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Summer Electronic Benefits Transfer for Children (SEBTC) Demonstration: Evaluation Findings for the Full Implementation Year

2012 Final Report

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Summer Electronic Benefits Transfer for Children (SEBTC) Demonstration: 2012 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 2011, 8.0 million households with children were food insecure in the U.S.[1] (one in five such households) and nearly half of these, 3.9 million, included children who were food insecure at some time during the year (Coleman-Jensen et al., 2012). Nearly 8.6 million children lived in households with food-insecure children, and 0.8 million children lived in households with very low food security among children (VLFS-C).

When school is in session, the Food and Nutrition Service (FNS) of the U.S. Department of Agriculture (USDA) funds free and reduced-price breakfasts (the School Breakfast Program, SBP) and lunches (the National School Lunch Program, NSLP). To address food needs in the summer, when school is out of session and these programs are not operational (or operate on a much reduced scale), the Summer Food Service Program (SFSP) provides meals and snacks to children in low-income areas where at least half of the children come from families with incomes eligible to receive the NSLP or 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, 2012a). Many communities also provide other types of food assistance and children's programs during the summer months to meet the nutrition needs of low-income children. However, locations and resources are limited, so there are still gaps in many communities.

As part of its efforts to end child hunger, FNS 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 Demonstrations, one component of which is the Summer Electronic Benefits Transfer for Children (SEBTC). FNS contracted with a team composed of 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 from pre-kindergarten through 12th grade who are certified for FRP school meals in the demonstration school food authorities (SFAs).[3] The amount of the benefit—an approximately $60 value per month per child in the

[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. SFSP meals are available free to any child at an open site and at an enrolled site where at least half are eligible for FRP school meals.

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

household—is comparable to the cost of free lunches plus breakfasts under the NSLP and SBP.[4] 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.[5]

The benefit is administered using either the State's existing EBT system for WIC or the EBT system for 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 only purchase specific quantities of specific foods based on the existing WIC food packages, and only at WIC-authorized retailers in the State where they were issued. The WIC SEBTC package was specified by FNS based on existing WIC foods prescriptions 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 contrast, in SNAP-model sites, participants can purchase any food which could be purchased under SNAP. 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 of 2011, five grantees implemented the SEBTC demonstration, offering the SEBTC benefit to 12,500 eligible children in a "proof of concept" year, during which the feasibility of the program model was tested. Three evaluation reports provide findings for 2011 related to implementation of SEBTC, as well as impacts on very low food security among children and other outcomes (Bellotti et al., 2011; Briefel et al., 2011; Collins et al., 2012).

Summer 2012 was the full implementation year of SEBTC. In 2012, 10 grantees participated in the SEBTC demonstration, which was implemented in 14 sites (four grantees operated two sites). Together, 10 grantees offered the benefit to over 65,000 eligible children. The grantees included Cherokee Nation, Chickasaw Nation, Connecticut (two sites), Delaware, Michigan (two sites), Missouri (two sites), Nevada, Oregon (two sites), Texas, and Washington. 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, SFAs, community organizations, and private contractors to help with planning and management. Sites varied widely on several dimensions including geographic size, degree of urbanicity, number of participating SFAs, and racial and ethnic composition of the participating population.

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[4] In 2012, the nationally estimated dollar value of the WIC food package, using Nielson price estimates, was $53. The actual average value of the WIC food packages, using average prices of the food package items from the sites' 2012 EBT data, ranged from $53.39 to $74.91, depending on the site. See Appendix 1A for the 2012 national estimated food package costs, plus the actual cost in the sites in summer 2012, as well as FNS' considerations when developing the SEBTC WIC package.

[5] More information on these evaluations and projects can be found on the FNS website at http://www.fns.usda.gov/ora/menu/DemoProjects/SummerFood/SEBTC.htm.

This report provides the results for the evaluation of the SEBTC Demonstration in its second year. A prior report (Briefel et al., 2012) provides details about implementation of SEBTC through the end of summer 2012

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 whether and how frequently children ate certain foods and beverages. 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

Given an extremely short timeline, as well as budgetary and other pressures on the State governments, 7 of the grantees, operating 9 of the 14 sites, were able to obtain consent from at least the target number of children and families needed to be part of the demonstration and evaluation (i.e., receive SEBTC benefits or be in the control group). Many grantees found identifying eligible households and obtaining consent from parents and guardians a major challenge. In many sites, difficulties were caused by incomplete or inaccurate data from school systems, limited time for the consent process, and limited communication with parents to encourage them to return consent forms in some of the sites.

Nine of the sites each provided benefits to about 5,300 children. The other five sites did not achieve their consent targets and provided benefits to between 2,500 to 4,000 children,

depending on the site. As a result, in 2012, a total of 66,772 children from 36,956 households were issued SEBTC benefits in summer 2012.

Among the households that were issued benefits, 90% used their benefits at least once during the demonstration. 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 77% of benefits issued for the summer. For the households that *participated* at all, i.e., made at least one SEBTC purchase, the mean amount *redeemed* was 86% of benefits issued. 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, ranging from 91% to 98%. The WIC-model States had substantially lower mean redemption rates, ranging from 50% to 67%. In terms of SEBTC WIC foods, participating households redeemed higher proportions of milk, cheese, eggs, and juice (between 79% and 82% of these items were redeemed) and relatively lower levels of whole grains, beans or peanut butter, and fish (between 61% and 69% redeemed).

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 22% to 91%, with rates being substantially 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 in the Study

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 $1,663, with 3% reporting no income in the previous 30 days. More than seven of 10 households had monthly incomes below the federal poverty line. In contrast, in 2011, 18% of families with related children under 18 had incomes below the federal poverty line (U.S. Census Bureau, 2012). Seventy-one percent of households reported at least one employed adult.

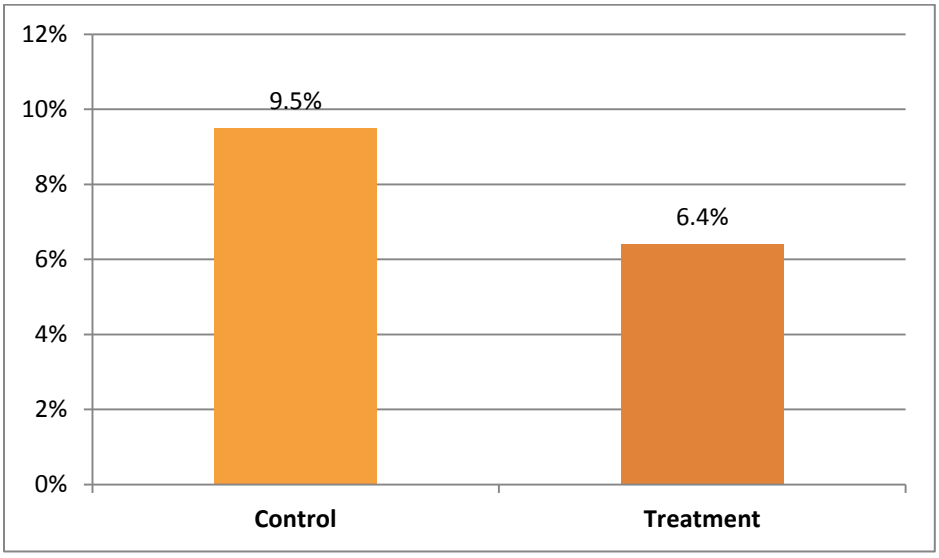
As other evidence of disadvantage relative to the national population, nearly two-thirds of the households (61%) reported receiving SNAP benefits in the spring, prior to when SEBTC began and over one-fifth (21%) reported receiving WIC. Nineteen percent reported using food pantries, kitchens, or other emergency food services at baseline prior to when SEBTC began. During the summer, only 12% of households (estimates using the control group only) reported that their children received any source of federal nutrition program for children during the

summer, including the school lunch program, school breakfast program, SFSP, or the summer backpack program.

Impact on Very Low Food Security among Children (VLFS-C)

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 2012. Averaging across all sites, SEBTC significantly reduced VLFS-C in the summer of 2012 by 3.1 percentage points, from 9.5% of children in the control group, which did not receive SEBTC, to 6.4% of children in the treatment group, which did receive the benefit (see Exhibit E.1). Thus, SEBTC eliminated VLFS-C for almost one-third of the children (33%) who would otherwise have experienced it. This statistically significant ($p<0.0001$) finding constitutes unequivocal evidence that SEBTC achieved its primary goal of reducing VLFS-C, on average, across the 14 sites. This impact on VLFS-C is robust to alternative measures of food security and subsamples.

Exhibit E.1 Impact on Food Security Among Children in Summer 2012: Prevalence Rates for Very Low Food Security Among Children



Source: SEBTC, Summer Survey, 2012 (n=27,092).

Difference=-3.09; SE=0.51; p-value=<0.0001.

The data show little evidence that impacts on VLFS-C differ across subgroups, despite large sample sizes. Notably, although there were higher participation and redemption rates in SNAP model sites compared to WIC model sites, the study did not find a resulting differential impact by program model. The study also found no differential impact by households' poverty status, or SNAP participation in spring 2012. Impacts were shown to be larger, however, for active consent sites, for households that had VLFS-C in the spring, for households with three or more children, and for households with adolescents.

The level of VLFS-C in the control group, which did not receive SEBTC, worsened between spring and summer, from 8.6% to 9.9%. Looking at the related general measure of food insecurity among children (food insecurity *or* very low food security), the prevalence rate did not change

significantly between spring and summer, from 45.3% in the spring to 45.7% in the summer in the control group.

As is common with this type of research design, SEBTC involved random assignment within 14 purposively selected sites. Findings should not be extrapolated to the nation as a whole since the selected sites are not representative of the country. For example, levels of food insecurity during the school year in the SEBTC full implementation sites were considerably higher than national estimates for similar households (i.e., those with school-age children and incomes below 185% of FPL). The SEBTC 2012 spring sample (Briefel, et. al., 2012) had a VLFS-C rate of 9.0%; for 2012; the corresponding national estimate is 2.2% (Coleman-Jensen et al., 2012).

While the SEBTC results cannot necessarily be generalized, it is useful to note that in the full implementation year, the study found positive impacts in the desired direction on VLFS-C in all but one of the 14 communities selected by grantees (although site-level impacts were not always statistically significant). Similarly, in the POC year, impacts were in the desired direction in four of the five POC sites. These communities were presumably targeted for the SEBTC intervention because grantees perceived substantial need and because they believed that SFAs and other community partners would be able to help them implement SEBTC successfully. The sites exhibited a wide range of characteristics, including, among many others, diversity in racial and ethnic composition, level of urbanicity, and community levels of poverty. The study findings thus provide evidence of the potential success of SEBTC in many types of communities. However, it is important to proceed with care in expecting similar findings in some types of communities, particularly those in which there are lower levels of perceived need and/or where community organizations may not have the capacity to implement SEBTC effectively.

Other Impacts of SEBTC

SEBTC also showed some impacts on children's food consumption (Exhibit E.2). Based on responses to the summer survey, children in households with SEBTC ate more fruits and vegetables, whole grains, and dairy foods; while consuming less added sugars from sugar-sweetened beverages. There was no impact on consumption of overall added sugars or nonfat/low-fat milk. These impacts were present for sites that used both the SEBTC-SNAP models and the SEBTC-WIC model, but were much larger for the WIC model.

Exhibit E.2 Impact of SEBTC on Children's Food Consumption of Fruits and Vegetables, Whole Grains, and Dairy Products in Summer 2012

Outcome	Sample Size	Control Group Consumption	Treatment Group Consumption	Impact on Food Consumption (T/C Difference)	SE	p-Value	% Change
Fruits and vegetables (servings per day)[a]	25,956	2.85	3.21	0.36***	0.06	<.0001	12.6%
Whole grains (servings per day)[b]	26,220	1.69	2.19	0.50***	0.08	<.0001	29.6%
Dairy products (servings per day)[a]	26,283	2.27	2.49	0.22***	0.04	<.0001	9.7%

Source: SEBTC, Summer Survey, 2012.

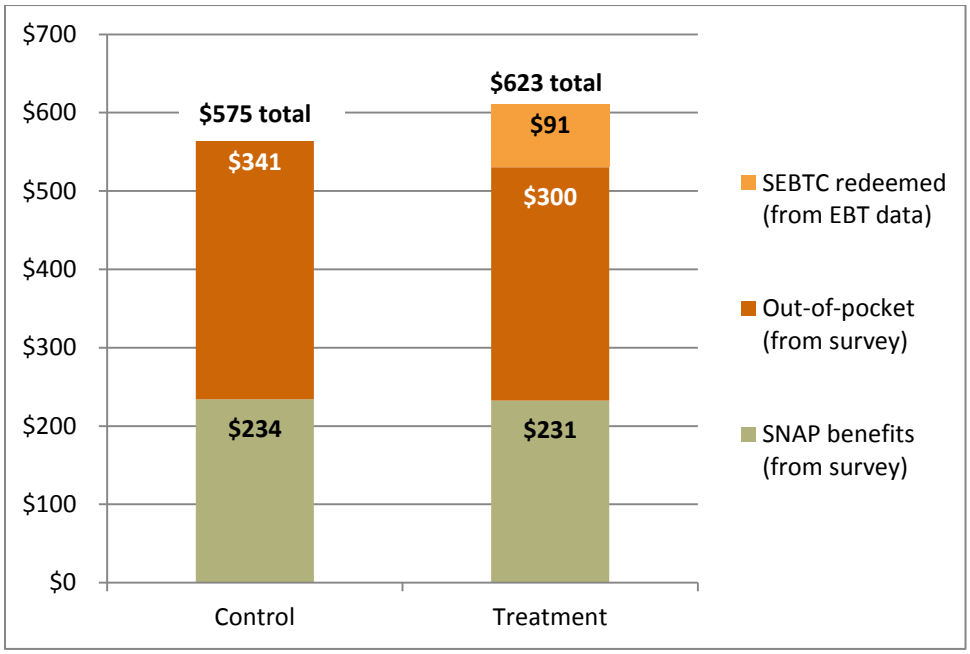
"% Change" is impact as a percent of control group level.

[a] Daily servings of fruits and vegetables and dairy are measured in cup equivalents and in ounce equivalents for whole grains, as defined by the 2010 *Dietary Guidelines for Americans.* One fruit and vegetable 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. One dairy serving is 1 cup milk, fortified soy beverage, or yogurt; 1½ ounces natural cheese; or 2 ounces of processed cheese. Dairy products include milk products in pizza and frozen desserts.

[b] Whole grain servings are measured in ounce equivalents. One whole grain serving is 1 one-ounce slice bread; 1 ounce uncooked pasta or rice; 1/2 cup cooked rice; pasta; or cereal; 1 6-inch diameter tortilla; 1 5-inch diameter pancake; or 1 ounce ready-to-eat cereal.

The study also showed that SEBTC caused increases in total food expenditures (including the SEBTC benefit) by $48 per household per month (Exhibit E.3). This increase is the net result of redemption of the SEBTC benefit of $91, less a smaller decline in out-of-pocket household food expenditures ($43). Thus each dollar of SEBTC benefit redeemed led to a 53 cent increase in total household food expenditures. This net increase in food expenditure is considerably higher than standard estimates that a dollar of SNAP benefits leads to an increase in food expenditures of about 30 cents (Hanson, 2010).

Exhibit E.3 Impact of SEBTC on Monthly Household Food Expenditures in Summer 2012



Source: SEBTC, Summer Survey and SEBTC redemption data, 2012 (n=25,767).

Note: Numbers may not add due to rounding.

SEBTC had no impact on SNAP participation, but slightly decreased participation in SFSP (from 8% to 7%) and their use, during the summer, of food pantries and other emergency food distribution sites (from 14% to 12%). Children receiving SEBTC benefits were less likely to receive free lunches from any source compared to children who did not (16% vs. 19% for free lunch at least one day per week).

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.

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 30% of total costs (i.e., benefit costs plus administrative costs), but the proportions varied considerably across sites, perhaps for a variety of factors, including economies of scale for grantees operating more than one site, type of model being implemented (SEBTC WIC versus SEBTC SNAP), and the fact that some grantees had already incurred start-up costs in 2011, as well factors related to each site's unique circumstances.

Because there are cost data from 14 sites, which vary on many dimensions, any conclusions about the relative costs of different approaches must be made with caution.

In terms of dollar amounts, overall administrative costs of implementing the SEBTC demonstration also ranged greatly, from $101,764 to $637,649 per site (see Exhibit E.4). The total cost of the 2012 demonstration (administrative plus benefit cost) ranged from $496,872 to $1,346,159 per site.

Exhibit E.4 Total Costs (Administrative + Benefits)

	Total administrative costs (grant + non-grant)		Benefits redeemed		
	$	% of total	$	% of total	Total Cost ($)
Cherokee Nation	231,623	30%	539,232	70%	770,855
Chickasaw Nation	637,649	47%	708,510	53%	1,346,159
Connecticut POC	111,059	14%	667,813	86%	778,872
Connecticut Expansion	101,764	20%	395,108	80%	496,872
Delaware	343,395	29%	824,399	71%	1,167,795
Michigan POC	192,424	22%	664,368	78%	856,792
Michigan Expansion	335,643	28%	845,719	72%	1,181,363
Missouri POC	281,651	25%	830,901	75%	1,112,552
Missouri Expansion	292,448	27%	801,852	73%	1,094,301
Nevada	320,599	34%	633,588	66%	954,187
Oregon POC	245,525	29%	596,411	71%	841,935
Oregon Expansion	210,594	26%	604,802	74%	815,396
Texas	335,478	35%	628,253	65%	963,731
Washington	335,872	39%	515,528	61%	851,399
All sites	3,975,724	30%	9,256,484	70%	13,232,208

Source: Cost data from grantees and subgrantees, 2012

Note: Totals may not sum due to rounding.

Over the full summer, the cost per school-aged child (both administrative and benefit cost) in a household redeeming benefits was $201 on average, and ranged from $132 to $253 across sites. Total costs per child issued benefits were higher in SNAP model sites than in WIC-model sites, on average, but this largely reflected higher rates of benefit redemption in SNAP-model sites. Administrative costs per child issued benefits were about 7% higher in WIC-model sites than in SNAP-model sites.

E.4 Next Steps

The findings from SEBTC's 2012 full demonstration year reinforce those from the POC year, both regarding the feasibility of the SEBTC approach and its potential effect on reducing VLFS-C in the summer. In 2013, FNS will add to this body of evidence by evaluating the relative impact of a $30 per eligible child per month benefit compared to the $60 benefit. The 2013 study will take place in six sites in four States, some of which participated in 2011 and 2012 SEBTC demonstrations, and involve approximately 18,000 households representing 32,000 children.

Chapter 1

Introduction

Children's development, health, and well-being depend on access to a safe and secure source of food. In 2011, 8.0 million households with children were food insecure[6] (one in five such households) and nearly half of these, 3.9 million, included children who were food insecure at some time during the year (Coleman-Jensen et al., 2012). Nearly 8.6 million children lived in households with food-insecure children, and 0.8 million children lived in households with very low food security among children (VLFS-C).

To address food 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.[7] 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, 2012a). Many communities also provide other types of food assistance and children's programs during the summer months to meet the nutrition 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 a team composed of 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 second year. For 2011, FNS planned a "proof of concept" (POC) year of the SEBTC to test whether the summer benefit intervention could be implemented successfully by five State grantees, and whether the evaluation, targeting 5,000 households, could be done with fidelity (Briefel et al., 2012; Collins et al., 2012). The full implementation year (2012) expanded the demonstration to 10 State

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

[7] 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.

agencies and a total of 14 sites,[8] and targeted 27,000 households for the evaluation. 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 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 have 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 - VLFS). These levels of food insecurity are assessed based on the report of an adult for both the adult(s) and the children living in the household, and also used to assess the total or full household.

In 2011 the prevalence of food insecurity among households with children and incomes at or below 185% of poverty (and thus eligible for free or reduced-price meals (FRP)) was 40% nationwide, indicating food insecurity among adults or children or both (Coleman-Jensen et al., 2012). 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, 21% of all households with incomes eligible for FRP meals had food insecurity among children, and 2.2% had VLFS-C in 2011. Among households with incomes below the poverty line, 24% had food insecurity among children and 2.8% had VLFS-C (Coleman-Jensen et al., 2012).

Cross-sectional, national data for all households from the 2011 Current Population Survey (CPS) also indicate that the prevalence of food insecurity among children was higher among Hispanic and non-Hispanic black households with children compared to other racial/ethnic or non-Hispanic white households (Coleman-Jensen et al., 2012).[10] The most recent CPS data reported

[8] The term "grantee" refers to the State agency or group of agencies implementing the demonstration. In 2012, two of the 10 grantees are Indian Tribal Organizations (ITOs) with demonstration sites in Oklahoma. For this report, the term "State" or grantee refers to the 10 grantees composed of eight States and two ITOs.

[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, 2012a).

[10] This statement reflects all income groups combined. National data on food insecurity among households with children were not reported by race/ethnicity *and* income subgroups (Coleman-Jensen et al., 2012).

for American Indian/Alaska Native households with children below 185% of the poverty level, based on combined data from 2001-2004, found that 43% had child food insecurity compared to 36% for all other racial/ethnic groups combined (Gordon and Oddo, 2012).

National food insecurity estimates for subgroups defined by household composition, income, *and* race/ethnicity are not usually reported due to small sample sizes and resultant reduced statistical reliability. Further, food insecurity estimates for local communities are primarily based on anecdotal evidence, small studies, and/or different measures. With its large sample size, from 14 sites in nine States, the SEBTC evaluation can contribute important information on the range and variability in households' and children's food insecurity across racial/ethnic, income, *and* geographic subgroups in the U.S. using the standard USDA food security measure.[11]

An in-depth analysis of School Nutrition Dietary Assessment Study-III data on food security provides insights into characteristics of households with food insecurity that included 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. Other local characteristics associated with food insecurity among low-income households with children include higher local housing costs, fuel costs, lack of access to public and private transportation and/or supermarkets and grocery stores (Bartfeld et al., 2010; Webber and Rojhani, 2010). In addition, food insecurity among children tends to be more prevalent in large cities and in nonmetropolitan (largely rural) areas than in the suburban and exurban commuting areas around large cities (Nord, 2009).

Research on seasonal differences in food security among households with children is limited. One analysis of national data from the 1995 through 2001 CPS suggests that food insecurity changes seasonally in States that provide fewer SFSP meals and 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). 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. A parallel analysis[12] found, without

[11] While the study had a 2012 sample size of approximately 27,000 low-income households with school-age children, the 14 sites were not selected to be representative of the country. Nevertheless, the study does provide greater detail about patterns of food security among this at-risk population.

[12] The project team analyzed data from the 1995-2001 CPS with two key differences from the earlier study: (1) restricting the sample to households with annual income not exceeding 130% FPL and with at least one child ages 3 to 17, and (2) using a 30-day measure of child food insecurity as the outcome measure instead of adult VLFS. 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. It was not possible to assess VLFS-C (using the eight child survey items)

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 (*p* value 0.07). After adjustment for covariates in the model, the difference in the spring/summer prevalence of child food insecurity increased slightly from 0.5 percentage points to 0.6 percentage points (*p* value 0.07) (Collins et al., 2012).

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.[13] In July 2011, approximately 9.5% of school-age children who were eligible for SFSP received it (Food Research and Action Center, 2012b).[14] FNS has funded 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 40 days were also tested.[15]

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, 2012a).[16] 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. Nevertheless, logistical and practical considerations 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 sites that may include parks, churches, and recreation centers, finding additional operators and locations to 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. Earlier studies 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, burdensome paperwork, food safety related to the lack of kitchen facilities or

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because of data availability, so an alternate measure was constructed, using five survey items referred to as child food insecurity (Collins et al., 2012).

[13] 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).

[14] Based on July average daily attendance figures for summertime NSLP participation reported by FNS, but not adjusted for absenteeism because summer absentee figures are not available for SFSP as they are for NSLP; the estimate assumes that SFSP accounts for approximately 65% of summer nutrition meals. About 14.6% of eligible children participated in summer nutrition meals in 2011 (Food Research and Action Center, 2012b).

[15] More information on these evaluations and projects can be found on the FNS website at http://www.fns.usda.gov/ora/menu/DemoProjects/SummerFood/Default.htm.

[16] Meals and snacks are also available to persons with disabilities, over age 18, who participate in school programs for people who are mentally or physically disabled. States approve SFSP meal sites as open, enrolled, or camp sites. Open sites operate in low-income areas where at least half of the children come from families with incomes eligible for FRP school meals. Enrolled sites provide free meals to children enrolled in an activity program at the site where at least half of them are eligible for FRP meals. Camps receive payments only for the meals served to children who are eligible for FRP meals.

refrigeration, and parents' concerns about neighborhood safety (Gordon and Briefel, 2003; FNS 2007, 2012). 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 provide resources for households with eligible children to obtain food during the summer. 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.

The 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 during the summer.

The SEBTC benefit is provided to households with children from pre-kindergarten through 12th grade who are certified for FRP school meals in the demonstration school food authorities (SFAs).[17] 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.[18] 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.[19]

The benefit is administered using either a participating State's existing EBT system for WIC or EBT system for SNAP. Grantees worked with their existing EBT vendors, which made necessary modifications to the State's WIC or SNAP EBT systems to administer the benefit. In WIC-model sites, participants could only purchase specific quantities of specific foods based on the existing WIC food packages, and only at WIC-authorized retailers in the State where they were issued.

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

[18] In 2012, the nationally estimated dollar value of the food package, using national Nielson price data, was $53. The actual average value of the food packages, using average prices of the food package items from the sites' 2012 EBT data, ranged from $53.39 to $74.91, depending on the site. Please see Appendix 1A for the 2012 national estimated food package costs, plus the actual average cost for the SEBTC WIC packages in participating sites in summer 2012, as well as FNS' considerations when developing the SEBTC WIC package.

[19] More information on these evaluations and projects can be found on the FNS website at http://www.fns.usda.gov/ora/menu/DemoProjects/SummerFood/SEBTC.htm.

The SEBTC package was specified by FNS based on existing WIC foods prescriptions 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 (see Appendix 1A). The grantees 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 to adjust for local food costs.

Grantees using their SNAP EBT systems for SEBTC implemented either a "SNAP" model or a "SNAP-hybrid" model.[20] 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. In 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 or SNAP-hybrid models, 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.[21]

As a prerequisite for participating in the evaluation, grantees were required to recruit more households than would be necessary to deliver the benefit, in order to conduct a random assignment evaluation. In such an evaluation, some households are randomly assigned to receive the intervention, while those who are not randomly chosen for the intervention serve as the comparison group. Research subjects are advised about such a study and must give consent in order to participate. In the SEBTC evaluation, grantees were given the choice to either use the "active consent" process, by which guardians of eligible children returned forms saying that they wanted to be included in the study, or the "passive consent" process, in which guardians only needed to respond if they did not want to be included. This distinction in the two consent models had implications in terms of implementation of the demonstration, as well as differential impacts on main outcomes, which are described in later chapters.

The demonstration was implemented in two phases. In the initial proof-of-concept (POC) phase in 2011, the demonstration was implemented by five grantees (Connecticut, Michigan, Missouri, Oregon, and Texas) in a total of five sites.[22] In the second year, FNS expanded the size of the demonstration by adding nine new sites and roughly doubling the number of child beneficiaries at each site. In 2012, all but one of the POC grantees (Texas) implemented SEBTC in a second site, and five new grantees (Chickasaw Nation, Cherokee Nation, Delaware, Nevada, and Washington) each had one site (see Exhibit 1.1). Some existing sites added school districts to meet the target size for 2012. In Chapter 2, we provide additional information about the participating grantees, their partner agencies, and SFAs; program model; and consent process.

[20] The impact analysis compared the SEBTC SNAP model (i.e., SNAP and SNAP-hybrid combined) to the SEBTC WIC model (see Chapter 5), but the feasibility of implementation and benefit redemption and usage rates were also compared between the SNAP and SNAP-hybrid models (see Chapter 3).

[21] For a full list of SNAP-approved foods, visit the FNS website at http://www.fns.usda.gov/snap/retailers/eligible.htm.

[22] The term "site" refers to the local areas where the demonstration was implemented.

Exhibit 1.1 Map of SEBTC Demonstration Sites in the Full Implementation Year

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 nutrition status
5. To determine and document the total and component costs of implementing and operating the demonstrations to assess the resources needed for implementation and facilitate comparisons of different operational models

Each research objective is addressed in this Year Two Evaluation Report. An earlier report, "Summer Electronic Benefits Transfer for Children (SEBTC) Demonstration: 2012 Congressional Status Report" (Briefel et al., 2012), presented findings on the first three objectives for the full implementation year. The "Summer Electronic Benefits Transfer for Children (SEBTC) Demonstration: Evaluation Findings for the Proof-of-Concept Year" report (Collins et al., 2012) presented impact, implementation, and cost findings for the five POC grantees for the first year of the demonstration.

1.3.2 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 may well have a similar effect on their behavior as receiving additional cash; i.e., households in the treatment group could use the SEBTC benefit to replace current cash spending on food, though not necessarily a dollar to dollar increase, freeing up resources for non-food expenditures.

However, the literature from SNAP suggests that while households do replace some of what they would have otherwise spent on food with their food assistance benefits, they spend more than they would from increases in other sources of income. Specifically, the literature suggests that each dollar of SNAP benefit appears to increase food expenditures by 26 to 35 cents (Hanson, 2010). This figure is considerably higher than standard estimates that 15 cents of each additional dollar of non-food assistance income are spent on food.[23] 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).[24]

1.3.3 Evaluation Framework for the SEBTC Demonstration

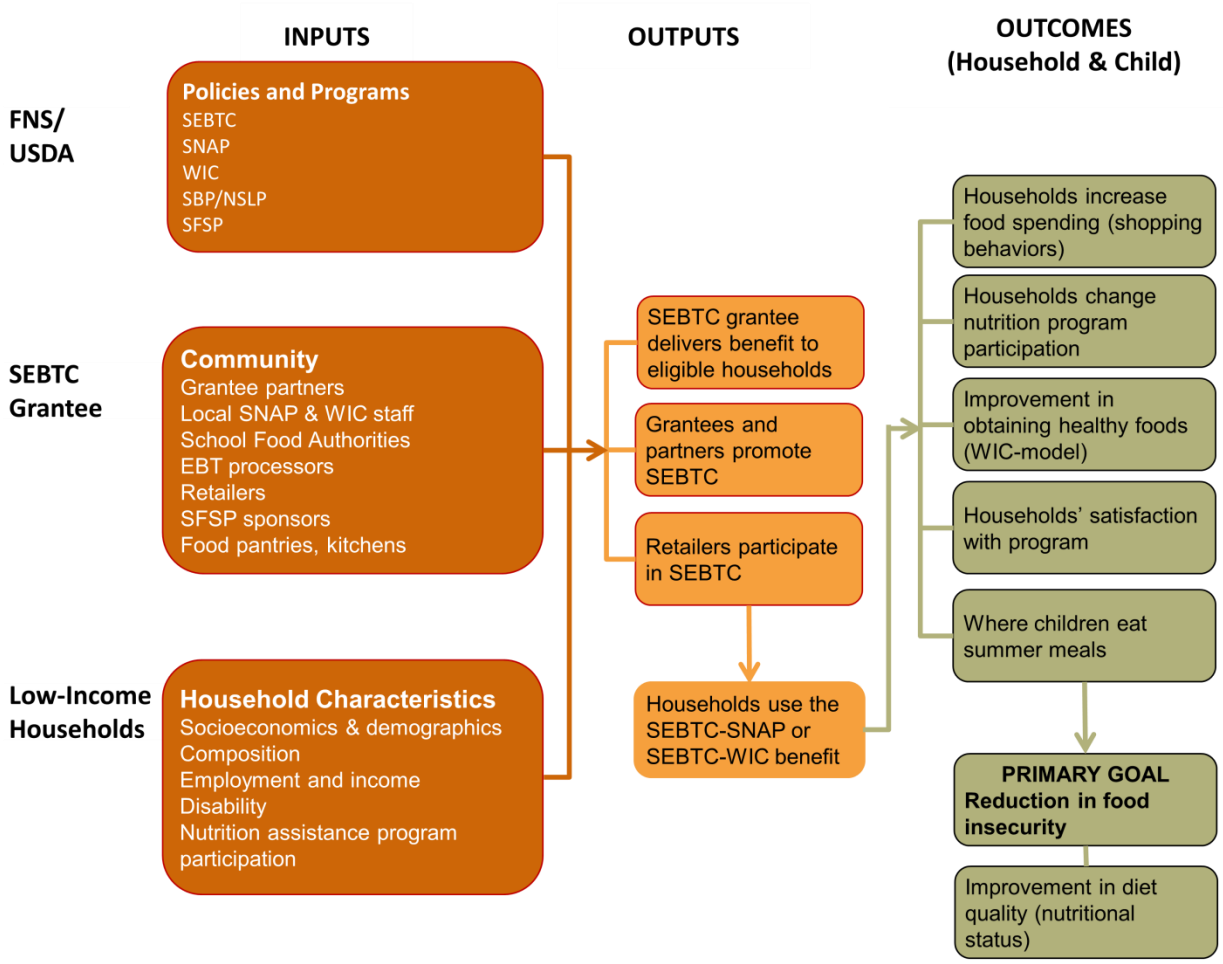
Children's food security and nutrition status are outcomes associated with a complex set of inter-relationships between household resources to obtain adequate and safe foods for all household members, and the policies, nutrition assistance programs, and institutions (e.g., schools, child care facilities) 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 healthful 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).

[23] 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.

[24] 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 with incomes just high enough to be ineligible for SNAP (150% to 250% of FPL).

Exhibit 1.2 illustrates how children's food security and nutrition status is related to nutrition policies and programs, community institutions, and household characteristics. Finally, the exhibit illustrates how the impact of the SEBTC may be determined by these factors. SEBTC provides a benefit to eligible households that may affect 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 there. Children also consume meals at school or summer sites, and other locations outside the home. Ultimately, the availability of (or lack of) food affects children's food security and nutrition 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 nutrition status, and reduce food insecurity among children.

Exhibit 1.2 Logic Model for the SEBTC Evaluation



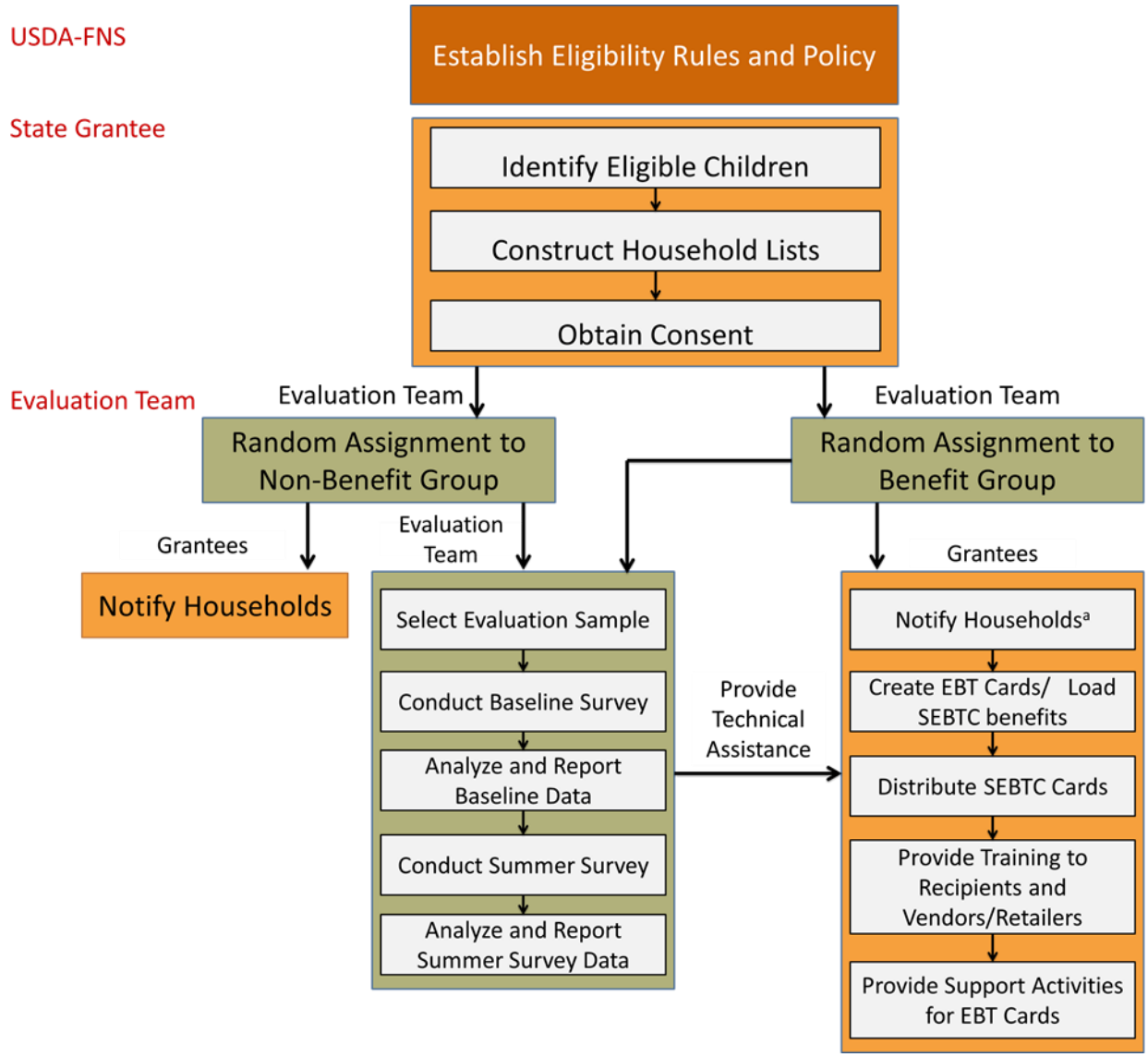
1.3.4 Research Design

This evaluation uses a random assignment design to provide the most credible and rigorous estimates of the impact of the demonstrations. In the full implementation year (2012), FNS provided funding for benefits for up to 75,000 children (5,300 per site). The evaluation team

planned to survey approximately 1,930 households per site, for a total of approximately 27,000 households across all 14 sites. As described below, the household data collection sample was surveyed before the intervention (i.e., during the school year) and again during the intervention (i.e., in the summer).

To accomplish these tasks, FNS, the grantees, and the evaluation team began work in December 2011 to complete a series of tasks related to implementing the demonstration and evaluation before the end of the 2011-2012 school year when SEBTC benefits became available to households. Exhibit 1.3 lays out the flow of activities that had to be accomplished during 2012. First, FNS established eligibility rules and policy, and then participating SFAs had to

Exhibit 1.3 Flow of Activities in 2012 of FNS, Grantees, and Evaluation Team, Post Grant Award



SEBTC = Summer Electronic Benefits Transfer (EBT) for Children

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

identify eligible children, group them into households, and obtain consent to take part in the demonstration and evaluation. Households that had one or more children certified for FRP meals and consented were 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 surveyed the selected households before the end of the school year and again during the summer. These surveys gathered data from eligible households and children on household food security and food expenditures, children's food consumption and eating behaviors as measures of diet quality and nutrition status, as well as other outcome measures. Rigorous estimates of the impacts of the SEBTC were 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 included 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 in 2012 and how the lessons learned in the POC year contributed to 2012 efforts. The evaluation team collected a variety of data from organizations involved in the demonstration. These include information gathered during the team's technical assistance to grantees to implement the demonstration and the evaluation design, stakeholder interviews during a June/July in-depth site visit 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. To the extent feasible, information on non-grant costs of implementing the evaluation was collected in the process study and incorporated into the cost analysis.

1.4 Summary of Findings from the POC Year

As described in the evaluation report for the POC year, referenced above, in summer 2011, five grantees participated in the SEBTC demonstration. 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 SFAs, EBT vendors, community organizations, and private contractors to help with planning and management.

1.4.1 SEBTC Implementation and Use of Benefits in the POC Year

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 SFAs 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. Over the summer, 11,412 children lived in households that redeemed SEBTC benefits, representing 92% of all children issued benefits. Households redeemed a total of $1.6 million in SEBTC benefits, with an average of $235 per household over the summer.

Among the households that were issued benefits in 2011, 90% used their benefits at least once during the demonstration. 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 three SNAP or SNAP-hybrid sites had the highest mean redemption rates among participating households (93% to 98%). The two WIC-model States had substantially lower mean redemption rates (71% in Michigan and 85% in Texas).

As in 2012, SEBTC benefits in 2011 were made available to households on their EBT cards on a monthly basis. While the 2011 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, in 2011, 57% of households exhausted their benefits in at least one summer month, and 35% exhausted their benefits for the summer. Among households that exhausted their benefits, on average, the benefits were spent 10 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.

1.4.2. Households in the Study and Impacts of SEBTC in the POC Year

Given that SEBTC was limited to households of children certified for FRP meals during the school year and that those programs have income requirements, it is not surprising that households that took part in the first year of the SEBTC demonstration were relatively disadvantaged, compared to the national population of households with children under 18. Reported mean household monthly income in the POC year was $1,572, with 4% reporting no income in the past month. Nearly three-fourths of the households (72.6%) had monthly incomes below the federal poverty line,[25] 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).[26] Over two thirds (69.5%) reported at least one employed adult in the household.

Among the group taking part in the demonstration in the five POC sites, SEBTC advanced the demonstration's main goal, reducing children's very low food security in the summer: The prevalence of VLFS-C was reduced from 7.0% in the control group to 5.6% in the treatment group. However, while all additional, exploratory analysis made the evaluation team confident that the direction of the impact is not in question, they concluded that the size of the impact 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.

Analyses of related measures of food insecurity—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. For example, food insecurity among children was reduced from 38% to 31% prevalence by the SEBTC intervention. All of the food security results for the POC year are robust in direction of the impact.

SEBTC also showed some impacts on children's nutrition intake in 2011. 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

[25] 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 four was $22,350 per year (i.e., $1,863 per month) in the 48 contiguous States.

[26] As other evidence of disadvantage relative to the national population, nearly two-thirds of the households (63.8%) reported receiving SNAP benefits, nearly one quarter (23.5%) reported receiving WIC, and 16% reported using food pantries, kitchens, or other emergency food services at baseline prior to when SEBTC began.

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' inability 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.

1.4.3 Costs of SEBTC in the POC Year

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 tasks related to the creation and cleaning of household files for random assignment. This caused some States to spend additional non-grant funds or to use in-kind resources from State staff or partner organizations because States tended to underestimate non-grant costs in their applications.

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 administrative cost of implementing the demonstration ranged from $210,683 in Connecticut to $716,040 in Michigan. Administrative costs funded by the SEBTC grant ranged from $118,801 in Oregon to $607,189 in Michigan.

The total cost of the demonstration (administrative plus benefit costs) ranged from $557,760 in Connecticut to $964,501 in 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. 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 of 2011, 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 sites compared to SNAP model sites.

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 six chapters. Chapter 2 provides an overview of the selected grantees and their partner agencies, describes variations

in the overall program models, and describes the implementation experiences and unanticipated challenges in the full demonstration year. Chapter 3 describes households' use of EBT benefits. Chapter 4 describes characteristics of the study population, and Chapter 5 provides the results from the impact study. Chapter 6 provides the costs of the SEBTC. Finally, Chapter 7 summarizes and discusses key findings based on the full implementation 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 2. To examine the implementation of SEBTC, including approaches used, and the challenges and lessons learned during the demonstrations	What was the process of SEBTC program implementation? What is the feasibility of the SNAP and WIC models based on the 2012 demonstrations?	2
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 nutrition 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 (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? What is the impact of SEBTC on the nutritional status of children? Does this vary by demonstration model, SNAP participation, and household poverty status? How did participation in SEBTC affect household food expenditures? How did participation in SEBTC affect household and children's participation in other nutrition assistance programs, including SNAP, WIC, and SFSP? How did participation in SEBTC affect where children ate meals during the summer?	5

Evaluation Study Research Objectives	Research Questions Addressed in this Report	Chapter in this Report
5. To determine and document the total and component costs of implementing and operating the demonstrations; and to determine the overall costs and facilitate comparisons of different operational models	What were the total costs of SEBTC, including both administrative and benefit costs? What percentage of costs were administrative, overall, by demonstration approach (WIC vs. SNAP), and by site? What were the total administrative costs of SEBTC, overall, by demonstration approach, 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, and 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 was the average and range of costs per school-aged child and per household, overall, by demonstration approach, and by site? How did average costs per child and household vary by approach, by active versus passive consent procedures, and by site? How did administrative costs in the full implementation year compare with costs in the POC year, both for the original POC sites and overall?	6

Chapter 2

Implementation of Summer EBT for Children

In the 2012 full implementation year, 10 grantees received funding to implement SEBTC in a total of 14 sites. As noted in Chapter 1, all five POC sites received a grant in the second year, and all but one of them (Texas) applied for and received funding to implement an additional demonstration in a second area in the State (referred to in the report as an "Expansion" site). FNS selected five additional grantees to implement demonstration sites—three States (Delaware, Nevada, and Washington) and two Indian Tribal Organizations (ITOs/Cherokee Nation and Chickasaw Nation).

As with any new program, the implementation of the SEBTC demonstration involved both successes and challenges. To better understand how the POC and new grantees implemented the SEBTC demonstration, the evaluation team conducted a detailed implementation study. This chapter begins with an overview of the key findings, study methodology, and State and local context in the 14 sites, including the variation among grantees in organizational structures, characteristics of the local areas, and selected SEBTC models. It then turns to the implementation study findings, discussing the consent processes, training and support for households, SEBTC participation rates, and EBT system modifications, as well as other important contextual factors that influenced grantee experiences in the second year of the demonstration.

2.1 Research Questions and Key Findings

2.1.1 Research Questions

The implementation analysis addresses the first two research objectives discussed in Chapter 1: (1) 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, (2) to document the approaches used for SEBTC implementation, along with the challenges and lessons learned.

More specifically, this chapter addresses the research questions, "What was the process of SEBTC program implementation?" and "What is the feasibility of the SNAP and WIC models based on the second year of the demonstrations?" To do so, the chapter describes the following implementation activities:

- Nature of the grantees and demonstration areas

- Timing and methods of informing families about the SEBTC demonstration
- Process for obtaining consent to take part in the SEBTC demonstration and evaluation
- Process for distributing cards to households selected to receive the SEBTC benefit
- Benefit 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
- Challenges encountered and resolved

2.1.2 Key Findings

Key findings from the implementation analysis include:

- Many grantees found identifying eligible households and obtaining consent from parents and guardians a major challenge. In many of the sites, difficulties were caused by incomplete or inaccurate data from school systems, limited time for the consent process, and limited communication with parents to encourage them to return consent forms in active consent sites.
- Despite difficulties, 7 of the grantees, operating 9 of the 14 sites, 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 90% to 97% in sites using passive consent to enlist eligible households (i.e., asking households to take no further action before being given a chance to receive SEBTC) and 23% to 57% in sites using active consent (i.e., asking households to return forms before having a chance to receive SEBTC).
- In the POC sites, the household consent rates were the same or higher in 2012 than in the 2011 year for three of the sites that participated in both years (Michigan, Missouri, and Oregon). They were lower for two sites that participated in 2011 and 2012 (Connecticut and Texas).
- Despite the extremely fast-paced time line and various issues grantees encountered, all 10 grantees recruited households, enrolled them in the SEBTC program, and administered SEBTC benefits during the summer of 2012. Nine of the 14 sites provided benefits to about 5,300 children. The other five sites did not achieve their consent targets and provided benefits to 2,500 to 4,000 children, depending on the site.
- Between 50% and 85% of households that received the SEBTC benefit in 2011, depending on the site, consented to participate again in 2012. In Michigan and Oregon, which used active consent for returning households (i.e., households had to take action to receive the benefit),[27] the consent rates were 50% and 62%. Consent rates in sites using passive consent for returning households (i.e., households needed to take no action) suggest that

[27] Connecticut, a site that generally used active consent, chose to use passive consent with the returning 2011 benefit group, thus only two sites used active consent for this group in 2012.

15% to 25% of the households either moved out of the site or were otherwise no longer eligible for SEBTC in 2012.

- The sites issued SEBTC benefits to a total of 36,956 households with 66,772 children. Among the households that were issued benefits, almost all households -- 89.7% (representing 91.5% of children) -- used their benefits at least once during the summer.
- Coverage estimates were used to estimate the percentage of households that would use SEBTC if it were available to all eligible households and not limited by demonstration or funding constraints. Coverage is estimated by multiplying the household consent rate by the SEBTC participation, or usage rate. This analysis indicates a 50% "coverage rate" (i.e., how many households would participate in the absence of funding constraints) of eligible households participated in 2012, representing 54% of eligible children. The coverage rate ranged from 64% to 91% for sites with passive consent and from 22% to 51% in sites with active consent.
- Each site worked with their EBT processor to close out accounts once the summer was over, which involve "expiring" benefits (i.e., benefits were no longer accessible after a pre-assigned expiration date) and "expunging" funds (i.e., removing unused SEBTC benefits from EBT cards at the end of the summer since unused SNAP benefits carry over from month to month) for SEBTC. The process ran smoothly for all except one site that allowed families to access about $5,000 in benefits (collectively) over a two-day period after benefits should have expired.[28]
- One of the key challenges in issuing the SEBTC benefit was that it necessitated collaboration between two programs that generally operate separately—the National School Lunch Program and either SNAP or WIC. This collaboration required the reconciliation of different federal and State program rules and approaches, such as definitions of households, information required from guardians to participate in programs, and other data requirements.

2.2 Research Methods

The implementation analysis relied on three data sources: (1) documentation from the evaluation team's technical assistance efforts; (2) notes from interviews during site visits conducted in the summer with grantees and their key partners, SFAs, SFSP sponsors, retailers, and EBT processors and notes from calls in October with the grantees and major partners; and (3) written documents, such as grant applications and materials developed by the grantee to obtain consent and notify the community about the demonstration.

The evaluation team gathered information from technical assistance efforts conducted from the start of the demonstration in December 2011 through benefit issuance in May or June 2012. Each grantee was assigned a team to help it implement evaluation requirements. Evaluation team members participated in routine ongoing communication with grantees and their partners. Reams for the five new grantees (Chickasaw Nation, Cherokee Nation, Delaware,

[28] The EBT vendor's process in Washington to flag SEBTC accounts as expired did not work as planned, and participants were able to access benefits for two days past the planned expiration date.

Nevada, and Washington) augmented this correspondence by conducting site visits to provide technical assistance in late December 2011 or early January 2012.

Evaluation teams visited each grantee in summer 2012 to collect in-depth information on the planning, implementation, and early operations of the demonstrations. They also conducted telephone interviews in fall 2012 to discuss project close-out activities. During these site visits, the team conducted interviews with the grantee and all its major partners. The team also conducted interviews with the following:

- EBT vendors
- 30 SFSP sponsors to learn about the availability of other summer feeding programs and their interaction with the SEBTC[29]
- 24 participating retailer organizations were interviewed (to learn about their experiences with SEBTC transactions)[30]
- 51 participating SFAs to learn, in part, about the recruitment and consent process[31]

Finally, to supplement information used from the other data sources, the evaluation team reviewed a range of written documents from the grantees, including grant applications, outreach and marketing materials, consent and notification documents, and materials used to train households on EBT procedures.

The evaluation team members used standardized templates to document interviews with those involved in the demonstration. The information obtained from the interviews and documentation was entered into a database, which was used for cross-site study analysis to identify the key themes and findings presented in this chapter.

2.3 Description of SEBTC Full Implementation Sites

In this section, the State and local context for the 10 grantees implementing SEBTC in 2012 are provided. The variation between grantees across organizational structures, characteristics of

[29] A sample of SFSP sponsors was interviewed in 13 of the 14 sites (no interviews were obtained in Texas due to sponsors' non-responsiveness). Each site team was asked to interview at least two to three sponsors and often SFA interviews were combined with SFSP sponsor interviews. Teams attempted to select a mix of SFSP characteristics to include large and small sponsors (with several or few sites), urban and rural areas, open and closed sites, and a variety of locations—schools, parks, boys and girls clubs, summer camp, and churches.

[30] A sample of retailers was interviewed in 11 of the 14 sites (no interviews were conducted in Missouri POC or Oregon POC and Expansion due to limited retailer outreach and awareness). Each site team was asked to conduct short interviews with two to five major retailers in the demonstration areas that participated in training or received outreach from the grantees.

[31] The number of SFAs in the demonstration sites ranged from one SFA to more than 40 (Exhibit 2.1). All participating SFAs in sites with five or fewer SFAs were interviewed. In sites with more than five SFAs, the team interviewed approximately 20% of the SFAs. In sites with more than five SFAs, the team chose a sample to ensure a mix of large and small SFAs, also taking into account variation in individual SFA's consent rates and the percent of children eligible for FRP meals.

the local areas, and selected SEBTC models are described. For more detail about sites, see the grantee profiles in Appendix 2A of the 2012 Congressional Status Report (Briefel et al., 2013).

2.3.1 Grantee and Organizational Structures

This section describes the organizational structures of the 8 State agencies and 2 ITOs (referred to as States hereafter) that received SEBTC grants, as well as describing the 14 local sites. When awarding the SEBTC grants, FNS gave grantees the flexibility to choose the agency or agencies to lead the effort. Grantees also could define the roles of other State and local partners and identify the local demonstration areas. For the SEBTC demonstration, the lead agency was most often the one administering SNAP or WIC, with 8 of the 10 grantees—all but Michigan and Texas—choosing the agency that administers the SNAP or WIC program. Michigan selected the education agency that administers NSLP and SFSP to serve as its lead, and Texas decided that both its WIC agency and its agency administering the NSLP and SFSP programs would co-lead the grant.

For all grantees, planning and implementing the SEBTC program was a large undertaking, requiring the involvement of additional State and local partners. All the grantees worked with their education agencies on the demonstration; however, education agency involvement varied considerably from those that worked intensively with SFAs on the consent process to those that simply advised the lead agency on program design and administration. For instance, in Washington and Connecticut, the Office of the Superintendent of Public Instruction and the State Department of Education, respectively, were responsible for much of the consent process, while the Oregon Department of Education served primarily in a consulting role, occasionally providing guidance on working with specific SFAs.

In addition to working with State Departments of Education and SFAs, lead agencies relied on a variety of other partners and unique staffing configurations. For instance, in Missouri, the grant manager was from the Department of Health and Senior Services and reported directly to the governor's office, which was heavily involved in the demonstration. Six of the grantees also chose to partner with local community organizations to help with outreach, participant training, and encouraging households to take part in the demonstration. Exhibit 2.1 further describes partnering arrangements.

For the 2012 full implementation year, FNS required that grantees select one or more geographically contiguous SFAs to participate in the demonstration. In order to meet sample size requirements for the impact evaluation, each site had to include at least 20,000 children certified for free or reduced-price meals (FRP) through the National School Lunch Program. FNS was interested in variation in urban/rural status, as well as variation in the concentration of children eligible for FRP (FNS, 2011a, 2011b). POC grantees were required to provide a second year of SEBTC in the same POC site and had to expand the areas with additional contiguous SFAs, if needed, to meet evaluation sample requirements. POC grantees also were invited to apply for an additional, separate expansion site that met the sample size requirement. Eleven of the sites identified at least 21,000 children (up to 37,000 in Texas) in contiguous SFAs for the

demonstration; however, Cherokee Nation and Connecticut POC identified just 17,500 and Michigan POC identified just 16,500 eligible children.

2.3.2 Overview of Demonstration Sites and Local Context

The characteristics of the demonstration sites potentially influenced both the implementation of the demonstration and its impact on the participating households. As in the POC year, the characteristics of the 14 demonstration sites varied greatly in terms of geographic area and the availability of SFSP sites and food retailers in the area, as described below.

Geographic Area and Local Population/Characteristics of Participating SFAs

The SEBTC sites included urban areas (Michigan POC, Missouri POC and Expansion, Oregon Expansion, Texas, and Washington), and relatively large, predominantly rural areas (Cherokee Nation, Chickasaw Nation, Connecticut POC, Michigan Expansion, and Oregon POC). Three sites contained a mix of urban, suburban, and rural communities (Connecticut Expansion, Delaware, and Nevada). The size of the local population in the demonstration areas varied from just under 50,000 residents in Cherokee Nation to more than 800,000 in Texas.[32] Three demonstration sites (Cherokee Nation, Chickasaw Nation, and Oregon POC) include Native American populations ranging from approximately 2% of the demonstration population in Oregon to 27% in Cherokee Nation. None of the demonstration areas—including the two administered by ITOs—served Native American children exclusively. Appendix 2A provides maps of the demonstration areas.

[32] In Texas, the participating SFA—Ysleta Independent School District—is one of nine districts that comprise El Paso County.

Exhibit 2.1 The Grantees, Their Partners, and Participating Local Areas in 2012

Grantee	State and Local Partners	2012 Site Desig-nation	Area Served	Number of SFAs	Urban/ Rural	Percent of Children Eligible for FRP Meals[a]	Approximate Number of SEBTC Eligible Children[b]	Program Model[c]	Consent
Cherokee Nation WIC Program	Oklahoma Education Department	New	29 of 51 SFAs in Adair, Cherokee, Delaware, Mayes, and Sequoyah Counties	29[d]	Rural	54 to 93	17,500	WIC[e]	Passive[f]
Chickasaw Nation Nutrition Services	Oklahoma Education Department	New	Carter, Coal, Garvin, Johnson, Marshall, McClain, Murray, and Pontotoc Counties	41	Rural	30 to 96	22,000	WIC	Active
Connecticut Department of Social Services	Connecticut State Department of Education; End Hunger! Connecticut	POC	2011: 17 of 57 SFAs in Windham, Tolland, and New London Counties 2012: 28 of 57 school districts in New London, Windham, and Tolland County	2011: 17[g] 2012: 28	Mostly rural	10 to 73	2011: 11,000 2012: 17,500	SNAP	Active[h]
		Expan-sion	6 of 70 SFAs in Hartford, Litchfield and New Haven Counties	6	Urban and rural	1 to 70	22,000		
Delaware Department of Health and Social Services (DHSS), Division of Social Services	Delaware Department of Education; DHSS Division of Management Services; The Data Service Center (nonprofit agency)	New	4 of 5 SFAs in New Castle County	4	Urban and rural	21 to 60	24,000	SNAP	Active
Michigan Department of Education	Michigan Department of Community Health	POC	City of Grand Rapids	2011: 1 2012: 1	Urban	2011: 80 2012: 86	2011: 16,000 2012: 16,500	WIC	Active
		Expan-sion	Bay, Arenac, Clare, Gladwin, Midland, and Tuscola Counties	32	Rural	31 to 59	21,000		

Grantee	State and Local Partners	2012 Site Desig-nation	Area Served	Number of SFAs	Urban/ Rural	Percent of Children Eligible for FRP Meals[a]	Approximate Number of SEBTC Eligible Children[b]	Program Model[c]	Consent
Missouri Department of Social Services	Missouri Department of Health and Senior Services; Missouri Department of Elementary and Secondary Education; Local Investment Commission	POC	Kansas City	2011: 3 2012: 3	Mostly urban	74 to 87 74 to 88	2011: 20,000 2012: 22,500	SNAP-Hybrid	Passive
		Expan-sion	City of St. Louis	1	Urban	82	22,000		
Nevada Department of Health and Human Services, Health Division WIC Program	Nevada Department of Education; Food Bank of Northern Nevada	New	Washoe, Douglas, and Lyon Counties	3	Urban and rural	35 to 48	24,000	WIC	Passive
Oregon Department of Human Services	Partners for a Hunger-Free Oregon; Oregon State University Extension Service; Oregon Hunger Task Force; Oregon Food Bank; Oregon Department of Education	POC	2011: Jefferson and Linn Counties 2012: Deschutes, Jefferson, and Linn Counties	2011: 9 2012: 12	Mostly rural	40 to 81	2011: 13,000 2012: 24,500	SNAP-Hybrid	Active
		Expan-sion	Marion County	1	Urban	60	24,000		
Texas Department of Agriculture **Texas Department of State Health Services**	West Texas Food Bank of El Paso; Ysleta Independent School District	POC	1 of 5 SFAs in El Paso County	2011: 1 2012: 1	Mostly urban	2011: 83 2012: 82	2011: 38,000 2012: 37,000	WIC[e]	Passive
Washington Department of Social and Health Services, Economic Services Administration, Community Services Division	Office of Superintendent of Public Instruction	New	2 of 9 SFAs in Clark County	2	Urban	47	29,500	SNAP	Active

Source: Grant proposal documents and technical assistance efforts with grantees, 2011 and 2012.

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

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

[c] The SNAP-hybrid model used the existing SNAP EBT card for SEBTC benefits; SEBTC benefits were added to existing SNAP cards during the summer months for current SNAP recipients, while households not receiving SNAP received a standard SNAP EBT card loaded with SEBTC benefits only. The SNAP and WIC models both used separate EBT cards for SNAP/WIC and SEBTC benefits.

[d] Cherokee Nation originally selected all 51 SFAs within the five counties; however, for various reasons, 22 SFAs chose not to participate.

[e] The State uses offline transaction technology for its WIC EBT, in which a smart card has an embedded "smart chip" that stores information about the specific foods and quantities available to the card holder. 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.

[f] One of the 29 SFAs in the Cherokee Nation site chose to use active rather than passive consent.

[g] Connecticut initially proposed to enroll 23 contiguous SFAs. During the course of early implementation, 6 decided not to participate, leaving a final count of 17 SFAs for the 2011 year. In 2012, the grantee expanded the POC site by adding approximately 21 SFAs to meet the required number of targeted children. Eleven of these subsequently dropped out of the demonstration prior to the consent process, leaving a total of 28 SFAs participating in the POC site in 2012.

[h] Connecticut used active consent for all new households and for households that consented in 2011 but did not receive the SEBTC benefit. For those households that received SEBTC benefits in 2011 and were eligible in 2012, the grantee used a passive consent process.

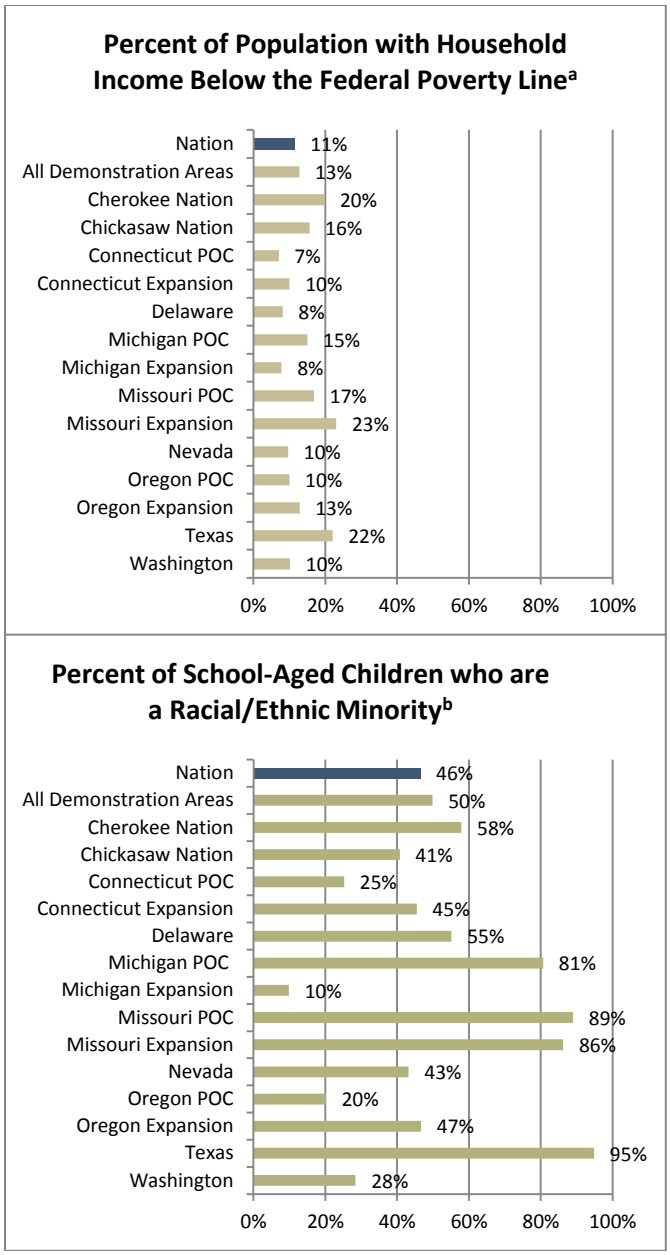
Exhibit 2.2 compares participating SFA populations to national estimates, using the Common Core of Data (CCD) for the most recent school year available (National Center for Education Statistics, 2012). The "all sites" number was calculated based on 2009-2010 CCD statistics for *all* households in the participating SFAs in the SEBTC demonstration areas, not just those eligible for FRP meals or the SEBTC demonstration. Taken together, the participating SFAs were located in areas with relatively higher than national rates of households living below the poverty line, children from an ethnic and racial minority, and children receiving FRP meals.

Poverty rates in some demonstration areas were between 2 and 12 percentage points higher than the national average (Exhibit 2.2). Specifically, while 11% of households had incomes below federal poverty guidelines nationally, the household poverty rate in the demonstration areas was 13%. However, the household characteristics of the SEBTC study population, reported later in Chapter 4, show that 70% of survey respondents were below poverty based on their reported monthly income in summer 2012.

The percentage of school-aged children of an ethnic or racial minority in the participating SFAs (50%) and those receiving FRP meals (53%) were slightly higher than the national average (46% and 47%, respectively). However, four demonstration areas (Michigan POC, Missouri POC and Expansion, and Texas) had significantly more children of a racial or ethnic minority than the national average, ranging from 81% to 95%; these sites were all located in urban settings.

To provide additional context on the food environment and economic conditions in the demonstration areas during 2011 and 2012, staff conducted a scan of local print media coverage in each area. This scan, which focused on the local economy and food security as well as potential changes between 2011 and 2012, identified some common themes across sites: 1) unemployment rates had not substantially improved since the beginning of the recession and remained high; 2) food banks reported noticeable reductions in food donations and served more families in the area in 2012 than in 2011; 3) increased costs of food and gasoline were cited as contributing to food bank usage; 4) in 2011, articles focused primarily on the recession, whereas in 2012 articles were more likely to cover coping strategies and SFSP availability in the area (some sites had little to no news or print media coverage of SFSP in the local area).

Exhibit 2.2 Characteristics of Demonstration Areas Compared to the Nation



Source: National Center for Education Statistics, Common Core of Data (NCES, 2009-2010).

[a] Percentage of population with annual household income not exceeding the federal poverty level, as measured in the 2000 Census.

[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.

Characteristics of SFSP in Demonstration Areas

As mentioned previously, SFSP is a national program that provides food to children during the summer months. Children receiving SEBTC benefits in the demonstration areas could also visit SFSP sites and receive meals. Although SFSP sites were generally available in the demonstration sites, about half of the grantees reported that the lack of SFSP availability was one of the primary criteria used to select demonstration areas. This was particularly true for the more rural areas with few SFSP sites and large distances between them. Therefore, SFSP may not have been available to, or convenient for, all children eligible for SEBTC.

SFSP sites were offered within all of the demonstration areas in the summer of 2012; however, the number of feeding sites available and the size of the geographic area served by each site varied by demonstration area. SFSP sponsor agencies were typically schools or community-based organizations that provided meals at several sites within local communities. These sites were located both indoors at schools, churches, libraries, housing complexes, community centers, and outdoors at parks and open green spaces, or from mobile food trucks. The number of SFSP sponsors in the demonstration areas ranged from three in Washington to 22 in Cherokee Nation. The number of SFSP sites ranged from 23 in Chickasaw Nation to more than 100 in Missouri. Both SFSP and grantee staff noted that the distribution of sites was not equal across the demonstration areas. In general, SFSP sites tended to be clustered in urban areas and more commerce-focused areas than in residential areas.

In summer 2012, most SFSP sites in the demonstration areas were "open," serving any child who visited the site during hours of operation. SFSP staff in sites located in rural areas, especially those in Cherokee Nation and Chickasaw Nation and the more rural parts within the Michigan and Texas demonstration catchment areas, reported that usage was low among children unless they attended summer school or a specific summer program that offered SFSP meals, despite the sites' "open" status. Within each demonstration area, nearly all of the SFSP sites offered lunch at various locations, but some also offered breakfast, supper, or afternoon snacks. At sites that offered additional meals, breakfast or snacks were offered more often than supper, among SFSP sponsors who were interviewed for the implementation study.

SFSP staff reported an average length of operation of just over eight weeks; sites in several areas reported staying open throughout the summer school break.[33] However, some SFSP sites in one SEBTC demonstration area (Cherokee Nation) operated only during June.

Stakeholders from all demonstration areas agreed that gaps remain in the availability and accessibility of SFSP for children, listing barriers to access that were consistent with a national evaluation of SFSP and other research findings (Gordon and Briefel, 2003; FNS, 2012b). For example, staff in Missouri estimated that over half of eligible children lacked access to food services during the summer. Nevada reported that in the rural areas outside of the cities of

[33] The length of the summer ranged from 11 weeks (Chickasaw Nation, Connecticut POC/Expansion, Delaware, Missouri Expansion, Texas, and Washington) to 15 weeks (Michigan Expansion). See Exhibit 2.3, Duration of the Summer Benefit, for more details.

Reno and Sparks in Washoe County there were no summer feeding sites, and another rural county in the demonstration had only one SFSP site. In addition to a lack of feeding locations, all nine demonstration areas with rural populations cited transportation as the main barrier to participation. Nevada staff indicated that there was often 15 to 20 miles between SFSP sites. In urban areas, lack of safety was a barrier. Michigan, Missouri, and Texas staff reported that unsafe urban neighborhoods deterred some parents from allowing their children to travel to SFSP sites alone. Finally, in rural and urban areas, funding issues caused some schools to eliminate summer school or other summer programs for children that were traditionally venues for SFSP service. Grantee staff in Nevada and Washington reported that school districts in their area eliminated summer school programs (and their sponsorship of SFSP) because of budget issues.[34]

In general, SFSP staff interviewed for the implementation study reported viewing SEBTC and SFSP programs as complementary, rather than in competition. Although some SFSP directors were initially concerned that the SEBTC demonstration could reduce SFSP participation, ultimately none found that it dampened participation and in some sites, SFSP participation actually increased from the previous summer. However, few of the local SFSP sponsors and site managers who were interviewed for the implementation study were aware that the SEBTC demonstration was being implemented unless they were SFAs directly involved in the demonstration. Their lack of awareness was due, in large part, to the fact that most grantees did not communicate directly with SFSP sponsors about the SEBTC demonstration. Non-SFA sponsors who were aware of the program had few details and sometimes expressed misperceptions about the nature of, and eligibility criteria for, the SEBTC—for instance, some thought families could not receive both SFSP and SEBTC benefits during the summer or that parents could contact the grantee agencies to "apply" for SEBTC throughout the summer.

Availability of Food Retailers in Demonstration Areas

The availability of local retailers affects food access and purchasing behaviors that contribute to children's food security and nutritional status. Grantee respondents reported several factors that limited access, including the lack of public transportation in rural communities (such as Chickasaw Nation and Nevada), language barriers among customers, the distance to SNAP or WIC authorized retailers in rural areas, and food deserts in highly populated areas (particularly the Missouri sites).[35]

Sites also reported a range of retail options for participants: including large chains, small retailers, convenience stores, farmers' markets, and superstores. Most sites reported a mix of all types of stores, but four sites—Chickasaw Nation, Delaware, Michigan Expansion, and Missouri Expansion—responded that the majority of SEBTC-approved retailers in their area were large chain stores. Only one site, Texas, had WIC-only vendors, which stock WIC-approved

[34] Note that in many of these areas other sponsors started SFSP programs to fill the gap and some of the locations were at schools.

[35] A food desert is an area where healthful, affordable food is difficult to obtain. Food deserts are most prevalent in low-socioeconomic minority communities (Ver Ploeg et al., 2009).

food items and serve WIC customers only. Although farmers' markets were located in all demonstration areas, only some markets in Delaware, Michigan POC, Missouri Expansion, Oregon POC and Expansion, and Washington accepted EBT cards for assistance programs.[36]

2.3.3 Variations in the SEBTC Model across Grantees

This section describes the SEBTC model options available to grantees and which options each chose. This includes the program model selected, type of consent used, and duration of SEBTC benefits.

Overview of Program Models

As described in Chapter 1, FNS issued two separate RFAs to engage States to implement summer benefits through either the SNAP or WIC EBT systems in 2012 (FNS, 2011a, 2011b). Grantees could choose to administer SEBTC by loading benefits onto existing EBT cards for those who were already receiving SNAP or WIC (the SNAP or the WIC hybrid model); or to issue separate SEBTC cards for selected households (the SNAP or the WIC model). Consequently, eight sites were awarded grants to offer benefits using SNAP EBT systems—Connecticut POC and Expansion, Delaware, Missouri POC and Expansion, Oregon POC and Expansion, and Washington. Missouri and Oregon chose the SNAP-hybrid model. Connecticut, Delaware, and Washington administered the SNAP model, sending a separate, SEBTC-branded card to selected households, regardless of whether they also received SNAP benefits.

The other six sites—Cherokee Nation, Chickasaw Nation, Michigan POC and Expansion, Nevada, and Texas—used WIC EBT systems to administer the SEBTC benefit. None of the sites chose to implement a WIC-hybrid model and instead issued benefits on newly created cards to all selected households. Each household received one food package per eligible school-age child per summer month. Exhibit 2.1 shows the model chosen by the site, as well as the method of gathering consent.

Active Versus Passive Consent

Each grantee was required to obtain consent from households to take part in the demonstration and release contact information to the grantee and evaluator. Six grantees (repesenting nine sites)—Chickasaw Nation, Connecticut POC and Expansion, Delaware, Michigan POC and Expansion, Oregon POC and Expansion, and Washington—chose an active consent process by which households returned a signed form that indicated they wanted to be considered for the program (i.e., opt in).[37] Households that did not return the form were excluded from the study. Four grantees (representing five sites)—Cherokee Nation,[38] Missouri (both sites), Nevada, and Texas—chose a passive consent process where households only

[36] Because SEBTC was provided on a SNAP or WIC EBT card (depending on the model) and worked just like those programs, anywhere SNAP or WIC EBT cards were accepted so too was SEBTC.

[37] Connecticut used active consent for all new households and for households that consented in 2011 but did not receive the SEBTC benefit. For those households that received the SEBTC benefit in 2011 and were eligible in 2012, the grantee used a passive consent process.

[38] One SFA in Cherokee Nation chose to use active consent.

returned a signed form if they chose not to let their contact information be released (i.e., opt out).[39] In these sites, only households that returned a form and opted out, or had a mailing returned as undeliverable (and thus were not given the opportunity to opt out) were excluded from the study.

Duration of Benefits Based on School Calendars

The duration of SEBTC benefits was tied to school calendars in each demonstration area. The goal of SEBTC is to provide nutritional assistance when children do not have access to FRP meals; therefore, the benefit period was between the end of the 2011-2012 school year and beginning of the following school year. For grantees with multiple SFAs, FNS indicated that they could issue benefits as early as the date that the first participating SFA let out for summer and end benefits on the day when the summer break ended for the last participating SFA (FNS, 2011a, 2011b). In five sites—Cherokee Nation, Chickasaw Nation, Michigan POC, Missouri Expansion, and Texas—there was no overlap between SEBTC benefits and FRP meals; however, in the other nine sites there was some overlap, ranging from one day in Missouri POC to 13 school days in some Michigan Expansion SFAs.

SEBTC benefits were available for 85 days on average, with a range of 80 days in Connecticut, Texas, and Washington to 102 days in the Michigan Expansion site. Thus, the SEBTC period varied by 22 days between the sites with the shortest and longest SEBTC period (Exhibit 2.3). The average benefit amount was approximately $178 per child for the summer, ranging from $158 (in Connecticut POC, Connecticut Expansion and Washington) to $228 in Michigan Expansion.[40]

[39] As discussed later in this report, in Texas, in order to get the benefit card, guardians 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 subsample without biasing the random assignment design.

[40] In the Michigan POC site, after the conclusion of the 2012 benefit period, it was discovered that households with children attending five year-round schools consented to participate in the study.

Exhibit 2.3 Duration of the Summer Benefit, 2012

Grantee	Last Day of School 2011-2012 SY (Range Across Schools)	First Day of School 2012-2013 SY (Range Across Schools)	First Day of Benefits	Last Day of Benefits	Number of Summer Benefit Days	Mean Total Amount of Summer Benefit Issued per Eligible Child
Cherokee Nation	5/4 – 5/25	8/8 – 8/16	5/5 – 5/26	8/7 – 8/15	81-94	$180[a]
Chickasaw Nation	5/9 – 5/30	8/3 – 8/23	5/10 – 5/31	8/2 – 8/22	82-84	$184[a]
Connecticut						
POC	6/8 – 6/21	8/27 – 8/30	6/15	9/3	81	$158
Expansion	6/14 – 6/21	8/27 – 9/4	6/15	9/3	81	$158
Delaware	6/7 – 6/12	8/27 – 8/28	6/8	8/29	83	$163
Michigan						
POC	6/8	9/4	6/9	9/3	87	$185
Expansion	5/24 – 6/12	9/4	5/25	9/3	102	$228
Missouri						
POC	5/22 – 5/23	8/13 – 8/15	5/23	8/14	84	$166
Expansion	5/24	8/14	5/25	8/13	81	$161
Nevada	6/1 – 6/8	8/20 – 8/27	6/2	8/31	91	$220
Oregon						
POC	6/7 – 6/14	9/4 – 9/10	6/8	9/6	91	$173
Expansion	6/7	9/6	6 /8	9/6	91	$173
Texas	6/6	8/27	6/7	8/26	81	$164
Washington	6/15 – 6/20	9/5	6/16	9/4	81	$158

Source: Dates gathered during technical assistance efforts with the grantees, 2011 and 2012. Amount of summer benefit based on dates and grantees' prorating for partial months (with FNS approval).

[a] Benefit amounts varied among school districts. Benefits were issued according to each district's school year ending and beginning dates.

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

This section discusses the consent process, training and support for households, SEBTC participation rates, and EBT system modifications, as well as other important contextual factors that influenced grantee experiences in the second year of the demonstration.

2.4.1 Identifying Eligible Children and Households

As described in Chapter 1, one of the primary tasks for the participating SFAs and/or their local partners was to identify children who were certified for FRP meals, and therefore eligible for SEBTC, and to group them into eligible households. The demonstration required household-level data for four purposes: (1) the initial mailing to obtain household consent to be part of the demonstration, (2) random assignment for receipt of the benefit, (3) the selection of an evaluation subsample, and (4) contact information for the evaluation's spring and summer surveys. The sources and quality of the data, as well as the skill levels of staff working with the

data, directly influenced the time needed to develop child and household lists and the complexity of the effort.

Grantees and SFAs relied on a range of data sources and processes for these tasks. Many SFAs had separate databases for information related to children receiving FRP meals—including data on children and households from the NSLP application for those that formally applied for NSLP and data received from the SNAP agency on those children directly certified for NSLP because they were receiving SNAP or TANF—and for information related to student records. Both may contain demographic and contact information for eligible children and their households, but student records tended to be updated more frequently and have more accurate contact information. Due to privacy concerns or access issues, however, some SFAs in two active sites did not use the student record data prior to consent, leaving them with NSLP application and direct certification data that may have included out-of-date household or contact information. Using their data sources, SFAs universally included all children from pre-kindergarten (where available) through 12th grade who were eligible for FRP meals in the target population, including those eligible for FRP meals because of their status regarding foster care, homeless youth, and emancipated youth. Most SFAs included students in their database as of the date they created the files, while others selected only those enrolled as of the beginning of the school year or another earlier date.

All of the grantees or SFAs were able to identify eligible children and mail consent forms; however, some SFAs were unable to group eligible children into specific households prior to consent. Others did not understand this was required as part of the consent procedure, in part because the grantees provided varying levels of guidance to SFAs across sites. As a result, some of the SFAs in Cherokee Nation, Connecticut, Nevada and Oregon sent one consent letter per child; consequently households with multiple eligible children received multiple letters.[41] SFAs that did create household files used a combination of techniques to match children to households. Many of the SFAs had a household identifier in their databases or used application numbers to identify households. Those without identifiers had to manually match children using telephone numbers, addresses, and guardian names.

Some of the grantees and SFAs found developing the household lists to be one of the most difficult and time-consuming parts of the demonstration. Staff in Delaware, Michigan Expansion, and Nevada, in particular, described the process of grouping eligible children into distinct households as very challenging. For instance, Nevada described difficulties in matching about 25% of eligible children to households because the parent name was not the same for all children in a household. SFAs also faced the challenge of duplicate records for the same

[41] Multiple letters to a single household sometimes resulted in a household returning more than one form, which could introduce difficulty in identifying unique households. Data issues not resolved prior to random assignment, could cause a number of difficulties, including assigning the same household to the benefit and non-benefit group. The evaluation team worked closely with these grantees and applied standardized procedures to make household lists as clean as possible prior to random assignment and few such incidences occurred.

household and children, and because sometimes there was slightly different contact information, it was not always clear if there were one or two unique households.[42]

2.4.2 Obtaining Household Consent

To be included in the demonstration, children's guardians had to give their consent—either actively or passively. All of the grantees completed the consent process, and nine of the 14 sites obtained consent from at least the minimum number of households needed to randomly assign benefits to 5,300 children and select households representing approximately 3,400 children (from both the benefit and non-benefit group) to participate in the evaluation, for an overall total of households representing approximately 7,000 children. Exhibit 2.4 provides the number of eligible and consenting children and households per site.

Because the active consent process is somewhat analogous to applying for the SEBTC benefit and passive consent is analogous to being automatically eligible for it, it is useful to consider the strengths and weaknesses of each of the processes when considering how SEBTC might be delivered absent an evaluation. These are discussed in detail below.

The issues encountered during the consent process differed between grantees that used active and those that used passive consent. Grantees using passive consent were more likely to achieve high numbers of "consenting" households, ranging from 90% to 97%, due to few families actively opting out of the demonstration (1-2%) and low rates of undeliverable mail (1-6%), which removes the families from the demonstration because they were not afforded the opportunity to opt out.[43] However, because of the nature of the opt-out process, it is not clear whether households that did not opt out actually wanted to take part in the demonstration or simply ignored or never received the consent mailing. The consent rates for passive POC sites in 2012 were similar to the rates in 2011, although in Missouri's POC site the undeliverable mail rate improved by 4 percentage points in 2012.

By contrast, the active consent process ensured that families consciously wanted a chance to receive the SEBTC benefit. However, to be included in the demonstration, households in active consent sites must receive and understand the consent materials and believe that their likelihood of receiving SEBTC is high enough to make the effort to fill out and return consent forms. These barriers could potentially filter out households that would otherwise have desired and used the benefit.

[42] In addition, in the Michigan POC site, after the conclusion of the 2012 benefit period, it was discovered that 605 households with children attending year-round schools consented to participate in the study. Of those, 382 were selected to be in the evaluation subsample (206 in the treatment group and 176 in the control group). Sensitivity analysis was conducted to determine impacts on main outcomes and there were negligible effects. (See footnote 96 in Section 5.3.1 for more details, and Appendix Table 5E.1.3.a)

[43] The opt-out number includes both those that returned signed letters and those letters that were returned as undeliverable.

Exhibit 2.4 Consent Rates by Grantee

Grantee	Approximate Number of Eligible Households in Demonstration Area	Approximate Number of Eligible Children in Demonstration Area	Percentage of Households Consenting[a]	Percentage of Children in Households Consenting[a]
Passive Consent Grantees				
Cherokee Nation	11,645[b]	17,456	90	96[c]
Missouri				
POC	12,893	22,309	96	97
Expansion	15,105	22,000	97	97
Nevada	15,204	23,739	93	93
Texas	24,500	37,020	94	96
Active Consent Grantees				
Chickasaw Nation	13,020	21,878	31	38
Connecticut				
POC	10,121	17,408	33	33
Expansion	11,193	21,715	23	23
Delaware	18,565	25,934	25	33
Michigan				
POC	9,809	16,459	57	58
Expansion	12,731	20,942	42	50
Oregon				
POC	15,102	24,459	24	28
Expansion	12,007[b]	23,708	28	27
Washington	14,000	29,380	23	22

Source: Data obtained through technical assistance efforts and files submitted by grantees for random assignment, spring 2012.

[a] In passive consent sites, the consent rate reflects those that opted out and undeliverable mail (to the extent it could be known).

[b] This is an estimate of the number of eligible households. The grantee was not able to obtain accurate estimates of the number of eligible households for all of their SFAs; therefore the evaluation team calculated the number of eligible households based on the ratio of children to households from the consenting population.

[c] Cherokee Nation included one active consent site that achieved a 25% consent rate. The consent rate calculation includes data from the passive consent sites only. When including the one active consent site, the consent rate is 90%.

Consent rates in active consent sites were much lower (from 23% of eligible households in Washington and Connecticut Expansion to 57% in Michigan POC) than in passive consent sites, and lower than many active consent grantees anticipated. Part of the issue was that some SFAs and grantees were inexperienced with the process of obtaining consent from families to take part in a demonstration. In addition, grantees, partners, and SFAs reported different levels of effort given to the consent process. A more intense level of outreach applied consistently may have yielded higher rates in some of the active consent sites.

In fact, 5 of the 14 sites—all active consent—were unable to obtain enough consenting households to use all of the benefits available for the demonstration and to meet the required sample needed for the evaluation's comparison sample. These sites were Connecticut POC and Expansion, Oregon POC and Expansion, and Washington. These sites obtained consent rates from 22% to 33% of children—considerably lower than the 40% to 50% needed and, for the POC sites, lower than their consent rates in 2011. The sites reported institutional obstacles,

such as limited staffing and contractual issues, that delayed their implementation, and most did not have contingency plans for or enough time to do needed additional outreach.

The passive consent process yielded much higher consent rates than active consent processes, and thus no passive consent sites had any problems meeting targeted sample sizes. However, several passive consent sites faced more difficulties in issuing benefits than did any active consent sites due to the lack of and/or inaccurate information about eligible households. Consequently, when sending notification and SEBTC cards to selected families, many passive sites had higher rates of undeliverable mail and often were unable to locate families selected for benefits. Missouri and Nevada were the most successful passive sites in terms of locating families for benefits: both of the Missouri sites had about a 2% undeliverable notification rates, with about 40 letters returned in their POC site and 65 in their Expansion site, of which they found new addresses for about half. Nevada had about 4% of letters returned but was able to resend about 45 of those. Cherokee Nation had 12% of their letters returned and ultimately about 8% of households did not receive benefits because they could not be located. However, Texas was not able to contact 35% of households to distribute cards prior to the start of benefits; by the end of the summer staff were still not able to identify about 900 of these families (24%). In contrast, active sites had only a handful of EBT cards that did not reach families.

2.4.3 Consent Rates for Households that Participated in the POC Year

In the POC sites, all households that received the benefit in 2011 could receive the benefit again in 2012, if they consented and continued to meet the eligibility requirements. With the exception of Connecticut, the sites used the same consent process for this group (active or passive) in both years. In Connecticut, SFAs used a passive consent process for households that received the SEBTC benefit in the POC year but active consent for all of the other eligible households in the site. The percent of households that were issued SEBTC benefits in 2011 and consented in both years ranged from 50% to 85%, depending on the site. The sites using active consent had substantially lower rates of returning households, as shown in Exhibit 2.5.

Some unknown percentage of the households that received the SEBTC benefit in the POC year were ineligible in 2012, either because they moved out of the jurisdictions of participating SFAs, no longer had school-age children, or no longer were eligible for FRP meals.[44] The rates of returning households in Connecticut and Missouri, which used the passive consent process,[45] provide some insight into the percentage of ineligible households and children, given that so few households opt out.[46] The consent rates for Connecticut and Missouri suggest that

[44] The number of households eligible in 2011 but not in 2012 was unavailable from several of the grantees.

[45] Connecticut used the passive consent process in 2012 for returning eligible beneficiaries only, and the active process in all other circumstances.

[46] Although Texas also used the passive consent process, the rate does not provide insights into this issue as nearly 25% of households issued SEBTC cards in 2011 could not be located and did not redeem benefits (Collins et al., 2012).

between 15% and 25% of households moved away or became ineligible between Year 1 and 2 of the demonstration.

It is unclear why, in the active consent sites, a relatively higher percentage of eligible households that received benefits in Year 1 did not give consent to take part in the demonstration again in Year 2, especially considering the high usage rate of SEBTC in Year 1 (Collins et al., 2012). Grantees hypothesized that some guardians in these active consent sites may not have understood the consent materials, thinking they were automatically eligible and did not realize that they had to provide consent for the second year. Other guardians in the active consent sites may have misplaced the consent forms or not read them at all.

Exhibit 2.5 Percent of Households and Children Who Received SEBTC Benefits in 2011 and Consented to Participate in 2012

POC Site	Type of 2012 Consent for POC Beneficiaries	Percent of POC Households Issued the SEBTC Benefit that Consented to Participate in 2012	Percent of Children in POC Households Issued the Benefit and Consented to Participate in 2012
Connecticut	Passive	84.7%	83.5%
Michigan	Active	62.3%	60.2%
Missouri	Passive	74.2%	69.9%
Oregon	Active	49.6%	44.8%
Texas	Passive	62.8%	68.9%

Source: Data obtained from grantee, including files submitted by grantee for random assignment, 2012.
Note: Percentages include all households and children receiving benefits in 2011, those ineligible in 2012 have not been excluded.

2.4.4 Notifying Households of the SEBTC Benefit

After the grantees compiled their site-level files(s) of consenting households, they submitted them to the evaluation team for random assignment. Benefits were assigned to approximately 5,300 children in nine of the 14 sites. Because of the low consent rates described above, fewer than 5,300 children were assigned to receive SEBTC benefits in the other five sites. The actual numbers ranged from 2,516 in Connecticut Expansion to 4,091 in Connecticut POC.[47] (Additional information about random assignment procedures is discussed in Chapter 4.)

After random assignment was complete, all grantees notified households that they were selected to receive SEBTC benefits and provided information on next steps. With the exception of Texas, grantees notified households by mail. Because the Texas grantee did not have enough time between receiving the assignment file and the start of training to notify households by mail, its local partner called families and conducted home visits, when necessary, to notify families, update information, and inform them about the training (described below). Eight of the 10 grantees also sent notification letters to all of the households that did not receive the benefits, whether or not they were selected to be in the evaluation subsample. Of the other two (Washington and Nevada), Nevada sent letters only to those non-benefit households that

[47] In the other three sites, benefits were assigned to 3,378 in Oregon POC, 3,259 in Oregon Expansion, and 3,297 in Washington.

were to be contacted by the evaluation team for the survey (the control group), and Washington chose not to send letters to any of the non-benefit households, although it reported receiving more than 100 calls from parents who were confused and wanted to know if they would receive the benefit.

Nutrition Education for Consenting Households

Nutrition education was neither a requirement of the SEBTC demonstration nor of the evaluation, but it is useful to consider whether grantees provided nutrition education materials to consenting SEBTC families or solely to those receiving the benefit. Such materials could have influenced families' food choices and, for households chosen to receive SEBTC, how the benefits were used. For example, if families selected for SEBTC were provided with educational materials on healthful food choices, they may have changed their food shopping behavior, although sustained behavior change takes multiple exposures to nutrition messages (Fox et al., 2007).

Seven of the 11 grantees provided some level of nutrition materials to consenting or benefit families, Chickasaw Nation, Nevada, and Washington being the exceptions. Michigan did not send materials directly to families but did create a publicly available website about the SEBTC, which was linked to multiple consumer nutrition education websites including USDA's MyPlate site. However, the grantee reported that website traffic was low. Connecticut sent general nutrition information along with the SEBTC cards to benefit families, whereas Cherokee Nation and Texas made education materials used for WIC audiences available to benefit families to pick up at SEBTC card trainings as an option. Only two grantees sent nutrition education materials to all consenting families: in Delaware, the University of Delaware sent a weekly nutrition newsletter to all consenting SEBTC households, and Oregon sent a packet of materials and recipes used in their SNAP outreach. Finally, Missouri distributed healthy eating kits created by Sesame Street under a different USDA project to 5,000 families in Kansas City and St. Louis schools in the demonstration area (i.e., not targeted specifically to SEBTC families).

2.4.5 Issuing Benefits

After the consent and notification processes were complete, grantees enrolled households into the relevant State MIS systems needed to issue benefits. At the end of the school year, all the sites had completed the required steps needed for the majority of the households assigned to receive the benefit.

More specifically, the grantees either used the existing SNAP or WIC benefit systems or developed a SEBTC-only stand-alone system to manage SEBTC households and load benefits each month.[48] The decision to use the existing system or develop a new one depended on the ease of adding coding to an existing system, staff availability, and the efficiency of the approach. In addition, for the SNAP-hybrid States, using the existing system was necessary to

[48] Note this relates to the State benefit system only, which manages cases, loads benefits, and sends data on benefit issuance to the EBT processor each month. Each State worked with their EBT processor to modify code in the current SNAP or WIC EBT system to issue SEBTC benefits (discussed later in this section).

load benefits on to the current SNAP recipients' cards. In fact, only one of the grantees using either the SNAP or SNAP hybrid models elected to use a new system (Delaware). Because the other four used their existing integrated systems that contained files for each household receiving some type of assistance, each grantee had to search the files to identify households already receiving public assistance and add the SEBTC program to the household file or create new accounts for households that were not currently in the State system. This process had to happen prior to issuing SEBTC benefits and involved using a household or person identifier if available, or more commonly, the parent and/or children's name, date of birth, and address. This was often time consuming and records that could not be found had to be manually entered, which often resulted in data entry errors. Like Delaware, all five WIC States created separate but parallel systems for administering SEBTC benefits, which allowed grantees to load household information into a database, without first needing to identify households already receiving other benefits. The free-standing systems eliminated staff time needed to identify existing households but sometimes still involved manual entry of information from the consent forms, a process prone to error.

Once SEBTC households were entered into the State's system, the grantee could issue SEBTC benefits to households. Nine grantees created automated issuances systems, in which all SEBTC cases in their system were transferred to the EBT processor for benefit administration and benefits were issued each month automatically. In Connecticut, however, the grantee did not automate the issuance when they added SEBTC programming to their system, so they had to manually enter SEBTC benefit amounts into the EBT administrative terminal to administer the benefits monthly. Again, this manual process required significant staff time and was subject to data entry errors.

In most States, selected households received their EBT cards by mail without further follow-up; however, a few States asked parents for additional information or to attend training. In Texas, the grantee's partner called or visited parents and verified household composition and contact information prior to issuance for about two thirds of the households receiving benefits. Connecticut, which in the POC year required selected households to send in a form with their social security numbers before they could receive benefits, streamlined the process in 2012 and eliminated the second data collection requirement. Four grantees offered training to households after they were selected for the program, and two of these, Cherokee Nation and Texas, distributed EBT cards at the training, Texas exclusively so:

- Texas required the 90-minute in-person training offered at 21 training sessions. Staff also offered one-on-one training sessions at local offices or through home visits, if necessary. About 75% of households participated in the trainings.
- Cherokee Nation offered 38, 60-minute sessions at 15 locations, with about 50% attendance. Households that could not attend the training could receive their card by mail or by visiting the WIC office.
- Chickasaw Nation offered optional 45-minute trainings in each of the 41 SFAs, but attendance was low, with about 25% of households offered training attending.

- Michigan offered five optional 30- to 60-minute in-person trainings, as well as online training videos for households to access at any time; only two to four families attended each session and the use of the web videos was very low.

Six of the 10 States succeeded in issuing benefits to all households on time. Cherokee Nation, Oregon, and Washington each were not able to deliver benefits to a few hundred of the many identified households at the start of the benefit period due to issues such as system errors in setting up the cases in the database, poor data quality causing mail to be sent to incorrect addresses, and delays in mailing EBT cards. However, in Connecticut, approximately one third of the selected households did not receive benefits on time due to the short period of time between the completion of the consent and random assignment process and the end of the school year. Most problems in all States were resolved by the end of the first benefit period.

2.4.6 Participation in SEBTC

EBT system data were used to determine participation rates, also known as take-up rates (described in Chapter 3). Among all of the sites, a total of 64,845 children were initially eligible to receive benefits (or assigned) in 37,339 households (Exhibit 3.1). As shown in the exhibit, after grantees made corrections to the lists of households and children initially assigned benefits, described below, these numbers were adjusted to 36,956 households and 66,772 children.

Numbers of households and children assigned benefits varied among the sites. In 9 of the 14 sites, approximately 5,300 children were randomly assigned to receive benefits; as discussed previously, fewer children were assigned in Connecticut POC and Expansion, Oregon POC and Expansion, and Washington. Among the 9 sites that issued benefits to 5,300 children, the number of households assigned benefits ranged from 2,602 in Chickasaw Nation to 3,731 in Missouri Expansion, due mainly to differences in household size. Overall, there were 1.7 children per household issued benefits, ranging from 1.4 in Missouri Expansion to 2.1 in Washington.

Differences between numbers of households and children assigned and issued benefits 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. 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. In addition, FNS allowed the five sites that did not meet consent targets to continue to add children when they could confirm parents consented and lived in the demonstration area, but these children were excluded from the evaluation subsample.

Among all households issued benefits, 89.7% used (i.e., redeemed) them at least once during the summer. This is considered the participation rate (Exhibit 2.6). The participation rate ranged from 73.1% in Texas to over 98% in the two Oregon sites. (More details about participation rates and how they vary by SNAP and WIC approaches, as well as among active and passive consent sites are found in Chapter 3.)

Exhibit 2.6 Households and Children Assigned, Issued, and Redeeming Benefits by Site for All Months, Summer 2012

Site	Number Assigned Benefits		Number Issued Benefits		Percent Issued Benefits	Households Participating (Redeeming Benefits)		Children Participating (in Households Redeeming Benefits)	
	House-holds	Children	House-holds	Children	House-holds	Number	Percent of Households Issued	Number	Percent of Children Issued
Cherokee Nation	3,621	5,409	3,635	5,838	100.4%	2,770	76.2%	4,653	79.7%
Chickasaw Nation	2,602	5,302	2,592	5,355	99.6%	2,432	93.8%	5,077	94.8%
Connecticut									
POC	2,357	4,091	2,345	4,486	99.5%	2,234	95.3%	4,321	96.3%
Expansion	1,296	2,516	1,273	2,636	98.2%	1,222	96.0%	2,553	96.9%
Delaware	2,906	5,302	2,864	5,307	98.6%	2,783	97.2%	5,169	97.4%
Michigan									
POC	3,044	5,303	3,042	5,368	99.9%	2,736	89.9%	4,913	91.5%
Expansion	2,734	5,347	2,784	5,365	101.8%	2,616	94.0%	5,091	94.9%
Missouri									
POC	3,015	5,327	3,056	5,452	101.4%	2,859	93.6%	5,141	94.3%
Expansion	3,731	5,304	3,374	5,353	90.4%	3,165	93.8%	5,077	94.8%
Nevada	3,376	5,301	3,295	5,431	97.6%	2,649	80.4%	4,524	83.3%
Oregon									
POC	1,752	3,378	1,849	3,511	105.5%	1,819	98.4%	3,464	98.7%
Expansion	1,652	3,259	1,805	3,553	109.3%	1,772	98.2%	3,504	98.6%
Texas	3,679	5,709	3,430	5,751	93.2%	2,509	73.1%	4,318	75.1%
Washington	1,574	3,297	1,612	3,366	102.4%	1,577	97.8%	3,315	98.5%
All Sites	37,339	64,845	36,956	66,772	99.0%	33,143	89.7%	61,120	91.5%

Source: Dates gathered during technical assistance efforts with the grantees, 2011 and 2012.

Note: In some cases, children were incorrectly grouped into one household when they belonged to more than one household. Therefore, in some sites the number of households assigned benefits was smaller than the number issued benefits, which resulted in the percent issued benefits exceeding 100% in six of the 14 sites.

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 proportion of the eligible population that consented to take part in the demonstration was multiplied by the proportion of households who "took up" SEBTC, using the participation rate as the definition of "take-up." The coverage rate ranged from 21.7% in Connecticut Expansion to 91.0% in Missouri Expansion. The passive consent sites, where parents or guardians had to take no action to get the benefit, with their resulting higher consent rates, had by far the highest coverage rate (75.4% of households, compared to 29.5% of households in active consent sites) (Exhibit 2.7). Differences in actions needed by parents may have implications for coverage rates if SEBTC were offered as a formal program. In considering this, it should be noted that while the nine active consent sites implied substantially lower potential coverage than their passive consent counterparts, the fact that SEBTC was offered for the first time in some of the sites and was a relatively new program in the others, must be taken into

account when looking at the consent rate. If SEBTC were a publicly recognized formal program, it may be possible that higher percentages of eligible households would take some action to receive the benefit. In addition, the relatively short time period in many sites during which households had the opportunity to return consent materials may also have suppressed consent and, ultimately, coverage rates.

Exhibit 2.7 Potential Coverage Rate of SEBTC

Site		Consent Rate		Participation Rate		Coverage Rate	
	Consent	Households	Children	Households	Children	Households	Children
Cherokee Nation	Passive	90.0	96.0	76.5	86.0	68.8	82.6
Chickasaw Nation	Active	31.0	38.0	93.5	95.8	29.0	36.4
Connecticut							
POC	Active*	33.0	33.0	94.8	105.6	31.3	34.9
Expansion	Active	23.0	23.0	94.3	101.5	21.7	23.3
Delaware	Active	25.0	33.0	95.8	97.5	23.9	32.2
Michigan							
POC	Active	57.0	58.0	89.9	92.6	51.2	53.7
Expansion	Active	42.0	50.0	95.7	95.2	40.2	47.6
Missouri							
POC	Passive	96.0	97.0	94.8	96.5	91.0	93.6
Expansion	Passive	97.0	97.0	84.8	95.7	82.3	92.8
Nevada	Passive	93.0	93.0	78.5	85.3	73.0	79.4
Oregon							
POC	Active	24.0	28.0	103.8	102.5	24.9	28.7
Expansion	Active	28.0	27.0	107.3	107.5	30.0	29.0
Texas	Passive	94.0	96.0	68.2	75.6	64.1	72.6
Washington	Active	23.0	22.0	100.2	100.5	23.0	22.1
Passive Consent Sites		94.1	95.8	80.1	87.7	75.4	84.0
Active Consent Sites		30.7	33.4	96.4	99.0	29.5	33.0
All Sites		56.4	56.9	88.8	94.3	50.0	53.7

Sources: Information from Grantees and EBT transaction data for SEBTC, 2012. In some cases, households contacted grantees to obtain the benefit for additional school-age children in their households who were not originally identified, which resulted in some cases of participation rates that exceeded 100%.

2.4.7 Providing Participant Supports During the Benefit Period

After households received their cards and were issued benefits, grantees provided support to families and dealt with a range of issues as families attempted to use their cards. Households generally had two types of questions – those related to the use of EBT cards more generally and those related to rules regarding the SEBTC benefit particularly. To address the former, all States provided a separate support number dedicated to SEBTC (discussed in Section 2.5.1). To address the latter, five States used the existing SNAP or WIC customer support telephone numbers to answer questions from families in the benefit group, and five instituted new SEBTC-specific telephone numbers. Half of the grantees also provided additional supports to families.

Nevada, Michigan, and Missouri created SEBTC-specific websites to provide program information to families, and Texas created a SEBTC Facebook page, where the grantee posted program updates and healthy recipes. Washington distributed the Washington Hunger Helpline number, which assists people with finding SFSP sites, regardless of whether they received the SEBTC benefit. Nevada also used a pre-existing WIC Google Earth application that SEBTC staff could use to direct clients to the closest WIC retailer. Finally, Texas provided in-person customer support through the local partner that provided training, as they did in 2011.

Every State received calls from parents with questions, although, only four (Cherokee Nation, Connecticut, Michigan, and Missouri) tracked numbers. Each of these four grantees received between 400 and 785 calls by late June. Other States estimated they received "hundreds of calls." The passive consent sites tended to receive more calls after benefits were issued, generally due to parents not being familiar with the program or needing to update their contact information. Although some grantees reported a high volume of calls, many calls came from the same callers. For instance, Connecticut estimated that up to 50% of its 600 calls in June were follow-up calls from the same parents. Inquiries most commonly received across States related to PIN numbers and activation of EBT cards, updating family composition, allowable food items for purchase, and timing of card receipt. The number of calls grantees received dropped precipitously by the middle of the summer with most of callers requesting a change in address or household composition.

Nine of the 10 States reported challenges related to PINs. In seven of these nine States, problems were minor and quickly resolved, but in Washington and Texas, 200 to 300 participants had difficulty with pinning. Common problems across States included parents' having difficulty remembering PIN numbers, understanding the verification of identity, or entering the PIN number. Missouri, which sent cards with benefits already activated, was the only State with no reported problems or phone calls related to activation or pinning.

As described above, grantees could not always locate households after the consent period ended, and some households refused the benefit. This resulted in a decrease in the number of children who could be issued benefits. At the same time, all 10 grantees received requests to add children to households because they were not initially included or later moved into the household. The numbers of children added ranged from Texas, which ended up with a net addition of 42 children, to 429 children added in Cherokee Nation. In total—taking into account both households that were un-locatable or refused SEBTC, and "new" children—1,927 additional children, nearly 3% of the original number assigned benefits, were actually issued benefits.

FNS authorized grantees to issue benefits to additional children who were not initially included and provided guidance that grantees could accept the parent's claim of household composition.[49] Most States attempted to verify that the children were included on the consent

[49] In some cases, these additional school-age children did not attend a participating SFA although one or more of their siblings did. FNS allowed these additional children to receive the benefit also because a State-wide SEBTC

forms (in the active sites) or lived in the demonstration area through discussion with the guardian, school records, or social service case files. Washington and Delaware were the only States to require that the child be listed on the consent form in order to be added to the case. Texas and Cherokee Nation did not verify the child's address before adding them, but due to concerns about potential fraud, Texas set a July 4 cut-off date for changes to household composition.

2.4.8 Efforts to Encourage Use of Benefits

Five grantees (Chickasaw Nation, Delaware, Missouri, Texas, and Washington) made efforts to encourage the use of SEBTC benefits among households that did not activate their cards or use benefits. Delaware, Missouri, and Washington contacted households that had not accessed their benefits to determine the reasons and encourage them to use the benefit. Texas posted reminders on their SEBTC Facebook page that benefits would expire each month and families should use them, and Chickasaw Nation issued a PSA recording in June for Chickasaw Nation Radio reminding families to use their benefits. Most grantees also sent notifications to all families when benefits were about to expire (discussed in detail in section 2.7.1).

2.4.9 Training Retailers

SNAP and WIC retailers also played a role in the demonstration and could have been affected by the influx of SEBTC benefits in the area. All 10 grantees informed retailers about the demonstration to prepare them for potential questions from customers or cashiers. The grantees distributed letters to retailer locations and four grantees also printed press releases in retailer association newsletters that described SEBTC and addressed retailers' potential questions. Four WIC model grantees (Cherokee Nation, Chickasaw Nation, Michigan, and Texas) and one SNAP model grantee (Delaware) also offered in-person training for retailers during the months before the benefit period began. The trainings for WIC retailers provided information about the similarity of SEBTC cards to WIC EBT cards despite the different logos, guidelines for processing a WIC or SEBTC card first, information about how the program could potentially increase grocers' WIC vendor business, and which food items were included in the SEBTC food package. Delaware invited retailers to nine community outreach sessions held over two weeks in May, but no retailers attended.

Retailers in all States were able to use the existing SNAP and WIC help-line phone numbers if they had questions about SEBTC. Michigan and Oregon also supplied retailers with SEBTC-specific help lines, as they also did during the POC year, although they reported very few, if any, calls to these numbers in both years. In addition, Michigan included a retailer section on their SEBTC website containing retailer-specific information, as the State did in the POC year.

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program would not take the demonstration area into account when establishing eligibility, and because of a concern that in those households, the impact of $60 per child per month benefit would have been diluted.

2.5 EBT Systems Modifications and Strategies to Maintain Program Integrity

As described in Section 2.4.6, 89.7% of households that were assigned to the benefit group received an EBT card and used at least a portion of their benefits during the summer months. To distribute these benefits, EBT processors for the POC sites used either the modifications previously made in the POC year or made new system modifications to accommodate the needs of the grantee, while new sites worked with their processors to modify their systems for the first time in 2012. This section discusses the EBT system modifications needed to facilitate benefit issuance and redemption during the demonstration year. It also describes the issuance and redemption patterns across the demonstration sites.

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 authorized by FNS.[50]

WIC EBT is a different type of transaction. The WIC program issues a set of foods to each recipient from a list of those authorized by each State's WIC program. WIC EBT systems must therefore ensure that only specific WIC "allowable foods" prescribed for an individual are purchased with the benefit card. A State with WIC EBT may use online transaction technology, somewhat similar to the way that SNAP EBT systems operate. An offline transaction can also be done through the use of a smart card, which has an embedded chip that stores information about the specific foods and quantities available to the card holder.[51]

Half of the States in the SEBTC demonstration use JPMorgan as their EBT processor, two use FIS, two self-process offline transactions but use SoliSystems for card issuance and writing benefits to the card's chip, and one uses Xerox (see Appendix 2B). All 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 2011-2012 school year.[52] These

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

[51] 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 offline transaction.

[52] 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 Cherokee Nation, Chickasaw Nation, Michigan and Texas WIC Universal Product Code (UPC) databases.

modifications may have included (1) account setup, (2) card issuance and re-issuance, (3) benefit processing, (4) cardholder support, and (5) benefit settlement and reconciliation.[53] Diagrams illustrating the processes and data flow for EBT issuance, procurement, and settlement for SNAP and WIC are provided in Appendix 2B.

Account Setup

Two types of modifications were necessary to enable account setup processes for SEBTC. First, systems in all States required a new SEBTC program designation so that SEBTC funds or WIC food items purchased with SEBTC funds could be tracked within the systems from issuance through redemption and settlement. Second, the States using WIC technologies also required the development of new software modules to create 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. All of these States were able to use a direct file transfer from their State eligibility systems to set up SEBTC accounts; Missouri used a manual process in the POC year, but added the direct file transfer feature in 2012.

Card Issuance and Re-issuance

As described earlier, eight of the grantees issued cards by mail; two issued them exclusively or also in person (Texas and Cherokee Nation, respectively). Replacement cards for the online systems were handled according to the States' existing procedures. -If a cardholder called the online EBT processor's customer service desk for a card replacement, the replacement card was mailed the next business day. Cherokee Nation and 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 because the local WIC clinics that normally re-issue cards were not involved with SEBTC. Because the account balance cannot be verified until grocer claim files are submitted, cards are usually not replaced for two to five days. In some cases Texas produced replacement cards sooner after speaking to the client and confirming that no purchases were made within the last few days. Replacement cards were mailed in Cherokee Nation and distributed by the local partner in Texas.

Account Processing

Each EBT processor had to establish a new program designation code within its system to separate SEBTC benefits and funds from SNAP and WIC and, in SNAP-hybrid sites, establish rules for which benefits were to be used first by families that received both SEBTC and SNAP. In Missouri, the EBT processors used a first-in, first-out process based on when the benefits were issued for drawing down funds for recipients receiving both SEBTC and SNAP cards. If a household was receiving both SNAP and SEBTC, any existing SNAP balance prior to the first SEBTC benefit issuance had to be drawn down before the household could access their SEBTC benefit. In Missouri SNAP issued SEBTC benefits on the day prior to SNAP benefits to allow that

[53] Benefit expiration and expunging is an additional process that had not occurred at the time of this report.

month's SEBTC to have first priority for use.[54] In Oregon, SEBTC benefits were given a priority draw ahead of any SNAP benefits.

In addition to setting up accounts, to increase benefit redemption in Missouri, FIS developed a monthly report to list the number of households which had not redeemed benefits during the reporting month.[55] Missouri used the report to contact inactive households and encourage benefit redemption.

Cardholder Support

EBT processors required few changes in cardholder support for PIN selection and questions concerning cards and accounts. Processors for eight of the States used the existing integrated voice response (IVR) for customer calls by providing staff with new SEBTC scripts to answer cardholder questions.[56] Some of the processors also added SEBTC-specific messages to their prompts or directed cardholders to SEBTC PIN functions. Two States—Chickasaw Nation and Michigan—requested that their processors establish a separate toll-free number for SEBTC IVR services. The script used for SEBTC was basically the same one used for WIC EBT. Across the States, processors reported little if any change from normal call center volumes after SEBTC benefits were issued. FIS reported a small increase in call volume, and as their contract agreement included the ability to charge for calls over a pre-set call volume, Missouri did incur costs for additional calls.

Benefit Reconciliation and Settlement

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, known as 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 required that SEBTC funds be tracked, settled, and reconciled separately from SNAP because monies are coming from two different funding sources. In order 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 settlement to

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[54] The timing of benefits issuance in Missouri created an issue in May when the half a month of SEBTC benefits were issued mid-month, then June benefits were issued on the last day of May. The combined one and one half months of benefit issuance caused Missouri to exceed their SEBTC issuance cap that month, which had to be resolved manually through the LOC process. In Oregon, FIS made SEBTC a priority draw ahead of SNAP benefits. This means that SEBTC benefits were drawn from the account prior to SNAP benefits being drawn down. This avoided the types of issues Missouri encountered.

[55] A household account may consist of one or more participants.

[56] An IVR is a menu-driven telephonic system that automates the interaction between the caller and the EBT system, cues and responses to the caller.

retailers must be sent to STARS. The processes for reconciliation and settlement were automated for all five grantees using SNAP models in 2012; in the POC year, FIS, which processed transactions for Missouri and Oregon, used a manual process, but automated the process in 2012, per 2012 grant requirements.

The settlement and reconciliation processes were slightly different for the WIC EBT systems. Once separate LOCs were established by the grantee States, no modifications to the WIC EBT systems were needed for SEBTC settlement.

2.6 Administrative Controls to Maintain Program Integrity

Although FNS did not require the grantees to institute any procedures for detecting or investigating claims of benefit abuse by SEBTC recipients, most applied the standards for other programs. None of the grantees reported establishing separate administrative processes to maintain program integrity for SEBTC cases but almost all of them instead relied on current SNAP or WIC systems for detecting and preventing fraud. Only a small number of potentially fraudulent cases were reported to grantees.

2.6.1 Preventing Participant Fraud

Seven of the 10 grantees indicated that they used the same process for detecting fraud as used for the SNAP or WIC program, which could include destroying any returned cards and voiding lost or stolen cards immediately, looking for a series of even dollar purchases, and investigating reports of abuse from caseworkers, the public, or retailers. The other three sites (Connecticut, Oregon, and Washington) indicated that they had not established a specific detection process nor did they apply current SNAP fraud detection procedures to the SEBTC cases. However, Oregon indicated that they would investigate fraud claims, if reported. Over the course of the summer, three grantees (Connecticut, Nevada, and Oregon) each received one fraud claim; none were found to be a fraudulent use of benefits.

A few sites also discussed issues with children who were issued benefits moving out of the household during the summer. FNS did not require that households report changes in household composition throughout the summer, or that grantees report these instances. Therefore, unless households voluntarily reported changes, the grantees had no information on this issue. The number of reports of benefits not being used for a child when their living situation changed was small. Most notably, the Missouri grantee became aware of about five cases in which children moved to foster care and the parent continued to receive the benefit. The grantee did not view these as fraud but simply miscommunication. In only one case were the benefits actually accessed.

2.6.2 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 demonstration year. The controls they maintain are similar to those used by the credit/debit industry.

To prevent fraud, 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 benefits have not expired. All WIC food item UPCs are matched to the State agency's authorized food list, stored electronically in the cash register.

To detect fraud, EBT processor systems have reports to identify transactions outside of common parameters, for example transactions of even dollar amounts, repeated transactions within a limited time period, afterhours transactions and repeated key-entered transactions from one retailer location.[57]

2.7 SEBTC Benefit Close-Out Activities

After the grantees delivered cards and activated benefits, there was little work for the grantee until late summer. At that time, grantees implemented procedures for notifying families about the expiration of benefits and expungement of funds from the EBT system prior to the start of the new school year. Generally, this process ran smoothly and required little time from the grantee staff and EBT processors to complete.

2.7.1 Notification about Benefit Expiration

All but two grantees (Cherokee Nation and Connecticut) sent reminders to households either by mail, email, text message, or telephone to use their benefits before the expiration date. Chickasaw Nation, Michigan, and Texas staff sent letters and emails in the first few weeks after benefits were first issued to remind participants that SEBTC benefits (using the WIC model) expire at the end of each month and they should use the benefits while available. Texas continued to send reminders twice a month (through email and calls) to participants through the end of the benefit period. Nevada did not send monthly reminders, but did send a notice in early August about the final termination of the summer program at the end of the month. All of the SNAP sites, except Connecticut, sent reminders the month before benefits ended to remind participants that benefits expire at the end of the summer (this was generally in early to mid-August). Cherokee Nation and Connecticut did not send any reminders, but Cherokee Nation reported reminding parents of the expiration if they called with questions.

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. Most of these families

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

did not realize the benefits were ending or were wondering why their benefits were lower in the last month (due to prorating). In a few cases, parents called because they had not received the EBT card at the beginning of the summer and realized from the benefit close-out letter that they could have been receiving benefits. In these cases, the grantees sent the family the card with benefits for the last month.

Expiration and Expungement

As discussed earlier, SEBTC benefits were set to expire prior to the start of the 2012-2013 school year.[58] The expiration of benefits meant that families could no longer access SEBTC benefits left on the cards; however, the benefits remained available to the States to settle accounts with retailers that submitted charges incurred prior to expiration. These accounts remained open for 23-62 days after expiration (depending on the State), at which point (for SNAP sites) the benefits were expunged from the system and any remaining benefits were returned to or remained with FNS. Exhibit 2.8 provides the dates that benefits were expired and, for the SNAP sites, expunged. For SNAP systems, the benefits were assigned an expiration date in the EBT host system. For WIC benefits, each month's benefits were issued with a pre-assigned expiration date so there was no expungement needed.

The expiration of benefits worked as anticipated in all of the sites, except Washington. The EBT vendor's process in Washington to flag SEBTC accounts as expired did not work as planned, and participants were able to access benefits past the planned expiration date. In the two days that it took to correct the problem, participants accessed approximately $5,000 in benefits that should have expired prior to the first day of school. However, in all other cases the EBT processors indicated that after benefits were expunged, the EBT systems accounts balanced.

[58] WIC benefits expired at the end of each month, while SNAP benefits carried-over each month until used. All benefits became unavailable prior to the start of the school year in each demonstration area.

Exhibit 2.8 Benefit Expiration and Expungement Dates

Grantee	Benefit Expiration	Benefit Expungment
Cherokee Nation	8/7 – 8/15[a]	Not applicable
Chickasaw Nation	8/2 – 8/22[a]	Not applicable
Connecticut		
POC	9/3	9/30
Expansion	9/3	9/30
Delaware	8/29	9/28
Michigan		
POC	9/3	Not applicable
Expansion	9/3	Not applicable
Missouri		
POC	8/14	10/15
Expansion	8/13	10/15
Nevada	8/31	Not applicable
Oregon		
POC	9/6	11/7
Expansion	9/6	11/7
Texas	8/26	Not applicable
Washington	9/5	9/28

Source: Information from grantees, summer 2012.

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

[a] Benefits were issued according to each SFA's ending and beginning dates. This includes the range of benefit end dates based on the start of the school year for each SFA.

2.8 Other Factors Influencing Implementation and Lessons Learned

A range of factors affected grantees' implementation of the SEBTC demonstration, including the State and local leadership of, and the support for, the demonstration, the budget and staff time required, the very condensed time line for the demonstration, the ability of grantees to partner with SFAs, and the degree to which sites used the lessons from the POC year.

2.8.1 State and Local Partnerships and Leadership

One of the key challenges in issuing the SEBTC benefit was that it necessitated collaboration between two programs that generally operate separately—school meals and either SNAP or WIC. This collaboration required the reconciliation of different federal and State program rules and approaches, such as definitions of households, information required from guardians to participate in programs, 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 data issues, related to the types of information required by the demonstration from the SNAP or WIC and FRP programs, and different cultures between the two organizations. Grantees and their partners worked hard to overcome those inconsistencies and to create a process where different programs worked together to achieve a common goal.

Grantees took a variety of approaches to dividing responsibilities across participating organizations. While many were comfortable with the division of labor, some key staff voiced differing opinions on the success and appropriateness of those approaches. Staff from eight of the 10 grantees suggested that they would have liked at least one of their partners to have been more involved in the demonstration—generally looking for more effort on the part of SFAs. Despite some perceived shortcomings, most participating agencies recognized both the strengths and weaknesses of each partner, and developed strategies to successfully implement the demonstration accordingly. All grantees 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.

Grantees also pointed out that having a strong leader in place to negotiate between multiple agencies was a key to success. States that reported having the least issues overall had dedicated staff that were able to push the project forward even as challenges arose. In addition, some of the sites discussed strong support from the community and public officials. For instance, Missouri had significant support from the governor's office, which was very involved in the project, and Delaware conducted a press conference introducing the demonstration that included remarks by one of the State's U.S. Senators and the State Secretaries of the Department of Health and Social Services (DHSS) and Education (DOE).

2.8.2 Level of Effort Needed and State Budget Issues

Grantees costs for SEBTC are described in Chapter 6. Although none of the grantees reported needing or requesting more funds than were available under the grant, Chickasaw Nation and Oregon reported using a considerable amount of in-kind and volunteer staff time to complete the project. In both cases, grantees indicated that in the future they would budget for a small, full-time staff dedicated to the project to avoid pulling staff away from their other responsibilities and to assure that staff were well-trained and understood the program. In addition, Cherokee Nation staff suggested that if they had known how much work was required, they would have budgeted for additional staff. Most States recommended that at least one dedicated staff member serve as the point person for all partners and to keep the project on track. In addition, both Connecticut and Oregon discussed that not having dedicated staff in place at the start of the project was detrimental to the demonstration and the primary reason they were not able to identify enough children in their four sites and to provide the full amount of benefits available to the area.

Five of the grantees mentioned that State budget constraints affected the demonstration. In most cases, mandatory furlough days interfered with completing work on the demonstration. However, in Missouri and Oregon, Statewide hiring freezes created difficulties in hiring staff needed for SEBTC even though grant funds would have made it possible to do so. In both States, staff had to seek special permission to hire these staff causing delays. Connecticut also had difficulty hiring a dedicated project manager, but this was related to extended delays in the hiring process as opposed to budget issues.

In addition, three States—Chickasaw Nation, Michigan and Washington—required Institutional Review Board (IRB) approval for the demonstration. This involved review and approval of all agreements and documents developed for the demonstration. IRB review can often extend time lines and add additional work for grantee staff. In Washington, the wait for IRB approval delayed the start of the consent process for several months.

2.8.3 The Pace of Implementation

As was the case in the POC year, the pace of implementation in 2012 was extremely fast and challenging for most grantees. Grants were awarded in December 2011 and the official kickoff meeting was in mid-January 2012. Most sites did not start actively planning for the demonstration until after the kickoff meeting. With about four to five 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 time line, especially when unanticipated challenges emerged. Staff in these States and local areas felt that with more time, they could have anticipated more of the issues, developed more effective ways of conducting implementation, and tapped other resources. Even with the POC experience, two of the grantees found the tight time frame difficult to manage and ultimately did not have enough time to obtain the needed consent rates, and, in fact, achieved lower consent rates than in the POC year.

2.8.4 Partnering with SFAs

Many grantees noted that partnering with the SFAs was more difficult than anticipated, particularly those with sites that included large numbers of SFAs. Most SFAs did not have experience obtaining consent from parents and working with data in the ways required by the demonstration, often not fully understanding the importance of data quality. One SNAP director working with multiple SFAs, pointed out that partnering with SFAs was not ideal for this type of project because SFAs are focused on feeding children and not on developing programs and monitoring program data. In addition, many of the grantees had no prior experience working with SFAs, so not only did they have to implement the demonstration; they also had to foster new relationships quickly. This could sometimes be a struggle for both SFA staff, who felt their process was misunderstood, and the grantee, which was frustrated by the quality of the data and perceived effort put forth.

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 sites with only a single participating SFA, the SFA was generally an active partner from the start of the demonstration, and expectations for its involvement were clear. In sites 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. This type of lack of communication in Cherokee Nation and Connecticut caused several SFAs to drop out of the demonstration after realizing how much work would be required; Cherokee Nation lost almost half of their proposed SFAs.

The grantees that minimized the role of SFAs reported fewer issues. Some of the sites, such as Delaware and Missouri, used partner organizations to work with SFAs to identify eligible children and collect consent data. The partners, which had previous working relationships with the SFAs, were able to better facilitate communication and had an understanding of the capacity of each SFA. They could also better navigate the issues with data than organizations that were not familiar with SFAs.

2.8.5 Applying Lessons Learned from the POC Year

All the POC sites discussed incorporating the lessons they learned from the first year and changing the process in the second year. For instance, Oregon realized that with twice the children in the second year, collecting and manually entering all of the consent forms at DHS would not work and they sought a greater level of involvement from SFAs in the second year. Three of the POC sites started working on the demonstration right after award, instead of waiting until the grantee meeting a month later. Two of the new 2012 grantees—Chickasaw Nation and Nevada—applied for but did not receive a POC grant. They both discussed learning from the POC sites and being able to anticipate some of the challenges that might occur. They conducted upfront planning before the grant started and made changes to their second application to make them stronger candidates for receiving the funds.

Although the lessons from the POC year helped many sites in 2012, using the models from the POC did not always work as anticipated. For instance, Michigan had difficulty replicating their successful model from 2011 in the Expansion site. They found applying the same model from a site with a single SFA to one with multiple SFAs was not the best approach. There was a different culture across SFAs that did not fit the model. For example, the SFAs in the Expansion site rarely sent correspondence home with children, and there were data access issues with multiple SFAs that did not exist with just one. A respondent working at an SFA in an Expansion site also suggested that the population in more rural counties often takes longer to embrace new programs than those families in more urban areas. Therefore, they may need to see the program another year or two before families in the community understand it and use it.

In addition, staff in Texas noted that they did not appreciate the difficulty of increasing the scale of the project in the second year. Texas used a very intensive outreach process that included contacting every benefit household by telephone and conducting trainings with each—in large groups or one-on-one for those that could not attend group sessions. Scaling that process up for the second year was a large undertaking and the grantee may not have anticipated the level of effort needed. In addition, due to schedule delays, the grantee was not able to send letters to the benefit group in time for the trainings, so their partner called or visited in-person each household to let them know about trainings and the benefits, requiring further intensive outreach.

2.9 Conclusion

Both during the POC and full implementation years of the SEBTC, grantees faced several challenges in planning, developing, and implementing the SEBTC program. Five of the nine sites that used active consent were unable to reach consent targets, resulting in fewer than the planned 5,300 children in their sites receiving SEBTC. Some of the grantees that used passive consent also were challenged, often because contact information was out of date.

Despite these challenges, the majority of sites were successful in achieving consent totals. All were successful in reaching households that were selected for SEBTC, distributing benefits, and encouraging use of the benefits, resulting in high SEBTC participation rates. Grantees were successful using both the WIC and SNAP models to distribute SEBTC benefits, using different partnership configurations, and implementing the benefit in large urban areas, in rural areas, and working with a few or many SFAS. These facts indicate that SEBTC is a feasible model to provide food to school-age children in the summer months who receive FRP meals during the school year.

Chapter 3

Use of Summer EBT for Children

This chapter presents patterns of SEBTC benefit use at the household level, using the SEBTC transaction data for the 2012 demonstration benefit period. The evaluation team obtained the transaction data from each State's EBT system, which tracks the SEBTC benefits of participating households. For each grantee, the EBT system provides data on when and where benefits were redeemed, the amount spent for each transaction, the proportion of benefits redeemed each month, and for those households that exhausted the benefit (i.e., redeemed 100% of it), when this occurred.

The EBT data provide a number of insights into the operation of the SEBTC demonstrations. At the most basic level, examining the average percentage of households participating (i.e., redeeming the SEBTC benefit at least once) and the average redemption rate (percentage of benefits redeemed) tests a key link in the theory underlying SEBTC (See Exhibit 1.2): that providing benefits to eligible households will increase purchases of eligible foods, the first step in the process leading to increased food security. Analysis of the distribution of redemption rates and amounts shows variation in benefit use among households. Categorizing households by their level of benefit use may provide insights into why impacts vary among participants or across sites. For example, the analysis of redemptions among households within the POC sites in 2011 pointed to a bimodal distribution, with most households redeeming either none of their benefits or more than 75%. This type of distribution has a different implication for potential impacts than a more even distribution.

From another perspective, data on benefit use provide indicators of the success of SEBTC implementation, both overall and across sites, and also suggest specific implementation problems. However, site differences in benefit use may be due to factors other than implementation, such as differences in household characteristics or external events outside the grantees' control, so connections between benefit use and grantees implementation of the demonstration must be made with caution.

After presenting research questions and key findings, the chapter begins with a brief description of the research methods, followed by a description of patterns of household benefit use in 2012. Subsequent sections examine differences in benefit use between SNAP and non-SNAP households in sites using the SNAP model, the distribution of benefit redemption by type of store, and patterns of benefit exhaustion (using up all benefits issued). Following the presentation of descriptive analysis of aggregate data, the chapter examines the relationship of benefit use to site and household characteristics. The conclusions are summarized in the final section.

3.1 Research Questions and Key Findings

3.1.1 Research Questions

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

- What percentage of households who are issued benefits participate in SEBTC, i.e., redeem any benefits?
- What percentage of available benefits do households redeem?
- When are the benefits used? Does use vary by month in the summer?
- At what rate are the benefits exhausted? How far from the end of the month are benefits exhausted?
- Where and for what are the benefits used? At what types of retailer are the benefits used? For what types of food are the benefits used?
- How did benefit use in the POC sites change from 2011 to 2012?

The evaluation team conducted two sets of analyses of SEBTC data to answer these questions. The main analyses produced aggregate statistics using all transaction data for all households issued SEBTC benefits during 2012, whether or not they were selected for the evaluation subsample, in the 14 sites. This analysis also compared benefit use in WIC and SNAP model sites and use between SNAP and non-SNAP households in the SNAP model sites. Additional analysis 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.

3.1.2 Key Findings

- Across all sites, 66,772 children from 36,956 households were issued benefits. Nearly 90% of these households (89.7%), representing 91.5% of children (33,143 households and 61,120 children) participated in SEBTC by redeeming at least some of their benefits.
- In the summer of 2012, demonstration households redeemed $9.2 million in benefits, averaging $150 per child and $250 per household across all households issued benefits and their children. The site-level average redemption per child issued benefits ranged from $118 to $173, depending on the value of benefits issued, the percentage of households participating, and the percentage of benefits redeemed among participating households.
- Across all of the sites, the average household (among all those issued benefits) redeemed 76.7% of benefits. Participating households (i.e., those who redeemed any SEBTC at all) redeemed 85.5% of benefits on average. At the site level, the average redemption rate (percentage of benefits redeemed) among participating households varied from 61.8% to 99.5%.
- A higher percentage of demonstration households participated in SEBTC in SNAP model sites (95.9%) and redeemed a higher percentage of benefits (93.9%) compared to participants in sites using the WIC model, in which 83.7% of households participated and

60.1% of benefits were redeemed.[59] Average participation and redemption rates varied less among the SNAP sites than among the WIC sites. Within each model, participation rates were higher in sites with active consent than in those with passive consent.

- Across all sites, 44.7% of demonstration households exhausted (i.e., redeemed all of) their benefits in at least one month, and 30.1% exhausted their benefits for the summer. In the SNAP sites, 55.6% of households exhausted their benefits for the summer, while only 5.5% did so in the WIC sites. The average household that exhausted benefits did so in 11 days.
- The results from regression analysis of the benefit use data support several major conclusions from the descriptive analysis. Controlling for differences in household characteristics and benefit periods, households in sites with the WIC model were less likely than those in sites with the SNAP model to redeem any benefits, redeemed less of their benefits, exhausted benefits less often, and took longer to exhaust benefits when they did so. Households in sites with passive consent were less likely than those in sites with active consent to redeem any benefits but exhausted benefits more often.
- Differences in SEBTC participation, levels of redemption and benefit exhaustion among between SEBTC models and between active and passive consent sites may be due to other characteristics of the sites. Nevertheless, the size and consistency of the regression estimates support the descriptive analysis: that the choice of SEBTC model and the mode of obtaining consent were strongly related to the levels of participation, redemption, and benefit exhaustion among households issued SEBTC benefits.

3.2 Research Methods

3.2.1 Data Files for EBT Transaction Analysis

The analysis in this chapter is based on SEBTC transaction data from all participating households in the 14 sites for the 2012 benefit period. A Memorandum of Understanding between the evaluation team and each site specified the data to be provided on benefit issuances, redemptions, and other transactions (such as returns and reversals).

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. In addition, data from all SNAP sites except Washington identified whether a particular household received SNAP benefits during each month of the SEBTC benefit period.[60] These data permitted analysis of benefit-use patterns for SNAP and non-SNAP households, including computation of totals, averages, and distributions of key measures.

[59] Several factors may have contributed to non-participation, including non-receipt of SEBTC cards or PINs, lack of information or confusion, explicit refusal of the benefit, or household preferences. See further discussion in Section 3.3.

[60] Washington declined to provide SNAP data because of privacy considerations. Households that received SNAP in any month were treated as SNAP participants in the analysis of the data for the entire summer.

Grantees using the WIC model also provided data on the date, time, and dollar value of each transaction. The data for these sites 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 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.[61] The approach is described in Appendix 3A.

3.2.2 Analysis Approach

The evaluation team created analysis files that included a record for each household in each month by summing the value of transactions by type (issuances, redemptions, and other credits and debits). The dollar value of WIC benefits issued was determined from the quantities of foods and their average purchase price, as described above.

To support analysis of shopping patterns by store type, the transaction data were merged with retailer data files from FNS indicating the store type.[62] The FNS data were provided on a monthly basis for the summer of 2012 and included all retailers authorized to accept SNAP in the 10 States. As described in Chapter 1, SEBTC cards in sites using SNAP systems could be used at any SNAP-authorized retailer in the country (as is true for regular SNAP EBT cards); however, the files did not include authorized retailers in other States. Participants in sites using the WIC systems could only redeem benefits at WIC-authorized retailers within the State (as is true for WIC participants).[63]

Averages and distributions of benefit issuance and redemption data for each site were computed by pooling household-level data for all months of the summer. Similarly, statistics for all WIC or SNAP sites and all sites combined were computed using all records of each household's monthly data. As a result, sites contribute to the group averages in proportion to the number of households issued benefits. Household-level records for each month were pooled across sites to compute overall statistics for each month, which are presented in Appendix 3B.

The evaluation team also used transaction and survey data to analyze the relationship between benefit use and household characteristics. The team merged transaction data for the treatment group (i.e., the evaluation subsample of all households receiving the benefit) with the

[61] 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.

[62] For the analysis, some of the FNS retailer categories were combined into a smaller set to simplify interpretation. Definitions of the combined categories are provided in Section 3.7.

[63] The Chickasaw and Cherokee Nation sites were operated by Indian Tribal Organizations (ITOs), so SEBTC transactions in these sites were limited to the retailers authorized by the ITOs for the WIC program.

household demographics obtained in the spring survey. The methods for this analysis are discussed in Section 3.9.

3.3 Overall Patterns of Households' Participation in SEBTC

As described in Section 2.3.3, the period from the first benefit issuance availability to the expiration of benefits varied, depending on the start and end dates of summer vacation. As a result, the length of the benefit period ranged from 81 days in the Connecticut sites, Texas, and Washington to 102 days in the Michigan Expansion site. The average duration of benefits was 86 days. As discussed below, the total benefit per child varied with the duration of benefits and also varied between the SNAP and WIC models

Exhibit 3.1 provides counts of households and children assigned benefits, issued benefits, and participating in SEBTC (i.e., redeeming benefits at least once). The initial numbers of households (37,339) and children (64,845) assigned benefits were determined at the time of random assignment, but the actual numbers issued benefits shifted over the course of the spring and summer for two reasons. First, the number of households went down because some households could not be located or, if located, declined the benefit when notified of it and numbers of children went down when duplicate records were discovered. Conversely, the number of households went up because additional households were added to benefit lists once it was discovered that their children were incorrectly grouped into someone else's household. In addition, numbers of eligible school-aged children were added to benefit lists if they had been mistakenly omitted initially. This process of adding households and children continued through the summer. The net result was that 99% of households assigned to receive benefits were actually issued them (i.e., had benefits credited to their EBT accounts), and 3% more children were issued benefits than assigned (for a total of 66,772 children compared to the original number of 64,845 who were assigned benefits).

Exhibit 3.1 Households and Children Assigned, Issued, and Redeeming Benefits by Site for All Months, Summer 2012

Site	Number Assigned Benefits		Number Issued Benefits		Percent Issued Benefits	Households Participating (Redeeming Benefits)		Children Participating (in Households Redeeming Benefits)	
	Households	Children	Households	Children	Households	Number	Percent of Households Issued	Number	Percent of Children Issued
Cherokee Nation (PW)	3,621	5,409	3,635	5,838	100.4%	2,770	76.2%	4,653	79.7%
Chickasaw Nation (AW)	2,602	5,302	2,592	5,355	99.6%	2,432	93.8%	5,077	94.8%
Connecticut									
POC (AS)	2,357	4,091	2,345	4,486	99.5%	2,234	95.3%	4,321	96.3%
Expansion (AS)	1,296	2,516	1,273	2,636	98.2%	1,222	96.0%	2,553	96.9%
Delaware (AS)	2,906	5,302	2,864	5,307	98.6%	2,783	97.2%	5,169	97.4%
Michigan									
POC (AW)	3,044	5,303	3,042	5,368	99.9%	2,736	89.9%	4,913	91.5%
Expansion (AW)	2,734	5,347	2,784	5,365	101.8%	2,616	94.0%	5,091	94.9%
Missouri									
POC (PS)	3,015	5,327	3,056	5,452	101.4%	2,859	93.6%	5,141	94.3%
Expansion (PS)	3,731	5,304	3,374	5,353	90.4%	3,165	93.8%	5,077	94.8%
Nevada (PW)	3,376	5,301	3,295	5,431	97.6%	2,649	80.4%	4,524	83.3%
Oregon									
POC (AS)	1,752	3,378	1,849	3,511	105.5%	1,819	98.4%	3,464	98.7%
Expansion (AS)	1,652	3,259	1,805	3,553	109.3%	1,772	98.2%	3,504	98.6%
Texas (PW)	3,679	5,709	3,430	5,751	93.2%	2,509	73.1%	4,318	75.1%
Washington (AS)	1,574	3,297	1,612	3,366	102.4%	1,577	97.8%	3,315	98.5%
All Sites	37,339	64,845	36,956	66,772	99.0%	33,143	89.7%	61,120	91.5%

Source: SEBTC transaction data, 2012.

AS=active consent, SNAP model; AW = active consent, WIC model; PS = passive consent, SNAP model; PW = passive consent, WIC model.

Note: In some cases, children were incorrectly grouped into one household when they belonged to more than one household. Therefore, in some sites the number of households assigned benefits was smaller than the number issued benefits, which resulted in the percent issued benefits exceeding 100% in six of the 14 sites.

Since benefits were issued and redeemed at the household level, the percentage of households redeeming any benefits (out of those issued benefits) is the primary measure of the participation rate for SEBTC. The overall household participation rate was 89.7%. This rate counts all households that were issued benefits in the denominator, including those that declined the benefit after issuance and those that did not receive SEBTC cards. The purpose of this measure is to indicate the extent to which benefits were actually used by households that the grantees sought to serve. Eleven of the 14 sites had household participation rates above 90%, with the Oregon POC and Expansion sites achieving over 98% participation. Active consent sites tended to have higher household participation rates than passive consent sites, with all of the active consent sites having at least 90% participation in SEBTC. Participation in passive consent sites ranged from 73.1% in Texas to 93.8% in Missouri Expansion, with the three passive consent sites using the WIC model having lower household participation rates than the two using the SNAP model (both in Missouri). Similarly, among the active consent sites, the six sites with the SNAP model had higher participation rates (all over 95%) than the three with the WIC model (all between 90% and 94%).

The regression analysis presented later in this chapter confirmed that both passive consent and the WIC model were associated with lower levels of participation in SEBTC. With passive consent, there are two factors that are likely to reduce participation. First, inaccurate address information is less likely to be corrected, so more households that are selected to receive benefits do not receive their EBT cards or notices and therefore do not participate. While such mail should be returned, this does not always happen. Second, households that do not want the benefit may ignore the passive consent letter but choose not to use the benefit when they are selected. In an active consent sites, such households would not be selected to receive the benefit. The difference in participation between the WIC and SNAP model sites is discussed in Section 3.5.

The percentage of children participating (i.e., the number of children in participating households as a percentage of the total number of children issued benefits) was always greater than the percentage of households participating, providing evidence that larger households were more likely to participate, but the differences in rates were not large. Overall, 91.5% of children participated; the site-level child participation rates ranged from 75.1% in Texas to over 98% in the Oregon POC and Expansion sites and the Washington site.

The numbers of households and children issued benefits rose each month over the summer, due to the identification of new households for assigned children and new children in assigned households (see Exhibit Appendix 3B for more details).

3.4 Patterns of Households' Redemptions of SEBTC Benefits

The 14 sites collectively issued $11.9 million in benefits for the summer of 2012, with a range among the sites from $416,488 (Connecticut Expansion) to $1,219,598 (Michigan Expansion) (Exhibit 3.2). The average benefit issued to a household for the summer ranged from $255 in

the Missouri Expansion site to $438 in the Michigan Expansion site. For the SNAP sites, the average benefit issued per child was determined by the number of days of benefits; this factor and the average number of children per household determined the mean benefit per household. For the WIC sites, these factors affected benefit levels, as did the WIC food packages (particularly the prorated packages) and the cost of prescribed foods.

Participating households redeemed a total of $9.3 million in benefits, with a range from $395,108 in the Connecticut Expansion site to $845,719 in the Missouri Expansion site (see Exhibit 3.2). The average benefit redeemed per child issued benefits was $150, ranging from $118 in Cherokee Nation to $173 in the Oregon Expansion site. This wide variation in average benefits redeemed per child reflected a combination of factors: differences in the type of benefits issued (WIC versus SNAP), participation rates, and redemption rates among participating households.

Exhibit 3.2 Dollar Amount of SEBTC Benefits Redeemed, by Site for All Months, Summer 2012

	Benefits Issued			Benefits Redeemed		
	Total	Mean per Household	Mean Per Child	Total	Mean per Household Issued Benefits	Mean Per Child Issued Benefits
Cherokee Nation	$1,048,870	$289	$180	$539,232	$148	$118
Chickasaw Nation	$982,743	$379	$184	$708,510	$273	$137
Connecticut						
POC	$708,974	$302	$158	$667,813	$285	$154
Expansion	$416,488	$327	$158	$395,108	$310	$154
Delaware	$862,812	$301	$163	$824,399	$288	$159
Michigan						
POC	$992,380	$326	$185	$664,368	$218	$132
Expansion	$1,219,598	$438	$228	$845,719	$304	$161
Missouri						
POC	$900,464	$295	$166	$830,901	$272	$162
Expansion	$862,032	$255	$161	$801,852	$238	$158
Nevada	$1,191,794	$362	$220	$633,588	$192	$138
Oregon						
POC	$607,843	$329	$173	$596,411	$323	$172
Expansion	$614,835	$341	$173	$604,802	$335	$173
Texas	$943,019	$275	$164	$628,253	$183	$144
Washington	$532,350	$330	$158	$515,528	$320	$155
All Sites	$11,884,202	$322	$178	$9,256,484	$250	$150

Source: SEBTC transaction data, 2012.

The value of benefits issued and redeemed, as measured by the total dollars, mean per household, and mean per child across all sites, rose from June to July and fell from July to August (see Appendix 3B for more details).

Across all sites, households redeemed 76.7% of benefits issued to them, on average (Exhibit 3.3), and 30.1% redeemed all of their benefits.[64] The household redemption rates (i.e., the percentages of benefits redeemed) varied from 50% or less (in two WIC model sites, Cherokee Nation and Nevada) to over 90% in all of the SNAP model sites. In Cherokee Nation, Nevada, and Texas (all WIC sites and all using passive consent), at least 20% of households did not redeem any benefits. A factor holding down household redemption rates in the WIC sites was the relatively low percentage of households with 75% or more of benefits redeemed (the last two columns in Exhibit 3.3), with only Chickasaw Nation and Texas having over 50% of households in the top two categories. In contrast, all of the SNAP sites had 6% or fewer households redeeming no benefits and over 90% of households redeeming at least 75% of benefits. Exhibit 3.4 graphically illustrates the variation in the distribution of household redemption rates across sites.

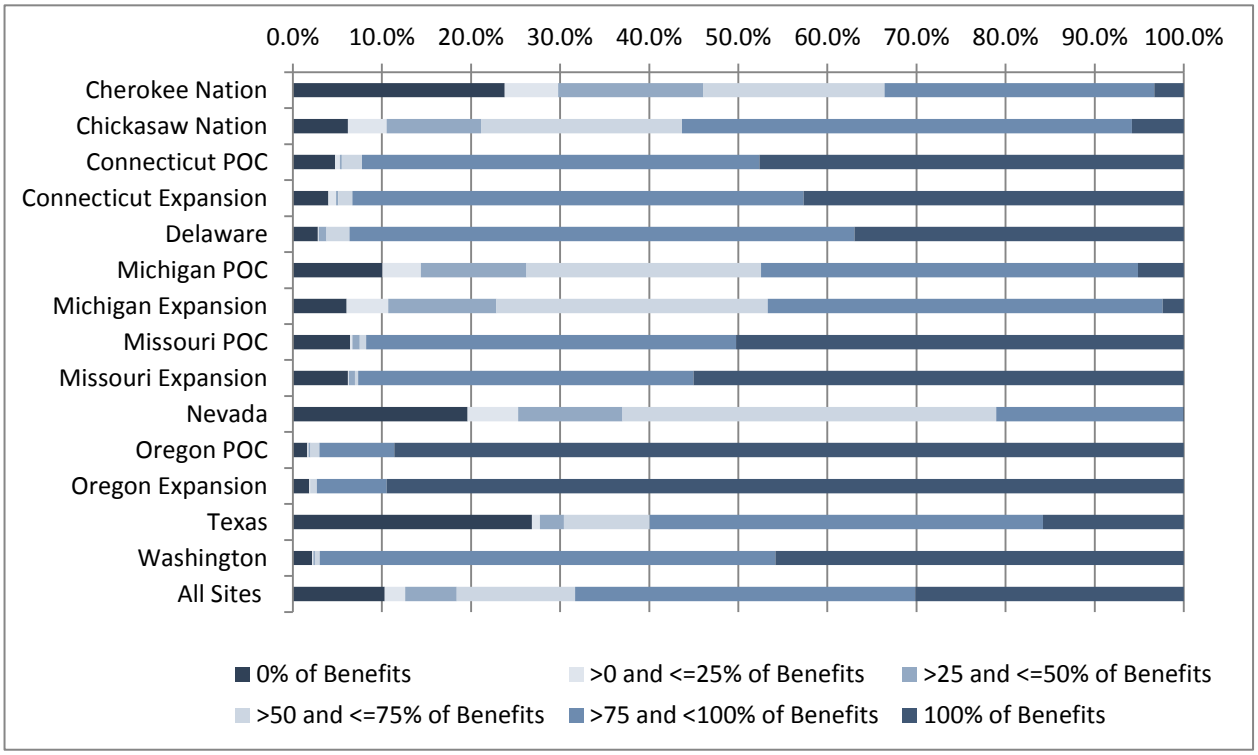
Exhibit 3.3 Percentage of SEBTC Redeemed, by Site for All Months, All Households, Summer 2012

Site	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
Cherokee Nation	50.1%	23.8%	6.0%	16.3%	20.3%	30.3%	3.3%
Chickasaw Nation	69.9%	6.2%	4.4%	10.6%	22.5%	50.5%	5.8%
Connecticut							
POC	92.9%	4.7%	0.6%	0.2%	2.3%	44.6%	47.6%
Expansion	93.6%	4.0%	0.9%	0.2%	1.6%	50.7%	42.7%
Delaware	95.0%	2.8%	0.1%	0.8%	2.6%	56.7%	37.0%
Michigan							
POC	64.1%	10.1%	4.3%	11.9%	26.3%	42.3%	5.1%
Expansion	66.5%	6.0%	4.7%	12.1%	30.5%	44.3%	2.4%
Missouri							
POC	90.8%	6.4%	0.2%	0.9%	0.7%	41.5%	50.3%
Expansion	91.5%	6.2%	0.1%	0.7%	0.4%	37.6%	55.0%
Nevada	49.7%	19.6%	5.7%	11.7%	41.9%	21.0%	0.1%
Oregon							
POC	97.6%	1.6%	0.2%	0.2%	1.0%	8.4%	88.6%
Expansion	97.6%	1.8%	0.1%	0.0%	0.8%	7.8%	89.5%
Texas	64.2%	26.9%	0.9%	2.7%	9.6%	44.1%	15.8%
Washington	95.9%	2.2%	0.1%	0.2%	0.6%	51.1%	45.8%
All Sites	76.7%	10.3%	2.3%	5.8%	13.3%	38.2%	30.1%

Source: SEBTC transaction data, 2012.

[64] Computations from Exhibit 3.2 show that 77.9% of all benefits issued to all households were redeemed. The mean percentage redeemed by individual households is lower, implying that larger households redeemed more of their benefits.

Exhibit 3.4 Distribution of All Households Issued Benefits by Percentage of SEBTC Benefits Redeemed Across All Summer Months, Summer 2012



Source: SEBTC transaction data, 2012.

Among households that redeemed benefits (excluding those that never redeemed), 85.5% of benefits were redeemed on average, with a range of 61.8% in Nevada to 99.5% in Oregon Expansion (Exhibit 3.5). Households in the SNAP sites redeemed between 97.1% and 99.5% of benefits on average, which meant that redemption in the SNAP sites was almost entirely all-or-nothing. The WIC sites, on the other hand, were less consistent ranging from 61.8% redeemed in Nevada to 87.8% in Texas among households.

Exhibit 3.5 Percentage of SEBTC Redeemed by Site for All Months, Participating Households (at Least One Redemption), Summer 2012

Site	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
Cherokee Nation	65.7%	7.8%	21.4%	26.7%	39.7%	4.3%
Chickasaw Nation	74.5%	4.6%	11.3%	24.0%	53.8%	6.2%
Connecticut						
POC	97.5%	0.6%	0.2%	2.4%	46.8%	50.0%
Expansion	97.5%	0.9%	0.2%	1.6%	52.8%	44.4%
Delaware	97.8%	0.1%	0.9%	2.7%	58.3%	38.1%
Michigan						
POC	71.3%	4.8%	13.2%	29.3%	47.0%	5.7%
Expansion	70.8%	5.0%	12.9%	32.4%	47.2%	2.5%
Missouri						
POC	97.1%	0.2%	0.9%	0.8%	44.4%	53.7%
Expansion	97.5%	0.1%	0.8%	0.4%	40.1%	58.6%
Nevada	61.8%	7.1%	14.5%	52.2%	26.1%	0.1%
Oregon						
POC	99.2%	0.2%	0.2%	1.0%	8.6%	90.0%
Expansion	99.5%	0.1%	0.0%	0.8%	8.0%	91.1%
Texas	87.8%	1.2%	3.7%	13.2%	60.3%	21.6%
Washington	98.0%	0.1%	0.2%	0.6%	52.3%	46.9%
All Sites	85.5%	2.6%	6.4%	14.8%	42.6%	33.6%

Source: SEBTC transaction data, 2012.

As with the participation rate and the total and mean values of benefits redeemed, the mean percentage of benefits redeemed (for all households and participating households) across all sites rose from June to July and fell in August (For more details, see Appendix 3B.)

3.5 Differences in Participation and Redemption between SEBTC SNAP and WIC Models

While the average household participation rate was 89.7 percent for all sites, it was lower in the WIC model sites (83.7%) than in the SNAP model sites (95.9%) (Exhibit 3.6). The difference in household participation rates contributed to differences in the average amount of SEBTC benefits redeemed between WIC and SNAP sites. Although WIC model sites issued higher benefit dollar amounts in total, per household, and per child, households in SNAP model sites redeemed more benefits by all measures (Exhibit 3.7). As discussed below, these differences in redemption amounts also reflected differences in redemption rates between the models.

There are several possible explanations that households in sites with the SEBTC WIC model were less likely to participate at all in SEBTC. First, fewer stores are authorized to accept WIC, so access to redeem benefits is not as easy as with the SNAP model. Second, redeeming benefits with the WIC model is more complicated because participants must choose from a

narrower set of eligible foods and keep track of balances for each food category rather than a single balance in dollars. Finally, some households may not want any or some of the foods eligible for purchase with the WIC model.

The SNAP and WIC model sites also differed substantially and importantly in the percentage of benefits redeemed. Households in SNAP sites redeemed 93.9% of benefits on average, while those in WIC sites redeemed 60.1% (Exhibit 3.8). Most notably, 55.6% of households in SNAP model sites redeemed all of their benefits for the summer, while only 5.5% of households in WIC model sites redeemed them all. These comparisons should be interpreted with some caution.[65] The WIC model sites had far more participating households who redeemed less than 50% of benefits, as well as more non-SEBTC participants (i.e., 0% redeemed).

One likely factor contributing to differences in redemption rates between WIC- and SNAP-model sites was the difference in the treatment of benefits at the end of the month. In WIC model sites, unused SEBTC benefits expired at the end of each month, while in the SNAP model sites, unused SEBTC benefits did not expire until the end of the summer. Other possible factors could include preferences for foods not authorized for purchase in WIC sites, broader availability of retailers in SNAP sites, and POS or stocking problems in WIC sites (see Section 3.6). Finally, for some foods it was possible to select a combination of items such that the remaining quantity was less than the minimum package size. (See Appendix 3A for details.)

[65] For the WIC sites, the value of benefits issued in each food category was calculated as the product of the quantity issued and the average unit price of purchased foods in the category. This permitted computation of a benefit redemption percentage that on average is comparable the percentage of (dollar-denominated) benefits redeemed in SNAP sites. This measure has some limitations at the individual household level. A participant could spend 100% of the value of benefits issued and not actually redeem the entire quantity issued, if the foods were purchased at above-average prices. Conversely, a participant could redeem the entire quantity issued and spend less than 100% of the calculated value of benefits if foods were purchased at below-average prices. These situations limit the comparability of the benefit redemption percentage distribution between SNAP and WIC model SEBTC sites. However, the analysis of benefit exhaustion presented in Section 3.10 yields a similar difference between the SNAP and WIC sites.

Exhibit 3.6 Households and Children Assigned, Issued, and Redeeming Benefits, by SEBTC Model for All Months, Summer 2012

	Number Assigned Benefits		Number Issued Benefits		Percent Issued Benefits	Households Participating (Redeeming Benefits)		Children Participating (in Households Redeeming Benefits)	
Site	Households	Children	Households	Children	Households	Number	Percent of Households Issued	Number	Percent of Children Issued
SEBT SNAP models	18,283	32,474	18,178	33,664	99.4%	17,431	95.9%	32,544	96.7%
SEBTC WIC model	19,056	32,371	18,778	33,108	98.5%	15,712	83.7%	28,576	86.3%
All Sites	37,339	64,845	36,956	66,772	99.0%	33,143	89.7%	61,120	91.5%

Source: SEBTC transaction data, 2012.

Exhibit 3.7 Dollar Amount of SEBTC Benefits Redeemed, by SEBTC Model for All Months, Summer 2012

	Benefits Issued			Benefits Redeemed		
	Total	Mean per Household	Mean Per Child	Total	Mean per Household	Mean Per Child
SNAP models	$5,505,798	$303	$164	$5,236,814	$288	$161
WIC model	$6,378,404	$340	$192	$4,019,670	$214	$138
All Sites	$11,884,202	$322	$178	$9,256,484	$250	$150

Source: SEBTC transaction data, 2012.

Exhibit 3.8 Percentage of SEBTC Redeemed, by SEBTC Model for All Months, All Households, Summer 2012

Site	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
SNAP models	93.9%	4.1%	0.2%	0.5%	1.2%	38.4%	55.6%
WIC model	60.1%	16.3%	4.3%	10.9%	24.9%	38.0%	5.5%
All Sites	76.7%	10.3%	2.3%	5.8%	13.3%	38.2%	30.1%

Source: SEBTC transaction data, 2012.

3.6 SEBTC Redemptions in WIC Model Sites by Food Category

Comparisons of participation rates (percentage of households who redeemed an item in a food category at least once) and redemption rates (percentages of benefits in food categories redeemed) in individual food categories may provide indications of the relative desirability and availability of the WIC-approved foods. Looking at the averages of participation in specific food categories for all sites combined, the participation rates were over 80% for all categories except fish and grain products with an average participation rate of all food categories 83.7%.

However, site-level participation rates varied (Exhibit 3.9).[66] Households in Michigan Expansion and Chickasaw Nation had the highest participation rates in most food categories. The Texas site generally had the lowest participation rate in each category, reflecting that site's low overall participation rate. In Cherokee Nation, Chickasaw Nation, Nevada, and Texas, the participation rates across food categories varied only by a few percentage points. There was more variation in both Michigan sites, with notably lower redemption of grain products (bread, tortillas, rice and oatmeal) than for most other food categories in both sites, and lower redemption of fish in the Michigan POC site.

[66] As noted earlier in this chapter, the participation rate is the percentage of all households issued benefits that redeemed any benefits (overall or in a specific food category). Thus, it reflects any barriers to participation attributable to the specific mode of implementation (including passive versus active consent and the mode of card issuance), access to participating retailers, or the ease of using the SEBTC card, as well as household preferences.

On average, participating households redeemed over 80% of benefits in three food categories: cheese, eggs, and juice (Exhibit 3.10). The least popular foods by this measure were beans and peanut butter, canned fish, and grain products, all with under 70% of benefits redeemed. Within sites, redemption rates varied more than participation rates across food categories. The highest redemption rates among participating households in every category were in Texas, while the lowest redemption rates among participating households were generally in either Cherokee Nation or Nevada. Thus, while the overall benefit redemption rate for all Texas demonstration households was 64.2% (see Exhibit 3.3), this was mainly due to the low participation rate.

Exhibit 3.9 Participation Rates by Food Category, by Site for All Months (SEBTC-WIC Model Sites), Summer 2012

Food Type	Percent with Any Redemptions						
	Cherokee Nation	Chickasaw Nation	Michigan POC	Michigan Expansion	Nevada	Texas	Average
Milk (Skim 1/2% 1% 2%)	75.5%	93.0%	89.0%	93.6%	79.4%	72.9%	83.0%
Cheese	74.6%	92.1%	86.0%	92.3%	78.8%	72.7%	81.9%
Eggs	74.6%	92.6%	87.8%	92.9%	79.2%	73.0%	82.4%
Juice (64 oz bottle or equivalent)	74.2%	91.2%	86.7%	92.0%	76.1%	72.6%	81.2%
Cereal	74.8%	91.7%	86.5%	91.8%	78.4%	72.6%	81.8%
Dry or canned beans & peanut butter	73.9%	90.7%	82.1%	91.6%	75.6%	72.0%	80.1%
Fish (canned tuna or salmon)	71.5%	88.6%	77.6%	88.8%	72.3%	71.5%	77.5%
Grain products (bread, tortillas, rice & oatmeal)	73.7%	89.8%	79.9%	85.7%	73.8%	72.2%	78.5%
Fruits & vegetables	75.3%	92.8%	89.2%	93.4%	79.9%	72.9%	83.0%
Total	76.3%	93.9%	89.9%	94.0%	80.4%	73.1%	83.7%

Source: SEBTC transaction data, 2012.

Exhibit 3.10 Benefit Redemption Rates by Food Category, by Site for All Months, Among Participating Households (SEBTC-WIC Model Sites), Summer 2012

Food Type	Percentage of Benefits Redeemed						
	Cherokee Nation	Chickasaw Nation	Michigan POC	Michigan Expansion	Nevada	Texas	Average
Milk (Skim 1/2% 1% 2%)	69.4%	79.1%	79.8%	82.4%	73.2%	89.5%	78.6%
Cheese	75.9%	86.0%	80.0%	83.8%	74.0%	93.5%	82.0%
Eggs	75.6%	86.9%	86.5%	81.3%	65.3%	94.3%	81.0%
Juice (64 oz bottle or equivalent)	74.4%	85.4%	86.6%	82.9%	71.5%	93.1%	81.9%
Cereal	66.1%	75.2%	74.7%	73.2%	67.1%	91.0%	73.9%
Dry or canned beans & peanut butter	55.9%	69.6%	67.4%	75.8%	50.0%	85.6%	67.2%
Fish (canned tuna or salmon)	62.7%	74.9%	74.7%	81.7%	46.8%	82.4%	68.4%
Grain products (bread, tortillas, rice & oatmeal)	62.2%	70.3%	53.1%	50.9%	58.9%	86.2%	61.6%
Fruits & vegetables	64.2%	78.9%	81.9%	74.9%	68.8%	89.4%	76.1%
Total	**65.7%**	**74.5%**	**71.3%**	**70.8%**	**61.8%**	**87.8%**	**71.8%**

Source: SEBTC transaction data, 2012.

3.7 Differences in Participation and Redemption between SNAP and non-SNAP households

Across the seven SNAP sites for which EBT data were available on receipt of SNAP benefits,[67] 70.2% of households who were issued SEBTC benefits also received SNAP at some time during the summer months (Exhibit 3.11). Almost all (98.9%) of these households participated in SEBTC (i.e., redeemed any benefits), while about 10% fewer non-SNAP households participated (88.2%). Although there was little variation in participation by SNAP households across sites, participation rates for SNAP households were slightly higher in Missouri and Oregon, where the SNAP hybrid model made participation for SNAP households virtually automatic (see the footnote for explanation). [68] There was more variation in participation among non-SNAP households; both Missouri sites had substantially lower participation compared to other sites. The use of passive consent in Missouri and resulting amount of inaccurate contact information may have been a driving factor, because these households had to receive EBT cards and PINs in order to participate, and thus incorrect address information would result in non-participation. Non-SNAP households would be more likely to be affected by this, because SNAP households already had EBT cards.[69] All of the other SNAP model sites used active consent, so there was less of a problem locating non-SNAP households after benefits were assigned, and less likelihood of the households declining the benefit after it was already issued.

SNAP households in sites using SNAP EBT systems to issue SEBTC redeemed 97.1% of benefits on average, more than 11 percentage points above the 85.6% redemption rate for non-SNAP households (Exhibit 3.12). In the SNAP hybrid sites, SNAP households more often used 100% of their benefits than non-SNAP households, sometimes by more than 30 percentage points, as would be expected with SEBTC redemption being integrated with SNAP redemption. However, this pattern was reversed in the SNAP model sites (Connecticut POC, Connecticut Expansion, and Delaware), where non-SNAP households redeemed all of their benefits slightly more often than SNAP households.

For both SNAP and non-SNAP households, redemption rates increased from June to July, as did the percentage of households redeeming 100% of benefits. The change from July to August was different for the two groups: redemption rates declined for SNAP households (though to levels still above June) but rose for non-SNAP households. This pattern suggests that the success in

[67] SNAP status was not available in the EBT data for Washington due to privacy restrictions. In addition, SNAP status was not available in the EBT data for the WIC sites, because of separations between program data systems. Appendix 3C provides results on the relationship of SNAP participation to benefit use, based on the regression analysis of data for the treatment group.

[68] Under the SNAP hybrid model, SNAP recipients who shopped with their regular EBT card automatically redeemed their SEBTC benefits before SNAP benefits for the same month were drawn down. In other SNAP model sites, the SNAP recipients redeemed their SEBTC benefits only when they used their separate SEBTC card.

[69] Non-SNAP households were also more likely than SNAP households to decline SEBTC when notified of the benefit.

locating non-SNAP households and their interest in or ability to use SEBTC continued to improve over the summer. (For more details about patterns of use, see Appendix 3B.)

Exhibit 3.11 SEBTC Household Participation (Any Benefit Redemption, by SNAP Status in SNAP Model Sites, Summer 2012)

Site	SNAP Status	# Households Issued Benefits	# Households Redeeming Benefits	% Households Redeeming Benefits
Connecticut				
POC	SNAP	1,431	1,400	97.8%
	Non-SNAP	914	834	91.2%
Expansion	SNAP	861	837	97.2%
	Non-SNAP	412	385	93.4%
Delaware	SNAP	1,649	1,620	98.2%
	Non-SNAP	1,215	1,163	95.7%
Missouri				
POC	SNAP	2,051	2,036	99.3%
	Non-SNAP	1,005	823	81.9%
Expansion	SNAP	2,639	2,616	99.1%
	Non-SNAP	735	549	74.7%
Oregon				
POC	SNAP	1,497	1,491	99.6%
	Non-SNAP	3,52	328	93.2%
Expansion	SNAP	1,503	1,500	99.8%
	Non-SNAP	3,02	272	90.1%
All SNAP Sites	SNAP	11,631	11,500	98.9%
	Non-SNAP	49,35	4,354	88.2%

Source: SEBTC transaction data, 2012.

Exhibit 3.12 Distribution of SNAP and non-SNAP Households by Percentage SEBTC Redeemed, All Months by Site, Summer 2012

Site	SNAP Status	N	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									
POC	SNAP	1,431	95.3%	2.2%	0.6%	0.1%	2.2%	51.5%	43.3%
	Non-SNAP	914	89.1%	8.8%	0.4%	0.3%	2.3%	33.8%	54.4%
Expansion	SNAP	861	95.3%	2.8%	0.5%	0.2%	1.2%	55.1%	40.3%
	Non-SNAP	412	90.1%	6.6%	1.7%	0.2%	2.4%	41.5%	47.6%
Delaware	SNAP	1,649	96.4%	1.8%	0.1%	0.4%	2.5%	62.5%	32.7%
	Non-SNAP	1,215	93.2%	4.3%	0.2%	1.5%	2.6%	48.7%	42.7%
Missouri									
POC	SNAP	2,051	96.9%	0.7%	0.1%	0.9%	0.3%	38.8%	59.1%
	Non-SNAP	1,005	78.5%	18.1%	0.5%	0.7%	1.5%	47.1%	32.1%
Expansion	SNAP	2,639	97.0%	0.9%	0.1%	0.5%	0.2%	36.3%	62.1%
	Non-SNAP	735	71.8%	25.3%	0.1%	1.6%	0.8%	42.4%	29.7%
Oregon									
POC	SNAP	1,497	99.1%	0.4%	0.0%	0.1%	0.9%	3.7%	94.9%
	Non-SNAP	352	90.8%	6.8%	0.9%	0.9%	1.1%	28.7%	61.6%
Expansion	SNAP	1,503	99.4%	0.2%	0.0%	0.0%	0.8%	3.4%	95.6%
	Non-SNAP	302	88.9%	9.9%	0.7%	0.0%	0.7%	29.8%	58.9%
All SNAP Sites	SNAP	11,631	97.1%	1.1%	0.2%	0.4%	1.1%	35.3%	62.0%
	Non-SNAP	4,935	85.6%	11.8%	0.5%	0.9%	1.8%	41.5%	43.5%

Source: SEBTC transaction data, 2012.

3.8 Comparison of 2011 and 2012 SEBTC Household Participation and Redemption in POC Sites

Among the five POC sites, the percentages of households participating in SEBTC increased in 2012 (compared with 2011) only in Missouri (Exhibit 3.13). The participation rate fell in the other four sites by 1% to 2%. Connecticut, Missouri, and Texas had slight increases in the percentage of benefits redeemed, while the other two sites had very slight reductions.

Exhibit 3.13 Comparison of 2011 and 2012 Participation and Redemption in POC Sites Based on Complete Summer Benefit Period

	Number of Days in Benefit Period		Average $ Redeemed Per Household		Percent of Households Participating		Percent Redeemed Per Household	
Site	**2011**	**2012**	**2011**	**2012**	**2011**	**2012**	**2011**	**2012**
Connecticut POC	81	81	$256	$285	96.2%	95.3%	89.8%	92.9%
Michigan POC	92	87	$183	$218	91.8%	89.9%	64.7%	64.1%
Missouri POC	79	85	$235	$272	91.2%	93.6%	89.1%	90.8%
Oregon POC	97	91	$349	$323	99.0%	98.4%	98.0%	97.6%
Texas	82	81	$168	$183	74.3%	73.1%	63.3%	64.2%
All POC Sites			$235	$250	90.0%	88.6%	80.4%	79.5%

Source: SEBTC transaction data, 2012.

Note: averages for all POC sites were computed with pooled data for all households issued benefits in each year. Thus, each site's relative weight on the 2011 and 2012 averages may be different.

3.9 Shopping Patterns by Store Type

In all 14 sites, at least 70% of benefits were redeemed in supermarkets,[70] and the overall average was 85.3% (Exhibit 3.14). The next largest categories were convenience stores (7.0% of benefits redeemed on average) and small/medium grocery stores (4.9% on average). Households in four sites (Connecticut Expansion, Delaware, and Missouri POC and Expansion) redeemed 10% or more of their benefits in convenience stores.[71] Texas was unique in having a relatively high percentage (27.9%) of redemptions in small/medium grocery stores, whereas all other sites had less than 9% in this category. Four of the six sites where farmers markets accepted SEBTC (the Missouri POC and Expansion, Oregon POC, and Washington) had any benefits redeemed at in those locations, and at very small percentages.[72]

The percentages of benefits redeemed by store type varied little over the summer (see Appendix 3B for details).

[70] The supermarket category also includes "big box" superstores and wholesale clubs.

[71] Authorization of convenience stores is more common for SNAP than for WIC, because of the specific requirements of WIC.

[72] Among the WIC sites, only Michigan POC authorized participants to redeem benefits at farmers' markets. Farmers' markets can participate in SNAP anywhere in the U.S. Among the SNAP-SEBTC sites, there were participating farmers' markets in Delaware, Missouri, Oregon and Washington.

Exhibit 3.14 Percentage of SEBTC Redeemed by Store Type, by Site for All Months, Summer 2012

Site	Super-markets	Grocery	Convenience	Farmers Markets	Other	Unknown
Cherokee Nation	89.4%	3.9%	2.6%	0.0%	0.0%	4.2%
Chickasaw Nation	91.7%	1.1%	8.4%	0.0%	0.0%	0.8%
Connecticut						
POC	87.0%	1.5%	6.9%	0.0%	0.6%	3.9%
Expansion	82.2%	4.4%	9.9%	0.0%	1.8%	1.8%
Delaware	78.1%	3.5%	10.4%	0.0%	1.8%	6.1%
Michigan						
POC	83.4%	8.5%	8.1%	0.0%	0.0%	0.1%
Expansion	96.5%	1.1%	2.3%	0.0%	0.0%	0.0%
Missouri						
POC	79.1%	2.3%	12.4%	0.1%	1.1%	5.0%
Expansion	75.6%	6.0%	15.7%	0.3%	0.5%	1.8%
Nevada	99.0%	1.0%	0.0%	0.0%	0.0%	0.0%
Oregon						
POC	88.3%	2.1%	5.8%	0.1%	3.0%	0.8%
Expansion	85.7%	4.0%	5.3%	0.0%	4.2%	0.7%
Texas	70.4%	27.9%	1.6%	0.0%	0.0%	0.1%
Washington	87.6%	3.6%	5.4%	0.1%	2.6%	0.6%
All Sites	85.3%	4.9%	7.0%	0.1%	1.0%	2.0%

Source: SEBTC transaction data, 2012. Store types are as assigned by FNS based on SNAP retailer authorization.

3.10 Benefit Exhaustion

Over the summer of 2012, 44.7% of SEBTC households (16,514) exhausted (i.e., used all) their benefits in at least one month (Exhibit 3.15). There was a wide range in this measure, from less than 1% of households exhausting benefits during at least one month in two sites (Cherokee Nation and Nevada) to over 80% doing so in four sites (the Missouri and Oregon POC and Expansion sites). In all of the SNAP model sites, at least 68.4% of households exhausted their benefits at least once; among the WIC sites, the highest rate was 32.5% in Texas. Participants in SNAP hybrid sites (Missouri and Oregon) were more likely to exhaust benefits than those in the other SNAP model sites, possibly due to the difference in models (as discussed in Section 3.7). Overall, 81.2% of households in SNAP sites exhausted their benefits at least once, but only 9.4% of households in WIC sites did so.

Exhibit 3.15 Exhaustion of SEBTC Benefits by Site for All Months, Summer 2012

Site	Exhausted Benefits Once or More Often		Days to Benefit Exhaustion				
	# Households	% Households	Mean	25th Percentile	Median	75th Percentile	Maximum
Cherokee Nation	23	0.6%	20	17	21	23	29
Chickasaw Nation	70	2.7%	25	25	27	30	33
Connecticut							
POC	1,699	72.5%	11	4	9	16.5	33
Expansion	871	68.4%	11	3	9	17	33
Delaware	2,013	70.3%	11	4	11	17.5	30
Michigan							
POC	371	12.2%	24	21	25	29	30
Expansion	174	6.3%	26	24	27	29	30
Missouri							
POC	2,585	84.6%	10	4	9	15	31
Expansion	2,978	88.3%	11	5	10	16	31
Nevada	7	0.2%	17	11	20	22	27
Oregon							
POC	1,737	93.9%	8	3	7	11	40
Expansion	1,694	93.9%	8	3	6	11	37
Texas	1,116	32.5%	19	14	20	24	30
Washington	1,176	73.0%	11	4	9	15	30
All Sites	16,514	44.7%	11	4	9	17	40

Source: SEBTC transaction data, 2012.

Note: For WIC sites, benefit exhaustion was determined based on the quantity of benefits redeemed, not the dollar value. See Appendix 3A for explanation.

Across all sites, the average household that exhausted benefits did so within 11 days (just over one third of a month). The mean number of days to benefit exhaustion varied from 8 to 11 days in the SNAP model sites, and from 19 to 28 days in the WIC model sites. Thus, households in the SNAP model sites were more likely to concentrate their redemptions in the first half of the month or an even shorter period. There was no systematic difference in the number of days to benefit exhaustion between the SNAP hybrid sites and the SNAP sites, but the Oregon POC and Expansion sites (both SNAP hybrid) had the shortest average time (8 days) to benefit exhaustion.

SNAP households were three times more likely to exhaust their benefits in at least one month than non-SNAP households (61.3% versus 20.7%), among the seven SNAP sites where SNAP status was indicated in the transaction records (Exhibit 3.16). The differences in the proportion of households with benefit exhaustion were largest in the SNAP hybrid sites. This finding supports the interpretation that the design of the SNAP hybrid model contributed to the higher benefit exhaustion rates in these sites. Non-SNAP households took longer to exhaust benefits than SNAP households, but the difference was smaller (12 versus 10 days).

Exhibit 3.16 Exhaustion of SEBTC Benefits by Site for All Months, Summer 2012

Site	SNAP Status	Exhausted Benefits Once or More Often		Days to Benefit Exhaustion				
		# Households	% Households	Mean	25th Percentile	Median	75th Percentile	Maximum
Connecticut								
POC	SNAP	1,007	42.9%	11	3	9	17	33
	Non-SNAP	692	29.5%	11	4	9	15	33
Expansion	SNAP	565	44.4%	11	3	9	17	33
	Non-SNAP	306	24.0%	11	4	9	16	33
Delaware	SNAP	1,123	39.2%	12	5	11	18	30
	Non-SNAP	890	31.1%	11	4	10	17	30
Missouri								
POC	SNAP	1,960	64.1%	10	4	9	15	31
	Non-SNAP	625	20.5%	13	3	10	24	31
Expansion	SNAP	2,558	75.8%	11	5	9	15	31
	Non-SNAP	420	12.4%	14	4	11	26	31
Oregon								
POC	SNAP	1,464	79.2%	8	3	6	10	40
	Non-SNAP	273	14.8%	14	7	13	19	36
Expansion	SNAP	1,470	81.4%	7	2	6	9	37
	Non-SNAP	224	12.4%	14	7	13	21	36
All SNAP Sites	SNAP	10,147	61.3%	10	4	8	14	40
	Non-SNAP	3,430	20.7%	12	4	10	18	36

Source: SEBTC transaction data, 2012.

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

The differences in patterns of SEBTC benefit use between WIC and SNAP model sites and between active and passive consent sites, as shown in Sections 3.3 through 3.10, raise a key question: how much of this variation can be attributed to the differences in how SEBTC was implemented? As discussed in Chapter 2, the SEBTC demonstration sites differed not only in the choice of SEBTC models (SNAP or WIC) and mode to obtain household consent (passive or active) but also on the characteristics of eligible households. The sites varied on many dimensions, including food security, participation in food assistance programs, racial and ethnic composition, income and employment, and family structure. These differences may have contributed to observed differences in benefit use between WIC and SNAP model sites or between passive and active consent sites. However, as discussed in this section, the evaluation finds strong evidence that the site level differences in benefit use persist after controlling for these differences. In addition, the evaluation finds strong evidence that both the choice of SNAP or WIC model and the use of passive or active consent are related to patterns of household benefit use, including rates of participation, redemption, and exhaustion. As a result, the evaluation has more confidence in attributing differences in benefit use across sites to the sites' approaches for implementing SEBTC, and particularly to the choice of models and the mode of consent.

This section summarizes the approach and conclusions of regression analysis used to delineate the relationships of the patterns of SEBT benefit use to the two key dimensions of sites' implementation approaches-- first, WIC versus SNAP models; and second, active versus passive consent-- and to the characteristics of households residing in individual sites. The discussion focuses on the relationship of benefit use to the implementation approaches. (The methods and results, including findings on the relationship of benefit use to household characteristics, are presented in more detail in Appendix 3C.)

3.11.1 Regression Analysis Approach

The evaluation team estimated regression models of the four measures of SEBTC benefit use previously described in Sections 3.3 through 3.10:

- The participation rate, i.e., percentage of all demonstration households that redeemed any benefits
- The redemption rate, i.e., percentage of benefits redeemed, specifically for participating households
- The exhaustion rate, i.e., percentage of all demonstration households that redeemed 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

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 that responded to the spring 2012 survey.[73] The evaluation team estimated two sets of models to test how implementation of SEBTC influenced household SEBTC participation, benefit redemption, benefit exhaustion, and time to benefit exhaustion. Both sets of models included the same set of spring (pre-SEBTC) household characteristics, including participation in food assistance programs (SNAP, WIC, and free/reduced-price breakfast), food insecurity, income, number of caretakers and other adults, age of oldest child, and demographics of the primary caretaker (race/ethnicity, gender, employment, and education). Appendix 3C provides definitions of the household characteristics and discusses their relationships to the SEBTC benefit use outcomes.

The two sets of regression models differed in how they tested for the relationship of SEBTC implementation to benefit use. The first set of models used site-specific indicators to explore the extent to which site differences in SEBTC benefit use, as observed in the descriptive analysis, persisted after controlling for differences in household characteristics across the sites. The second set of regression models replaced the site-specific indicators with indicators for whether the site used the SEBTC WIC model (for comparison to the two SNAP models looked at together) and whether the site used passive consent (for comparison to sites with active consent), to test whether differences in patterns of benefit use were related to these two implementation approaches. The models with indicators for the WIC model and passive consent quantified the differences in benefit use between groups of sites on these dimensions.

3.11.2 Regression Analysis Results

Participation Rates

The regression analysis supported the descriptive findings about the site level differences in participation, after controlling for differences in household characteristics across sites:

- Five of the eight sites that used the SNAP model (Connecticut Expansion, Delaware, Oregon POC and Expansion, and Washington) had higher odds of participation than any of the six sites that used the WIC model. (The odds of an event are computed as the ratio of the probability that the event happens to the probability that it does not happen.)[74]
- Among sites using the same SEBTC model (SNAP or WIC), sites that used active consent almost always had higher odds of SEBTC participation (i.e., used benefits at least once) than those that used passive consent. The exception was that the Connecticut POC site (mostly

[73] The Cherokee Nation was excluded from the regression analysis because it had a low spring survey response rate.

[74] If the participation rate is 75%, the odds of participation are 3 to 1. In contrast, if the participation rate is 25%, the odds of participation are 1 in 3. In this particular example, the first participation rate is 3 times the second one, but the ratio of the odds is 9 (3/(1/3)=9). However, the relationship of the probability of an event (P) to the odds of the event (O) is non-linear: O=(P/(1-P)). Thus, the conversion from ratios of probabilities to odds ratios (as presented in this discussion) is also non-linear. See Appendix 3C for further discussion.

active consent)[75] had lower odds of participation than the Missouri POC site (passive consent).

- Both of the regression models of household participation described above (i.e., the first, with site-level indicators, and the second with indicators for the WIC model and passive consent) yielded the same conclusions about the relationship of participation to implementation approaches. The regression models reinforced descriptive findings that both sites using the SNAP model (compared with the WIC model) and using active consent (compared with those using passive consent) had higher odds of SEBTC participation among households issued benefits.
- The second regression model indicated that the odds of a household participating in SEBTC were reduced by more than half if the household belonged to a WIC model site, compared to a SNAP model site. Based on the same regression model, the odds of participating in a passive consent site were 38% of the odds in an active consent site.
- While these findings support the conclusions from the aggregate data, they also suggest that site-specific differences also contributed to the variation in the odds of SEBTC participation across sites. For example, the odds of participation were more than twice as high in the Connecticut Expansion site than in the Connecticut POC site, even though the analysis controlled for differences in household characteristics, and the two sites used the same SNAP model and active consent (see footnote referenced above), as well as shared additional similarities in implementation approaches.

Redemption Rates

In addition to participation rates, the regression analysis examined the factors related to redemption rates (percentage of benefits redeemed) among households that participated in SEBTC (i.e., used SEBTC benefits at least once). As described earlier, the first regression model had site-specific indicators, while the second model instead had indicators for use of the SEBTC WIC model (rather than SNAP) and use of passive (not active) consent. The two regression models of redemption rates supported the findings from the descriptive analysis related to site-level differences, after controlling for differences in household characteristics:

- As indicated by descriptive analysis, participating households in all SNAP model sites redeemed a greater percentage of their benefits, on average, than participating households in the WIC model sites. This finding is supported by both regression models.
- Also supporting the descriptive analysis, based on the second regression model, participating households in WIC model sites had 19% lower redemption rates, controlling for both the type of consent used by the site and for household characteristics. (The first model did not provide estimates of differences between WIC and SNAP model sites as a group.)
- Households participating in SEBTC in the four SNAP-hybrid sites (Missouri POC and Expansion and Oregon POC and Expansion) had greater redemption rates than participating households in three SNAP model sites that issued a separate SEBTC-SNAP card (Connecticut

[75] In 2012, Connecticut used passive consent for households in the POC site that received benefits in 2011. This policy may have contributed to the lower odds of participation in the POC site.

POC, Delaware, and Washington).[76] The results are consistent with the expectation that the more automatic benefit redemption in the SNAP-hybrid model sites would result in greater redemption rates.

- As in the descriptive analysis, the regression analysis shows no significant differences between redemption rates for participating households between sites using passive consent compared to those using active consent. Since, as described above, passive consent was associated with lower household participation rates, the overall redemption rates for all households, including those that did not participate, were lower in sites with passive consent, as shown in Exhibit 3.3.[77]

Benefit Exhaustion

Finally, the regression analysis reinforced some conclusions from the descriptive analysis about site-level differences in SEBTC benefit exhaustion rates (percentage of all households redeeming all of their SEBTC benefits during a month) and the time elapsed from SEBTC benefit issuance to exhaustion (for households exhausting benefits) after controlling for differences in household characteristics across sites:

- As shown in the descriptive analysis, households in all of the SNAP model sites were much more likely to exhaust their benefits and did so much faster than households in the WIC model sites. Based on the regression model with WIC and passive consent indicators, the odds of benefit exhaustion in WIC model sites were 3% of the odds in SNAP model sites, and the time to benefit exhaustion in the WIC sites was almost 10 days more than in the SNAP model sites.[78]
- Unlike the descriptive analysis, the regression analysis showed that the odds of SEBTC benefit exhaustion in passive consent sites were three times the odds that benefit exhaustion would occur in active consent sites. The reasons for this result are not clear. Given that, as described above, regression analysis did not suggest that redemption rates were significantly associated with passive or active consent, it is plausible that the odds of SEBTC benefit exhaustion were related to other site level or unmeasured household characteristics.
- Among households that exhausted benefits, those in sites with passive consent took slightly longer (about .5 days) to do so.

Broadly speaking, the results from the regression analysis support a major conclusion from the earlier descriptive analysis: sites implementing SNAP models had higher rates of household

[76] The Connecticut Expansion site was the exception to the pattern that SNAP hybrid model sites had higher redemption rates than the SNAP model sites with a separate SEBTC card. Households in the Connecticut Expansion site had a greater average redemption rate than those in the Oregon POC site, one of the SNAP hybrid model sites.

[77] Among the WIC sites, the highest overall redemption rates (including non-participating households) were in Chickasaw Nation, Michigan POC, and Michigan Expansion—all using active consent. Similarly, the overall redemption rates in the Missouri POC and Expansion sites were lower than in the other SNAP model sites, all of which used active consent.

[78] The regression model was used to compute the ratios of odds as described in Appendix 3C.

participation in SEBTC, benefit redemption among participating households and SEBTC benefit exhaustion. These results are robust even after controlling for household characteristics. The results of the regression analysis also support the conclusion from the descriptive analysis that household SEBTC participation rates were substantially lower in sites with passive consent. The regression results further indicate that participating households in sites with passive consent had higher benefit exhaustion rates. These results are based on a limited number of sites with self-selected approaches to SEBTC. It is possible that the observed results reflect unobserved economic, social, or implementation factors that influence the behavior of these households. Nevertheless, the size and consistency of the estimates argue for the plausibility of the interpretations presented here.

3.12 Conclusion

This chapter has presented the results of descriptive tabulations and regression analyses of SEBTC benefit issuance and redemption data. Nearly 92% of children that were issued benefits were in households that participated by redeeming at least some of their benefits, and the average benefit redeemed per child was $150. There was substantial variation across the sites in the value of benefits issued, the rate of participation, the value and percentage of benefits redeemed, and the proportion of households that exhausted (used all of) their benefits. Participation, redemption, and exhaustion rates were higher in sites with the SNAP model than in those with the WIC model. Participation rates were higher in sites with active consent, but benefit exhaustion rates were higher in sites with passive consent. There is strong evidence that these associations are related to the characteristics of the SEBTC models and the mode of consent, but other differences at the site and household level likely contributed to the observed variation as well.

Chapter 4

Characteristics of Households in the Summer EBT for Children Demonstration

This chapter describes the characteristics of households taking part in the SEBTC demonstration areas, drawing largely from surveys of over 27,000 households at two points in time: in the spring (i.e., before the end of the school year), and again during the summer. The chapter presents important context to help understand and interpret the impacts of SEBTC that are discussed in the subsequent chapter, which answers questions about the impact of SEBTC on VLFS-C, nutritional status, and other outcomes.

4.1 Research Questions and Key Findings

4.1.1 Research Questions

The major research questions addressed in this chapter are:

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

Not all households in the full sample responded to both the spring and summer surveys. In order to describe the same sample that was used for the impact analysis in the subsequent chapter, most household characteristics are described according to information provided by all households, even those that only responded to the summer survey. However, estimates of characteristics which could be affected by receiving SEBTC, such as household income and use of SNAP or WIC, are based on either summer responses from the control group only or on the spring responses from the full evaluation subsample (i.e., both treatment and control groups). For each set of characteristics described below, the survey timing and sample are identified.

4.1.2 Key Findings

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

- Almost half of the households reported having more than one adult (48.1%), and almost half of the households (48.0%) had one adult who was female. In terms of race/ethnicity, the largest group identified themselves as non-Hispanic white (41.9%) with the next largest

group being Hispanic (30.6%). The mean number of children in the households (both school age and younger) was 2.5.

- In terms of income, households were relatively disadvantaged, compared to the national population. Reported mean household monthly income for the control group was $1,665, with 2.9% reporting no income in the previous 30 days. More than seven of 10 households (70.4%) had monthly incomes below the federal poverty line,[79] ranging from 58.8% of households in Washington to 79.5% in Michigan Expansion. Over two thirds (71.7%) reported at least one employed adult in the household.
- As further evidence of disadvantage, 36.1% of respondents reported that a member of their household was a person with a physical or mental disability, and this varied across sites: 21.3% of households in Texas and 49.1% of households in Cherokee Nation reported family members with a disability.
- Respondents reported that, during summer 2012, nearly 83.9% of children (estimated using the control group only) usually ate lunch Monday through Friday at home during the previous 30 days. Ten percent (10.0%) reported that children usually ate at summer school or an identified SFSP site. Most respondents (87.6%) indicated that the child did not usually eat at any other location, but 12.4% said children routinely ate at a second location.
- Nearly two-thirds of the households (61.7%) reported receiving SNAP benefits in the spring, prior to when SEBTC began. Over one-fifth (21.6%) reported receiving WIC. Reporting about the summer 2012, 4.2% of households reported that their children received NSLP or SFSP as their primary source of weekly lunch in the summer (4.1% and 3.1%, respectively).
- Tests of balance for child and household characteristics available from school districts prior to random assignment (e.g., child age and gender, number of children in the household, race/ethnicity, etc.) indicated that there was no difference between households that consented to be in the demonstration sample and selected to receive SEBTC, and those not selected. Tests also indicated that the evaluation subsample selected to receive the household survey (i.e., the treatment and control group), was also balanced on these characteristics.

Chapter 4 first describes the random assignment process, survey response rates, the data collection approach, and the survey instruments. 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

[79] The Federal Poverty Level (FPL) is adjusted for household size. An FPL is calculated for the contiguous United States, Alaska, and Hawaii. The 2012 FPL for a family of four is $23,050 per year (i.e., $1,921 per month) in the 48 contiguous States (http://aspe.hhs.gov/poverty/12poverty.shtml).

meals. After obtaining consent from families (by either passive or active processes) SFAs or grantees 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 approximately 5,300 children to receive the benefit per site. 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 and in the summer, overall and by site. (See Appendix 4B for details about the sampling plan and computation of the weighted response rate.) Overall, the survey achieved a 72.9% weighted response rate in the spring and an 80.3% weighted response rate in the summer. Across all sites, the summer response rate among households in the treatment group was 83.0%, compared to 77.5% in the control group. The overall summer response rate varied substantially by whether the site used active or passive consent, with active consent sites achieving an overall weighted response rate of 85.9%, compared to a 72.2% rate in passive consent sites. Every site, including passive and active consent sites, achieved a summer weighted response rate over 60%.[80]

[80] Prior to completion of the spring data collection, FNS and the evaluation team determined that any site with a weighted response rate below 50% would be excluded from analyses. One site – Cherokee Nation – had a spring weighted response rate below 50%; therefore, the site was excluded from the estimates based on the spring sample (i.e., household participation in nutrition assistance programs, reported in Section 4.3.6) and analyses examining spring-to-summer change in food security (reported in Chapter 5).

Exhibit 4.1 Weighted Response Rates, All Sites and by Site, Spring and Summer 2012

	Spring			Summer		
	All Cases	Treatment	Control	All Cases	Treatment	Control
Cherokee Nation	39.9%	40.8%	39.1%	61.6%	63.5%	59.6%
Chickasaw Nation	84.4%	89.9%	76.4%	82.5%	87.2%	75.8%
Connecticut						
POC	73.9%	75.3%	72.5%	87.7%	90.9%	84.7%
Expansion	76.6%	81.0%	72.2%	78.3%	83.4%	73.3%
Delaware	84.3%	85.9%	82.7%	87.4%	90.3%	84.5%
Michigan						
POC	83.7%	85.9%	81.5%	82.7%	86.1%	79.3%
Expansion	90.2%	90.6%	89.7%	91.8%	93.7%	90.0%
Missouri						
POC	54.2%	54.8%	53.6%	69.3%	72.1%	66.5%
Expansion	58.1%	59.3%	57.0%	69.5%	72.9%	66.0%
Nevada	59.6%	61.7%	57.5%	73.5%	75.1%	71.8%
Oregon						
POC	85.2%	86.8%	83.5%	88.0%	90.2%	85.9%
Expansion	81.2%	80.3%	82.1%	88.4%	88.4%	88.4%
Texas	75.6%	78.8%	72.5%	83.2%	84.9%	81.6%
Washington	90.3%	90.3%	90.2%	88.1%	90.8%	85.5%
All Sites	***72.9%***	***74.9%***	***70.9%***	***80.3%***	***83.0%***	***77.5%***
Active Sites	82.3%	84.4%	80.1%	85.9%	88.8%	82.9%
Passive Sites	58.3%	59.9%	56.7%	72.2%	74.6%	69.8%

Source: Spring and Summer Household Samples, 2012.

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 non-respondents to the CATI interviews were randomly 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 summer by telephone. Both the spring and summer surveys took approximately 30 minutes to complete. The surveys were conducted in English or Spanish. The spring survey included questions about household characteristics, household and children's participation in nutrition assistance programs, household food

security, and monthly food expenditures. Respondents received a $10 incentive for completing the spring survey.

During the summer, the survey collected similar information, as well as additional information on children's eating behaviors, 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 $25 incentive 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. Specifically, survey responses are weighted to represent the 2012 study population.[81,82] The sample is not nationally representative, nor necessarily representative of children receiving FRP meals. 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.

As stated earlier, some households responded only to the summer survey and lacked a spring survey. In order to describe the same sample as used for the impact analysis in Chapter 5, most household characteristics are described according to how all households, whether or not they received a spring survey, responded during the summer. However 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 for the full sample or the household characteristics in the summer for the control

[81] These estimates are very similar to those reporting in the 2012 Congressional Status Report (Briefel et al., 2012). They do not match exactly because respondents to the summer 2012 survey were not exactly the same as the respondents to the spring survey. The construction of survey weights is described in Chapter 5 and Appendix 5B.

[82] In the POC sites in Missouri and Texas, households that received the benefit for two summers were included in analysis in both Chapter 4 and Chapter 5. Because there was no statistically significant difference in the return rates for the benefit and non-benefit groups in these two sites, it is reasonable to interpret the benefit and non-benefit returning households as statistically equivalent, and the returning benefit group can be considered equivalent to the re-randomized non-benefit group. However, households in the other POC sites that received the benefit for two summers did not have a direct counterpart in the control group. In those sites, there was a statistically significant difference in return rates between the benefit and non-benefit groups; therefore, the 2-year benefit group was not included in analyses for the other POC sites.

group are reported, whichever was most appropriate. Unless otherwise noted, all estimates are based on the summer status of all of the households.[83]

The sections that follow present average estimates across all sites. The analysis also tests for variation across sites, but only mentions differences if they meet the p-value standard of below 0.05, suggesting strong evidence of variation. Appendix 4D presents household characteristics for both the total study population and for each site.

4.3.1 Household Size and Composition

Across all 14 sites, the mean number of people in the household was 4.4, ranging from 4.0 to 4.8 ($p<0.001$)[84] (Exhibit 4.2; Appendix 4D, Exhibit 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 (48.1%), and almost half (48.0%) had one adult who was female. The remaining households (3.9%) had one adult who was male. Household composition varied significantly across sites, with Missouri Expansion reporting almost three-fourths (73.4%) of its households with one female adult, compared to Cherokee Nation reporting about a third (35.1%) (Appendix 4D, Exhibit 4D.1).

The mean number of children in households was 2.5. This count includes 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.[85] The mean number of children ranged from 2.2 to 2.7 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/FPL). It would therefore be expected that the survey sample would be relatively disadvantaged, and, in fact, mean monthly household summer income for households in the control group was $1,665, with 2.9% reporting no income that month (Exhibit 4.2). For a family of four, this represents 87% of FPL. In fact, 70.4% of the survey population had monthly incomes below the FPL, ranging from 58.8% of households in Washington to 79.5% in Michigan Expansion (Appendix Table 4D.1).[86] Consistent 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

[83] As described in the methods section, the spring survey asked for demographic information, which was updated in the summer for those households that completed a spring survey. Households that did not complete a spring survey were asked the same demographic questions about their household's status during the previous 30 days.

[84] A *p* value of 0.05 or lower indicates strong evidence of variation among sites. Differences among sites are only mentioned if the *p* value meets the standard of below 0.05.

[85] 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.

[86] In comparison, 18.1% of families with children reported being under the poverty level nationally in 2011 (Census Bureau, 2012, https://www.census.gov/hhes/www/poverty/data/incpovhlth/2011/index.html).

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 (71.7%; Exhibit 4.2). Texas reported the highest percentage of employed adults (77.1%) and Missouri-Expansion reported the lowest (60.0%). Thirty-six percent of households reported a person with a physical or mental disability, and this varied across sites: 21.3% of households in Texas and 49.1% of households in Cherokee Nation (Appendix Table 4D.1).

Exhibit 4.2 SEBTC Household Characteristics, 2012

Characteristic	Estimate	SE
Household Size[a]		
Mean number of people in household	4.4	0.01
Household Composition[a]		
Household with one adult, female	48.0%	0.44
Household with one adult, male	3.9%	0.24
Household with more than one adult	48.1%	0.44
Number of Children[a]		
1 child	23.1%	0.35
2 children	35.4%	0.44
3 or more children	41.5%	0.44
Mean number of children in household	2.5	0.01
Last Month Household Income[a, c]		
Median	$1,400	25.35
Mean	$1,665	14.73
No income (Last Month)	2.9%	0.21
Last Month Household Income[a, c]		
Below poverty line[b]	70.4%	0.54
101-130 percent of poverty line[b]	13.0%	0.36
131-185 percent of poverty line[b]	11.3%	0.37
Above 185 percent of poverty line[b]	5.3%	0.26
At least one employed adult [c]	71.7%	0.52
Any person with a physical or mental disability	36.1%	0.49

Source: SEBTC, Summer Survey, 2012 (full sample n=27,094; control group n = 12,985).

[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/12poverty.shtml). A small percentage of households provided annual income, which was used to calculate monthly income for the poverty distribution.

[c] Estimates for household income and employment are reported for the control group only.

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

(89.3%) and 72% were between the ages of 30 and 49 (Exhibit 4.3). There was age variation across sites: nearly one quarter of Michigan POC respondents were between the ages of 18 and 29 (24.4%) compared to Oregon POC and Expansion sites, with the smallest proportion of respondents in that age category (13.0%). Chickasaw Nation had the highest proportion of respondents over 50 years of age (13.8%); Connecticut Expansion had the lowest (8.9%). (See Appendix Table 4D.2, for site-level details.)

In terms of racial and ethnic composition across all of the sites, the largest group identified themselves as non-Hispanic white (41.9%) with the next largest group being Hispanic (30.6%) (Exhibit 4.3). There was a large amount of variation in the racial/ethnic composition among the 14 sites participating in 2012. Michigan and Delaware were the most racially and ethnically diverse with approximately equal proportions of respondents reporting being Hispanic, non-Hispanic black, and non-Hispanic white. In contrast, 95.1% of Texas respondents reported that they were Hispanic, 90.3% of respondents in Michigan Expansion reported being non-Hispanic white, and 79.1% of respondents in Missouri POC reported being non-Hispanic black. (See Appendix Table 4D.2.)

In terms of educational 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). Oregon Expansion had the highest proportion of respondents who had not completed high school (38.5%). (See Appendix Table 4D.2.)

Slightly over half the respondents reported being single (51.8%, including never married, separated or divorced, or widowed), with the remaining reporting they were married or living with a partner (48.2%) (Exhibit 4.3). Substantial variation existed across the sites: Chickasaw Nation had the highest proportion of respondents married or living with a partner (60.3%), and Missouri Expansion the lowest (22.1%). (See Appendix Table 4D.2.)

4.3.5 Characteristics of Children Certified for FRP Meals

The survey gathered information specifically about children in the evaluation subsample 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 pre-school-aged 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.

Exhibit 4.3 Characteristics of SEBTC Respondents and Children Certified for Free or Reduced-Price Meals, 2012

Characteristic	Percent	SE
Gender*		
Female (Respondent)	89.3	0.26
Male (Respondent)	10.7	0.26
Age of Respondent[a]		
18-29 years	16.7	0.35
30-39 years	44.6	0.44
40-49 years	27.4	0.39
50-59 years	8.8	0.28
60 years or older	2.4	0.12
Race/Ethnicity of Respondent[b]		
Hispanic	30.6	0.36
Non-Hispanic black	17.7	0.24
Non-Hispanic white	41.9	0.44
Other, non-Hispanic	9.9	0.27
Education Level of Respondent[c]		
Less than high school	27.3	0.38
Completed high school (or GED)	32.5	0.42
Some college (including 2-year degree)	32.7	0.44
Four-year degree or higher	7.5	0.23
Marital Status of Respondent*		
Married	39.2	0.44
Living with partner	8.9	0.22
Separated or divorced	25.6	0.39
Widowed	2.5	0.18
Never married	23.7	0.35
Age of Children[a]		
3-4 years	3.3	0.21
5-8 years	30.3	0.45
9-12 years	30.1	0.48
13-15 years	20.6	0.41
16-17 years	11.2	0.29
>17 years	4.6	0.19

Source: SEBTC, Summer Survey, 2012 (n=27,094).

[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.

4.3.6 Where Children Usually Ate Lunch During the Summer

The summer survey asked respondents where their children usually ate lunch, Monday through Friday, in the previous 30 days. They were also asked whether children also ate in a second place, and, if so, where that was. For both the primary (most frequent) and the secondary (i.e., next most frequent) they were asked how often they ate lunch meals and whether the lunch was paid, brought from home, or free.

To gain a sense of where children from the evaluation subsample would typically eat in the summer, in the absence of SEBTC, information is provided 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 84% of the control group respondents reported that, during the previous 30 days, their school-aged children usually ate lunch at home on Monday through Friday (Exhibit 4.4). Another 10.0% indicated that their children ate at summer school or site that could be identified as using SFSP, and 3.6% of respondents indicated that their children usually ate lunch at a another program. The remaining respondents indicated that their children ate at a friend's or relative's home or another place. There was some variation across sites in terms of the participation in summer school or eating lunch at an identified SFSP site, with 5.0% in Washington reporting that children usually ate at these locations, compared to 15.8% in Missouri Expansion (See Appendix Table 4D.3.).

Exhibit 4.4 Where Children Usually Ate Lunch, Monday through Friday, Summer 2012 (Control Group Only)

Primary Location	Percent	SE
At home	83.9	0.47
Summer school or Identified SFSP site[a]	10.0	0.39
Another program (camp, church, playground, daycare, community center not coded as SFSP)	3.6	0.21
At friend's or relative's home	1.6	0.14
Other (work, restaurant other place, don't know/refused)	0.9	0.11

Source: SEBTC, Summer Survey, 2012 (n=12,807).

[a] Summer Food Service Program site. Respondents reported that over the last 30 days that their child usually attended a program that could be confirmed as an SFSP site or identified as a likely SFSP site.

Respondents in the control group also reported on the secondary place where their children ate lunch Monday through Friday in the summer (Exhibit 4.5). Almost nine out of ten households (87.6%), no matter what the primary location was, reported that children did not eat at any place other than the primary location. This was especially the case for nearly all children who primarily ate at home (92.7%), for approximately three-quarters of children who ate primarily at a program that was not an SFSP site (75.9%) and for those who ate at a friend's or relative's house (70.6%). The households that had children most likely to eat at another location were those that ate at a school or an SFSP site (54.8%), or those that ate at another location (57.9%).

Exhibit 4.5 Whether Children Had A Secondary Location for Lunch, Monday through Friday, by Primary Location, Summer 2012 (Control Group Only)

Primary Location	No Other Place		Another Location	
	%	SE	%	SE
At home	92.7	0.41	7.3	0.41
Summer school or Identified SFSP site[a]	54.8	1.98	45.2	1.98
Another program (camp, church, playground, daycare, community center not coded as SFSP)	75.9	2.88	24.1	2.88
At friend's or relative's home	70.6	4.12	29.4	4.12
Other (work, restaurant other place, don't know/refused)	57.9	6.80	42.1	6.80
All Control Group Households	87.6	0.44	12.4	0.44

Source: SEBTC, Summer Survey, 2012 (n=12,807)

[a] Summer Food Service Program site. Respondents reported that over the last 30 days that their child usually attended a program that could be confirmed as an SFSP site or identified as a likely SFSP site.

In total, 11.2% of all control group respondents (including those that did not name an additional location where their children ate lunch) reported that a summer school or SFSP site was either the child's primary or secondary source of lunch from Monday through Friday.[87] This reported rate of participation is lower than 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, 2012).[88]

For both primary and secondary locations where children usually ate lunch, respondents were also asked to report whether their child's lunch was: (1) eaten at or brought from home; (2) paid for by the household; or (3) provided to the child for free (either because the lunch was provided by a program or by a friend or relative).[89] Most of the households in the control group (who were therefore not receiving SEBTC) used their own resources for their children's lunches, Monday through Friday, by either supplying lunch from or at home or directly paying for it.

Considering both primary and secondary locations where children in the control group usually ate lunch, 80.1% of children usually did not receive a free lunch even one day per week; 4.6% of children usually received free lunch one to two days per week; 0.4% of children usually received free lunch three to four days per week; and 13.6% of children usually received free lunch five days per week (Exhibit 4.6.).

[87] Among the control group (n= 12,807), 7.2% of households reported that their child usually ate at a place identified by the evaluation team as an SFSP site, an additional 2.8% reported that school was the primary location where their child ate, an additional 1.0% reported a secondary location identified by the evaluation team as an SFSP site, and an additional 0.15% reported that school was the secondary location.

[88] Based on July average daily attendance figures for summertime NSLP participation reported by FNS, but not adjusted for absenteeism because summer absentee figures are not available for SFSP as they are for NSLP; estimate assumes that SFSP accounts for approximately 65% of summer nutrition meals. About 14.6% of eligible children participated in summer nutrition meals in 2011 (Food Research and Action Center, 2012b).

[89] In some cases, respondents indicated that their child attended a program that offered free meals but their child brought his or her food from home.

Exhibit 4.6. Number of Days Children Usually Received Free Lunch, Monday through Friday, Summer 2012 (Control Group Only)

Cost	Percent	SE
0 Days	80.1	0.54
1-2 Days	4.6	0.30
3-4 Days	0.4	0.06
5 Days	13.6	0.45
Missing or unknown	1.2	0.12

Source: SEBTC, Summer Survey, 2012 (n=12,917).

Note: Lunch at summer school was assumed to be free.

Respondents in the control group were asked if there was a program in their neighborhood that provided free meals to children during the summer months. Approximately 30% of control group respondents said they were aware of such a program (Exhibit 4.7). Of those who knew about a program nearby and said their child did not attend it, 38.5% indicated that there was a logistical barrier to attending (e.g., non-food costs of participating in a program; lack of transportation; conflicts with child's or parent's schedule) (Exhibit 4.8). Thirty-six percent indicated that the food served at home better fit their child's food preferences or nutritional needs and 10% indicated that they did not like some aspect of the program, besides the free meals served.

Exhibit 4.7 Awareness of a Program in the Neighborhood that Provides Free Meals, Summer 2012 (Control Group Only)

Location	Percent	SE
Respondent is aware of a program that provides free meals	29.8	0.61
Respondent indicates that there is no program that provides free meals	46.8	0.73
Respondent does not know if there is a program that provides free meals	23.4	0.60

Source: SEBTC, Summer Survey, 2012 (n=12,806)

Exhibit 4.8 Reasons Provided for Why Children Did Not Attend Known Programs Providing Free Meals,[a] Summer 2012 (Control Group Only)

Location	Percent	SE
Logistical barriers to attending	38.5	1.22
Food at home better meets child need/preference	36.0	1.19
Does not like other aspects of the program	10.0	0.69
Child is not eligible	4.4	0.44
Other	5.4	0.57

Source: SEBTC, Summer Survey, 2012 (n=3,486)

[a]Reasons are not mutually exclusive. Among households indicating that they were aware of a neighborhood program providing free meals, 11.3% indicated that the child attends the program.

4.3.7 Participation in Nutrition Assistance Programs

This section describes participation in nutrition assistance programs targeting households and children. It first describes the use of benefits provided to the overall household, including SNAP, WIC, and food pantry/food bank/emergency kitchen. The section then describes benefits issued to children, including NSLP, SBP, supper at school, SFSP, and backpack

programs. Participation in programs targeting households is described using spring data on both the treatment and control groups. Participation in programs targeting children is described using summer data for the control group only.

Participation in Programs Targeting Households

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.[90] In addition to participation in NSLP and SBP, in the spring, approximately three-quarters of households (72.3%) reported participating in at least one federal nutrition assistance program in the 30 days prior to the summer interview (Exhibit 4.10). Households most commonly reported using SNAP (61.7%), followed by WIC (21.6%). Participation rates varied across sites, with the highest proportion of respondents reporting participation in SNAP in Oregon POC (74.0%), compared to 35.9% of respondents in Chickasaw Nation. Michigan POC and Oregon Expansion respondents reported the highest participation in WIC (30.3% and 30.9% respectively). (See Appendix Table 4D.6).

Participation in Summer Programs for School-Aged Children

Respondents were asked about their children's participation in SBP and NSLP during the summer (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 reported location was an SFSP site in the local area. Respondents in the control group reported that 88.2% of children did not participate in any summer nutrition program—neither SBP, NSLP, SFSP, nor a backpack program (Exhibit 4.9). The highest reported participation was for SFSP, 8.3%. This is approaching two-thirds the national average of 14.6% for SFSP participation in 2011 (Food Research and Action Center, 2012).[91]

[90] By using the SNAP participation rate in the spring, while all households are certified for the FRP meals and no households are receiving SEBTC, the estimate does not include any potential impacts of SEBTC on SNAP or WIC participation.

[91] 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 13% in the Michigan POC site; Appendix 4D). This discrepancy may reflect under-reporting by parents, an SFSP program name or location 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.

Exhibit 4.9 Reported Participation in Household and Child Nutrition Programs in Sites, Summer 2012

Characteristics	Percent	SE
Household Benefits Prior to any Receipt of SEBTC[a]		
Reported receiving SNAP[b]	61.7	0.46
Reported receiving WIC[c]	21.6	0.35
Reported receiving food from food pantry/food bank/emergency kitchen	19.2	0.36
Reported receiving none of the above	27.7	0.42
Children's Benefits During the Summer 2012[d]		
Reported receiving NSLP[e]	4.1	0.24
Reported receiving SBP[f]	3.1	0.19
Reported receiving supper at school	0.5	0.07
Reported meals at an identified SFSP site[g]	8.3	0.37
Reported receiving backpack program	2.6	0.19
Reported receiving none of the above	88.2	0.42

Source for Household Benefits: SEBTC Spring survey, 2012 (n= 22,282 treatment and control)

Source for Children's Benefits: SEBTC Summer survey (n= 12,985 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 confirmed as an SFSP site or identified as a likely SFSP site (reported for control group only).

4.4 Conclusion

This chapter presents evidence that the households participating in the SEBTC demonstration were economically disadvantaged and reported relatively high use of nutrition assistance programs prior to the receipt of SEBTC. Nearly three-quarters of households (70%) were below the FPL and, in addition to FRP meals, most participated in one or more nutrition assistance programs, including SNAP and WIC. Almost one in five households (19%) reported food pantry or emergency kitchen use in the month prior to their spring interview (i.e., during the school year). However, despite the level of disadvantage, the children of very few households in the control group received weekday meals during the summer provided by SFSP or summer school (8%) and only 14% of children received a free lunch, Monday, through Friday, more than three days per week.

Chapter 5

Impact of Summer EBT for Children 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 resources to obtain food for households with children certified for free or reduced-price meals during the school year. 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 outcomes (including food expenditures and participation in nutrition assistance programs) Unless otherwise noted, all estimates use the experiment's randomly assigned control group, which did not receive SEBTC benefits, to establish what the outcomes would have been for SEBTC recipients (the treatment group) without the intervention in the 14 sites that participated in 2012.

5.1.1 Research Questions

Specifically, the chapter addresses five broad 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 household poverty status?
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 assistance 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

- With respect to the study's primary outcome, SEBTC reduced very low food security among children (VLFS-C) during the summer of 2012 from 9.5% in the control group to 6.4% in the treatment group; a drop of a third. In these 14 sites, SEBTC unambiguously and substantially advanced the demonstration's main goal, reducing children's very low food security in the summer.
- SEBTC caused reductions (i.e., improvements) in related measures of food security. More specifically, the broader measure of food insecurity among children (FI-C, i.e., either very low food security or low food security) was reduced from 45% to 36%. Very low food security and food insecurity among adults (VLFS-A and FI-A) also declined, suggesting that some of the SEBTC benefit also went towards increasing adults' food intake. The overall results hide considerable variation in both the levels of VLFS-C and in impact. Some of that variation is due to relatively small sample sizes at the site level, but some of it is true variation.
- With few exceptions (and despite large samples), the impacts on VLFS-C did not differ substantially across subgroups. There was no differential effect for program model (SNAP models vs. WIC-model, as well as SNAP-model vs. SNAP-hybrid-model), poverty, family size, or SNAP participation in spring 2012. The exceptions are that impacts were larger for active consent sites, for households that had VLFS-C in the spring, and for households with adolescents.
- The level of VLFS-C in the control group, which did not receive SEBTC, increased (i.e., food security worsened) during the school year, and summer, from 8.6% to 9.9%. However, the overall level of food insecurity (including both low and very low food security) among children in the control group, whose households did not get the SETBC benefit, did not change significantly from spring to summer (45.3% to 45.7%).
- Children in households with SEBTC ate more fruits and vegetables, whole grains, and dairy foods; while consuming fewer sugar-sweetened beverages. There was no impact on consumption of total daily added sugars or nonfat/low-fat milk. These impacts were present for the SNAP models and the WIC model, but much larger for the WIC model.
- SEBTC caused increases in total food expenditures (including the SEBTC benefit) by $48 per household. This increase is the net result of redemption of the SEBTC benefit of $91, less a smaller decline in out-of-pocket household food expenditures ($43). Thus, each dollar of SEBTC benefit redeemed led to a 53 cent increase in total household food expenditures. This net increase in food expenditure is considerably higher than standard estimates that a dollar of SNAP benefits leads to an increase of about 30 cents (Hanson, 2010).
- SEBTC had no impact on SNAP participation, but slightly decreased participation in the Summer Food Service Program (SFSP -- from 8.3% to 7.2%) and use of food pantries and emergency food distribution sites (from 14.0% to 11.7%). Children in treatment group families were less likely to receive free lunches from any source (16.2% vs. 18.9% for free lunch at least one day per week; 12.1% vs. 14.2% for free lunch at least three days per week).

Direct generalization of these results to a potential national SEBTC program is not appropriate since the demonstration was not conducted in a nationally representative set of locations. Impacts in the SEBTC demonstration sites may differ from impacts in other communities.

The balance of this chapter presents the just-summarized results in greater detail. 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: household food expenditures; children's nutritional status; 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, household data collection, and characteristics of households. This section provides an overview of the impact analysis variables 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), with a regression adjustment (see below). 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.[92]

Reported estimates of the levels in the treatment group and in the control group, as well as the estimates of impact 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 unequal probabilities of selection, two-phase sampling, and possible nonresponse bias. While the sites differ in the number of households randomized and the number of completed surveys, weights were constructed such that the sum of the weights is equal in each site. As a result, the overall estimates can be interpreted as the average of the 14 site-specific estimates. Appendix 5C describes the construction of three sets of dependent variables – food security, nutritional status, and participation in the Summer Food Service Program. Appendix 5D defines the variables used in the regression adjustment and provides descriptive statistics of those variables as well as the outcome variables used in this chapter. Appendix 5E presents supplementary results (some of which are discussed, but not presented, in the body of the chapter).

[92] Statistical significance measures (p-values) are generally for two-sided hypothesis tests, to allow detection of unexpected negative effects and offsetting favorable and unfavorable effects in different domains. Unless otherwise noted, the statistical tests are for impacts in the 14 SEBTC sites.

5.2.2 Subgroup Analyses

As discussed in the next section, the main and confirmatory results for this study are pooled over the entire sample. Results for individual sites, for site-level subgroups, and for individual-level subgroups are also reported. At the site level, subgroups are defined by the SEBTC model used by the site (i.e., the SEBTC-WIC vs. SEBTC-SNAP, including SNAP-hybrid model; and SNAP-model vs. SNAP-hybrid model). At the household level, subgroups are defined by VLFS-C at baseline, SNAP participation, poverty status, number of children in the household, and presence of an adolescent in the household.[93] (Appendix 5E includes findings based on alternative models for subgroup effects that consider all of the subgroups jointly.)

5.2.3 Confirmatory and Exploratory Outcomes

As described earlier, this chapter reports on estimates on many impacts and impacts on various subgroups, raising the problem of multiple comparisons. The large number of tests complicates the interpretation of the statistical tests. Conventional standard errors are strictly correct 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). Failure to consider the tests together substantially increases the probability of finding 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.

The SEBTC evaluation took what is today the conventional approach to multiple comparisons (Schochet, 2009). Before seeing the results, the evaluation design specified 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 conclude that an observed SEBTC impact on VLFS-C represents a true effect.

Consistent with this designation of the pooled impact on VLFS-C is the sole "confirmatory" test in this multiple comparisons sense. All other analyses are treated as exploratory. These exploratory results are described as significant when $p<0.05$ and borderline significant (or similar language) when $p<0.10$, using tests uncorrected for multiple comparisons. Conclusions about the success of the intervention can only be based on the statistical tests for the confirmatory outcome: VLFS-C. If a statistically significant impact on VLFS-C is found for the overall sample, the study concludes that SEBTC has a positive impact. Results for other exploratory outcomes can then be used to shed light on the main finding and suggest areas for

[93] Specifically, the body of the report includes conventional models of subgroup impacts. These total effects models use regression to estimate impacts for two groups; e.g., comparing average impact in households that participated in SNAP as of the spring survey vs. average impact in households that did not.

further consideration. If no statistically significant impact on VLFS-C is found, it cannot be concluded that SETBC succeeded, regardless of the results of the significance tests conducted in the exploratory analyses (i.e., all outcomes except for VLFS-C).

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).

As discussed in the previous section, the evaluation pre-specified VLFS-C as its sole confirmatory outcome and thus uses the presence of an impact on VLFS-C as the measure of the success of the intervention. Results presented in this section establish that SEBTC unambiguously and substantially reduced VLFS-C in the summer of 2012, in the 14 sites combined. Thus, the study presents strong evidence that SEBTC achieved its primary goal in the demonstration sites.

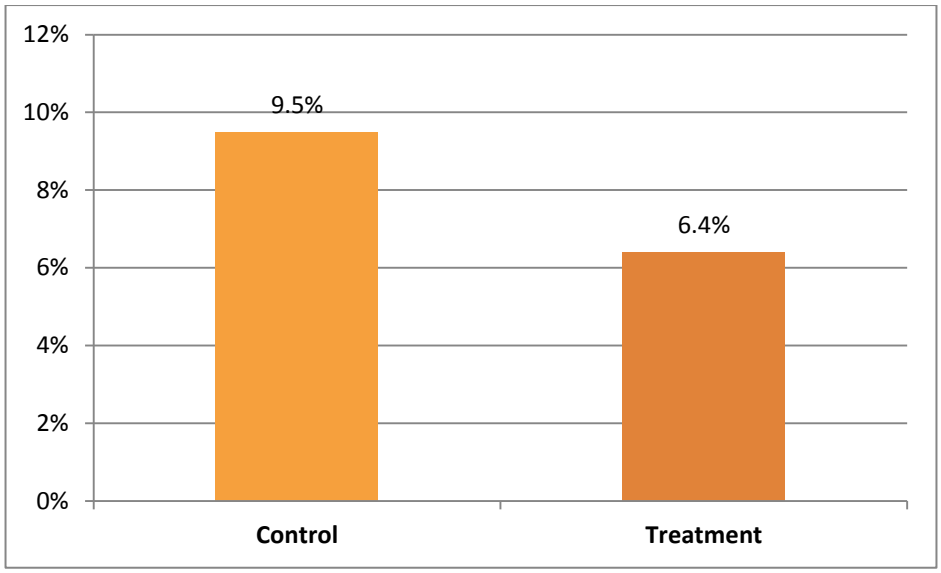
Consistent with the confirmatory results for VLFS-C, estimates of the impact of SEBTC on other measures of food security, including a broader measure of food security among children and measures of food security for adults and households as a whole, consistently show improvements in food security at 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).

5.3.1 Impacts on Very Low Food Security among Children

Averaging across all sites, SEBTC significantly reduced VLFS-C in the summer of 2012 by 3.1 percentage points, from 9.5% of children in the control group, which did not receive SEBTC, to 6.4% of children in the treatment group, which did receive the benefit (see Exhibit 5.1). Thus, SEBTC eliminated VLFS-C for almost one-third of the children (33%) who would otherwise have experienced it. This statistically significant ($p<0.0001$) confirmatory finding constitutes unequivocal evidence that SEBTC achieved its primary goal of reducing VLFS-C, on average, across the 14 sites. This impact on VLFS-C and other results on food insecurity (and very low food security reported below) are robust.[94,95]

[94] Comparing SEBTC redemption amounts for the survey respondents and the population receiving SEBTC revealed that within the treatment arm, there was differential nonresponse: households that used any of their SEBTC benefits were more likely to respond to the household survey. Appendix 5B provides further details about this nonresponse. However, the nonresponse does not appear to have introduced any serious bias into effect estimates on the primary outcome, VLFS-C. Appendix 5E, Exhibit 5E.1.3 contains the results of the investigation into the possible implications of the relationship between survey response and the study's estimates on VLFS-C and other food security measures. For analyses of food expenditures within the treatment arm, because the

Exhibit 5.1 SEBTC Impact on Very Low Food Security among Children in Summer 2012



Source: SEBTC, Summer Survey, 2012 (n=27,092).

Difference=-3.09; SE=0.38; p-value=<0.0001.

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 exploratory analysis suggests that SEBTC had an effect on food insecurity among children, broadly defined (Exhibit 5.2). The prevalence of food insecurity among treatment group children was 36.2% in the summer of 2012 compared to 44.6% in the control group. This contrast suggests that, in the demonstration sites during the summer, the prevalence of VLFS-C for households that received SEBTC is about 19% lower than it would have been in the absence of SEBTC. This is a large proportional decline, but smaller than the proportional decline for VLFS-C (33%).

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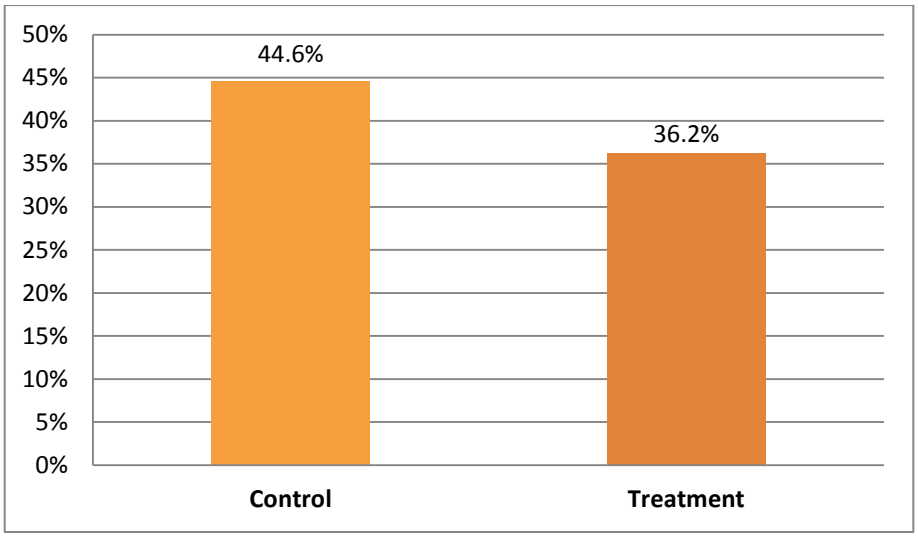
differential nonresponse clearly affects the level of SEBTC redemptions, a special set of weights was developed and used for those analyses. Again, Appendix 5B provides more details.

[95] Appendix 5E, Exhibit 5E.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 5E, Exhibit 5E.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. Appendix 5E, Exhibit 5E.1.3a reports impacts on VLFS-C overall and by site, excluding 207 households with children who attended year-round schools in the Michigan POC site (see footnote 42 in Section 2.4.2); results are very similar. Finally, Appendix 5E, Exhibit 5E.1.4, reports results for the 18 individual items that comprise the food security scale. These results show SEBTC to have significantly reduced food insecurity for all of the individual items.

Exhibit 5.2 SEBTC Impact on Food Insecurity among Children in Summer 2012



Source: SEBTC, Summer Survey, 2012 (n=27,092).

Food insecurity includes low food security and very low food security among children.

Difference=-8.39; SE=0.72; p-value=<0.0001.

Exhibit 5.3 repeats the findings on summer food security of children from Exhibits 5.1 and 5.2, as well as reporting on four new measures: food insecurity and very low food security for adults, and food insecurity and very low food security for entire households.[96] 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. Each of these effects is proportionately similar to those found for children, meaning that overall SEBTC eliminated about one-third of very-low-food security and one-fifth of the food insecurity of adults and households in the participating population.

[96] 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.

Exhibit 5.3 SEBTC Impact on Food Security Among Children, Adults, and Households in Summer 2012: Prevalence Rates for Very Low Food Security and Food Insecurity

Outcome	Sample Size	Control Group Prevalence	Treatment Group Prevalence	Impact on Prevalence Rate (T/C Difference)	SE	p-value	% Change
Very low food security—children	27,092	9.49	6.40	-3.1***	0.38	<.0001	33%
Food insecure—children	27,092	44.61	36.21	-8.4***	0.72	<.0001	19%
Very low food security—adults	27,091	26.95	18.18	-8.8***	0.61	<.0001	33%
Food insecure—adults	27,091	51.99	42.51	-9.5***	0.74	<.0001	18%
Very low food security—household	27,092	28.70	19.47	-9.2***	0.61	<.0001	32%
Food insecure—household	27,092	57.31	48.47	-8.8***	0.74	<.0001	15%

Source: SEBTC, Summer Survey, 2012.

"% Change" is impact as a percent of control group level.

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

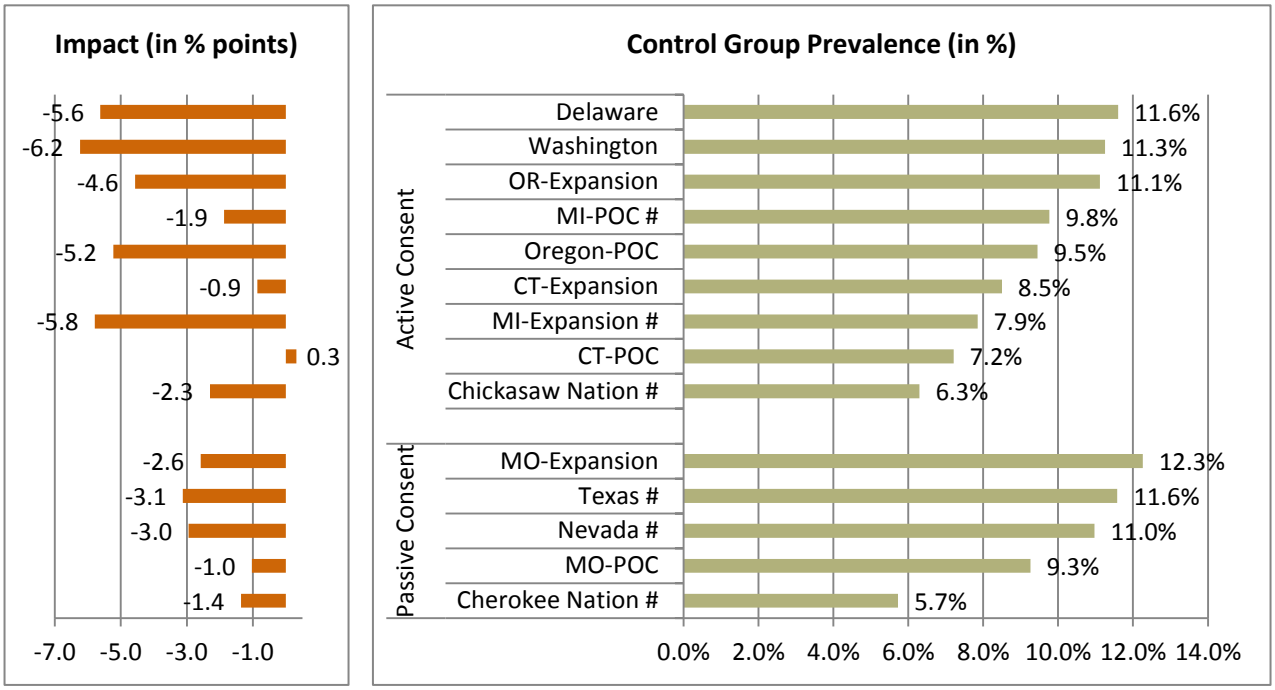
5.3.3 Impacts on Food Security by Site

As described in the earlier section, the study established that SEBTC resulted in statistically significant reductions in many measures of food insecurity when all 14 sites are considered together. However, sites differ in terms of their characteristics, SEBTC models used (i.e., eight SNAP model sites and six WIC model sites) (see Chapter 2), SEBTC participation and redemption rates (see Chapter 3), and household characteristics (see Chapter 4).

Site-specific analyses suggest clear variation in both the overall prevalence of and SEBTC's impact on VLFS-C across the sites ($p<0.0001$; see Exhibit 5.4 and Exhibit 5.5). In 13 sites, the point estimate is negative; and in 7 of these sites, the point estimate is significantly different from zero at the $p<.05$ level. In two other sites, the p-value is larger than .05 but less than .07. In only one of the sites is the point estimate positive (but insignificant)—Connecticut POC. These analyses, which show potentially favorable effects on VLFS-C in almost all instances, although not always with statistical significance, affirm that the overall effects on VLFS-C reported earlier are not concentrated in just one or two sites. (Section 5.3.6 provides possible explanations for differences in impact across sites.)

Appendix 5E (Exhibits 5E1.5–5E.1.9) presents results by site for the other food security measures: food insecurity among children; very low food security and food insecurity among adults and for entire households. With only scattered exceptions, these site-level estimates are also consistently in the expected direction and statistically significant.

Exhibit 5.4 Impact on Food Security Among Children in Summer 2012: Prevalence Rates for Very Low Food Security (VLFS-C)



Source: SEBTC, Summer Survey, 2012.

# indicates WIC program model.

Exhibit 5.5 Impact on Food Security Among Children in Summer 2012: Prevalence Rates for Very Low Food Security (VLFS-C)

Outcome/Site	Sample Size	Control Group Prevalence	Treatment Group Prevalence	Impact on Prevalence Rate (T/C Difference)	SE	p-value	% Change
VLFS-C	27,092	9.5%	6.4%	-3.1***	0.38	<0.001	33%
Cherokee Nation	909	5.7%	4.4%	-1.4	1.51	0.370	24%
Chickasaw Nation	2,379	6.3%	4.0%	-2.3***	0.88	0.009	37%
Connecticut							
POC	1,363	7.2%	7.5%	0.3	1.82	0.862	4%
Expansion	1,825	8.5%	7.6%	-0.9	1.26	0.499	10%
Delaware	2,386	11.6%	6.0%	-5.6***	1.24	<0.001	48%
Michigan							
POC	1,734	9.8%	7.9%	-1.9	1.34	0.163	19%
Expansion	2,192	7.9%	2.1%	-5.8***	1.60	<0.001	74%
Missouri							
POC	2,109	9.3%	8.2%	-1.0	1.40	0.462	11%
Expansion	2,195	12.3%	9.7%	-2.6*	1.41	0.068	21%
Nevada	1,292	11.0%	8.0%	-3.0*	1.54	0.055	27%
Oregon							
POC	1,946	9.5%	4.2%	-5.2***	1.17	<0.001	55%
Expansion	2,205	11.1%	6.6%	-4.6***	1.18	<0.001	41%
Texas	2,361	11.6%	8.5%	-3.1**	1.44	0.030	27%
Washington	2,196	11.3%	5.0%	-6.2***	0.74	<0.001	55%

Source: SEBTC, Summer Survey, 2012.

Test that T/C difference varies by site: $\chi 2=34.90$, df=13, p=.0009

"% Change" is impact as a percent of control group level.

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

5.3.4 Comparison of 2011 and 2012 Impacts on VLFS-C Estimates

The impacts for 2012, for the pooled 14 sites (see Exhibit 5.5), are larger than the reported estimates for 2011 for the five POC sites (see Appendix 5E, Exhibit 5E.1.11). For VLFS-C, the reported estimate in 2011 was 1.5 percentage points, with a lower prevalence of 7.0% in the control group, while the reported estimate for 2012 is -3.1 percentage points and the control group prevalence is 9.5% (see Appendix 5E, Exhibit 5E.1.11).[97]

Additional analyses are inconclusive on the cause of this difference in both underlying prevalence and size of the impact (see Appendix 5E). Possible explanations include sampling variability, real changes in levels of food security, and improvements in survey methods. Given the larger samples (leading to more precise estimates), higher response rates, narrower

[97] Estimates of p-values for year-to-year differences in this sub-section assume independent samples across the two years. As such, these estimates ignore the small overlap of individuals in the two years (There are 737 households in the POC districts that were in the sample both in 2012; 11.9% of the 6,277 households in the 2012 sample) and in 2011 (14.1% of the 5,225 households in the 2011 sample.) As such, these estimates slightly overestimate the standard errors and the p-values.

treatment/control difference in response rates, the 2012 estimates should be viewed as supplanting the 2011 estimates.

5.3.5 Changes in Child Food Security between the 2012 School Year and the Summer

As discussed in Chapter 1, there is very little research on the changes in levels of food security among school-age children between the school year and the summer. [98] For households that would qualify for a SEBTC-type benefit, the evaluation provides an opportunity to gain additional insight into changes in food security between the school year when children have access to FRP meals, and the summer, when, absent SEBTC—many children do not participate in other SFSP or other school lunch programs, as shown in Chapter 4, which reported findings for the control group.

Interest in this change is heightened by the results of the 2011 analysis of the POC sites which found no statistically significant change in VLFS-C for the control group between the spring and the summer and statistically significant improvements in FI-C (-4.2 p.p., $p<0.001$) between those two points in time.

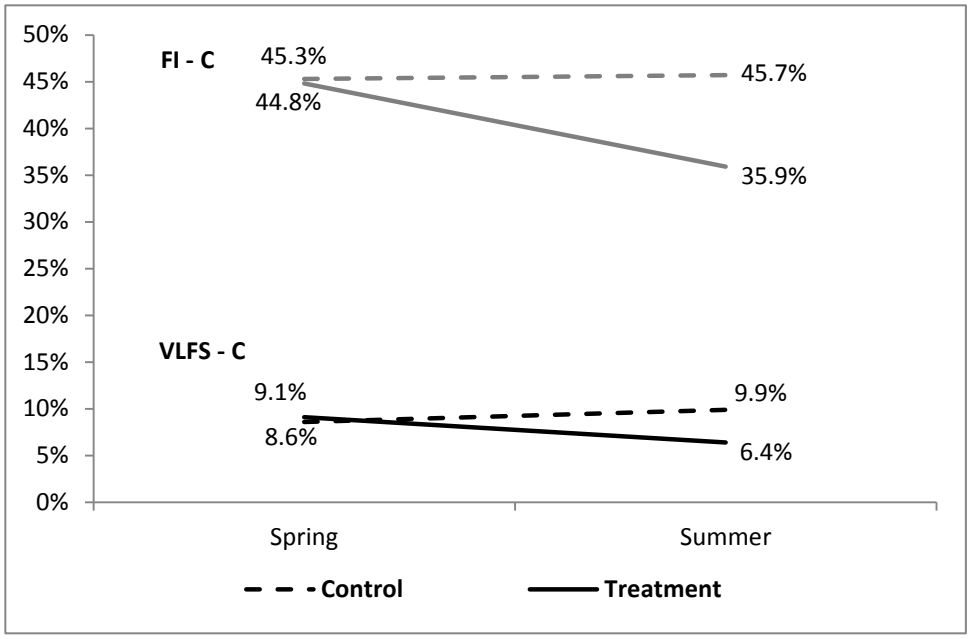
For 2012, the study conducted similar analysis, assessing the school-year-to-summer changes in food security for children in the control and treatment groups, and for the treatment group relative to the control group (i.e., the SEBTC effect on this change). This analysis uses the panel sample, which 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 exactly match the corresponding prevalence estimates provided in the first two rows of Exhibit 5.3. Similarly, the impact estimates also do not match exactly.

The study found that, for the control group, the prevalence of VLFS-C between spring and summer of 2012 increased from a spring rate of 8.6% to a summer rate of 9.9% ($p<0.001$) (Exhibits 5.6a and 5.6b). However, the study found no change in the broader measure of food insecurity (VFLS-C plus LFS-C) among control group children.

The analysis also shows that households receiving SEBTC had lower levels of VLFS-C and FI-C in the summer than in the spring (when all eligible children can receive FRP meals). Specifically, for this group, VLFS-C falls from 9.1% prevalence to 6.4%, while general food insecurity among children dropped from 44.8% to 35.9% (Exhibits 5.6a and 5.6b).

[98] 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 CPS data finds small and borderline statistically significance increases for children (p=.06).

Exhibit 5.6a Spring-to-Summer Change, Treatment and Control Groups, in Prevalence of Very Low Food Security and Food Insecurity among Children in Summer 2012



Source: SEBTC, Spring and Summer Surveys, 2012.

Exhibit 5.6b Spring-to-Summer Change, Treatment and Control Groups, in Prevalence of Very Low Food Security among Children in Summer 2012

Measurement Point(s)	Sample Size	Control Group Prevalence	Treatment Group Prevalence	Impact on Prevalence Rate (T/C Difference)	SE	p-Value
Very Low Food Insecurity						
Spring	22,280	8.6%	9.1%	0.5	0.46	0.296
Summer	22,280	9.9%	6.4%	-3.6***	0.45	<0.001
Spring-to-summer change	22,280	1.3***	-2.7***	-4.1***	0.49	<0.001
SE		0.37	0.32			
p-value		<0.001	<0.001			
Food Insecurity						
Spring	22,280	45.3	44.8	-0.5	0.90	0.559
Summer	22,280	45.7	35.9	-9.9***	0.88	<0.001
Spring-to-summer change	22,280	0.4	-9.0***	-9.3***	0.90	<0.001
SE		0.55	0.73			
p-value		0.476	<0.001			

Source: SEBTC, Spring and Summer Surveys, 2012

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

Note: Numbers may not add due to rounding.

The difference in the spring-to-summer trend between the two groups (third row of the fifth column of Exhibit 5.6b) provides several complementary estimates of the impact of SEBTC. This study's primary and confirmatory estimate of the impact of SEBTC were the treatment/control differences in the summer sample (-3.1 for VLFS-C); see Exhibit 5.3). The corresponding estimate in the panel sample is slightly larger (-3.6 p.p.). In the exploratory analysis of the impact of SEBTC since the spring/summer change in the treatment group is less than the spring/summer change in the control group—leading to a third and slightly larger estimate of the impact of SEBTC (-4.1 p.p.).[99]

5.3.6 Differential Impacts in Food Security Outcomes by Subgroups

In exploratory analyses, the evaluation sought to find if SEBTC was more successful among some types of sites or, at an individual level, among some subgroups. Accordingly, at the site level, the evaluation assessed differences in impact on VLFS-C among active and passive consent sites, and among sites that used each of the models (WIC, SNAP, and SNAP hybrid). At the individual level, the evaluation assessed subgroup differences among households according to respondents' race/ethnicity, and their status in the spring, before the intervention on the following characteristics: VLFS-C , whether a household was below the federal poverty line (FPL), participation in SNAP, number of children in the household, and the presence of an adolescent in the household.

For subgroup characteristics assessed based on households' status in the spring, analyses had to be limited to households in the panel sample, i.e., those households that responded to both the spring and summer surveys.[100,101] Due to differences in the sample composition between the full summer sample and the panel sample, impacts on the main outcome, VLFS-C, are slightly different in the panel sample than for the full summer sample (-3.6 vs. -3.1, as shown in Exhibits 5.6b and 5.3, respectively).

For most subgroups, the impact of SEBTC on VLFS-C does not differ significantly.[102] These subgroups include the site-level subgroup of the WIC vs. SNAP model,[103] and individual-level

[99] These are difference-in-difference estimates. The summer only estimates for the full sample (as presented in Exhibit 5.3) are preferred because they were specified as the preferred estimation method and are estimated on a larger sample.

Additional results reported in Appendix 5E (Exhibits 5E.1.13 - 5E.1.16) 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.

[100] As discussed in Appendix 5A, estimation proceeds via logistic regression. The evaluation team, nevertheless, test for an interaction in the impact in percentage points (not in the log odds scale in which the logistic regression coefficients are estimated). Standard errors for the differential impact in percentage points are computed via the bootstrap. See the discussion in Appendix 5A.

[101] This restriction is necessary because, to preserve the random assignment design, individual level subgroups are defined based on spring survey responses (i.e., before households received SEBTC).

[102] The exhibit only reports results for subgroups where there is evidence of differential impact; complete results are presented in Appendix 5E Exhibit 5E.1.17a (logistic regression) and Exhibit 5E.1.17c (linear regression).

subgroups of household poverty at baseline, participation in SNAP in the spring, number of children in the household at baseline, and race/ethnicity.[104]

The study did find significant differences in impacts for some subgroups (Exhibit 5.7). Specifically, at the site level, there was some evidence that impacts were larger in active consent sites (relative to passive consent sites; -3.6 p.p. vs. -2.2 p.p.; p=0.083). This result is consistent with higher EBT redemption amounts in active consent sites than passive consent sites (by an average of $20 per month; see Appendix 5E, Exhibit 5E.2.1c). The larger impacts in active sites may reflect that fewer households in passive consent sites were locatable so did not receive or use the benefits, and that households in active consent sites that had to make an effort to participate in the demonstration may be more likely to use SEBTC if they received it.

At the individual level, impacts were *larger* (in terms of percentage points) for households which were VLFS-C at baseline than those that were not (-9.7 p.p. vs. -3.2 p.p.); however, the size of the impacts expressed as a percentage of control group prevalence was *smaller* for households that were VLFS-C at baseline than for their counterpart (20% vs. 52%).

Not surprisingly, the prevalence of VLFS-C in the summer varies with VLFS-C in the spring. In the absence of SEBTC (i.e., the control group), 49.4% of those who are VLFS-C in the spring (when they received FRP meals) are also VLFS-C in the summer (Exhibit 5.7). Among those who were not VLFS-C in the spring, only a much smaller share, 6.2%, were VLFS-C in the summer.

The impact of SEBTC varies by whether the household was VLFS-C at baseline. Among households that were VLFS-C in the spring, SEBTC cut VLFS-C in the summer by 9.7 percentage points; i.e., a 20% decrease relative to the control group (Exhibit 5.7). Among households that were not VLFS-C in the spring, the impact of SEBTC on VLFS-C in the summer was much smaller, only 3.2 percentage points. This is a 52% decrease relative to the control group.

In addition, at the individual level, impacts were larger for households with an adolescent than those that did not have an adolescent (-5.0 p.p. versus -2.3 p.p.), and there was some evidence that impacts were larger for households with 3 or more children compared to those with 1-2 children (-4.5 p.p. versus -3.1 p.p., p=.089).

There was no statistically significant difference in impacts based on whether the household received SNAP at baseline. The study further explored whether a difference based on SNAP participation occurred within program models (i.e., SNAP, SNAP-hybrid, or WIC) Results showed no statistically significant difference in the impact on VLFS-C based on SNAP participation in any of the ,models (see Appendix Table 5E.1.17b).

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[103] In models that distinguish the SNAP-hybrid model from the SNAP model, there was no statistically significant difference in impacts on food security (see Appendix 5E, Exhibits 5E.1.17a and 5E.1.17c).

[104] All subgroup estimates are presented in Appendix 5E, Exhibit 5E.1.17a.

Exhibit 5.7 Impact of SEBTC on Prevalence of Very Low Food Security Among Children, by Subgroup in Summer 2012 (When Significant)

	n	Control (Summer Prevalence)	Treatment (Summer Prevalence)	Difference	SE	p-value
Active/Passive Consent						
Passive consent	8,866	10.0	7.8	-2.2***	0.67	0.0011
Active consent	18,226	9.2	5.7	-3.6***	0.50	<.0001
Difference	27,092	-0.7	-2.1	-1.4*	0.79	0.0828
VLFS-C at Baseline						
Not VLFS-C at baseline	20,323	6.2	3.0	-3.2***	0.35	<.0001
VLFS-C at baseline	1,952	49.4	39.7	-9.7***	3.12	0.0022
Difference	22,275	43.2	36.7	-6.5**	3.11	0.0389
Adolescent in the Household						
No adolescent in household	10,434	6.7	4.4	-2.3***	0.52	<.0001
Adolescent in household	11,638	13.0	8.0	-5.0***	0.69	<.0001
Difference	22,072	6.3	3.6	-2.7***	0.83	0.0012
Number of Children in the Household						
3 or more children in household	9,281	10.7	6.2	-4.5***	0.70	<.0001
2 or fewer children	12,996	9.4	6.3	-3.1***	0.53	<.0001
Difference	22,277	-1.3	0.1	1.4*	0.83	0.0888

Source: SEBTC, Summer Survey, 2012.

Notes: 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).

Active/Passive consent analysis based on summer sample. VLFS-C at baseline, number of children, and adolescent in household based on panel sample.

No significant subgroup differences in impacts were found based on WIC/SNAP program model, poverty status, number children, baseline SNAP participation, or race/ethnicity.

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

5.4 Impact on Household Food Expenditures

The logic model for the SEBTC program, provided in Chapter 1 (Exhibit 1.2), implies the following pathway: SEBTC provides additional income to households in the form of an EBT card which can be used to purchase qualifying foods. Therefore, families that receive the SEBTC benefit can obtain more food, thereby improving children's food security and nutritional status.

The extent to which such a program will increase total household food expenditures is the subject of some debate, as discussed in Chapter 1. An analysis of SNAP that is attributed to Southworth (e.g., Fraker, 1990; Fox, Hamilton, and Lin, 2004) and is sometimes called "The Food Stamp Paradox" argues that households receiving a cash-like benefit for food might simply use it to replace much of their current cash expenditures on food. This analysis suggests that receipt of SEBTC would result in an increase in total food expenditures of the same

magnitude as would happen if a household received the same amount in non-targeted cash income.

However, the empirical evidence suggests that SNAP benefits—and therefore plausibly, SEBTC benefits—have a "signaling" component, i.e., relative to additional cash income, a larger fraction of these benefits will be spent on food. Nevertheless, the net increase in food expenditures is likely to be less than the benefit itself (see Fox, Hamilton, and Lin, 2004; Burstein et al., 2004; Wilde, Troy, and Rogers, 2009). A more recent analysis by Hanson (2010) suggests that the increase in food expenditures is likely to be between 26 and 35 cents per dollar of SNAP benefits.

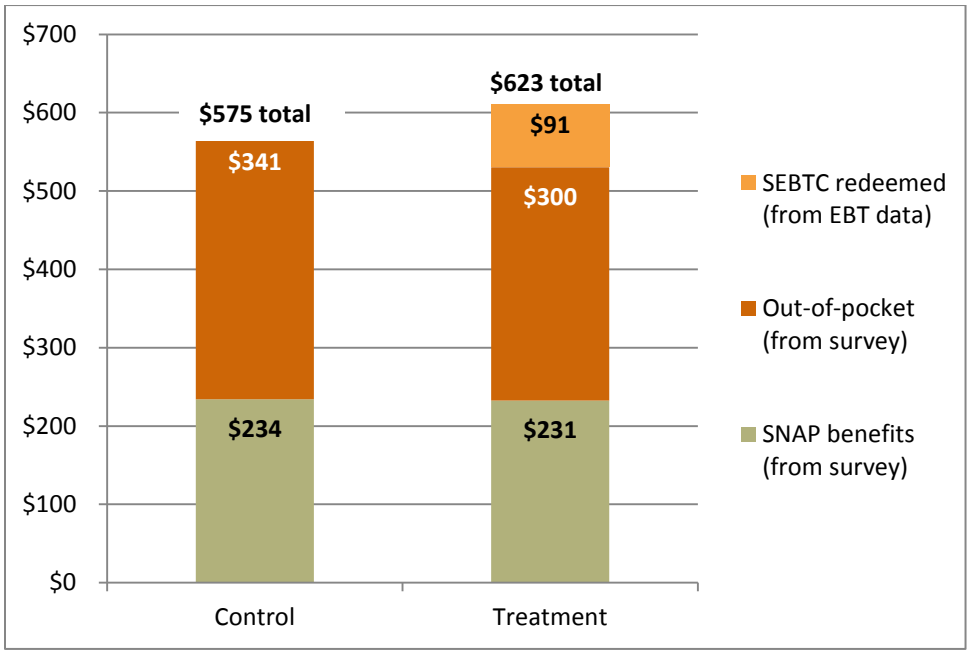
Data collection for the SEBTC allows the evaluation to estimate both the increase in total expenditure with receipt of the SEBTC and that increase as a percent of the SEBTC benefit. To ascertain food expenditures, households responding in the summer were asked to report their out-of-pocket food spending over the last 30 days. Households were explicitly instructed to exclude any nutrition program assistance—SNAP, WIC, or SEBTC. Households were then separately asked about the value of any SNAP benefits received. In addition to using these reported estimates of expenditures, the evaluation imputes the average monthly value of SEBTC benefits redeemed using EBT data.[105] These data allow exploratory (in a multiple comparisons sense, as discussed earlier) analysis of the impact of SEBTC on the monthly amount spent on food in the 30-day period corresponding to the time period during which other food expenditures and levels of food security were measured.

Exhibit 5.8a reports the impact of SEBTC on the components of food expenditure and on total expenditures (see also Exhibit 5.8b).[106] Treatment group households had higher total food expenditures. Specifically, average per household SEBTC benefits redeemed was $91 for households in the treatment group. Since SEBTC did not show an impact in summer participation in SNAP (see in Section 5.5, below), SNAP benefits in the two groups are quite similar ($231 in the treatment group; $234 in the control group). Finally, out-of-pocket food expenditures are lower in the treatment group than in the control group ($300 vs. $341; a difference of $41). Thus, net household food expenditures are $48 (8%) higher in the treatment group than in the control group.

[105] The study did not account for the value of non-SEBTC WIC benefits because the evaluation lacked a secondary data source for WIC benefit value and the price equivalent of WIC foods cannot be reported with accuracy by households. Further, since there do not appear to be any impacts of SEBTC on WIC participation, the value of the benefits between treatment and control groups is likely to be extremely similar.

[106] As discussed in Appendix 5B, comparisons of SEBTC benefits redeemed between the full benefit sample and the evaluation subsample using the survey weights suggest that the weights do not completely correct for survey non-response. For these analyses of food expenditures, the evaluation team used weights that take into consideration information on the full sample's SEBTC redemptions. Doing so causes the dollar amounts to more closely align with the administrative totals. For reasons discussed in Appendix 5B, the evaluation team did not use those weights for other analyses in this chapter.

Exhibit 5.8a Impact of SEBTC on Monthly Household Food Expenditures in Summer 2012



Source: SEBTC, Summer Survey and SEBTC redemption data, 2012 (n=25,767).

Note: Numbers may not add due to rounding.

Exhibit 5.8b Impact of SEBTC on Monthly Household Food Expenditures in Summer 2012

Outcome	Control Group	Treatment Group	Impact on Food Expenditures (T/C Difference)	SE	p-value	% Change
Out-of-pocket	$341	$300	- $41***	4.13	<0.0001	12.0%
SNAP amount	$234	$231	- $ 2	3.41	0.489	1.0%
SEBTC benefits redeemed	$0	$ 91	$91	0.82	<0.0001	—
Out-of-pocket, SNAP, and SEBTC redeemed	$575	$623	$48***	4.41	<0.0001	8.3%

Source: SEBTC, Summer Survey and SEBTC redemption data, 2012 (n=25,767).

Note: Analysis uses EBT-adjusted summer household weights. Results using the non-EBT adjusted weights are included in Appendix 5E, Exhibit 5E.2.1. Numbers may not add due to rounding.

"% Change" is impact as a percent of control group level.

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

While total food expenditure is greater for the treatment group, the increase in food expenditure, as suggested by previous research, is smaller than SEBTC benefits redeemed. These estimates for SEBTC imply that for every dollar of benefits, total food expenditure goes up by 53 cents; i.e., households redeemed an average of $91 benefit, and increase total food expenditure by $48 (53%=$48/$91). This estimate is well above the upper end of the range of estimates for SNAP in Hanson (2010; i.e., 35%). Why the estimates are larger is unclear.

The evaluation team conducted site- and individual-level subgroup analysis to ascertain whether SEBTC had a differential impact on food expenditures, as it did for the VLFS-C. At the site level, there were some limited differences in impacts between active and passive consent sites and between WIC and SNAP models.

The amount of the SEBTC benefit redeemed was an average of $20 higher in active consent sites than in passive consent sites. However, impacts on out-of-pocket expenditures, SNAP benefit amount, and total expenditures were the same in both active and passive consent sites (see Exhibit 5E.2.1c).

Out-of-pocket food expenditures and SNAP benefits are similar across SNAP-model and WIC-model sites; however, SEBTC benefits redeemed were almost $27 lower in WIC-model sites than in SNAP-model sites (see Appendix 5E, Exhibit 5E.2.1a). In addition, the overall increase in food expenditure is significantly smaller in WIC-models sites ($33 vs. $58). In models that distinguish the SNAP-hybrid model from the SNAP model, benefit redemption is slightly (but statistically significantly) higher in the SNAP sites than in the SNAP-hybrid sites ($108 vs. $99), but there is no statistically significant difference in out-of-pocket expenditures or total expenditures (see Appendix 5E, Exhibit 5E.2.1b).

The subgroup estimates by type of model imply that for every dollar of benefits, total food expenditure goes up in SNAP model sites by 57 cents, but in WIC model sites, by 44 cents. However, survey research experience indicates that WIC participants are not able to estimate accurately the value of their WIC benefits since they are delivered as commodities (i.e., a dozen eggs, a gallon of milk). Households in WIC model sites may have used information they were given about the value of the benefit ($60 per month per child) rather than the actual amount redeemed when making choices about out-of-pocket expenditures.

When assessing impacts at the individual level for subgroups, the study found the following:

- Households in poverty (relative to those who are not in poverty) reduced out-of-pocket expenditures less and experienced a greater overall increase in total food expenditures.
- Households with 3 or more children (compared to those with fewer children) reduced their out-of-pocket expenditures more, but given that the SEBTC benefit was bigger, experienced a greater overall increase in total food expenditures.

Specific estimates for each of these subgroups and more details on subgroup analysis can be found in Appendix 5E, Exhibit 5E.2.2a – Exhibit 5E.2.6f.

5.5 Impact of SEBTC on Children's Nutritional Status

In 2012, SEBTC improved most of the measured dietary indicators of children's nutritional status. The evaluation used dietary factors or indicators drawn from food frequency questions used in the 2009-2010 National Health and Nutrition Examination Survey (NHANES) as proxies

for nutritional status.[107] The household survey included questions about children's intake of foods shown to be associated with nutritional risk among school-age children and to reliably assess consumption of dietary factors addressed in the *Dietary Guidelines for Americans* (Newby, 2007; Briefel et al., 2008; Reedy and Krebs-Smith, 2010; Taveras et al., 2010).

Specifically, the evaluation estimated the impact of SEBTC on seven dietary indicators of nutritional status:[108]

1. Servings per day of fruits and vegetables
2. Servings per day of fruits and vegetables, excluding fried potatoes
3. Servings per day of whole grains from cereals, whole-grain breads and tortillas, whole grain rice, and popcorn
4. Servings per day of dairy products from milk, cheese, and foods containing milk products (e.g., pizza, ice cream)
5. Whether the child usually drank nonfat or low-fat milk during the last 30 days
6. Teaspoons per day of added sugars from all foods and beverages
7. Teaspoons per day of added sugars from sugar-sweetened beverages

Greater intake of nonfat or low-fat milk, fruits, vegetables (non-fried) and whole grains are associated with a more healthful diet (USDA and HHS, 2010). Cookies, cake, pie, doughnuts, brownies, and sugar-sweetened drinks are major sources of children's discretionary calories and are indicative of a less healthful diet (Malik et al., 2006; Pereira, 2006; Vartanian et al., 2007; Reedy and Krebs-Smith, 2010). In the summer survey, respondents were asked to report how often children ate these food items over the last 30 days. Scoring procedures developed by the National Cancer Institute (NCI) were used to convert the respondents' reports of their children's consumption of specific items into daily servings of fruits and vegetables, whole grains, and dairy items; and teaspoons of added sugars per day. The coding algorithms use the MyPyramid cup equivalents, ounce equivalents, and servings defined in the 2010 *Dietary Guidelines for Americans* (USDA and HHS, 2010).

SEBTC led to favorable and meaningful impacts on most measured nutrition outcomes (see Exhibit 5.9). While neither group's mean intake met the recommended 5 or more servings of

[107] The 2009-2010 NHANES Multifactor Diet Screener was used to assess the intake of specific dietary factors included in the 2010 *Dietary Guidelines for Americans* (NCI, 2012). The scoring algorithms used for the analysis can be found at: http://riskfactor.cancer.gov/studies/nhanes/dietscreen/scoring.html.

[108] Daily servings of fruits and vegetables and dairy are measured in cup equivalents and in ounce equivalents for whole grains, as defined by the 2010 *Dietary Guidelines for Americans.* One fruit and vegetable 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. One dairy serving is 1 cup milk, fortified soy beverage, or yogurt; 1½ ounces natural cheese; or 2 ounces of processed cheese. Ice cream and pizza contribute to the dairy and calcium scores. Whole grain servings are measured in ounce equivalents. One whole grain serving is 1 one-ounce slice bread; 1 ounce uncooked pasta or rice; 1/2 cup cooked rice; pasta; or cereal; 1 6-inch diameter tortilla; 1 5-inch diameter pancake; or 1 ounce ready-to-eat cereal. Teaspoons of added sugars are derived from reported frequencies of consuming sugar-sweetened beverages (soda, fruit-flavored drinks, and sugar or honey added to coffee or tea); cookies/cakes/pies; doughnuts; ice cream; candy; and cereals.

fruits and vegetables per day (USDA and HHS, 2010), children receiving SEBTC benefits consumed 3.2 daily servings of fruits and vegetables per day versus 2.9 daily servings consumed by control children. SEBTC improved children's mean fruit and vegetable intake by one-third of a daily serving (0.36 cup equivalents; when using either measures that include or exclude fried potatoes).This impact, roughly equivalent to a third of a cup of raw fruit or two-thirds of a cup of salad greens for example, is on par with the SEBTC impact in the POC year and the Fresh Fruit and Vegetable Program intervention, which improved treatment children's daily consumption of fruits and vegetables by one-third of a cup (Bartlett et al., 2013).[109]

Children receiving SEBTC benefits consumed 2.2 servings of whole grains per day, which was a half of a daily serving more than the control group. This improvement, roughly equivalent to one-half slice of whole wheat bread or one-fourth of a cup of cooked brown rice for example, makes a substantial contribution towards the recommended 2.5 to 3.5 servings of whole grains per day. Treatment children consumed 2.5 servings of dairy products per day, nearly one-fourth of a daily serving (0.22 cup equivalents) more than control children and contributing to the higher end of the daily recommendation to consume 2 to 3 cup equivalents of dairy per day. However, a high proportion of children (85 to 86%) were not meeting the dietary guidelines recommendation to consume nonfat or low-fat milk and milk products. Usual consumption of nonfat or low-fat milk did not vary according to experimental groups; between 14 and 15% of children usually drank nonfat or low-fat milk.

The SEBTC intervention had no impact on total daily consumption of added sugars from foods and beverages.[110] When sugary cereals were excluded, treatment children's consumption of added sugars was lower than control children's consumption (1.4 versus 1.1 teaspoons per day), consistent with SEBTC children's consumption of sugar-sweetened cereals being higher than the control group. SEBTC lowered added sugars consumption from sugar-sweetened beverages by about 8%; SEBTC children consumed two-thirds of a teaspoon (approximately 10 calories) less added sugar per day than the control group.

[109] Previous studies of school interventions aimed at intake of daily servings of fruits and vegetables have documented increases of 0 to 1.35 servings per day (Baranowski et al., 2000, French et al., 2003, and Reynolds et al., 2000).

[110] The treatment and control groups consumed 18 teaspoons (270 calories) from added sugars per day.

Exhibit 5.9 Impact of SEBTC on Children's Food Consumption in Summer 2012

Outcome	Sample Size	Control Group Consumption	Treatment Group Consumption	Impact on Food Consumption (T/C Difference)	SE	p-Value	% Change
Fruits and vegetables (servings per day)[a]	25,956	2.85	3.21	0.36***	0.03	<.0001	12.6%
Fruits and vegetables, without fried potatoes (servings per day)[a]	25,976	2.73	3.08	0.36***	0.03	<.0001	13.2%
Whole grains (servings per day)[b]	26,220	1.69	2.19	0.50***	0.05	<.0001	29.6%
Dairy products (servings per day)[a]	26,283	2.27	2.49	0.22***	0.02	<.0001	9.7%
Usually drank nonfat or low-fat milk (%)[c]	25,794	14.57	14.11	-0.46	0.70	0.5119	3.2%
Added sugars (teaspoons per day)[d]	25,806	18.41	18.21	-0.20	0.18	0.2646	1.1%
Added sugars excluding cereals (teaspoons per day)[d]	25996	17.27	16.77	-0.50***	0.16	0.0014	2.9%
Sugar-sweetened beverages (teaspoons per day)[d]	26,321	8.36	7.73	-0.63***	0.17	0.0002	7.5%

Source: SEBTC, Summer Survey, 2012.

"% Change" is impact as a percent of control group level.

[a] Daily servings of fruits and vegetables and dairy are measured in cup equivalents and in ounce equivalents for whole grains, as defined by the 2010 *Dietary Guidelines for Americans.* One fruit and vegetable 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. One dairy serving is 1 cup milk, fortified soy beverage, or yogurt; 1½ ounces natural cheese; or 2 ounces of processed cheese.

[b] Whole grain servings are measured in ounce equivalents. One whole grain serving is 1 one-ounce slice bread; 1 ounce uncooked pasta or rice; 1/2 cup cooked rice; pasta; or cereal; 1 6-inch diameter tortilla; 1 5-inch diameter pancake; or 1 ounce ready-to-eat cereal.

[c] Respondents who reported that their child consumed more than one type of milk were included if any the milk types reported were nonfat and low-fat. Those reporting only whole milk and/or 2% milk were not considered to usually consume nonfat or low-fat milk.

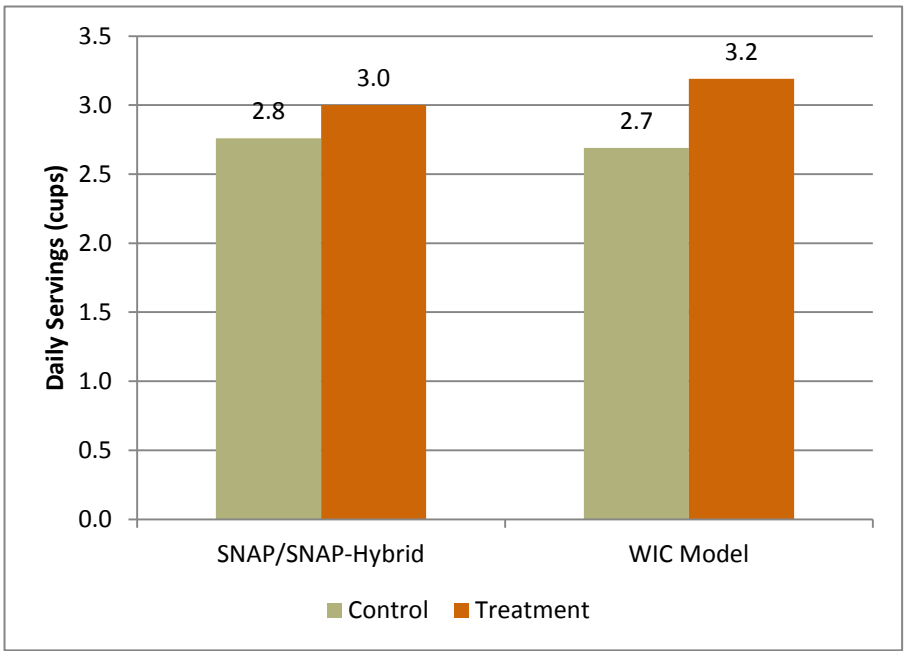
[d] Teaspoons of added sugars are derived from reported frequencies of consuming sugar-sweetened beverages (soda, fruit-flavored drinks, and sugar or honey added to coffee or tea); cookies/cakes/pies; doughnuts; ice cream; candy; and cereals.

The study assessed differences in impacts by the WIC and SNAP model. While there were no differential impacts on VLFS-C (Section 5.3.6), impacts are consistently larger (towards more healthful food consumption) for children in sites using the WIC model than for those using the SNAP models, although in most cases there are statistically significant impacts for both sets of children in both types of sites (see Exhibits 5.10, 5.11, and 5.12).[111] Impacts were twice as large

[111] In models that distinguish the SNAP-hybrid model from the SNAP model, there is never a statistically significant difference between impacts for the SNAP model and impacts for the SNAP-hybrid model (see Appendix 5E, Exhibit 5E.3.1).

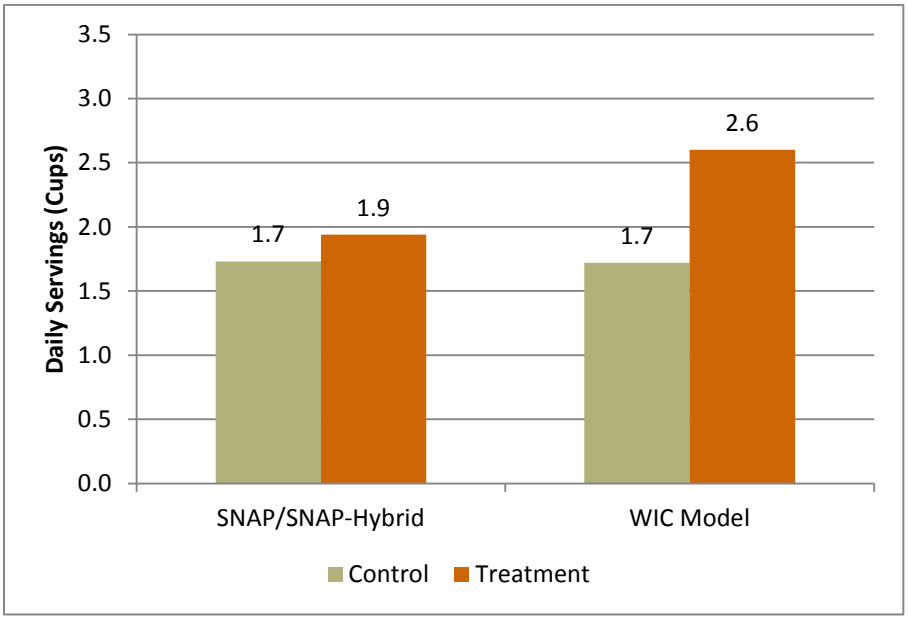
for fruit and vegetable intake, four times as large for whole grains, and three times as large for dairy. For each of these outcomes, there is improvement for both the SNAP models and for the WIC model. For nonfat or low-fat milk, there is no pooled impact and no differential impact.

Exhibit 5.10 Impact on Servings of Fruits and Vegetables (without Fried Potatoes) Consumed Daily, by Program Delivery Model in Summer 2012



Source: SEBTC, Summer Survey, 2012 (n=25,976).

Exhibit 5.11 Impact on Servings of Whole Grains Consumed Daily, by Program Delivery Model in Summer 2012



Source: SEBTC, Summer Survey, 2012 (n=26,220).

Exhibit 5.12 Impact of SEBTC-WIC and SEBTC-SNAP on Children's Food Consumption in Summer 2012

	Control	Treatment	Difference	SE	p-value	% Change
Fruits and vegetables (servings per day)[a] *(n=25,956)*						
SNAP/SNAP-hybrid	2.88	3.12	0.25***	0.03	<.0001	8.7%
WIC model	2.82	3.33	0.51***	0.06	<.0001	18.1%
Difference	-0.06	0.20	0.26***	0.07	0.0001	433.3%
Fruits and vegetables without fried potatoes (servings per day)[a] *(n=25,976)*						
SNAP/SNAP-hybrid	2.76	3.00	0.25***	0.03	<.0001	9.1%
WIC model	2.69	3.19	0.51***	0.06	<.0001	19.0%
Difference	-0.07	0.19	0.26***	0.07	<.0001	371.4%
Whole Grains (servings per day)[b] *(n=26,220)*						
SNAP/SNAP-hybrid	1.70	1.90	0.20***	0.06	0.0003	11.8%
WIC model	1.69	2.57	0.89***	0.10	<.0001	52.7%
Difference	-0.01	0.67	0.68***	0.11	<.0001	6800.0%
Dairy Products (servings per day)[a] *(n=26,283)*						
SNAP/SNAP-hybrid	2.27	2.38	0.11***	0.03	<.0001	4.8%
WIC model	2.27	2.64	0.37***	0.05	<.0001	16.3%
Difference	0.00	0.26	0.26***	0.05	<.0001	2600.0%
Usually drank nonfat or low-fat milk (%) *(n=25,794)*						
SNAP/SNAP-hybrid	17.66	17.76	0.09	0.92	0.9179	0.5%
WIC model	10.36	9.26	-1.10	1.17	0.3464	10.6%
Difference	-7.30	-8.50	-1.19	1.50	0.4266	16.3%
Added sugars (teaspoons per day)[d] *(n=25,806)*						
SNAP/SNAP-hybrid	17.90	18.11	0.21	0.22	0.3415	1.2%
WIC model	19.08	18.35	-0.73**	0.31	0.017	3.8%
Difference	1.18	0.24	-0.94**	0.38	0.013	79.7%
Added sugars excluding cereals (teaspoons per day)[d] *(n=25,966)*						
SNAP/SNAP-hybrid	16.69	16.74	0.05	0.19	0.8087	0.3%
WIC model	18.04	16.82	-1.22***	0.27	<.0001	6.8%
Difference	1.35	0.08	-1.27***	0.33	0.0001	94.1%
Sugar-sweetened beverages (teaspoons per day)[d] *(n=26,321)*						
SNAP/SNAP-hybrid	7.60	7.48	-0.11	0.21	0.5808	1.4%
WIC model	9.37	8.05	-1.32***	0.30	<.0001	14.1%
Difference	1.77	0.56	-1.21***	0.36	0.0009	68.4%

Source: SEBTC, Summer Survey, 2012.

"% Change" is impact as a percent of control group level.

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 food consumption within a subgroup or a subgroup difference in the treatment-control difference in prevalence rates).
*p<.10 **p<.05 ***p<.01

[a] Daily servings of fruits and vegetables and dairy are measured in cup equivalents and in ounce equivalents for whole grains, as defined by the 2010 *Dietary Guidelines for Americans.* One fruit and vegetable 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. One dairy serving is 1 cup milk, fortified soy beverage, or yogurt; 1½ ounces natural cheese; or 2 ounces of processed cheese.

[b] Whole grain servings are measured in ounce equivalents. One whole grain serving is 1 one-ounce slice bread; 1 ounce uncooked pasta or rice; 1/2 cup cooked rice; pasta; or cereal; 1 6-inch diameter tortilla; 1 5-inch diameter pancake; or 1 ounce ready-to-eat cereal.

[c] Respondents who reported that their child consumed more than one type of milk were included if any the milk types reported were nonfat and low-fat. Those reporting only whole milk and/or 2% milk were not considered to usually consume nonfat or low-fat milk.

[d] Teaspoons of added sugars are derived from reported frequencies of consuming sugar-sweetened beverages (soda, fruit-flavored drinks, and sugar or honey added to coffee or tea); cookies/cakes/pies; doughnuts; ice cream; candy; and cereals.

Finally, for total daily added sugars, there is no pooled impact, but there is a differential impact: added sugars are lower in the WIC model, but not in the SNAP model. There is no pooled impact and no differential impact if cereals are excluded from the added sugars estimate. There is a pooled impact for added sugars from sugar-sweetened beverages; however, there is no impact for the SNAP model, but an improvement for the WIC model.

The evaluation also assessed whether there were differences in nutritional status by poverty status and found no differential impacts on nutritional outcomes (see Appendix 5E, Exhibit 5E.3.3).

In summary, SEBTC clearly improves some important aspects of children's diet quality (i.e., consumption of non-fried fruits and vegetables and whole grains), but not others (e.g., added sugars). If maintained over time, these changes would be expected to lead to improved nutritional status. Positive impacts are present for SNAP model sites, but impacts are much larger for WIC model sites. Sites chose their delivery model, so these differential SNAP-model/WIC-model impacts need to be interpreted with care because differential impacts could be due to other site-related factors. With that important caveat, these much larger nutritional impacts provide support for the SEBTC WIC model if improving children's diet quality and nutrition status is a major goal.

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

Since SEBTC provides new, additional benefits to households, it could reduce households' use of other existing nutrition assistance programs, including SFSP, SNAP, WIC, and food kitchens and emergency food pantries. However, SEBTC could also increase the use of some of these programs. In particular, eligible households in SNAP and WIC model sites that had not previously participated in the SNAP or WIC programs could be spurred by their experience of SNAP-like or WIC-like SEBTC benefits to also apply to receive SNAP or WIC. The added purchasing power of SEBTC also could change households' strategies for feeding their children lunch and, in some cases, breakfast, Monday through Friday, when their children received FRP meals during the school year. The evaluation addressed these issues as exploratory outcomes.

The evaluation found that SEBTC did not produce statistically significant increases in SNAP participation in the summer in the treatment group (Exhibit 5.15). In contrast, it did show a statistically significant increase in WIC participation by 1.7 percentage points. However, sensitivity analyses suggest that the WIC finding may be the result of reporting error on the part of treatment group households (see Appendix 5E, Exhibit 5E.4.8).[112] SEBTC also decreased use of food pantries and emergency food kitchens.

[112] 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

It appears that SEBTC also had an impact on households' strategies for feeding their children during the summer. SEBTC resulted in the slight but statistically significant decrease in use of SFSP programs (from 8.3% in the control group to 7.2% in the treatment group, p<.01). In addition, SEBTC reduced the percent of households who relied on meals provided at no cost to themselves because either a program or friend or relative were paying for them. For instance, while 14.2% of the control group relied on their children's lunch time meals from family, friends, or programs for at least 3 days per week, 12.1% of households receiving SEBTC also did so.

Exhibit 5.13 Impact on Participation in Nutritional Assistance Programs and Whether Children's Households Paid for Lunch in Summer 2012[113]

Outcome	Sample Size	Percent of Control Group	Percent of Treatment Group	Impact on Percent (T/C Difference)	SE	p-value	% Change
Participation in SNAP	26,996	59.4	59.6	0.22	0.58	0.700	0.4%
Participation in WIC	27,001	18.8	20.5	1.66***	0.52	0.001	8.8%
Participation in food pantry/emergency kitchen	27,027	14.0	11.7	-2.37***	0.53	<.0001	16.9%
Participation in SFSP	26,649	8.3	7.2	-1.15***	0.45	0.0099	13.8%
Child usually received free lunch at least 1 day/week	26,601	18.9	16.2	-2.75***	0.65	<.0001	14.5%
Child usually received free lunch at least 3 days/week	26,586	14.2	12.1	-2.19***	0.56	<.0001	15.4%

Source: SEBTC, Summer Survey, 2012.

"% Change" is impact as a percent of control group level.

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

5.7 Conclusion

This chapter has presented study findings on the impact of SEBTC on a range of outcomes. Before conducting any analysis, the evaluation team pre-specified VLFS-C as the primary and sole confirmatory outcome and thus uses the presence of an impact on VLFS-C as the measure of the success of the intervention. The estimates provide clear evidence that SEBTC improved (i.e., lowered) VLFS-C in the participating sites. Furthermore, the impact is large: VLFS-C in the treatment group is 3.1 percentage points lower than in the control group (6.4% vs. 9.5%), an

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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 (57%) had no child under age 5. In contrast, just 39% 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).

[113] These estimates are covariate adjusted, so they differ slightly from those reported in Chapter 4 (which are simple weighted means).

effect of about a third of the control group level. Thus, the evaluation concludes that, for the 14 sites, the intervention succeeds.

Other related results are consistent with this finding. These include the following:

- Other measures of food insecurity improve
- Food expenditures increase (by less than the full amount of the benefit, but by more than would have been expected from the SNAP literature)
- Several measures of children's nutritional status, based on diet quality indicators, improve,
- Usage of SFSP and food pantries and emergency kitchens decrease.

Chapter 6

Costs of Implementing Summer EBT for Children

As part of the evaluation, the team analyzed data on program costs provided by each grantee or its partners. This chapter describes the cost-related research questions, data collection and analysis methods, and cost analysis findings—including the total and unit costs of the SEBTC demonstration, the components of costs, and the cost differences across the 14 sites and major groupings of sites (SNAP- versus WIC-based models; active versus passive consent; and POC sites in 2012 versus 2011).

Costs analyzed in this chapter include the administrative costs of implementing and operating SEBTC in 2012 from the point of view of government agencies and their partners -- costs incurred by grantees, EBT and other for-profit contractors, nonprofit community partners, and SFAs. In addition, these costs include the actual benefits paid to participants. Most of these costs were paid for by the SEBTC grants funded by FNS, but the study team also estimated the extent of resources used for SEBTC implementation not covered by the grants. These non-grant, or in-kind, resources were provided by other public agencies or community partners; if the program were implemented more widely, these costs would still need to be incurred. As much as possible, the analysis also includes indirect or overhead costs, as these costs were sometimes charged to the grants and were part of the full cost of the demonstration (i.e., the cost of all resources used, regardless of funding source).

One goal of the cost analysis is to examine the feasibility and cost of expanding SEBTC, should it move from a demonstration to an ongoing program. Per-participant costs for a demonstration program are likely to be higher than costs for a fully implemented program, because of several factors, including one-time start-up costs, efficiencies gained with experience, and economies of scale in delivering program services more widely. Comparing POC sites in 2012 with the same sites in 2011 provides some information about costs associated with expanding the program and insights into “start-up” versus “ongoing” costs. However, each of these grantees faced a unique set of circumstances, so inferences must be made with great caution.

In assessing factors that may affect program costs across sites, as with the impact analysis described in Chapter 5, another important caution is that data are only available for the 14 sites, which were not selected to be representative of the nation. Average costs across these sites are not necessarily a good indicator or proxy for costs of implementing a broader program statewide or in other States nationally. Results in this chapter therefore should be seen as exploratory.

6.1 Research Questions and Key Findings

6.1.1 Research Questions

The key research questions for the cost analysis are as follows:

- What were the total costs of SEBTC, including both administrative and benefit costs? What percentage of costs were administrative and what percentage were benefit costs, overall, by demonstration approach (WIC versus SNAP model), and by site?
- What were the total administrative costs of SEBTC, overall, by approach, and by site? How were costs distributed between the pre-implementation period (before benefits were available) and the summer benefit period and afterwards?
- What proportions of administrative costs were incurred by State agencies (grantees and State partners), SFAs, and 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 was the average and range of total and administrative costs per school-aged child and per household, overall, by demonstration approach, and by site? How did average costs per child and household vary by approach, by use of active versus passive consent procedures, and by site?
- How did administrative costs in the full implementation year compare with costs in the POC year, both for the original POC sites and overall?

6.1.2 Key Findings

Key findings are as follows:

- The total cost of the 2012 demonstration (administrative plus benefit cost) ranged from $496,872 to $1,346,159 per site. Administrative costs accounted for 30% of total costs in 2012, in contrast with more than half of total costs in the POC year. Grantees at the low end of the range of costs were Cherokee Nation, Connecticut, and Oregon. The latter two grantees had POC sites plus an additional site. The relatively low costs in these sites likely reflect already incurred start-up costs and economies of scale. However, it must also be noted that both Connecticut and Oregon grantees failed to meet consent targets, as described in Chapter 2. As a result, at least benefit costs in these sites were lower than they would have been if they had served as many households as the other sites. Cherokee Nation had low total costs primarily because of low benefit redemption rates.
- Overall administrative costs of implementing the demonstrations ranged greatly, from $101,764 to $637,649 per site. The portion of the administrative costs funded by the SEBTC grants ranged from $59,813 to $636,199. In each of these categories, Connecticut Expansion had the lowest costs and Chickasaw Nation had the highest costs.[114]

[114] Factors that may have contributed to the relatively high costs for the Chickasaw Nation included: being a new grantee, having a single site with a large number of SFAs, using active consent, reaching the targeted number of children, and the need for extensive services from the EBT vendor and other for-profit contractors.

- The total cost per child issued benefits (including both benefit and administrative costs) was $201 on average, and ranged from $132 in Cherokee Nation to $253 in Washington.
- Total costs per child issued benefits were higher in SNAP-model sites than in WIC-model sites, on average, but this largely reflected higher rates of benefit redemption in SNAP-model sites. Administrative costs per child issued benefits were about 7% higher in WIC model sites than in SNAP-model sites.[115]
- Costs per child (both total and administrative) were higher, on average, for sites using active consent than for those using passive consent. Active consent sites had higher redemption rates per child, for reasons discussed in Chapter 3. In addition, administrative costs were higher in the active consent sites than passive consent sites, because non-consenting families are more common in active consent sites, and funds spent to recruit them are averaged into the costs for consenting families.
- Costs per child varied widely within groups of sites by model (WIC and SNAP) and by mode of obtaining consent (active and passive). This variation suggests the need for caution in interpreting the difference in average costs between sites using these models and modes of consent.

6.2 Research Methods

6.2.1 Data Collection

The data for the cost analysis were collected in conjunction with the implementation study and EBT data collection. The evaluation team requested information on staff hours, staff hourly wage and fringe benefit rates, indirect costs (if applicable), contractual expenses, and other direct costs such as printing and mailing. The evaluation team asked grantees to provide data from their accounting systems on SEBTC implementation costs charged to the SEBTC grant and those not funded under the grant, including amounts paid to SFAs, contractors, and community partners, as applicable. The team also had access to the budgets and budget narratives included in the grant applications. Cost data were obtained from all State agency teams involved in the SEBTC program, and through them, from for-profit contractors, including EBT processors and management information system (MIS) development contractors or consultants. In most cases, States negotiated a fixed-price contract amendment with the same contractors who worked on the State's SNAP or WIC EBT system for systems changes to issue and process the benefits, and for development of reports to track spending on SEBTC benefits separately from regular SNAP or WIC benefits. (See Chapter 2 for more details on use of contractors.) Once benefits were activated, the EBT contractors all charged the same cost per case-month for SEBTC benefit issuance and redemption as for the main programs. Cherokee Nation and Texas processed transactions in-house and therefore did not incur contractor charges for this purpose.

The evaluation team also asked for cost estimates for time spent on SEBTC from SFAs and community partners in each site, regardless of whether they received any grant funding. For

[115] In the remainder of this chapter, costs per child are "per child issued benefits" and costs per household are "per household issued benefits," unless otherwise noted.

organizations not funded through the grant, these requests were less formal and some costs were approximated using published data.

In addition to cost data submitted by the grantee, the evaluation team asked grantees and partners during site visits or calls about program staffing, contractual relationships between agencies, and activities handled by each agency. The interviews 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, and (3) impressions of the adequacy of program funding and of what could be improved.

The cost analysis also drew on the analysis of EBT transaction data, discussed in Chapter 3, which provided the dollar value of benefits redeemed, numbers of households with benefits issued, and numbers of children with benefits issued in each site. Benefits issued but not redeemed were not costs.

The evaluation team encountered several challenges in collecting and analyzing the cost data, described in Appendix 6A, and summarized below:

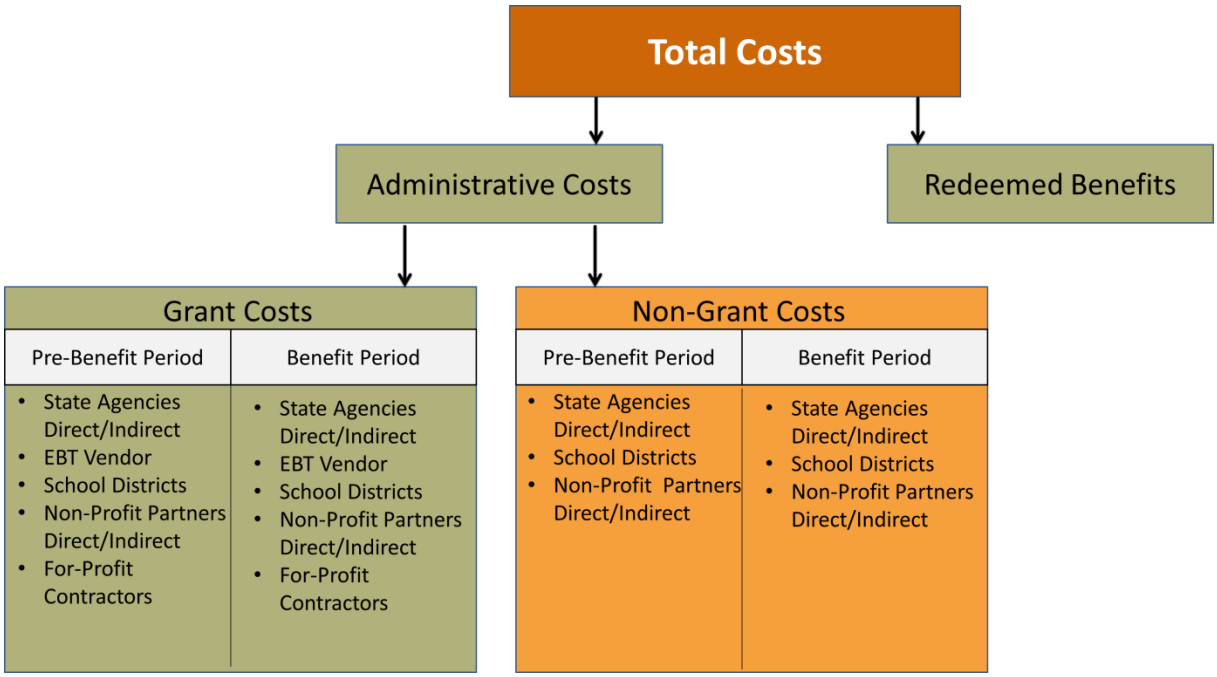
- Complications involved in ascertaining when costs were incurred versus when they were billed
- Grantee difficulties in isolating costs that related specifically to the evaluation as opposed to implementing the intervention
- Grantee and partner staff difficulties in estimating time spent on SEBTC that was not supported by grant funds
- Inconsistent reporting among grantees and other entities of indirect costs, and
- For the POC grantees operating more than one site, difficulty in allocating administrative costs across these sites

The cost analysis does not include any expenses incurred by the evaluation team, which provided technical assistance to the grantees for the process of grouping eligible children into households. While the primary purpose of this process was to facilitate random assignment, the grantees might have needed to do some of the work done by the evaluation team in order to issue benefits correctly to eligible households. To the extent that is true, costs of the program (in a non-evaluation context) may be understated.

6.2.2 Analysis Approach

The cost analysis assesses the administrative costs of providing the SEBTC benefits, as well as the cost of the benefits (foods) provided. Exhibit 6.1 provides an overview of the different types of cost component used in the analysis for this chapter.

Exhibit 6.1 Components of SEBTC Demonstration Costs



Methods for Analysis of Administrative Costs

Because data were available at the State or site level, the analysis of SEBTC administrative costs was largely an accounting exercise. Costs billed to the grant were documented by grantee records. Non-grant costs were estimated when possible from records, but also from recall of those involved. When salaries were not available or labor was from volunteers, the evaluation team estimated a proxy hourly wage from published data.[116]

To assess the full costs of the SEBTC program, the team also sought to collect data on indirect costs associated with the demonstration. Specifically, grantees and non-profit partners were asked to provide estimates of indirect or overhead costs whenever possible. Some State agencies included indirect costs in their grant application and charged them to the grant; others did not, for reasons that may reflect their State's accounting rules or practices. When not reported as grant costs, the evaluation team tried to collect estimated indirect costs and include them as non-grant costs, but two of the State agencies (with three sites) did not provide this information (Connecticut and Delaware). Rather than have their costs systematically understated, non-grant indirect costs were imputed using the average indirect cost rate calculated for the sites with indirect costs reported. Although this is a very rough approximation, the overall results of the analysis are not very sensitive to this imputation. SFAs did not report indirect costs and, since their costs were a small proportion of demonstration

[116] In asking State agencies and community partners about their non-grant costs, the team prompted them to consider time spent in meetings or conference calls, time supervising staff whose hours were charged to the grant or any volunteers who helped out, and hours spent by volunteers, their qualifications and tasks. Most respondents were able to estimate such hours, at least within an approximate range.

costs overall, the evaluation team did not collect them. Contractors were assumed to have included such costs in their price.[117]

Analysis of Unit Costs

While average costs per school-aged child are of interest because school-aged children are the target of the intervention, SEBTC benefits were distributed at the household level and impacts are measured primarily at the household level. Thus, it is important to look both at the average cost of the program per child and per household.

6.2.3 Estimating Total and Unit Costs for the Full Demonstration

As noted, administrative costs were estimated site by site as were total benefit costs. In averaging site-level costs across all 14 sites or subgroups of sites for the cost analysis, each site was weighted equally.[118] In computing unit costs per child and per household for the full demonstration, site averages were also weighted equally. Although there was site level variation in the number of children issued benefits (ranging from 2,636 to 5,838 children), the majority issued benefits to about 5,300 children, thus the global average (which weights sites by the number of children issued benefits) produced very similar results. For example, the average cost per child with equal weights across sites was $201, but the global average was $198.

6.3 Total Costs of SEBTC by Site (Administrative plus Benefit Costs)

The total cost, including costs funded by grant and non-grant resources, of the demonstration ranged across the 14 sites from $496,872 to $1,346,159. For sites, on average, administrative costs were 30% of total costs (Exhibit 6.2). This represents a higher proportion of spending on administrative cost than, for example, the SNAP program (4.7% in 2011). SNAP is a relevant comparison in that it is a food benefit delivered through an EBT system, and intended to facilitate purchases of food for home use. However, SNAP is nationwide, year-round, and has had EBT in place for a relatively long time.

Another comparison of SEBTC could be with the WIC program. According to data from the National Survey of WIC Participants-II, which included local WIC agency surveys in 2009, local WIC agencies pay about 18% of their non-benefit costs for administration (versus client

[117] Some agencies preferred to provide indirect costs in dollar terms because they used a cost allocation plan instead of a labor-loading rate, or because they had different rates for different types of staff. Such costs were also sometimes charged with a lag, so that it was difficult to match the indirect charges to the grant charges, even among the seven grantees that charged their indirect costs to the grant. Non-grant indirect costs were imputed for the remaining three grantees using the average indirect cost rate calculated for the sites with indirect costs reported.

[118] In Chapter 3, averages across sites are for all households and therefore sites with more households issued benefits have more weight.

services); however, substantial administrative costs are incurred at the State level for vendor management and reimbursement (Geller et al., 2012, Vol. II).[119] Most WIC programs have not yet implemented EBT, which is expected to reduce administrative costs, while those involved in SEBTC all had EBT.

Finally, another relevant comparison is to the school meal programs, as SEBTC is intended to help counter the limited availability of NSLP lunches and SBP breakfasts over the summer. Administrative costs for the school meal programs comprised about 25% of districts' school meal program costs in 2005-2006, when measured as all program costs other than food and cafeteria labor (Bartlett et al., 2008). When including only costs counted in school food service budgets, administrative costs were 18% of total costs. Given the additional infrastructure needed to support preparing and serving school meals, these costs are also low relative to SEBTC, again reflecting the fact that the program is mature (past start-up costs), nationwide, and ongoing for much of the year. Another program that is available in the summer, the Summer Food Service Program, requires very little tracking of administrative costs at the local level, in part because programs are relatively small, but reimbursement rates are substantially higher than those for the NSLP and SBP (for lunch and breakfast, respectively), because FNS expects that the small scale of the program and the need to recruit participants raises costs.

At the same time, administrative costs of SEBTC were markedly lower as a share of total costs in 2012 than in the POC year, during which administrative costs were 54% of total costs. One major factor in this shift was the increase in the scale of the demonstrations from an average of 2,282 children per site in the POC year to 4,769 per site in 2012, resulting in much higher average benefit costs per site.

[119] USDA recently began a national study of WIC Nutrition Services and Administrative costs. That study will be the first to obtain data on costs in WIC EBT States compared to non-EBT States.

Exhibit 6.2 Total Costs

	Total Administrative Costs (Grant + Non-Grant)		Benefits Redeemed		
	$	% of total	$	% of total	Total Cost ($)
Cherokee Nation	231,623	30%	539,232	70%	770,855
Chickasaw Nation	637,649	47%	708,510	53%	1,346,159
Connecticut POC	111,059	14%	667,813	86%	778,872
Connecticut Expansion	101,764	20%	395,108	80%	496,872
Delaware	343,395	29%	824,399	71%	1,167,795
Michigan POC	192,424	22%	664,368	78%	856,792
Michigan Expansion	335,643	28%	845,719	72%	1,181,363
Missouri POC	281,651	25%	830,901	75%	1,112,552
Missouri Expansion	292,448	27%	801,852	73%	1,094,301
Nevada	320,599	34%	633,588	66%	954,187
Oregon POC	245,525	29%	596,411	71%	841,935
Oregon Expansion	210,594	26%	604,802	74%	815,396
Texas	335,478	35%	628,253	65%	963,731
Washington	335,872	39%	515,528	61%	851,399
All sites	3,975,724	30%	9,256,484	70%	13,232,208

Sources: Administrative cost data from grantees and partners, 2012. Expenditure reports of grantees and other agencies, supplemented with staff responses to questions and published data. EBT issuance and redemption data provided by grantees.

6.4 Total Administrative Costs and Grant-Funded Administrative Costs

6.4.1 Grant and Non-Grant Funded Administrative Costs

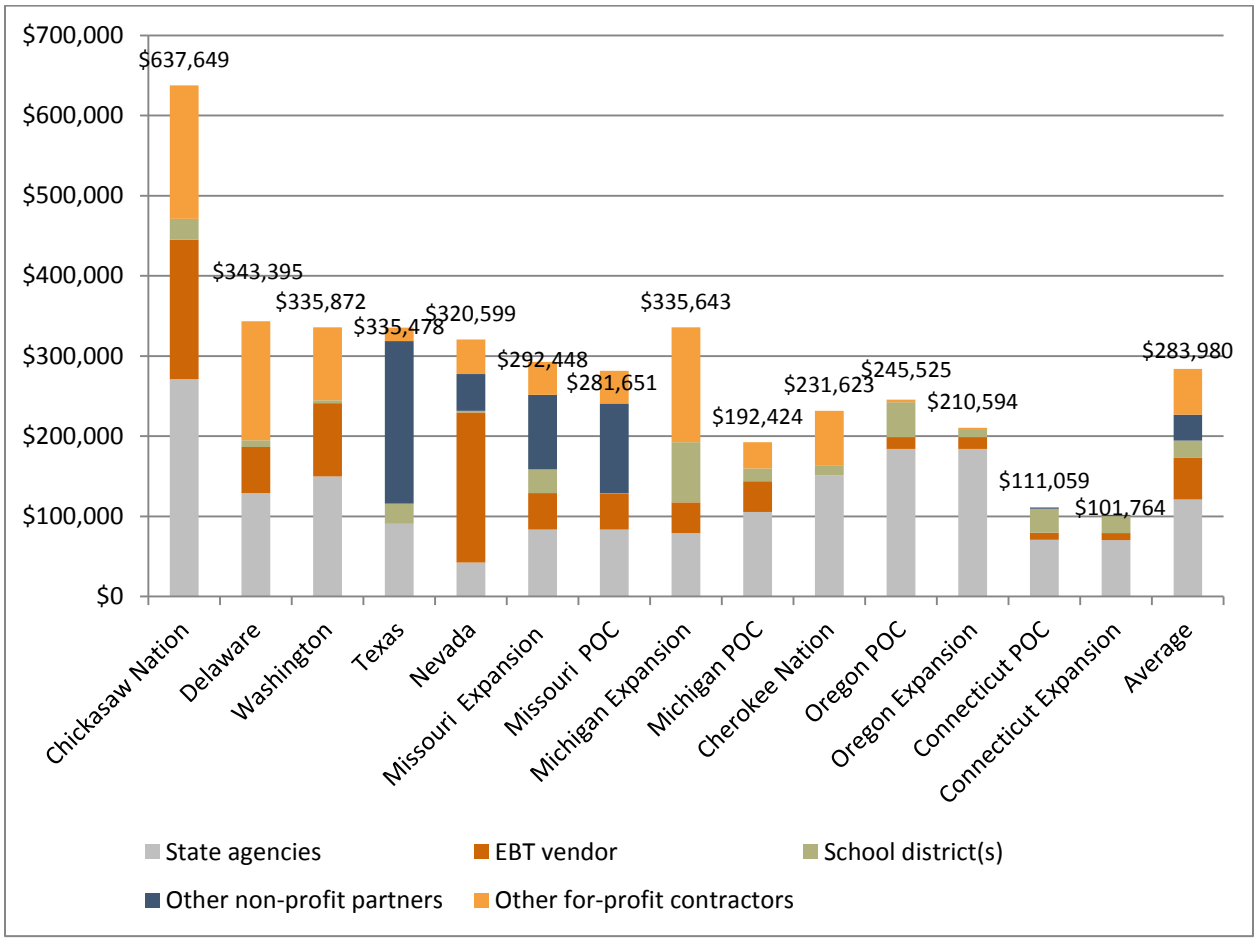
Administrative costs varied widely across sites. Total administrative costs (grant and non-grant) ranged from $101,764 to $637,649; with a mean of $283,980 (Exhibit 6.3). Grant funded administrative costs ranged from $59,813 to $636,199, with a mean of $257,048 (Exhibit 6.4). The Connecticut Expansion and POC sites had the lowest costs and Chickasaw Nation had the highest costs when considering either total administrative costs or grant funded administrative costs. (As noted in Chapter 2, all three of these sites implemented SEBTC across many SFAs; however, while Chickasaw Nation was able to achieve its consent target, Connecticut fell short in both sites.) Administrative costs (grant and non-grant costs) in the remaining 11 sites ranged from $192,424 (Michigan POC) to $343,395 (Delaware). All sites reported lower administrative grant expenditures than were estimated in their proposals (not shown).[120]

Overall, estimated non-grant expenditures were minor, comprising 9% of total administrative costs, but the proportion differed across sites (Exhibit 6.5). Five sites (Chickasaw Nation, Michigan POC, Michigan Expansion, Nevada, and Washington) used very little non-grant funding (2% or less). On the other hand, five sites (Connecticut POC, Connecticut Expansion, Missouri POC, Oregon POC, Oregon Expansion—all original POC grantees) reported large portions of their overall administrative costs were not funded under the grant (ranging from

[120] Details of costs for each of the 14 sites by entity and by time period are included in Appendix 6B. This report reflects costs reported in all four quarters of 2012.

13% to 41%). Much of this variation reflects how State agency staff time was reported and funded: some States funded fewer staff hours through the grant than others, sometimes because of unanticipated issues. (For example, Connecticut was not able to hire a temporary staff person when most needed, so existing State staff pushed the project forward. However, they were not in positions permitted to charge federal grants, as this would risk loss of State funded positions.) Sites where State staff provided time "in-kind" did not always track their hours spent on the demonstration separately, thus making it difficult to estimate non-grant costs. Some refused to estimate time spent or insisted they spent the exact hours budgeted. For all these reasons, in-kind State staff time is likely to be underestimated.

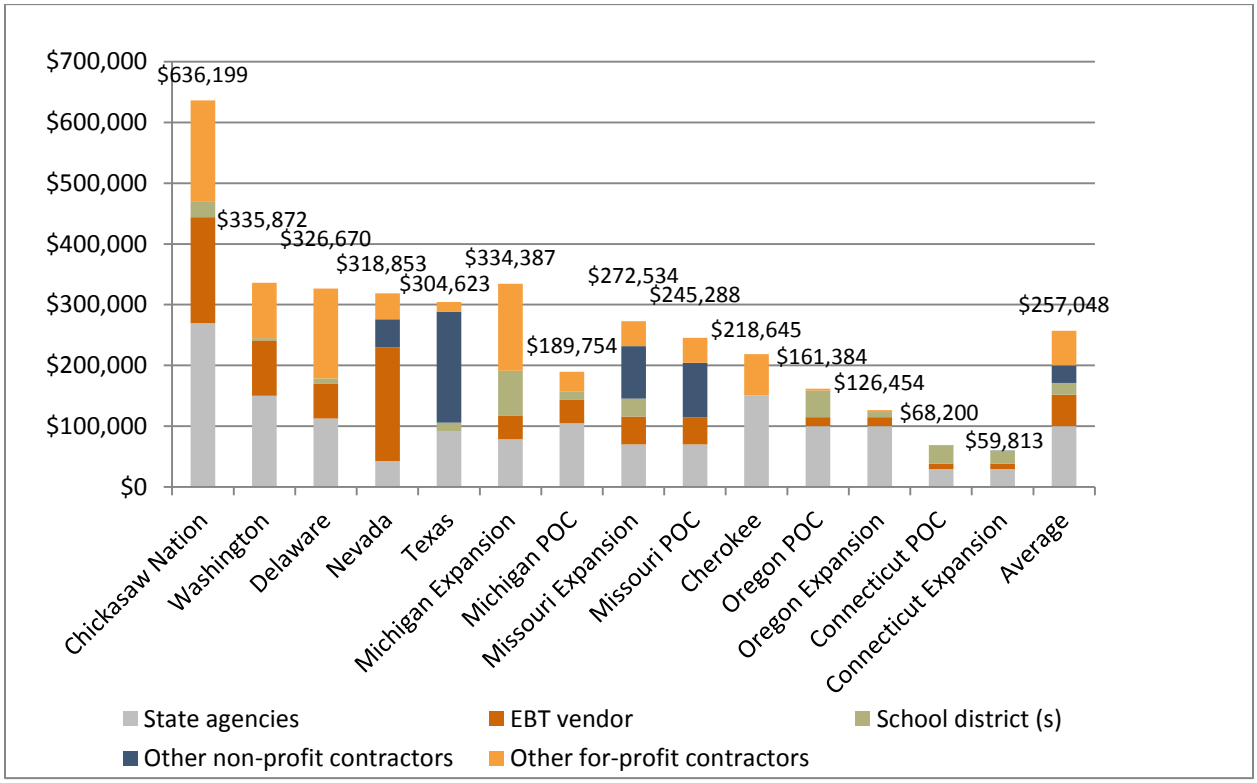
Exhibit 6.3 Total Administrative Costs by Entity (Sites Ordered by Grantee Average)



Sources: Cost data from SEBTC grantees and partners, 2012; expenditure reports of grantees and other agencies supplemented with staff responses to questions and published data.

Note: Dollar amounts represent total administrative costs per site.

Exhibit 6.4 Administrative Costs Funded by Grant, by Entity (Sites Ordered by Grantee Average)



Sources: Cost data from SEBTC grantees and partners, 2012. Expenditure reports of grantees and other agencies supplemented with staff responses to questions and published data.

Note: Dollar amounts represent total administrative costs per site.

Exhibit 6.5 Total Administrative Costs (Grant and Non-Grant)

	Grant Costs		Non-Grant Costs		Total Administrative Cost ($)
	$	% of total	$	% of total	
Cherokee Nation	218,645	94%	12,978	6%	231,623
Chickasaw Nation	636,199	100%	1,450	0%	637,649
Connecticut POC	68,200	61%	42,859	39%	111,059
Connecticut Expansion	59,813	59%	41,950	41%	101,764
Delaware	326,670	95%	16,726	5%	343,395
Michigan POC	189,754	99%	2,670	1%	192,424
Michigan Expansion	334,387	100%	1,256	0%	335,643
Missouri POC	245,288	87%	36,363	13%	281,651
Missouri Expansion	272,534	93%	19,915	7%	292,448
Nevada	318,853	99%	1,747	1%	320,599
Oregon POC	161,384	66%	84,141	34%	245,525
Oregon Expansion	126,454	60%	84,141	40%	210,594
Texas	304,623	91%	30,854	9%	335,478
Washington	335,872	100%	0	0%	335,872
All sites	3,598,675	91%	377,049	9%	3,975,724

Sources: Cost data from SEBTC grantees and partners, 2012. Expenditure reports of grantees and other agencies supplemented with staff responses to questions and published data.

The wide variation in administrative costs across the sites may be due to factors related to various aspects of SEBTC demonstration design including (1) site-level characteristics (geographic size, number of SFAs, urbanicity, etc.); (2) implementation approach (i.e., use of the WIC or SNAP models; use of active or passive consent; number of SFAs in the demonstration); and (3) differences in household characteristics of those eligible for SEBTC. In addition, factors that are idiosyncratic to particular States, including organization and size of State governments, may also have affected the administrative costs of implementing the SEBTC demonstration. Due to the relatively modest number of sites and the large number of ways that they varied, it is not possible to separate the effects of these factors.

In this context, Chickasaw Nation's relatively high administrative costs and Connecticut's relatively low administrative costs were likely the result of many factors. Both grantees grappled with implementing SEBTC in large numbers of SFAS, using active consent. Chickasaw Nation's approach may have led to higher costs. In particular, Chickasaw Nation spent substantial funds on a private contractor to modify the WIC MIS for the processing of SEBTC benefits. Chickasaw Nation staff spent a large amount of time providing extensive guidance to SFAs in developing consent lists and subsequently grouping households, and State staff spent additional time cleaning data for several SFAs that did not provide complete data.[121] In Connecticut, updates that were made to the EBT system during the POC year did not have to be repeated in 2012, reducing costs for the POC and Expansion sites. Connecticut, one of the grantees that did not make its consent targets, was also not able to hire a planned staff

[121] As with Michigan in the POC year, Chickasaw Nation worked with the contractor they had worked with previously in implementing the WIC EBT program MIS interface. Most likely, much of this expense was a one-time start-up cost.

member until June, when most of the work had been completed by existing staff not able to charge the grant, which resulted in lower costs than initially budgeted.[122]

In any attempt to assess the costs of SEBTC if it were implemented more universally, it is crucial to assess whether resources spent on SEBTC were sufficient for the program to be successful. In particular, in 2012, three of the 10 grantees (with five of the 14 sites) failed to obtain consent from enough households to issue benefits to the planned 5,300 children and still allow the evaluation to randomly assign the planned number of households to the study's control group. Insufficient staffing and resources may have contributed to this circumstance. However, in all but one of these sites, the grantee was successful in recruiting enough households to provide the benefit to at least 5,300 children, absent a control group.

6.4.2 Distribution of Administrative Costs by Entity

Costs were incurred by grantees and other partnering State agencies, SFAs, EBT contractors (except in Texas and Cherokee Nation, which operate their own EBT systems), other private contractors, and, in six of the 14 sites, by local non-profit partners. This section describes the distribution of administrative costs by these entities (Exhibits 6.3 and 6.4) and by their timing (Exhibit 6.6). Additional details and exhibits related to this section, including breakdowns by entity and time period for each site, are presented in Appendix 6B.

State Agencies

State agency costs include both the primary grantee and any partnering State agencies. As discussed in Chapter 2, one of the main roles of State staff was working with SFAs to compile household lists and helping SFAs obtain consent, or undertaking these tasks directly. State staff also worked with SFAs or took the lead in notifying households about their benefit status and setting up accounts in the State's MIS so that EBT benefits could be delivered. In seven sites the vast majority (99% to 100%) of State activities were funded by the grant. In the remaining seven sites, grant funds were supplemented by substantial amounts of non-grant funds. All sites except the two Connecticut sites used grant funds to cover at least one State agency staff member during preparations for implementation. (In some cases this staff person was temporary or contract staff.) Two State agencies also operated their EBT system themselves (Cherokee Nation and Texas), thus making most EBT costs, typically grant funded, internal to their agencies.

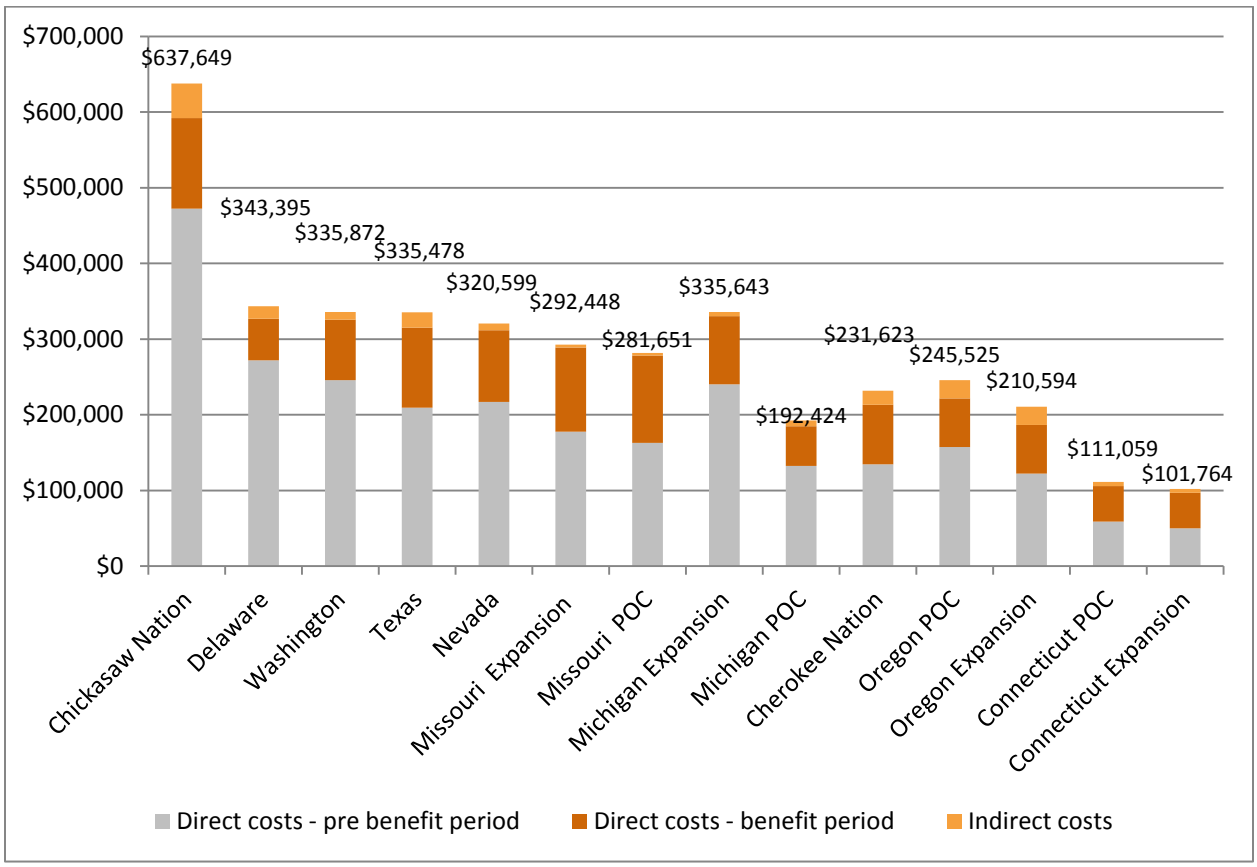
Sites that relied on a combination of grant and non-grant funds to cover State agency costs tended to report lower administrative costs than those where grant funds covered large portions of such costs (Exhibits 6.3 and 6.4). Four of the five sites with the lowest total administrative costs (both Connecticut sites and both Oregon sites) used grant funds to cover a limited number of staff positions and charged less than two-thirds of State agency costs to the

[122] Another factor was that Connecticut SFAs received substantial technical assistance from the evaluation team, which assisted in compiling household lists and took over some duties that were handled by grant-funded staff in other sites, such as working with SFAs directly to resolve problems with their household lists. This shift of responsibilities to the evaluation team may have led to lower grantee costs than in a non-evaluation setting.

grant.[123] Four of the five most expensive sites (Chickasaw Nation, Washington, Michigan Expansion, and Texas, respectively) charged all or nearly all of their State agency costs (99% to 100%) to the grant.

The demonstration sites incurred a combination of pre-benefit period (start-up) and benefit period (operations) costs (Exhibit 6.6).[124] Eight of the sites had higher State agency costs during the pre-benefit period than during the benefit period, five had higher State agency costs during the benefit period, and one had a roughly even split between the pre-benefit period and benefit period. However, the time split for State agency staff was particularly hard to estimate, as most of their effort was in the weeks just before and just after the benefits were issued.

Exhibit 6.6 Total Administrative Costs by Time Period



Sources: Cost data from SEBTC grantees and partners, 2012. Expenditure reports of grantees and other agencies, supplemented with staff responses to questions and published data.

Note: Dollar amounts represent total administrative costs per site.

[123] The exception to this pattern was the Michigan POC site, which ranked 12th in total administrative costs but had only 1% of its total in non-grant costs. The Michigan Expansion site had very small non-grant costs and ranked 4th in total costs.

[124] Indirect costs were not counted in these comparisons. See Appendix 6B for detailed cost by benefit period for each entity in each site.

EBT Contractors

As described in Chapter 2, EBT vendors performed several functions for SEBTC: modifying existing EBT systems to process SEBTC benefits and track SEBTC funds separately; EBT card distribution; in the SNAP hybrid sites, loading SEBTC benefits on existing SNAP EBT cards; staffing toll-free customer service lines to respond to SEBTC questions and/or programming of interactive voice response systems; and processing benefits each month.

POC sites and their associated Expansion sites benefitted from system changes that were implemented in 2011 and had lower EBT contractor costs than the new sites in 2012 as a result. Twelve sites were billed by EBT vendors for processing benefits during the benefit period. (The exceptions were Cherokee Nation and Texas, which handled their own EBT processing and therefore had no EBT vendor costs.) Fees associated with vendor charges (billed on a per case-month basis) for SEBTC benefit issuance were relatively small. Cherokee Nation and Texas used the same contractor for developing benefit issuance applications and issuing their SEBTC "smart" cards with benefit information stored on the cards' processing chips.

Among new grantee sites, most of the EBT vendor costs were pre-benefit period costs, i.e., start-up costs incurred to prepare for the benefit period. In POC sites, much of this work had already been completed in 2011 leading, in general, to lower EBT vendor costs in both POC and Expansion sites than in new sites (refer back to Exhibit 6.3). In the Oregon sites, EBT vendor costs for the pre-benefit period exceeded costs for the benefit periods. In the remaining POC States with EBT vendors (Connecticut, Michigan, and Missouri), pre-benefit EBT costs were the same as or lower than the three months of benefit processing costs (benefit period costs). However, in both Missouri sites, the majority of EBT costs incurred during the benefit period were for the EBT vendor's customer service hotline. As was the case in Oregon, charges for benefit issuance were lower than for development in the Missouri POC and expansion sites.

School Districts

The majority of grantees relied on the assistance of school districts (SFAs) to identify eligible households and to coordinate the consent process. SFAs in 11 of the 14 sites received grant funds to compensate them for their time spent on SEBTC activities and/or to cover the cost of materials used for the demonstration.[125] Nearly all SFA involvement took place during the pre-benefit period. SFA costs ranged from less than one percent of administrative costs (Missouri POC site) to 27% (Connecticut POC site).[126] SFA costs were associated with a number of factors including whether funding was available, SFA size and number, and the level of involvement required of SFA staff. Sites with large numbers of SFAs funded by the grant such as Chickasaw Nation (41 SFAs), the Connecticut POC Site (28 SFAs), and the Oregon POC site (12 SFAs) reported larger SFA costs, between $25,000 and $44,000 (comprising 4% to 27% of total

[125] For sites that did not provide grant funds to SFAs, the SFA costs were estimated based on reported staff time and listed as non-grant costs.

[126] The Missouri POC site's community partner handled much of the work related to compiling student lists and the consent process that was conducted by SFAs in other sites. This partner had access to school data systems and worked closely with the districts involved outside of SEBTC activities.

administrative costs in each site). The site with the highest dollar amount of SFA costs (the Michigan Expansion site) only had four participating SFAs; however these were regional SFAs cumulatively responsible for 32 individual school districts. Each of the four SFAs working in the Michigan Expansion site had part-time staff funded through the grant to work with the various local school districts.

Non-Profit Community Partners

As described in Chapter 2, six grantees (both Connecticut sites, both Missouri sites, Nevada, and Texas) provided funds to non-profit community partners under the SEBTC grant. In fact, the two Missouri sites, Texas, and Nevada relied heavily on their community partners, which were mostly funded through the grant. In these four sites, community partners took on tasks that State agency or SFA staff typically handled in the other sites.

The cost of community partners was about evenly split between the pre-benefit and benefit periods. In both Texas and Missouri, much of the community partners' 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. In Nevada, the community partner hired two temporary staff who worked in the WIC office to answer the SEBTC hotline both before and after benefits began, and who also did data entry and other clerical tasks over both periods.

Other For-Profit Contractors

In addition to the EBT vendors, all grantees except Connecticut hired for-profit contractors and consultants that received grant funds to perform activities associated with SEBTC. Activities of these contractors included software enhancements, database management, and (in sites that did not use an EBT vendor) EBT card production. In Nevada, for-profit contractors were also hired to develop brochures and websites to explain the WIC food packages to families (as Michigan had done in the POC year). Sites that allocated a high percentage of their grant funds to for-profit contractors tended to have higher administrative costs. For-profit contractor costs comprised at least 25% of administrative costs in four of the five sites with the highest administrative costs (Chickasaw Nation, Delaware, Michigan Expansion, and Washington; Texas was the exception to this pattern.) Delaware spent 43% of administrative costs on for-profit contractors. In three of the four sites with the lowest administrative costs (Connecticut POC and Expansion, and Oregon Expansion), for-profit contractor costs comprised 1% of administrative costs or less. (Michigan POC was the exception to this pattern, with 17% of administrative costs for the private MIS contractor.) Almost all of the costs for these contractors were incurred before the benefit period started.

6.5 SEBTC Costs per Child and per Household

6.5.1 Total Costs (Administrative Plus Benefits) per Child and per Household

In 2012, the average total cost of SEBTC, including administrative costs and benefits, across all sites was $201 per child and $376 per household issued benefits, ranging from $132 per child and $212 per household (Cherokee Nation) to $253 per child and $528 per household (Washington) (Exhibit 6.7).

Exhibit 6.7 Average Total Cost Per Child and Household

		Children Issued Benefits		Households Issued Benefits	
	Total costs $	Number of Children	Average Cost per Child ($)	Number of Households	Average Cost Per Household ($)
Cherokee Nation	770,855	5,838	132	3,635	212
Chickasaw Nation	1,345,159	5,355	251	2,592	519
Connecticut POC	778,872	4,486	174	2,345	332
Connecticut Expansion	496,872	2,636	188	1,273	390
Delaware	1,167,795	5,307	220	2,864	408
Michigan POC	856,792	5,368	160	3,042	282
Michigan Expansion	1,181,363	5,365	220	2,784	424
Missouri POC	1,112,552	5,452	204	3,056	364
Missouri Expansion	1,094,301	5,353	204	3,374	324
Nevada	954,187	5,431	176	3,295	290
Oregon POC	841,935	3,511	240	1,849	455
Oregon Expansion	815,396	3,553	229	1,805	452
Texas	963,731	5,751	168	3,430	281
Washington	851,399	3,366	253	1,612	528
All sites	13,232,208	66,772	201	36,956	376

Sources: Administrative cost data from SEBTC grantees and partners, 2012. Expenditure reports of grantees and other agencies, supplemented with staff responses to questions and published data. EBT issuance and redemption data provided by grantees.

Note: Averages for all sites were computed with equal weight for each site, so the average cost per child or household does not equal the total cost divided by total children or households.

6.5.2 Total Administrative Cost per Child and Household

Across all sites, the average administrative cost of SEBTC was $60 per child and $112 per household, ranging from $25 per child and $47 per household (Connecticut POC) to $119 per child and $246 per household (Chickasaw Nation) (Exhibit 6.8).

Exhibit 6.8 Average Administrative Cost Per Child and Household

	Administrative Costs $	Children Issued Benefits		Households Issued Benefits	
		Number of Children	Average Cost per Child ($)	Number of Households	Average Cost Per Household ($)
Cherokee Nation	231,623	5,838	40	3,635	64
Chickasaw Nation	637,649	5,355	119	2,592	246
Connecticut POC	111,059	4,486	25	2,345	47
Connecticut Expansion	101,764	2,636	39	1,273	80
Delaware	343,395	5,307	65	2,864	120
Michigan POC	192,424	5,368	36	3,042	63
Michigan Expansion	335,643	5,365	63	2,784	121
Missouri POC	281,651	5,452	52	3,056	92
Missouri Expansion	292,448	5,353	55	3,374	87
Nevada	320,599	5,431	59	3,295	97
Oregon POC	245,525	3,511	70	1,849	133
Oregon Expansion	210,594	3,553	59	1,805	117
Texas	335,478	5,751	58	3,430	98
Washington	335,872	3,366	100	1,612	208
All sites	3,975,724	66,772	60	36,956	112

Sources: Administrative cost data from grantees and partners, 2012. Expenditure reports of grantees and other agencies supplemented with staff responses to questions and published data. EBT issuance and redemption data provided by grantees.

Note: Averages for all sites were computed with equal weight for each site, so the average cost per child or household does not equal the total cost divided by total children or households.

6.5.3 Differences in Cost per Child and Household by Model (WIC or SNAP) and Consent Process (Active or Passive)

An important question for the evaluation is how costs differ for two major groupings of sites: WIC compared with SNAP model sites, and active consent compared with passive consent sites. Overall, SNAP model sites had higher total costs per child and household, while WIC model sites had higher administrative costs per child and household. Active consent sites had higher costs than passive consent sites for both measures (total and administrative costs) using both types of units (per child and household).

Total and Administrative Costs in WIC and SNAP Sites

Overall, the SNAP model sites had higher total costs per child and per household, because a greater proportion of the benefits were redeemed. However, when excluding the benefit costs, the WIC model sites on average had slightly higher (7%) administrative costs per child and per household than the SNAP model sites.

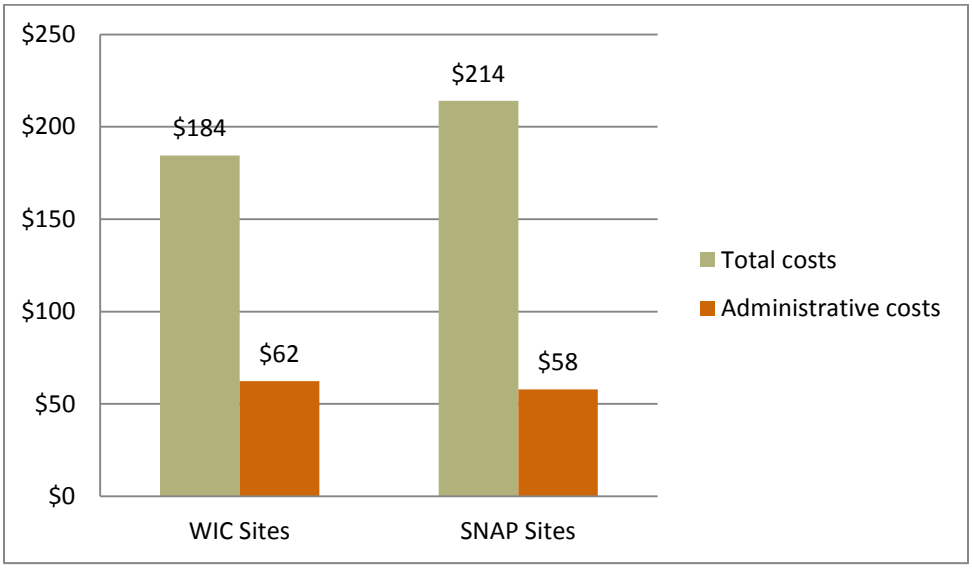
Total costs per child were 15% higher in SNAP model sites than in WIC model sites ($214 versus $184). However, administrative costs per child in WIC sites, on average, were about 7% higher than in SNAP sites ($62 versus $58; see Exhibit 6.9).

Average total costs per household had the same pattern as the per child costs – 19% higher in SNAP model sites than in WIC model sites ($407 versus $335). Administrative costs per

household were 4% higher for WIC model sites than for SNAP model sites ($115 versus $110; see Exhibit 6.10).

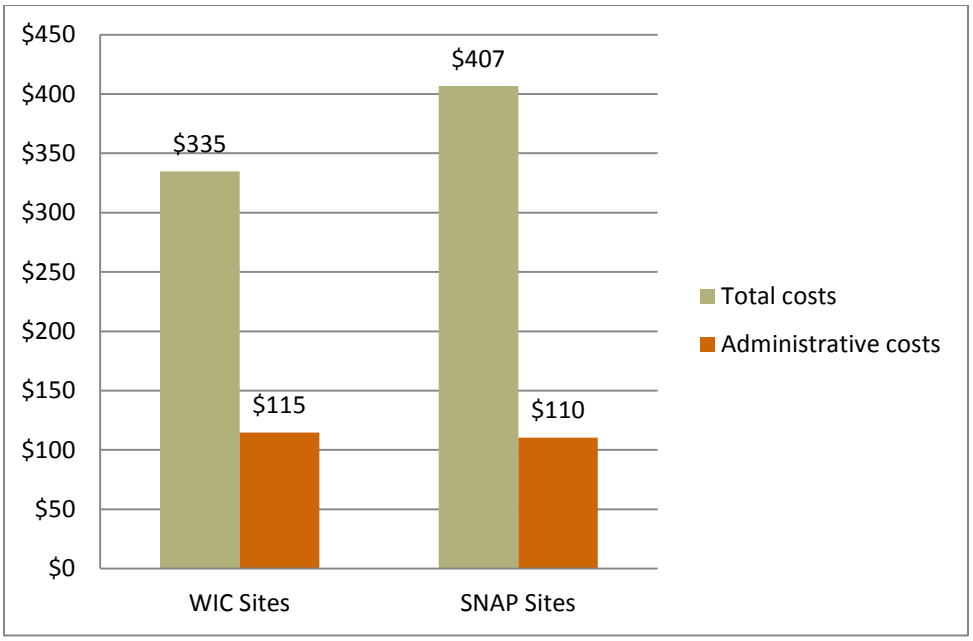
While administrative costs on average were higher in WIC model than SNAP model sites, and benefit costs were lower, within each group there was considerable variation in total costs, and in administrative costs, as illustrated in Exhibit 6.11. No clear pattern emerges in the cost per child by site among the sites using the two models of benefit delivery. For example, the sites with the highest and lowest average total cost per child were both WIC sites (Cherokee Nation and Chickasaw Nation). Review of the data suggests that the exceptionally low administrative costs per child in the two Connecticut sites and the exceptionally high administrative costs per child in the Chickasaw Nation have substantial influence on the respective averages for SNAP and WIC sites.

Exhibit 6.9 Average Cost Per Child Issued Benefits: WIC and SNAP Sites



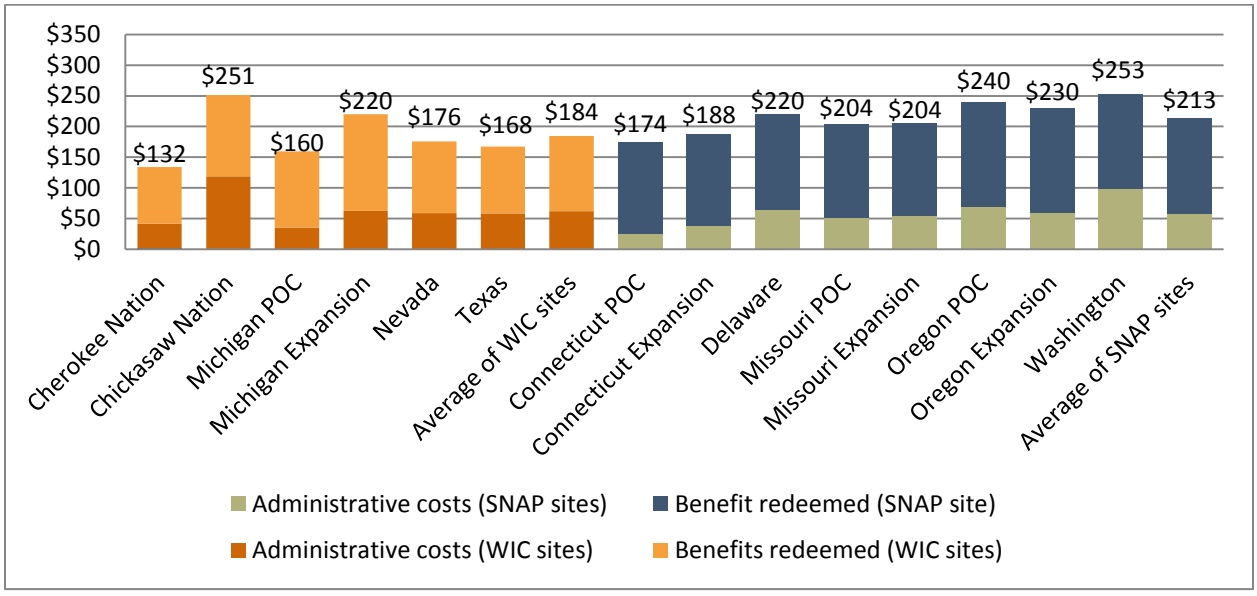
Sources: Administrative cost data from grantees and partners, 2012. Expenditure reports of grantees and other agencies, supplemented with staff responses to questions and published data. EBT issuance and redemption data provided by grantees.

Exhibit 6.10 Average Cost Per Household Issued Benefits: WIC and SNAP Sites



Sources: Administrative cost data from grantees and partners, 2012. Expenditure reports of grantees and other agencies supplemented with staff responses to questions and published data. EBT issuance and redemption data provided by grantees.

Exhibit 6.11 Average Administrative and Benefit Costs Per Child for WIC and SNAP Sites



Sources: Administrative cost data from grantees and partners, 2012. Expenditure reports of grantees and other agencies supplemented with staff responses to questions and published data. EBT issuance and redemption data provided by grantees.

Note: Dollar amounts represent total administrative costs per site.

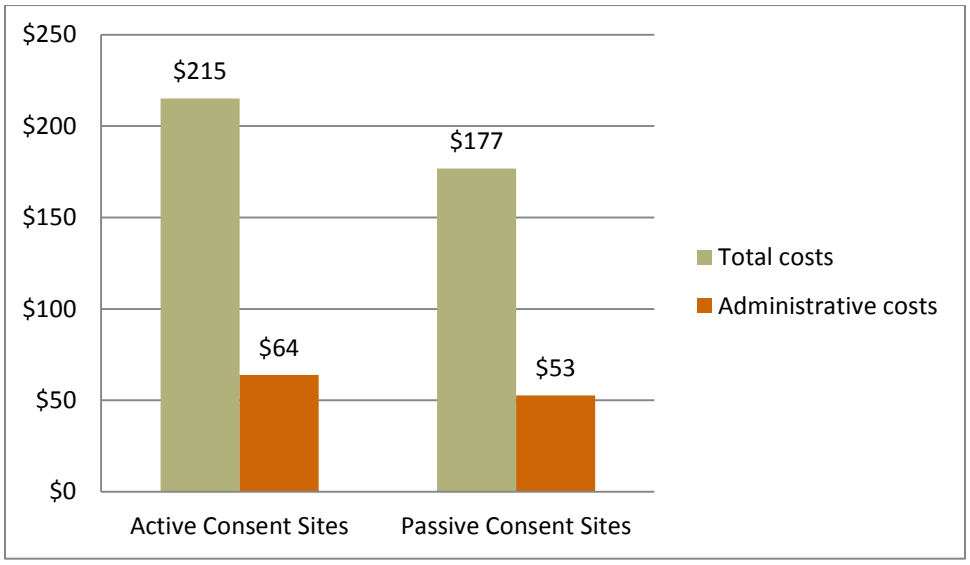
Total and Administrative Costs in Sites Using Active and Passive Consent

An important question for the evaluation was whether SEBTC costs per child and per household would be greater or less in sites requiring parents to actively consent to participate in the demonstration. The consent process could affect both the administrative and benefit costs. In terms of administrative costs, to be successful, active consent requires more staff hours to recruit households and more resources to provide letters, outreach materials, and reminders. However, passive consent sites, with lower-quality contact information, might need to spend more resources than active consent sites after consent is obtained because more households need to be located in order to issue benefits. In terms of benefit costs, active consent sites would be expected to have higher benefit costs per child and per household, compared with passive consent sites, because parents who submit consent forms are more likely to have accurate contact information and more likely to use the benefits, than parents in passive sites.

In fact, the patterns in costs between active and passive sites show that both total program costs per child and household and total administrative costs per child and household were higher in active consent sites than in passive consent sites. Total costs were $215 per child in active consent sites and $177 per child in passive consent sites. Administrative costs were $64 per child in active consent sites and $53 per child in passive consent sites. Similar differences were observed in total and administrative costs per household (see Exhibits 6.12 and 6.13).

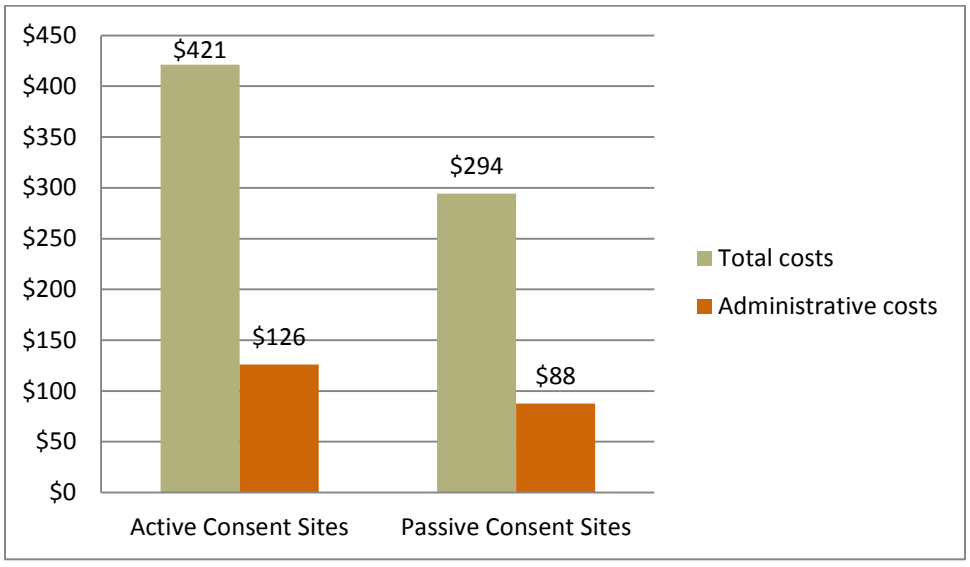
In considering differences in total costs per child between active and passive consent sites, it should be noted that three out of the five passive consent sites implemented the SEBTC WIC model, compared to two out of the nine active consent sites, and thus may have had lower benefit redemption rates due to their greater use of the WIC model as well as the consent process used, as discussed in Chapter 3. Finally, as noted in the discussion of WIC versus SNAP model costs, there was a wide range of costs within the groups of active and passive consent sites, and this variation suggests caution in attributing cost differences to the mode of consent.

Exhibit 6.12 Average Cost Per Child Issued Benefits: Active and Passive Consent Sites



Sources: Administrative cost data from grantees and partners, 2012. Expenditure reports of grantees and other agencies supplemented with staff responses to questions and published data. EBT issuance and redemption data provided by grantees.

Exhibit 6.13 Average Cost Per Household Issued Benefits: Active and Passive Consent Sites



Sources: Administrative cost data from grantees and partners, 2012. Expenditure reports of grantees and other agencies supplemented with staff responses to questions and published data. EBT issuance and redemption data provided by grantees.

6.5.4 Changes in Average Administrative Costs from 2011 to 2012 in POC Sites

Average administrative costs per child and household across the POC sites fell by 69% from 2011 to 2012. In the POC year, administrative costs accounted for more than 50% of demonstration costs, while in the full implementation year, they accounted for about 25% of

costs in the POC sites (computed from Exhibit 6.2). In contrast, the five new sites spent on average 36% of total costs on administrative activities.

The major sources of the declines in cost in the POC sites varied by site, but there were some common themes. In particular, some specific costs appear to have had a large "startup" component in 2011, in that they were much lower in 2012. For two grantees, delays in hiring staff contributed to lower staffing costs in 2012. At the same time, there were also increases in costs for some activities between 2011 and 2012. In particular, several sites increased funding for SFAs and community partners, as ways to obtain higher-quality data and to encourage more families to participate.

Changes in scale also played a role in the reduction of administrative costs per child and household in the POC sites from 2011 to 2012. All of the POC sites roughly doubled their samples in their original location, and four of the five POC sites operated a second (Expansion) site in 2012. Thus, the sites realized economies of scale. As an illustration of the scale effect, even if total administrative costs for each site had remained the same, costs per household would have fallen roughly by 50% because of the doubling of the number of households; in fact, total administrative costs fell, so costs per household declined by 69%.

Specific changes in costs for each of the POC sites are described below.

- ***Connecticut***—The major change in administrative costs per child from 2011 to 2012 was the decline of payments to the EBT contractor, which were much lower even if the costs for the POC and Expansion sites were combined. However, Connecticut also had continuing staff shortages, and the grantee was unable to hire a planned temporary staff member until it was too late for the consent process. They also did not reach their targets for obtaining consent in 2012 and may have underestimated the costs and resources needed to scale up the demonstration in the second year.
- ***Michigan***—In the POC year, Michigan's site had the highest administrative costs among the five POC sites by far, almost entirely due to high contracting costs with private companies that handled project management, MIS development, and other aspects of program implementation. In 2012, Michigan reduced costs by using two on-call contract staff, one hired as a temporary worker within the WIC agency and the other within the Department of Education. Although they were well-qualified professionals, they had lower salary and benefit costs than the contractor used previously. Michigan also spent less for their EBT contractor and their MIS contractor, mainly because they had already incurred needed start-up costs for systems modifications. Michigan's SEBTC average administrative costs per child in 2012 were only 13% of their 2011 costs, the largest reduction among the POC sites.
- ***Missouri***—Missouri spent substantially less for their EBT contractor than in 2011. However, they increased the budget for their community partner and added a new contractor to automate entry of SEBTC cases in their MIS, leading to a smaller than average decline in their administrative costs per child.
- ***Oregon***—In Oregon, most of the reductions in costs per child were for State staff time, which were their largest costs. The grantee changed the distribution of work in 2012 and

shifted more work to the SFAs. In addition, they did not have their project manager in place until March, which reduced costs and the amount of work completed early in the consent period. Furthermore, State staff were working on the expansion site and their hours were not tracked by site, but evenly split for reporting costs. Due to significant issues in the Expansion site, an even split of time likely underestimated the costs in the Expansion site and overestimated the costs in the POC site. Lastly, like Connecticut, Oregon did not reach their consent goals. The costs and resources needed to add an expansion site and increase the sample in the POC site were likely underestimated by the grantee.

- ***Texas***—Texas spent less for their State agency staff and their contractor for card issuance, but spent more for the community partner, the West Texas Food Bank, which conducted more participant training and locating in 2012 than in 2011. Texas was the only POC site with about the same level of total administrative costs between the two years; it was also the only POC site where the grantee did not have an expansion site to potentially share State-level costs. Nonetheless, with their larger sample, their administrative cost per child declined by roughly 61%.

Exhibit 6.14 Average Administrative Cost Per Child Issued Benefits, POC Sites Percent Change

	Average Cost Per Child ($)		
	2011	2012	% Change
Connecticut	87	26	-70%
Michigan	286	36	-87%
Missouri	121	52	-57%
Oregon	124	70	-44%
Texas	148	58	-61%
All POC Sites	153	46	-69%

Sources: Administrative cost data from grantees and partners, 2011 and 2012. Expenditure reports of grantees and other agencies supplemented with staff responses to questions and published data.

6.6 Conclusion

In 2012, administrative costs to operate SEBTC were, on average, less than one-third of the total costs, and comprised both start-up and ongoing costs. At the same time, each State grantee and its partner agencies handled the demonstration somewhat differently and worked in very different contexts, leading to variations in costs across the 14 sites. Compared to the POC year, the larger scale of the demonstration in each site and the lessons learned and investments made during that year likely contributed to much lower administrative costs per child and per household, both in the POC sites and overall. At the same time, the challenge of expansion may have required more resources than were spent in some States.

In drawing conclusions from the 2012 grantee experiences, three caveats must be made. First, and perhaps most importantly, the findings in this chapter are purely descriptive of the experiences in these 14 sites. Second, costs may be somewhat understated as staff in many sites did not track the time they spent on the demonstration each day. Other measurement issues, such as different approaches to tracking indirect costs and the lack of separate grantee

tracking of the time spent on POC and Expansion sites also suggest caution in interpreting these results.

Chapter 7

Discussion and Conclusions

Congress provided FNS with authority and funding to demonstrate and rigorously evaluate approaches for reducing or preventing food insecurity and hunger among children in the summer months. The Summer EBT for Children (SEBTC) demonstration, the largest such intervention funded by the 2010 Agriculture Appropriations Act, delivered SEBTC benefits through WIC or SNAP EBT systems to households with eligible children. The evaluation of the SEBTC in the first year (i.e., the Proof of Concept (POC) year), showed that SEBTC could be implemented with fidelity and found a positive impact on food security outcomes for households with eligible school-age children. The study's 2012 full implementation year more fully demonstrated the following:

- The summer benefit intervention was implemented successfully by the State and local grantees entrusted with its actuation; and
- In the 14 participating sites, SEBTC unambiguously and substantially advanced the intervention's main goal, reducing children's very low food security in the summer.

The evaluation also found favorable effects on broader food security measures and on several dietary indicators of nutritional status of children, the latter in particular for sites using the SEBTC WIC model.

The 2012 implementation and evaluation built on the lessons learned from the POC year. It largely reinforces that year's insights into SEBTC implementation, challenges, and successes and provides more information about the intervention's costs. In addition, the full implementation year, with substantially larger sample sizes compared to the POC year (approximately 27,000 versus approximately 5,000) and larger number of sites (14 versus 5) improved the precision of the main impact estimates. Larger samples also allow more robust examination of the circumstances in which SEBTC may be more or less successful, across different types of sites and among different demographic groups.

This chapter summarizes key findings on SEBTC implementation and benefit use, and on the costs incurred by grantees and sites in setting up and implementing the intervention, based on the process, EBT and cost analyses. It also summarizes findings of the second year impacts of SEBTC on children's food security and other outcomes, based on the impact analysis.

7.1 SEBTC Implementation

As often happens in the early years of an intervention or a program, grantees encountered unanticipated difficulties in implementing the program. For SEBTC, these difficulties included identifying households eligible for the benefit, obtaining consent, delivering the SEBTC benefit,

improving SEBTC participation rates, and collaborating with new partners. Despite these difficulties, findings from both 2011 and 2012 indicate that SEBTC is feasible, across a range of partners and approaches used in the full implementation year.

Five of the 10 grantees in 2012 implemented SEBTC for the first time, requiring efforts to set up and operate a variety of new administrative processes. Grantees needed to identify the households eligible for the demonstration and inform those households of the SEBTC benefit. From there, grantees 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 benefit and its EBT technology. Given random assignment, grantees also needed to make clear to households that, even if they consented, there was no guarantee of SEBTC benefit receipt. Next, grantees had to modify SNAP and WIC EBT procedures and systems to equip them to issue SEBTC benefits. Because 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. In addition, because SEBTC derives its funds from sources independent from SNAP or WIC, fully separate and transparent lines of accounting had to be maintained—even if States included SEBTC and SNAP benefits on the same benefit cards. Grantees and their partners then had to issue new EBT cards or load benefits onto existing cards.

As in the POC year, many grantees found identifying eligible households and obtaining consent from parents and guardians to be a major challenge. These challenges included incomplete or inaccurate data from school systems, limited time for the consent process, and limited communication with parents to encourage them to return consent forms in active consent sites. Despite difficulties, 7 of the 10 grantees, operating 9 of the 14 sites, were able to obtain consent from the target number of households. Household consent rates ranged from 90% to 97% in sites using passive consent and 23% to 57% in sites using active consent. All of the grantees succeeded in implementing procedures for the expiration or expungement of remaining benefits, and card deactivation. These processes generally ran smoothly.

The five returning grantees, which had POC sites in 2011, needed to undertake many of the same steps as did the new grantees. Specifically, they needed to obtain consent from eligible households, and then notify and issue benefits. While most of these POC grantees substantially modified some approaches based on their 2011 experiences, they faced similar challenges as did new grantees, including very tight time frames, working with new SFAs, and implementing contingency plans to ensure that they reached required consent goals. In fact, two of the three grantees that failed to meet consent targets in 2012 had implemented POC sites in 2011.

From the experience in 2012, it is possible to estimate 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 2012, the potential coverage rate (computed by multiplying the consent rate by the participation rate; i.e., the fraction redeeming any benefit), ranged from 21.7% (Connecticut Expansion) to 91.0% (Missouri Expansion), with passive consent sites experiencing higher coverage rates than active consent sites.

In addition to considering 2012 implementation experiences as context for findings on the impact of SEBTC, those experiences are insightful for SEBTC as an ongoing program. The source of some of the difficulties faced by grantees in both 2011 and 2012 involved (1) the fact that they were required to participate in an evaluation, and (2) that SEBTC was a new and short-term initiative instead of an ongoing one. For instance, if there had been no requirement for a control group, four of the five active consent sites that failed to reach consent totals would still have obtained consent from enough households to provide benefits to all 5,300 children. In addition, if SEBTC were an ongoing program as opposed to a demonstration, States would likely automate more processes (rather than manual efforts used by the 2011 and 2012 grantees) and/or develop additional strategies for increasing participation among eligible households.

However, some of the challenges faced by the SEBTC grantees would remain in an ongoing program. Even without an evaluation, current privacy rules require households to agree to have their contact information shared among the agencies who must work together to issue SEBTC benefits. Unless those rules were to change, some type of process would be necessary to gain households' agreement to share information across agencies. An active application approach for SEBTC would almost certainly result in fewer households receiving the benefit than would a more automatic approach. However, issues faced with the automatic approach would likely mirror those faced in passive consent sites during the demonstration period, arising from greater numbers of households with inaccurate contact information.

7.2 SEBTC Benefit Issuance and Use

In January 2012, FNS asked each of the 14 sites to provide SEBTC benefits to 5,300 children, resulting in a planned total of 74,200 children to be issued benefits in summer 2012. In fact, across all sites, 66,772 children (from 36,956 households) were issued benefits, representing approximately 90% of the planned target. The slight overall shortfall was due in large part to the fact that, as discussed earlier, five sites did not meet consent targets.

Among the households that were issued benefits, 90% used them at least once during the summer. Analysis of EBT data indicates distinct patterns of usage. Eighty-six percent of households that used the SEBTC benefits at least once used more than three quarters of the benefit, for an average of $150 of SEBTC benefits redeemed over the summer per participating child. This finding suggests that eligible families with a desire to take advantage of an SEBTC-type benefit (as represented by those using the SEBTC benefit at least once) likely will use most or all of SEBTC benefits offered to them in an ongoing program.

Rates of both participation (i.e., households redeeming SEBTC benefits at least once) and redemption (i.e., the percent of SEBTC used by households) varied by whether sites used one of the SNAP models (SNAP or SNAP hybrid; in which SEBTC benefits follow the same rules as the regular SNAP program) or the WIC model (in which SEBTC benefit cards can be used only for a specific list of WIC-allowable foods). As a group, a higher percentage of demonstration households participated (95.9%) in SEBTC in SNAP model sites and redeemed a higher percentage of benefits (93.9%) compared to participants in sites using the WIC model, where

83.7% of households participated and 60.1% of benefits were redeemed. Within each model, participation rates were higher in sites with active consent than in those with passive consent.

7.3 Impacts of SEBTC

The impact analysis relies on a random assignment design, 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. This type of design is considered the gold standard for estimating the impacts of programs and policies. All evidence indicates that random assignment was implemented with fidelity in the full implementation year, with a summer weighted response rate of 80%. Therefore, the impact analysis for the SEBTC in 2012 provides a high quality estimate of the impact of SEBTC.

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 2012 in the 14 full implementation sites combined. The prevalence of VLFS-C was cut a third, from 9.5% to 6.4%. 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. The food security results are robust to alternative estimation methods, and are present for all of the underlying components of the food security index, and are not limited to a small number of sites.

The data show little evidence that impacts on VLFS-C differ across subgroups, despite large sample sizes. Notably, although there were higher participation and redemption rates in SNAP model sites compared to WIC model sites, the study did not find a resulting differential impact by program model. The study also found no differential impact by households' poverty status, or SNAP participation in spring 2012. Impacts were shown to be larger, however, for active consent sites, for households that had VLFS-C in the spring, for households with three or more children, and for households with adolescents.

As is common with this type of research design, SEBTC involved random assignment within 14 purposively selected sites. Findings should not be extrapolated to the nation as a whole since the selected sites are not representative of the country. For example, levels of food insecurity during the school year in the SEBTC full implementation sites were considerably higher than national estimates for similar households (i.e., those with school-age children and incomes below 185% of FPL). The SEBTC 2012 spring sample (Briefel et. al., 2012) had a VLFS-C rate of 9.0%; for 2012; the corresponding national estimate is 2.2% (Coleman-Jensen et al., 2012).

While the SEBTC results cannot necessarily be generalized, it is useful to note that in the full implementation year, the study found positive impacts in the desired direction on VLFS-C in all but one of the 14 communities selected by grantees (although site-level impacts were not always statistically significant). Similarly, in the POC year, impacts were in the desired direction in four of the five POC sites. These communities were presumably targeted for the SEBTC

intervention because grantees perceived substantial need and because they believed that SFAs and other community partners would be able to help them implement SEBTC successfully. The sites exhibited a wide range of characteristics, including, among many others, diversity in racial and ethnic composition, level of urbanicity, and community levels of poverty. The study findings thus provide evidence of the potential success of SEBTC in many types of communities. However, it is important to proceed with care in expecting similar findings in some types of communities, particularly those in which there are lower levels of perceived need and/or where community organizations may not have the capacity to implement SEBTC effectively.

Prior research on seasonal differences in food security among school-age children is limited. This study, with its large sample sizes in 14 selected communities, provides researchers and policy makers with additional information about this important topic. The study found that in these communities, the level of VLFS-C in households with children receiving FRP meals in the school year worsened in the summer (from 8.6% to 9.9%), absent the summer benefit. Conversely, SEBTC resulted in reducing the VLFS-C in the treatment group to below levels households experienced during the school year (from 9.1% to 6.4%).

Food insecurity among children in the control group, a broader measure (i.e., VLFS-C and LFS-C together) remained steady from spring to summer (45.3% to 44.8%, not statistically significant) and declined for the treatment group (from 45.7% to 35.9%, $p<.01$). As with VLFS-C, households receiving SEBTC experienced lower levels of this broader measure of food insecurity in the summer than they did in the spring, when nearly all children received FRP meals.

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

The conceptual model for how SEBTC affects children's food security posits that, as a first step, SEBTC will cause households to purchase more food during the summer than they would have if they had not received SEBTC. The increased spending, in turn, results in reduced food insecurity during that period compared to the household's control group counterparts. And, in fact, in 2012, data from EBT systems, combined with respondent reports, showed that households receiving SEBTC increased overall food expenditures. However, as suggested by prior research, these households also replaced some of the cash they would have otherwise spent on food with some of the additional SEBTC benefit. Consequentially, every dollar of SEBTC led to a 51 cent increase in overall household food expenditures. This net increase in food expenditures is considerably larger than analyses of SNAP, which are closer to 30 cents (see, for example, Hanson, 2010).

In addition to confirming that SEBTC results in improvements in VLFS-C, and demonstrating the pathway of effects (i.e., SEBTC leads to increased food expenditures and consequent improvements in levels of food insecurity), the 2012 evaluation also showed favorable and meaningful impacts on several dietary indicators contributing to children's nutritional status. More specifically, the study suggests that SEBTC improved children's mean intake of (1) fruits and vegetables by one-third of a daily serving, (2) of whole grains by one-half of a daily serving,

and (3) of dairy by one fourth of a daily serving. SEBTC had no impact on consumption of milk products that were higher or lower in fat (e.g., fat-free, low-fat, 2%, whole).

These positive impacts were consistently larger for children in sites using the WIC model than for those using the SNAP model, although in most cases there are statistically significant impacts for children in both types of sites. For instance, relative to sites using the SNAP or SNAP hybrid model, impacts in WIC sites were twice as large for fruit and vegetable intake, four times as large for whole grains, and three times as large for dairy items.

Finally, the 2012 evidence suggests that SEBTC did not increase participation in the federal SNAP program. Nor is there clear evidence that SEBTC increased WIC participation. While the treatment group reported a statistically higher use of WIC, it appears that many respondents in households in sites using the WIC model have sites may have misidentified SEBTC WIC benefits as regular WIC benefits.

Households assigned to receive SEBTC relied on slightly fewer meals that were free or at low cost to them than their control group counterparts. SEBTC slightly decreased participation in the Summer Food Service Program (SFSP—from 9.8% to 8.8%). Children in treatment group families were less likely to receive free lunches from any source Monday through Friday (16.2% vs. 18.9% for free lunch at least one day per week; 12.1% vs. 14.2% for free lunch at least three days per week).

7.4 SEBTC Costs

In 2012, costs ranged widely among the sites administering SEBTC. The total cost of the 2012 demonstration (administrative plus benefit cost) ranged from $496,872 to $1,346,159 per site. Several factors accounted for this range, including lower numbers of households redeeming benefits in some sites, economies of scale for States with more than one site, and a wide range of administrative costs. Administrative costs accounted for 30% of total costs in 2012, in contrast with more than half of total costs in the POC year. Administrative costs ranged greatly, from $101,746 to $637,649 per site.

Although administrative costs were substantially lower in 2012 than in the POC year, the share of administrative costs in total costs remains higher than for other ongoing federal nutrition assistance programs that serve children.[127] This level of administrative costs likely reflects, in part, 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

[127] The SFSP requires very little tracking of administrative costs at the local level so it is not possible to compare SEBTC to SFSP in this regard. Local WIC agencies pay about 18% of their non-benefit costs for administration (versus client services), however. Substantial administrative costs are incurred at the State level for vendor management and reimbursement (2009 data; Geller et al., 2012, Vol. II). Administrative costs for the school meal programs comprised about 25% of districts' school meal program costs (2005-2006 data; Bartlett et al., 2008). See Chapter 6 for discussion.

households and get their consent to take part in the demonstration, a resource cost that would apply in a permanently established program. Given that SEBTC is a short-term benefit and households would likely need to consent to receive it, it is possible that administrative costs for SEBTC would be higher than for other ongoing or long-term federal nutrition programs.

Overall, total costs were higher for SNAP model sites than WIC model sites, due to higher levels of SEBTC redemptions among households in SNAP model sites. Administrative costs, however, were about 7% higher in WIC sites than in SNAP sites. Within each model there was a wide range of administrative costs. Review of the data suggests that the exceptionally low administrative costs per child in the two Connecticut sites and the exceptionally high administrative costs per child in the Chickasaw Nation have substantial influence on the respective averages for SNAP and WIC sites.

7.5 Overview and Next Steps

The findings from SEBTC's 2012 full demonstration year reinforce those from the POC year, both regarding the feasibility of the SEBTC approach and its potential effect on reducing VLFS-C in the summer. In 2013, FNS will add to this body of evidence by evaluating the relative impact of a $30 per child per month benefit compared to the $60 benefit. The 2013 study will take place in six sites, some of which participated in 2011 and 2012 SEBTC demonstrations, and involve approximately 18,000 households representing 32,000 children. Findings from 2013 will help add to the body of evidence about the ways in which school-age children's food security can be protected during the summer months when school-year FRP meals are unavailable.

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