.1   In the past 30 days was there ever a time when there was a zero balance on your EBT card <u>for special summertime benefits</u>?

YES.. 1

NO.. 2   **GO TO H11**

DON'T KNOW... 8   **GO TO H11**

REFUSED.. 9   **GO TO H11**

H7.2   How long did that zero balance last? You can tell me the number of days or weeks.

        1__ PER DAY [RANGE 1-30]   **GO TO H11**

        2__ PER WEEKS [RANGE 1-4]   **GO TO H11**

        8 DON'T KNOW/NOT SURE   **GO TO H11**

        9 REFUSED   **GO TO H11**

[ASK H8 – H8.1 IF (MARKET=14 OR 15) AND H2 = 1]
H8.   In the past 30 days was there ever a time when there was a zero balance on your [IF OREGON FILL WITH "SNAP"; IF MO FILL WITH "Food Stamp Program"] <u>EBT card</u>?

        YES.. 1

        NO.. 2   **GO TO H11**

        DON'T KNOW.. 8   **GO TO H11**

        REFUSED... 9   **GO TO H11**

H8.1   How long did that zero balance last? You can tell me the number of days or weeks.

        1__ PER DAY [RANGE 1-30]   **GO TO H11**

        2__ PER WEEKS [RANGE 1-4]   **GO TO H11**

        8 DON'T KNOW/NOT SURE   **GO TO H11**

        9 REFUSED   **GO TO H11**

[ASK H9 – H10 IF (MARKET=12 OR 13)]
H9.   Now, think about the special summertime food benefits that you received for your (child/children). Using a scale of excellent, very good, good, fair, or poor, how would you rate the food benefits for…

RANDOMIZE H9A-H9D	EXCELLENT	VERY GOOD	GOOD	FAIR	POOR	DON'T KNOW	REFUSED
a. Providing the right quantity of food?....	5	4	3	2	1	8	9
b. Offering foods that (your children like/your child likes) to eat?	5	4	3	2	1	8	9
c. Offering food choices in sizes that you can find on the shelf? For example, if the benefit is for a 64 oz. container of juice, you can find it in the store where you shop	5	4	3	2	1	8	9
d. Letting you shop at stores that are convenient and easy to shop at	5	4	3	2	1	8	9

H10.   Now, I'd like to ask you about any problems that you may have had with the EBT card that had the special summertime food benefits. In the last 30 days, has your card been lost or stolen?

YES.. 1   **GO TO H12**

NO... 2   **GO TO H12**

DON'T KNOW.. 8   **GO TO H12**

REFUSED.. 9   **GO TO H12**

[ASK H11 IF H6.1=1, 8 OR 9 AND (MARKET=11, 14, OR 15)]
H11.   Now, I'd like to ask you about any problems that you may have had with your [OREGON FILL WITH "SNAP"; IF MO FILL WITH "Food Stamp Program"] EBT card? In the last 30 days, has your card been lost or stolen?

YES.. 1

NO... 2

DON'T KNOW.. 8

REFUSED.. 9

PROGRAMMER: IF RESPONDENT IS IN OREGON OR MISSOURI AND RECEIVING SNAP, GO TO H14.

[ASK H12 – H13 IF H6.1=1, 8 OR 9 AND ((MARKET=11, 12, OR 13) OR ((MARKET=14 OR 15) AND H2 NE1]
H12.   Using a scale of excellent, very good, good, fair, or poor, what overall rating would you give to the **ease of obtaining** the EBT card for the special summertime benefits for children?

EXCELLENT 5

VERY GOOD 4

GOOD 3

FAIR.. 2

POOR 1

DON'T KNOW.. 8

REFUSED.. 9

H13.   Using a scale of excellent, very good, good, fair, or poor, what overall rating would you give to **the directions for using** the EBT card for the special summertime benefits for children?

> EXCELLENT 5
>
> VERY GOOD 4
>
> GOOD 3
>
> FAIR 2
>
> POOR 1
>
> DON'T KNOW 8
>
> REFUSED 9

[ASK H14 – H18 IF H6.1=1, 8 OR 9]
H14.   (Using a scale of excellent, very good, good, fair, or poor,) what overall rating would you give to the **ease of using the EBT card to get food**?

> EXCELLENT 5
>
> VERY GOOD 4
>
> GOOD 3
>
> FAIR 2
>
> POOR 1
>
> DON'T KNOW 8
>
> REFUSED 9

H15.   Using a scale of excellent, very good, good, fair, or poor, what overall rating would you give to the **ease of resolving problems with the EBT card** [for the special summertime benefits] for children? [PROGRAMMER: OMIT PHRASE IN BRACKETS WHERE H2=1 AND STATE = MO OR STATE=OR]

> EXCELLENT 5
>
> VERY GOOD 4
>
> GOOD 3
>
> FAIR 2
>
> POOR 1
>
> HAD NO PROBLEMS 0
>
> DON'T KNOW 8
>
> REFUSED 9

H16.   When you purchased food with your special summertime benefits, did you buy any food with [CHILD NAME] in mind?

YES.. 1

NO.. 2   **GO TO H18**

DON'T KNOW.. 8   **GO TO H18**

REFUSED.. 9   **GO TO H18**

H17.   How much of your special summertime benefits did you spend on food that you bought with [CHILD NAME] in mind? Would you say…

Less than 10 percent 1

10 to 25 percent 2

25 to 50 percent 3

50 to 75 percent 4

More than 75 percent...................................... 5

DON'T KNOW.. 8

REFUSED.. 9

H18.   During the last 30 days were you ever embarrassed using the EBT card for the special summertime benefits for children?

YES.. 1   **GO TO I1**

NO.. 2   **GO TO I1**

DON'T KNOW.. 8   **GO TO I1**

REFUSED.. 9   **GO TO I1**

H19.   Did you decide not to use your special summertime food benefit for children because you felt embarrassed using the EBT card to get food?

YES.. 1

NO.. 2

DON'T KNOW.. 8

REFUSED.. 9

TIMING 11

SECTION I: CAREGIVER DEMOGRAPHICS

CHECKPOINT: **IF BLINE=1, GO TO I14.1**
IF BLINE=2, GO TO I1

I1. Now, I have a few questions about you.
[RECORD GENDER FROM OBSERVATION.]
[ONLY IF NECESSARY – ASK: Because it is sometimes difficult to determine over the phone, I am asked to confirm with everyone…Are you male or female?]

MALE 1

FEMALE.. 2

DON'T KNOW... 8

REFUSED 9

I2. What is your relationship to [CHILD NAME]?

READ ONLY IF NECESSARY: Are you [CHILD NAME's]…

BIOLOGICAL/ADOPTIVE PARENT 1

STEP-PARENT.. 2

GRANDPARENT 3

GREAT GRANDPARENT 4

SIBLING/STEPSIBLING 5

OTHER RELATIVE OR IN-LAW 6

FOSTER PARENT.. 7

OTHER NON-RELATIVE... 8

PARENT'S PARTNER 9

DON'T KNOW.. 88

REFUSED 99

I3. Are you of Hispanic or Latino origin?

YES... 1

NO... 2

DON'T KNOW... 8

REFUSED 9

I4.   I am going to read a list of five race categories. Please choose one or more races that you consider yourself to be. American Indian or Alaska Native; Asian; Black or African American; Native Hawaiian or other Pacific Islander; White?

<u>MARK ALL THAT APPLY</u>

AMERICAN INDIAN OR ALASKA NATIVE 1

ASIAN..2

BLACK OR AFRICAN AMERICAN...............................3

NATIVE HAWAIIAN OR
OTHER PACIFIC ISLANDER 4

WHITE 5

DON'T KNOW 8

REFUSED 9

I5   .   What is your current marital status? Are you now married, divorced, separated, widowed,
never married, or living with a partner?

MARRIED 1

SEPARATED OR DIVORCED...................................... 2

WIDOWED... 3

NEVER MARRIED 4

LIVING WITH PARTNER... 5

DON'T KNOW... 8

REFUSED 9

I6.   Please tell me your birth date.

|___|___| / |___|___| / |___|___|___|___|
MONTH   DAY   YEAR

DON'T KNOW... 8

REFUSED 9

45

I6.1   What is the highest grade or level of school you have completed or the highest degree you have received?

[ENTER HIGHEST LEVEL OF SCHOOL.]

NEVER ATTENDED/KINDERGARTEN ONLY 0

1ST GRADE 1

2ND GRADE 2

3RD GRADE 3

4TH GRADE 4

5TH GRADE 5

6TH GRADE 6

7TH GRADE 7

8TH GRADE 8

9TH GRADE 9

10TH GRADE 10

11TH GRADE 11

12TH GRADE, NO DIPLOMA 12

HIGH SCHOOL GRADUATE 13

GED OR EQUIVALENT 14

SOME COLLEGE, NO DEGREE 15

ASSOCIATE DEGREE: OCCUPATIONAL,
TECHNICAL, OR VOCATIONAL PROGRAM 16

ASSOCIATE DEGREE: ACADEMIC PROGRAM 17

BACHELOR'S DEGREE (EXAMPLE: BA, AB,
BS, BBA) 18

MASTER'S DEGREE (EXAMPLE: MA, MS, MEng,
MEd, MBA) 19

PROFESSIONAL SCHOOL DEGREE
(EXAMPLE: MD, DDS, DVM, JD) 20

DOCTORAL DEGREE (EXAMPLE: PhD, EdD) 21

DON'T KNOW 88

REFUSED 99

I7.   The next questions are about your current job or business. Were you working in the last 30 days?

YES 1   **GO TO I10**

NO 2

DON'T KNOW 8

REFUSED 9

I8.   Was any other adult in the household working in the last 30 days?

YES... 1

NO... 2

DON'T KNOW... 8

REFUSED... 9

I10.   What was your household's total income <u>last month</u> before taxes? Please include all types of income received by all household members last month, including all earnings, Social Security, pensions, child support, and cash welfare benefits such as TANF (TAN-IF) and SSI. Do not include the value of SNAP benefits or food stamps, WIC, Medicaid, or public housing.

NO INCOME ....0 **GO TO I12**

GAVE ANSWER .... 1 **[RANGE $1 – 99,999]   GO TO I12**

DON'T KNOW... 8

REFUSED... 9

I11.   Some people find it easier to select an income range. Please stop me when I reach your household's total income for <u>last month</u>. Was it…

Less than $500, ... 1

$500 to less than $1,000,.............................. 2

$1,000 to less than $1,500,........................... 3

$1,500 to less than $2,000,........................... 4

$2,000 to less than $2,500,........................... 5

$2,500 to less than $3,000,........................... 6

$3,000 or more?.. 7

DON'T KNOW... 8

REFUSED... 9

I12.   And, what was your household's total income last year before taxes? Please include all types of income received by all household members last year, including all earnings, Social Security, pensions, child support, and cash welfare benefits such as TANF (TAN-IF) and SSI. Do not include the value of SNAP benefits or food stamps, WIC, Medicaid, or public housing.

NO INCOME .... 0 **GO TO I14**

GAVE ANSWER .... 1 **[RANGE $1 – 999,999]   GO TO I14**

DON'T KNOW.. 8

REFUSED... 9

I13.   Some people find it easier to select an income range. Please stop me when I reach your household's total income for last year. Was it…

Less than $10,000, ... 1

$10,000 to less than $20,000,....................................... 2

$20,000 to less than $35,000,....................................... 3

$35,000 to less than $50,000,....................................... 4

$50,000 to less than $75,000,....................................... 5

$75,000 to less than $100,000,..................................... 6

$100,000 to less than $150,000 or, ... 7

$150,000 or more?.. 8

DON'T KNOW.. 88

REFUSED... 99

I14.   Has a doctor or other health care professional ever told you or anyone in your household that they had a disability? By disability, I mean a physical or mental impairment.

YES.. 1

NO.. 2

DON'T KNOW.. 8

REFUSED... 9

CHECKPOINT: IF BLINE=2, GO TO J1

I14.1   And now, my final questions. Thinking about [NAME OF PAST MONTH], what was your household's total income last month before taxes? Please include all types of income received by all household members last month, including all earnings, Social Security, pensions, child support, and cash welfare benefits such as TANF (TAN-IF) and SSI. Do not include the value of SNAP benefits or food stamps, WIC, Medicaid, or public housing.

NO INCOME ....0 **GO TO J1**

GAVE ANSWER .... 1 [RANGE $1 – 99,999] **GO TO J1**

DON'T KNOW.. 8

REFUSED... 9

I14.2   Please stop me when I reach your household's total income for last month. Was it…

Less than $500, ... 1

$500 to less than $1,000,............................... 2

$1,000 to less than $1,500,............................ 3

$1,500 to less than $2,000,............................ 4

$2,000 to less than $2,500,............................ 5

$2,500 to less than $3,000,............................ 6

$3,000 or more?... 7

DON'T KNOW.. 8

REFUSED... 9

TIMING 12

SECTION J: CLOSING AND ADDRESS VERIFICATION

QUALIFIED LEVEL 9: REACHES J1

J1.   [IF QKEY NE XXXXXXXX_i:] Thank you very much for your time. You have helped us greatly with this important study. We will send you a $10 gift card within four weeks and I'd like to confirm your mailing address.

J1.   [IF QKEY=XXXXXXXX_i:] Thank you very much for your time. You have helped us greatly with this important study. The field interviewer will give you your $10 gift card. While we have you on the phone, we would like to confirm your mailing address.

[ASK ALL:]

J1a. According to our records we have…

[IF A3=1, FILL NAME FROM FILE. ELSE, FILL FROM A4.1]

[FILL STREET ADDRESS FROM SAMPLE FRAME]

[FILL CITY, STATE, ZIP CODE FROM SAMPLE FRAME]

NAME AND ADDRESS IS CORRECT 1   **GO TO CHECKPOINT**

NAME AND ADDRESS NEEDS UPDATING................. 0

UPDATE: NAME

UPDATE: STREET ADDRESS:

_____

_____

CITY: _____

STATE: _____

ZIP CODE: _____

CHECKPOINT: IF BLINE=1, GO TO K2

TIMING 13

[IF IN CONTROL GROUP AND SITE WITH ACTIVE CONSENT, GO TO K2]

SECTION K: RELEASE OF RECORDS

[READ IF RESPONDENT IN TREATMENT GROUP AND NO BASELINE INTERVIEW COMPLETED:]
K1. If you were selected to receive the Summer EBT card, we would like your permission to look at your records on when and where you used your card [**for market=12 and 13**…and, what types of food you bought]. This will help us to evaluate how the Summer EBT program is working.

[READ IF PASSIVE CONSENT AND NO BASELINE INTERVIEW COMPLETED:]
We would also like your permission to have the [name of school district] provide us with information from your child/children's National School Lunch application as well as some administrative information from your child's school records. This data will include items such as age, grade level and other administrative information. It will not include academic or disciplinary information.

[TO BE READ AFTER FIRST OR SECOND PARAGRAPH:]
Your records will only be used for this study. All information collected during the survey will be kept private, as required by law. Releasing your records is completely voluntary, and you may refuse. If you refuse, it will not affect any government assistance you may be receiving. Would you be willing to release these records?

YES.. 1

NO.. 2

[READ TO ALL]
K2.   There is minimal risk to participating in this study. The main risk is a violation of confidentiality, but procedures are in place to protect your information. Finally, if you have any questions about this study or your rights as a participant, I can give you a telephone number to call. This completes the survey!

[ONLY IF NEEDED: THE PROJECT DIRECTOR AT ABT ASSOCIATES CAN BE REACHED AT 855-281-6385]

TIMING 14

Household and Child Characteristics in the POC Year, All Sites and by Site

Exhibit 4D.1   Household Characteristics in the POC Year, All Sites and by Site

Characteristic	Overall		CT		MI		MO		OR		TX		P-Value
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	
Household size[a]													
Mean number of people in household	4.4	0.02	4.2	0.05	4.6	0.05	4.2	0.05	4.5	0.05	4.5	0.06	p<.0001
Household composition[a]													
Household with one adult, female	49.5%	0.80	50.9%	1.63	53.0%	1.57	62.5%	1.95	37.8%	1.59	43.7%	1.98	p<.0001
Household with one adult, male	3.2%	0.29	4.1%	0.66	2.6%	0.51	3.9%	0.80	2.7%	0.53	2.9%	0.66	
Household with more than one adult	47.2%	0.79	45.1%	1.62	44.3%	1.56	33.6%	1.90	59.5%	1.61	53.4%	1.99	
Number of children[a]													
1 child	23.6%	0.61	24.0%	1.30	18.2%	1.19	25.1%	1.71	22.7%	1.23	28.1%	1.75	p<.0001
2 children	33.6%	0.70	36.8%	1.50	30.5%	1.42	32.3%	1.84	33.8%	1.46	34.5%	1.89	
3 or more children	42.8%	0.68	39.1%	1.45	51.3%	1.49	42.6%	1.93	43.5%	1.43	37.4%	1.89	
Mean number of children in household	2.4	0.02	2.3	0.03	2.6	0.04	2.4	0.05	2.5	0.03	2.2	0.04	p<.0001
Income (percentage)[b]													
Below poverty line	72.6%	0.72	65.3%	1.57	78.6%	1.33	77.0%	1.73	70.0%	1.54	72.2%	1.83	p<.0001
101-130 percent of poverty line	13.0%	0.53	15.9%	1.21	11.9%	1.05	11.5%	1.27	14.3%	1.16	11.4%	1.23	
131-185 percent of poverty line	9.7%	0.48	13.0%	1.10	6.3%	0.79	7.1%	1.10	12.2%	1.13	9.6%	1.23	
Above 185 percent of poverty line	4.7%	0.37	5.8%	0.80	3.2%	0.58	4.4%	0.86	3.5%	0.62	6.8%	1.13	
Income in the past month													
No income in past month	3.8%	0.31	3.1%	0.57	4.1%	0.62	5.9%	0.96	2.9%	0.55	2.8%	0.70	P=0.0054
Median Income	$1297.4	25.16	$1484.9	29.03	$1197.5	25.81	$1197.6	50.36	$1459.7	25.26	$1211.1	43.23	
Mean Income	$1572.2	21.29	$1741.2	39.64	$1440.2	38.08	$1391.0	48.58	$1649.4	36.74	$1636.4	66.46	p<.0001
At least one employed adult (percentage)	69.5%	0.74	72.8%	1.46	67.3%	1.49	63.9%	1.94	65.9%	1.57	77.5%	1.72	p<.0001
Any person ever diagnosed with a physical or mental disability	29.0%	0.72	32.5%	1.54	33.6%	1.51	24.7%	1.73	37.0%	1.60	17.1%	1.56	p<.0001

Source: SEBTC, Spring Survey, 2011 (n=5,837).

Note: P-values indicate overall difference in the characteristic across sites. The null hypothesis being tested for continues variables is that the mean value is equal in sites. For categorical variables, the null hypothesis is that the distribution is the same in all of the sites. When rejecting the null hypothesis (when the p-value is greater than .05), we conclude that the sites are not equal.

a The respondent reported the household's characteristics and circumstances in the last 30 days (and last month for income) except for reports of disabilities and access to a working refrigerator.

b Poverty level was calculated based on reported household income last month before taxes, household size, and the U.S. Department of Health and Human Services poverty guidelines

Exhibit 4D.2 Characteristics of Respondents in the POC Year, All Sites and by Site

Characteristic	Overall		CT		MI		MO		OR		TX		P-Value
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	
Female	89.6%	0.49	89.0%	1.02	91.0%	0.91	90.8%	1.16	90.5%	0.99	86.8%	1.35	*p*=0.0326
Age of respondent[a]													
18-29 years	17.6%	0.62	15.0%	1.19	25.8%	1.41	20.4%	1.71	13.8%	1.14	12.9%	1.40	*p*<.0001
30-39 years	44.1%	0.79	45.5%	1.64	45.2%	1.58	43.7%	2.01	48.4%	1.66	37.6%	1.92	
40-49 years	26.1%	0.70	29.1%	1.47	19.3%	1.21	24.3%	1.70	25.0%	1.43	32.4%	1.86	
50-59 years	9.1%	0.46	8.5%	0.93	7.2%	0.82	8.6%	1.07	10.0%	1.03	11.3%	1.23	
60 years or older	3.2%	0.31	1.8%	0.49	2.4%	0.54	3.1%	0.64	2.8%	0.52	5.8%	1.08	
Race/ethnicity of respondent[b]													
Hispanic	40.5%	0.73	27.8%	1.29	35.4%	1.48	21.1%	1.60	23.5%	1.33	94.2%	0.98	*p*<.0001
Non-Hispanic black	22.1%	0.66	6.9%	0.84	36.7%	1.55	65.6%	1.90	0.3%	0.19	1.8%	0.58	
Non-Hispanic white	32.7%	0.68	59.6%	1.44	24.0%	1.37	9.6%	1.26	66.9%	1.51	3.1%	0.76	
Other, non-Hispanic	4.7%	0.31	5.7%	0.75	3.9%	0.57	3.8%	0.66	9.3%	0.99	0.8%	0.30	
Education level of respondent[c]													
Less than high school	32.5%	0.74	25.6%	1.39	41.8%	1.55	34.8%	1.93	26.4%	1.40	33.7%	1.86	*p*<.0001
Completed high school (or GED)	29.5%	0.73	37.3%	1.59	25.5%	1.40	28.2%	1.78	30.7%	1.55	25.9%	1.79	
Some college (including 2-year degree)	31.4%	0.75	30.2%	1.53	28.0%	1.43	31.0%	1.87	36.9%	1.60	30.8%	1.85	
Four-year degree or higher	6.6%	0.40	6.9%	0.77	4.7%	0.69	5.9%	0.91	5.9%	0.83	9.6%	1.18	
Marital status of respondent													
Married	37.4%	0.77	35.4%	1.56	31.5%	1.44	24.5%	1.73	47.8%	1.64	47.2%	1.99	*p*<.0001
Separated or divorced	25.4%	0.70	29.6%	1.47	18.8%	1.24	23.5%	1.74	26.9%	1.46	28.0%	1.79	
Widowed	2.4%	0.24	1.6%	0.42	2.2%	0.45	2.4%	0.55	2.7%	0.48	3.1%	0.76	
Never married	24.8%	0.69	23.7%	1.38	34.7%	1.53	40.4%	1.99	10.9%	1.04	15.5%	1.45	
Living With partner	9.9%	0.47	9.7%	0.97	12.8%	1.05	9.2%	1.14	11.7%	1.09	6.2%	0.94	
Age of children[a]													
3-4 years	3.0%	0.31	2.0%	0.45	5.6%	0.90	4.0%	0.88	1.9%	0.52	1.6%	0.61	*p*<.0001
5-8 years	31.8%	0.83	35.1%	1.70	36.8%	1.72	32.6%	2.16	27.5%	1.59	27.1%	2.08	
9-12 years	31.2%	0.83	36.3%	1.75	31.7%	1.70	25.9%	1.88	32.5%	1.72	29.5%	2.17	
13-15 years	18.8%	0.71	17.8%	1.38	12.9%	1.20	20.4%	1.86	23.0%	1.57	20.1%	1.75	
16-17 years	10.2%	0.57	6.2%	0.85	7.0%	1.01	10.8%	1.44	11.7%	1.16	15.3%	1.67	
>17 years	5.0%	0.40	2.5%	0.62	6.1%	0.85	6.3%	1.10	3.5%	0.65	6.5%	1.11	

Source: SEBTC, Spring Survey, 2011 (n=5,837).

Note: P-values indicate overall difference in the characteristic across sites. (See expanded explanation under Exhibit 4D.1.)

[a] Age of respondent and child were calculated from date of birth and the date the survey was administered.

[b] Responses to the separate race and ethnicity questions were combined to create race/ethnicity.

[c] Education level categories were condensed from the survey response categories to create those displayed.

Exhibit 4D.3   Children Usually Ate Lunch, Monday through Friday, Summer 2011 (Control Group Only)

Location	Overall		CT		MI		MO		OR		TX		P-Value
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	
At home	89.5%	0.80	90.0%	1.42	85.3%	2.07	87.5%	2.26	89.5%	1.73	95.4%	1.17	p<.0001
At friend's or relative's home	1.1%	0.31	1.3%	0.69	0.1%	0.07	1.1%	0.78	2.8%	1.11	0.1%	0.10	
School or Identified SFSP site	7.2%	0.68	6.7%	1.12	11.0%	1.80	9.7%	2.11	6.1%	1.22	2.7%	0.91	
Another program (camp, church, playground, daycare)	1.6%	0.31	1.4%	0.48	2.8%	1.12	1.5%	0.51	0.5%	0.40	1.8%	0.74	
Other (work, other place, don't know/refused)	0.5%	0.16	0.6%	0.33	0.7%	0.40	0.2%	0.18	1.1%	0.58	0.0%	0.03	

Source: SEBTC, Summer Survey, 2011 (n=2305)

Note: P-values indicate overall difference in the characteristic across sites. (See expanded explanation under Exhibit 4D.1.)

Exhibit 4D.4   Secondary Place Where Children Usually Ate Lunch if They Most Often Ate at Home, Summer 2011 (Control Group Only)

Location	Overall		CT		MI		MO		OR		TX		P-Value
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	
At friend's or relative's home	58.7%	2.00	60.0%	3.72	63.0%	4.17	59.2%	5.05	54.2%	4.10	56.9%	5.53	P=0.1128
School or identified SFSP site	13.3%	1.37	11.4%	2.46	20.3%	3.56	12.9%	3.37	11.9%	2.82	10.2%	3.02	
Another program (camp, church, playground, daycare not coded as SFSP))	6.9%	0.93	8.8%	1.94	20.3%	3.56	7.8%	2.40	6.7%	1.96	6.0%	2.46	
Other (work, other place, don't know/refused)	21.1%	1.68	19.8%	3.14	11.7%	2.44	20.1%	4.46	27.2%	3.73	26.9%	4.77	

Source: SEBTC, Summer Survey, 2011 (n=929)

Note: P-values indicate overall difference in the characteristic across sites. (See expanded explanation under Exhibit 4D.1.)

Exhibit 4D.5 Reasons Provided for Why Children Did Not Attend Known Programs Providing Free Meals, Summer 2011 (Control Group Only)

Characteristic	Overall		CT		MI		MO		OR		TX		
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	*P*-Value
Food at home better meets child need/preference	31.5%	1.88	30.0%	3.69	18.9%	3.24	29.6%	6.90	31.1%	3.02	44.1%	5.27	*p*=0.0022
Does not like other aspects of the program	12.0%	1.30	6.4%	1.77	17.3%	3.55	5.2%	3.01	16.8%	2.57	9.5%	3.14	*p*=0.0058
Logistical barriers to attending	29.3%	1.88	32.3%	3.77	20.6%	3.64	30.2%	7.34	32.4%	3.26	27.1%	4.70	*p*=0.2851
Child is not eligible	3.5%	0.64	4.4%	1.30	8.8%	2.63	3.1%	2.32	2.0%	0.85	1.1%	0.83	*p*=0.0042
Other	10.4%	1.25	8.4%	2.02	9.0%	2.90	16.2%	5.07	12.1%	2.27	8.8%	3.16	*p*=0.4880

Source: SEBTC, Summer Survey, 2011 (n=944)

Note: P-values indicate overall difference in the characteristic across sites. (See expanded explanation under Exhibit 4D.1.)

Exhibit 4D.6   Reported Participation in Household and Child Nutrition Programs in POC Sites

Characteristic	Overall Estimate	Overall SE	CT Estimate	CT SE	MI Estimate	MI SE	MO Estimate	MO SE	OR Estimate	OR SE	TX Estimate	TX SE	P-Value
Household Benefits Prior to any Receipt of SEBTC[a]													
Reported receiving SNAP[b]	63.8%	0.83	60.1%	1.80	63.4%	1.70	63.3%	2.13	75.4%	1.58	55.1%	2.09	p<.0001
Reported receiving WIC[c]	23.5%	0.72	17.4%	1.40	32.2%	1.64	18.8%	1.66	27.3%	1.58	20.2%	1.67	p<.0001
Reported receiving food from food pantry/food bank	14.7%	0.59	15.4%	1.31	17.3%	1.32	14.6%	1.48	21.6%	1.45	3.3%	0.69	p<.0001
Reported receiving food at emergency kitchen	0.7%	0.22	2.8%	0.58	1.1%	0.35	2.9%	0.79	1.7%	0.42	0.2%	0.16	p=0.0001
Reported receiving none of the above	26.5%	0.77	31.1%	1.71	21.2%	1.46	27.0%	2.00	15.8%	1.36	39.6%	2.06	p<.0001
Children's Benefits During the Summer 2011[d]													
Reported receiving NSLP[e]	2.1%	0.30	1.6%	0.49	3.7%	0.82	3.7%	0.94	0.7%	0.48	0.9%	0.41	p=0.0008
Reported receiving SBP[f]	1.4%	0.23	1.9%	0.58	2.6%	0.62	1.5%	0.54	0.6%	0.48	0.4%	0.20	p=0.0212
Reported meals at an identified SFSP site[g]	4.6%	0.59	4.6%	0.99	6.5%	1.60	5.9%	1.89	5.4%	1.12	0.7%	0.36	p=0.0064
Reported receiving backpack program	2.4%	0.38	0.7%	0.38	5.9%	1.38	3.0%	0.89	1.0%	0.66	1.2%	0.61	p<.0001
Household Benefits Prior to any Receipt of SEBTC[a]	91.4%	0.72	93.2%	1.14	85.6%	2.02	88.1%	2.18	93.0%	1.35	97.2%	0.82	p<.0001

Source for Household Benefits: SEBTC, Spring Survey, 2011 (n= 5,837 treatment and control)

Source for Children's Benefits: SEBTC, Summer Survey (n= 2,348 control)

Note: Proportions for household benefits are based on household weights and proportions for children's benefits are based on child-level weights.

[a] Respondents reported benefits use at the spring survey. The respondent reported if anyone in the household or if the focal child received food assistance from any of the programs in the last 30 days, for the control group only. Estimates are based on the full sample of summer respondents who had completed a spring survey.

[b] Supplemental Nutrition Assistance Program.

[c] Special Supplemental Nutrition Program for Women, Infants and Children.

[d] Summer Sample, control group only

[e] National School Lunch Program. Respondents reported if their child received NSLP during the summer months (reported for control group only)

[f] School Breakfast Program. Respondents reported if their child received SBP during the summer months (reported for control group only)

[g] Summer Food Service Program site. Respondents reported that over the last 30 days that their child usually attended a program that could be identified as an SFSP site (reported for control group only).

Appendix 5A

Additional Methodological Detail

This section describes the models used to estimate the impact of Summer EBT for Children. These models apply to all variables measured in both the treatment and control groups.

5A.1 Basic Model—Pooled Across Sites

The random assignment procedure should ensure that there are no systematic differences between research groups other than the presence of the intervention. Since the key outcome for this study, very low food security among children (VLFS-C), is binary, impacts estimations use logit models. These models explicitly account for the necessarily non-linear relation between covariates and the probability of the outcomes. Linear regression is used for continuous outcomes (expenditure, nutrition). The following discussion only presents the logistic regression specification. The corresponding linear regression specification should be clear from the specification for the logistic regression case (i.e., replace the index with the continuous outcome).

The logit model for pooled impacts across sites is:

(1) $\quad I_{s,h,i} = \alpha + \delta T_{s,h} + \beta X_{s,h,i} + \mu_s + \varepsilon_{s,h,i}$

where *I* and *y* are related by:

(2)
$$y_{s,h,k} = 1 \Leftrightarrow I_{s,h,i} > 0$$
$$y_{s,h,k} = 0 \Leftrightarrow I_{s,h,i} < 0;$$

y is the outcome of interest for individual *i* in household *h* in site *s*. *T* is an indicator variable for treatment (that is, 1 for treated households and 0 for control households; with *s* and *h* subscripts, but no *i* subscript—randomization is at the household level). δ is the impact of the program in site *s* (here with a "1" subscript, corresponding to the first in the sequence of estimators), *X* is a vector of characteristics observed at baseline that are correlated with the outcome, μ is a vector of site dummy variables, β is the corresponding vector of regression coefficients, and ε is a regression residual. Below we discuss the particular covariates, *X*.

Under the assumption that ε has the extreme value distribution, this construction yields the conventional logit model. For expositional clarity, the discussion that follows only states the index, *I*; the transformation to the binary outcomes is as in Equation (2) above.

For binary outcomes, the logit estimates impact in the logit (or log odds) scale. Of interest is the impact on the probability scale, which is estimated by simulation. Specifically, the

regression estimated mean for the treatment group is the mean over all observations (treatment and control) of the predicted value of the logistic regression on the probability scale, setting $T=1$ for every observation. Conversely, the regression estimated mean for the control group is the mean over all observations (treatment and control) of the predicted value of the logistic regression for every observation (treatment or control), setting $T=0$.

5A.2 Subgroup Analysis

The impact of (binary) subgroups is analyzed using a generalization of the model specified above. Denote subgroup membership by g; $g=1$ is in the subgroup (e.g., white); $g=0$ is outside the subgroup (e.g., not white). Then to estimate subgroup impacts, the following model is used:

(3) $\quad I_{s,h,i} = \alpha + \delta T_{s,h} + \gamma g_{s,h} + \beta X_{s,h,i} + \mu_s + \varepsilon_{s,h,i}$

The analysis of subgroups begins by testing for homogeneity; i.e, test if $\gamma=0$. If $\gamma=0$ is rejected, then the analysis estimates the impact for those in the subgroup as $\delta+\gamma$, and for those outside the subgroup as δ. If the analysis fails to reject homogeneity, then the pooled estimate is taken to be the impact for both groups.

5A.3 Control Variables for the Analysis

Control variables are not necessary to generate unbiased and consistent estimates of overall program impact. (Covariates are needed to estimate subgroup impacts as discussed below.) Covariates are included, nevertheless, because doing so improves the precision of the estimates.

A common set of control variables are used in all regressions, as described in Appendix 5C, which defines the control variables and provides descriptive statistics. The only exception is the spring/summer change models, which do not include the spring food security measures as control variables. In other words, there are three sets of models estimated using the panel sample, which do not include spring food security measures as control variables. These are models in which outcomes are (1) spring-to-summer change in food security, (2) summer food security, and (3) spring food security.[1]

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[1] The evaluation did not include spring food security as a covariate in models with spring food security as the outcome. In addition, it did not include it in models with (1) summer food security as the outcome and (2) change in food security as the outcome because the mean change was not the same as the difference between summer means and spring means. By excluding it, the means would aligned in the tables.

5A.4 Computing Appropriate Standard Errors

For each of models, the analysis computes appropriate standard errors that consider the following issues:

- *Stratification*: To improve precision, the sample is stratified by the number of children in the household (1, 2, or 3 or more children) and to ensure balance among SFAs in demonstration areas where there are multiple SFAs. Such stratification has some, but usually small, implications for standard errors.
- *Weighting*: The two-phase fielding scheme requires unequal design weights. Unequal numbers of children within households will also induce unequal weights. In addition, there was survey non-response, and non-response weights were constructed to account for this. Some list information is available, which will support better non-response models than the standard survey sampling case (e.g., Random Digit Dial). Appendix 6B discusses construction of the weights.

We estimate these models using SAS PROC SURVEYREG and SAS PROC SURVEYLOGISTIC with the appropriate weight (correcting for the two-phase design and non-response) and strata (as defined in the original sampling scheme).

Household and Child Weights for the Evaluation Sample and Summary of Non-Response Bias Analysis

The evaluation team developed several sets of household and child level weights. These include:

(1) Those to be used to describe the original spring sample and to assess differences between the treatment and control group in the spring (referred to as the "spring" weights).

(2) Weights to describe the summer sample (regardless of whether or not there was a spring interview) to assess differences between treatment and control groups in the summer ("cross-sectional" weights);

(3) Weights for the sample that responded to both the spring and summer survey (referred to as "panel" weights).

(4) An additional weight was constructed for the sample of treatment respondents that consented to allow EBT record release (described in Chapter 3) so that this group could more accurately represent the full treatment group.

These weights correct for unequal probabilities of selection into the demonstration sample and into the evaluation sample; including the two-stage sampling for in-field non-response follow-up; and differential non-response, including controlling to strata based on number of children in the household and SFA in multi-SFA sites; raking to match information about the underlying population, provided by the sites and from other sources (i.e., "control totals"); and treatment/control balance for food security. Panel weights were also raked to the spring distribution of poverty and presence of children aged 12 or more years. Each of these steps is described in more detail below.

As described in Appendix 4B, the survey achieved a 67.5% weighted response rate in the spring and a 60.0% weighted response rate in the summer, with a differential response rate between the treatment and control groups in both periods. Therefore, in addition to constructing these weights, the evaluation team conducted three different non-response bias analyses to assess differential response between the treatment and control groups. The

three analyses did not find evidence of nonresponse bias in the weighted control group sample relative to the weighted treatment group sample. More specifically, the weighting procedures corrected for differences between the treatment and control group samples of households with completed interviews.

This appendix first describes the process by which the four sets of weights were constructed and then summarizes the non-response analysis conducted.

5B.1 Spring Weights

Household and child weights were calculated for the completed interviews in the spring evaluation sample. The evaluation sample households were drawn from the demonstration sample of households. For each of the five sites, a list of eligible households was provided to the research team. The team reviewed each list. If it was not clear that two or more children belonged to the same household, the children were assigned to the same household to reduce the chances that one or more children in a household would be assigned to the treatment group and other children in that same household assigned to the control group. The evaluation team then stratified the list of households in each site on the basis of the number of children in the household (1, 2 or 3+ children) and on SFA for multi-SFA sites. For the demonstration sample, a proportionate stratification of the benefit group was drawn for each site. All non-sampled households became part of the non-benefit group sample. Abt Associates calculated a base sampling weight for each household in the benefit and non-benefit samples. The base sampling weight equaled the reciprocal of the probability of selection of the household.

Drawing the Sample

Before drawing a subsample of households for the evaluation study from the benefit and non-benefit samples in each site, the team reviewed the households and split apart those that possibly contained children living in separate households. This step was taken because for the evaluation sub-sample, one child was randomly selected from each household and the study wanted to limit the possibility that a respondent was not related to this target child. After completing this process, the treatment and control households were re-stratified by the number of children in the household and by SFA for multi-SFA sites. A proportionate stratified sample of treatment households was drawn from the benefit group in each site and a proportionate stratified sample of control households was drawn from the non-benefit group. The initial evaluation subsample consisted of a total of 9,743 households.

The research team calculated a base sampling weight for each sample household in the treatment and control sample. The base sampling weight equaled the reciprocal of the probability of selection of the household. For each sample household the final base sampling weight equaled the product of the Demonstration sample base sampling weight and the Evaluation sample base sampling weight.

Adjusting for Non-Response

The evaluation sample design also took non-response into account. Nonrespondent households in the first 50% of the sample replicates were eligible to be sent to the field for further attempts to complete the interview. Hard refusals in the nonrespondent subsample were not sent to the field and remained as nonrespondents. Given the short data collection schedule, some nonrespondent households either never made it to the field or were only in the field for a very short time period. Of the 2,145 telephone survey nonrespondents that were in replicates eligible to go to the field, 762 households were not sent to the field and 230 households were in the field for a very short time period. There is a large difference in the proportion of households that became completed interviews in the field when we examine the intervals of 0-3 days and 4-10 days in terms of the number of days the household was eligible for field work (*fieldeligibledays*): 18.7% and 40.6%, respectively. The approach to defining the actual nonrespondent subsample was to treat all nonrespondent households within the *0-3 days* interval and eligible for field work as not having been selected for the nonrespondent subsample. To do this, the team first classified the 762 + 230 = 992 households into two *refusal status* categories:

- Hard refusals (*Sumcode*[1] = 4 or 8 and disposition codes for hard refusals = 17, 157, 158, 159, 160, 161, 177, 178, 179, or 209): 39 households
- Other refusals: 953 households

Next, the team classified the 9,743 sample households into one of seven *nonrespondent subsample groups*:

1. ***Field Eligible, interview completed*** (*fieldeligibledays = 4 days or more and ph2code[2] = 1*): 523 households

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[1] **Sumcode** – summary disposition codes.

Sumcode values:

1=Complete (5,792 households)

2=Partial (45 households)

3=Household Confirmed – Incomplete (460 households)

4=Household Confirmed – Refusal (257 households)

5=Household Confirmed - Screen-Out (104 households)

6=Household Not Confirmed – Incomplete (1,958 households)

7=Household Not Confirmed - No Contact (756 households)

8=Household Not Confirmed – Refusal (371 households)

[2] **Ph2code** – The second phase disposition code for each field eligible case that was released to the field.

1=Complete/Partial: Any case that became a complete or partial after being sent for field work (566 households)

2=Ineligible Household: Any case that was screened out after being sent for field work (28 households)

3=Other: Any case that was sent for field work and did not become a complete/partial or screen-out (814 households)

2. ***Field Eligible, ineligible household*** *(fieldeligibledays = 4 days or more and ph2code = 2):* 28 households

3. ***Field Eligible, nonrespondent*** *(refusal status = Hard refusals or (fieldeligibledays = 4 or more days and ph2code = 3)*: 641 households

4. ***Field eligible, but "not fielded" due to tight schedule*** *(refusal status = Other refusals)*: 953 households

5. **Not field eligible, interview completed** (not in categories 1 to 4 and sumcode = 1 or 2): 5,271 households

6. **Not field eligible, *ineligible* household** (not in categories 1 to 4 AND sumcode = 5): 76 households

7. **Not field eligible, nonrespondent household** (remainder of sample households): 2,251 households

The next step was the calculation of the actual nonrespondent subsampling fraction which equals the number of field sample households divided by the total number of telephone sample nonrespondent households:

$$\frac{Sum \ of \ nonrespondent \ subsample \ group \ 1, 2, and \ 3}{Sum \ of \ nonrespondent \ subsample \ group \ 1, 2, 3, 4, and \ 7}$$

The actual nonrespondent subsampling fractions ranged from 0.134 in Connecticut to 0.383 in Texas. The overall actual nonrespondent subsampling fraction was 0.271 (1,192 / 4,396).

For the 9,743 households the team then calculated the nonrespondent subsample adjusted base sampling weight:

- If nonrespondent subsample group = 1, 2 or 3, nonrespondent subsample adjusted base sampling weight = base sampling weight *x* (1 / nonrespondent subsampling fraction)
- If nonrespondent subsample group = 5 or 6, nonrespondent subsample adjusted base sampling weight = base sampling weight
- If nonrespondent subsample group = 4 or 7, nonrespondent subsample adjusted base sampling weight = blank

As noted above, some of the households in the evaluation subsample were nonexistent or found to be ineligible. For each stratum in a site, the household eligibility rate was calculated using the entire evaluation subsample. The total number of households in each stratum was multiplied by the eligibility rate to estimate the total number of eligible households in each stratum. For each stratum, a separate unit nonresponse adjustment was made for the treatment and control samples by first calculating the ratio of the estimated eligible population of households to the sum of the nonrespondent subsample adjusted base sampling weights of the completed household interviews in that stratum. The

nonrespondent subsample adjusted base sampling weights of the completed household interviews in a stratum were multiplied by the ratio for that stratum to form the unit nonresponse-adjusted base sampling weight.

For each stratum in the h[th] site we calculated:

$$HH\ Elibility_h = \frac{Weighted\ count\ of\ SUMCODE\ 1 + 2 + 3 + 4}{Weighted\ count\ of\ SUMCODE\ 1 + 2 + 3 + 4 + 5}$$

Where the weighted counts are calculated using the nonrespondent subsample adjusted base sampling weights.[3]

For each stratum in the h[th] site we then calculated:

$$Est\ M_h = M_h x HH\ Elibility_h$$

Where M_h is the number of households in the stratum.

Separating the treatment and control samples in each stratum, the team calculated the stratum unit nonresponse adjustment factor for the treatment samples:

$$RT_h = \frac{Est\ M_h}{Weighted\ count\ of\ SUMCODE\ 1 + 2}$$

The weighted count in the denominator uses the nonrespondent subsample adjusted base sampling weight.

Taking the treatment interviews (SUMCODE = 1 or 2) we calculated the unit nonresponse adjusted base sampling weight:

Stratum Nonresponse WT = nonrespondent subsample adjusted base sampling weight x RT_h.

Similarly, for the control sample the team calculated:

$$RC_h = \frac{Est\ M_h}{Weighted\ count\ of\ SUMCODE\ 1 + 2}$$

And the unit nonresponse adjusted base sampling weight:

Stratum Nonresponse WT = nonrespondent subsample adjusted base sampling weight x RC_h.

Raking the Sample

A survey sample may cover segments of the target population in proportions that do not match the proportions of those segments in the population itself. The differences may arise,

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[3]   Due to zero completed interviews in some strata in Oregon, some strata were collapsed.

for example, from sampling variability, from nonresponse, or because the sample design was not able to cover the entire target population. In such situations, one can often improve the relation between the sample and the population by adjusting the sampling weights of the cases in the sample so that the marginal totals of the adjusted weights on specified characteristics, referred to as control variables, agree with the corresponding totals for the population. This operation is known as raking ratio estimation, raking, or sample-balancing, and the population totals are usually referred to as control totals. Raking is most often used to reduce biases from nonresponse and noncoverage in sample surveys.

Raking usually proceeds one variable at a time, applying a proportional adjustment to the weights of the cases that belong to the same category of the control variable. The initial design weights in the raking process are often equal to the inverse of the selection probabilities and may have undergone some adjustments for unit nonresponse and noncoverage. The weights from the raking process are used in estimation and analysis.

The adjustment to control totals is sometimes achieved by creating a cross-classification of the categorical control variables (e.g., age categories × gender × race × household-income categories) and then matching the total of the weights in each cell to the control total. This approach, however, can spread the sample thinly over a large number of adjustment cells. It also requires control totals for all cells of the cross-classification. Often this is not feasible (e.g., control totals may be available for age × gender × race but not when those cells are subdivided by household income). The use of raking with marginal control totals for single variables (i.e., each margin involves only one control variable) often avoids many of these difficulties.

The procedure known as raking adjusts a set of data so that its sample based marginal totals match population control totals on a specified set of variables. The term "raking" suggests an analogy with the process of smoothing the soil in a garden plot by alternately working it back and forth with a rake in two perpendicular directions.

In a simple 2-variable example the marginal totals in various categories for the two control variables are known from the entire population, but the joint distribution of the two variables is known only from a sample. In the cross-classification of the sample, arranged in rows and columns, one might begin with the rows, taking each row in turn and multiplying each entry in the row by the ratio of the population total to the weighted sample total for that category, so that the row totals of the adjusted data agree with the population totals for that variable. The weighted column totals of the adjusted data, however, may not yet agree with the population totals for the column variable. Thus the next step, taking each column in turn, multiplies each entry in the column by the ratio of the population total to the current total for that category. Now the weighted column totals of the adjusted data agree with the population totals for that variable, but the new weighted row totals may no longer match the corresponding population totals.

This process continues, alternating between the rows and the columns, and close agreement on both rows and columns is usually achieved after a small number of iterations. The result

is a tabulation for the sample that reflects the relation of the two control variables in the population. Raking can also adjust a set of data to control totals on three or more variables. In such situations the control totals often involve single variables (e.g., race, household income), but they may involve two or more variables (e.g., age by gender).

Using the Stratum Nonresponse WT as the input weight, the evaluation team raked the household treatment and control interview weights in each site to site-level sampling frame control totals. The control totals were created by starting with the control totals provided by the sites and adjusting them to account for ineligible households in the sampling frame using the overall site level household eligibility rate for the spring sample. The sampling frame variables available varied somewhat by site. The potential raking margins included household sampling stratum and the following dichotomous variables:

- Four age group indicator variables: household contains one or more children age 1-5 years; 6-12 years; 13-17 years; 18 years or older.

- Four grade level indicator variables: household contains one or more children in PK/KG; grade 1-5; grade 6-8; grade 9-12.

- Four race/ethnicity indicator variables: household contains one or more children who are white; black; Hispanic; other races.

- Two gender indicator variables: household contains one or more male children; female children.

- Three language spoken at home indicator variables: English; Spanish; other.

- Two free/reduced status indicator variables: household contains one or more children who are free status; reduced status.

Two sites also provided information on the type of application (Direct Certification versus Food Stamps). The team removed dichotomous variables that contained less than 5% of the total households in the site from the site level raking.

The team used the IGCV SAS raking macro to conduct the raking to control totals (Izrael et al. 2009). The convergence criterion was a maximum difference of 0.1 percentage points between a control total percent and the weighted sample percent or a maximum of 20 iterations.

Using the raking output weights, the team then estimated the weighted household food security (HHFS) distribution in each site using the HHFS variable which contains 4 categories. In the spring, the treatment and control interviews in each site should roughly have the same weighted food security distribution. We therefore reran the raking for the treatment and control interviews in each site by adding one additional raking margin: the weighted food security distribution. This yielded a final household weight for each interview.

Finally, the sum of the household weights across all five sites were summed and divided by five in order to "equalize" the sum of the household weights for the treatment and control interviews across the five sites. In other words, for the treatment sample, as an example, the sum of the household weights is the same for each site.

There are a total of 5,794 interviews assigned household and child weights.

Child Weights in the Spring

The initial child weight was calculated as the product of the household raking weight and the number of age eligible children in the household. The number of age eligible children in the household was capped at 5 to avoid extreme child weights from very large households or group quarters. Using the sampling frame we developed child level control totals for each site that included the household stratum variable and the following potential dichotomous variables:

- Four age group indicator variables: child is age 1-5 years; 6-12 years; 13-17 years; 18 years or older.

- Four grade level indicator variables: child is in PK/KG; grade 1-5; grade 6-8; grade 9-12.

- Four race/ethnicity indicator variables: child is white; black; Hispanic; other races.

- Two gender indicator variables: child is male; female.

- Three language spoken at home indicator variables: child lives in a household where English is spoken; Spanish is spoken; other language is spoken.

- Two free/reduced status indicator variables: child has free status; reduced status.

Two sites also provided information on the type of application (Direct Certification versus Food Stamps). The team removed dichotomous variables that contained less than 5% of the total children in the site from the site level raking.

Using the initial child weight as the raking input weight we raked the child treatment and control interview weights in each site to site-level sampling frame control totals. We used the IGCV SAS raking macro to conduct the raking to control totals (Izrael et al. 2009). Using the raking output weights we then estimated the weighted child level food security distribution in each site using the HHFS variable which contains 4 categories. In the spring, the treatment and control interviews in each site should have the same food security distribution. We therefore reran the raking for the treatment and control interviews in each site by adding one additional raking margin: the weighted food security distribution. This yielded a final child weight for each interview.

Finally, the sum of the child weights across all five sites were summed and divided by five in order to "equalize" the sum of the child weights for the treatment and control interviews across the five sites. In other words, for the treatment sample, as an example, the sum of the child weights is the same for each site.

5B.2 Summer Weights

Households

The summer sample consisted of the same 9,743 households in the spring sample. All sample households in the spring sample were included in the summer sample except for 250 households that were in sample replicates deemed to not be needed to achieve the target number of interviews in CT, MI and OR. The weighting methodology for the summer sample followed the same exact steps as detailed for the spring sample. The actual nonrespondent subsampling fractions ranged from 0.255 in Texas to 0.478 in Connecticut. The overall actual nonrespondent subsampling fraction was 0.371 (1,823 / 4,914).

The household raking followed the same approach as the spring household raking, including using the spring HHFS food security variable as a raking margin. The raking control totals were created by starting with the control totals provided by the sites and adjusting them to account for ineligible households in the sampling frame using the overall site level household eligibility rate for the summer sample. The sampling frame variables available varied somewhat by site. The potential raking margins included household sampling stratum and the following dichotomous variables:

- Four age group indicator variables: household contains one or more children age 1-5 years; 6-12 years; 13-17 years; 18 years or older.

- Four grade level indicator variables: household contains one or more children in PK/KG; grade 1-5; grade 6-8; grade 9-12.

- Four race/ethnicity indicator variables: household contains one or more children who are white; black; Hispanic; other races.

- Two gender indicator variables: household contains one or more male children; female children.

- Three language spoken at home indicator variables: English; Spanish; other.

- Two free/reduced status indicator variables: household contains one or more children who are free status; reduced status.

Two sites also provided information on the type of application (Direct Certification versus Food Stamps).

Finally, the sum of the household weights across all five sites were summed and divided by five in order to "equalize" the sum of the household weights for the treatment and control interviews across the five sites. In other words, for the treatment sample, as an example, the sum of the household weights is the same for each site.

Children

The weighting methodology for the summer child sample followed the same exact steps as detailed for the spring sample. The child raking followed the same approach as the spring household raking, including using the spring HHFS food security variable as a raking margin. Using the sampling frame we developed child level control totals for each site that included the household stratum variable and the following potential dichotomous variables:

- Four age group indicator variables: child is age 1-5 years; 6-12 years; 13-17 years; 18 years or older.

- Four grade level indicator variables: child is in PK/KG; grade 1-5; grade 6-8; grade 9-12.

- Four race/ethnicity indicator variables: child is white; black; Hispanic; other races.

- Two gender indicator variables: child is male; female.

- Three language spoken at home indicator variables: child lives in a household where English is spoken; Spanish is spoken; other language is spoken.

- Two free/reduced status indicator variables: child has free status; reduced status.

Two sites also provided information on the type of application (Direct Certification versus Food Stamps).

Finally, the sum of the child weights across all five sites were summed and divided by five in order to "equalize" the sum of the child weights for the treatment and control interviews across the five sites. In other words, for the treatment sample, as an example, the sum of the child weights is the same for each site.

There are a total of 5,237 summer interviews that were assigned household and child weights.

5B.3 Panel Weights

Households

Among the 5,794 spring interviews 4,066 were also interviewed in the summer and therefore define the panel sample. For the 4,066 household interviews we used the spring household weight as the raking input weight. We raked to the same control totals that were used in the spring raking, listed above, except that we added to spring variable raking margins:

- Poverty status (below poverty versus above poverty or poverty status not determined)
- Presence of one of more children in the household age 12 years or older (one or more versus one or not determined)

The control totals for these two variables were developed by combining the spring treatment and control household interviews in each site and producing weighted counts using the spring household weights.

Finally, the sum of the household panel weights across all five sites were summed and divided by five in order to "equalize" the sum of the household panel weights for the treatment and control interviews across the five sites. In other words, for the treatment sample, as an example, the sum of the household panel weights is the same for each site.

Children

For the 4,066 interviews we used the spring child weight as the raking input weight. We raked to the same exact control totals that were used in the spring child raking, listed above, except that we added to spring variable raking margins:

- Poverty status (below poverty versus above poverty or poverty status not determined)
- Age of child category (age 12 years or older versus under 12 years of age)

The control totals for these two variables were developed by combining the spring treatment and control child interviews in each site and producing weighted counts using the spring child weights.

Finally, the sum of the child panel weights across all five sites were summed and divided by five in order to equalize the sum of the child panel weights for the treatment and control interviews across the five sites. In other words, for the treatment sample, as an example, the sum of the child panel weights is the same for each site.

5B.4 Summer Weights for Households Who Consented to Release of EBT Records

Interviewed households in the summer treatment group were requested to provide consent for Abt Associates to obtain EBT data. EBT data were obtained for 2,440 of the 2,889 interviewed households. Household weights were assigned to these 2,440 households.

The weighting methodology involved using the summer household weight as the raking input weight. The raking margins consisted of the summer raking variables, listed above, as well as the summer household food security variable. The control totals for the 4-category summer food security variable were created by taking the summer household treatment interviews in a site and calculating weighted totals using the summer household weight. After running the raking in each site we took the EBT household weight and equalized the sum of the weights so that the EBT treatment households in each site summed to the same total.

Weighted were also calculated for the 2,983 treatment group households with EBT data that completed the spring interview, the summer interview, or both interviews. We refer to this as the combined EBT household sample.

Households that only completed the spring interview have a spring household weight. Households that only completed the summer interview have a summer household weight. Household that completed both interviews have both weights. For these households we calculated the mean of the spring and summer weights. We refer to this weight as the combined sample household weight.

The weighting methodology for the combined sample of households with EBT data involved using the combined sample household weight as the raking input weight. The raking margins consisted of the summer raking variables, listed above, including a 5-category (missing spring HHFS values were coded to 5) spring food security variable as well as a 5-category (missing summer HHFS values were coded to 5) summer household food security variable.

The control totals for the 5-category spring food security variable were created by taking the combined sample household treatment interviews in a site and calculating weighted totals using the combined sample household weight. The control totals for the 5-category summer food security variable were created by taking the combined sample household treatment interviews in a site and calculating weighted totals using the combined sample household weight. After running the raking in each site we took the combined sample EBT household weight and equalized the sum of the weights so that the combined sample EBT treatment households in each site summed to the same total.

5B.5 Nonresponse Bias Analyses

As stated above, three sets of nonresponse bias analysis were conducted as a result of achieving a 67.5% response rate in the spring, a 60.0% response rate in the summer, and a differential response rate between the treatment and control groups. These analyses are summarized below.

Analysis #1

The first analysis involved a comparison of the design-weighted distribution of the summer household interviews in each site, for each of the sampling frame variables, with the population control distribution. For each site we examined the sampling frame variables included in the raking that was used to develop the final summer household weights. Each sampling frame variable is dichotomous with a value of 2, signifying that the household has the group present (e.g., presence of one or more children age 1-5 years in the household) or 0 if the group was not present. The design weight was used to form the weighted household sample distributions prior to raking.

For the treatment household sample, we found that a total of 30 (30/156 = 19.2% of the total number of differences) differences prior to raking were two percentage points or greater with only the presence of grade 9-12 children in the household variable differences in Texas being five percentage points or larger (6.7 percentage points). Texas accounts for 10 of the 30 differences, with 29.4% of the differences at two percentage points or larger.

For the control household sample we found that 62 (62/156 = 39.7%) of the differences have a magnitude of two percentage points or greater. Two differences are five percentage points of larger: presence of age 13-17 children in the household in Connecticut (6.0 percentage points) and direct certification applicant type in Texas (5.6 percentage points). In Connecticut 69.2% of the difference are two percentage points or greater, while in Texas 50.0% of the differences are of this magnitude.

In addition of the sampling frame variables, we also created control total distributions for the 4-category spring household food security variable. The control distributions were created by combining the spring treatment and spring control household interviews, and estimating the distribution of household food security using the spring raked weights based on just controlling the sampling frame variables in each site. Because summer households that did not complete the spring interview will not have a value for household food security we added a fifth category to account for the summer household interviews with a missing household food security value. In looking at the 25 treatment sample differences (5 x 5) we find that 11 (44.0%) have a magnitude of two percentage points or larger. Michigan accounts for three of the eleven differences with one difference of 5.0 percentage points. In contrast, 4 (16.0%) of the control sample differences are of this magnitude with Connecticut (2), Missouri (1), and Oregon (1) accounting for the four differences.

In summary, we find evidence that the lower response rate in the summer control household sample led to differences between the weighted distributions on the sampling frame variables prior to the raking, however this finding does not hold when we looked at

the spring household food security variable. The sampling frame variables and the spring household food security were used in the raking and therefore any differences that existed prior to the raking were reduced typically to a difference of 0.1 percentage points or smaller after the raking.

Analysis #2

The second analysis examined households that completed the spring and summer interviews and focused on spring survey variables that were not controlled in the construction of the summer household weights. We identified the following six spring variables for inclusion in the nonresponse bias analysis:

- CHILDFS: 3-level variable on food security among children in the household (secure, low food security, very low food security)
- HHCOMPCAT: 3-levels indicating the number of adults in the HH (one female adult; one male adult; two or more adults)
- RACECATCG: race/ethnicity of the survey respondent
- NEEDSRATIO_QUINTILES: income to needs ratio variable divided into quintiles
- HH_HAS_AGE_12P: presence of 1+ children age 12+ years in the HH
- POVCAT_R: poverty status

Based on the panel sample weights, we used SAS SURVEY FREQ to produce six tables for each site (1 = treatment versus 2 = control) by each of the variables listed above. The Wald chi-square statistic was calculated for each of the 30 tables. A chi-square statistic significant at the 0.05 level would indicate that treatment versus control group is not independent of the spring variable. This might occur if the lower summer response rate in the control group sample caused the control group to have a different distribution from the treatment group on the spring variable. None of the chi-square statistics were statistically significant. In other words we failed to reject the null hypothesis that treatment versus control group is independent of each of the six spring variables for each of the five sites. For the six variables that were not controlled in the raking, we do not find any evidence of nonresponse bias in the control group relative to the treatment group.

Analysis #3

The third nonresponse bias analysis focused on the summer nonrespondent subsample in each site. A random subsample of telephone survey nonrespondents to the summer survey were designated to go to the field for further attempts to complete the interview. Nonrespondent subsample = 1 identifies nonrespondent households that were sent to the field and the interview was completed. Nonrespondent subsample = 5 identifies respondent households that completed the telephone interview and were therefore not eligible to go to the field. Using the summer household weight we produced site level tabulations for the treatment group and the control group of nonrespondent field interview samples versus telephone interview samples by the six spring variables discussed above. Using the Wald chi-square statistic we tested the null hypothesis that nonrespondent field interview versus telephone interview status is independent of each of the six spring survey variables.

For the treatment group only three of the 30 chi-square tests were statistically significant at the 0.05 level: NEEDSRATIO_QUINTILES in Connecticut and Oregon, and POVCAT_R in Texas. Three (10%) of the 30 chi-square tests were also significant at the 0.05 level in the control group: NEEDSRATIO_QUINTILES and POVCAT_R in Connecticut, and HHCOMPCAT in Michigan. One purpose of the nonrespondent field subsample was to adjust for nonresponse bias in the telephone survey data collection. That is, differences between the nonrespondent subsample interviews and the telephone interviews were accounted for in the weighting by increasing the weights of the households in the nonrespondent subsample (see Weighting Methodology documentation). For the six spring survey variables examined, we found that the control group nonrespondent subsample differed from the control group telephone interviews in only 10% of the tests. The same result was found in the treatment group sample.

Reference:

David Izrael, Michael Battaglia, and Martin Frankel. 2009. Extreme Survey Weight Adjustment as a Component of Sample Balancing (a.k.a. Raking), 2009 SAS Global Forum. http://www.abtassociates.com/Page.cfm?PageID=40858&FamilyID=8600.

Appendix 5C

Description of Covariates in Impact Analysis Models

This appendix defines and presents descriptive statistics for the covariates used in regression-adjusted models estimating the impacts of SEBTC on food security and other food-related outcomes. Variables included as covariates in the impact analysis were measured prior to the summer, before SEBTC benefits were issued. Data were collected using the spring survey, which was completed during the school year before treatment households began receiving the SEBTC benefit. Covariates fell into four groups:

- Food security
- Household characteristics
- Respondent characteristics
- Reported participation in nutrition assistance programs

5C.1 Food Security

Six measures of food security during the school year were included in impact analysis models. Measures of both severe and general food insecurity among children in the household, adults in the household, and the household as a whole were included in impact models. Covariate measures of food security were constructed in the same way as outcome measures of food security. The timing of measurement was the only difference (school year versus summer).

Household food security was measured with an 18-item survey module that was developed by USDA to assess and monitor food security in large-scale population studies such as the Current Population Survey and the National Health and Nutrition Examination Survey (NHANES). Respondents were asked to recall information about food security over the previous 30 days. The instrument has been well-tested and has well-documented sensitivity and specificity for measuring food security in households with children (Economic Research Service (ERS 2010a, 2010b; National Research Council 2005, 2006; Nord and Hopwood 2007).

Exhibit 5C.1 lists the 18 questions in the standard battery. For 15 of the items, respondents were asked to indicate for their household, in the last 30 days, if the statement was often true, sometimes true, or never true. For 3 items, respondents were asked to indicate for how many of the last 30 days the event had occurred. Each item was scored as shown in Exhibit 5C.1.

Exhibit 5C.1   Summer Impact Estimates without a Regression Adjustment

Survey Questions. *Respondents were asked to indicate if the statement was often true, sometimes true, or never true for their household in the last 30 days.*	Scoring	Measures food security among…[1]
1. We worried whether our food would run out before we got money to buy more.	1=often/sometimes 0=never true	Adults
2. The food that we bought just didn't last, and we didn't have money to get more.	1=often/sometimes 0=never true	Adults
3. We couldn't afford to eat balanced meals.	1=often/sometimes 0=never true	Adults
4. In the last 30 days, 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?	1=often/sometimes 0=never true	Adults
4a. In the last 30 days, how many days did this happen?	1= ≥3 days 0= <3 days	Adults
5. In the last 30 days, did you ever eat less than you felt you should because there wasn't enough money for food?	1=often/sometimes 0=never true	Adults
6. In the last 30 days, were you ever hungry but didn't eat because there wasn't enough money for food?	1=often/sometimes 0=never true	Adults
7. In the last 30 days, did you lose weight because there wasn't enough money for food?	1=often/sometimes 0=never true	Adults
8. In the last 30 days, did [you/you or other adults in your household] ever not eat for a whole day because there wasn't enough money for food?	1=often/sometimes 0=never true	Adults
8a. In the last 30 days, how many days did this happen?	1= ≥3 days 0= <2 days	Adults
9. [I/We] relied on only a few kinds of low-cost food to feed [my/our] [child/children] because [I was/we were] running out of money to buy food.	1=often/sometimes 0=never true	Children
10. [I/We] couldn't feed [my/our] [child/children] a balanced meal, because [I/we] couldn't afford that.	1=often/sometimes 0=never true	Children
11. [My/Our/The] [child was/children were] not eating enough because [I/we] just couldn't afford enough food.	1=often/sometimes 0=never true	Children
12. In the last 30 days, did you ever cut the size of [your child's/any of the children's] meals because there wasn't enough money for food?	1=often/sometimes 0=never true	Children
13. In the last 30 days, did [your child/any of the children] ever skip meals because there wasn't enough money for food?	1=often/sometimes 0=never true	Children
13a. In the last 30 days, how many days did this happen?	1= ≥3 days 0= <3 days	Children
14. In the last 30 days, [was your child/were your children] ever hungry but you just couldn't afford more food?	1=often/sometimes 0=never true	Children
15. In the last 30 days, did [your child/any of the children] ever not eat for a whole day because there wasn't enough money for food?	1=often/sometimes 0=never true	Children

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[1]   The 18-item measure is a household-level measure of food insecurity among the general household, adults in the household, and children in the household. The first 10 items (questions #1 – 8a) are the 'adult scale' and the remaining 8 questions (questions #9-15) are the 'child scale'.

Items were summed to create 6 measures of food security – (1) severe food insecurity (i.e., very low food security) and (2) general food insecurity (i.e., very low or low food security) – among (a) children in the household, (b) adults in the household, and (c) all residents in the household.

As indicated in Exhibit 5C.1, there are 8 items measuring food security among children in the household (items 9-15). These 8 items were summed, and the following two dichotomous measures of food insecurity among children were created:

- ***Very Low Food Security Among Children, VLFS-C,*** *the most severe form of food insecurity among children in the household, is* defined as a sum of 5 points or higher
- ***Food Insecurity Among Children in the Household, indicating low or very low food insecurity, is*** defined as a sum of 2 points or higher

Similarly, the 10 items measuring food security among adults in the household (items 1-8a in Exhibit 5C.1) were summed, and the following two dichotomous measures of food security among adults were created:

- ***Very Low Food Security Among Adults*** in the Household is defined as a sum of 6 points or higher
- ***Food Insecurity Among Adults in the Household***, indicating low or very low food insecurity is defined as a sum of 3 points or higher

Two measures of food security in the household overall were constructed based on the measures of food security among children and adults in the household:

- ***Very Low Food Security in the Household Overall*** is defined as very low food security among children, very low food security among adults, or very low food security among both children and adults.
- ***Food Insecurity in the Household Overall, indicating low or very low food security,*** is defined as food insecurity among children, food insecurity among adults, or food insecurity among both children and adults.

Exhibit 5C.2 presents descriptive statistics for each of the six measures of spring food insecurity used as covariates.

5C.2 Household Characteristics

Five measures describing household characteristics were used as covariates in impact models:

- ***Number of people in the household*** was collected from the following survey question – "Including yourself, how many people live in your household? Don't forget to include non-relatives who live here and, of course, babies and small children. Also include persons who usually live here but are temporarily away for reasons such as vacation, traveling for work, or in the hospital. Do not include children living away at school."

- **Number of children in the household** was collected from the following survey question – "How many of those people (in question about number of people in the household) are children age 18 or younger or over 18 but were still in high school during the most recently completed school year?"
- **Age of the oldest child in the household** was calculated based on the birthdate for each child in the household, as reported on the survey, and the survey date. Children over age 20 were excluded, and the age of the next oldest child was used instead. This variable was missing for households that did not report the birthdate of a child under age 20 years.
- **Income-to-needs ratio**, or annual income as a proportion of the 2011 Federal Poverty Level, as defined by the U.S. Department of Health and Human Services, was calculated by dividing annual household income, as reported on the survey, and the Federal Poverty Level, based on the size of the household.
- **Employment status** was a dichotomous variable indicating whether at least one adult in the household was working in the last 30 days or not.

For each of the five household characteristics measures used as covariates, Exhibit 5C.3 presents descriptive statistics for treatment households, control households, and all households combined. In addition, Exhibit 5C.3 shows the percentage of households with an adolescent in the home, for the treatment group, the control group, and all households. The measure, *presence of an adolescent in the household*, is not included as a covariate in impact models, but is used in subgroup analyses. The measure is used to address questions of whether SEBTC impacts differ for households with and without an adolescent present. In models examining whether impacts differ for households with and without an adolescent, the variable *age of oldest child in the household* is excluded from the model. Therefore, percentages are reported in Exhibit 5C.3.

Exhibit 5C.2   Prevalence during the School Year of Severe and General Food Insecurity among Children, Adults, and Households, by Treatment Status and for All Households

Outcome	All Households		Treatment Group		Control Group		Total % Point Difference	p-value
	Estimate	SE	Estimate	SE	Estimate	SE		
Very low food security among children	7.29%	0.45	7.18%	0.59	7.40%	0.69	-0.21	0.815
Food insecurity among children	43.21%	0.86	43.59%	1.12	42.83%	1.30	0.76	0.660
Very low food security among adults	23.91%	0.73	23.97%	0.97	23.85%	1.09	0.12	0.934
Food insecurity among adults	53.17%	0.87	52.47%	1.13	53.87%	1.32	-1.40	0.422
Very low food security among households	25.59%	0.75	25.46%	1.00	25.71%	1.13	-0.25	0.867
Food insecurity among households	58.19%	0.86	58.21%	1.12	58.17%	1.31	0.04	0.983
Sample size	4091		2303		1788			

Source: SEBTC, Spring Survey, 2011

Note: The p-values are reported for a test of the difference in the prevalence rate for households in the treatment group compared to households in the comparison group. The null hypothesis being tested is that the total percentage point difference in the prevalence rates is zero.

*p<.10 **p<.05 ***p<.01

Exhibit 5C.3 Descriptive Statistics for Measures of Household Characteristics Used as Covariates In Impact Analysis, by Treatment Status and for All Households

Household Characteristics, In spring	All Households			Treatment Group			Control Group			Difference	p-value
	Sample size	Estimate	SE	Sample size	Estimate	SE	Sample size	Estimate	SE		
Number of people in household (mean)	4092	4.45	0.03	3049	4.47	0.04	2784	4.43	0.04	0.05	0.400
Number of children in household (mean)	4026	2.48	0.02	3000	2.52	0.03	2741	2.44	0.03	0.08*	0.089
Age in years of oldest child in household (mean)	4012	12.43	0.07	2991	12.56	0.09	2732	12.30	0.11	0.26*	0.063
Presence of an adolescent in the household (%)[1]	3955	52.65	0.86	2234	53.82	1.13	1721	51.46	1.32	2.36	0.182
Income-to-needs ratio (Proportion of FPL)	3685	0.80	0.01	2732	0.79	0.01	2477	0.81	0.02	-0.02	0.214
At least one employed adult in household (%)	4079	69.70	0.79	2299	69.89	1.06	1780	69.50	1.19	0.40	0.804

Source: SEBTC, Spring Survey, 2011

Note: The p-values are reported for a test of the difference in household characteristic between households in the treatment group compared to households in the comparison group. The null hypothesis being tested is that the difference is zero.

[1] Variable used in subgroup analysis.

[2] FPL = Federal Poverty Level)

*p<.10 **p<.05 ***p<.01

5C.3 Respondent Characteristics

Two household respondent characteristics reported on the survey were included as covariates in impact analyses:

- *Race/ethnicity* –respondents were coded as (a) Hispanic/Latino, (b) non-Hispanic African American, or (c) non-Hispanic White, or non-Hispanic other race/ethnicity, including American Indian or Alaskan Native, Asian, Native Hawaiian or other Pacific Islander, or non-Hispanic multiracial.
- *Education level* – respondents' highest level of education was coded as (a) less than a high school degree, (b) a high school degree or GED, (c) some college/associate degree, or (d) bachelor's degree) or higher.

Exhibit 5C.4 presents the percentage of respondents – in the treatment group, in the control group, and in households overall – who are in each race/ethnicity category and in each education level category.

5C.4 Reported Participation in Nutrition Assistance Programs

Four measures of households' reported participation in nutrition assistance programs were used as covariates in impact analyses – participation in SNAP, participation in WIC, participation in the National School Lunch Program, and participation in the School Breakfast Program. Exhibit 5C.5 presents the percentage of households – in the treatment group, in the control group, and in households overall – that participated in each nutrition assistance program.

Exhibit 5C.4   Descriptive Statistics for Measures of Respondent Characteristics Used as Covariates in Impact Analysis, by Treatment Status and for All Households

Respondent Characteristics, In spring	All Households			Treatment Group			Control Group			Total % Point Difference	p-value
	Sample size	Estimate	SE	Sample size	Estimate	SE	Sample size	Estimate	SE		
Race/Ethnicity (%)	4060			2290			1770				
Non-Hispanic African American		20.16	0.69		19.97	0.91		20.35	1.08	-0.38	
Hispanic		40.10	0.79		40.94	1.06		39.26	1.25	1.69	0.612
Non-Hispanic White /Other		39.74	0.79		39.09	1.06		40.39	1.24	-1.31	
Education (%)	4073			2297			1776				
Less than high school		33.16	0.80		33.75	1.06		32.56	1.21	1.19	
High school degree/GED		29.01	0.79		28.95	1.02		29.08	1.21	-0.13	0.722
Some college/AA		31.16	0.81		30.38	1.05		31.94	1.24	-1.56	
College degree or higher		6.67	0.42		6.92	0.58		6.42	0.62	0.50	

Source: SEBTC, Spring Survey, 2011

Note: The p-value is reported for a test of the difference in the distribution of race/ethnicity and education level for households in the treatment group compared to households in the comparison group. The null hypothesis being tested is that there is no difference in the distributions for the two conditions.

*p<.10 **p<.05 ***p<.01

Exhibit 5C.5   Descriptive Statistics for Measures of Nutrition Assistance Used as Covariates in Impact Analysis, by Treatment Status and for All Households

Nutrition Assistance Program	All Households			Treatment Group			Control Group			Total % Point Difference	p-value
	Sample Size	Estimate	SE	Sample Size	Estimate	SE	Sample Size	Estimate	SE		
Participation in SNAP (%)	4075	63.80	0.83	2297	62.45	1.09	1778	65.15	1.26	-2.70	0.107
Participation in WIC (%)	4083	23.52	0.72	2299	22.28	0.91	1784	24.76	1.11	-2.48	0.083
Children's participation in National School Lunch Program (%)	4059	93.48	0.43	2285	93.55	0.55	1774	93.41	0.66	0.14	0.870
Children's Participation in School Breakfast Program (%)	4018	84.47	0.63	2267	84.87	0.81	1751	84.07	0.97	0.80	0.528

Source: SEBTC, Spring Survey, 2011

Note: The p-values are reported for a test of the difference in nutrition assistance program participation rates for households in the treatment group compared to households in the comparison group. The null hypothesis being tested is that the difference is zero.

*p<.10 **p<.05 ***p<.01

Appendix 5D

Detailed Impact Analysis Results

This appendix presents detailed impact analysis results discussed or alluded to in the body of Chapter 5, in three sections:

- Impacts on food security in summer 2011 (section 5D.1, Exhibits 5D.1.1 to 5D.1.12)
- Impacts on nutritional status in summer 2011 (section 5D.2, Exhibits 5D.2.1 to 5D.2.6)
- Impacts on participation in nutrition assistance programs and whether the child's household paid for lunch in summer 2011 (section 5D.3, Exhibits 5D.3.1 to 5D.3.4).

5D.1   Food Security

This section presents findings on SEBTC's impact on the food security of children, adults, and households as a whole in the summer of 2011, organized into four sets of exhibits:

- Findings from alternative impact estimation methods (no regression adjustment and linear regression) – Exhibits 5D.1.1 and 5D.1.2
- Findings for the 18 individual food security questions on the summer survey – Exhibit 5D.1.3
- Findings by site – Exhibits 5D.1.4 to 5D.1.7
- Findings on spring-to-summer changes – Exhibits 5D.1.8 to 5D.1.11
- Findings on impacts for subgroups – Exhibits 5D.1.12 to 5D.1.13

Exhibit 5D.1.1   Summer Impact Estimates without a Regression Adjustment

Outcome	n	Treatment	Control	Difference	SE	p-value
Very Low Food Security - Children	5225	5.63%	6.94%	-1.31*	0.75	0.080
Food Insecure – Children	5225	30.68%	37.81%	-7.14***	1.51	<0.001
Very Low Food Security – Adults	5226	15.83%	21.75%	-5.92***	1.24	<0.001
Food Insecure – Adults	5226	37.09%	46.63%	-9.54***	1.57	<0.001
Very Low Food Security – Household	5226	17.39%	23.05%	-5.66***	1.27	<0.001
Food Insecure – Household	5226	42.83%	51.42%	-8.59***	1.59	<0.001

Source: SEBTC, Summer Survey, 2011

Note: The p-values are based on a test of the difference in the prevalence rates for households in the treatment group compared to households in the comparison group. The null hypothesis being tested is that the difference in the prevalence rates is zero.

*p<.10 **p<.05 ***p<.01

Exhibit 5D.1.2   Summer Impact Estimates using Linear Regression (rather than logistic regression)

Outcome	n	Treatment	Control	Difference	SE	p-value
Very Low Food Security - Children	5225	5.58%	6.99%	-1.41*	0.72	0.050
Food Insecure – Children	5225	30.56%	37.92%	-7.36***	1.38	<0.001
Very Low Food Security – Adults	5226	15.93%	21.68%	-5.75***	1.14	<0.001
Food Insecure – Adults	5226	37.13%	46.62%	-9.49***	1.44	<0.001
Very Low Food Security – Household	5226	17.47%	23.00%	-5.53***	1.17	<0.001
Food Insecure – Household	5226	42.81%	51.45%	-8.64***	1.44	<0.001

Source: SEBTC, Summer Survey, 2011

Note: The p-values are based on a test of the difference in the prevalence rates for households in the treatment group compared to households in the comparison group. The null hypothesis being tested is that the difference in the prevalence rates is zero.

*p<.10 **p<.05 ***p<.01

Exhibit 5D.1.3   Summer Impact Estimates, Item-by-Item (Impacts on Percent of Respondents Indicating that a Statement Was Sometimes or Often True)

Survey Item	n	Treatment	Control	Difference	SE	p-value
Items Measuring Food Insecurity Among Adults in the Household						
Worried food would run out	5217	53.98%	62.28%	-8.29***	1.47	<0.001
Food didn't last	5218	44.17%	52.33%	-8.17***	1.49	<0.001
Couldn't afford balanced meals	5214	40.31%	49.24%	-8.93***	1.48	<0.001
Adults cut/skipped meals	5217	21.94%	28.99%	-7.05***	1.27	<0.001
Adults cut/skip meals ≥ 3/day	5213	17.81%	23.45%	-5.64***	1.20	<0.001
Adults ate less than should	5216	24.86%	33.06%	-8.19***	1.33	<0.001
Adult was hungry but didn't eat	5221	14.83%	18.98%	-4.15***	1.12	<0.001
Adult lost weight without money for food	5143	7.54%	10.05%	-2.52***	0.86	0.004
Adult did not eat for a whole day	5222	4.78%	6.66%	-1.88**	0.73	0.010
Adult did not eat for ≥ 3days	5225	3.47%	4.99%	-1.52**	0.65	0.020
Items Measuring Food Insecurity Among Children in the Household						
Relied on only a few low-cost foods	5220	43.52%	51.46%	-7.94***	1.49	<0.001
Couldn't feed children balanced meals	5221	32.73%	38.82%	-6.09***	1.41	<0.001
Children were not eating enough	5220	16.09%	20.63%	-4.54***	1.15	<0.001
Cut the size of children's meals	5221	9.76%	12.93%	-3.17***	0.97	0.001
Children skipped meals	5223	5.01%	6.52%	-1.51**	0.71	0.033
Children skipped meals ≥ 3 days	5221	3.41%	4.47%	-1.06*	0.60	0.076
Children were hungry	5217	6.93%	9.02%	-2.09**	0.81	0.010
Children did not eat for a whole day	5225	1.08%	1.49%	-0.41	0.39	0.289

Source: SEBTC, Summer Survey, 2011

Note: The p-values are based on a test of the difference in the percentage of households indicating that a statement was sometimes or often true, comparing households in the treatment group with those in the comparison group. The null hypothesis being tested is that the difference is zero.

*p<.10 **p<.05 ***p<.01

Exhibit 5D.1.4   Summer Impact Estimate, VLFS-Adult by Site

Site	N	Treatment	Control	Difference	SE	p-value
All sites	5226	15.95%	21.66%	-5.70***	1.15	<0.001
Connecticut	1115	19.62%	26.13%	-6.51**	2.54	0.010
Michigan	1199	13.43%	18.88%	-5.46***	2.04	0.007
Missouri	872	15.90%	17.47%	-1.58	2.64	0.551
Oregon	1086	13.55%	19.77%	-6.22***	1.74	<0.001
Texas	954	7.39%	9.59%	-2.21	1.37	0.106

Source: SEBTC, Summer Survey, 2011

Note: The p-values are based on a test of the difference in the prevalence rates for households in the treatment group compared to households in the comparison group. The null hypothesis being tested is that the difference in the prevalence rates is zero.

The analysis of impacts by site was done separately for each site. The covariates were not constrained to have the same relationship with the outcome in each site and in the pooled analysis. For this reason, the overall impact estimate is not a weighted average of the within-site impact estimates.

*p<.10 **p<.05 ***p<.01

Exhibit 5D.1.5   Summer Impact Estimates, Food Insecurity-Adult by Site

Site	N	Treatment	Control	Difference	SE	p-value
All sites	5226	37.17%	46.59%	-9.42***	1.43	<0.001
Connecticut	1115	40.33%	50.84%	-10.51***	2.97	<0.001
Michigan	1199	35.10%	46.63%	-11.53***	2.85	<0.001
Missouri	872	37.01%	39.44%	-2.44	3.70	0.510
Oregon	1086	52.44%	61.85%	-9.41***	2.06	<0.001
Texas	954	56.12%	60.49%	-4.36**	2.09	0.037

Source: SEBTC, Summer Survey, 2011

Note: The p-values are based on a test of the difference in the prevalence rates for households in the treatment group compared to households in the comparison group. The null hypothesis being tested is that the difference in the prevalence rates is zero.

The analysis of impacts by site was done separately for each site. The covariates were not constrained to have the same relationship with the outcome in each site and in the pooled analysis. For this reason, the overall impact estimate is not a weighted average of the within-site impact estimates.

*p<.10 **p<.05 ***p<.01

Exhibit 5D.1.6   Summer Impact Estimates, VLFS-Household by Site

Site	N	Treatment	Control	Difference	SE	p-value
All sites	5226	17.48%	22.98%	-5.50***	1.17	<0.001
Connecticut	1115	21.22%	26.78%	-5.56**	2.56	0.030
Michigan	1199	14.94%	20.76%	-5.82***	2.11	0.006
Missouri	872	17.64%	19.26%	-1.62	2.80	0.563
Oregon	1086	14.43%	20.54%	-6.12***	1.76	<0.001
Texas	954	8.45%	10.72%	-2.27	1.43	0.111

Source: SEBTC, Summer Survey, 2011

Note: The p-values are based on a test of the difference in the prevalence rates for households in the treatment group compared to households in the comparison group. The null hypothesis being tested is that the difference in the prevalence rates is zero.

The analysis of impacts by site was done separately for each site. The covariates were not constrained to have the same relationship with the outcome in each site and in the pooled analysis. For this reason, the overall impact estimate is not a weighted average of the within-site impact estimates.

*p<.10 **p<.05 ***p<.01

Exhibit 5D.1.7   Summer Impact Estimates, Food Insecurity-Household by Site

Site	N	Treatment	Control	Difference	SE	p-value
All sites	5226	42.86%	51.43%	-8.58***	1.44	<0.001
Connecticut	1115	47.29%	55.50%	-8.21***	2.97	0.006
Michigan	1199	40.46%	52.29%	-11.83***	2.83	<0.001
Missouri	872	41.81%	42.25%	-0.44	3.74	0.906
Oregon	1086	56.18%	66.19%	-10.01***	2.10	<0.001
Texas	954	60.38%	63.77%	-3.40	2.09	0.103

Source: SEBTC, Summer Survey, 2011

Note: The p-values are based on a test of the difference in the prevalence rates for households in the treatment group compared to households in the comparison group. The null hypothesis being tested is that the difference in the prevalence rates is zero.

The analysis of impacts by site was done separately for each site. The covariates were not constrained to have the same relationship with the outcome in each site and in the pooled analysis. For this reason, the overall impact estimate is not a weighted average of the within-site impact estimates.

*p<.10 **p<.05 ***p<.01

Exhibit 5D.1.8   Spring-to-Summer Change Impact Estimates without Regression Adjustment

Outcome	n	Treatment	Control	Difference	SE	p-value
Very Low Food Security – Children	4056	-1.33	0.44	-1.77	1.09	0.103
Food Insecure – Children	4056	-12.96	-4.17	-8.79***	1.86	<0.001

Source: SEBTC, Spring and Summer Survey, 2011

Note: The p-values are based on a test of the difference in the spring-to-summer change in prevalence rates for households in the treatment group compared to households in the comparison group. The null hypothesis being tested is that the difference in the change in prevalence rates is zero.

*p<.10 **p<.05 ***p<.01

Exhibit 5D.1.9   Spring-to-Summer Change Impact Estimate, Item-by-Item (Spring-to-Summer Change in the Percentage of Respondents Indicating that the Statement was Sometimes or Often True)

Survey Item	n	Treatment	Control	Difference	SE	p-value
Items Measuring Food Insecurity Among Children in the Household						
Relied on only a few low-cost foods	4047	-12.34	-3.25	-9.09***	2.04	<0.001
Couldn't feed children balanced meals	4050	-12.30	-3.64	-8.66***	1.80	<0.001
Children were not eating enough	4049	-3.94	-1.38	-2.56	1.62	0.114
Cut the size of children's meals	4048	-4.81	-1.16	-3.66***	1.29	0.005
Children skipped meals	4048	-1.34	0.60	-1.94*	1.07	0.071
Children skipped meals ≥ 3 days	4043	-1.10	0.55	-1.65*	0.92	0.073
Children were hungry	4040	-3.35	0.13	-3.48***	1.22	0.004
Children did not eat for a whole day	4053	-0.43	0.28	-0.71	0.56	0.204

Source: SEBTC, Spring and Summer Survey, 2011

Note: The p-values are based on a test of the difference in the spring-to-summer change in item responses for households in the treatment group compared to households in the comparison group. The null hypothesis being tested is that the difference in the change is zero.

*p<.10 **p<.05 ***p<.01

Exhibit 5D.1.10   Spring-to-Summer Change Impact Estimate, for VLFS-C by Site (Difference in Spring-to-Summer Change in Prevalence Rates of VLFS-C, by Site)

Site	Sample Size	Treatment Spring-to-Summer Change	Control Spring-to-Summer Change	T-C Difference in Spring-to-Summer Change
All sites	4056	-1.40**	0.50	-1.89*
SE		0.63	0.80	1.08
p-value		0.008	0.551	0.081
Connecticut	845	1.57	-0.14	1.71
SE		1.18	1.30	2.06
p-value		0.482	0.302	0.406
Michigan	926	-1.83*	0.38	-2.22
SE		1.26	1.61	2.48
p-value		0.059	0.960	0.371
Missouri	636	-1.47	2.35	-3.82
SE		1.71	2.41	2.71
p-value		0.370	0.433	0.159
Oregon	897	-3.49***	1.19	-4.69*
SE		1.29	1.60	2.43
p-value		0.006	0.491	0.054
Texas	752	-2.42	-0.56	-1.86
SE		1.60	2.04	2.39
p-value		0.373	0.364	0.436

Source: SEBTC, Spring and Summer Survey, 2011

Note: The p-values are based on a test of the difference in the spring-to-summer change in prevalence rates for households in the treatment group compared to households in the comparison group. The null hypothesis being tested is that the difference in the change in prevalence rates is zero.

The analysis of change in VLFS-C by site was done separately for each site. The covariates were not constrained to have the same relationship with the outcome in each site and in the pooled analysis. For this reason, the overall estimate is not a weighted average of the within-site estimates.

*p<.10 **p<.05 ***p<.01

Exhibit 5D.1.11 Spring-to-Summer Change Impact Estimate for Food Insecurity among Children, by Site (Difference in Spring-to-Summer Change in Prevalence Rates of Food Insecurity among Children, by Site)

Site	Sample Size	Treatment Spring-to-Summer Change	Control Spring-to-Summer Change	T-C Difference in Spring-to-Summer Change
All sites	4056	-12.91***	-4.18***	-8.72***
SE		1.12	1.24	1.83
p-value		<0.001	<0.001	<0.001
Connecticut	845	-7.02***	-5.63	1.71
SE		2.33	2.85	2.06
p-value		<0.001	0.210	0.406
Michigan	926	-12.97***	-3.08*	-2.22
SE		2.24	2.52	2.48
p-value		<0.001	0.062	0.371
Missouri	636	-9.87***	-2.32	-3.82
SE		2.69	3.39	2.71
p-value		<0.001	0.852	0.159
Oregon	897	-18.00***	-5.17***	-4.69*
SE		2.40	2.57	2.43
p-value		<0.001	0.009	0.054
Texas	752	-16.03***	-5.10*	-1.86
SE		2.90	2.56	2.39
p-value		<0.001	0.055	0.436

Source: SEBTC, Spring and Summer Survey, 2011

Note: The p-values are based on a test of the difference in the spring-to-summer change in prevalence rates for households in the treatment group compared to households in the comparison group. The null hypothesis being tested is that the difference in the change in prevalence rates is zero.

The analysis of change in VLFS-C by site was done separately for each site. The covariates were not constrained to have the same relationship with the outcome in each site and in the pooled analysis. For this reason, the overall estimate is not a weighted average of the within-site estimates.

*p<.10 **p<.05 ***p<.01

Exhibit 5D.1.12   Summer Impact Estimate for VLFS-C, by Subgroup

	n	Treatment	Control	Difference	SE	p-value
Very Low Food Security—Children						
SNAP/WIC model	5225					
SNAP/SNAP-hybrid	3072	5.49%	6.74%	-1.24	0.91	0.172
WIC model	2153	5.64%	7.43%	-1.79	1.16	0.124
Difference		0.15	0.69	-0.55	1.63	0.736
Poverty	3678					
Not below 100% FPL	1040	3.55%	6.93%	-3.37**	1.42	0.017
Below 100% FPL	2638	5.79%	8.90%	-3.11***	1.04	0.003
Difference		2.24	1.97	0.26	0.41	0.526
Participation in SNAP in spring (4067)						
Does not receive SNAP	1474	5.20%	8.22%	-3.02**	1.33	0.023
Receives SNAP in spring	2593	5.60%	7.92%	-2.32**	0.98	0.019
Difference		0.40	-0.30	0.70	1.52	0.646
Number of children in household (HH) (4019)						
3 or more children in HH	1765	5.29%	7.65%	-2.35**	1.18	0.047
2 or fewer children	2254	5.60%	8.37%	-2.77***	1.06	0.009
Difference		0.31	0.72	-0.42	2.55	0.869
Presence of adolescent in household (3951)						
No adolescent in HH	1862	4.07%	6.52%	-2.45**	1.10	0.026
Adolescent in HH	2089	6.85%	9.71%	-2.86**	1.17	0.015
Difference		2.78	3.19	-0.41	1.00	0.683
Respondent race/ethnicity (4052)						
White/Other	1589	2.67%	5.56%	-2.90***	0.99	0.003
African American (AA)	756	6.45%	10.70%	-4.25*	2.18	0.051
Hispanic	1707	7.70%	8.97%	-1.27	1.32	0.336
Difference (AA v. other)		3.78	5.14	-1.35	3.93	0.731
Difference (Hisp v other)		5.03	3.41	1.63*	0.92	0.075
Difference (Hisp v. AA)		1.25	-1.73	2.98	2.55	0.243

Source: SEBTC, Summer Survey, 2011

Note: The p-values are based on a test of the difference between treatment group households and control group households. The null hypothesis being tested is that the treatment-control difference is zero (either the treatment-control difference in prevalence rates within a subgroup or a subgroup difference in the treatment-control difference in prevalence rates).

*p<.10 **p<.05 ***p<.01

Exhibit 5D.1.13   Summer Impact Estimate for Food Insecurity among Children, by Subgroup

	n	Treatment	Control	Difference	SE	p-value
Food Insecurity—Children						
SNAP/WIC model	5225					
SNAP/SNAP-hybrid	3072	31.04%	37.64%	-6.59***	1.77	<0.001
WIC model	2153	29.95%	38.29%	-8.34***	2.23	<0.001
Difference		-1.09	0.65	-1.75	2.54	0.491
Poverty	3678					
Not below 100% FPL	1040	27.85%	32.54%	-4.69*	2.58	0.069
Below 100% FPL	2638	29.90%	41.26%	-11.36***	1.82	<0.001
Difference		2.05	8.72	-6.67*	3.49	0.056
Participation in SNAP in spring (4067)						
Does not receive SNAP	1474	30.08%	38.30%	-8.22***	2.31	<0.001
Receives SNAP in spring	2593	29.43%	39.47%	-10.04***	1.77	<0.001
Difference		-0.65	1.17	-1.82	3.24	0.574
Number of children in household (HH) (4019)						
3 or more children in HH	1765	29.45%	42.13%	-12.68***	2.21	<0.001
2 or fewer children	2254	30.17%	37.07%	-6.90***	1.82	<0.001
Difference		0.72	-5.06	5.78*	2.95	0.050
Presence of adolescent in household (3951)						
No adolescent in HH	1862	24.35%	31.06%	-6.71***	1.91	0.000
Adolescent in HH	2089	34.93%	46.76%	-11.83***	2.10	0.000
Difference		10.58	15.70	-5.12	4.13	0.215
Respondent race/ethnicity (4052)						
White/Other	1589	27.97%	35.61%	-7.64***	2.16	<0.001
African American (AA)	756	29.51%	37.40%	-7.89**	3.18	0.013
Hispanic	1707	31.78%	43.70%	-11.92***	2.25	<0.001
Difference (AA v. other)		1.54	1.79	-0.25	1.68	0.882
Difference (Hisp v other)		3.81	8.09	-4.28	3.30	0.195
Difference (Hisp v. AA)		2.27	6.30	-4.03	4.75	0.396

Source: SEBTC, Summer Survey, 2011

Note: The p-values are based on a test of the difference between treatment group households and control group households. The null hypothesis being tested is that the treatment-control difference is zero (either the treatment-control difference in prevalence rates within a subgroup or a subgroup difference in the treatment-control difference in prevalence rates).

*p<.10 **p<.05 ***p<.01

5D.2 Nutritional Status

This section presents findings on SEBTC's impact on nutritional status in the summer of 2011 by subgroup—i.e., by program model and household characteristics.

Exhibit 5D.2.1   Summer Impact Estimates for Daily Consumption of Fruits and Vegetables, w/o Fried Potatoes, by Subgroup

	n	Treatment	Control	Difference	SE	p-value
Fruits and Vegetables without fried potatoes (servings per day)						
SNAP/WIC model	4996					
SNAP/SNAP-hybrid	2940	3.12	2.90	0.22***	0.07	0.001
WIC model	2056	3.46	3.03	0.43***	0.09	<0.001
Difference		0.34	0.13	0.21*	0.11	0.067
Poverty	3537					
Not below 100% FPL	1009	3.14	2.66	0.48***	0.11	<0.001
Below 100% FPL	2528	3.23	2.91	0.33***	0.07	<0.001
Difference		0.09	0.25	-0.15	0.13	0.250
Participation in SNAP in spring (3900)						
Does not receive SNAP	1406	3.26	2.80	0.47***	0.10	<0.001
Receives SNAP in spring	2494	3.19	2.86	0.34***	0.07	<0.001
Difference		-0.07	0.06	-0.13	0.12	0.281
Number of children in household (HH) (3856)						
3 or more children in HH	1697	3.32	2.83	0.49***	0.08	<0.001
2 or fewer children	2159	3.07	2.85	0.22***	0.08	0.005
Difference		-0.25	0.02	-0.27**	0.11	0.013
Presence of adolescent in household (3791)						
No adolescent in HH	1791	3.01	2.65	0.36***	0.07	<0.001
Adolescent in HH	2000	3.37	2.98	0.39***	0.09	<0.001
Difference		0.36	0.33	0.03	0.12	0.807
Respondent race/ethnicity (3886)						
White/Other	1543	3.00	2.68	0.31***	0.08	<0.001
African American (AA)	714	3.21	2.59	0.62***	0.14	<0.001
Hispanic	1629	3.45	3.12	0.33***	0.10	0.001
Difference (AA v. other)		0.21	-0.09	0.31*	0.17	0.061
Difference (Hisp v other)		0.45	0.44	0.02	0.19	0.918
Difference (Hisp v. AA)		0.24	0.53	-0.29*	0.17	0.094

Source: SEBTC, Summer Survey, 2011

Note: The p-values are based on a test of the difference between treatment group households and control group households. The null hypothesis being tested is that the treatment-control difference is zero (either the treatment-control difference in fruit & vegetable consumption within a subgroup or a subgroup difference in the treatment-control difference in prevalence rates).

*p<.10 **p<.05 ***p<.01

Exhibit 5D.2.2   Summer Impact Estimates for Daily Consumption of Fruits and Vegetables, w Fried Potatoes, by Subgroup

	n	Treatment	Control	Difference	SE	p-value
Fruits and Vegetables (servings per day)						
SNAP/WIC model	4982					
SNAP/SNAP-hybrid	2933	3.24	3.02	0.22***	0.07	0.001
WIC model	2049	3.60	3.16	0.43***	0.09	<0.001
Difference		0.36	0.14	0.21*	0.11	0.063
Poverty	3529					
Not below 100% FPL	1009	3.25	2.77	0.49***	0.11	<0.001
Below 100% FPL	2520	3.35	3.03	0.32***	0.07	<0.001
Difference		0.10	0.26	-0.17	0.14	0.213
Participation in SNAP in spring (3889)						
Does not receive SNAP	1405	3.39	2.92	0.47***	0.10	<0.001
Receives SNAP in spring	2484	3.31	2.98	0.33***	0.07	<0.001
Difference		-0.08	0.06	-0.14	0.12	0.257
Number of children in household (HH) (3846)						
3 or more children in HH	1692	3.45	2.95	0.50***	0.08	<0.001
2 or fewer children	2154	3.19	2.98	0.20**	0.08	0.011
Difference		-0.26	0.03	-0.30***	0.11	0.009
Presence of adolescent in household (3781)						
No adolescent in HH	1788	3.11	2.75	0.36***	0.07	<0.001
Adolescent in HH	1993	3.50	3.12	0.38***	0.09	<0.001
Difference		0.39	0.37	0.02	0.14	0.887
Respondent race/ethnicity (3875)						
White/Other	1543	3.12	2.80	0.32***	0.08	<0.001
African American (AA)	706	3.30	2.73	0.57***	0.15	<0.001
Hispanic	1626	3.58	3.25	0.34***	0.10	<0.001
Difference (AA v. other)		0.18	-0.07	0.25	0.17	0.132
Difference (Hisp v other)		0.46	0.45	0.02	0.17	0.904
Difference (Hisp v. AA)		0.28	0.52	-0.23	0.18	0.189

Source: SEBTC, Summer Survey, 2011

Note: The p-values are based on a test of the difference between treatment group households and control group households. The null hypothesis being tested is that the treatment-control difference is zero (either the treatment-control difference in fruit and vegetable consumption within a subgroup or a subgroup difference in the treatment-control difference in prevalence rates).

*p<.10 **p<.05 ***p<.01

Exhibit 5D.2.3   Summer Impact Estimates for Daily Consumption of Whole Grains, by Subgroup

	n	Treatment	Control	Difference	SE	p-value
Whole Grains (servings per day)						
SNAP/WIC model	5148					
SNAP/SNAP-hybrid	3029	0.64	0.58	0.06**	0.03	0.041
WIC model	2119	0.77	0.65	0.12***	0.03	<0.001
Difference		0.13	0.07	0.06	0.05	0.188
Poverty	3631					
Not below 100% FPL	1028	0.69	0.58	0.11**	0.05	0.025
Below 100% FPL	2603	0.69	0.62	0.07**	0.03	0.022
Difference		0.00	0.04	-0.04	0.06	0.517
Participation in SNAP in spring (4015)						
Does not receive SNAP	1458	0.68	0.59	0.09**	0.04	0.015
Receives SNAP in spring	2557	0.69	0.61	0.08**	0.03	0.016
Difference		0.01	0.02	-0.01	0.03	0.766
Number of children in household (HH) (3968)						
3 or more children in HH	1748	0.72	0.62	0.10***	0.04	0.006
2 or fewer children	2220	0.64	0.58	0.06**	0.03	0.048
Difference		-0.08	-0.04	-0.04	0.05	0.458
Presence of adolescent in household (3900)						
No adolescent in HH	1848	0.67	0.59	0.08**	0.03	0.028
Adolescent in HH	2052	0.70	0.61	0.09**	0.03	0.010
Difference		0.03	0.02	0.01	0.04	0.791
Respondent race/ethnicity (4001)						
White/Other	1572	0.64	0.60	0.04	0.04	0.326
African American (AA)	744	0.72	0.54	0.18***	0.06	0.003
Hispanic	1685	0.71	0.64	0.08**	0.04	0.034
Difference (AA v. other)		0.08	-0.06	0.14*	0.07	0.052
Difference (Hisp v other)		0.07	0.04	0.04	0.05	0.452
Difference (Hisp v. AA)		-0.01	0.10	-0.10	0.07	0.162

Source: SEBTC, Summer Survey, 2011

Note: The p-values are based on a test of the difference between treatment group households and control group households. The null hypothesis being tested is that the treatment-control difference is zero (either the treatment-control difference in whole grain consumption within a subgroup or a subgroup difference in the treatment-control difference in prevalence rates).

*p<.10 **p<.05 ***p<.01

Exhibit 5D.2.4   Summer Impact Estimates for Daily Consumption of Baked Goods, by Subgroup

	n	Treatment	Control	Difference	SE	p-value
Baked Goods—Cookies, Cakes, Pies, Doughnuts, Brownies (servings per day)						
SNAP/WIC model (5178)						
SNAP/SNAP-hybrid	3047	0.38	0.36	0.02	0.02	0.316
WIC model	2131	0.29	0.34	-0.05**	0.02	0.016
Difference		-0.09	-0.02	-0.07**	0.03	0.015
Poverty (3648)						
Not below 100% FPL	1032	0.30	0.33	-0.03	0.02	0.179
Below 100% FPL	2616	0.34	0.36	-0.03	0.02	0.206
Difference		0.04	0.03	0.00	0.00	0.859
Participation in SNAP in spring (4032)						
Does not receive SNAP	1463	0.32	0.36	-0.05*	0.03	0.087
Receives SNAP in spring	2569	0.33	0.34	-0.01	0.02	0.483
Difference		0.01	-0.02	0.04	0.04	0.313
Number of children in household (HH) (3984)						
3 or more children in HH	1755	0.33	0.35	-0.02	0.02	0.355
2 or fewer children	2229	0.32	0.34	-0.02	0.02	0.348
Difference		-0.01	-0.01	0.00	0.00	0.973
Presence of adolescent in household (3917)						
No adolescent in HH	1848	0.33	0.35	-0.02	0.02	0.353
Adolescent in HH	2069	0.33	0.34	-0.02	0.02	0.459
Difference		0.00	-0.01	0.00	0.00	0.870
Respondent race/ethnicity (4017)						
White/Other	1575	0.32	0.34	-0.03	0.02	0.274
African American (AA)	749	0.43	0.41	0.02	0.04	0.592
Hispanic	1693	0.28	0.32	-0.04*	0.03	0.096
Difference (AA v. other)		0.11	0.07	0.05	0.05	0.325
Difference (Hisp v other)		-0.04	-0.02	-0.01	0.02	0.618
Difference (Hisp v. AA)		-0.15	-0.09	-0.06	0.05	0.192

Source: SEBTC, Summer Survey, 2011

Note: The p-values are based on a test of the difference between treatment group households and control group households. The null hypothesis being tested is that the treatment-control difference is zero (either the treatment-control difference in baked goods consumption within a subgroup or a subgroup difference in the treatment-control difference in prevalence rates).

*p<.10 **p<.05 ***p<.01

Exhibit 5D.2.5   Summer Impact Estimates for Daily Consumption of Sugar-Sweetened Drinks, by Subgroup

	n	Treatment	Control	Difference	SE	p-value
Sugar-Sweetened Drinks (servings per day)						
SNAP/WIC model (5111)						
SNAP/SNAP-hybrid	3010	1.12	1.08	0.04	0.06	0.508
WIC model	2101	1.10	1.32	-0.22***	0.08	0.008
Difference		-0.02	0.24	-0.26**	0.10	0.010
Poverty (3602)						
Not below 100% FPL	1023	0.96	0.93	0.02	0.08	0.782
Below 100% FPL	2579	1.11	1.14	-0.03	0.07	0.633
Difference		0.15	0.21	-0.05	0.10	0.609
Participation in SNAP in spring (3984)						
Does not receive SNAP	1436	1.02	1.10	-0.08	0.08	0.324
Receives SNAP in spring	2548	1.08	1.09	-0.02	0.07	0.787
Difference		0.06	-0.01	0.06	0.10	0.566
Number of children in household (HH) (3937)						
3 or more children in HH	1731	1.13	1.09	0.04	0.08	0.587
2 or fewer children	2206	0.97	1.10	-0.14**	0.06	0.030
Difference		-0.16	0.01	-0.18*	0.10	0.076
Presence of adolescent in household (3871)						
No adolescent in HH	1834	0.87	0.87	0.00	0.06	0.975
Adolescent in HH	2037	1.20	1.23	-0.03	0.08	0.747
Difference		0.33	0.36	-0.03	0.11	0.784
Respondent race/ethnicity (3969)						
White/Other	1560	0.90	0.91	-0.01	0.07	0.863
African American (AA)	738	1.49	1.15	0.34**	0.15	0.025
Hispanic	1671	1.03	1.26	-0.24***	0.08	0.005
Difference (AA v. other)		0.59	0.24	0.35**	0.17	0.034
Difference (Hisp v other)		0.13	0.35	-0.23**	0.11	0.036
Difference (Hisp v. AA)		-0.46	0.11	-0.58***	0.18	0.001

Source: SEBTC, Summer Survey, 2011

Note: The p-values are based on a test of the difference between treatment group households and control group households. The null hypothesis being tested is that the treatment-control difference is zero (either the treatment-control difference in sugar-sweetened drink consumption within a subgroup or a subgroup difference in the treatment-control difference in prevalence rates).

*p<.10 **p<.05 ***p<.01

Exhibit 5D.2.6   Summer Impact Estimates for Whether Usually Drank Nonfat/Lowfat Milk, by Subgroup

	n	Treatment	Control	Difference	SE	p-value
Drink lowfat or nonfat milk (percentage)						
SNAP/WIC model (5023)						
SNAP/SNAP-hybrid	2951	17.06	18.34	-1.27	1.62	0.432
WIC model	2072	9.03	10.08	-1.04	1.65	0.527
Difference		-8.03	-8.26	0.23	1.63	0.888
Poverty	3546					
Not below 100% FPL	993	21.74	22.27	-0.54	2.96	0.857
Below 100% FPL	2553	11.34	12.97	-1.64	1.49	0.274
Difference		-10.40	-9.30	-1.10	2.03	0.587
Participation in SNAP in spring (3918)						
Does not receive SNAP	1413	17.17	17.81	-0.65	2.35	0.783
Receives SNAP in spring	2505	12.32	14.75	-2.43	1.54	0.114
Difference		-4.85	-3.06	-1.78	2.34	0.447
Number of children in household (HH) (3874)						
3 or more children in HH	1713	12.83	13.97	-1.14	1.82	0.532
2 or fewer children	2161	16.30	18.59	-2.29	1.86	0.218
Difference		3.47	4.62	-1.15	3.65	0.753
Presence of adolescent in household (3808)						
No adolescent in HH	1793	14.45	16.54	-2.09	1.86	0.261
Adolescent in HH	2015	14.21	15.52	-1.3	1.82	0.474
Difference		-0.24	-1.02	0.79	2.80	0.778
Respondent race/ethnicity (3904)						
White/Other	1522	24.08	24.97	-0.88	2.54	0.728
African American (AA)	722	5.86	4.39	1.47	1.68	0.380
Hispanic	1660	8.28	12.25	-3.98**	1.80	0.027
Difference (AA v. other)		-18.22	-20.58	2.35	2.49	0.345
Difference (Hisp v other)		-15.80	-12.72	-3.10	1.95	0.111
Difference (Hisp v. AA)		2.42	7.86	-5.45	2.93	0.063

Source: SEBTC, Summer Survey, 2011

Note: The p-values are based on a test of the difference between treatment group households and control group households. The null hypothesis being tested is that the treatment-control difference is zero (either the treatment-control difference in lowfat/nonfat milk consumption within a subgroup or a subgroup difference in the treatment-control difference in prevalence rates).

*p<.10 **p<.05 ***p<.01

5D.3   Participation

This section presents findings on SEBTC's impact on participation in nutrition assistance programs and whether the child's household paid for lunch in the summer of 2011, by site.

Exhibit 5D.3.1   Summer Impact Estimates for Participation in SFSP, by Site

Site	n	Treatment	Control	Difference	SE	p-value
All sites	5213	2.89	4.19	-1.30**	0.55	0.019
Connecticut	1111	3.81	4.41	-0.59	1.20	0.622
Michigan	1197	3.12	5.22	-2.10*	1.26	0.095
Missouri	870	4.73	5.54	-0.81	1.77	0.647
Oregon	1084	2.29	4.92	-2.62**	1.18	0.026
Texas	951	0.50	0.90	-0.39	0.51	0.442

Source: SEBTC, Summer Survey, 2011

*p<.10 **p<.05 ***p<.01

Note: Estimates are based on a logistic regression model without covariates other than the treatment indicator. Missing values for covariates resulted in large overestimates in Missouri; however, in all other sites, estimates from both models were comparable. The p-values are based on a test of the difference in the participation rates for households in the treatment group compared to households in the comparison group. The null hypothesis being tested is that the difference in the participation rates is zero.

Exhibit 5D.3.2   Summer Impact Estimates for Participation in SNAP, by Site

Site	n	Treatment	Control	Difference	SE	p-value
All sites	5193	67.37	63.85	3.52***	1.26	0.005
Connecticut	1108	65.33	60.89	4.43*	2.42	0.067
Michigan	862	69.75	61.81	7.95**	3.69	0.031
Missouri	1187	67.20	65.69	1.50	2.49	0.546
Oregon	1080	86.28	81.33	4.95***	1.27	<0.001
Texas	956	51.64	55.46	-3.82	3.36	0.255

Source: SEBTC, Summer Survey, 2011

Note: The p-values are based on a test of the difference in the participation rates for households in the treatment group compared to households in the comparison group. The null hypothesis being tested is that the difference in the participation rates is zero.

The analysis of impacts by site was done separately for each site. The covariates were not constrained to have the same relationship with the outcome in each site and in the pooled analysis. For this reason, the overall impact estimate is not a weighted average of the within-site impact estimates.

*p<.10 **p<.05 ***p<.01

Exhibit 5D.3.2.a   Change in SNAP status, by Treatment Group Status, by Site, and by SEBTC Program Model (WIC or SNAP)

	Number (%) of Households that Began Receiving SNAP After Spring Interview	% of Households that Began Receiving SNAP
All sites	319 (7.8%)	
Treatment	230 (10.5%)	67.2%
Control	89 (5.1%)	32.8%
CT (SNAP model)	43 (4.9%)	
Treatment	35 (7.5%)	75.4%
Control	8 (2.4%)	24.6%
MI (WIC model)	98 (11.1%)	
Treatment	63 (12.9%)	58.2%
Control	35 (9.3%)	41.8%
MO (SNAP model)	81 (11.4%)	
Treatment	66 (16.6%)	72.0%
Control	15 (6.3%)	28.0%
OR (SNAP model)	55 (6.0%)	
Treatment	43 (10.0%)	83.1%
Control	12 (2.0%)	16.9%
TX (WIC model)	42 (5.4%)	
Treatment	23 (5.4%)	50.1%
Control	19 (5.4%)	49.9%
SNAP sites	179 (7.5%)	
Treatment	144 (11.3%)	75.8%
Control	35 (3.6%)	24.2%
WIC sites	140 (8.3%)	
Treatment	86 (9.2%)	55.5%
Control	54 (7.3%)	44.5%

Source: SEBTC, Spring and Summer Surveys, 2011

Exhibit 5D.3.3   Summer Impact Estimates for Participation in WIC, by Site

Site	n	Treatment	Control	Difference	SE	p-value
All sites	5205	24.63	22.07	2.57**	1.07	0.016
Connecticut	1112	15.76	16.72	-0.96	1.87	0.609
Michigan	866	19.34	19.15	0.19	2.99	0.950
Missouri	1190	40.97	29.81	11.17***	2.42	<0.001
Oregon	1083	27.13	26.91	0.22	2.10	0.917
Texas	954	14.07	12.98	1.10	1.34	0.413

Source: SEBTC, Summer Survey, 2011

Note: The p-values are based on a test of the difference in the participation rates for households in the treatment group compared to households in the comparison group. The null hypothesis being tested is that the difference in the participation rates is zero.

The analysis of impacts by site was done separately for each site. The covariates were not constrained to have the same relationship with the outcome in each site and in the pooled analysis. For this reason, the overall impact estimate is not a weighted average of the within-site impact estimates.

*p<.10 **p<.05 ***p<.01

Exhibit 5D.3.3a Change in WIC status, by Treatment Group Status, by Presence of a Child under Age 5, by Site, and by SEBTC Program Model (WIC or SNAP)

	Number (%) of Households that Began Receiving WIC after Spring Interview	% of Households that Began Receiving WIC	% of Households with a Child < 5
All sites	160 (3.74%)		46.78
Treatment	113 (4.81%)	64.33	30.94
Control	47 (2.67%)	35.66	75.91
CT (SNAP model)	8 (1.33%)		70.00
Treatment	3 (0.64%)	23.98	17.14
Control	5 (2.03%)	76.02	86.63
MI (WIC model)	83 (7.78%)		46.68
Treatment	59 (9.28%)	59.77	27.01
Control	24 (6.27%)	40.23	75.95
MO (SNAP model)	19 (3.54%)		61.96
Treatment	15 (5.51%)	77.74	55.37
Control	4 (1.57%)	22.26	84.97
OR (SNAP model)	13 (1.33%)		60.93
Treatment	7 (1.23%)	46.29	52.24
Control	6 (1.43%)	53.71	66.91
TX (WIC model)	37 (4.73%)		23.30
Treatment	29 (7.42%)	78.19	15.19
Control	8 (2.06%)	21.81	60.71
WIC sites	120 (6.25%)		38.18
Treatment	88 (4.15%)	33.24	21.81
Control	32 (8.35%)	66.76	72.86
SNAP sites	40 (2.07%)		63.50
Treatment	25 (2.46%)	59.46	51.52
Control	15 (1.68%)	40.54	80.50

Source: SEBTC, Spring and Summer Surveys, 2011

Exhibit 5D.3.4: Summer Impact Estimates for Whether Child's Household Paid for Lunch, by Site

Site	n	Treatment	Control	Difference	SE	p-value
All sites	5117	93.32	91.47	1.85**	0.91	0.042
Connecticut	1093	91.61	91.01	0.60	2.03	0.769
Michigan	848	78.14	74.38	3.75	4.56	0.411
Missouri	1174	92.59	89.17	3.42*	2.01	0.089
Oregon	1072	95.43	90.74	4.69***	1.74	0.007
Texas	930	98.16	98.57	-0.41	0.71	0.566

Source: SEBTC, Summer Survey, 2011

Note: The p-values are based on a test of the difference between treatment households and control households in the percentage that paid for the child's lunch. The null hypothesis being tested is that the difference is zero.

The analysis of impacts by site was done separately for each site. The covariates were not constrained to have the same relationship with the outcome in each site and in the pooled analysis. For this reason, the overall impact estimate is not a weighted average of the within-site impact estimates.

*p<.10 **p<.05 ***p<.01

Appendix 6A

Cost Study Assumptions

The following details the assumptions made to distinguish pre-benefit period administrative costs from benefit period administrative costs for each of the demonstration sites.

6A.1 Connecticut

The Connecticut site presented administrative costs divided by quarter, distinguishing between start-up and ongoing costs. Costs labeled as start-up are counted as occurring during the pre-benefit period and costs labeled ongoing are counted as occurring during the benefit period.

6A.2 Oregon

The Oregon site presented administrative costs divided by quarter (Q). Non-grant labor costs were reported by month. In Q1, start-up costs and ongoing costs were distinguished from one another, with all administrative costs labeled as start-up. In subsequent quarters, start-up and ongoing costs were not differentiated. Therefore, time period is used to distinguish pre-benefit and benefit period costs. All non-labor costs and grant labor costs reported in Q1 and Q2 are counted as pre-benefit and all non-labor costs and grant labor costs reported in Q3 and Q4 are counted the as benefit period. All non-grant labor costs reported from January – May are counted as pre-benefit costs and those reported from June – December are counted as benefit period costs.

6A.3 Michigan

The Michigan site presented subcontractor costs by quarter and divided the state administrative costs by pre-benefit and benefit period. State agency administrative costs are reported as they were by the grantee. Subcontractor costs reported in Q1 and Q2 are counted as pre-benefit and those reported in Q3 are counted as benefit period.

6A.4 Missouri

The Missouri site reported costs as start-up and ongoing, but did not divide by quarter. The grantee's budget analyst indicated that start-up costs were those incurred prior to May 2011, excluding data entry work required to administer benefits throughout the demonstration. All data entry was counted as start-up regardless of when it was completed. The community partner, LINC, reported costs by quarter and by start-up versus ongoing. The LINC comptroller indicated that the definition used for start-up costs were onetime costs and the definition of ongoing costs were those that would need to be repeated in

subsequent years. Monthly invoices were provided by the EBT contractor and distinguished processing fees from development costs.

To divide pre-benefit and benefit period costs, costs reported by the state agencies and the SFAs as start-up are counted as pre-benefit and costs reported as ongoing are counted as benefit period. LINC's costs incurred during Q1 and Q2 are counted as start-up costs and those incurred during Q3 are counted as ongoing costs, excluding "Professional Program Support" costs labeled as "ongoing" in Q2. Ongoing professional program support costs resulted from a hotline available to families throughout the summer and were therefore counted as benefit period costs. The EBT vendor's development costs are counted as pre-benefit and monthly processing fees are counted as benefit period costs.

6A.5 Texas

The Texas site reported costs divided by quarter and start-up versus ongoing. The cutoff for startup and ongoing used by Texas appears to be in line with the beginning of the benefit period. Therefore, startup costs are counted as pre-benefit period costs and ongoing costs are counted as benefit period costs.

Site-Level Cost Analysis Details

Exhibit 6B.1   Connecticut

	Pre-Benefit Period			Benefit Period			
	Grant Funds ($)	Non-Grant Funds ($)	Total Start-up ($)	Grant Funds ($)	Non-Grant Funds ($)	Total Benefit Period ($)	Total ($)
State Agencies							
Labor Costs	-	38,876	38,876	5,572	25,410	30,982	69,858
Other Direct Costs[a]	-	544	544	357	700	1,057	1,601
Total State Agency Costs	-	39,420	39,420	5,928	26,110	32,039	71,459
SFAs			-			-	-
Labor Costs	-	12,170	12,170	-	-	-	12,170
Other Direct Costs[b]	32,018	-	32,018	-	-	-	32,018
Total SFA Costs	32,018	12,170	44,188	-	-	-	44,188
EBT Contractors			-			-	-
EBT Contractor	67,275	-	67,275	7,225	-	7,225	74,500
EBT Card Vendor	17,900	-	17,900	16	-	16	17,916
Total EBT Contractor Costs	85,175	-	85,175	7,242	-	7,242	92,417
EHC!			-			-	-
Labor Costs	-	2,063	2,063	-	556	556	2,619
Total Community Partner Costs	-	2,063	2,063	-	556	556	2,619
TOTAL COSTS	**117,193**	**53,653**	**170,846**	**13,170**	**26,667**	**39,837**	**210,683**

Note: Numbers may not sum due to rounding.

[a]Translation and duplication.

[b]Printing and mailing.

Exhibit 6B.2   Michigan

	Pre-Benefit Period			Benefit Period			
	Grant Funds ($)	Non-Grant Funds ($)	Total Start-up ($)	Grant Funds ($)	Non-Grant Funds ($)	Total Benefit Period ($)	Total ($)
MDE & WIC							-
Labor Costs	16,385	-	16,385	12,695	-	12,695	27,493
Total State Agency Costs[a]	16,385	65,928	82,313	12,695	42,923	55,618	137,931
GRPS							-
Labor Costs	6,677	-	6,677	11,317	-	11,317	17,994
Other Direct Costs[b]	4,041	-	4,041	-	-	-	4,041
Total GRPS Costs	10,718	-	10,718	11,317	-	11,317	22,035
Other Contractors and Partners							
NDG[c]							
Total NDG Costs	200,238	-	200,238	13,902	-	13,902	214,141
3 Sigma[d]							
Total 3 Sigma Costs	174,160	-	174,160	49,190	-	49,190	223,350
ACS[e]							
Total ACS Costs	51,300	-	51,300	8,717	-	8,717	60,017
Loeffler Associates							
Labor Costs	16,110	-	16,110	9,248	-	9,248	25,358
Other Direct Costs	209	-	209		-	-	209
Total Loeffler Associates Costs	16,319	-	16,319	9,248	-	9,248	25,566
HealthRite[f]							
Total HealthRite Costs	20,000	-	20,000	1,000	-	1,000	21,000
Anr[g]							
Total Anr Costs	12,000	-	12,000	-	-	-	12,000
Total Contractor/Partner Costs	474,017	-	474,017	82,057	-	82,057	556,074
Total Costs	**501,120**	**65,928**	**567,048**	**106,069**	**42,923**	**148,992**	**716,040**

[a]Indirect costs were included, but not enough information to break them out.

[b]Printing, mailing letters, and refreshments.

[c]Project management.

[d]Eligibility system development.

[e]EBT Card Issuance, benefit issuance and redemption.

[f]Website, Handouts, and food list design.

[g]Video Production.

Exhibit 6B.3   Missouri

	Pre-Benefit Period			Benefit Period			
	Grant Funds ($)	Non-Grant Funds ($)	Total ($)	Grant Funds ($)	Non-Grant Funds ($)	Total Benefit Period ($)	Total ($)
DHSS & DSS							
Labor Costs	11,198	29,892	41,089	51,183	17,254	68,437	109,527
Other Direct Costs[a]	206	-	206	-	400	400	606
Indirect Costs[b]	-	1,962	1,962	-	3,270	3,270	5,231
Total State Agency Costs	11,403	31,853	43,257	51,183	20,924	72,107	115,364
SFAs							
Labor Costs	-	1,673	1,673	-	-	-	1,673
Total SFA Costs	-	1,673	1,673	-	-	-	1,673
EBT Vendor Cost							
Total EBT Vendor Costs	111,612	-	111,612	4,063	-	4,063	115,675
LINC							
Labor Costs	22,636	17,621	40,257	3,900	6,754	10,654	50,911
Other Direct Costs[c]	17,454	1,580	19,034	1,248	160	1,408	20,442
Indirect Costs	-	2,589	2,589	-	732	732	3,321
Total LINC Costs	40,090	21,790	61,880	5,148	7,646	12,794	74,674
TOTAL COSTS	**163,105**	**55,316**	**218,422**	**60,394**	**28,570**	**88,964**	**307,386**

[a]Travel and phone line for conference calls.

[b]Indirect cost rate estimated at 4.75% of state costs.

[c]Includes printing, purchase orders, and translation.

Exhibit 6B.4   Oregon

	Pre-Benefit Period			Benefit Period			
	Grant Funds ($)	Non-Grant Funds ($)	Total Start-up ($)	Grant Funds ($)	Non-Grant Funds ($)	Total Benefit Period ($)	Total ($)
State Agencies							
Labor Costs	18,083	108,879	126,963	10,878	84,147	95,025	221,988
Other Direct Costs[a]	57,039	-	57,039	8,288	-	8,288	65,327
Indirect Costs	8,639	-	8,639	9,301	-	9,301	17,940
Total State Agency Costs	83,761	108,879	192,640	28,467	84,147	112,614	305,254
SFAs							
Labor Costs	1,326	-	1,326	-	-	-	1,326
Other Direct Costs[b]	3,545	-	3,545	-	-	-	3,545
Total SFA Costs	4,872	-	4,872	-	-	-	4,872
EBT Vendor							
Total EBT Vendor Costs[c]	-	-	-	1,701	-	1,701	1,701
Total Costs	**88,633**	**108,879**	**197,512**	**30,169**	**84,147**	**114,316**	**311,827**

Note: Numbers may not sum due to rounding.

[a] EBT coding, postage, printing, and translation.

[b] Supplies and postage.

[c] Oregon could not separately report their EBT contractor's development costs for SEBTC, as these costs were not charged to the grant, but to the contractor's existing contract with the State

Exhibit 6B.5   Texas

	Pre-Benefit Period\			Benefit Period			
	Grant Funds ($)	Non-Grant Funds ($)	Total Start-up ($)	Grant Funds ($)	Non-Grant Funds ($)	Total Benefit Period ($)	Total ($)
State Agencies							
Texas Dept. of Agriculture (TDA)							
Labor Costs	9,714	-	9,714	5,609	-	5,609	15,323
Other Direct Costs[a]	4,100	-	4,100	3,095	-	3,095	7,195
Indirect Costs[b]	4,516	-	4,516	2,336	-	2,336	6,852
Total TDA Costs	18,330	-	18,330	11,040	-	11,040	29,370
Texas Dept. of State Health Services (TDSHS)							
Labor Costs	51,144	-	51,144	5,293	-	5,293	56,437
Other Direct Costs[c]	-	-	-	6,770	-	6,770	6,770
Indirect Costs	-	-	-		-	-	25,943
Total TDSHS Costs[d]	86,341	-	86,341	19,302	-	19,302	131,585
Total State Agency Costs	104,671	-	104,671	30,342	-	30,342	160,956
Ysleta Independent School District (YSID)							
Labor Costs	2,757	-	2,757	-	-	-	2,757
Other Direct Costs[e]	1,613	-	1,613	-	-	-	1,613
Indirect Costs	-	-	-	-	-	-	-
Total YISD Costs	4,370	-	4,370	-	-	-	4,370
Other Contractors							
West Texas Food Bank (WTFB)							
Labor Costs	45,673	11,400	57,073	45,673	10,277	55,949	113,022
Other Direct Costs[f]	3,925	1,110	5,035	9,464	2,810	12,274	17,309
Total WTFB Costs[d]	49,598	12,510	62,108	66,711	13,086	79,797	141,906
Solisystem							
Total Solisystem Costs	58,650	-	58,650	-	-	-	58,650
Total Other Contractor Costs	108,248	12,510	120,758	66,711	13,086	79,797	200,556
TOTAL COSTS	**217,289**	**12,510**	**229,799**	**97,053**	**13,086**	**110,139**	**365,881**

Note: Numbers may not sum due to rounding.

[a]Transportation, lodging, meals, and text messaging services.

[b]Applied to TDA staff salaries at a rate of .5266 in FY 2011 and .5815 in FY 2012.

[c]EBT cards, training materials and travel.

[d]Insufficient detail to show costs by component.

[e]Mailing services and supplies.

[f]Office space, computers, training equipment, office supplies, event planner, and event hall.