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## **Evaluation of Demonstration Projects to End Childhood Hunger (EDECH): The Nevada Healthy, Hunger Free Kids Project**

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**GLOSSARY OF ACRONYMS AND ABBREVIATIONS**

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AAPOR	American Association for Public Opinion Research
ARRA	American Recovery and Reinvestment Act
BL	Baseline
CATI	Computer-assisted telephone interview
CONSORT	Consolidated Standards of Reporting Trials
CMNE	Case management and nutrition education
CPS	Current population survey
EBT	Electronic benefits transfer
EDECH	Evaluation of Demonstration Projects to End Childhood Hunger
ERS	Economic Research Service
ES	Executive Summary
EVFS	East Valley Family Services
FI-C	Food insecurity among children
FI-HH	Food insecurity among household
FNS	Food and Nutrition Service
FRP	Free or reduced-price meals
FS-C	Food security among children
FU	Follow-up
FPL	Federal poverty level
FY	Fiscal year
GED	General Education Development
HH	Household
HHFK	Healthy, Hunger Free Kids
IRB	Institutional Review Board
IT	Information technology
LSSN	Lutheran Social Services of Nevada
MIS	Management information system
NA	Not applicable
NSLP	National School Lunch Program
ODC	Other direct costs
OMB	Office of Management and Budget

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OOP	Out-of-pocket spending
RCT	Randomized controlled trial
SBP	School Breakfast Program
SEBTC	Summer Electronic Benefits Transfer for Children
SFSP	Summer Food Service Program
SNAP	Supplemental Nutrition Assistance Program
SSI	Supplemental Security Income
T	Treatment
T1	Treatment group 1
T2	Treatment group 2
TANF	Temporary Assistance for Needy Families
USDA	United States Department of Agriculture
VLFS	Very low food security
VLFS-C	Very low food security among children
WIC	Special Supplemental Nutrition Program for Women, Infants, and Children

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## EXECUTIVE SUMMARY

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This evaluation report describes the vision, implementation, and impacts on child food insecurity and other outcomes of the Nevada Healthy, Hunger Free Kids (HHFK) project. The evaluation was carried out under the Childhood Hunger Demonstration grants funded by the U.S. Department of Agriculture’s (USDA) Food and Nutrition Service (FNS) in 2015–2017.

### **The problem: Food insecurity among children**

Food security is defined as access by all people at all times to enough food for an active, healthy life (Economic Research Service [ERS] 2017a). When a household does not have enough money or other resources to buy food, food intakes are reduced and eating patterns disrupted, leading to food insecurity and its social, developmental, and nutrition consequences, especially for children (National Research Council and Institute of Medicine 2013; Nord and Parker 2010). National estimates indicate that almost one in four families (24%) living in poverty in 2016 experienced food insecurity among children (FI-C),<sup>1</sup> and 44% experienced food insecurity among the household as a whole (Coleman-Jensen et al. 2017a).

### **A potential solution: Enhanced Supplemental Nutrition Assistance Program (SNAP) benefits and additional services targeting families with young children living in poverty**

The 2010 Child Nutrition reauthorization called for the development of innovative strategies to “reduce the risk of childhood hunger or provide a significant improvement to the food security status of households with children,” and an independent evaluation of the effectiveness of these strategies using rigorous experimental designs and methodologies to produce scientifically valid evidence of project impacts on food security (U.S. Congress, P.L. 111-296, 2010). USDA awarded a \$3.1 million grant<sup>2</sup> to the Nevada Division of Public and Behavioral Health, which administers the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), along with the Nevada Division of Welfare and Supportive Services, which administers the Supplemental Nutrition Assistance Program (SNAP).

The HHFK project in Nevada was designed to, among households with young children living in poverty, (1) reduce FI-C, (2) increase enrollment in WIC and other nutrition assistance programs, and (3) improve nutrition and healthy shopping habits. It aimed to achieve these goals primarily by increasing access to food through higher SNAP benefits, and secondarily by helping families gain access to WIC and other assistance programs, and encourage healthy shopping and cooking behaviors through nutrition education. The project targeted households living in Las Vegas that were receiving SNAP, had children under age 5, and household incomes below 75% of the Federal Poverty Level (FPL). The project operated over 12 months, from June 2016 through May 2017.

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<sup>1</sup> FI-C in the household occurs when *any* of the children in it have their eating pattern disrupted (ERS 2017b).

<sup>2</sup> The total program cost including State matching funds was \$3.3 million.

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## The evaluation

**Study design.** The evaluation conducted by Mathematica Policy Research used a rigorous randomized controlled trial (RCT) design to estimate the Nevada HHFK project’s impact on the primary study outcome—FI-C—and other outcomes, including food security among adults and the household as a whole, food spending, and participation in nutrition assistance programs. Households receiving SNAP in the Las Vegas area were randomly assigned to one of two treatment groups, or a control group that received no additional SNAP benefits. All households randomly assigned to the intervention (treatment group) received an additional \$40 per month in benefits per eligible child under 5 on their electronic benefits transfer (EBT) cards to enhance household SNAP benefits. A subset of treatment households was randomly selected to receive case management and nutrition education to help them access nutrition and other assistance programs in addition to the extra SNAP benefits. That is, the treatment group included two treatment arms—one received just the extra SNAP benefits and a second received those benefits plus case management and nutrition education.

- **Study outcomes.** The key study outcome was FI-C, as measured by the 30-day USDA food security survey module (ERS 2017b). Key secondary outcomes were (1) other measures of food insecurity, (2) household participation in SNAP and other nutrition assistance programs, (3) household food expenditures (using SNAP benefits and out-of-pocket expenses), and (4) food shopping and nutrition behaviors. Most outcomes were collected through a follow-up survey administered at or near the end of the 12-month implementation period. Additional outcomes were measured using SNAP administrative data.
- **Survey methods.** A target population of 11,305 Las Vegas households met the project’s eligibility criteria; a sample of households was selected for the evaluation’s baseline survey conducted in 2016. Households that completed the baseline survey (n = 3,088) made up the evaluation sample and then were randomly assigned to one of two treatment arms (1,971 households) or the control group (1,117 households).<sup>3</sup> A follow-up telephone survey with field follow-up was conducted a year later, in 2017, to measure household outcomes (n = 2,074). Survey data were weighted to be representative of the target population in the Las Vegas area.
- **Quantitative and qualitative analytic methods.** To estimate impacts, outcomes among households assigned to the treatment and control groups were compared, controlling for their baseline characteristics using a regression framework. For both the implementation and cost studies, descriptive tabulations were used to address the key research questions on implementation planning and operations, and the resources needed to implement the HHFK project. A summary of qualitative findings highlights participants’ views and uses of the benefit services.
- **Study population.** The average household size among the evaluation sample at baseline was 4.5 members, with an average of 2.9 children. Approximately 57% of respondents were Hispanic, 25% non-Hispanic black, and 18% non-Hispanic white or another race. The employment rate, defined as any adult in the household employed during the last 30 days,

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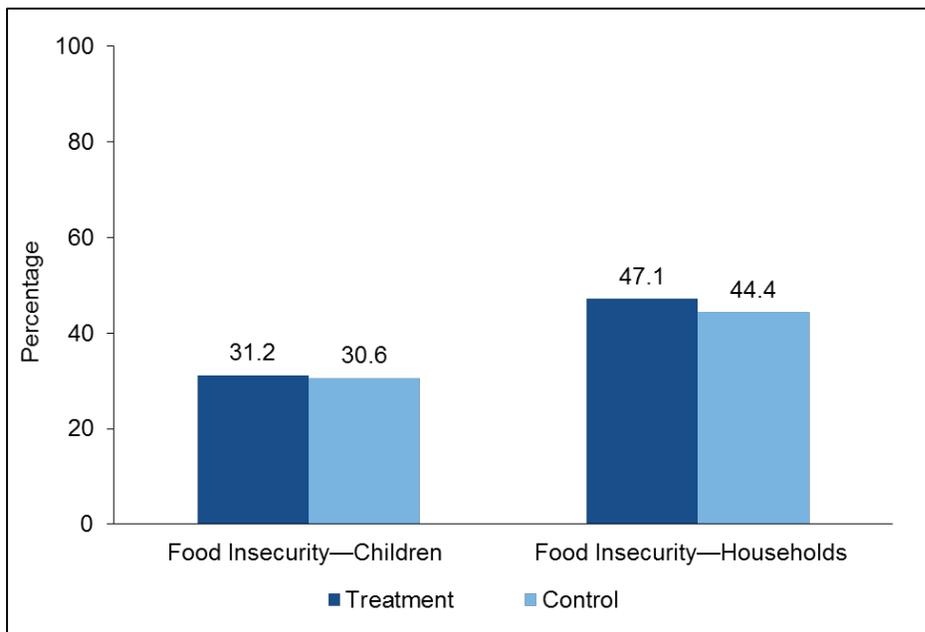
<sup>3</sup> Households outside of the evaluation sample were also randomly assigned to the treatment and control groups so that all eligible households would have a chance to receive project benefits.

was 57%. Median household income in the last 30 days was approximately \$1,000. At baseline, all households participated in SNAP (an eligibility criterion), 60% participated in WIC, and 13% obtained food from a food pantry, emergency kitchen, or another community food program in the 30 days before the survey.

### The findings: Impacts of the HHFK project on children and households

**Impacts on food security among children.** Overall, the project did not lead to a reduction in the prevalence of FI-C—the primary outcome in the evaluation. About 31% of households in both the treatment and control groups reported FI-C at follow-up (see Exhibit ES.1). The rates of other measures of food insecurity were also similar in treatment and control group households at follow-up. Because there were no meaningful differences between the two treatment arms of the intervention, the findings presented here are for the entire treatment group.

#### Exhibit ES.1. Impact of the Nevada HHFK project on food insecurity among children and households



Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 follow-up survey. Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research.

Note: Sample sizes are: treatment group = 1,332, control group = 738. Estimates are regression-adjusted to account for households' baseline characteristics. The differences between treatment and control groups are not statistically significantly different from zero at the 0.05 level, two-tailed test.

HHFK = Healthy, Hunger Free Kids.

For each group, the rate of FI-C declined between the baseline and follow-up periods. For the treatment group, it declined from 35% to 31% during the period in which the project operated and households received benefits. If viewed in isolation, this decline might suggest that project benefits led to the reduction in FI-C. However, the design of the RCT provides an estimate of the counterfactual—what would have happened in the absence of project benefits. Specifically, the decline in FI-C that also occurred among the control group during this period suggests that some

explanation other than the project itself explains this reduction. One likely explanation is that this was a period in which the economy in Las Vegas was improving, with a decline in the unemployment rate from 6.1% to 4.8% (U.S. Department of Labor, Bureau of Labor Statistics 2018) and a corresponding improvement in the employment rate among households in the evaluation sample.

**Impacts for subgroups.** Although the project did not reduce FI-C overall in the sample, it could have been effective among subgroups of households. For most subgroups examined, the project did not reduce FI-C. However, the project led to a decline in FI-C among households that included two or more older children. (Note that households did not receive extra benefits for children age 5 or older). The FI-C rate at follow-up was 33% and 40% among treatment and control households in this subgroup, respectively. The extra SNAP benefits for this group could have had a greater effect because older children tend to eat more than younger ones, placing a greater strain on the food budgets for households with two or more older children, as suggested by the higher rates of FI-C in this subgroup. Estimated impacts did not differ across other subgroups of households defined based on socioeconomic characteristics, including the presence of a single adult versus two or more; the number of children eligible for project benefits; FI-C at baseline; the expected level of extra SNAP benefits; household participation in WIC; and the survey respondents' race, ethnicity, and level of education.

**Impacts on SNAP benefit receipt and food spending.** The average treatment household received \$44 in project benefits in the month of the follow-up survey—the result of the number of eligible children in the household and the proportion of households participating in SNAP in that month. The extra SNAP benefits were added to households' regular SNAP benefits. The overall effect of the extra benefits on households' food purchasing power depended on the amount by which the sum of regular and extra SNAP benefits among treatment households was greater than the regular benefits alone among control households. In the evaluation, the median treatment household spent \$44 more in total SNAP benefits than the median control household in the survey month—\$466 versus \$422 (Exhibit ES.2)—an increase of 10% in households' total SNAP benefit spending.

#### **Pathway from extra SNAP to food in the household**

*How much in extra monthly SNAP benefits did a treatment household receive?*

**\$44**

*Did they use all of it or leave any extra SNAP benefits unspent?*

**All (99%)**

*How much did it raise the household's total SNAP spending?*

**\$44 per month**

*How much larger did it make the household's total spending on food (including SNAP and out-of-pocket spending)?*

**\$23 per month**

*About how many additional meals would that \$23 cover?*

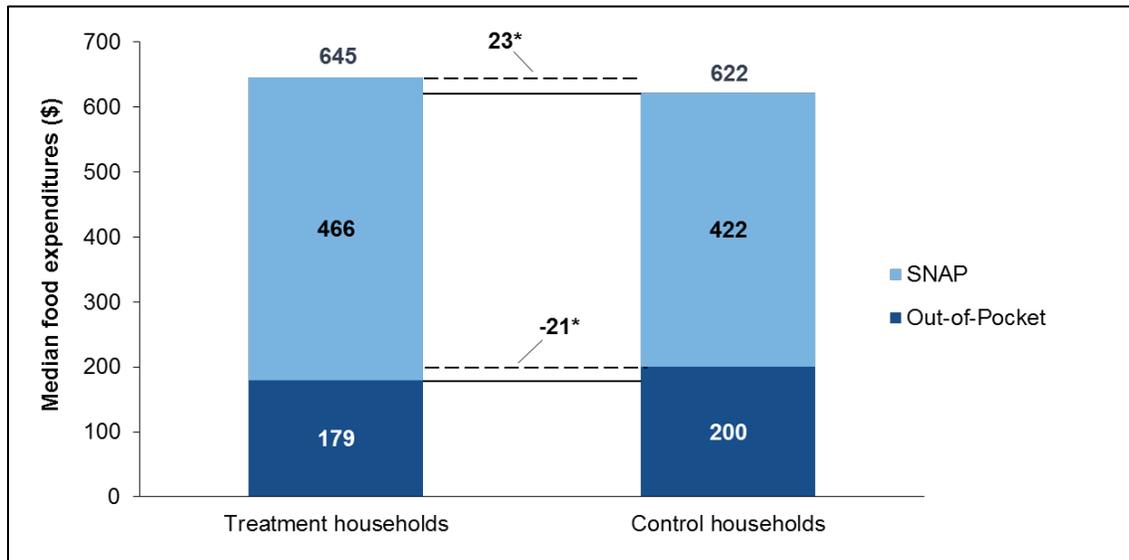
**8 for one person**

**2 for a family of 4**

The study also measured total expenditures on food, including out-of-pocket spending and SNAP purchases. The project led to an increase in median total food expenditures of \$23,

slightly more than half as large as the increase in SNAP spending. In other words, treatment households spent just over half of their additional purchasing power on food and the balance allowed them to increase their out-of-pocket spending on nonfood items. The \$23 in additional food spending translates to about \$6 each month per household member for a family of four, or about 8 single meals for a food-secure person over the course of a month (Feeding America 2017).

### Exhibit ES.2. Median out-of-pocket and SNAP-based household food expenditures, Nevada HHFK project treatment and control groups



Source: Nevada SNAP administrative data, 2016–2017 and Evaluation of Demonstrations to End Childhood Hunger, 2017 follow-up survey. Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research.

Notes: Sample sizes are: treatment group = 1,335 and control group = 739. Estimates are regression-adjusted to account for households' baseline characteristics. The total spending amount at the top of each bar reflects the sum of median SNAP spending plus median out-of-pocket spending. See Exhibit III.2 for the median of a combined measure of SNAP and out-of-pocket spending. For each group (treatment and control), the median of the combined measure is about \$10 larger than the sum of median SNAP spending plus median out-of-pocket spending, although the treatment-control difference of \$23 is the same.

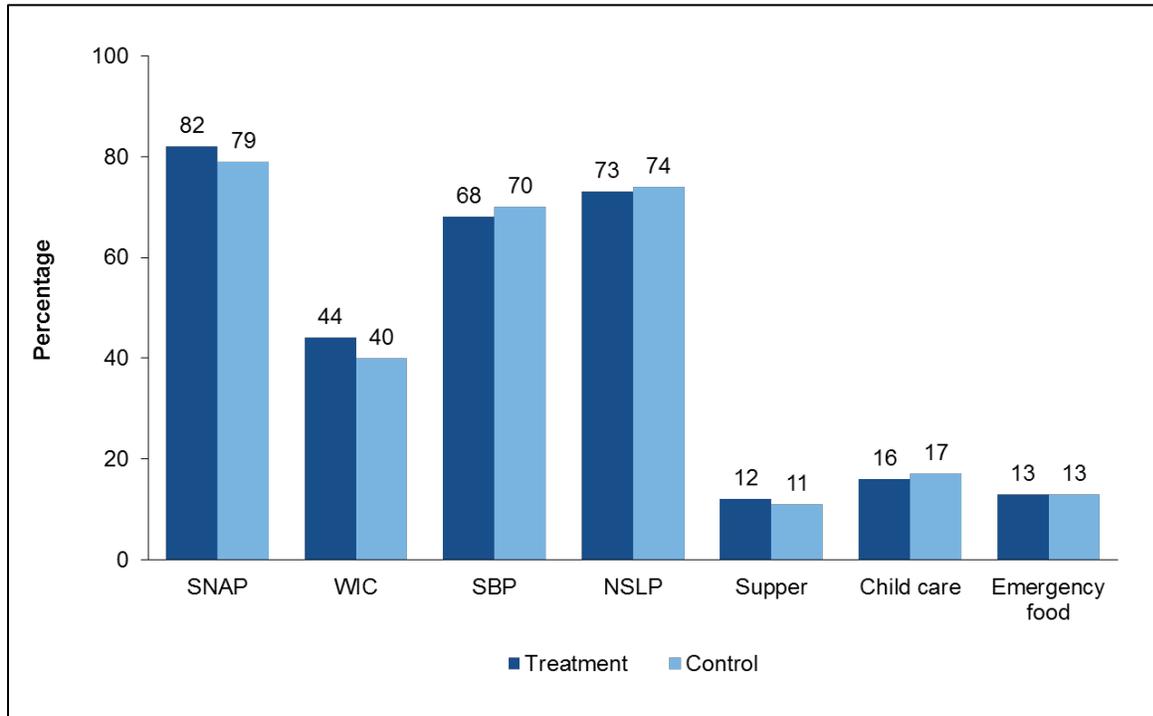
\*Difference is statistically significant at the 0.05 level, two-tailed test.

HHFK = Healthy, Hunger Free Kids; SNAP = Supplemental Nutrition Assistance Program.

**Impacts on food program participation.** Treatment and control households participated in household and child nutrition assistance programs at similar rates, although there were small differences that did not reach statistical significance at traditional levels (see Exhibit ES.3). At follow-up, approximately 82% of treatment households reported SNAP participation, compared with 79% of control households ( $p = 0.064$ ). The reported prevalence of WIC participation was also slightly higher in treatment than control households (44% versus 40%) ( $p = 0.052$ ). Considering SNAP and WIC together, treatment households were 3.6 percentage points more likely to report participating in at least one of the two programs—a statistically significant difference ( $p = 0.022$ ). On average, households in each group participated in three of the child nutrition programs examined (SNAP, WIC, School Breakfast Program (SBP), National School Lunch Program (NSLP), child care (including Head Start), school suppers, food backpack

programs, and afterschool care). In addition, similar percentages of each group (about 13%) received help from a food pantry, emergency kitchen, or other community food program.

### Exhibit ES.3. Reported participation in nutrition assistance programs, Nevada HHFK project



Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 follow-up survey. Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research.

Notes: Sample sizes are: treatment group = 1,335 and control group = 739. Estimates are regression-adjusted to account for households' baseline characteristics. Differences between treatment and control groups are not statistically significant at the 0.05 level, two-tailed test. Participation in backpack and afterschool care programs each ranged from 14% to 16% in treatment and control groups. Emergency food sources include food pantries, food banks, emergency kitchens, shelters, senior centers, and other community programs providing food or meals. SBP and NSLP include free or reduced-price meals.

HHFK = Hunger, Healthy Free Kids; NSLP = National School Lunch Program; SBP = School Breakfast Program; SNAP = Supplemental Nutrition Assistance Program; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

### Implementation and costs of the Nevada HHFK project

The evaluation included an analysis of project implementation and costs, based on a review of grant documents and materials, ongoing communications with grantee staff, site visits and interviews during the planning and implementation periods, and focus groups with participants. The project's major success was seamlessly and efficiently delivering the extra SNAP benefit; also, the choice of how to deliver these benefits was instrumental to its success. Instead of modifying the existing SNAP eligibility system, project staff continued using it to deliver basic SNAP benefits but developed a new database to provide the extra SNAP benefits to treatment households. This database used information from the existing SNAP eligibility system and the project on the amount of extra SNAP benefits households should receive, and added those

benefits to the households' existing EBT accounts. This approach minimized costs and simplified operations for the demonstration project and meant that households did not have to take any action to receive the extra SNAP benefits. Although it may initially have caused some households to be unaware of the existence of the additional funds, even if households did lack this awareness, it did not deter them from spending the extra funds, as treatment households spent nearly all of the extra benefits added to their EBT cards by the end of the implementation period.

In contrast to the extra SNAP benefits, a small share of households took advantage of the case management and nutrition education benefits. Project staff attempted to contact (by phone, email, or mail) nearly all households (91%) in the second treatment group at least once, but the outreach effort remained relatively low overall. Among the households staff attempted to contact, 83% were called only once. A small share of households (25%) spoke with a case manager about assistance programs at least once. About 3% of the households enrolled in WIC after receiving support, and 3% attended a nutrition education class. Because participation in other nutrition programs was relatively high already, a small share gained access to other assistance programs. Staff noted that a high proportion of households were interested in programs that could help them save, such as energy assistance (37%) and child care subsidies (21%).

The analysis of SNAP administrative data found that nearly all households (92%) received the extra \$40 per child benefit at least once—typically for 8 out of 11 months assessed. Receipt of the benefit declined slightly and steadily over time, to 72% by the last month of the project. This decline in HHFK participation was almost fully due to loss of SNAP eligibility, which could have occurred if a household's income increased or the household moved out of State or failed to recertify for SNAP.

The cost analysis reflects that it was primarily a SNAP project and delivered at relatively low cost, aside from the extra SNAP benefits themselves. The project costs totaled \$2.3 million.<sup>4</sup> Most of the costs (80%, or nearly \$1.9 million) reflect payments directly to households in the form of extra SNAP benefits (average of \$491 per household during the 12 month demonstration period). The planning for and administration of the extra SNAP benefit accounted for approximately 5% to 11% of the total paid costs over 28 months,<sup>5</sup> suggesting that project staff identified a relatively low-cost way to deliver a temporary increase in SNAP benefits. This delivery approach would also be easily scalable; adding more households would not raise administrative costs, and extending the benefit period would raise them only marginally.

The case management and nutrition education components, on the other hand, were labor intensive, so the planning and administrative portions of their costs made up a greater share (9% to 14%) of the total costs, and they were delivered to a smaller share of households.

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<sup>4</sup> This figure excludes grant money remaining at the conclusion of the evaluation period, which Nevada intends to spend during a no-cost extension period. It includes both paid and donated labor.

<sup>5</sup> This range reflects the fact that 5% of the total costs are attributable solely to the SNAP benefit and another 6% of project costs were for jointly administering the SNAP and the cost management and nutrition education components.

## **Conclusion**

Using a rigorous random assignment design, this study examined the impact of the Nevada HHFK project, which aimed to reduce food insecurity among children by providing households with young children living in poverty extra SNAP benefits and access to case management and nutrition education services. Overall, the project did not reduce FI-C or other measures of 30-day food insecurity. This lack of an impact may be related to the size of the benefit and its influence on food spending. The project led to an increase in monthly SNAP spending of \$44 for the average household, but an increase of only \$23 a month in overall food purchases including out of pocket spending—the equivalent of about two meals for a family of four during the month. This change may not have been large enough to reduce food insecurity as measured by the standard survey module. Despite high nutrition program participation in both treatment and control households, one in eight families also relied on emergency or other community food assistance. The study could not rule out project impacts on other aspects of household well-being; for example, households may have used a share of their extra purchasing power to address other basic needs such as housing or health care. The study provides evidence of the challenges involved in identifying effective strategies to reduce child food insecurity among populations living in poverty.

## I. THE NEVADA HEALTHY, HUNGER FREE KIDS PROJECT

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This evaluation report describes the vision, implementation, and impacts on child food insecurity and other outcomes of the Nevada Healthy, Hunger Free Kids (HHFK) project. This project was carried out under the Childhood Hunger Demonstration grants funded by the U.S. Department of Agriculture’s (USDA) Food and Nutrition Service (FNS) in 2015–2017. The demonstration was designed to reduce food insecurity among low-income families with at least one child under age 5. Households already receiving Supplemental Nutrition Assistance Program (SNAP) benefits were provided with additional resources (extra SNAP benefits on a monthly basis, and for some households, case management and nutrition education services).

### A. Introduction

Access to adequate healthy food is important to children’s nutrition, psychosocial development, and health (Coleman-Jensen et al. 2013; National Research Council and Institute of Medicine 2013). Households in poverty often struggle to meet the food needs of household members. A household’s ability to do so—its food security<sup>6</sup>—is a function of available resources (money to buy food and other resources), competing demands for those resources, and the cost of acquiring food (Nord et al. 2014).

USDA’s FNS administers 15 nutrition assistance programs designed to ensure that low-income Americans do not go hungry and have access to healthful and nutritionally adequate diets (FNS 2016). Despite high participation in SNAP, the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC),<sup>7</sup> and the National School Lunch Program (NSLP),<sup>8</sup> rates of food insecurity among low-income households with children remain a concern.<sup>9</sup> To address this concern, the 2010 Child Nutrition reauthorization called for the development and independent outcome evaluation of innovative strategies to “reduce the risk of childhood hunger or provide a significant improvement to the food security status of households with children,” including alternative models of service delivery or benefit

In 2016, one in five families with incomes eligible for SNAP (22%) experienced food insecurity among the children (FI-C), and 41% experienced food insecurity among the household as a whole (FI-HH) (Coleman-Jensen et al. 2017).

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<sup>6</sup> Food security is defined as access by all people at all times to enough food for an active, healthy life (Economic Research Service (ERS) 2017a). Household food insecurity occurs when the food intake of one or more household members is reduced and their eating patterns are disrupted because the household lacks money and other resources for food (ERS 2017a). Food insecurity can be measured at the household, adult, and child levels. Food insecurity among children (FI-C) occurs when *any* of the children in the household have their eating patterns disrupted, and food insecurity among adults (FI-A) occurs when *any* of the adults in the household have their eating patterns disrupted because “there wasn’t enough money for food.”

<sup>7</sup> In fiscal year (FY) 2017, 42.1 million people participated in SNAP (FNS 2018c), and 7.3 million women and children participated in WIC (FNS 2018d). In both programs, total participation decreased slightly compared to the 2011–2014 period.

<sup>8</sup> Participation in NSLP has remained stable in the past decade; 30.0 million children participated in FY 2017 (FNS 2018b). In FY 2017, 74% of all school lunches were free or reduced-price (FNS 2018b).

<sup>9</sup> In the 2012 SNAP Food Security Survey, 33% of households with children entering SNAP (that is, new entrants) had food insecure children (Mabli et al. 2013).

levels (FNS 2018a; U.S. Congress, P.L. 111-296, 2010). The 2010 Child Nutrition reauthorization provided \$40 million to USDA to conduct and evaluate the demonstration projects. USDA awarded grants to States and Indian tribal organizations in February 2015 to develop and implement their strategies for reducing childhood food insecurity. The resulting Evaluation of Demonstration Projects to End Childhood Hunger (EDECH) study independently evaluated the implementation and impacts of four of the grantees' demonstration projects (USDA 2018). This report, one of four, presents results from the EDECH study for one of the grantees: Nevada.

The EDECH study investigated, for all grantees, the projects' impacts on food insecurity among children—the primary outcome. The EDECH evaluation had six research objectives that are addressed in this report (Exhibit I.1).

### Exhibit I.1. Overview of the EDECH evaluation design

Study component	Sample	Data sources	Main outcomes
<b>Objective 1. To describe the demonstration project in detail</b>			
Implementation	State agency directors, project staff, and State and local partner organizations	Document review; in-person interviews	Project vision; project components; planning process; stakeholders' roles
<b>Objective 2. To describe the processes involved in the implementation and operation of the demonstration project</b>			
Implementation	State agency directors, project staff, and State and local partner organizations; parents/guardians	In-person interviews; parent/guardian focus groups; administrative and Management Information System (MIS) data	Project components; implementation processes; project challenges and successes; staff and participants' perceptions and experiences
<b>Objective 3. To determine the impact of the demonstration project on the prevalence of food insecurity</b>			
Impact	Parents/guardians	Baseline and follow-up household surveys; SNAP caseload and EBT administrative data; findings from Objectives 1 and 2	Food insecurity among children; adult and household-level food insecurity among households with children
<b>Objective 4. To determine how impacts on food insecurity among children and households with children vary by relevant factors</b>			
Impact	Parents/guardians	Baseline and follow-up household surveys; findings from Objectives 1 and 2	Food insecurity among children by household income, race/ethnicity and other factors
<b>Objective 5. To determine the impact of the demonstration project on additional household outcomes potentially related to food security</b>			
Impact	Parents/guardians	Baseline and follow-up household surveys; SNAP EBT administrative data; findings from Objectives 1 and 2	Participation in nutrition assistance programs; food shopping, food preparation, and spending patterns
<b>Objective 6. To determine the demonstration's cost and effectiveness</b>			
Cost	Project staff and State and local partner organizations	Document review; in-person interviews; cost workbooks; administrative data	Total project costs; component costs of ongoing operations and how they relate to the impact observed

EBT = electronic benefits transfer; SNAP = Supplemental Nutrition Assistance Program.

## B. The Healthy, Hunger Free Kids Project in Nevada

The Nevada HHFK project was designed to reduce hunger in households with very young children living in poverty. The project aimed to reduce food insecurity, improve nutrition, and improve household economic stability, primarily by increasing access to food through higher SNAP benefits. The project secondarily aimed to achieve these goals by helping families with young children gain access to WIC and other assistance programs, and through education to encourage healthy shopping and cooking behaviors. USDA awarded a \$3.1 million grant for the HHFK project to the Nevada Division of Public and Behavioral Health, which administers WIC. The Division of Public and Behavioral Health executed a sub-grant with the Nevada Division of Welfare and Supportive Services, which administers SNAP. These agencies—the WIC and SNAP agencies—were responsible for designing and implementing the project.

Project benefits included extra SNAP benefits and, for some households, case management and nutrition education. The project targeted households living in Las Vegas (Clark County) that were receiving SNAP, had children under age 5, and had household incomes below 75% of the Federal Poverty Level (FPL). Households were randomly assigned to one of two treatment arms or a control group in this randomized controlled trial (RCT). The specific package of benefits that went to participating households depended on the treatment arm assignment for the household.

- Households assigned to treatment arm 1 (T1) were offered an additional \$40 in SNAP benefits for each child in the household under age 5. For example, a household with one parent, two young children, and \$600 net income per month would receive an additional \$80 per month, so their monthly SNAP benefit level would increase from approximately \$324 to \$404 (Center on Budget and Policy Priorities 2017).
- Households assigned to the second treatment arm (T2) were offered the same monthly SNAP benefit plus case management designed to help them access nutrition and other assistance programs, and nutrition education classes.
- Households assigned to the control group did not receive any of the project benefits.

Following an initial planning year, the project lasted for 12 months. Households in T1 or T2 were eligible for these benefits for each month they remained on SNAP from June 3, 2016 through May 31, 2017. The monthly \$40 benefit per young child, which this report refers to as extra SNAP benefits, were loaded onto participants' existing electronic benefits transfer (EBT) cards. From the perspective of participants, these benefits functioned in the same way as regular SNAP benefits. However, the extra benefits came from a separate funding stream and, for accounting purposes, the State monitored them separately from regular SNAP benefits.

The Nevada HHFK demonstration project was designed to address several goals:

- **Reduce food insecurity among children:** This was the primary goal of the project, in keeping with the 2010 Child Nutrition reauthorization. The State sought to reduce food insecurity among children by giving eligible households (1) extra benefits to spend on food and (2) case management and nutrition education. Evidence suggests that most SNAP families with children scramble to feed their families at the end of the month (Edin et al.

2013), and that extra SNAP benefits can reduce food insecurity among children (Collins et al. 2016). The State’s vision for case management was to help households enroll in nutrition and other assistance programs for which they were eligible to improve their economic stability and strengthen their budgets so there would be more money to purchase food. Improving food security was also a priority of the Governor’s office, which requested that the WIC and SNAP agencies apply for the grant.

- **Increase enrollment in WIC and other assistance programs:** Increasing WIC enrollment was a State priority before the HHFK project, and the State designed HHFK, in part, to further this goal. In 2014, the year the State applied for the HHFK grant, 54% of WIC-eligible individuals in Nevada were participating in the WIC program, about equivalent to the national rate of 55%. Participation was highest for infants (74%) and lowest among four year-olds (34%) (Johnson et al. 2017). Nevada’s WIC agency, the recipient of the HHFK grant, led the development of the vision for the grant and elected to target young children to coincide with its service population—that is, children under age 5 who would be eligible for WIC when the demonstration began—rather than older children. Additionally, the case management offered to the T2 group was designed specifically to help eligible households enroll in WIC. Nevada staff also sought to increase enrollment in other Federal nutrition assistance programs (such as school meals) and non-food assistance programs (such as home energy assistance).
- **Improve nutrition and healthy shopping habits:** The State wished to improve additional nutrition outcomes by offering nutrition education classes to households in the T2 group. Having extra SNAP benefits also could have led households to purchase and consume more healthy foods, which might have been more costly or been perceived as more costly.

### C. Evaluation design

The centerpiece of the evaluation design for estimating the HHFK project’s impacts was an RCT. This design used random assignment to ensure that the project’s treatment groups (T1 and T2) and control group were statistically equivalent at the beginning of the project implementation, with the only difference being that households in the treatment groups were eligible to receive the benefits described above and those in the control group were not. RCTs are considered the gold standard of evaluation design, producing rigorous evidence on project impacts (Rossi et al. 2004). Based on this design, the study evaluated the HHFK project’s impacts, implementation, and costs. Appendix A presents a detailed description of the study design and methods.

Conducting the study’s RCT evaluation design involved three steps: (1) identifying eligible households—those in the target population<sup>10</sup>; (2) randomly assigning households to the two treatment groups and one control group, and notifying them of their eligibility for benefits; and (3) measuring outcomes at the end of the implementation period and comparing those among the treatment and control groups. Eligible households included those with children under age 5, with incomes below 75% of the FPL, and living in 12 neighboring zip codes in Clark County (Las

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<sup>10</sup> Approximately 11,300 households were in the target population.

Vegas).<sup>11</sup> In addition, before random assignment, a baseline household survey was conducted, and the evaluation sample consisted of households that completed the survey and were subsequently randomly assigned.<sup>12</sup>

Random assignment into the study's two treatment arms and control group was conducted at the household level, with each household having an approximately equal chance of being assigned to any of the three groups. Because the groups had similar characteristics before the project's implementation, including similar levels of food insecurity, any differences in outcomes at the end of the implementation period could be attributed to the impact of the HHFK project. The evaluation sample included 3,088 households, with 981 assigned to T1, 990 assigned to T2, and 1,117 assigned to the control group (see Appendix Exhibit A.9).<sup>13</sup> The characteristics of the three groups were similar at baseline, with two differences among the numerous socioeconomic and demographic characteristics examined (treatment households spent an average of \$13 per person out-of-pocket at restaurants, compared to \$15 among the control group; and 60% of T1 households had an employed adult, compared to 56% of T2 households; see Appendix Exhibits A.1-A.4).

The **impact study** measured impacts of receiving the extra SNAP benefits and—for some households—being eligible for case management and nutrition education services. The key study outcome was food insecurity among children, as measured by the USDA's 30-day survey module. Key secondary outcomes were (1) other measures of food insecurity, (2) household participation in SNAP and other nutrition assistance programs, (3) household food expenditures, and (4) food shopping and nutrition behaviors. Most outcomes were collected through a follow-up survey administered at or near the end of the 12-month implementation period. Additional outcomes were measured with administrative data from the State's SNAP eligibility system and the SNAP EBT system. To estimate impacts, outcomes among households assigned to the treatment and control groups were compared, controlling for baseline characteristics of households using a regression framework. Although a simple comparison of mean outcomes between the treatment and control groups would result in an unbiased estimate of project impacts given the random assignment design, controlling for baseline characteristics improves the statistical power of these estimates.<sup>14</sup> Data on baseline characteristics were obtained from a baseline survey, administered a few months before the beginning of the implementation period.

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<sup>11</sup> The targeted zip codes were 89030, 89101, 89106, 89108, 89110, 89119, 89142, 89156, 89104, 89121, 89122, and 89169. One of the zip codes is in North Las Vegas and the remaining 11 are in Las Vegas.

<sup>12</sup> Sample weights were created to ensure that households responding to the baseline survey were representative of all eligible households. In addition, any differences between respondents and nonrespondents on the baseline survey would have affected the treatment and control groups in the same way because random assignment was conducted after completion of the baseline survey. Although nonrespondents to the baseline survey were not included in the evaluation sample, a separate random assignment was conducted for those households, so they had the same chance of receiving project benefits as respondents. Weights for the follow-up survey were also constructed to ensure that the sample completing the follow-up survey would be representative of the target population.

<sup>13</sup> In the larger group of all households eligible for project benefits, 1,919 were randomly assigned to T1, 1,919 were randomly assigned to T2, and the remaining 7,467 households were randomly assigned to the control group.

<sup>14</sup> In addition, these baseline characteristics account for any differences between the treatment and control groups that arise by chance, despite random assignment, including the observed difference in the proportion of employed adults.

Appendix A presents details of the study approach to sampling, random assignment, and analysis methods; Appendix B includes a description of the data collection methods and data sources used to evaluate the project.

One key aspect of the evaluation design is that there were two treatment groups in Nevada that received different packages of project benefits. All households in either treatment group (T1 and T2) received the most important benefit of the HHFK project—the extra monthly SNAP benefit of \$40 per young child. The difference was that households in T2 had the possibility of receiving case management and nutrition education services in addition to the extra SNAP benefit. As described in Chapter II, however, the case management and nutrition education services reached only a relatively small proportion of T2 households and so were unlikely to have had a major effect on study outcomes. Thus, in presenting estimates of project impacts in Chapter III, T1 and T2 were combined to form a single treatment group, and outcomes were compared among households in this group with those in the control group. The benefit of this approach was that it simplified the analysis and presentation of results, and increased the statistical power of the design. It is worth keeping in mind, however, that the estimated impacts presented in Chapter III reflect the effects of the extra SNAP benefits, but—for a subset of households—may also have been influenced by access to case management and nutrition education services.

The **implementation study** described the design and implementation of the HHFK project benefits to document project activities, challenges, and successes, and help to interpret the project impacts. As part of the implementation study, in-person interviews were conducted with State and local agency directors/managers to assess (1) project outreach and recruitment strategies during the planning and early implementation periods, and (2) service provision during the implementation period. Focus groups with project participants were also conducted. These data sources were complemented with administrative and Management Information System (MIS) data to assess the fidelity of project implementation, service take-up rates, and the nature and intensity of services that project participants received. Finally, for the **cost study**, information on the grantee's project costs was collected and analyzed to understand the resources needed to implement the HHFK project. Grantees completed standardized cost accounting worksheets quarterly. For both the implementation and cost studies, descriptive tabulations were used to address the key questions.

The study activities are shown in Exhibit I.2, which shows Nevada's 12-month implementation period and key evaluation activities. Data collection covered this full period, with the survey periods and site visits coinciding with the beginning and end of the project.

**Exhibit I.2. Timeline for Nevada's HHFK 12-month project**

Calendar year	2015												2016												2017					
Month	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	
	Planning period																		Implementation period (June 2016–May 2017)											
<b>Project activities</b>																														
Grant award	■																													
Extra \$40 SNAP benefits per eligible child available																														
<b>Evaluation activities</b>																														
Survey data collection																														
Site visit																														
SNAP administrative data <sup>a, b</sup>																														
MIS data <sup>a</sup>																														
Cost data <sup>a</sup>																														

Source: Evaluation of Demonstration Projects to End Childhood Hunger.

<sup>a</sup>Months included in data source.

<sup>b</sup>SNAP administrative data include SNAP caseload and SNAP EBT data. EBT data were available for the months during the period July 2016 through May 2017, thus excluding the first month of implementation.

BL = baseline survey; EBT = electronic benefits transfer; FU = follow-up survey; MIS = Management Information System; SNAP = Supplemental Nutrition Assistance Program.

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## II. THE NEVADA HHFK PROJECT IMPLEMENTATION AND COSTS

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This chapter describes the Nevada HHFK project’s design, implementation, and costs to document the project activities and highlight factors that may have depressed or facilitated its impacts. The chapter includes information on the project’s eligibility criteria, the benefits included in each component, household members’ level of awareness of and participation in each component, and project costs. Staff and households’ perceptions of the HHFK project’s successes, challenges, and lessons are particularly instructive for understanding its impacts on participating households and for other States or funders seeking to learn from Nevada’s experience.

As this chapter describes, the case management and nutrition education services that were exclusively offered to T2 households were a small part of their overall project benefits. The extra SNAP benefits offered to both T1 and T2 households were the main mechanism for improving food security. However, to fulfill the first two research objectives—describing the project and the implementation process—this chapter details the case management and nutrition education services components offered to T2 households. Understanding these components and their successes and challenges also informs the impact analysis in Chapter III and may be useful to other agencies considering something similar.

Data sources are detailed in Appendix B. In brief, the main data sources to support the implementation analyses were (1) two site visits, including interviews with project staff and observations of project activities;<sup>15</sup> (2) two focus groups with project participants; (3) quantitative data on service delivery and take-up of each project component; and (4) reviews of grantee documents, including the proposal, quarterly progress reports to FNS, and operational materials (such as letters to households). Cost data derive from detailed, standardized cost accounting worksheets that grantees completed quarterly.

### A. The demonstration project

#### 1. Project overview

##### a. Overview of the demonstration area

In 2014, the year the State applied for the HHFK grant, Nevada had the highest unemployment rate in the nation (U.S. DOL, BLS 2017b). State planners selected Las Vegas for the demonstration area because it had high levels of food insecurity and unemployment relative to the rest of the State. According to the State’s grant application, approximately 22% of children in the targeted zip codes lived in households with income under 75% of the FPL. The median unemployment rate was 17%, substantially higher than the 2014 unemployment rates for the county (8%), State (8%), and nation (6%) (U.S. DOL, BLS 2017a, 2017b). Project planners sought contiguous zip codes that were similar in demographic characteristics and median incomes, which they could find in densely populated Las Vegas.

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<sup>15</sup> The site visits are summarized in detail in two site visit reports (Cabali and Melia 2017; Jacobson and Kleinman 2016).

By the time the project began, the unemployment rate had improved, consistent with national economic trends. The unemployment rate in the Las Vegas metropolitan statistical area fell approximately one percentage point each year between June 2014 and June 2017 (from 8% to 5%) (Federal Reserve Bank of St. Louis 2018). A lower unemployment rate would help to improve families' food security when households experiencing food insecurity gain employment and income.

Yet there were additional local circumstances during the project period that potentially could have contributed to food insecurity in the area. Nevada had low participation rates in nutrition assistance programs. In 2014, Nevada's SNAP participation rate ranked third lowest nationwide, with only 65% of the eligible population participating, compared with 83% nationally (Cunningham 2017). WIC participation was even lower the same year, with 54% of eligible individuals in the State participating (Johnson et al. 2017). Project staff attributed low utilization of assistance programs to lack of awareness about the programs or the application processes, fears of government-run programs (particularly among eligible immigrant residents), pride in wanting to be self-sufficient, or embarrassment at the circumstances that caused a household to require assistance.

## b. Nature of benefits and delivery process

**Extra \$40 SNAP benefit (T1 and T2 households).** Eligible households were offered the extra SNAP benefits each month for 12 months, beginning June 2016 and ending May 2017. Households in the demonstration zip codes that met the project eligibility criteria as of September 2015 (just before the baseline survey)—SNAP recipients, children under age 5 in the household, and household income below 75% of the FPL—were identified as potentially eligible for the project. Those still receiving SNAP as of March 31, 2016, two months before project implementation began, were randomly assigned to a treatment or control group. A total of 1,919 households with 2,503 eligible children were randomly assigned to the T1 group; 1,919 households with 2,496 eligible children were assigned to the T2 group. The control group included 7,467 randomly assigned households with an estimated 9,300 children. A subset of households in each group were selected for the evaluation sample, which is the basis of the impact analysis in Chapter III.

### Nevada HHFK benefits

Households eligible for the demonstration were randomly assigned into a control group that received the standard SNAP benefit or one of two treatment groups:

- **Treatment 1 (T1):** received \$40 per month in extra SNAP benefits per child under age 5.
- **Treatment 2 (T2):** received the same \$40 per month per child extra SNAP benefit *plus* were offered (a) case management consisting of a phone call from a case manager to assess the need for nutrition or other assistance programs and application assistance, and (b) up to three nutrition education classes.

Households in both treatment groups received the extra \$40 per child SNAP benefit for every month during the 12-month demonstration that they were also receiving SNAP in Nevada. Thus, a household that moved out of the State or cycled off of SNAP for a few months would not receive the extra SNAP benefits during those months. If the household regained SNAP eligibility in Nevada, it would regain HHFK eligibility. Households remained eligible for HHFK even if

(1) household income rose above 75% of the FPL or (2) the qualifying child(ren) turned 5 years old. Benefit levels did not increase if a household gained a child under age 5. Hence, a T1 or T2 household with two eligible children at the start of the implementation period received an extra \$80 in SNAP per month for every month it also received regular SNAP benefits.

Participants used the HHFK SNAP benefit the same way they would use regular SNAP benefits for food purchases. That is, they could purchase the same foods at the same places with the same EBT card. The extra benefit and SNAP balance appeared as a single combined balance on the card. If they knew their regular SNAP benefit levels, they could figure out how much extra they were getting through the project. Otherwise, households could not distinguish between the two sets of benefits.

For administrative purposes, when households used their EBT card to make SNAP purchases, they first spent down their regular SNAP benefits for the month. Only after regular benefits were gone did they begin spending down their extra SNAP benefits. Thus, the households that used their HHFK supplement necessarily used all of their regular benefits and were likely to use their HHFK supplement to help them meet food needs toward the end of the month once their regular benefits ran out. Households would likely have been unaware of which set of benefits they were spending at a given time, however. Unspent funds from the extra SNAP benefit rolled over to subsequent months (as is standard procedure for unspent SNAP funds). Households were given a full year after their last HHFK benefit was issued to use up or forfeit their remaining benefits, which is also standard for SNAP benefits.

During the project's planning phase, SNAP and WIC project staff explored several methods for disbursing the extra SNAP benefits. They ultimately decided to load the extra benefits onto households' existing EBT cards. Difficulty in finalizing these plans and a change in the EBT vendor were the primary reasons for the long planning period (about 16 months). (The State's new EBT system went live just weeks before HHFK benefits rolled out). Project planners settled on issuing the extra SNAP benefits on households' existing EBT cards rather than issuing new cards only after the State contracted with a new EBT vendor that could accommodate adding the \$40 benefit as a separate account from participants' regular SNAP benefits. The prior EBT vendor lacked such a mechanism. The change in EBT vendor (which was unrelated to the HHFK project) enabled the State to issue the benefit on households' existing cards. The advantage of this approach was its simplicity for staff and households. Staff would not need to mail out new cards, and household participation would not hinge on a household receiving and opening a letter with a new card or keeping track of two EBT cards. As discussed later in this chapter, given the likelihood that many households would not have received a letter with a new EBT card (either because they did not notice it in the mail or changed addresses) or would have mistrusted the letter, issuing the extra benefits on households' existing EBT cards was a strength of the project and likely important for household participation.

Project staff also had to decide between modifying the existing SNAP eligibility system or building a new database to record information about the extra SNAP benefits. They chose to build a new database because it would have been prohibitively expensive and infeasible to change the SNAP eligibility system while the State was undergoing a simultaneous (yet unrelated) initiative to overhaul the system. Every month, the new database pulled information from the SNAP eligibility system on who was eligible and combined it with information on how

much extra SNAP benefits a household was eligible to receive. Staff then sent the list of eligible households and extra SNAP benefit amounts to the EBT vendor. At that point, the EBT vendor loaded the extra benefits onto households' EBT cards. These benefits would become available for households to use on the first of the month; regular SNAP benefits were also available on the first of the month. Tracking the benefits in an intermediary database, rather than the SNAP eligibility system, had two implications. First, SNAP eligibility workers (who only accessed the main eligibility system) had no knowledge of which households received the HHFK benefit or their extra benefit levels. This fact simplified operations because it eliminated the need to involve eligibility workers in the project beyond simply informing them of it. Second, because the information about households' eligibility was maintained in a separate database, the extra SNAP benefit was not prorated. Thus, if households were on SNAP at the point that HHFK eligibility was determined, they received the full extra benefit for the month, regardless of whether they were on SNAP for the full month. Conversely, if households were not on SNAP at this point, they received no extra SNAP benefits, even if they entered the program later in the same month. SNAP, in contrast, is prorated, so households that begin or recertify for SNAP mid-month receive a portion of their SNAP benefit.

**Case management (T2 only).** The purpose of the case management services was to increase household access to food and improve economic security by helping households enroll in programs for which they were eligible and interested. Project planners were focused on using the case management benefit to raise WIC enrollment, which they perceived as having a low participation rate in the State. Case management encompassed benefits counseling, application assistance, and referrals to services. It began in July 2016 and was offered through the end of the project. All households assigned to T2 were eligible to receive this service. Staff administering case management and nutrition education updated their records on household HHFK eligibility only twice (in December 2016 and April 2017), meaning it was possible for a household to receive case management (or attend a nutrition class) in a month they were no longer eligible for a SNAP benefit or HHFK. On the other hand, households that lost eligibility for HHFK and had not yet been contacted by a case manager as of December 2016 (six months into implementation) were likely never contacted by a case manager.

Demonstration staff envisioned the case management services as consisting of an initial telephone screening call to assess household need and follow-up in-person meetings to provide more thorough application or other assistance to interested households. They hoped to support households from application through to enrollment in new assistance programs. Case management staff were housed at two community partners in Las Vegas: East Valley Family Services (EVFS) and Lutheran Social Services of Nevada (LSSN) (organizational structures and staffing are described in Section II.2). Their underlying objective was to integrate the T2 households into their agency clientele, thereby enabling households to receive assistance past the project period.

The initial telephone calls were an important part of the case management services. These calls were the primary method for outreach and soliciting client involvement. Because the services were optional and targeted to a large group of about 1,900 households, not all of whom necessarily needed or wanted the services, staff had to sell clients on using them and relied on the initial call to do so. The initial call also distinguished HHFK case management services from those EVFS and LSSN normally offered. That is, these partner organizations provided case

management services but did not reach out to potential clients using cold calls. Based on the number of case management staff (discussed in the next section), which was low for the number of eligible households, project staff allotted the full 12 months to finish making the initial calls, rather than making them at the beginning of the implementation period and then focusing on following up with households. Actually reaching households by telephone proved to be challenging, as discussed in Sections B (participation) and C (challenges and lessons).

During the initial telephone calls, which lasted about 15 minutes, case managers notified clients of the case management and nutrition education benefits and, if households were interested, discussed their current participation in a list of assistance programs. Case managers assessed households' eligibility (such as having age-eligible children) and level of interest in new programs. They asked households whether they were currently on WIC, and if not, asked if they had age-eligible children and whether they would be interested in applying. They also discussed other nutrition programs, such as national school lunch and breakfast programs, and other forms of assistance, such as Temporary Assistance for Needy Families, Medicaid, and housing assistance. Case managers then aimed to schedule an appointment for a face-to-face meeting at the agency; alternatively, they mailed or emailed follow-up information or scheduled a follow-up call. Case managers followed a call script and received three trainings and ongoing support from the case management director.

**Nutrition education (T2 only).** The nutrition education services offered to T2 households were intended to promote the nutritional quality of children's food through classes on healthy food shopping and preparation. Between September 2016 and May 2017, staff held a total of 29 nutrition classes on three different topics, planned and led by the project team's nutrition coordinator, with planning assistance from key WIC staff. Households were invited to attend all three classes. Classes started four months into implementation due to a delay in staff hiring (described in the next section). The following were the class topics and offerings (Appendix Exhibit C.1):

1. **Smart Grocery Shopping** helped clients learn how to use budgets to write grocery shopping lists and plan meals to stretch their food budgets. The goal was to help families realize there are "nutritious meals that are still budget friendly."
2. **Healthy Cooking** taught families how to cook a tasty steamed vegetable dish, identify healthy cooking practices and unhealthy ingredients, and foster food safety. It was interactive, with a live cooking demonstration and tasting.
3. **Healthy Kids and Picky Eaters** taught parents or caregivers how to include children in meal preparation, build awareness of healthy snacks for kids, and learn techniques for compromising with a picky eater. Children were invited to attend.

Households learned of the nutrition classes through (1) initial case management phone calls; (2) cold calls the nutrition educator made to households that lived near the upcoming class venue; and (3) flyers and schedules mailed and emailed to households for which they had valid addresses. Staff also made reminder calls to interested households.

Classes were conducted frequently at first (about five classes per month) and less frequently (about one class per month) starting in January 2017, when the nutrition education coordinator

increased her case management duties. The classes were held in English and Spanish. In total, 12 of the classes were held in Spanish and 3 were offered to a bilingual audience. Most of the classes were held at the EVFS office—home to the nutrition educator and case management director. Classes were also held at LSSN, two local SNAP offices, and a church. Volunteers provided child care during later classes to help raise attendance.

The nutrition classes were secondary to the case management services, with fewer resources dedicated to nutrition education. Only one staff person was dedicated to nutrition education and, in the second half of the project year, she reduced her time conducting outreach for nutrition education (and thus held fewer classes) to assist the case management team’s progress in reaching households.

## **2. Grantee organizational structures, partners, and staffing**

### **a. Lead and partner agencies**

**Nevada’s WIC agency** was the formal lead organization and had responsibility for financial and quarterly reporting and grants management. A staff member from WIC chaired the grant writing process; another staff member was regularly involved in developing and overseeing the case management and nutrition education components. These staff also hired the case management director and nutrition education coordinator. Unlike the State employees based in Carson City, the new project hires were based in Las Vegas, where they delivered the services.

The case management director was hired two months before the demonstration started in June 2016; the nutrition coordinator was hired a few weeks beforehand. Project leaders intentionally hired them close to the start of the demonstration because they could not determine in advance when the extra SNAP benefits would first be disbursed (the start date was pushed back numerous times) and did not budget for the new positions to start well in advance of their rollout. Once the new hires were identified, the hiring process also took longer than expected. Once hired, they had to quickly plan the logistics that would support the original vision. For example, the nutrition coordinator first had to design and advertise the nutrition classes, develop materials, and identify and coordinate with volunteers to help with mailings and classes. Challenges and lessons around the hiring delays are described in Section II.C.

**Nevada’s SNAP agency** acted as the lead agency for major planning decisions and day-to-day-operations. SNAP was responsible for coordination with WIC, the EBT vendor, and FNS. Staff in this unit finalized decisions regarding the \$40 per child SNAP benefit, including plans for defining the eligible sample, determining how to disburse benefits, amending the contract with the EBT vendor, notifying eligible households, and building requisite data systems. The unit’s coordinator for SNAP-education programming served as the project manager and main liaison (Exhibit II.1). The bulk of the demonstration duties fell to SNAP, rather than the WIC agency, because the extra SNAP benefits were the primary component of the demonstration.

**EVFS and LSSN** were the key partners in the demonstration project. The agencies worked on HHFK under an informal commitment to the State, which they made during the grant application process. Both partners donated staff time to case management and hosted most of the nutrition classes. EVFS also housed the case management director and nutrition education

coordinator, and provided the web services to develop and operate a project-specific MIS database, which the staff used to track case management and nutrition services delivery.

Case management and nutrition education were delivered with few staff, particularly in relation to the approximately 1,900 households in the T2 group. The low staffing levels reflect that these components were HHFK's secondary priority; the spending priority was on giving households more SNAP dollars for food. Case management staffing consisted of up to 80% of one full-time equivalent case manager, plus call support from the full-time case management director and nutrition education coordinator. For the first half of the project year, four case managers (two from each organization) dedicated up to one day a week to the project. The staff available for this work was reduced to three case managers after an unexpected vacancy occurred at LSSN. The staffing levels were based on the amount of staff time that EVFS and LSSN could spare for the project, particularly given they were donating the time. The full-time case management director and nutrition education coordinator also pitched in to call eligible households throughout the week. Nutrition education was delivered with only one full-time staff plus occasional support from volunteers to help with mailings and reminder calls.

In addition to partners at EVFS and LSSN, the Nevada Department of Agriculture Food and Nutrition Service contributed to the design of the demonstration during the grant application phase and contributed a portion of the State funding match. The Governor's office directed the WIC and SNAP agencies to apply for the project grant but was not involved in planning or implementing the project.

### **Exhibit II.1. HHFK key project staff**

HHFK was staffed with several key positions, listed below. These staff were responsible for the day-to-day project operations, although others also made important contributions.

- *HHFK project manager from SNAP agency* coordinated the decision making, operations, and monitoring of the SNAP benefit; arranged for partnerships with EVFS and LSSN; worked closely with all other project leaders; and monitored outreach for case management.
- *SNAP information systems staff* generated the monthly lists of households eligible for the extra \$40 per child SNAP benefit.
- *WIC liaison* coordinated with the project manager and supervised the case management director and nutrition education coordinator; contributed to the design of the case management and nutrition education materials, and their operations; and managed grant reporting.
- *Case management director*, a full-time, temporary contract hire, created and monitored case management, trained and supervised volunteer case managers, and made case management phone calls.
- *Nutrition education coordinator*, a full-time, temporary contract hire developed nutrition education classes and resources, led the classes, coordinated with volunteers, and made case management phone calls.
- *Case managers from EVFS and LSSN* volunteer staff communicated directly with T2 households to provide the case management services.

## **b. Communication and collaboration between agencies and staff**

Core project staff worked closely together on HHFK. By the start of the implementation period, processes for distributing the SNAP benefit were well established and required only routine, monthly communications to check the SNAP status of T1 and T2 households (as well as infrequent ad hoc checks if questions arose). Project staff communicated often during the implementation phase—first around the design of the case management and nutrition education components, and later on about case management progress. Many of the project team members had a history of working together, which aided their planning and execution. For example, the case management director, who was the founder and former executive director of EVFS, had worked with the project manager over many years.

## **B. Client engagement and participation**

### **1. Communication with participants**

**Recruitment and consent.** Households were selected for HHFK by virtue of receiving SNAP and meeting the other eligibility criteria. Apart from identifying eligible SNAP households, State planners did not undertake a separate effort to recruit households. They used a passive consent process to allow households selected for the baseline survey to opt out of the evaluation (0.2% did so), but there was no consent process connected to project enrollment. Thus, households could receive project benefits even if they opted out of the evaluation.

From the perspective of treatment households, enrollment into HHFK was automatic. They received the extra SNAP benefits without having to take any action. Disbursing the benefits through households' existing EBT cards simplified the enrollment process by removing potential obstacles (such as a recipient overlooking or failing to receive a new card in the mail), helping to make delivery of the benefits successful. In contrast, receipt of case management and nutrition education services required certain actions. Staff needed the households' current telephone numbers to call them for case management; households had to willingly answer the phone or call back. Households also had to receive information about nutrition classes and show up for them. Difficulty in reaching households by phone proved to be a challenge for delivering these services, as discussed in Section C.2.

**Communication with participants.** Households learned of the demonstration through two mailed letters. SNAP staff mailed the first letter in September 2015 to inform them about the project, the possibility of being randomly selected for a treatment or control group, future communication about the upcoming survey, and a project-devoted telephone line or email to which they could direct questions or update their contact information. Letters were sent in English or Spanish, based on the language preferences indicated in households' SNAP records. The project team received about 150 calls to the project's dedicated telephone line (out of 11,305 households sent letters). Project staff also alerted all SNAP staff to the demonstration in case households raised questions with an eligibility worker.

All T1 and T2 and control group households were mailed a second notification letter just before the demonstration began in June 2016, alerting them to their group assignments and noting the HHFK benefits they would receive. The letters were written generically for the T1 and T2 groups, respectively, and did not include how much in extra SNAP dollars a household would individually receive. Furthermore, the letters described the benefits as including an extra \$40 per

month for their child but did not stipulate the households would receive \$40 *per eligible child* or the child-related eligibility criteria. Treatment households could only learn of their extra SNAP benefit levels by calculating how much extra they were receiving after implementation began.

Once the benefits rolled out, communication was limited, especially for T1 households. HHFK staff did not take any steps to engage or communicate with T1 households beyond the initial notification letters. This approach was intentional, to help keep administrative costs low. T2 households that spoke with a case manager or attended a nutrition class had better access to information. In their initial calls with T2 households, case managers discussed the HHFK benefits, including the extra SNAP dollars. However, relatively few T2 households actually spoke with a case manager or attended a nutrition class (see Section II.2).

It was possible that households, especially T1 households, did not know about the project even when they were receiving and spending the extra SNAP benefits. As one staff member said, for some households, *“It’s like they don’t even know they got it.”* If they did not read or understand their notification letter and did not pay attention to their SNAP balance, they may not have been aware they were receiving and spending these extra benefits. Other T1 or T2 households may have noticed that their SNAP benefit suddenly increased but not known why it happened. Focus group discussions with households (representing 21 households from the T1 and T2 groups) revealed that this lack of awareness may have been common. Many of the discussants had never opened the letter. Those who knew about the project had more commonly learned about it through the outreach for the evaluation’s data collection activities. Furthermore, most focus group discussants lacked basic information about the project. They were unsure how and why they qualified for it, how much extra SNAP benefits they were receiving, whether the benefit was calculated per household or per child, and how long the benefit would last. Some were also concerned that the extra benefit would lower their regular SNAP benefit levels or was a mistake that would be revoked if they asked questions. Case managers interviewed for the evaluation emphasized the importance of their telephone calls in notifying T2 households about the HHFK benefit. These calls were also staff’s opportunity to reduce suspicions about the project. Yet despite these questions and concerns, focus group discussants gave no indication that they had avoided spending their HHFK benefits. The next section, which analyzes SNAP administrative data on all treatment households, affirms that households were not deterred from spending the benefits.

## **2. Project participation**

### **a. Extra SNAP benefit receipt and spending**

This section describes the share of households that received the monthly SNAP benefit, how much households typically received in extra SNAP benefits, and how much they typically spent. Data are from the State’s EBT data systems and represent months 2 through 12 of the demonstration period; the first month of data could not be obtained because of a change in EBT vendors that occurred at the beginning of the demonstration. This analysis uses data for all T1 and T2 households, and is intended to describe participation in the main project benefit. Chapter

III, in contrast, limits the analysis to the evaluation sample and compares treatment and control households to estimate the project's impact on SNAP receipt and spending.<sup>16</sup>

Exhibit II.2 provides key findings on receipt and spending of the extra \$40 SNAP benefit per young child.

### **Exhibit II.2. Extent to which treatment households received and spent the extra SNAP benefit (T1 and T2 groups)**

Outcome	Treatment (SE)
<b>Share of households that received extra SNAP benefits (among all households)</b>	
Households received benefit for at least 1 month (%)	91.5
Households received benefits in a given month (%)	76.8
Average number of months households received the benefit (out of 11 months)	8.4 (0.1)
Monthly benefit level that households were eligible to receive (% of households)	
Never received benefits (\$0)	8.5
\$40	67.1
\$80	21.6
\$120	2.5
\$160	0.2
<b>Amount of extra SNAP benefits households received</b>	
Average monthly benefit received (\$)	
In all months (all households)	40.24 (0.40)
In all months (among households that received any benefit)	43.97 (0.38)
In months household received a benefit	51.94 (0.36)
<b>Amount of extra SNAP benefits households spent</b>	
Average monthly benefit spent (\$)	
In all months (all households)	39.95 (0.40)
In all months (among households that received any benefit)	43.64 (0.38)
In months household received a benefit	51.51 (0.36)
Households with remaining SNAP balances (%) (among all households)	
\$0 received (households never received any benefits)	8.5
\$0 remaining	42.2
\$0.01 to \$2.00 remaining	28.7
\$2.01 to \$10.00 remaining	12.4
\$10.01 to \$50.00 remaining	7.5
\$50.01 or more remaining	0.7
Average remaining balance among households with any amount remaining (\$)	6.60 (0.30)
Sample size	3,826

Source: Evaluation of Demonstration Projects to End Childhood Hunger, Nevada SNAP EBT database, 2016–2017. Tabulations were prepared by Mathematica Policy Research.

Notes: This analysis combined households in the T1 and T2 groups. Diagnostic testing indicated there were no differences in SNAP benefit receipt and spending between the two groups. Data represent months 2 through 12 of the demonstration period because the first month of data could not be obtained.

EBT = electronic benefits transfer; HHFK = Healthy, Hunger Free Kids; SNAP = Supplemental Nutrition Assistance Program; SE = standard error; T1 = treatment group 1; T2 = treatment group 2.

<sup>16</sup> The implementation analysis used the full sample (3,838 treatment households) rather than the evaluation sample (1,987 treatment households) because it allowed for a more complete picture of Nevada's implementation process, and data on implementation activities and outcomes were available for the full sample. By contrast, key outcomes for the impact analysis were available only for the evaluation sample. However, sample weights used in the impact analysis made the evaluation sample representative of the full sample. Thus, results from the analyses of SNAP benefit receipt and spending for the full implementation sample (reported here) and the evaluation sample are comparable.

- **Nearly all households (92%) received the extra \$40 per child benefit at least once, and typically for 8 months (out of 11 months).** In an average month, approximately 77% of households received the benefit. Most of the remaining households (15%) began the implementation period on SNAP but left the program or moved out of State at some point before the project ended, whereas a few others may have remained on SNAP but had the HHFK-eligible child move out. Another 8% of treatment households never received the extra SNAP benefits. These households were on SNAP at one time during the baseline period but likely left the program or moved out of State before July 2016 (the first month for which data were available on the receipt of extra benefits).<sup>17</sup>
- **Receipt of the extra \$40 benefit declined slightly and steadily over time.** By design, the HHFK benefit was tied to SNAP receipt; over time, normal SNAP turnover shrank the eligible HHFK population. In July 2016, the first month for which data were available, 82% of households received the benefit. As stated above, 8% of the households were never issued a benefit or received it only in the first project month, which means that many of the 82% of households that did not receive a benefit in July did receive a benefit in subsequent months. Overall, however, there was a net loss of HHFK participation. Participation declined 10 percentage points (to 72%) by the last month of the project. On average, benefit receipt declined by 1 percentage point per month. This decline in HHFK participation was almost fully due to loss of SNAP eligibility. (Appendix Exhibit C.2 shows the monthly participation rates.)
- **Normal SNAP turnover contributed to relatively low average monthly benefits.** Even though many households (25%) were eligible to receive \$80 or more per month, when considering all households and all months, households actually received an average of an extra \$40 per month in SNAP. This average monthly benefit level is important for estimating the impact of the project on food insecurity among all children (see Chapter III). A second way to think about the extra SNAP benefit receipt is to consider the benefit levels among just those households eligible to receive them. This approach helps to understand how a more stable group of SNAP recipients might have benefited from the extra SNAP benefits. In the months households received regular SNAP, they were given an extra \$52, on average, to spend on food. However, because households cycled on and off of SNAP during the project, the key measure of SNAP benefit receipt used in determining the project impacts was \$12 per month lower.
- **Households spent all or nearly all of the extra SNAP benefits they received.** Households received \$40.24 extra in SNAP and redeemed or spent \$39.95, on average, leaving just \$0.29 left over (among all households). Across all T1 and T2 households, the vast majority (79%) had \$2 or less remaining at the end of the implementation period; only 8% had more than \$10 remaining. This suggests that households needed these extra SNAP benefits. Even if, as discussed above, households did not fully understand the reasons for or parameters of the extra SNAP benefits, their questions or misgivings do not appear to have prevented them from using the benefits.

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<sup>17</sup> HHFK eligibility determinations were made by the evaluation team based on SNAP participation as of March 31, 2016. Thus, most of the households that never received extra SNAP benefits left Nevada SNAP between March 31, 2016 and July 2016.

Focus group discussants appreciated the extra SNAP benefits and that they did not have to do anything special to receive them or carry an additional EBT card. They viewed the extra SNAP benefit as important for stretching their SNAP dollars to the end of the month. (*“It is a great help that benefits us all and helps me get to the end of the month—before it was like three weeks.”*) Some also reported it helped them to purchase healthier foods, which they perceived as more expensive. According to a discussant: *“I like to buy [my daughter] things that may be a little more expensive but they’re healthier. So it helps me a lot.”*

Some focus group discussants would have appreciated higher benefits, whereas others felt the extra benefit levels were sufficient. Although appreciative of the extra food dollars, some of the discussants noted that they would have benefited more from even higher benefit levels, especially with older children in the family. In the summer months, especially, some noted that children eat more at home because they are not in school. A few others felt that the additional benefit levels were sufficient and even allowed them to scale back on other sources of food (*“I told my child not to take food from school because with SNAP and extra \$40 I make it fine to the end of the month.” “Leave it for those who need it.”*). A few would have liked to be able to use the benefits to buy nonfood necessities instead, such as diapers, soap, or toilet paper, perhaps indicating those discussants already had a basic level of food security through SNAP and other local food sources.

## **b. Case management outreach and participation**

This section describes the level of outreach the case management team conducted to engage T2 households, the proportion of households receiving any case management, and the proportion assisted to enroll in new programs. Data on case management and nutrition education services were collected throughout the implementation period in the project-designed MIS database. (For a description of the MIS data collection process, see Appendix B.5). Staff recorded every time they attempted to contact a household by phone, mail, or email. That is, the data show the outreach effort but not the number of times staff actually spoke with a household. Abbreviated tables in this chapter highlight main findings. Detailed tables are in Appendix C.

Key findings related to staff’s outreach efforts and household engagement in case management follow (see Exhibit II.3 and Appendix Exhibit C.3).

- **Staff attempted to contact (by phone, email, or mail) nearly all households (91%) at least once.** Most of the remaining households were likely never contacted because they lost HHFK eligibility before the case management team could attempt to do so. Slightly more households that retained HHFK eligibility throughout the demonstration received an outreach attempt (96%). Outreach was mainly conducted by phone. In addition, staff reported sending three mass emails to households for which they had valid email addresses. About 47% of all households that staff attempted to contact received at least one email.
- **A small share of households (25%) spoke with a case manager about assistance programs at least once.** About one-quarter of all households received the initial case management phone call, at minimum. Among the households that retained HHFK eligibility, 36% received this minimum level of case management services. Discussions with participants during a focus group echoed these trends. Overall, they had little awareness

### Exhibit II.3. Extent of outreach provided to households and participation in case management (T2)

Outcome	Number	Percentage
<b>Outreach among all households</b>		
Households staff attempted to contact (n = 1,891)	1,724	91.2
<b>Outreach among households staff attempted to contact</b>		
Households staff attempted to contact, by mode (n = 1,724)		
Phone	1,615	93.7
Email	805	46.7
Mail	156	9.0
In-person	39	2.3
Number of phone call attempts (n = 1,615)		
1	1,333	82.5
2 or 3	274	17.0
4 or more	8	0.5
<b>Participation among all households</b>		
Received case management services <sup>a</sup> (n = 1,891)		
Number of phone call attempts (n = 466)		
1	329	70.6
2 to 3	129	27.7
4 or more	8	1.7
Did not receive case management services <sup>a</sup>		
Number of phone call attempts (n = 1,149)		
1	1,004	87.4
2 to 3	145	12.6
4 or more	0	0.0
<b>Outreach and participation among households eligible throughout the demonstration<sup>b</sup></b>		
Eligible throughout the demonstration (n = 1,891)	744	39.3
Households staff attempted to contact (n = 744)	717	96.4
Received case management services <sup>a</sup> (n = 744)	266	35.8

Source: Evaluation of Demonstration Projects to End Childhood Hunger, Nevada HHFK project case management and nutrition education database, and SNAP EBT database, 2016–2017. Tabulations were prepared by Mathematica Policy Research.

Note: The overall sample size is 1,891 households. Sample sizes vary by category and are shown in the row heading.

<sup>a</sup>Case management service receipt is defined as a household member having spoken with a case manager about nutrition or other assistance programs, as indicated in the case management and nutrition education database.

<sup>b</sup>Households were eligible throughout the demonstration if they received \$40 grant benefits per eligible child for months 2 through 12 of the demonstration period. Data from the EBT system could not be obtained for the first month.

EBT = electronic benefits transfer; HHFK = Healthy, Hunger Free Kids; SNAP = Supplemental Nutrition Assistance Program; T2 = treatment group 2.

about the case management offering and expressed little enthusiasm for it. Only 2% of the households that staff attempted to contact met with a case manager in person. Project leadership intended for the initial call to be a gateway into more substantive assistance; in practice, staff indicated that transportation barriers prevented many from visiting the offices, particularly if they lived in outlying zip codes.

- **The outreach effort was relatively low overall, with staff attempting to contact most households just once.** Among the households that staff attempted to contact, 83% were called only once. Although staff initially hoped to call three times before giving up and moving on to other households, in practice, too few staff were available to keep trying households, which were very difficult to reach by phone. The implications of the low outreach effort are unclear. It is possible that more call attempts would have raised engagement to a degree, but it is also likely that even if staff had repeatedly tried to call households, many clients still would have had disconnected phone numbers or not answered or called back. They offered suggestions for altering the design of their approach, discussed in Section II.C, such as targeting a narrower group of households.

The purpose of case management was to help households take advantage of assistance programs, particularly WIC. Appendix Exhibit C.4 shows the extent to which Nevada's HHFK project achieved this goal. Among the 25% of households (n = 473) that spoke with a case manager, key findings are as follows:

- **A very small share of households (3%, or about a dozen) that spoke with a case manager enrolled in WIC after receiving support.** Most of the households (52%) were already receiving WIC or were not eligible or not interested (33%). Although the project intended to reach households that would be age eligible for WIC throughout the implementation period, some children aged out of WIC due to the project's delayed start. In considering all T2 households, less than 1% enrolled in WIC with case management support.
- **A very small share of households gained access to other assistance programs.** Most households already had a child participating in the nutrition programs, such as national school breakfast and lunch programs, or likely did not have a school-age child. The Summer Food Service Program was relatively more popular, with about 50 households starting this program (which does not have an enrollment process). Among the non-nutrition programs, some were well targeted but others were not. There was more interest in programs such as energy assistance (37% interested) and child care subsidies (21% interested), for which most households were eligible. Staff noted that many households were very interested in programs like energy assistance that could save them money.

In considering all T2 households, the proportion supported to enroll in WIC or other new assistance programs was very low, ranging from up to about 2.5% in one of the most popular programs (Summer Food Service Program) to less than 1% in several others. This very low rate of uptake for new assistance programs will have consequences for estimating the impact of case management and nutrition education on childhood food insecurity above and beyond the extra SNAP benefits. The next chapter discusses these implications in greater detail.

Why was the case management service not more successful in reaching households and supporting them in entering new programs? As discussed in Section C below, many households were unresponsive to the case management outreach approach—they were difficult to get on the phone and skeptical of the project—and staffing levels were too low to conduct the extensive outreach necessary to engage such a hard-to-reach group. Another possibility is that many households were hard to reach because they were not interested in case management; either they were already enrolled in the programs or were not interested in joining new ones. The case management data lend some support for this theory. Among the subset of households with which case managers spoke, most were either already enrolled in or not eligible or interested in joining new programs, including WIC. However, it cannot be ruled out that the hardest-to-reach households are those with the greatest need for additional assistance.

Yet despite speaking with only about one-quarter of the eligible households and enrolling just a handful of them in new programs, staff who worked directly with the families considered these conversations a victory. For the case managers, improving the lives of even a few families was a worthy endeavor. As the case managers described it, “*Anytime you educate someone the effort is worthwhile,*” and “*Sometimes [they] just need to know what’s available.*” The staff also held aspirations for families that went beyond the 12-month project. They hoped to form lasting connections with the families with which they spoke so that they might take advantage of the organizations’ services in the future. HHFK would then provide a lasting and indefinite benefit to families in need.

### c. Nutrition education participation

Nutrition education, delivered via in-person classes, was intended to improve the nutrition quality of children’s diet. This section discusses the extent to which the HHFK project drew households to classes.

**A very small share of T2 households (3%, or 58) attended a nutrition class (Appendix Exhibit C.5).** The proportion is double (6%) when based on the T2 households that were HHFK-eligible throughout the demonstration. Most households (67%) that attended a class attended only one of the three topics. The class on smart grocery shopping was offered the most and was the most well attended. Fifty-six of the 58 households that attended a class had at minimum an initial screening phone call with a case manager. This finding reflects that the main outreach strategy for nutrition education involved notifying households about upcoming classes during case management phone calls.

The low participation in nutrition classes belied much interest among the T1 and T2 focus group discussants. All or nearly all of the T2 discussants expressed interest in the nutrition classes, even though only two out of nine had attended an HHFK nutrition class. Those that attended a class liked learning about new foods, new ways to cook, and techniques for picky eaters, such as adding fruits and vegetables to yogurt. They liked the focus on family nutrition. As one discussant summarized, “*Everybody here loves their children and wants them to be healthy.*” Most of the T2 households that had not attended a class were unaware of the invitation. Some discussants noted that a budgeting class could help maximize extra benefits. As one stated,

*“I would really like to go to the classes. That would benefit me more than just 40 dollars.”* That said, the reality of getting to a class could be a barrier, as it was for one discussant who had heard about the class and wanted to attend but could not make it.

If not primarily a lack of interest, why was participation in nutrition education classes so low? As with case management, the limited outreach likely left many households unaware of the offering. Outreach for nutrition classes relied largely on case managers telling households about the classes, and case managers reached only about 25% of the T2 households. Staff highlighted households’ transportation barriers, busy schedules, and child care as other key challenges to uptake. Holding classes in different parts of the city and offering Saturday classes and child care (or involving children in the classes) helped somewhat with turnout.

### **C. Successes and challenges for the design and implementation of HHFK**

HHFK’s major success was getting extra SNAP benefits to project participants. This accomplishment was important, given that the SNAP enhancement was the project’s primary mechanism for reducing food insecurity among children. The project’s major challenge was engaging households in case management and nutrition education. This section expands on factors that contributed to these successes and challenges, and lessons that might have improved service delivery. Some of the successes and challenges relate to HHFK’s design (that is, decisions around what to distribute to whom and how); others relate to implementation (the ability to execute those plans).

#### **1. Successes: What worked well and why?**

**HHFK successfully delivered the extra SNAP benefit to households that widely used it.** The HHFK team accomplished the goal of delivering the SNAP enhancement to all eligible households throughout the implementation period. This process required the project staff to effectively and efficiently determine household eligibility, communicate that information to the EBT vendor, and distribute the benefits in a manner seamless to households. The team successfully accomplished these steps. They spent more than a year planning how to most efficiently determine which households were eligible in a given month and transmit that information to the EBT vendor. The team’s workaround to modifying the SNAP eligibility system—a new database that interfaced with the SNAP eligibility system—was built relatively quickly and cheaply, and operated with minimal recurring actions from staff. Distributing the benefit on existing SNAP EBT cards prevented challenges to benefit redemption that would likely have surfaced had they mailed households new cards (such as the likelihood that some letters would have gone unopened). Most households that received the extra benefit fully spent it.

**A strong partnership between the SNAP and WIC offices also helped staff plan and deliver the SNAP enhancement.** HHFK touched several agencies, thus requiring strong partnerships. In particular, given that the WIC office was the grant recipient of record, HHFK required strong collaboration between WIC and SNAP offices. The core group of staff that operated HHFK was small and shared a commitment to the project vision and goals. Several of the core staff had a history of collaboration and appeared to enjoy working together on HHFK. Although the WIC and SNAP staff largely had separate duties, they actively collaborated at the beginning of the project to jointly plan the SNAP enhancement (including ways to identify the population dually eligible for SNAP and WIC and disburse benefits). The division of labor

during the implementation stage, along with check-ins, helped the project to run efficiently. Finally, the project had a champion in the project manager, who gave the project momentum during the planning stage and actively monitored operations.

## 2. Challenges

The project's major challenge was engaging households in case management and nutrition education. The following factors appear to have had the most influence on the delivery of these components. The discussion focuses on the case management component because staff viewed it as a higher priority.

**Project staff had a difficult time reaching T2 households for case management and nutrition education.** Several circumstances contributed to this difficulty, which resulted in a slow pace of delivery and low participation. (1) Calling households took more time than planners anticipated and there was insufficient staffing to make faster progress. Only about two full-time equivalent staff were responsible for reaching about 1,900 households. Staff described the call-outs, rather than dialogue with clients, as the most time-intensive part of their duties. Although by the end of the demonstration staff had called nearly all eligible households once, leaving a voice message when possible, a larger team would have enabled them to call more often and sooner. Relying on volunteer case managers saved money but meant that the case managers had to balance HHFK with their other duties, which took priority at times. Yet even though a larger number of staff may have contacted more households, it is unclear whether it would have substantially improved their success in light of the next two challenges. (2) Telephone-based outreach was a barrier for many households due to changes in contact information. Listed telephone numbers were often discontinued or belonged to someone else. (3) Staff suggested that fear of government services may have been common among Spanish-speaking households (which represented approximately 60% of all treatment households). Many households headed by undocumented immigrants (in which the children qualified for SNAP) were fearful of the project. Fears were elevated after Federal policies enacted during the implementation period raised the threat of arrest and deportation for undocumented immigrants.

**Given these challenges, having more staff make more calls would likely have helped build trust and interest, or facilitate follow-through on an application, to a degree. Starting with a more interested group and/or attempting to reach them through means other than cold calls may also have been required.** Among the 25% of households that staff reached for case management, very few were interested in joining the new programs, as discussed above. For instance, 85% of those with which case managers spoke were already enrolled in, not interested in, or not eligible for WIC. Given that the project planners designed HHFK in part to increase WIC enrollment, this finding could suggest that targeting a more interested group of households may have been called for. The opposite also could be true: among the majority of households never reached for case management (75% of T2 households), many could have been interested in joining WIC but staff could not overcome the underlying telephonic outreach and trust challenges. That is, the hardest-to-reach households might have benefited the most from speaking with a case manager if staff could have reached them. Lessons drawn from these challenges are discussed in the next section (II.C.3).

**The challenges in delivering case management and nutrition education may have stemmed from a short planning phase for these components.** The case management and nutrition education services faced problems of design (including understaffing and a wide target group) that may have been foreseen if the lead staff had more planning time. Whereas State staff spent more than a year planning for the SNAP enhancement, they held off on making tactical plans for the case management and nutrition education components until they brought on the respective project leaders, whom they intended to lead the design of those services. Project planners intentionally hired the staff late in the process because they were unsure when implementation would begin and did not want to bring them on too soon; the hiring process also took longer than expected. Although this strategy conserved resources for the benefits themselves, it meant that staff did much of their planning as they went along. Had the staff spent more time planning these components and been consulted during the grant process, they might have foreseen some of the key delivery challenges (such as outreach) and designed the services differently.

### 3. Recommendations and lessons learned from staff and households

HHFK staff and participating households suggested several lessons to streamline or improve the services. Even though the extra SNAP benefits component was designed and implemented successfully, they suggested two lessons. **First, households suggested that State staff provide more information about the extra SNAP benefits.** Although staff received few questions from households, focus group discussants lacked basic information about the extra SNAP benefit. It is tempting to believe that a lack of understanding about the benefits was inconsequential because households received it automatically, and the data show they typically spent it all, regardless of whether they were aware they received it or that it came from the project. Also, stronger outreach would have raised administrative costs and could have generated more confusion. Yet these concerns must be weighed against households' desire for more information and the possibility that by misunderstanding or mistrusting the extra benefits, the benefits could fail to improve household food security. As one discussant pointed out, *"It is not very helpful that we don't know when we get [the benefit until]."* As another recommended:

*"More information, more [clarity] of what the program is about before they do it. Getting random phone calls or just seeing extra benefits on your food stamps that aren't on your case. It's kinda like, 'Well, what is this?' It's really not enough information about the program. Of course if you're going to give somebody \$40, we're all going to say 'okay.' But you don't really know what it's coming for, its purpose. So more information is needed."*

**The second lesson, from staff, was to consult EBT and SNAP eligibility systems experts early in planning a temporary increase in SNAP benefits.** The State arrived at a strategy that efficiently determined household HHFK eligibility and seamlessly delivered the extra SNAP benefit to households. Yet as it turned out, its originally proposed strategy for disseminating SNAP benefits was not viable. The original EBT vendor could not add a new benefit to existing EBT cards, which the design required, and the original plan to modify the SNAP eligibility database turned out to be cost prohibitive. It was a stroke of luck that a new EBT vendor was able to add the extra SNAP benefits to existing cards. Staff recommended to States considering something similar that they consult the EBT vendor and in-house EBT experts from the beginning to ensure the vendor can add separate lines of funding to existing EBT cards.

Consulting information systems staff would also help States determine whether it would be more cost-efficient and feasible to make impermanent changes to existing SNAP eligibility systems or develop a new eligibility determination process, as did Nevada.

**Finally, to improve utilization of the elective case management and nutrition education components, staff suggested targeting interested clientele.** Higher staffing levels for more extensive outreach, more accurately anticipating how long it takes to call households, and better household contact information all would have improved the success of these services. However, as discussed above, these strategies would likely not have solved all of the challenges. In a wide swath of households—nearly 2,000—not everyone was going to be interested in these benefits. Some may simply have felt they did not need case management support, whereas others may have been skeptical or fearful of the offer. Typically, clients seek out support organizations, rather than the inverse. HHFK staff, in contrast, were challenged to convince households to take up their services. As one case manager observed, *“There was some sales job with this one.”* Getting in the door with households was the hardest part. Case managers and the nutrition educator spent most of their time placing phone calls and trying to convince uninterested households to take advantage of their services. The low rate of households that joined new programs as well as discussions with T2 households echoed this point. Focus group discussants expressed little enthusiasm for the case management, although many liked the idea of nutrition classes.

To target interested clientele, one staff member suggested involving households in planning similar services, such as through town hall-style meetings, to assess their service needs and interests, hear their ideas, and build their engagement and trust. As another staff member found from similar experiences, you *“Have to work a lot with the population to convince them it’s okay to apply [for welfare programs].”* This upfront outreach would help project staff then be more strategic about the design of the services so they could spend more time working with clients who are more likely to need or want their assistance. Stacking their outreach resources at the beginning of the implementation period may also have helped them spend more of the implementation period working with interested households they could reach. The staff member also suggested that a smaller target population in a smaller geographic area and with a high concentration of food insecurity could improve participation in optional services. Staff also must be able to reach interested households. Additional forms of outreach beyond telephone calls and emails would help reach those whose numbers have changed or are skeptical of callers they do not know. One staff member also suggested requiring the case management or nutrition classes as a condition of the extra SNAP benefit.

## D. Cost of Implementing HHFK

The objective of the cost analysis was to describe the resources required to launch and deliver the HHFK project in Nevada, and estimate the cost of those resources (in dollar terms). Analysis of project costs was based on a detailed listing of all resources used to deliver the HHFK intervention. The relevant resources were defined to be those over and above those used for the existing SNAP program. The analysis was based on data from grantee staff (including labor, other direct costs, and partner or contractor costs) and administrative databases (SNAP benefit redemptions). Appendix B.5 describes the methods used for the cost study.

### Nevada HHFK project costs

Most of the project costs went towards the extra SNAP benefits. The project provided \$1,877,568 in extra SNAP benefits to participating households. About 14% of the project costs in the implementation period went towards distributing these benefits and providing case management and nutrition education.

The following sections present the labor costs, other direct costs (ODCs), vendor or contractor costs, and extra SNAP benefit costs of implementing Nevada's HHFK project. Section D.1 presents the results of an analysis that distinguishes between start-up costs (costs associated with preparations for the provision of project benefits incurred during the project start-up period of February 1, 2015 to May 31, 2016) and implementation costs (the ongoing costs associated with providing services during the implementation period of June 1, 2016 to May 31, 2017). Section D.2 presents the costs of different components of the project, including (1) the provision of enhanced SNAP benefits (for T1 and T2), (2) the provision of case management and nutrition education services (for T2 only), and (3) costs associated with both of these activities (for T1 and T2).

### 1. Component costs, by time period

The Federal grant award was for \$3,143,079; Nevada contributed an additional \$146,218 in State matching funds, for a total value of \$3,289,297. The project reported a total paid cost of \$2,334,706, or 71% of the value of the grant, during project start-up through close-out (February 2015 through June 2017). The key reasons for the difference between the project's funding and expenditures involves the time period of the data collection, as the project did not distribute all available extra SNAP benefits during the data collection period and planned to continue service provision beyond the date of the final cost report.

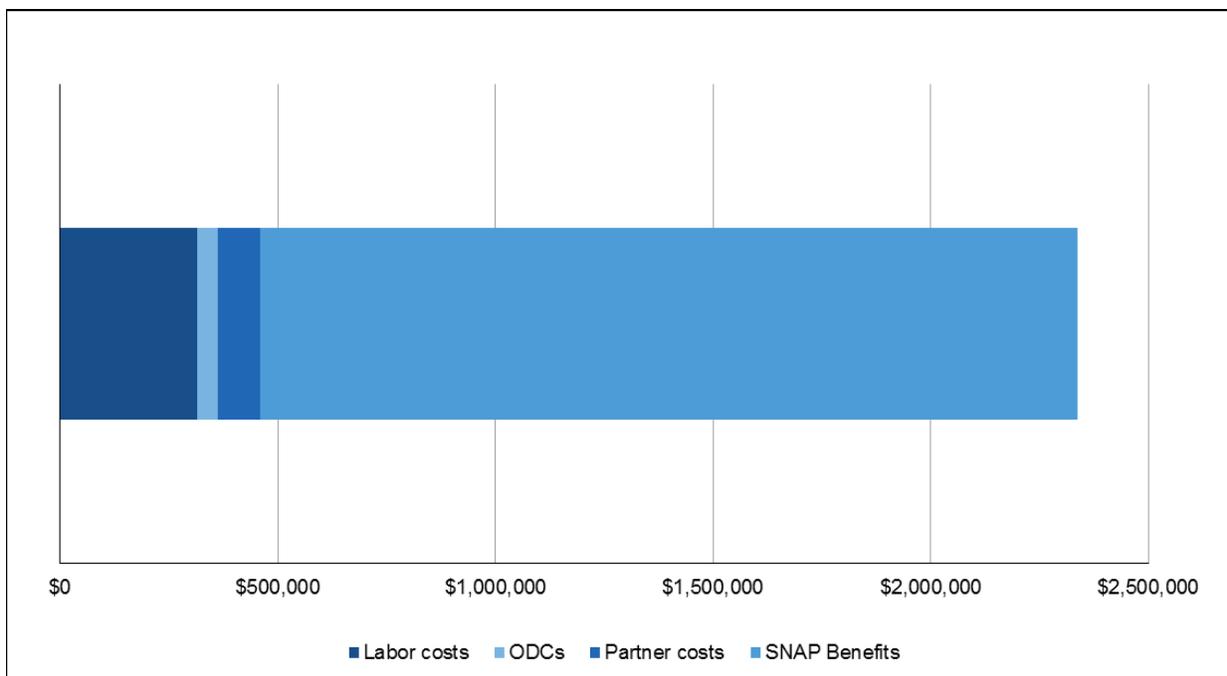
Labor costs accounted for \$311,846 (13%) of the total paid costs, whereas ODCs accounted for \$46,708 (2%), vendor or partner costs accounted for \$98,584 (4%), and extra SNAP benefits accounted for \$1,877,568 (80%) of the total costs. The project reported \$3,383 in donated labor, equivalent to only 0.14% of the total cost, and no donated or in-kind ODCs or partner costs. On average, the total cost per household assigned to one of the two treatment arms (T1 or T2) was \$610.54, with \$81.55 in paid labor, \$12.21 in ODCs, \$25.78 in vendor and partner costs, and \$491.00 in supplemental SNAP benefits redeemed for the period February 2015 through June 2017.<sup>18</sup>

<sup>18</sup> Costs per household were calculated based on the total number of consenting treatment households in the project as a whole (n = 3,824).

Start-up costs accounted for 7% of the total paid project cost and 35% of the incurred costs (that is, the total cost minus the cost of the extra SNAP benefits); these costs included 36% of the total paid labor costs, 21% of the total ODCs, and 38% of the total partner costs. On average, the start-up cost per household assigned to a treatment group (T1 or T2) amounted to \$29.19 in paid labor costs, \$2.57 in ODCs, and \$9.74 in vendor or partner costs. Implementation costs accounted for the remainder of project costs, including 93% of total costs and 65% of incurred costs. The cost of extra SNAP benefits alone accounted for the majority of project costs—80% of total project costs (as noted above) and 86% of implementation costs.

Exhibits II.4, II.5, and II.6 show the total cost per component and the total and per-household start-up and implementation costs for each component. More detailed cost information is presented in Appendix Exhibit C.6.

#### Exhibit II.4. Total costs, by component

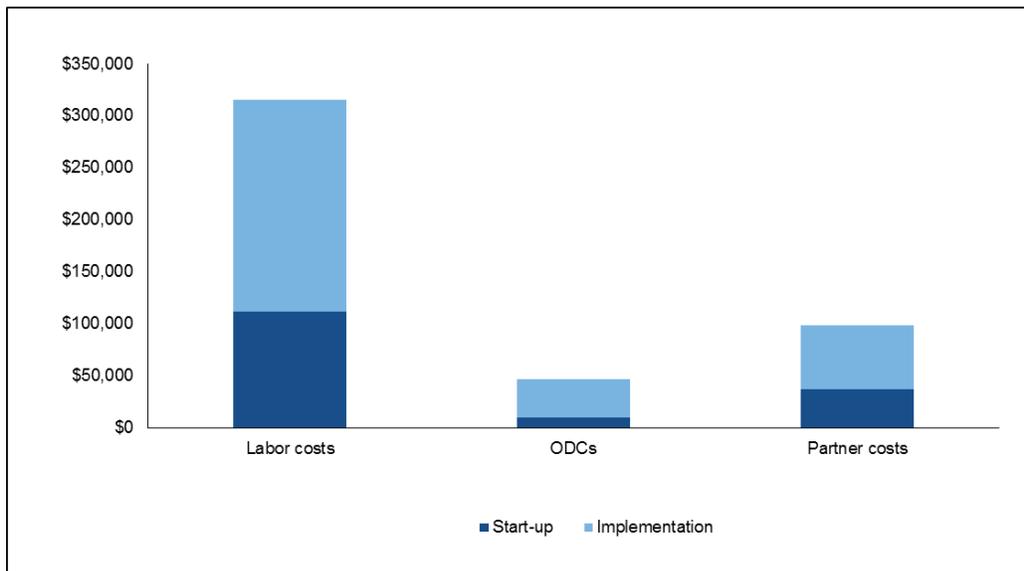


Source: Nevada HHFK project cost data-collection instruments. Tabulations were prepared by Mathematica Policy Research. Start-up costs cover February 1, 2015 to May 31, 2016. Implementation costs cover June 1, 2016 to June 30, 2017. The grantee provided services through May 2017, so the costs reported here include costs for closing out operations.

Note: Labor estimates include both paid labor costs and the estimated value of volunteer labor.

HHFK = Healthy, Hunger Free Kids; ODC = other direct costs; SNAP = Supplemental Nutrition Assistance Program; SNAP Benefits = the extra SNAP benefits provided through HHFK.

**Exhibit II.5. Total start-up and implementation costs, by component**

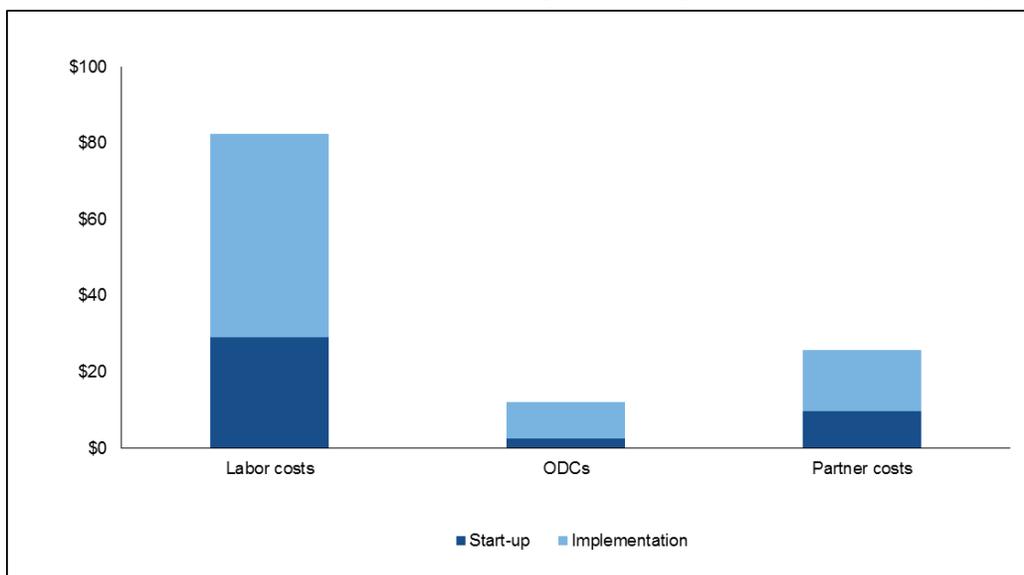


Source: Nevada HHFK project cost data-collection instruments. Tabulations were prepared by Mathematica Policy Research. Start-up costs cover February 1, 2015 to May 31, 2016. Implementation costs cover June 1, 2016 to June 30, 2017. The grantee provided services through May 2017, so the costs reported here include costs for closing out operations.

Note: Labor estimates include both paid labor costs and the estimated value of volunteer labor. All costs shown exclude \$1,877,568 in supplemental SNAP benefits distributed during the implementation period.

HHFK = Healthy, Hunger Free Kids; ODC = other direct costs; SNAP = Supplemental Nutrition Assistance Program.

**Exhibit II.6. Per-household start-up and implementation costs, by component**



Source: Nevada HHFK project cost data-collection instruments. Tabulations were prepared by Mathematica Policy Research. Start-up costs cover February 1, 2015 to May 31, 2016. Implementation costs cover June 1, 2016 to June 30, 2017. The grantee provided services through May 2017, so the costs reported here include costs for closing out operations.

Note: Labor estimates include both paid labor costs and the estimated value of volunteer labor. All costs shown exclude \$1,877,568 in supplemental SNAP benefits distributed during the implementation period. Costs per household are based on 3,824 treatment households.

HHFK = Healthy, Hunger Free Kids; ODC = other direct costs; SNAP = Supplemental Nutrition Assistance Program.

## 2. Component costs, by project activity

This section provides information on the costs of the Nevada HHFK project associated with (1) the provision of extra SNAP benefits; (2) the provision of case management and nutrition education services; and (3) costs that were associated with both of these activities.

Activities related to the provision of extra SNAP benefits—but not including the payments to households themselves—accounted for \$123,618 (5%) of the total paid costs, whereas case management and nutrition education (CMNE) costs accounted for \$196,192 (8%), and activities related to both SNAP and CMNE accounted for \$137,328 (6%) of paid costs. The cost of the extra SNAP benefits that were distributed accounted for the remaining \$1,877,568 (80%) of total paid costs. On average, the total cost per enrolled household was \$32.33 for SNAP administrative activities, \$51.31 for CMNE activities<sup>19</sup>, \$35.91 for activities involving both sets of benefits, and \$491.00 in extra SNAP benefits.

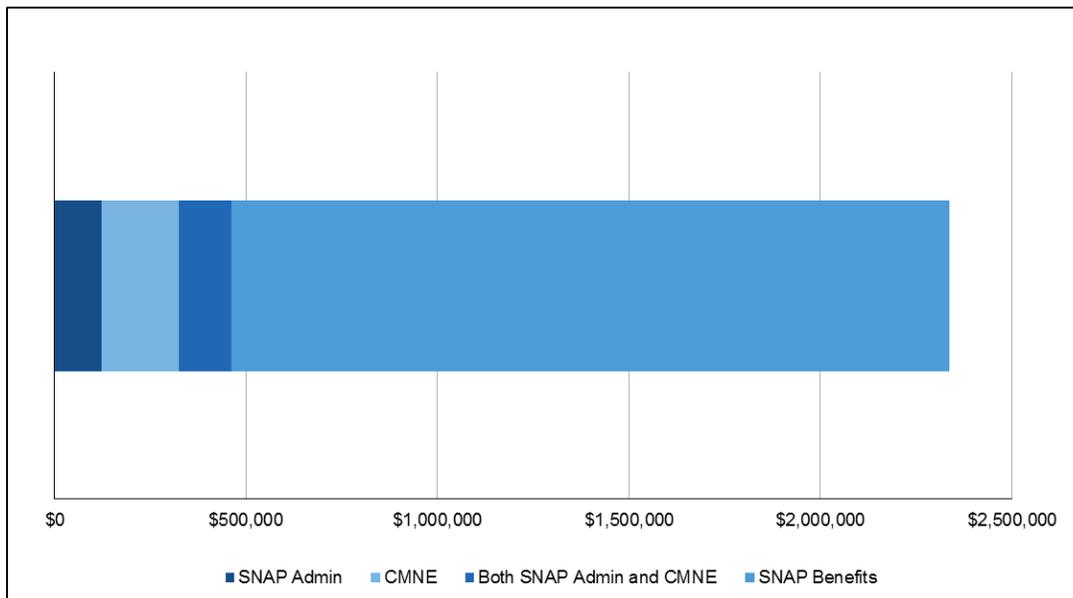
Looking only at the costs of activities associated with the provision of extra SNAP benefits, labor and ODCs accounted for only 34% and 10%, respectively, whereas partner/vendor costs accounted for more than half of these costs (\$69,344 or 56%). Labor costs accounted for the vast majority (77%, or \$151,120) of CMNE expenditures, whereas ODCs accounted for \$15,832 (8%), and partner or vendor costs accounted for \$29,240 (15%) of total CMNE costs. Finally, for activities associated with both SNAP and CMNE, labor accounted for \$118,246 (86%) and ODCs accounted for \$19,082 (14%) of the costs.

Exhibits II.7, II.8, and II.9 show the total cost per activity and the total and per-household start-up and implementation costs for each activity.

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<sup>19</sup> The per-household costs for CMNE reported here are based on all households assigned either to T1 or T2. However, only households in T2 were eligible to receive CMNE benefits as part of the project. Thus, the CMNE costs per household in T2 were twice as large, or \$102.62.

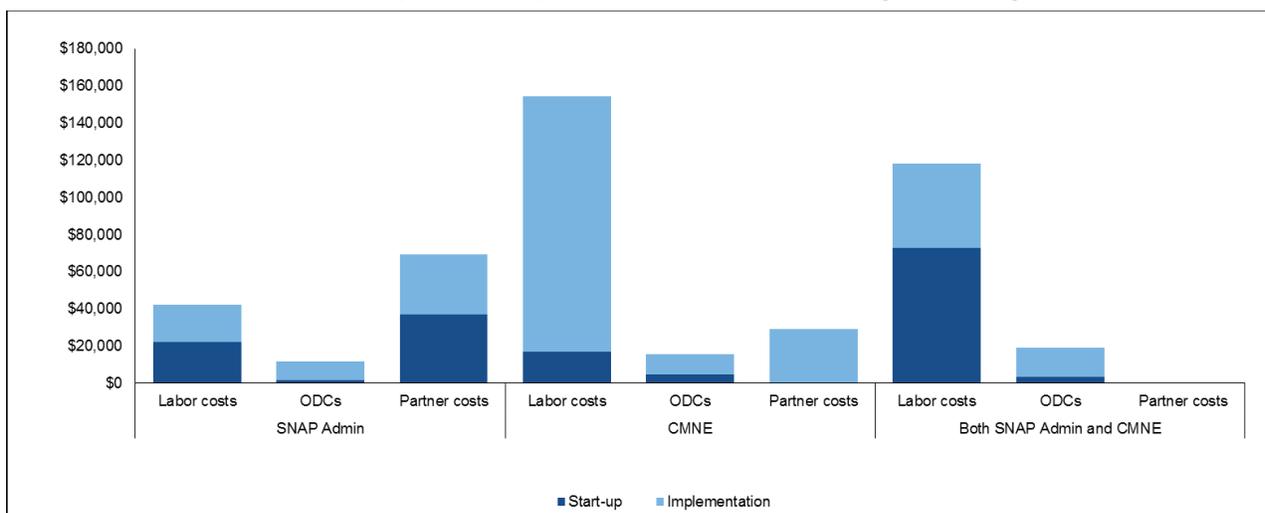
**Exhibit II.7. Total costs, by activity**



Source: Nevada HHFK project cost data-collection instruments. Tabulations were prepared by Mathematica Policy Research. Start-up costs cover February 1, 2015 to May 31, 2016. Implementation costs cover July 1, 2016 to June 30, 2017. The grantee provided services through May 2017, so the costs reported here include costs for closing out operations.

CMNE = cost management and nutrition education services; HHFK = Healthy, Hunger Free Kids; SNAP = Supplemental Nutrition Assistance Program; SNAP Admin = cost of administering the extra SNAP benefits; SNAP Benefits = the extra SNAP benefits provided through HHFK.

**Exhibit II.8. Total start-up and implementation costs, by activity**

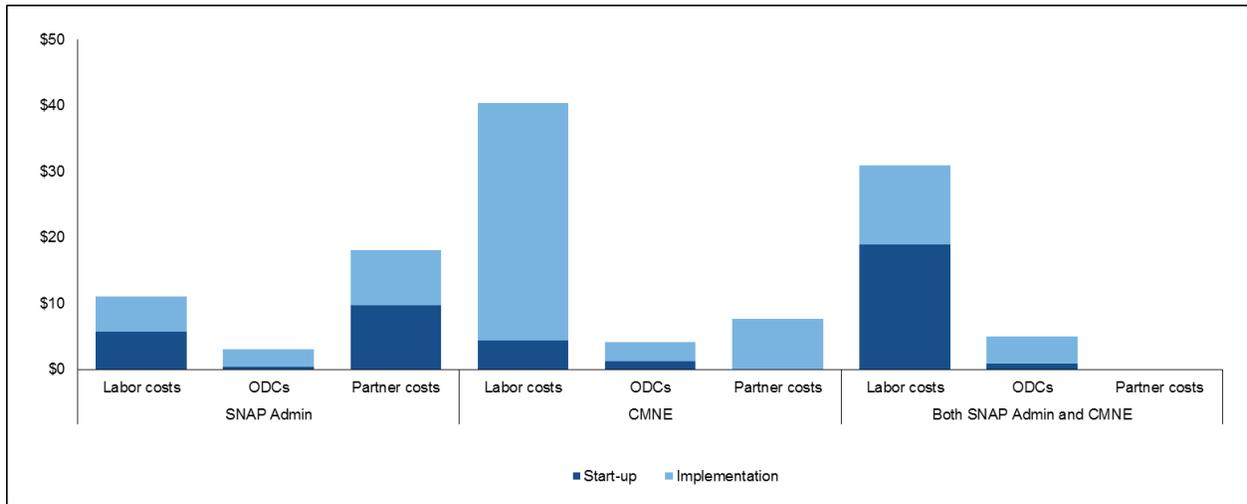


Source: Nevada HHFK project cost data-collection instruments. Tabulations were prepared by Mathematica Policy Research. Start-up costs cover February 1, 2015 to May 31, 2016. Implementation costs cover July 1, 2016 to June 30, 2017. The grantee provided services through May 2017, so the costs reported here include costs for closing out operations.

Note: Labor estimates include both paid labor costs and the estimated value of volunteer labor. All costs shown exclude \$1,877,568 in supplemental SNAP benefits distributed during the implementation period.

CMNE = cost management and nutrition education services; ODC = other direct costs; HHFK = Healthy, Hunger Free Kids; SNAP = Supplemental Nutrition Assistance Program; SNAP Admin = cost of administering the extra SNAP benefits.

**Exhibit II.9. Per-household start-up and implementation costs, by activity**



Source: Nevada HHFK project cost data-collection instruments. Tabulations were prepared by Mathematica Policy Research. Start-up costs cover February 1, 2015 to May 31, 2016. Implementation costs cover July 1, 2016 to June 30, 2017. The grantee provided services through May 2017, so the costs reported here include costs for closing out operations.

Note: Labor estimates include both paid labor costs and the estimated value of volunteer labor. All costs shown exclude \$1,877,568 in supplemental SNAP benefits distributed during the implementation period. Costs per household are based on 3,824 treatment households.

CMNE = cost management and nutrition education services; ODC = other direct costs; HHFK = Healthy, Hunger Free Kids; SNAP = Supplemental Nutrition Assistance Program; SNAP Admin = cost of administering the extra SNAP benefits.

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### III. THE IMPACTS OF THE NEVADA HHFK PROJECT ON FOOD SECURITY AND OTHER OUTCOMES

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This chapter describes the households in the HHFK project and the project's impacts on childhood food insecurity and other outcomes. It first describes the baseline characteristics of households in the evaluation sample. The chapter then presents evidence on how the project affected outcomes for these households during the implementation period, including their SNAP receipt and food spending patterns; indicators of the households' food insecurity; and other outcomes, such as their participation in other nutrition assistance programs. Data sources are detailed in Appendix B. In brief, the data sources to support the impact analyses were (1) the baseline and follow-up surveys, and (2) administrative data on SNAP caseloads and EBT transactions.

All impact analyses were based on the subset of households in the evaluation sample. This sample consisted of households that completed the baseline survey (administered before HHFK was implemented)<sup>20</sup> and were subsequently randomly assigned to the T1, T2, or control groups, with each household having an approximately equal chance of being assigned into any of the three groups. The evaluation sample was surveyed again toward the end of the implementation period (a 12-month follow-up).<sup>21</sup> Thus, households given the follow-up survey necessarily completed the baseline survey. The evaluation sample included 3,088 households, which were roughly evenly split between the T1, T2, and control groups. Impact models were then estimated using the 2,074 households that completed the follow-up survey, weighted to represent the target population. To estimate impacts, treatment and control outcomes were compared, controlling for baseline characteristics of households using a regression framework. See Appendix A for details on the random assignment design, survey response rates, sampling, and weighting methods.

As described in Chapter II, T1 households were offered an extra \$40 in SNAP benefits for each child in the household under age 5; T2 households were offered the same extra monthly SNAP benefit, plus case management services to help them access nutrition and other assistance programs, and nutrition education classes. The control group received regular SNAP benefits. Because the case management and nutrition education services reached a relatively small proportion of T2 households, they were unlikely to have had a major effect on study outcomes. For this reason, the T1 and T2 groups were combined to form a single treatment group in the impact analyses that follow, with comparisons of the T1 and T2 groups presented in Appendix D. This approach simplified the analysis and presentation of results, and increased the statistical power of the design.

#### A. Household characteristics at baseline

This section reports the baseline characteristics of consenting households that responded to the baseline survey conducted in the period of October 2015–March 2016. Baseline characteristics are presented in Exhibit III.1 and are discussed in greater detail below. Estimates

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<sup>20</sup> The baseline response rate was 57% (Briefel et al. 2018).

<sup>21</sup> Sixty-seven percent of households in the evaluation sample completed the follow-up survey (see Appendix Exhibit A.10).

**Exhibit III.1. Household characteristics at baseline**

Characteristic	Mean (SE) or percentage
<b>Household size</b>	
Mean number of household members who share food	4.5 (0.03)
Mean number of children in household	2.9 (0.03)
<b>Age of children</b>	
Less than 5 years	100.0
5 to 11 years	60.5
12 to 17 years	28.4
18 years (or older if still in high school)	3.0
<b>Two or more HHFK-eligible children in household</b>	27.2
<b>Median household income last month (\$) <sup>a</sup></b>	994 (25)
<b>Any household adult employed in last 30 days</b>	57.2
<b>Household nutrition benefit program participation <sup>b</sup></b>	
Reported currently receiving SNAP <sup>c</sup>	100.0
Reported receiving WIC	60.3
Reported receiving food from food pantry, emergency kitchen, or other community program	13.3
<b>Household food security status</b>	
Secure	44.3
Insecure	55.7
VLFS	23.2
<b>Adult food security status</b>	
Secure	48.1
Insecure	51.9
VLFS	22.2
<b>Child food security status</b>	
Secure	65.4
Insecure	34.6
VLFS	5.5
<b>Reported monthly out-of-pocket household mean food expenditures (\$) <sup>d</sup></b>	174 (3)
<b>Reported monthly out-of-pocket per-person mean food expenditures (\$)</b>	
Total out-of-pocket expenditures <sup>d</sup>	42 (1)
Food expenditures at supermarkets, grocery stores, and other types of stores <sup>e</sup>	32 (1)
Expenditures at restaurants <sup>f</sup>	14 (0) <sup>^</sup>
Sample size	3,088

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2015–2016 baseline survey. Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research. Proportion of households with two or more children eligible for the HHFK project was calculated by Mathematica Policy Research using Nevada SNAP caseload administrative data.

Note: Estimates are percentages unless otherwise noted. Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project, based on the baseline weights. Calculations are based on the full evaluation sample, including households ultimately assigned to both treatment groups and the control group. Missing values, which ranged from 0.0 to 4.5% of observations, were excluded from the calculations. Program participation questions generally reflected current participation at the time of the interview, defined as “during the last 30 days.” Food security was measured using the 30-day survey module. VLFS is a subcategory within the food insecure category. Questions about food expenditures were asked about the last 30 days.

<sup>a</sup>Includes all earnings, Social Security, pensions, veteran's benefits, unemployment insurance, workers' compensation benefits, child support, payments from roomers and borders, TANF, and SSI for all household members but does not include SNAP or WIC.

<sup>b</sup>Calculated for all households as a descriptive variable and not constrained to only those households eligible for a specific program listed.

<sup>c</sup>Based on SNAP administrative records.

<sup>d</sup>Sum total of reported out-of-pocket food expenditures at stores and restaurants in the last 30 days. Excludes purchases made with SNAP and WIC. The sum is not equal to the sum of the two means because of missing data. If expenditures at either stores or restaurants are missing, then the total is missing.

<sup>e</sup>Out-of-pocket expenditures on food at supermarkets, grocery stores, and other stores. Excludes purchases made with SNAP and WIC.

<sup>f</sup>Includes carryout, drive through, and all types of restaurants.

<sup>g</sup>Greater than zero but less than 0.5.

HHFK = Nevada Healthy, Hunger Free Kids Project; SNAP = Supplemental Nutrition Assistance Program; SSI = Supplemental Security Income; TANF = Temporary Assistance for Needy Families; VLFS = very low food security; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

were weighted to be representative of the population of households in the Nevada HHFK project that met the project's eligibility criteria. Appendix A presents supplemental exhibits on household characteristics at baseline, including a comparison of these baseline characteristics for the treatment and control groups, showing the characteristics were similar across these groups, both among the full evaluation sample and for the households that completed the follow-up survey.<sup>22</sup> Appendix B presents further methodological detail about the survey and its administration.

## 1. Baseline household demographic characteristics and socioeconomic status

Household size was calculated as the number of household members who share food by purchasing and preparing meals together—the SNAP definition of household size. The mean household size was 4.5 members who share food.<sup>23</sup> On average, 2.9 of the household members were children, defined as 18 years old or younger, or still in high school if older than age 18, and living with an adult in a household. Because having a child up to age 5 in the household was an eligibility criterion, all Nevada households had a child in that age category (27% of households had two or more age-eligible children). Additionally, 61% had a child ages 5 to 11, and 28% had a child ages 12 to 17.

Eligibility rules for the Nevada HHFK project specifically limited participation to households that were currently participating in SNAP and with incomes below 75% FPL, and therefore the expectation was that the baseline sample would be relatively disadvantaged.<sup>24</sup> Median household income in the last 30 days was approximately \$1,000. The employment rate, defined as any adult in the household employed during the last 30 days, was 57%.

<sup>22</sup> Characteristics of households at follow-up are also presented in Appendix A.

<sup>23</sup> Twenty percent of households in the sample had more members who did not share food (data not shown). This finding may suggest more than one family living together, with each family responsible for its own food and meals.

<sup>24</sup> The poverty threshold for a family of four in 2016 was \$24,563 (U.S. Census Bureau n.d.). Seventy-five percent of the poverty threshold is \$18,422, or \$1,535 per month.

## 2. Baseline participation in nutrition assistance programs

SNAP participation was universal in the evaluation sample because, as noted above, it was an eligibility criterion for the Nevada HHFK project. Sixty percent of baseline survey respondents reported receiving WIC, although all households were eligible because they all were SNAP eligible and had one or more children up to age 5. (Increasing WIC enrollment was a goal of the demonstration.) The share of respondents who reported using emergency assistance from a food pantry, emergency kitchen or another community program was 13%.

## 3. Baseline food security status

Reducing food insecurity among children—FI-C—was the key objective of the Nevada HHFK project. Exhibit III.1 shows the baseline food security status over the past 30 days for households, adults, and children. Before implementation, 56% of households with children experienced food insecurity. Fifty-two percent of households experienced food insecurity among adults, and 35% experienced food insecurity among children. Very low food security, a subcategory within the food insecure category, was 23%, 22%, and 6%, respectively, among households, adults, and children. The prevalence of food insecurity in the Nevada HHFK project's evaluation sample was higher than national estimates. In 2016, 44% of below-poverty households with children in the United States experienced food insecurity, and 24% experienced FI-C (Coleman-Jensen et al. 2017a).

## 4. Baseline monthly food expenditures

Respondents were asked about their household spending on food in the last 30 days, and the mean expenditures per person were calculated. On average, households spent a total of \$42 per person per month on food, excluding purchases made with SNAP and WIC. Respondents reported spending an average of \$32 per person out of pocket on food purchased at supermarkets, grocery stores, or other types of stores, and an average of \$14 per person on restaurants.

## B. SNAP participation, benefit receipt, and spending levels

The Nevada HHFK project provided an extra \$40 SNAP benefit to treatment households each month for each child under age 5. This extra SNAP benefit was a central component of the project design and was delivered to both treatment arms. It was intended to reduce food insecurity among children by increasing overall spending on food (FNS 2018a). Thus, a key issue in the evaluation is how receipt of the extra SNAP benefit affected households' overall SNAP benefit receipt and food spending levels. The more households used this increase in their overall level of resources to purchase food for the household (as opposed to reducing their out-of-pocket spending on food and using the extra resources for other household needs), the greater the chances the project would reduce food insecurity. This section describes households' monthly SNAP benefits received, use (or redemption) of these benefits, and total spending on food, including both out-of-pocket and SNAP spending.<sup>25</sup>

The project delivered extra SNAP benefits to treatment households as planned, resulting in higher overall SNAP benefits received in treatment than control households. Treatment

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<sup>25</sup> This section compares these measures between control group households and the pooled group of households in both treatment arms. Appendix D presents comparisons between the two treatment arms.

households received \$44 in extra SNAP benefits in the month of the follow-up survey, on average, whereas control households did not receive any extra SNAP benefits from the project (Exhibit III.2). This extra SNAP benefit translated to treatment households receiving \$37 more in SNAP benefits overall because control households had slightly higher levels of regular, non-HHFK SNAP benefits at follow-up.

Did these additional SNAP benefits cause treatment households to spend more on food? The median treatment household spent \$44 per month more at follow-up in SNAP benefits (including both the regular and extra SNAP benefits) than its counterpart in the control group but spent approximately \$21 less per month out of pocket on food than did the median control household (Exhibit III.2).<sup>26</sup> After adding these two components of households' food budgets, treatment households' combined median monthly food spending was \$654, compared with \$631 among control households, and the \$23 difference was statistically significant.<sup>27</sup> Still, the fact that the extra SNAP benefits from the project led to a \$23 increase in monthly household food spending, rather than an increase closer to \$40, suggests that the main mechanism for reducing food insecurity may have been weaker than intended.

Even if the project did not have an impact on the combined SNAP and out-of-pocket spending on food, it could have influenced the timing of households' food spending in ways that could affect food insecurity. For example, if the additional benefits allowed households to "smooth" their food purchasing over the course of the month, it could have allowed them to avoid spells in which there was not enough food available. To shed light on the timing of household food spending, we measured how many days passed between the exhaustion of a month's benefit and receipt of the next month's benefit—a period in which households may have been especially at risk of having inadequate resources for food.<sup>28</sup> On average, treatment households spent the last of their monthly SNAP benefits approximately six days before they received the next month's benefit amount; this was approximately one day later than control households, although the difference was not statistically significant ( $p = 0.057$ ).

It is possible that the receipt of extra benefits through the project could have influenced households' rates of participation in SNAP—for example, by providing treatment households with a stronger incentive to recertify their eligibility when required. If this phenomenon were occurring, treatment households might be more likely to remain enrolled in SNAP and ultimately receive more benefits. As shown in Exhibit III.2 below, however, the average household in both the treatment and control groups participated in SNAP in approximately 85% of the project's months. This finding indicates that the project did not cause treatment households to be more (or less) likely to remain enrolled in SNAP throughout the project implementation period.

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<sup>26</sup> Previous studies have found that for every additional dollar of SNAP benefits a household receives, overall food spending tends to increase by less than a full dollar. This research is discussed further in Section III.D.

<sup>27</sup> The estimated mean value of total food expenditures had a relatively large standard error because of the variation across households in the out-of-pocket food expenditures measure, with some households reporting expenditure levels well above the mean (Exhibit III.2). Because median values are less sensitive to extreme values, the median value of total food expenditure (and the treatment-control difference in this measure) were more precisely estimated.

<sup>28</sup> Exhaustion was defined as having an EBT balance of less than \$1 in benefits. This approach is consistent with research on SNAP spending patterns by Castner and Henke (2011).

**Exhibit III.2. SNAP benefit receipt and spending in the Nevada HHFK project**

	Treatment <sup>a</sup>	Control	Difference (SE)	p-value
<b>Regular SNAP benefit in follow-up survey month (\$)</b>	412	419	-6 (11)	0.547
<b>HHFK benefit in follow-up survey month (\$)</b>	44	0	44 (1)	<.001
<b>Total SNAP benefit in follow-up survey month (\$)</b>	456	419	37 (11)	<.001
<b>Average monthly SNAP benefit (\$)</b>				
Regular SNAP Benefit	409	415	-6 (6)	0.316
HHFK benefit	42	0	42 (1)	<.001
Total SNAP Benefit	452	415	37 (6)	<.001
<b>Percentage of months eligible for SNAP</b>	85.3	86.2	-0.9	0.316
<b>Days between exhausting benefits and next month's benefit load, in follow-up survey month<sup>b</sup></b>	6.2	7.0	-0.8 (0.40)	0.057
<b>Percentage of households with each level of gap days<sup>c</sup></b>				0.148
Zero days	42.3	37.7	4.6	
1 to 3 days	5.9	7.3	-1.4	
4 to 7 days	7.9	7.7	0.2	
8 to 14 days	14.3	16.9	-2.6	
15 to 21 days	10.4	11.3	-0.9	
More than 21 days	5.7	7.4	-1.7	
Did not receive SNAP in response month	13.6	11.7	1.9	
<b>SNAP benefit redemption</b>				
Ratio of EBT spending to month's SNAP benefit in survey response month	0.99	1.00	-0.01	0.167
Funds remaining in EBT account at end of demonstration (\$)	12	12	0 (2) <sup>^</sup>	0.985
<b>Mean food expenditures (\$)</b>				
SNAP purchases in survey response month	453	417	35 (11)	0.001
Out-of-pocket (OOP) spending in survey response month <sup>d</sup>	226	248	-21 (9)	0.021
SNAP plus OOP spending in survey response month <sup>e</sup>	679	665	14 (13)	0.273
<b>Median food expenditures (\$)</b>				
SNAP purchases in survey response month	466	422	44 (3)	<.001
OOP spending in survey response month	179	200	-21 (6)	<.001
SNAP plus OOP spending in survey response month	654	631	23 (7)	<.001
Sample size	1,335	739		

Source: Nevada SNAP administrative data and, where noted, EDECH 2017 follow-up survey data. Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research.

Note: Regressions controlled for baseline measures of child and adult food insecurity, and very low food security; household income and employment status; the survey respondent's age, race/ethnicity, health status, and primary language spoken; the number of children in the household and presence of a teenager; and household participation in WIC, free or reduced-price breakfast and lunch; the amount of SNAP benefits received at baseline; and the duration of SNAP participation in the year before the baseline survey. Measures of SNAP benefit receipt throughout the implementation period (as opposed to measures at the

time of the follow-up survey), and analysis of ending account balance, are based on the full sample of 3,088 baseline survey respondents.

<sup>a</sup>Total households in T1 and T2 groups.

<sup>b</sup>Exhaustion of benefits was defined as having an EBT balance of less than \$1 in benefits.

<sup>c</sup>Gap days are calculated as the number of days between the day benefits are exhausted and the day the next month's benefits are available, in the month before the follow-up survey was completed.

<sup>d</sup>Sum total of reported out-of-pocket food expenditures at stores and restaurants in the last 30 days. Excludes purchases made with SNAP and WIC, measured using the EDECH 2017 follow-up survey.

<sup>e</sup>Sum total of reported out-of-pocket food expenditures at stores and restaurants in the last 30 days, plus SNAP expenditures in the month before the survey response. This measure combines information on EBT purchases from Nevada administrative data with information from the EDECH 2017 follow-up survey.

<sup>^</sup>Greater than zero but less than 0.5.

EBT = electronic benefits transfer; EDECH = Evaluation of Demonstrations to End Childhood Hunger; HHFK = Healthy, Hunger-Free Kids; OOP = Out-of-pocket spending; SNAP = Supplemental Nutrition Assistance Program; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

### **C. Impacts of the Nevada HHFK project on child food insecurity**

The central question motivating this study is whether the Nevada HHFK project caused a reduction in food insecurity among children. This section describes the impacts of the project on food insecurity among children as well as among adults and households. It also reports on changes in household circumstances among the study's treatment and control groups and on sources of help available to these households to shed light on how those factors might influence levels of food insecurity.<sup>29</sup>

#### **1. What was the impact of the project on the prevalence of food insecurity?**

The study examined food insecurity measures gathered using the USDA's 18-question module and a 30-day reference period, administered in the follow-up survey near the end of the project's 12-month implementation period. Impacts on food insecurity in the full sample are presented in Exhibit III.3 and discussed in greater detail below.<sup>30</sup> Impacts on food insecurity among key subgroups of interest are presented in Exhibit III.4.<sup>31</sup>

Overall, the project did not lead to a reduction in the prevalence of food insecurity among children—the primary outcome in the evaluation. About 31% of households in both the treatment and control groups reported food insecurity among children (Exhibit III.3). The rate of very low

<sup>29</sup> This section reports comparisons of these characteristics among households in the overall treatment group and those in the control group. Appendix D compares these measures among households in the first treatment arm (extra SNAP benefits only) with those in the second treatment arm (extra SNAP benefits plus the offer of case management and nutrition education services).

<sup>30</sup> Analytic sample sizes in exhibits based on follow-up survey data vary according to the questions included in each exhibit. Specifically, the sample size in a given exhibit is the sample for the highest non-missing survey data element in that exhibit. A small number of households (eight, including 0.3% of households in the treatment group and 0.4% in the control group) did not include children at the time of the follow-up survey. These households are missing the data on food insecurity among children and are not included in estimates of the impact of the project on FI-C or VLFS-C. They are included in estimates of the impact of the project on other outcomes.

<sup>31</sup> Exhibit D.11 shows the percentage of affirmative responses to each of the 18 items in the module, by study group.

food security among children was also similar in treatment and control group households at follow-up.<sup>32</sup>

Similarly, the intervention did not reduce food insecurity among adults or households as a whole—secondary outcomes in the evaluation. The estimated rate of food insecurity among adults was 44% among households in the treatment group and 41% in the control group;<sup>33</sup> the rate of very low food security among adults was near 20% for each group (Exhibit III.3). The levels of food insecurity and very low food security among households as a whole were similar to the rates among adults; there were no statistically significant differences between treatment and control households in any of the adult- or household-level measures.

### Exhibit III.3. Impact of the Nevada HHFK project on food insecurity

	Treatment <sup>a</sup> (%)	Control (%)	Difference	95% Confidence interval	p-value
<b>Children</b>					
Secure	68.8	69.4	-0.6	[-4.4, 3.2]	0.620
Insecure	31.2	30.6	0.6	[-3.2, 4.4]	0.620
VLFS	5.6	4.3	1.3	[-0.5, 3.1]	0.915
<b>Adults</b>					
Secure	56.3	59.2	-2.9	[-6.9, 1.1]	0.925
Insecure	43.7	40.8	2.9	[-1.1, 6.9]	0.925
VLFS	17.9	18.6	-0.7	[-3.9, 2.6]	0.337
<b>Households</b>					
Secure	52.9	55.6	-2.6	[-6.7, 1.4]	0.900
Insecure	47.1	44.4	2.6	[-1.4, 6.7]	0.900
VLFS	18.5	18.9	-0.4	[-3.7, 2.9]	0.408
Sample size	1,332	738			

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 follow-up survey. Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research.

Note: Food security was measured using the standard USDA 18-item survey module and a 30-day reference period. VLFS is a subcategory within the food insecure category. The p-value associated with each impact estimate is from a one-tailed test of statistical significance. Regressions controlled for baseline measures of child and adult food insecurity and very low food security; household income and employment status; the survey respondent's age, race/ethnicity, health status, and primary language spoken; the number of children in the household and presence of a teenager; and household participation in WIC, free or reduced-price breakfast and lunch; the amount of SNAP benefits received at baseline; and the duration of SNAP participation in the year before the baseline survey. Regressions also controlled for the month of survey response.

<sup>a</sup>Includes total households in T1 and T2 groups.

<sup>32</sup> An alternate analysis approach would be to estimate the impact among only the households that received HHFK benefits in the two months before they responded to the follow-up survey, which effectively assumes that the project had no impact on the households that did not receive HHFK benefits in those months. This analysis approach, known as a complier average causal effect (CACE) or the effect of treatment on the treated (TOT), yielded an estimated impact on FI-C and VLFS-C that was less than one percentage point different from the main estimated impact and was similarly not statistically significant.

<sup>33</sup> Although the estimated rate of food insecurity among adults was higher in the treatment than the control group, the estimated confidence interval for this food insecurity measure in the two groups had substantial overlap.

HHFK = Healthy, Hunger Free Kids; SNAP = Supplemental Nutrition Assistance Program; USDA = U.S. Department of Agriculture; VLFS = Very low food security; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

## 2. How do impacts on food insecurity among children and households with children vary by relevant factors?

Even though the Nevada HHFK project did not affect food insecurity among eligible households as a whole, it could have reduced food insecurity among certain groups. Households of different sizes and family structures or those with different socioeconomic characteristics might have been more or less likely to benefit from the project. Exhibit III.4 presents impacts within subgroups defined by these characteristics to explore whether the project was effective at reducing food insecurity among any of these groups (see Appendix D.10 for impacts with confidence intervals).

### Exhibit III.4. Impact of the Nevada HHFK project on food insecurity among children, by subgroup

Characteristic	Treatment <sup>a</sup>		Control		Difference	Difference within subgroup: p-value	Difference between subgroups: p-value <sup>b</sup>
	Sample size	FI-C (%)	Sample size	FI-C (%)			
<b>Household composition</b>							0.921
Single adult	572	29.8	342	29.5	0.4	0.550	
Two or more adults	756	32.5	394	31.7	0.8	0.619	
<b>Number of non-HHFK-eligible children in household</b>							0.001
1 or fewer	689	30.0	430	24.0	6.0	0.993	
2 or more	639	33.0	306	39.7	-6.6	0.018	
<b>Number of HHFK-eligible children in household</b>							0.060
1 or fewer	970	30.0	526	31.7	-1.7	0.228	
2 or more	358	34.5	210	28.0	6.5	0.962	
<b>Presence of a teenager in the household</b>							0.046
Household has no teens	910	29.0	525	25.7	3.2	0.926	
Household has 1 or more teens	418	37.3	211	43.0	-5.7	0.073	
<b>Respondent race/ethnicity</b>							0.512
Hispanic (all races)	792	34.4	443	33.2	1.2	0.679	
Non-Hispanic black	307	29.3	185	26.8	2.5	0.748	
Non-Hispanic white or non-Hispanic other race	229	23.9	108	28.3	-4.4	0.182	
<b>Respondent level of education</b>							0.905
Less than high school	633	37.0	331	37.3	-0.3	0.464	
High school, GED	372	26.7	238	26.1	0.7	0.579	
Some college or higher	303	26.5	161	24.7	1.8	0.680	
<b>Baseline child food security status</b>							0.318
Secure (FS-C)	846	16.2	462	17.2	-1.0	0.327	
Insecure (FI-C)	482	60.0	274	56.4	3.6	0.831	

Characteristic	Treatment <sup>a</sup>		Control		Difference	Difference within subgroup: p-value	Difference between subgroups: p-value <sup>b</sup>
	Sample size	FI-C (%)	Sample size	FI-C (%)			
<b>WIC participation</b>							0.899
Participates in WIC	849	30.0	465	29.6	0.4	0.564	
Does not participate in WIC	479	33.1	271	32.2	0.9	0.611	
<b>Expected level of HHFK benefit</b>							0.918
Expected benefits are less than 10% of monthly total	547	32.3	294	31.9	0.4	0.552	
Expected benefits are 10% or more	678	29.3	393	29.3	0.0 <sup>^</sup>	0.499	
Sample size	1,328		736				

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 follow-up survey. Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research.

Note: Food security was measured using the 30-day survey module. The p-value associated with each impact estimate is from a one-tailed test of statistical significance, whereas the p-value associated with the test of differences in impacts across subgroups is from a two-tailed test. Regressions controlled for baseline measures of child and adult food insecurity and very low food security; household income and employment status; the survey respondent's age, race/ethnicity, health status, and primary language spoken; the number of children in the household and presence of a teenager; and household participation in WIC, free or reduced-price breakfast and lunch; the amount of SNAP benefits received at baseline; and the duration of SNAP participation in the year before the baseline survey. Regressions also controlled for the month of survey response.

<sup>a</sup>Includes total households in T1 and T2 groups.

<sup>b</sup>p-value is from a chi-square test of significant difference between subgroup impacts.

<sup>^</sup>Greater than zero but less than 0.05.

FI-C = food insecurity among children; FS-C = food security among children; GED = general educational development; HHFK = Healthy, Hunger Free Kids; SNAP = Supplemental Nutrition Assistance Program; T1 = treatment group 1; T2 = treatment group 2; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

The estimated impacts of the HHFK project differed significantly between households with a teen and those without a teen, based on an omnibus test of the significance of differences between subgroups in estimated project impacts. Among households with at least one teenager, treatment households had a rate of child food insecurity 5.7 percentage points lower than control households, an estimate that was perhaps meaningful although not statistically significant ( $p = 0.073$ ). Among households with no teens, the estimated impact on childhood food insecurity was 3.2 percentage points higher in the treatment than the control group. Research indicates that the nutritional needs of teens are substantially higher than younger children (Institute of Medicine 2002). Food security research also indicates that younger children are shielded from food insecurity before teens and adults (Coleman-Jensen et al. 2013; Nord 2009). It is possible that households with higher overall nutritional needs gained greater benefits from the extra SNAP benefits provided by the project.

Impact estimates differed in a more pronounced way between households with two or more children too old to qualify for extra SNAP benefits and households with fewer than two. The pattern in impacts is similar to the one observed between subgroups based on the presence of a teen. In households with at least two older children, the HHFK project led to a statistically significant reduction of 6.6 percentage points in food insecurity among children. In households

with no more than one older child, the rate of food insecurity among children was higher in the treatment than in the control group. Both the results for the subgroup indicating the presence of a teenager in the household and that indicating the presence of two or more children too old to qualify for HHFK benefits suggest that the project led to a reduction in child food insecurity among households with older children, but not among households without older children. The presence of older children in the household is another indicator of possible increased nutritional needs in the households because older children did not trigger an increase in HHFK benefits as part of the project.

Estimated impacts did not differ across subgroups of households defined based on several other household socioeconomic characteristics. Characteristics used to define subgroups included the presence of a single adult versus two or more; the number of children eligible for project benefits; food insecurity among children at baseline; the expected level of extra SNAP benefits, measured as a share of the total expected SNAP benefit during the demonstration; household participation in WIC; and the survey respondent's race and ethnicity, and level of education.

### **3. What is the relationship between changes in household circumstances and impacts on food insecurity?**

The impacts of the Nevada HHFK project on food insecurity could be related to changes in circumstances, such as shifts in household size or employment status, or being evicted from one's home. To provide contextual information about factors that may influence impacts on food insecurity, this section describes the prevalence of changes in these circumstances that respondents reported in the previous six months. Exhibit III.5 presents the share of households that experienced each of these types of changes within the treatment and control groups. Appendix Exhibits A.5 and A.6 present household characteristics and demographics at follow-up.

Changes in employment were the most common type of change households experienced during the six months before the measurement of food insecurity, followed by changes in household size. About a quarter of households reported some type of employment change (25% in the treatment group and 27% in the control group). The most common types of employment changes were losing a job, getting a new job, and having a decrease in pay or hours (Exhibit III.5). For example, household employment increased in both the treatment and control groups, from a sample-wide rate of 57% at baseline to 65% at follow-up (Exhibit A.7). About 18% of treatment and control households experienced a change in household size; the most common type of change was the addition of a new child to the household due to birth, adoption, or a new stepchild or foster child. The next most common types of changes were the arrival or departure of a relative, boarder, child, or adult. Eviction was the least common change in circumstances; it was experienced by about 4% of households.

**Exhibit III.5. Reported household changes in the six months before follow-up**

	Treatment <sup>a</sup>	Control	Difference	p-value
<b>Percentage of households with a change in number of people living in household (HH size)</b>	17.5	17.9	-0.4	0.848
<b>Reasons for change in HH size (%)<sup>b</sup></b>				
Percentage of households with:				
Birth, new step, foster, or adopted child	42.7	49.1	-6.4	0.259
Marriage, romantic partner	2.9	5.4	-2.4	0.278
Family, boarder, other child, other adult moved in	24.4	22.9	1.5	0.754
Family, boarder, other child, other adult moved out	25.5	21.2	4.3	0.379
Separation or divorce	4.8	0.9	4.0	0.063
Death of HH member	3.0	1.5	1.4	0.385
HH member incarcerated	1.2	0.7	0.6	0.601
Sample member moved	3.9	4.2	-0.3	0.902
Other <sup>c</sup>	0.5	0.9	-0.4	0.691
<b>Percentage of households with a change in employment or change in pay</b>	25.0	26.8	-1.8	0.388
Percentage of households that: <sup>d</sup>				
Obtained a job	20.2	25.9	-5.7	0.150
Changed jobs	14.8	13.2	1.7	0.610
Increase in pay or hours	16.0	13.9	2.2	0.529
Lost a job	29.6	24.2	5.4	0.203
Quit a job	4.4	6.5	-2.1	0.324
Decrease in pay or hours	25.0	23.9	1.1	0.785
Seasonal work	1.9	1.2	0.7	0.533
Temporary leave (maternity, workers' compensation, disability)	3.4	5.2	-1.8	0.330
Other <sup>e</sup>	2.3	3.5	-1.2	0.453
<b>Percentage of households reporting an eviction</b>	3.5	4.2	-0.7	0.470
<b>Of three categories of changes, number reported in the past six months<sup>f</sup> (%)</b>				0.102
None	61.7	61.4	0.3	
One	30.8	29.5	1.3	
Two	7.2	7.9	-0.7	
Three	0.3	1.2	-0.9	
Sample size	1,321	734		

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 follow-up survey. Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research.

Note: F-tests of independence were conducted to test for significant differences in proportions between the treatment and the control groups for each characteristic.

<sup>a</sup>Total households in T1 and T2 groups.

<sup>b</sup>Calculated among households that reported a change. Multiple reasons could be reported.

<sup>c</sup>Other reasons include child went to college; different custody arrangements; evicted; and personal issues.

<sup>d</sup>Calculated among households that reported a change. Multiple reasons could be reported.

<sup>e</sup>Other reasons include change in job location; change in job shift; and retirement.

<sup>f</sup>Includes changes in household size; changes in employment or pay; and eviction.

HH = household; HHFK = Healthy, Hunger Free Kids; T1 = treatment group 1; T2 = treatment group 2.

Overall, patterns of household changes during the six months before the follow-up survey interview were similar in treatment households compared with control households. There were no statistically significant differences between treatment and control households in the prevalence of any of the three types of events described above (Exhibit III.5). Similarly, there was not a statistically significant difference between treatment and control households in how many of these three types of changes households reported experiencing.

#### **4. What is the relationship between availability of supports and impacts on child food insecurity?**

This section describes households' reported levels of support available from family, friends, and other community members. The availability of such sources of support might influence food insecurity or affect the potential for the project to reduce food insecurity among children. For example, households with fewer sources of support might be expected to experience higher levels of food insecurity (Chilton et al. 2013; Edin et al. 2013). They might also benefit more from the extra SNAP benefits offered in this project than households that can draw more help from family or friends. Alternatively, they may be so far from the threshold of food security that the extra SNAP benefits are generally not sufficient to measurably reduce food insecurity among children in these households.

Respondents in both the treatment and control groups reported they could get the highest levels of help from family and lower levels from friends and others in the community. Approximately one-third of households could get most or all of the help they needed from family members, compared with 15% or 16% among friends and a similar share among others in the community (Exhibit III.6). Support could be provided either financially or through in-kind help; approximately 20% of respondents reported receiving financial support from family and friends (Appendix Exhibit A.5).

To explore the relationship between available help and food security, Exhibit III.7 reports the level of food insecurity among children in treatment and control households that indicated higher and lower levels of support available. The lower prevalence of food insecurity among households with more access to help from family suggests that the availability of this support may facilitate food security, a finding consistent with existing research (Chilton et al. 2013; Edin et al. 2013; Hoisington et al. 2002). However, household responses do not indicate that the level of access to help from family, friends, and community members influenced the effectiveness of the HHFK project. At each level of help from family and friends, the project is estimated to have had no impact on the rate of food insecurity among children. As shown in the lower panels of Exhibit III.7, the relationship between prevalence of food insecurity and help available from friends or others is not as strong as the relationship to support from family members.

### Exhibit III.6. Reported access to help from family, friends, and the local community

Percentage of households reporting they could get help, if needed for a problem, from:	Treatment <sup>a</sup>	Control	Difference	p-value
<b>Family living nearby</b>				0.371
All of the help needed	13.5	13.0	0.6	
Most of the help needed	19.0	21.7	-2.8	
Very little of the help needed	35.8	32.7	3.1	
No help	31.7	32.6	-0.9	
<b>Friends</b>				0.934
All of the help needed	4.2	4.8	-0.6	
Most of the help needed	11.0	11.1	-0.1	
Very little of the help needed	37.4	37.4	0.0	
No help	47.5	46.8	0.7	
<b>Other people in the community</b>				0.054
All of the help needed	4.1	4.6	-0.5	
Most of the help needed	10.5	13.3	-2.7	
Very little of the help needed	33.0	27.6	5.4	
No help	52.4	54.6	-2.2	
Sample size	1,318	734		

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 follow-up survey. Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research.

Note: F-tests of independence were conducted to test for significant differences in proportions between the treatment and control groups for each characteristic.

<sup>a</sup>Total households in T1 and T2 groups.

HHFK = Healthy, Hunger Free Kids; T1 = treatment group 1; T2 = treatment group 2.

### Exhibit III.7. Rate of child food insecurity, by study group and level of help available from family, friends, and the local community

	FI-C, Treatment <sup>a</sup> (%)	FI-C, Control (%)	Difference
<b>Level of help available from family</b>			
Most or all help needed	23.8	23.9	-0.2
Very little or none of help needed	35.3	34.4	0.9
<b>Level of help available from friends</b>			
Most or all help needed	28.6	26.4	2.2
Very little or none of help needed	32.1	31.6	0.5
<b>Level of help available from others</b>			
Most or all help needed	31.0	29.6	1.4
Very little or none of help needed	31.6	30.6	1.0
Sample size	1,311	731	

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 follow-up survey. Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research.

Note: Food security was measured using the 30-day survey module.

<sup>a</sup>Total households in T1 and T2 groups.

FI-C = food insecurity among children; HHFK = Healthy, Hunger Free Kids; T1 = treatment group 1; T2 = treatment group 2.

## **D. Impacts on program participation, food spending, and nutrition-related behavior**

The Nevada HHFK project was designed to improve food security by boosting food purchases among treatment households, raising participation in nutrition programs among eligible households, and encouraging behaviors that allow families to stretch their food dollars. The follow-up survey measured program participation, food spending, and nutrition-related behaviors to assess the extent to which they differed between treatment and control households. This section describes findings on whether the project caused the changes intended to lead to reductions in food insecurity.<sup>34</sup> Assessing whether the project influenced these intermediate outcomes can help explain more precisely why the project did not significantly reduce the ultimate outcome of food insecurity as intended, as shown in the previous section.

### **1. Did the project raise participation in nutrition assistance programs?**

The project could have raised participation in nutrition assistance programs in two ways. First, the project's second treatment arm provided case management services designed to inform households about nutrition assistance programs available to them and encourage enrollment. It is also possible that the project's extra SNAP benefits would provide an extra incentive for treatment households to recertify eligibility for SNAP, causing an increase in SNAP participation as fewer households cycled off. If the project succeeded in raising participation in nutrition programs, then households would gain resources that could reduce the likelihood that children would experience food insecurity. Exhibit III.8 presents households' reported participation rates over the 30 days before the follow-up survey. Appendix Exhibit D.6 presents program participation among each of the treatment arms separately; participation rates in each treatment arm were generally very similar.

Treatment households reported participating in SNAP and WIC at slightly higher rates than control group households, though differences were small and not significant ( $p = 0.064$ ,  $p = 0.052$ , respectively, Exhibit III.8). Specifically, 82% of treatment households reported participating in SNAP, compared with 79% of control households.<sup>35</sup> The reported prevalence of WIC participation was also slightly higher in treatment than in control households (44% versus 40%), although again the difference was not significant ( $p = 0.052$ ). Considering the two programs together, however, treatment households were 3.6 percentage points more likely to report participating in at least one of the two programs—a difference that was statistically significant.

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<sup>34</sup> This section reports comparisons of these characteristics among households in the overall treatment group and those in the control group. Appendix D compares these measures among households in the first treatment arm (extra SNAP benefits only) with those in the second treatment arm (extra SNAP benefits plus the offer of case management and nutrition education services).

<sup>35</sup> This small difference in reported participation rates was not reflected in a related measure of participation throughout the project duration based on SNAP administrative data. As discussed in Section III.B, that measure indicated that a slightly higher percentage of control households had participated in SNAP than treatment households, though the difference was not statistically significant.

### Exhibit III.8. Reported participation in household and child nutrition programs at follow-up

	Treatment <sup>a</sup>	Control	Difference (SE)	p-value
<b>Household nutrition benefit program<sup>b</sup> (%)</b>				
Reported currently receiving SNAP	81.8	78.5	3.4	0.064
Reported receiving WIC	44.5	40.4	4.0	0.052
Reported none of the above nutrition benefits	10.3	13.9	-3.6	0.022
<b>Children's nutrition program<sup>b</sup> (%)</b>				
Reported receiving SBP <sup>c</sup>	68.0	69.5	-1.4	0.412
Reported receiving NSLP <sup>c</sup>	72.6	73.8	-1.3	0.428
Reported receiving free supper meals at an after school program held in their school building	11.5	11.3	0.2	0.908
Reported receiving backpack program	15.6	14.4	1.3	0.415
Reported receiving food at any other after school program where meals or snacks are served	13.6	14.6	-1.0	0.525
Reported receiving food at another center, e.g., Head Start or daycare	15.6	16.9	-1.3	0.430
Reported none of the child nutrition benefits listed above <sup>d</sup>	18.5	17.3	1.2	0.406
<b>Mean number of 8 listed programs that household reported participating in (SE)</b>	3.3	3.2	0.0 (0.06) <sup>e</sup>	0.654
<b>Reported receiving food from food pantry, emergency kitchen, or community program (%)</b>	13.3	13.4	-0.1	0.951
Sample size	1,335	739		

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 follow-up survey. Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research.

Note: Program participation questions generally reflected current participation at the time of the interview, defined as "during the last 30 days." Reported p-values are from two-tailed tests of statistical significance. Regressions controlled for baseline measures of household income and employment status; the survey respondent's age, race/ethnicity, health status, and primary language spoken; the number of children in the household and presence of a teenager; the amount of SNAP benefits received at baseline; the duration of SNAP participation in the year before the baseline survey; and household participation in the program being analyzed at follow-up. Regressions also controlled for a baseline measure of the outcome being analyzed and the month of survey response.

<sup>a</sup>Total households in T1 and T2 groups.

<sup>b</sup>Calculated for all households as a descriptive variable and not constrained only to those households eligible for a specific program listed.

<sup>c</sup>The numerator in this proportion includes free or reduced-price school breakfast or school lunch, and excludes paid school meals.

<sup>d</sup>Calculation excludes free meals or snacks at summer food programs due to the timing of data collection.

<sup>e</sup>Greater than zero but less than 0.05.

HH = household; HHFK = Healthy, Hunger Free Kids; NSLP = National School Lunch Program; SBP = School Breakfast Program; SE = standard error; SNAP = Supplemental Nutrition Assistance Program; T1 = treatment group 1; T2 = treatment group 2; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

Treatment and control households participated in child nutrition assistance programs at similar rates. In both groups, about 80% of households reported participating in at least one of six child nutrition programs identified in the follow-up survey. Children participated most commonly in NSLP (roughly 73%) and the School Breakfast Program (SBP) (roughly 69%), and

approximately 10% to 15% received food from each of four other sources: free suppers at their school; food backpack programs; afterschool snack programs; and other centers, such as daycare. On average, households in each group participated in about three of the seven child nutrition programs examined. Finally, similar percentages of each group (about 13%) received help from a food pantry, emergency food program, or other community program that provided food or meals.

## **2. What was the project's impact on out-of-pocket food spending?**

The extra SNAP benefits received by treatment households increased their overall food budget. Household members then might have chosen to maintain the same level of out-of-pocket spending on food, which would have raised their overall food spending by the amount of the extra benefits. Alternatively, they might have reduced their out-of-pocket spending on food and used some of their additional purchasing power to address other financial needs. In this case, their overall food spending would have increased by less than the extra benefits. This decision may have influenced how much the increase in SNAP funds led to an increase in food available in the household and a consequent reduction in food insecurity.<sup>36</sup> Exhibit III.9 presents food spending levels among treatment and control households.

Respondents in treatment households reported lower out-of-pocket spending on food than those in control households. The median treatment household spent \$21 less per month out of pocket than control households (Exhibit III.9). Considered as a share of the extra SNAP benefit treatment households received, this difference represents slightly less than half of the \$44 in additional SNAP funds received by the average treatment household (Exhibit III.2). However, the treatment-control difference in total SNAP benefits received during the month of the follow-up survey was \$37, so the \$21 reduction in out-of-pocket food spending among treatment households represents over half of this difference.<sup>37</sup> The median treatment household spent \$5 less per person out of pocket on food than the median control household.

Lower out-of-pocket spending among treatment households was reflected in lower spending at restaurants, supermarkets, and other food stores. The median treatment household spent \$13 less per month at food stores than did control households, translating to \$3 less per person. The median out-of-pocket spending at restaurants among treatment households (\$47) was also \$3 lower than among control households, although this difference was not significant ( $p = 0.095$ ).

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<sup>36</sup> If the case management services provided in the second treatment arm caused any households to gain benefits from other nutritional assistance programs, then treatment households in that group could have reduced their out-of-pocket food spending while still devoting all of the extra SNAP benefit to food purchases. Findings in Exhibit III.8 suggest that increased program enrollment was not widespread, but this possibility warrants caution when interpreting impacts on out-of-pocket spending.

<sup>37</sup> The \$37 difference in total SNAP benefits received and the \$44 in additional HHFK SNAP funds received by treatment households were measured using SNAP EBT transaction records; the \$21 reduction in out-of-pocket spending was measured using the follow-up survey.

**Exhibit III.9. Reported monthly food expenditures at follow-up**

	Treatment <sup>a</sup> (\$)	Control (\$)	Difference (SE) (\$)	p-value
<b>Total out-of-pocket food expenditures<sup>b</sup></b>				
Household mean	226	248	-21 (9)	0.021
Household median	179	200	-21 (6)	<.001
Per-person mean	54	57	-3 (2)	0.150
Per-person median	38	43	-5 (1)	<.001
<b>Food expenditures at supermarkets, grocery stores, and other types of stores<sup>c</sup></b>				
Household mean	172	185	-13 (8)	0.110
Household median	130	143	-13 (5)	0.007
Per-person mean	41	42	-1 (2)	0.439
Per-person median	30	33	-3 (1)	0.021
<b>Expenditures at restaurants<sup>d</sup></b>				
Household mean	55	63	-8 (3)	0.010
Household median	37	40	-3 (2)	0.132
Per-person mean	13	15	-2 (1)	0.038
Per-person median	9	10	-1 (0) <sup>e</sup>	0.050
Sample size	1,316	732		

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 follow-up survey. Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research.

Note: Questions were asked about the last 30 days. Regressions controlled for baseline measures of child and adult food insecurity and very low food security; household income and employment status; the survey respondent's age, race/ethnicity, health status, and primary language spoken; the number of children in the household and presence of a teenager; and household participation in WIC, free or reduced-price breakfast and lunch; the amount of SNAP benefits received at baseline; and the duration of SNAP participation in the year before the baseline survey. Regressions also controlled for a baseline measure of the outcome being analyzed and the month of survey response. Reported p-values are obtained from two-tailed t-tests of statistically significant differences.

<sup>a</sup>Total households in T1 and T2 groups.

<sup>b</sup>Sum total of reported out-of-pocket food expenditures at stores and restaurants in the last 30 days; excludes purchases made with SNAP and WIC.

<sup>c</sup>Out-of-pocket expenditures on food at supermarkets, grocery stores, and other stores; excludes purchases made with SNAP and WIC.

<sup>d</sup>Includes carryout, drive through, and all types of restaurants.

<sup>e</sup>Greater than zero but less than 0.5.

HHFK = Healthy, Hunger Free Kids; SE = standard error; SNAP = Supplemental Nutrition Assistance Program; T1 = treatment group 1; T2 = treatment group 2; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

The significantly lower level of out-of-pocket food spending among treatment households suggests that households reallocated part of their out-of-pocket food budget in response to the extra SNAP benefits provided by the project. In this case, less than 100% of the extra SNAP benefits translated to increases in food available to household members.<sup>38</sup> This finding may be one reason why the extra SNAP benefits did not result in a significant reduction in the prevalence of food insecurity among children.

### **3. Did the project have an impact on shopping and food preparation?**

The Nevada HHFK project was designed to provide households in one treatment arm with access to nutrition education. As described in Chapter II, these classes focused on shopping strategies to stretch a tight budget and preparing healthy meals for children—skills that could promote food security by helping families maximize dietary quality within their budgets. In addition, treatment households' shopping and food preparation behaviors could have been affected by the extra SNAP benefits they received. For example, their large potential food budget could have influenced where they shopped, how often they shopped, or what sorts of foods they purchased and prepared. The follow-up survey asked respondents about their shopping and meal preparation behavior to assess whether the project had any impacts on these behaviors.

Patterns of shopping and nutrition-related behavior among treatment households were very similar to those in control households. None of the measures of shopping, meal preparation, or nutrition education attendance indicated significant differences in behavior between treatment and control households (Exhibit III.10). Comparisons between the two treatment arms, presented in Appendix Exhibit D.8, also did not indicate substantial differences in any of these behaviors. These results align with the finding that among households in the treatment arm that included nutrition education, only about 3% attended any of the classes (Chapter II, Appendix Exhibit C.5).

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<sup>38</sup> This finding is consistent with previous research on how households use SNAP benefits. According to a 2004 literature review (Fox et al. 2004), previous studies found that when households received an extra dollar in food stamp benefits, they increased overall food spending by much less than a dollar, with most estimates ranging from \$0.20 to \$0.40. More recent studies found that households increased their food spending by larger amounts—but still much less than \$1.00—when they received an additional dollar of SNAP benefits (Gundersen and Ziliak 2014; Mabli et al. 2013).

### Exhibit III.10. Food shopping and nutrition behaviors among treatment and control households at follow-up

	Treatment <sup>a</sup>	Control	Difference (SE)	p-value
<b>Percentage of respondents that reported shopping with a grocery list</b>				0.724
Always	27.9	29.4	-1.5	
Most of the time	26.3	23.6	2.7	
Sometimes	23.2	23.5	-0.3	
Rarely	11.6	11.5	0.1	
Never	11.1	12.1	-1.0	
<b>Distribution of the number of nights a week family typically sits down together to have dinner as a family (%)</b>				0.990
Every night	59.5	59.4	0.1	
5 or 6 nights	18.6	18.6	0.0 <sup>^</sup>	
3 or 4 nights	15.3	15.6	-0.4	
1 or 2 nights	5.3	5.4	0.0 <sup>^</sup>	
Never	1.3	1.0	0.3	
<b>Mean number of times dinner prepared at home in last 7 days</b>	5.7	5.7	0.1 (0.08)	0.532
<b>Percentage of respondents that reported attending a nutrition education class, lecture, event, or demonstration in past 12 months</b>	29.3	26.7	2.5	0.236
<b>Mean number of nutrition education classes, lectures, events, demonstrations attended in past 12 months among participants<sup>b</sup></b>	2.8	2.9	-0.1 (0.30)	0.854
Sample size	1,334	739		

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 follow-up survey. Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research.

Note: For continuous measures, reported p-values are obtained from two-tailed t-tests of statistically significant differences; for binary and categorical measures, p-values are from F-tests of independence.

<sup>a</sup>Includes total households in T1 and T2 groups.

<sup>b</sup>Calculated among households that reported attending at least one nutrition education event in the past 12 months.

<sup>^</sup>Greater than zero but less than 0.05.

HHFK = Healthy, Hunger Free Kids; SE = standard error; T1 = treatment group 1; T2 = treatment group 2.

## IV. STUDY FINDINGS AND CONCLUSIONS

This chapter summarizes and discusses study findings from the evaluation of the Nevada HHFK project, including an assessment of project implementation (Chapter II) and impacts on food insecurity among children (Chapter III). It first briefly describes the project’s goals and design, and then summarizes and discusses the findings from the implementation and impact analyses. The chapter concludes with a discussion of study conclusions and limitations.

### A. The Nevada HHFK project

Adequate and consistent access to healthy food is important to children’s nutrition, psychosocial development, and health (Coleman-Jensen et al. 2013; National Research Council and Institute of Medicine 2013). However, a substantial number of American children fail to get such adequate and consistent access, based on the best available measure—food security. In some areas, rates of food insecurity are particularly high. In the period just before the Nevada HHFK project (2011–2013), for example, the estimated rate of household food insecurity in Nevada (among all income groups) was 16.2%—higher than the national rate of 14.6% (Coleman-Jensen et al. 2017a). In response to this need, the Nevada WIC and SNAP agencies received a 2010 Child Nutrition reauthorization grant to implement a project designed to address food insecurity among children by providing two key sets of benefits to eligible households. These benefits included an extra \$40 in monthly SNAP benefits for each child under 5 in the household and case management and nutrition education services for a subset of those households. The households targeted for these benefits were those thought to be at greatest risk of food insecurity among children—those receiving SNAP, with a child under 5, with incomes under 75% of the FPL, and living in one of 12 neighboring zip codes in the Las Vegas area with particularly high levels of food insecurity.

#### How did the study work?

The study used *an experimental design*—the most rigorous way of estimating demonstration effects. Households eligible for benefits were initially randomly assigned to one of three groups—a control group that received only the usual benefits from SNAP and other programs, one treatment arm (T1) that received the extra \$40 in monthly SNAP benefits per eligible child, and a second treatment arm (T2) that received these extra SNAP benefits plus access to case management and nutrition education services. These groups were followed through the project’s implementation period, and their outcomes were measured about 12 months later based on survey and administrative data. Because the treatment and control groups were similar at the beginning of the implementation period due to random assignment, later differences in food insecurity among children between the treatment and control groups can be attributed to the impact of the project, as can other outcomes.

The evaluation of the Nevada HHFK project examined the characteristics of households receiving these benefits and assessed the project’s implementation. It also examined what impact the benefits from the project—primarily the extra SNAP benefits—had on the low-income households that participated in the study.

## **B. Successes and challenges of the Nevada HHFK project implementation**

Households generally received and spent the extra SNAP benefits they were issued through the project. The project's major success was in seamlessly and efficiently delivering this extra SNAP benefit; its choice of how to deliver these benefits was instrumental to this success. Instead of modifying the existing SNAP eligibility system, project staff continued using it to deliver basic SNAP benefits but developed a new database to provide the extra SNAP benefits to treatment households. This database used information from the existing SNAP eligibility system and the project on the amount of extra SNAP benefits households should receive, and added the extra benefits to these households' existing EBT accounts. This approach minimized costs and simplified operations for the demonstration project.

Nevada's HHFK project was also successful in providing extra SNAP benefits because the benefits were distributed to households transparently and automatically. The basic and extra SNAP benefits appeared on households' existing EBT cards as a single combined benefit. Participants did not need to take any action to receive the benefits. Finally, any benefits a household failed to use in a given month automatically carried over to the next month. To households, it was a seamless process that could not have been simpler. Households used the HHFK benefit to purchase the same foods at the same places with the same EBT card as they did with regular SNAP benefits.

Indeed, the process was so seamless that households could have spent the extra SNAP benefits yet remain unaware of the additional resources they had to buy food. This fact could have been a drawback to households lacking a basic awareness of the project and wanting to know more. However, given that it was a 12-month intervention, it seems likely households eventually became aware of the extra SNAP benefits. Even if households did lack this awareness, it did not deter them from spending the extra benefits, as treatment households spent nearly all of the extra benefits added to their EBT cards by the end of the implementation period.

In contrast to their use of the extra SNAP benefits, a small share of T2 households took advantage of the case management and nutrition education services. The case management services were designed to help households enroll in programs, particularly WIC, for which they were eligible and interested. However, project staff found it difficult to reach the T2 households, and many of these households either did not need or were not interested in the case management or nutrition education services offered. Only about a quarter of households had someone who spoke with a case manager; among them, only 3% signed up for WIC as a result. Similarly, few households (3% of all T2 households) participated in a nutrition education class.

A couple of factors contributed to the low participation rates in case management and nutrition education services. The project's key focus was providing extra SNAP benefits to households, with less emphasis on case management and nutrition education, so a limited number of case managers were trying to reach nearly 2,000 households. Also, the target population—households living below 75% of the FPL and with young children—was hard to reach by telephone, which complicated the staff's charge. In addition, a sizeable share primarily spoke Spanish and may have been hard to reach because they were fearful of government-run services, fears which were reportedly heightened due to the political climate during the implementation period.

Another challenge with case management and nutrition education services was that they were offered to all T2 households but may have been appropriate only for a subset. For example, households already participating in or ineligible for WIC or other assistance programs did not need the kinds of help offered by case managers. Other households may not have had the time, transportation, or energy to attend nutrition classes even if they wanted to do so. A strategy that first aimed to identify households most interested in and able to take advantage of these services, and then targeting outreach toward them, may have been more successful.

### **Costs of HHFK**

Total project costs<sup>a</sup> = \$2,334,706

#### **Start-up**

6.8% of total (\$158,700)

#### **Implementation period**

Extra SNAP benefits to households = 80.4% of total (\$1,877,568 or \$491 per household over 12 months)

Administration, case management and nutrition education = 12.8% of total (\$298,438)

<sup>a</sup>Covers the start-up and implementation periods.

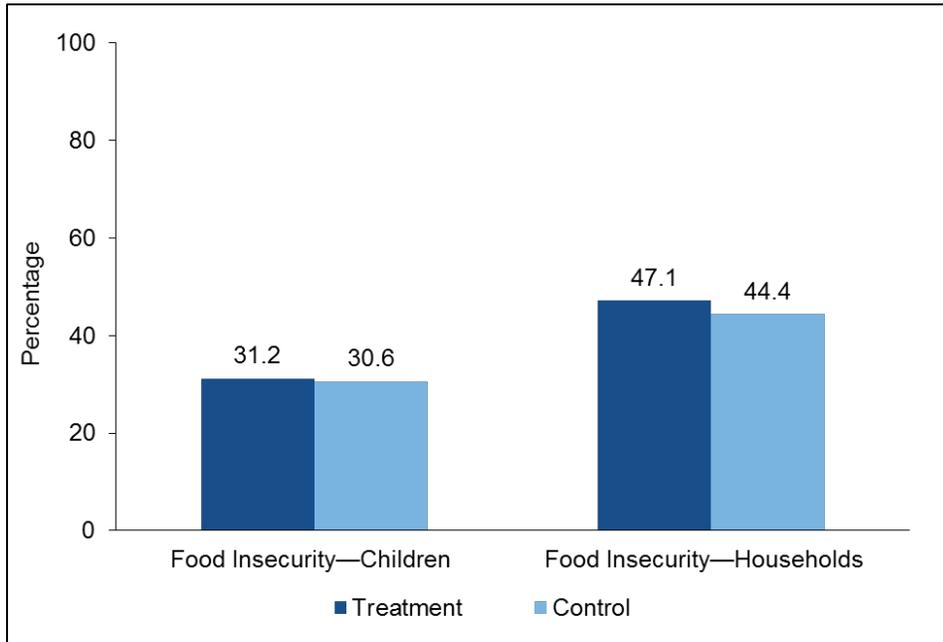
## **C. Summary of impact results**

The Nevada HHFK project benefits were delivered to a highly disadvantaged set of households, consistent with the project's intended target population of households with incomes below 75% of the FPL. The typical household in the evaluation sample had total monthly income at baseline of only about \$1,000, and only 57% of these households had any employed household members. As intended, all of these households were on SNAP and had a child under 5 at baseline. About a quarter had more than one young child in the household and so were eligible to receive a total of \$80 or more per month in extra SNAP benefits, with the remaining three-quarters eligible for an additional \$40 per month. Finally, more than a third (35%) of households experienced food insecurity among children in the 30 days before their baseline interview, well above the 2016 national estimated rate of 24% for a 12-month period among households with children and incomes below poverty level (Coleman-Jensen et al. 2017a).<sup>39</sup>

The key objective of the Nevada HHFK project was to reduce the rate of food insecurity among children. The evidence suggests that the project did not achieve this objective. In both the treatment and control groups, just over 30% of households were experiencing food insecurity among children at the time of the follow-up survey (see Exhibit IV.1). This rate of food insecurity among children was lower than among evaluation households at the time of the baseline survey approximately 12 months earlier. However, the decline in food insecurity among children experienced by treatment households—from 35% to 32%—was matched by a similar decline among control households (see Exhibit IV.2). Nor did the project lead to significant reductions in other measures of food insecurity, including very low food security among children, adult food insecurity, or household food insecurity.

<sup>39</sup> This report uses the 30-day measure of food insecurity whereas the national estimate is based on the 12-month measure. National estimates of the 30-day rate of food insecurity are not available for a comparable population of SNAP households with children under five and incomes below 75% of poverty. Nationally, 31% of SNAP households had experienced household food insecurity in the 30 days prior to a 2016 survey (Coleman-Jensen et al. 2017b).

**Exhibit IV.1. Impact of the Nevada HHFK project on food insecurity among children and households**

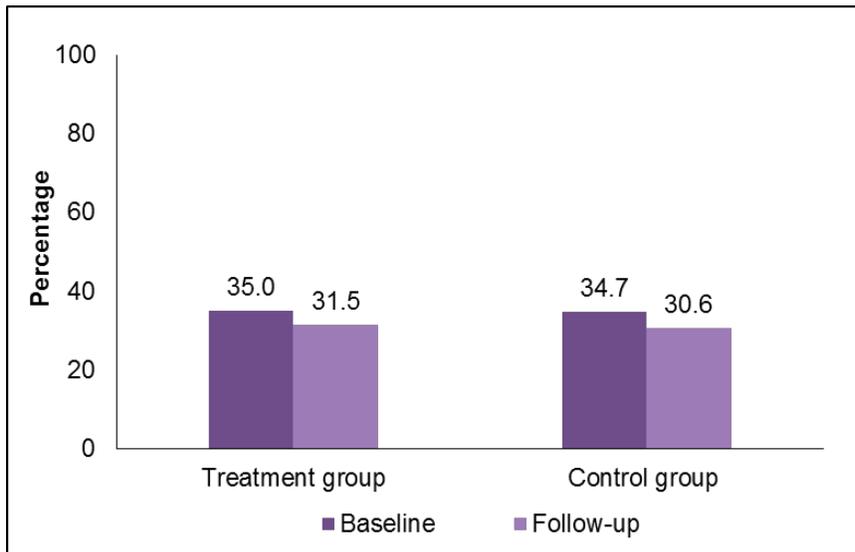


Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 follow-up survey. Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research.

Note: Sample sizes are: treatment group = 1,332, control group = 738. Estimates are regression-adjusted to account for households' baseline characteristics. The differences between treatment and control groups are not statistically significantly different from zero at the 0.05 level, two-tailed test.

HHFK = Healthy, Hunger Free Kids.

### Exhibit IV.2. Changes from baseline to follow-up in rates of food insecurity among children



Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2015-2016 baseline survey and 2017 follow-up survey. Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research. Estimates are not regression-adjusted.

Note: Sample sizes are: treatment group = 1,332, control group = 738. FI-C at baseline and follow-up are estimated within the sample of follow-up respondents. Differences between treatment and control groups are not statistically significant at the 0.05 level, two-tailed test.

FI-C = food insecurity among children; HHFK = Healthy, Hunger Free Kids.

Although the project did not reduce food insecurity among children in the sample overall, it could have done so for subsets of Nevada households, such as those particularly disadvantaged or receiving larger increases in SNAP benefits because they had more children under 5. For most subgroups, the results were similar to the estimates for the overall sample—the project did not reduce food insecurity. Among households that included two or more older children (who were not eligible for extra SNAP benefits), the project led to a decline in food insecurity among children, with a rate of 33% among treatment households and 40% among control households in this subgroup at follow-up. The extra SNAP benefits for this group could have had a greater effect because older children tend to eat more than younger ones, placing a greater strain on the food budgets for households with two or more older children, as suggested by the higher rates of food insecurity among children in this subgroup.<sup>40</sup>

Given that the Nevada HHFK project provided extra SNAP benefits to purchase additional food in households with very low income levels and high rates of food insecurity, a key question is why these benefits did not reduce food insecurity. This finding contrasts with the results of the Summer Electronic Benefits Transfer for Children (SEBTC) study, which found that providing extra resources for food to low-income households with children during the summer months led

<sup>40</sup> In the control group, for example, 40% of households with two or more older children experienced food insecurity among children, compared with 24% of households with one young child (and no older children). It is worth noting that the food insecurity among children measure does not distinguish among children within a given household. In other words, households experiencing food insecurity among children could include one, some, or all children not getting enough food due to limited resources.

to a substantial reduction in FI-C and very low food security among children (VLFS-C) (Collins et al. 2016). Although the basic approach in the SEBTC study of providing extra benefits to low-income households was similar to that of the Nevada HHFK project, some aspects of the SEBTC intervention and the population served differed from the HHFK project in important ways. One key difference that may have contributed to the different results (and is discussed in further detail below) is that monthly benefits to participating households were larger in the SEBTC project than in the Nevada HHFK project.<sup>41</sup>

To better understand the possible effects of the Nevada HHFK project, it is useful to examine the pathway by which the extra SNAP benefits could have led to greater availability of food. The pathway began when extra benefits were given to treatment households. The average treatment household received \$44 in extra SNAP benefits in the month of the follow-up survey. This amount resulted from the proportion of households participating in SNAP that month, the number of eligible children in those households, and the benefits going to participating households for each eligible child (\$40). These extra SNAP benefits were loaded onto treatment households' EBT cards but would not have contributed food to the households if they never used the available benefits. However, in an average month, treatment households in the Nevada HHFK project used 99% of the benefits added to their EBT cards.

#### Pathway from extra SNAP to food in the household

*How much in extra monthly SNAP benefits did a treatment household receive?*

**\$44**

*Did they use all of it or leave any extra SNAP benefits unspent?*

**All (99%)**

*How much did it raise the household's total SNAP spending?*

**\$44 per month**

*How much larger did it make the household's total spending on food (including SNAP and out-of-pocket spending)?*

**\$23 per month**

*About how many additional meals would that \$23 cover?*

**8 for one person  
2 for a family of 4**

Next, the extra SNAP benefits were added to households' regular SNAP benefits. The overall effect of the extra benefits on households' food purchasing power depended on the amount by which the sum of regular and extra SNAP benefits among treatment households was greater than the regular benefits alone among control households. In the evaluation, the median treatment household spent \$44 more in total SNAP benefits than the median control household in

<sup>41</sup>There were other differences between the two interventions. The Nevada HHFK project was conducted in one urban location and targeted households with income below 75% of the FPL and at least one child under age 5. In contrast, SEBTC was conducted in 16 sites deemed to be at risk of VLFS-C and targeted households eligible for free or reduced-price (FRP) school meals. In SEBTC, benefits were delivered through a SNAP or WIC model and in addition to other nutrition programs. Some households participated in SNAP and/or WIC at baseline, and some did not. In the Nevada HHFK project, all households participated in SNAP at baseline, and some may also have participated in WIC.

the survey month—\$466 versus \$422 (Exhibit IV.3). In other words, the extra benefits led to a 10% increase in households' total SNAP spending.

The final step in this pathway involved households' decisions about how to use their additional purchasing power. Although they had to use SNAP benefits to purchase food, they could have reduced their out-of-pocket food spending to offset the additional food they were able to purchase via SNAP. For example, a SNAP household usually spending its normal SNAP benefits of \$400 plus \$50 of its own cash on food would have total food spending of \$450. With the Nevada project's extra SNAP benefits of \$40, this household may have reduced its out-of-pocket spending down to \$30, resulting in total food spending of \$470 ( $= \$400 + \$40 + \$30$ ). Thus, this household's total spending on food would have increased by only \$20 ( $= \$470 - \$450$ )—less than the \$40 increase in SNAP benefits; the \$20 in cash “saved” by reducing out-of-pocket food spending ( $= \$50 - \$30$ ) would have allowed the household to increase its spending on nonfood needs.

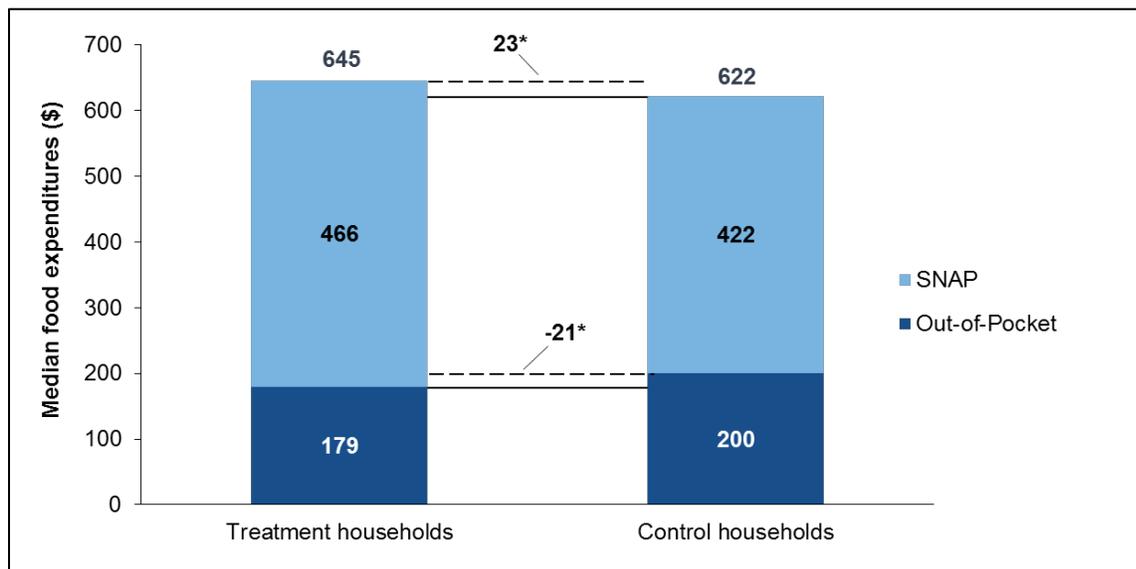
In practice, this reduction in out-of-pocket food spending did occur. Treatment households in the Nevada HHFK project increased their food spending, but by less than the increase in their total SNAP benefits. The project reduced households' out-of-pocket food spending in the survey month from \$200 to \$179 for a treatment household (Exhibit IV.3). Median overall spending on food increased by \$23 (including SNAP and out-of-pocket expenditures). The result was that treatment households spent a total of \$645 on food, when combining SNAP and out-of-pocket spending, compared with \$622 among control households.<sup>42, 43</sup> In other words, out of the extra \$44 in purchasing power that resulted from the project benefit, households used slightly more than half on food; the balance allowed them to increase their out-of-pocket spending on nonfood items. The \$23 in additional food spending translated to about \$6 each month per household member (for a family of four), or covered about eight meals for a food-secure person over the course of a month (Feeding America 2017).

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<sup>42</sup> The total spending amounts cited here and shown in Exhibit IV.3 reflect the sum of median SNAP spending plus median out-of-pocket spending. See Exhibit III.2 for the median of a combined measure of SNAP and out-of-pocket spending. For each group (treatment and control), the median of the combined measure is about \$10 larger than the sum of median SNAP spending plus median out-of-pocket spending, although the treatment-control difference of \$23 is the same.

<sup>43</sup> The Thrifty Food Plan monthly food cost for a family of 4 that included two school-age children in March 2017 (the midpoint of the follow-up survey period) was \$638.50 (Center for Nutrition Policy and Promotion 2017). The average household in the study sample was 4.7 members rather than 4; this number implies a monthly household food cost of approximately \$750, suggesting that the average household in each study group spent less than the Thrifty Food Plan amount.

### Exhibit IV.3. Median out-of-pocket and SNAP-based household food expenditures, Nevada HHFK project treatment and control groups



Source: Nevada SNAP administrative data, 2016–2017 and EDECH 2017 follow-up survey data. Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research.

Notes: Sample sizes are as follows: treatment group = 1,335; control group = 739. Estimates are regression adjusted to account for households' baseline characteristics. The total spending amount at the top of each bar reflects the sum of median SNAP spending plus median out-of-pocket spending. See Exhibit III.2 for the median of a combined measure of SNAP and out-of-pocket spending. For each group (treatment and control), the median of the combined measure is about \$10 larger than the sum of median SNAP spending plus median out-of-pocket spending, although the treatment-control difference of \$23 is the same.

\*Treatment-control difference is statistically significant at the 0.05 level, two-tailed test.

HHFK = Healthy, Hunger Free Kids; SNAP = Supplemental Nutrition Assistance Program.

Thus, one possible reason why the Nevada HHFK project did not reduce FI-C in households that received an extra \$40 per child under age 5 each month is that these benefits did not lead to a large amount of additional spending on food for the household. By contrast, the SEBTC intervention had a more substantial effect on food spending and food insecurity. For example, SEBTC treatment households spent an average of \$53 per month more on food than control households (Collins et al. 2016), an effect about twice as large as that of the Nevada HHFK project. This large difference occurred primarily because the SEBTC intervention provided a higher level of monthly benefits to treatment households. Treatment households across the 16 sites in the SEBTC study typically received more than \$100 per month in SEBTC benefits (\$60 for each school-age child eligible for free or reduced-price [FRP] meals) and used an average of \$92 per month—much larger than the \$44 received and used by the average Nevada HHFK project household. This increase, in turn, led to large reductions in food insecurity among households receiving SEBTC benefits—statistically significant reductions of 8.3 percentage points in FI-C and 3.0 percentage points in VLFS-C.

However, a secondary analysis in the SEBTC study examined the effects of more modest benefits, which were more similar to that of the Nevada HHFK project. This SEBTC analysis experimentally compared giving households an additional \$60 or \$30 a month in benefits per

eligible child, effectively testing the impact of an additional \$30 a month within the context of both groups receiving some benefits. Being in the \$60 rather than the \$30 group led to a monthly increase in SEBTC benefits of \$45 for the average household, which in turn led these households to increase their total monthly food spending by \$29 (Collins et al. 2014). By comparison, the Nevada HHFK treatment led to a monthly average increase of \$44 in SNAP benefits and \$23 in food spending. The SEBTC test of receiving \$60 rather than \$30 for each eligible child led to a statistically significant reduction in FI-C of 3.6 percentage points ( $p < 0.01$ ) (Collins et al. 2016). Thus, even in this secondary analysis of the SEBTC study, in which benefit levels were more similar to those in the Nevada HHFK project, the impact results differed. This suggests that the higher benefit levels of the SEBTC treatment (\$60 per child) was one reason for the difference in impact results between the SEBTC and Nevada projects, but the higher benefit levels do not fully explain this difference.

Research on the increase in SNAP benefits arising from the American Recovery and Reinvestment Act (ARRA) of 2009 provides another example from the research literature of higher SNAP benefit levels leading to reductions in food insecurity. ARRA led to an increase in SNAP benefits for participating households of 16% to 19%, on average (Nord and Prell 2011). For example, a household of four received an increase of \$80 per month in their SNAP benefits. This increase compares with one of about 10% for the average household in the Nevada HHFK project. The ARRA increase in benefits led to a statistically significant decline in both food insecurity among households (FI-HH) and VLFS (Nord and Prell 2011).<sup>44</sup>

Thus, this study does not provide definitive evidence about why the Nevada HHFK project did not reduce FI-C even though these other studies suggest that additional benefits for SNAP for other low-income households does reduce food insecurity. However, several hypotheses are possible:

- **An improving economy could have made it easier for some households to meet their food needs.** The Las Vegas area was hit hard by the Great Recession, with the unemployment rate reaching a high of about 14% in 2010 and remaining at relatively high levels during the period in which the Nevada HHFK project was being planned (for example, at about 8% in 2014). These periods also were covered by the previous research mentioned above on the impacts of benefit increases (Nord and Prell 2011; Collins et al. 2014, 2016). By the time the project was implemented, however, the economy was stronger and improving, with an unemployment rate of 6.1% at the beginning of the implementation period in June 2016 dropping to 4.8% by the end in May 2017 (U.S. DOL, BLS 2018). As a result, households' available resources for food may not have been as tight at the time of the

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<sup>44</sup> The Nord and Prell (2011) study was non-experimental, with impact estimates based on a comparison of all low-income households in late 2008—before the ARRA increase in benefits went into effect—to late 2009, after the increase. This aspect of the study makes it difficult to translate their estimates into how food insecurity rates of SNAP participants were affected because the low-income households being studied included both SNAP participants and nonparticipants. However, the estimated reduction in food insecurity was statistically significant, and slightly higher-income households not eligible for SNAP did not experience a similar decline in rates of food insecurity. Finally, additional studies found corresponding increases in rates of food insecurity among low-income households when the ARRA benefits declined and then ultimately ended over the next five years (Katare and Kim 2017; Nord 2013).

follow-up survey as the project planners had anticipated—a fact supported by the decline in the overall rates of food insecurity and an increase in employment between the baseline and follow-up surveys.<sup>45</sup> Although it is possible that not everyone benefited from the economic recovery—in 35% of treatment households, no adults were employed in the 30 days before the follow-up survey—a stronger economy still would have improved the financial circumstances for many households in the evaluation sample.<sup>46</sup>

- **Households may have used a share of their extra purchasing power to address other basic needs common to low-income households.** For example, households could have fallen behind on housing costs<sup>47</sup> during the height of the economic downturn or elected to spend more on home heating and cooling in an improved economy, with the latter being particularly relevant in Las Vegas.<sup>48</sup> Food insecurity has also been linked with poor health, including mental health problems, among low-income household members (American Academy of Family Practitioners 2015; Burke et al. 2016; Choi et al. 2017; Coleman-Jensen et al. 2013; Melchior et al. 2009). Given the range of challenges low-income households potentially face, they may have had to choose between spending money on medication, housing, or food (Bengle et al. 2010; Berkowitz et al. 2014). Thus, benefits from the project could have affected the circumstances of treatment households in ways that would not be captured by the survey’s food security measures.
- **Food security among households with young children targeted by the Nevada HHFK project could have been less sensitive to increases in benefits than those with older children.** The Nevada HHFK project focused on households with very young children (younger than age 5), who typically have nutritional needs that are met at home before those of the older children and adults (Nord 2013; Nord and Coleman-Jensen 2014). Thus, FI-C in these households may more likely be caused by factors other than a shortfall in SNAP benefits and would not be addressed by a \$40 increase in those benefits. For example, single-parent households with young children may face specific financial challenges related to child care and transportation costs, and may have needed to use their extra purchasing power to address these needs. In contrast, households with older children, who have greater nutritional needs, could have received an increase in SNAP benefits sufficient to address their food insecurity (as in the SEBTC intervention). In other words, this hypothesis suggests that the project may have been more likely to reduce food insecurity if it had targeted households with older children. It is notable that the one subgroup for which the project did lead to a

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<sup>45</sup> In the evaluation sample, the share of households with at least one member employed in the past 30 days rose from approximately 58% at the time of the baseline survey in fall 2015 to 65% at the time of the follow-up survey in early 2017 (Exhibits A.3 and A.5).

<sup>46</sup> Nord et al. (2014) found that nationally, higher unemployment rates are associated with higher levels of FI-HH. Similarly, Rabbitt et al. (2016) found that trends in food insecurity from 2000 to 2014 among Hispanic households appeared to be closely related to trends in the U.S. labor market.

<sup>47</sup> Fletcher et al. (2009) found that higher housing costs were associated with higher food insecurity rates.

<sup>48</sup> In interviews conducted for the Nevada HHFK project evaluation, some participants talked about the high cost of air conditioning and the need to buy bottled drinking water because of the heat and the poor taste of their tap water in the summer. Nord and Romig (2006) found that heating and cooling costs were associated with food insecurity among some households.

significant reduction in FI-C was households with two or more non-HHFK eligible children (that is, children age 5 or older at baseline).

- **Household spending patterns may differ during the school year compared with the summer, which the food insecurity measures would not have captured.** Although the Nevada HHFK project provided households with benefits over a 12-month period, including summer months, household food security was measured during the school year (January through June 2017). It was not measured during the summer, when many low-income households lose a key source of food assistance from their children’s receipt of FRP school meals that are not offset by participation in the Summer Food Service Program (SFSP) or other programs (Collins et al. 2014; Nord and Romig 2006).<sup>49</sup> It is possible that households that received extra SNAP benefits during the school year may have been more likely to use those benefits to free up personal cash to address nonfood household needs while using a greater share of the benefits on food during the summer months. The survey measures of food insecurity captured only the patterns present in the previous month during the school year, however.

#### **D. Limitations of the study**

As with any study, there are limitations in the evaluation of the Nevada HHFK project. Although the study’s findings are important and policy relevant, the following issues should be kept in mind when considering them:

- The study was conducted in a specific place and time, and the findings apply specifically to that place and time. It focused on largely Hispanic families with young children in Las Vegas, Nevada, living in poverty. It was conducted during a time when the local economy was expanding and the unemployment rate falling. The results do not necessarily reflect what the impacts of the project would have been in other communities or if conducted at a different time under different circumstances.
- The focus of the study was on food security among children—a complex problem. Although several other outcomes were examined, there are other aspects of household well-being that were not, such as the households’ housing stability and health status. Given the finding that receiving extra SNAP benefits appeared to lead households to spend more on nonfood items, there could have been changes in these outcomes that were not observed.
- The study examined a demonstration project implemented over a limited period of time. Some treatment households may not have realized initially that they were getting extra benefits; others may have realized their benefits were temporary. Moreover, there were additional services envisioned as part of T2 that never reached a large proportion of households in a major way. The impacts of the various components of the demonstration

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<sup>49</sup> Based on an analysis of 1991 to 2005 Current Population Survey (CPS) data, Nord and Romig (2006) found a 1.1 percentage point higher rate of VLFS among adults (rather than children) in the summer compared to the school year in households with children eligible for FRP meals. Collins et al. (2014) analyzed data from the 1995 to 2001 CPS and found that FI-C was borderline significantly higher in the summer in households with incomes at 130% of FPL or lower (3.9% vs. 3.4%;  $p = 0.07$ ).

project may have been different if they were being implemented either as part of a pilot or an ongoing program.

## **E. Conclusions**

This study examined the impact of the Nevada HHFK project, which aimed to reduce food insecurity among children by providing extra SNAP benefits and access to case management and nutrition education services to low-income households with young children. Overall, the project did not reduce food insecurity among children or affect other measures of 30-day food insecurity. This lack of an impact may have been related to the size of the benefit and its influence on food spending. The project led to an increase of \$44 in monthly SNAP spending for the average household, but an increase of only \$23 per month in food purchases—the equivalent of about two meals for a family of four during the month. This change may not have been large enough to reduce food insecurity as measured by the standard survey module. However, the study could not rule out project impacts on other aspects of household well-being; for example, households may have used a share of their extra purchasing power to address other basic needs such as housing or health care.

Future research should try to better understand why this effort to reduce food insecurity did not accomplish its primary objective, in light of other research showing that SNAP benefits in general have reduced food insecurity (Gundersen and Ziliak 2014; Katare and Kim 2017; Mabli et al. 2013; Schanzenbach 2013; Nord and Prell 2011) and a previous effort to provide additional food assistance to low-income households during summer months did reduce such insecurity (Collins et al. 2016). Future research could examine to what extent these differences in research findings could be explained by the size of the change in food assistance being examined. In other words, might the Nevada HHFK project have reduced food insecurity if households had been provided with more than \$40 per eligible child? In addition, it would be useful to know more about the role of economic conditions and targeting benefits and specific strategies to meet the food needs of low-income families and their children. This study and other such research to come can serve as building blocks in a more comprehensive overview of these needs and how best to satisfy them.

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## **APPENDICES**

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## **APPENDIX A**

### **STUDY DESIGN AND ANALYTIC METHODS**

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## A.1. STUDY DESIGN: SAMPLING, RANDOM ASSIGNMENT, AND ANALYSIS

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This appendix describes the sampling design, random assignment, and analysis methods for the evaluation of the Nevada Healthy, Hunger Free Kids (HHFK) project. This design was used to estimate impacts of the project on household food security and other outcomes.

### A. Sampling design and random assignment

The target population for the Nevada project included SNAP households headed by an adult with children less than age 5 and with income below 75% of the poverty line in 12 participating zip codes within Clark County in spring 2016.<sup>1</sup> The estimates from the study reflect the impacts of the Nevada HHFK project just for this population and as such may not be generalizable to other areas, points in time, or types of households. The study team received an initial listing of the full eligible population in September 2015. From that sample frame, a sample was selected for the baseline survey, the baseline survey was administered, study eligibility was confirmed, and then random assignment was conducted in late April 2016. Households assigned to receive project benefits first got the extra SNAP benefits in June 2016.

**Initial sampling.** The initial sampling frame consisted of 11,305 households. A random sample of 7,246 was selected from this frame in late September 2015. This was a simple random sample, with no clustering or stratification. The households in this sample were targeted for the baseline survey.

**Baseline survey.** Between October 2015 and March 2016, the baseline survey was administered. During the process of conducting the baseline survey, approximately 7% of the households contacted were determined to be ineligible.<sup>2</sup> Additional households were later determined to be ineligible because they did not remain on SNAP through April 2016. Ultimately, 3,088 households completed the baseline survey and remained eligible for project benefits.<sup>3</sup>

Households' eligibility for the evaluation sample was based on whether or not they completed the baseline survey. Households that completed the baseline survey and remained otherwise eligible for project benefits were included in the evaluation sample; all others were excluded. However, households that did not complete the baseline survey remained eligible for

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<sup>1</sup> Households on SNAP, with children less than 5, and household incomes less than 75% of the poverty line were initially identified in September 2015. To remain eligible, as of April 1st, 2016 these households had to have remained on SNAP in Nevada and had to have at least one child under the age of 5 in the household. Their household incomes were not required to remain below 75% of the poverty line through April 2016.

<sup>2</sup> Households were determined to be ineligible during baseline data collection if the household was no longer enrolled in SNAP, no longer had an age-eligible child in the household, or no longer lived in the demonstration area.

<sup>3</sup> See Briefel et al. (2018) for an analysis of nonresponse bias, which examined the characteristics of respondents to the baseline survey versus the full sample frame. Differences were found between baseline respondents and nonrespondents in terms of race and language spoken in the home, but there were no differences in monthly income, gender of the household head, or household size. The analytic weights described in Section A.3 account for the differences between respondents and nonrespondents on the baseline (as well as follow-up) survey.

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project benefits and, among the sample selected for the survey, whether or not the household completed the survey did not affect their likelihood of receiving benefits.

Because the evaluation sample excludes households that did not complete the baseline survey, sample weights were constructed to ensure that the evaluation sample is representative of the full target population described above covering the eligible portion of the 11,305 households (see Appendix A.3 for a description of the sample weights). Since random assignment was conducted after the baseline survey was administered, households' propensity to complete the baseline survey was not related to their randomly assigned study group status, by design. In other words, any differences between the treatment and control groups cannot have occurred because of differences between the groups in the probability of completing the baseline survey.

***Random assignment.*** As noted above, households were required to remain on SNAP through April 2016 to be eligible for project benefits, so administrative data from Nevada was used to identify and exclude any households from the initial sampling frame that had left SNAP by that month. Among the 3,088 households that remained in the evaluation sample, random assignment was conducted in late April 2016. Households were randomly assigned into either treatment group 1 (T1), treatment group 2 (T2), or the control group. Households assigned to T1 were eligible to receive an extra \$40 per child in the household under age 5 (as of April 2016) each month they remained on SNAP during the intervention period of June 2016 through May 2017. Households assigned to T2 were also eligible to receive this benefit, and in addition they could receive case management and nutrition education services. Households assigned to the control group received their normal SNAP benefits during the intervention period.

Stratified random assignment was used, with strata formed on the basis of the household's zip code, number of children, and baseline food security status. Within each stratum, approximately one-third of the households were assigned to each of the three groups. When the number of households in a given stratum was not divisible by three, any additional households were assigned to the control group. If there were ten households in a stratum, for example, three households would be assigned to T1, three would be assigned to T2, and four would be assigned to the control group. Ultimately, 981 households were assigned to T1, 990 households were assigned to T2, and 1,117 households were assigned to the control group.

Among households selected for the baseline survey sample that did not complete the survey but remained eligible for project benefits, a similar stratified random assignment process was used to determine which of these households would receive benefits. Finally, among households not selected for the baseline survey sample, a simple (non-stratified) random assignment process was conducted to select those that would fill the remaining open slots to receive project benefits.

***Characteristics of evaluation sample households assigned to the treatment and control groups.*** Random assignment should have ensured that households in T1, T2, and the control group had similar characteristics at baseline. To confirm that this was the case, this section presents baseline characteristics of these groups, using an approach similar to the approach used in the impact analysis. In particular, the section shows baseline characteristics of the full treatment group (including all households assigned to T1 or T2) and the control group, both for the full group of households that completed the baseline survey (the evaluation sample) and the subset that also completed the follow-up survey and were used in the impact analysis. A similar

set of comparisons are presented that compare the baseline characteristics of households assigned to T1 versus those assigned to T2.

Treatment and control households had similar characteristics at baseline, as expected in groups created by random assignment. Out of the characteristics measured at baseline, just one, monthly expenditures per person on restaurants, had a statistically significant difference between the control group and the pooled group of households in the two treatment arms (Exhibit A.1). On average, households in the sample of baseline survey respondents had between four and five members, including just under three children. Approximately half of households reported food insecurity among adults, and 35% reported food insecurity among children. Slightly more than half of households had at least one member employed. The median monthly income was \$940 in the control group and \$1,000 in the treatment group; the difference was not statistically different.

### Exhibit A.1. Household and respondent characteristics at baseline, baseline survey respondents

Characteristic	Treatment <sup>a</sup>	Control	Difference (SE)	p-value
<b>Household (HH) size</b>				
Mean number of HH members who share food	4.6	4.5	0.1 (0.07)	0.282
Mean number of children in household	2.9	2.8	0.1 (0.06)	0.143
<b>Age of children (%)</b>				
Less than 5 years	100.0	100.0	0.0	--
5 to 11 years	61.2	59.1	2.1	0.256
12 to 17 years	29.3	26.6	2.7	0.109
18 years (or older if still in school)	3.1	2.8	0.2	0.731
<b>2 or more HHFK-eligible children (%)<sup>b</sup></b>	27.0	27.7	-0.7	0.693
<b>Single adult household (%)</b>	45.1	46.0	-0.9	0.624
<b>Median HH income last month (\$)</b>	1,000	940	60 (34)	0.081
<b>Any household adult employed in last 30 days (%)</b>	58.1	55.5	2.6	0.167
<b>Nutrition benefit program participation (% unless noted)<sup>c</sup></b>				
Reported currently receiving SNAP <sup>d</sup>	100.0	100.0	0.0	--
Reported receiving SNAP during all of the previous year	75.3	72.4	2.9	0.086
Baseline SNAP benefit (\$) <sup>e</sup>	426	439	-14 (10)	0.162
Reported receiving WIC	60.7	59.7	1.0	0.587
Reported receiving food from food pantry, emergency kitchen, or other community program	14.1	11.8	2.3	0.073
Reported receiving FRPL	66.0	64.1	1.9	0.303
Reported receiving FRPB	59.7	57.6	2.2	0.247
Reported receiving any child nutrition benefits outside school hours <sup>f</sup>	25.4	27.1	-1.7	0.300
<b>HH food security status (%)</b>				
Insecure	56.2	54.6	1.6	0.396
VLFS	23.6	22.2	1.4	0.381
<b>Adult food security status (%)</b>				
Insecure	52.0	51.6	0.4	0.818
VLFS	22.6	21.5	1.2	0.464

Characteristic	Treatment <sup>a</sup>	Control	Difference (SE)	p-value
<b>Child food security status (%)</b>				
Insecure	34.5	34.6	-0.1	0.952
VLFS	5.6	5.4	0.2	0.777
<b>Reported monthly HH mean out-of-pocket food expenditures (\$) <sup>g</sup></b>				
	174	175	0 (7) <sup>^</sup>	0.959
<b>Reported monthly per person out-of-pocket mean food expenditures (\$)</b>				
Total out-of-pocket expenditures <sup>g</sup>	42	43	-1 (2)	0.415
Food expenditures at supermarkets, grocery stores, and other types of stores <sup>h</sup>	32	32	0 (1) <sup>^</sup>	0.965
Expenditures at restaurants <sup>i</sup>	10	11	-1 (1)	0.021
<b>Respondent race/ethnicity (%)</b>				
Hispanic, all races	56.3	57.5	-1.2	0.430
Black, non-Hispanic	24.5	25.7	-1.2	
White, non-Hispanic	12.2	10.3	1.9	
Other, non-Hispanic	7.0	6.5	0.5	
<b>Respondent age (%)</b>				
Under 40	86.5	87.4	-0.9	0.480
40 or older	13.5	12.6	0.9	
<b>Respondent health status (%)</b>				
Excellent, very good, or good	70.1	67.9	2.3	0.199
Fair or poor	29.9	32.1	-2.3	
<b>Head of household language preference (%)</b>				
English	69.4	72.0	-2.6	0.110
Other	30.6	28.0	2.6	
Sample size	1,971	1,117		

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 follow-up survey, and 2016 SNAP caseload data (for language preference). Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research.

Note: For continuous measures, reported p-values are obtained from two-tailed t-tests of statistically significant differences; for binary measures, p-values are from F-tests of independence. Tests of statistical significance were not conducted for differences between treatment and control households in the percentage with a child under age 5 and the percentage participating in SNAP, since project eligibility criteria required that households have these characteristics.

<sup>a</sup>Total households in treatment 1 and treatment 2 groups.

<sup>b</sup>Includes all earnings, Social Security, pensions, Veteran's benefits, unemployment insurance, workers' compensation benefits, child support, payments from roomers and borders, TANF, and SSI for all household members.

<sup>c</sup>Calculated for all households as a descriptive variable and not constrained to only those households that are eligible for a specific program listed.

<sup>d</sup>Based on SNAP administrative records.

<sup>e</sup>July 2016 basic (non-HHFK) SNAP benefit, the earliest measure available in SNAP EBT records.

<sup>f</sup>Examples include afterschool snacks or suppers, food backpacks, or meals or snacks at a daycare center.

<sup>g</sup>Sum total of reported out-of-pocket food expenditures at stores and restaurants in the last 30 days. Excludes purchases made with SNAP and WIC.

<sup>h</sup>Out-of-pocket expenditures on food at supermarkets, grocery stores, and other stores. Excludes purchases made with SNAP and WIC.

<sup>i</sup>Includes carryout, drive through, and all types of restaurants.

<sup>^</sup>Greater than zero but less than 0.5.

EBT = electronic benefits transfer; FRPL = Free or Reduced-Price Lunch; FRPB = Free or Reduced-Price Breakfast; HH = household; HHFK = Healthy, Hunger Free Kids; SE = standard error; SNAP = Supplemental Nutrition Assistance Program; SSI = Supplemental Security Income; TANF = Temporary Assistance for Needy Families; VLFS = very low food security; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

Households in the two treatment arms were also similar, though there was one statistically significant difference among the numerous characteristics measured at baseline (Exhibit A.2). Households in the first treatment arm (extra SNAP benefits only) were about 5 percentage points more likely to have a member employed than those in the second treatment arm that received an offer of case management and nutrition education.

### Exhibit A.2. Household characteristics at baseline, baseline survey respondents in treatment households

Characteristic	Treatment #1 (SNAP benefits)	Treatment #2 (SNAP benefits plus case management/ nutrition education)	Difference (SE)	p-value
<b>Household (HH) size</b>				
Mean number of HH members who share food	4.6	4.5	0.0 (0.08) <sup>^</sup>	0.747
Mean number of children in household	2.9	2.9	0.0 (0.07) <sup>^</sup>	0.955
<b>Age of children (%)</b>				
Less than 5 years	100.0	100.0	0.0	--
5 to 11 years	62.4	60.0	-2.4	0.284
12 to 17 years	27.8	30.8	3.0	0.145
18 years (or older if still in school)	3.2	2.9	-0.3	0.719
<b>2 or more HHFK-eligible children (%)<sup>a</sup></b>	27.3	26.7	-0.6	0.770
<b>Single adult household (%)</b>	44.5	45.6	1.1	0.629
<b>Median HH income last month (\$)</b>	1,000	1,000	0 (47)	> 0.999
<b>Any household adult employed in last 30 days (%)</b>	60.4	55.8	-4.5	0.045
<b>Nutrition benefit program participation (% unless noted)<sup>b</sup></b>				
Reported currently receiving SNAP <sup>c</sup>	100.0	100.0	0.0	--
Reported receiving SNAP during all of the previous year	76.0	74.6	-1.5	0.470
Baseline SNAP benefit (\$) <sup>d</sup>	419	432	13 (12)	0.281
Reported receiving WIC	59.2	62.2	3.0	0.185
Reported receiving food from food pantry, emergency kitchen, or other community program	13.2	15.0	1.8	0.266
Reported receiving FRPL	66.5	65.4	-1.1	0.614
Reported receiving FRPB	60.9	58.6	-2.3	0.299
Reported receiving any child nutrition benefits outside school hours <sup>e</sup>	24.0	26.8	2.8	0.160
<b>HH food security status (%)</b>				
Insecure	55.6	56.8	1.2	0.608
VLFS	24.0	23.2	-0.7	0.701
<b>Adult food security status (%)</b>				
Insecure	51.6	52.5	0.9	0.704
VLFS	23.0	22.2	-0.8	0.679
<b>Child food security status (%)</b>				
Insecure	34.5	34.5	0.0 <sup>^</sup>	0.985
VLFS	5.5	5.7	0.2	0.819

Characteristic	Treatment #1 (SNAP benefits)	Treatment #2 (SNAP benefits plus case management/ nutrition education)	Difference (SE)	p-value
<b>Reported monthly HH mean out-of-pocket food expenditures<sup>f</sup> (\$)</b>	181	168	-13 (8)	0.095
<b>Reported monthly per person mean out-of-pocket food expenditures (\$)</b>				
Total out-of-pocket expenditures <sup>f</sup>	44	40	-4 (2)	0.062
Food expenditures at supermarkets, grocery stores, and other types of stores <sup>g</sup>	34	30	-3 (2)	0.050
Expenditures at restaurants <sup>h</sup>	10	9	0 (1) <sup>^</sup>	0.523
<b>Respondent race/ethnicity (%)</b>				0.067
Hispanic, all races	57.3	55.4	-2.0	
Black, non-Hispanic	25.9	23.2	-2.7	
White, non-Hispanic	10.4	14.0	3.6	
Other, non-Hispanic	6.4	7.5	1.1	
<b>Respondent age (%)</b>				0.616
Under 40	86.1	86.9	0.8	
40 or older	13.9	13.1	-0.8	
<b>Respondent health status (%)</b>				0.631
Excellent, very good, or good	70.6	69.6	-1.0	
Fair or poor	29.4	30.4	1.0	
<b>Head of household language preference (%)</b>				0.475
English	68.7	70.1	1.4	
Other	31.4	29.9	-1.4	
Sample size	981	990		

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 follow-up survey and 2016 SNAP caseload data (for language preference). Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research.

Note: For continuous measures, reported p-values are obtained from two-tailed t-tests of statistically significant differences; for binary measures, p-values are from F-tests of independence. Tests of statistical significance were not conducted for differences between treatment and control households in the percentage with a child under age 5 and the percentage participating in SNAP, since project eligibility criteria required that households have these characteristics.

<sup>a</sup>Includes all earnings, Social Security, pensions, Veteran's benefits, unemployment insurance, workers' compensation benefits, child support, payments from roomers and borders, TANF, and SSI for all household members.

<sup>b</sup>Calculated for all households as a descriptive variable and not constrained to only those households that are eligible for a specific program listed.

<sup>c</sup>Based on SNAP administrative records.

<sup>d</sup>July 2016 basic (non-HHFK) SNAP benefit, the earliest measure available in SNAP EBT records.

<sup>e</sup>Examples include afterschool snacks or suppers, food backpacks, or meals or snacks at a daycare center.

<sup>f</sup>Sum total of reported out-of-pocket food expenditures at stores and restaurants in the last 30 days. Excludes purchases made with SNAP and WIC.

<sup>g</sup>Out-of-pocket expenditures on food at supermarkets, grocery stores, and other stores. Excludes purchases made with SNAP and WIC.

<sup>h</sup>Includes carryout, drive through, and all types of restaurants.

<sup>^</sup>Greater than zero but less than 0.5 for a 0 estimate; greater than zero but less than 0.05 for a 0.0 estimate.

EBT = electronic benefits transfer; FRPL = Free or Reduced-Price Lunch; FRPB = Free or Reduced-Price Breakfast; HH = household; HHFK = Healthy, Hunger Free Kids; SE = standard error; SNAP = Supplemental Nutrition Assistance Program; SSI = Supplemental Security Income; TANF = Temporary Assistance for Needy Families; VLFS = very low food security; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

Even if these groups are similar at baseline, it is possible that the main impact analysis was based on a sample in which the treatment and control groups were not equivalent, since only households that completed the follow-up survey were included in the analysis of project impacts on the key study outcomes. However, among households that completed the follow-up survey, those in the treatment and control group had similar characteristics at baseline. Out of the characteristics measured at baseline, none had statistically significant differences between the control group and the pooled group of households in the two treatment arms (Exhibit A.3).

Household characteristics within the sample of follow-up survey respondents were similar to the characteristics of the broader sample that responded to the baseline survey. On average, households in the sample of baseline survey respondents had between four and five members, including just under three children. Approximately half of households reported food insecurity among adults, and 35% reported food insecurity among children. Slightly more than half of households had at least one member employed, and the median monthly income was \$1,000.

### Exhibit A.3. Household characteristics at baseline, follow-up survey respondents

Characteristic	Treatment <sup>a</sup>	Control	Difference (SE)	p-value
<b>Household (HH) size</b>				
Mean number of HH members who share food	4.5	4.5	0.0 (0.09) <sup>^</sup>	0.790
Mean number of children in household	2.9	2.8	0.1 (0.07)	0.388
<b>Age of children (%)</b>				
Less than 5 years	100.0	100.0	0.0	--
5 to 11 years	61.3	59.9	1.4	0.536
12 to 17 years	29.3	25.8	3.5	0.099
18 years (or older if still in school)	3.1	2.9	0.2	0.824
<b>2 or more HHFK-eligible children (%)<sup>b</sup></b>	27.0	28.5	-1.5	0.485
<b>Single adult household (%)</b>	45.6	46.6	-1.0	0.673
<b>Median HH income last month (\$)</b>	1,000	1,000	0 (51)	0.999
<b>Any household adult employed in last 30 days (%)</b>	58.6	55.9	2.7	0.245
<b>Nutrition benefit program participation (% unless noted)<sup>c</sup></b>				
Reported currently receiving SNAP <sup>d</sup>	100.0	100.0	0.0	--
Reported receiving SNAP during all of the previous year	75.6	73.3	2.3	0.265
Baseline SNAP benefit (\$) <sup>e</sup>	431	448	-17 (12)	0.160
Reported receiving WIC	60.8	59.5	1.3	0.576
Reported receiving food from food pantry, emergency kitchen, or other community program	14.2	12.1	2.1	0.191
Reported receiving FRPL	66.4	65.3	1.1	0.641
Reported receiving FRPB	60.3	58.9	1.5	0.530
Reported receiving any child nutrition benefits outside school hours <sup>f</sup>	25.7	26.5	-0.8	0.710
<b>HH food security status (%)</b>				
Insecure	56.0	54.9	1.1	0.639
VLFS	23.4	22.4	1.1	0.603
<b>Adult food security status (%)</b>				
Insecure	51.8	51.7	0.2	0.947
VLFS	22.6	21.6	1.0	0.613
<b>Child food security status (%)</b>				
Insecure	35.0	34.7	0.3	0.889
VLFS	5.6	5.3	0.2	0.826
<b>Reported monthly HH mean out-of-pocket food expenditures<sup>g</sup> (\$)</b>	170	172	-2 (8)	0.778
<b>Reported monthly per person mean out-of-pocket food expenditures (\$)</b>				
Total out-of-pocket expenditures <sup>g</sup>	41	42	-1 (2)	0.609
Food expenditures at supermarkets, grocery stores, and other types of stores <sup>h</sup>	31	31	0 (2) <sup>^</sup>	0.928
Expenditures at restaurants <sup>i</sup>	10	11	-1 (1)	0.132
<b>Respondent race/ethnicity (%)</b>				
Hispanic, all races	56.7	57.6	-1.0	0.325
Black, non-Hispanic	24.3	25.9	-1.6	
White, non-Hispanic	12.4	9.5	2.9	
Other, non-Hispanic	6.7	7.0	-0.3	

Characteristic	Treatment <sup>a</sup>	Control	Difference (SE)	p-value
<b>Respondent age (%)</b>				0.986
Under 40	86.8	86.8	0.0	
40 or older	13.2	13.2	0.0	
<b>Respondent health status (%)</b>				0.201
Excellent, very good, or good	69.9	67.1	2.8	
Fair or poor	30.1	32.9	-2.8	
<b>Head of household language preference (%)</b>				0.336
English	68.8	70.8	-2.0	
Other	31.2	29.2	2.0	
Sample size	1,335	739		

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 follow-up survey and 2016 SNAP caseload data (for language preference). Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research.

Note: For continuous measures, reported p-values are obtained from two-tailed t-tests of statistically significant differences; for binary measures, p-values are from F-tests of independence. Tests of statistical significance were not conducted for differences between treatment and control households in the percentage with a child under age 5 and the percentage participating in SNAP, since project eligibility criteria required that households have these characteristics.

<sup>a</sup>Total households in treatment 1 and treatment 2 groups.

<sup>b</sup>Includes all earnings, Social Security, pensions, Veteran's benefits, unemployment insurance, workers' compensation benefits, child support, payments from roomers and borders, TANF, and SSI for all household members.

<sup>c</sup>Calculated for all households as a descriptive variable and not constrained to only those households that are eligible for a specific program listed.

<sup>d</sup>Based on SNAP administrative records.

<sup>e</sup>July 2016 basic (non-HHFK) SNAP benefit, the earliest measure available in SNAP EBT records.

<sup>f</sup>Examples include afterschool snacks or suppers, food backpacks, or meals or snacks at a daycare center.

<sup>g</sup>Sum total of reported out-of-pocket food expenditures at stores and restaurants in the last 30 days. Excludes purchases made with SNAP and WIC.

<sup>h</sup>Out-of-pocket expenditures on food at supermarkets, grocery stores, and other stores. Excludes purchases made with SNAP and WIC.

<sup>i</sup>Includes carryout, drive through, and all types of restaurants.

<sup>^</sup>Greater than zero but less than 0.5 for a 0 estimate; greater than zero but less than 0.05 for a 0.0 estimate.

EBT = electronic benefits transfer; FRPL = Free or Reduced-Price Lunch; FRPB = Free or Reduced-Price Breakfast; HH = household; HHFK = Healthy, Hunger Free Kids; SE = standard error; SNAP = Supplemental Nutrition Assistance Program; SSI = Supplemental Security Income; TANF = Temporary Assistance for Needy Families; VLFS = very low food security; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

Among households that completed the follow-up survey, the two treatment arms had very similar characteristics. There was just one statistically significant difference between the two treatment arms' characteristics: in the first treatment group, the survey respondent was more likely to be black or Hispanic and less likely to be white, relative to the second treatment group that received an offer of case management and nutrition education services. Household characteristics among follow-up survey respondents within each treatment group were similar to those measured among the broader sample that completed the baseline survey (Exhibit A.4).

### Exhibit A.4. Household characteristics at baseline, follow-up survey respondents in treatment households

Characteristic	Treatment #1 (SNAP benefits)	Treatment #2 (SNAP benefits plus case management/ nutrition education)	Difference (SE)	p-value
<b>Household (HH) size</b>				
Mean number of HH members who share food	4.5	4.5	0.0 (0.10) <sup>^</sup>	0.909
Mean number of children in household	2.9	2.9	0.0 (0.08) <sup>^</sup>	0.722
<b>Age of children (%)</b>				
Less than 5 years	100.0	100.0	0.0	--
5 to 11 years	62.4	60.1	-2.3	0.406
12 to 17 years	27.8	30.7	2.9	0.264
18 years (or older if still in school)	3.2	2.9	-0.3	0.770
<b>2 or more HHFK-eligible children (%)<sup>a</sup></b>	28.2	25.8	-2.4	0.346
<b>Median HH income last month (\$)</b>	1,000	1,000	0 (61)	> 0.999
<b>Single adult household (%)</b>	45.9	45.2	-0.7	0.806
<b>Any household adult employed in last 30 days (%)</b>	61.1	56.0	-5.1	0.068
<b>Nutrition benefit program participation (% unless noted)<sup>b</sup></b>				
Reported currently receiving SNAP <sup>c</sup>	100.0	100.0	0.0	--
Reported receiving SNAP during all of the previous year	77.0	74.3	-2.7	0.277
Baseline SNAP benefit (\$) <sup>d</sup>	422	440	18 (14)	0.200
Reported receiving WIC	58.8	62.8	4.0	0.158
Reported receiving food from food pantry, emergency kitchen, or other community program	13.1	15.4	2.3	0.226
Reported receiving FRPL	67.3	65.5	-1.8	0.505
Reported receiving FRPB	61.9	58.8	-3.1	0.264
Reported receiving any child nutrition benefits outside school hours <sup>e</sup>	24.5	26.9	2.5	0.321
<b>Household food security status (%)</b>				
Insecure	55.4	56.6	1.2	0.670
VLFS	23.8	23.1	-0.7	0.786
<b>Adult food security status (%)</b>				
Insecure	51.1	52.6	1.5	0.596
VLFS	22.9	22.4	-0.6	0.819
<b>Child food security status (%)</b>				
Insecure	35.3	34.6	-0.7	0.795
VLFS	5.6	5.6	0.0	0.997
<b>Reported monthly HH mean out-of-pocket food expenditures<sup>f</sup> (\$)</b>	173	166	-7 (9)	0.448
<b>Reported monthly per person mean out-of-pocket food expenditures (\$)</b>				
Total out-of-pocket expenditures <sup>f</sup>	41	40	-2 (2)	0.450
Food expenditures at supermarkets, grocery stores, and other types of stores <sup>g</sup>	32	30	-2 (2)	0.332
Expenditures at restaurants <sup>h</sup>	10	10	0 (1) <sup>^</sup>	0.887

Characteristic	Treatment #1 (SNAP benefits)	Treatment #2 (SNAP benefits plus case management/ nutrition education)	Difference (SE)	p-value
<b>Respondent race/ethnicity (%)</b>				0.036
Hispanic, all races	58.4	54.9	-3.5	
Black, non-Hispanic	25.7	22.8	-2.9	
White, non-Hispanic	9.8	15.0	5.2	
Other, non-Hispanic	6.1	7.3	1.2	
<b>Respondent age (%)</b>				0.668
Under 40	86.4	87.2	0.8	
40 or older	13.6	12.8	-0.8	
<b>Respondent health status (%)</b>				0.983
Excellent, very good, or good	69.9	69.9	-0.1	
Fair or poor	30.1	30.1	0.1	
<b>Head of household language preference (%)</b>				0.293
English	67.5	70.1	2.6	
Other	32.5	29.9	-2.6	
Sample size	655	680		

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 follow-up survey and 2016 SNAP caseload data (for language preference). Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research.

Note: For continuous measures, reported p-values are obtained from two-tailed t-tests of statistically significant differences; for binary measures, p-values are from F-tests of independence. Tests of statistical significance were not conducted for differences between treatment and control households in the percentage with a child under age 5 and the percentage participating in SNAP, since project eligibility criteria required that households have these characteristics.

<sup>a</sup>Includes all earnings, Social Security, pensions, Veteran's benefits, unemployment insurance, workers' compensation benefits, child support, payments from roomers and borders, TANF, and SSI for all household members.

<sup>b</sup>Calculated for all households as a descriptive variable and not constrained to only those households that are eligible for a specific program listed.

<sup>c</sup>Based on SNAP administrative records.

<sup>d</sup>July 2016 basic (non-HHFK) SNAP benefit, the earliest measure available in SNAP EBT records.

<sup>e</sup>Examples include afterschool snacks or suppers, food backpacks, or meals or snacks at a daycare center.

<sup>f</sup>Sum total of reported out-of-pocket food expenditures at stores and restaurants in the last 30 days. Excludes purchases made with SNAP and WIC.

<sup>g</sup>Out-of-pocket expenditures on food at supermarkets, grocery stores, and other stores. Excludes purchases made with SNAP and WIC.

<sup>h</sup>Includes carryout, drive through, and all types of restaurants.

<sup>^</sup>Greater than zero but less than 0.5 for a 0 estimate; greater than zero but less than 0.05 for a 0.0 estimate.

EBT = electronic benefits transfer; FRPL = Free or Reduced-Price Lunch; FRPB = Free or Reduced-Price Breakfast; HH = household; HHFK = Healthy, Hunger Free Kids; SE = standard error; SNAP = Supplemental Nutrition Assistance Program; SSI = Supplemental Security Income; TANF = Temporary Assistance for Needy Families; VLFS = very low food security; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

Household and respondent characteristics at the time of the follow-up survey provide contextual information to support the interpretation of impact analysis results. Exhibit A.5 presents household characteristics at the time of the follow-up survey among survey respondents, by study group. The characteristics of households in the treatment and control groups were similar at follow-up. Out of the characteristics measured, two exhibited statistically significant differences: median household income and Temporary Assistance for Needy Families (TANF)

participation. The apparent difference in median income is the result of clustering of survey responses about family income into round numbers which causes the appearance of a larger difference in incomes among households in the middle of the distribution. The small difference in mean income provides a useful point of comparison in this regard.

### Exhibit A.5. Household characteristics at follow-up

Characteristic	Treatment <sup>a</sup>	Control	Difference (SE)	p-value
<b>Household (HH) size</b>				
Mean number of HH members who share food	4.7	4.7	0.0 (0.09) <sup>^</sup>	0.787
<b>Number of children</b>				
<i>Percentage of households with:</i>				0.783
1 child	14.9	16.3	-1.5	
2 children	27.4	26.8	0.6	
3 or more children	57.3	56.6	0.7	
Mean number of children in household	3.0	3.0	0.0 (0.07) <sup>^</sup>	0.944
<b>Age of children (%)</b>				
Less than 5 years	86.0	87.7	-1.7	0.318
5 to 11 years	70.5	69.7	0.7	
12 to 17 years	33.0	31.7	1.3	
18 years (or older if still in school)	7.3	7.9	-0.6	
<b>Any household adult employed in last 30 days (%)</b>				
	64.0	65.9	-1.9	0.411
<b>Last month household income<sup>b</sup></b>				
Median (\$)	1,200	1,100	100 (33)	0.002
Mean (\$)	1,219	1,202	17 (45)	0.696
<i>Percentage of households</i>				0.759
No income	7.0	6.5	0.5	
Positive income below 75% of poverty line	70.2	71.6	-1.4	
75% of poverty line to poverty line	11.6	12.1	-0.5	
At or above 100% of poverty line but below 130%	6.3	5.7	0.6	
At or above 130% of poverty line but below 185%	3.9	2.7	1.2	
<b>Sources of income (%)</b>				
Reported receiving TANF	11.7	15.5	-3.8	0.019
Reported receiving Social Security	11.3	12.3	-1.0	0.520
Reported receiving SSI or supplemental security income	10.7	11.9	-1.2	0.417
Reported receiving veteran's benefits	0.6	0.9	-0.3	0.503
Reported receiving unemployment insurance or workers' compensation benefits	1.7	1.6	0.2	0.797
Reported receiving child support payments	13.9	14.7	-0.9	0.602
Reported receiving financial support from family and friends	19.6	21.9	-2.2	0.250
Reported receiving any other income besides earnings	0.7	0.5	0.2	0.617
Reported none of the above	51.5	48.1	3.3	0.163
Sample size	1,335	739		

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 follow-up survey. Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research.

Note: For continuous measures, reported p-values are obtained from two-tailed t-tests of statistically significant differences; for binary measures, p-values are from F-tests of independence.

<sup>a</sup>Total households in treatment 1 and treatment 2 groups.

<sup>b</sup>Includes all earnings, Social Security, pensions, Veteran's benefits, unemployment insurance, workers' compensation benefits, child support, payments from roomers and borders, TANF, and SSI for all household members.

<sup>^</sup>Greater than zero but less than 0.05.

HH = household; HHFK = Healthy, Hunger Free Kids; SE = standard error; SNAP = Supplemental Nutrition Assistance Program; SSI= Supplemental Security Income; TANF = Temporary Assistance for Needy Families; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

Respondent characteristics were also similar in the treatment and control groups at follow-up (Exhibit A.6). Although there is a statistically significant difference in the age distribution of respondents, this is mainly due to differences in proportions of each group within adjacent age categories, indicating that the discrete categories may overstate true differences in the age distribution.

**Exhibit A.6. Demographics of respondents at follow-up**

Characteristic	Treatment (%) <sup>a</sup>	Control (%)	Difference	p-value
<b>Gender</b>				0.809
Male	5.2	4.9	0.3	
Female	94.8	95.1	-0.3	
<b>Age</b>				0.012
Under 20 years	0.5	0.4	0.2	
20 to 29 years	36.1	41.1	-5.1	
30 to 39 years	45.5	41.7	3.8	
40 to 49 years	14.5	13.0	1.5	
50 to 59 years	2.3	3.7	-1.4	
60 years or older	1.2	0.1	1.0	
<b>Race/ethnicity</b>				0.435
Hispanic, all races	56.5	57.8	-1.4	
Black, non-Hispanic	25.2	26.3	-1.1	
White, non-Hispanic	11.9	9.4	2.5	
Other, non-Hispanic	6.5	6.5	-0.1	
<b>Level of education</b>				0.454
Less than high school	46.7	43.9	2.7	
High school graduate (or GED)	29.7	31.4	-1.7	
Some college (including 2 year degree)	20.0	21.9	-1.8	
Four year college degree or higher	3.6	2.9	0.8	
<b>Marital status</b>				0.595
Married	23.5	21.8	1.7	
Living with partner	22.1	22.8	-0.7	
Separated or divorced	17.4	15.7	1.7	
Widowed	1.2	0.9	0.2	
Never married	35.9	38.9	-3.0	
<b>Reported health status</b>				0.097
Excellent	11.8	13.4	-1.7	
Very good	15.8	19.6	-3.9	
Good	42.4	37.2	5.2	
Fair	23.5	23.3	0.3	
Poor	6.5	6.4	0.1	
Sample size	1,320	733		

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 follow-up survey. Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research.

Note: F-tests of independence were conducted to test for significant differences in proportions between the treatment and the control groups for each characteristic.

<sup>a</sup>Includes total households in treatment 1 and treatment 2 groups.

GED = general educational development; HHFK = Healthy, Hunger Free Kids.

Household size and composition were similar at the baseline and follow-up time points (Exhibit A.7). However, household employment changed in a notable way from the baseline to the follow-up survey period. Household employment increased in both the treatment and control groups, from a sample-wide rate of 57% at baseline to 65% at follow-up.

**Exhibit A.7. Household characteristics at baseline and follow-up**

Characteristic	Mean (SE) or percentage	
	Baseline	Follow-Up
<b>Household size</b>		
Mean number of household members who share food	4.5 (0.03)	4.7 (0.04)
Mean number of children in household	2.9 (0.03)	3.0 (0.04)
<b>Age of children (%)</b>		
Less than 5 years	100.0	86.5
5 to 11 years	60.5	70.2
12 to 17 years	28.4	32.6
18 years (or older if still in high school)	3.0	7.5
<b>Median household income last month (\$) <sup>a</sup></b>	994 (25)	1,200 (15)
<b>Any household adult employed in last 30 days (%)</b>	57.2	64.7
<b>Household nutrition benefit program participation (%) <sup>b</sup></b>		
Reported currently receiving SNAP <sup>c</sup>	100.0	80.1
Reported receiving WIC	60.3	43.2
Reported receiving food from food pantry, emergency kitchen, or other community program	13.3	13.9
<b>Adult food security status (%)</b>		
Insecure	51.9	43.0
VLFS	22.2	18.0
<b>Child food security status (%)</b>		
Insecure	34.6	31.2
VLFS	5.5	5.1
<b>Reported monthly out-of-pocket per-person mean food expenditures (\$)</b>		
Total out-of-pocket expenditures <sup>d</sup>	42 (1)	55 (1)
Food expenditures at supermarkets, grocery stores, and other types of stores <sup>e</sup>	32 (1)	42 (1)
Expenditures at restaurants <sup>f</sup>	14 (0) <sup>^</sup>	14 (0) <sup>^</sup>
Sample size	3,088	2,074

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2015–2016 baseline survey and 2017 follow-up survey. Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research.

Note: Estimates are percentages unless otherwise noted. Tabulations are weighted to be representative of all eligible households in the Nevada HHFK demonstration, based on the baseline weights. Calculations are based on the full evaluation sample, including households ultimately assigned to both treatment groups and the control group. Program participation questions generally reflected current participation at the time of the interview, defined as “during the last 30 days.” Food security was measured using the 30-day survey module. VLFS is a subcategory within the food insecure category. Questions about food expenditures were asked about the last 30 days.

<sup>a</sup>Includes all earnings, Social Security, pensions, veteran’s benefits, unemployment insurance, workers’ compensation benefits, child support, payments from roomers and borders, TANF, and SSI for all household members but does not include SNAP or WIC.

<sup>b</sup>Calculated for all households as a descriptive variable and not constrained to only those households eligible for a specific program listed.

<sup>c</sup>Based on SNAP administrative records.

<sup>d</sup>Sum total of reported out-of-pocket food expenditures at stores and restaurants in the last 30 days. Excludes purchases made with SNAP and WIC. The sum is not equal to the sum of the two means because of missing data. If expenditures at either stores or restaurants are missing, then the total is missing.

<sup>e</sup>Out-of-pocket expenditures on food at supermarkets, grocery stores, and other stores. Excludes purchases made with SNAP and WIC.

<sup>f</sup>Includes carryout, drive through, and all types of restaurants.

<sup>g</sup>Greater than zero but less than 0.5.

HHFK = Nevada Healthy, Hunger Free Kids Project; SE = standard error; SNAP = Supplemental Nutrition Assistance Program; SSI = Supplemental Security Income; TANF = Temporary Assistance for Needy Families; VLFS = very low food security; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

## B. Analysis approach

**Descriptive analysis.** This study included several descriptive analyses to provide an overview of the baseline characteristics of the sample, describe key implementation outcomes, and analyze project costs. These analyses used MIS, cost, and administrative EBT data, and the descriptive analyses employed varied by characteristic. For continuous variables, such as income or food expenditures, means or medians were calculated. For categorical characteristics such as education level or households' participation in SNAP, proportions or frequency distributions were calculated. In all of these analyses, appropriate statistical tests were used (t-tests for comparing means and F-tests for comparing frequency distributions and proportions) to identify statistically significant treatment-control differences. In addition, the study's sampling weights were applied to the calculations, including the estimation of standard errors used in statistical inference.

**Impact analysis.** The approach to estimating project impacts compared outcomes among the full treatment group (including households assigned to both T1 and T2) and the control group. Because the study's primary outcome (food insecurity among children) is a binary variable, a logistic regression model was used to estimate project impacts. To test whether the results were sensitive to the modeling approach, a linear probability model was also estimated as an alternative approach (see Appendix D.2 for results). The basic form of the model being estimated (whether through a logistic or linear regression) was:

$$(1) \quad y_h = \alpha + \delta T_h + \beta X_h + \varepsilon_h$$

where  $y_h$  is the outcome of interest (such as food insecurity among children) for household  $h$ ,  $\alpha$  is the regression intercept,  $T_h$  is a binary indicator for being assigned to the treatment group (set equal to 1 for treatment households in either T1 or T2 and 0 for control households),  $X_h$  represents a set or vector of household characteristics,  $\beta$  is a vector of regression coefficients for those characteristics, and  $\varepsilon_h$  is the regression's residual. The parameters of interest is  $\delta$ , which represents the impact of the project—extra SNAP benefits and case management and nutrition education for a subset of these households—on the outcome.

The primary model in Nevada combined the two treatment arms because the main project benefit of extra SNAP benefits was provided equally to each, and the supplemental services provided to households in the second treatment arm turned out to be a relatively minor portion of the overall benefit package (see Chapter II). Thus, the key hypotheses were that the main driver of any impacts would be the extra SNAP benefits that were provided to all treatment households.

However, to assess whether the supplemental benefits provided to households in the second treatment arm may have influenced outcomes, sensitivity analyses were conducted to estimate these impacts. This analysis used the same basic estimation model shown in equation (1), but the sample was restricted to households in the treatment group and the indicator for overall treatment status was replaced for a binary indicator of whether a household was in the second treatment arm (set equal to 1 for these households and to 0 for households in the first treatment arm). The coefficient on this variable represents the marginal impact of the availability of the supplemental services of case management and nutrition education to households in this treatment arm, over and above any impact of extra SNAP benefits.

Under well-implemented RCT designs that identify equivalent treatment and control groups at baseline, it may not be necessary to include covariates in the regression model to produce unbiased impact estimates. However, controlling for the characteristics of sample respondents can help to improve the precision of the impact estimates if those characteristics are associated with the outcome of interest, in this case (primarily) food insecurity among children, and if these factors are related to sample attrition. The model used to estimate impacts of the Nevada HHFK project included a set of covariates, including the baseline level of the outcome measure (that is, baseline food insecurity among children). Other baseline covariates in the model included food insecurity among adults and very low food security among children and adults; the presence of a single adult in the household versus more than one; the presence of one HHFK-eligible child versus more than one; the presence of a teen in the household; household income, employment status, and SNAP benefit and duration of participation; respondent age, health status, ethnicity, and language preference; baseline participation in WIC, school-based meal programs, or food pantries; and indicator variables for the month of follow-up survey response.

To address the fact that not all households in the evaluation sample had valid values of all variables included in the analysis, the following steps were used. First, households were dropped from the analysis of impacts on a particular outcome if they had missing data for that outcome. However, households were included if they had valid outcome data, regardless of whether they had valid data for other outcomes or for the covariates included in the model. This ensured that it was possible to compare true outcome values among households in the treatment and control groups for as many households as possible, thus minimizing the risk that missing data would create differences in the underlying (baseline) characteristics between the two groups, leading to bias in estimated impacts. One implication of this approach was that the models that examined project impacts may have been based on different sample sizes for different outcomes.

The second aspect of the strategy for addressing missing data involved households with valid outcome data but missing baseline data for a model covariate (e.g., because they failed to complete an item on the baseline survey). In these cases, that household was included in the analysis with an imputed value of the variable. When possible, information from another data source was used to fill in missing values before addressing the remaining missing values as described below. In practice this was only feasible for the respondent language preference and ethnicity variables. For the remaining baseline covariates, missing data was imputed using an approach known as “dummy variable adjustment” (Puma et al. 2009).

The dummy variable adjustment approach involves two steps. The first step is to impute the missing values with valid values. A simple imputation is used, with all missing values for a given

variable imputed with a single value. In this case, the missing values for baseline covariates were replaced with a value of zero.<sup>4</sup> The second step is to create and include in the impact regression a set of missing “flag” indicator variables to identify observations with missing data on baseline covariates. In particular, when a household was missing the value of a particular covariate, that value was changed to zero so that the household could be included in the impact analysis. In order to account for the fact that the true value of that covariate for households with missing values was not zero, the model also included a binary missing value indicator variable. In principle, each covariate with missing values would have an indicator variable that could be included in the model, equal to one for a given household if the original value of the covariate was missing (and it had been imputed), and equal to zero otherwise. In practice, covariates capturing similar household characteristics were often missing for the same households. Thus, if a separate missing value indicator had been created for each covariate and all were included in the model, there would have been a severe problem with multicollinearity. As a result, single missing value indicator variables for related covariates were created and included in the model. This approach was implemented by defining six missing value indicator flags, which indicated missing data on (1) baseline measures of monthly income, (2) duration of SNAP enrollment, (3) other household characteristics, (4) respondent characteristics, (5) program participation, and (6) food insecurity.<sup>5</sup> In each case, if any of the covariates included in that set had a missing value for a given household, the missing value indicator flag was set to one. If all of the covariates had valid values for a household, the missing value indicator flag was set to zero. These six missing value indicator flags were included in the impact model as additional covariates.<sup>6</sup> Exhibit A.8 presents the number and percentage of observations with missing values on each covariate.

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<sup>4</sup> Under the dummy variable adjustment approach recommended by Puma et al. (2009), the key is that missing values for a given variable are replaced (imputed) with a constant. The specific constant that is used (e.g., zero, the mean of valid values, or some other value) does not matter. This is because of the inclusion of the missing value dummy variable in the regression, since the coefficient on that dummy variable will adjust to account for differences in the constant that is used for imputation.

<sup>5</sup> The missing flag for “other household characteristics” indicated the presence of missing values on employment status or single adult household; the respondent characteristics missing flag covered respondent age and health status; the program participation missing flag covered five indicators for receipt of benefits from five sources: WIC, food pantry or other community program benefits, FRPL, FRPB, and any other child nutrition benefits outside of school hours, such as a snack, food backpack, or supper; and the food insecurity missing flag covered all six FI indicators, FI-C, FI-A, FI-HH, VLFS-C, VLFS-A, and VLFS-HH.

<sup>6</sup> Analyses of impacts on food insecurity, program participation, and food spending included baseline measures of the outcome being analyzed in addition to the covariates mentioned above. When the baseline measure of the outcome had missing values, these were also imputed using the dummy variable adjustment approach described above, and a separate indicator for missing values specific to that baseline measure was also included in the covariate set unless it was collinear with one of the existing missing flags.

### Exhibit A.8. Missing data on baseline covariates, among follow-up survey respondents

Covariate	Number missing	Percentage missing
Teenager in household <sup>a</sup>	0	0.0
Single adult household	11	0.5
Respondent age is 40 or greater	32	1.5
Health status	23	1.1
Language preference	0	0.0
Race/ethnicity	53	2.6
Adult food insecurity	3	0.1
Child food insecurity	6	0.3
Household food insecurity	5	0.2
Adult very low food security	3	0.1
Child very low food security	6	0.3
Household very low food security	7	0.3
A household member is currently employed	10	0.5
Monthly income	70	3.4
Total number of nutrition programs participating in	20	1.0
Reported currently receiving SNAP	0	0.0
Baseline SNAP benefit amount	0	0.0
Received WIC	6	0.3
Household was on SNAP for full prior year	21	1.0
Did not participate in any household nutrition programs	0	0.0
Received FRPB	2	0.1
Received FRPL	5	0.2
Received any food from a program outside of school hours	4	0.2
Received a food backpack	3	0.1
Received food at a daycare or other child care center	0	0.0
Received afterschool snacks	2	0.1
Received supper at school	2	0.1
Did not participate in any child nutrition programs	2	0.1
Received food from a food pantry or other community program	8	0.4
Monthly out-of-pocket food spending	64	3.1
Monthly out-of-pocket food spending, per person	64	3.1
Monthly household spending at restaurants	24	1.2
Monthly spending per person at restaurants	24	1.2
Monthly household spending out-of-pocket at grocery stores	50	2.4
Monthly spending per person out-of-pocket at grocery stores	50	2.4

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 first follow-up survey (n = 2,074).  
Tabulations are prepared by Mathematica Policy Research.

<sup>a</sup>Based on research indicating that the presence of a teenager is an important determinant of household food insecurity, impact models use a measure of the presence of teenagers collected from the same follow-up survey as the food insecurity outcome. This results in a lower level of missing data.

<sup>b</sup>For households missing a baseline measure of the race/ethnicity of the respondent, the missing value was imputed using the value at follow-up. Four households that were still missing race/ethnicity values after this initial imputation VLFS had their values imputed as the modal value, Hispanic.

FRPB = free or reduced-price breakfast; FRPL = free or reduced-price lunch; NSLP = National School Lunch Program; SBP = School Breakfast Program; SNAP = Supplemental Nutrition Assistance Program; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

In addition to the main analysis models that used imputation to address missing data, sensitivity analyses implemented two alternative approaches. One approach excluded all covariates from the analysis model except random assignment stratum variables defined based on

child food insecurity, number of HHFK-eligible children, and household zip code, since those were never missing. A second approach included all covariates but removed from the analysis sample any observation with a missing value on any model covariate, referred to as listwise deletion. This second approach amounts to estimating impacts among only those households that completed both the follow-up survey and every item of the baseline survey from which a baseline covariate was drawn. Households that failed to complete these items on the baseline survey were excluded because they had missing values for model covariates, and those that failed to complete the follow-up survey were excluded because they had missing values for the dependent variable (food security measures). The results of these sensitivity analyses are presented in Exhibit D.2, and the estimated impacts on food insecurity among children obtained from each approach are similar.

The analysis used respondent weights that correspond to the survey's sampling design and adjust for survey nonresponse, as described in Appendix A.4. Standard errors were calculated that used appropriate adjustments for these weighting factors and accounted for heteroskedasticity in the sample (that is, did not assume that the amount of variance in the data was the same across subpopulations of survey respondents). With random assignment at the household level, the standard errors for model 1 did not need to be adjusted for clustering. Because the study focused on a primary outcome that was specified in advance (food insecurity among children), it was not necessary to perform a multiple-comparisons adjustment for the principal (confirmatory) impact estimates.

For this primary outcome, one-way hypothesis tests were conducted, where the null hypothesis was that the rate of food insecurity among children in the treatment group (or in the T2 group) was less than or equal to the rate of food insecurity among children in the control group (or the T1 group). The alternative hypothesis was that the rate of food insecurity among children was higher in the treatment group (T2 group). One-way significance tests were conducted for this outcome because of the assumption that providing extra resources to a household would only lead to a reduction in food insecurity (if it had any effect at all), and would not be expected to lead to an increase in food insecurity. For all other outcomes, two-way hypothesis tests were conducted. A  $p < 0.05$  standard of statistical significance was used in all tests.

To ease interpretation of the impacts estimated using logistic regression models, tables of impact estimates present the average marginal effect of the project—the difference between the treatment and control groups in the predicted probability of being in a given category (e.g., of the household experiencing food insecurity among children), rather than logit coefficients or odds ratios. The average marginal effect was calculated by using the coefficients estimated in the logistic model to predict probabilities of the outcome (for example, child food insecurity) for every sample member under two scenarios: first, as if each sample member had been in the control group, and then as if each had been in the treatment group. Each sample member then received a calculated difference in predicted probabilities under the two scenarios, and the average marginal effect was calculated as the average of those differences, accounting for respondent weights. In each table of estimated impacts, the control mean or proportion is the weighted value in the control group within the analysis sample; the treatment mean or proportion is the sum of the control group value plus the average marginal effect. For continuous outcomes,

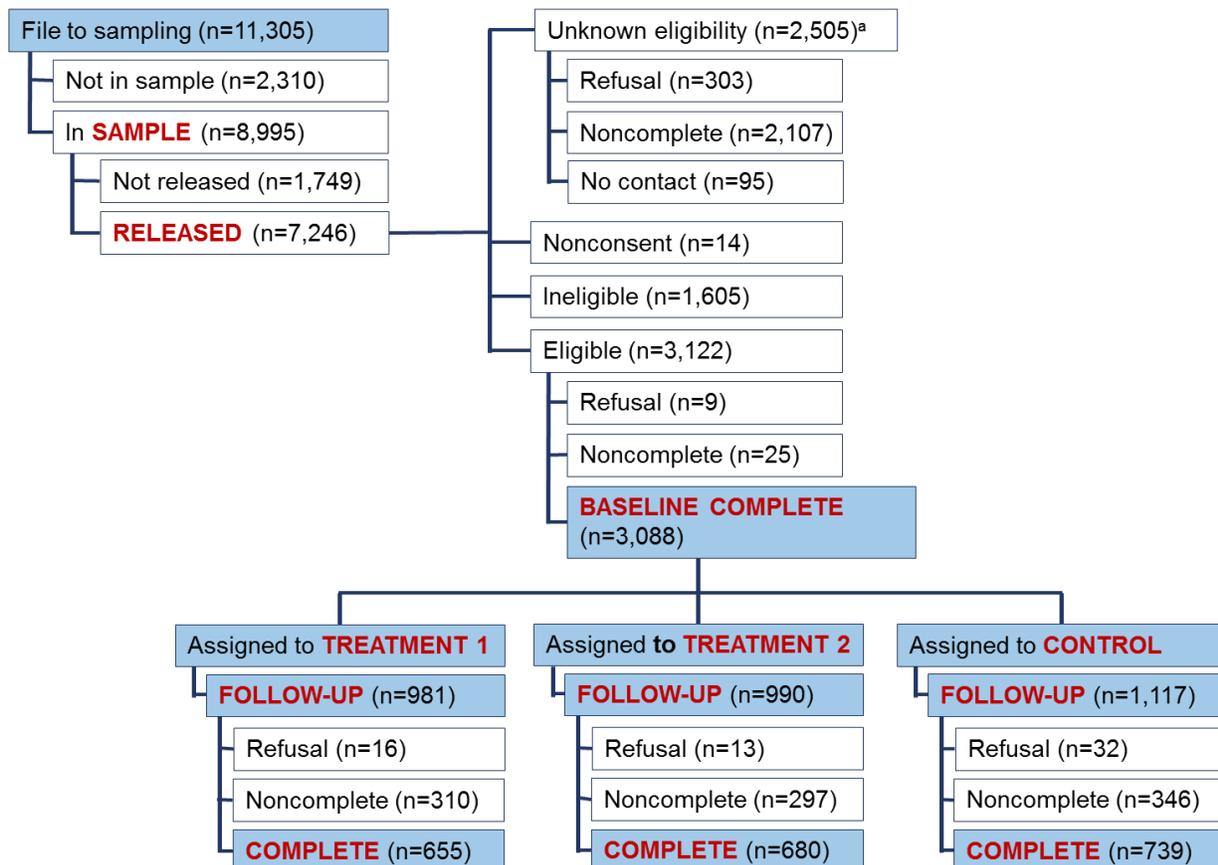
tables present the impact estimate calculated directly from the linear regression model, but the calculation of the control mean and treatment mean is otherwise the same as described here.

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## A.2 CONSORT FLOW DIAGRAM AND RESPONSE RATES

The Consolidated Standards of Reporting Trials (CONSORT) Flow Diagram (Exhibit A.9) shows the flow of participants from the recruitment stage, through consent, random assignment, and follow-up (Schulz et al. 2010). All participants completing a survey at baseline were assigned to a study group and contacted for follow-up.

**Exhibit A.9. CONSORT flow diagram for the Nevada HFFK project evaluation**



<sup>a</sup> The estimated eligibility rate of those with unknown eligibility is 91%, based on the sample findings.

Households whose eligibility status was unknown at baseline and that were classified as noncompletes were reached on the telephone but the respondent either did not start the survey at all or started the survey but ended the telephone call before answering all of the eligibility questions. Eligible noncompletes at baseline answered all of the screening questions but ended the interview before answering enough of the questions to be included in the analysis.<sup>7</sup> Likewise, noncompletes at follow-up were reached on the telephone, but they either did not start the survey or they did not answer enough of the questions to be included in the analysis.

Exhibit A.10 shows the response rates among Nevada HFFK project participants overall, as well as by study group. The follow-up response rate for all participants was 67%, and response

<sup>7</sup> Households had to complete the food security questions in Section E to be included in the analysis.

rates by study group were similar to this overall rate. Response rates are based on standard definitions by the American Association for Public Opinion Research (AAPOR 2016). To calculate AAPOR response rate 4, the numerator contains the number of completes, which includes partial interviews;<sup>8</sup> the denominator includes the number of completes, partials, and eligible noncompletes (because only eligible baseline respondents were included in follow-up, all noncompletes are considered eligible).

### Exhibit A.10. Final followup survey response rates by study group

Demonstration project	Total number of eligible cases	Response rate of all cases (%)	Number of treatment 1 cases	Response rate of treatment 1 group (%)	Number of treatment 2 cases	Response rate of treatment 2 group (%)	Number of control cases	Response rate of control group (%)
Nevada	3,088	67.2	981	66.8	990	68.7	1,117	66.2

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 follow-up survey. Response rates calculated by Mathematica Policy Research using AAPOR response rate 4 (AAPOR 2016).

Note: See CONSORT Flow Diagrams in Appendix A, Exhibit A.9 for additional details. The responding households in Nevada were randomized after completing the baseline survey.

AAPOR = American Association for Public Opinion Research, CONSORT = Consolidated Standards of Reporting Trials.

<sup>8</sup> Partial interviews are those that the respondent completed through at least the Food Security questions (Section E in the follow-up survey) before breaking off the interview.

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### A.3 SAMPLE WEIGHTS FOR THE FOLLOW-UP ANALYSIS

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This appendix describes the creation of sample weights for the analysis of follow-up data in the Nevada HHFK project. One set of weights was created for the sample of households that completed the baseline survey and were randomly assigned (n=3,088). A separate set of weights was created for those that completed the follow-up survey (n=2,074). The focus of this appendix and most of the analysis in this report is the follow-up survey; details about the baseline survey are available in the interim report (Briefel et al. 2018).

#### A. General features of the sample weights

Sample weights are applied to an analysis sample in order to make the data for that sample representative of the eligible population of 11,305 households. In the case of EDECH, the population being generalized to includes the households potentially eligible for the demonstration services being offered as part of EDECH. Since a randomized experimental design was used, weights were created that make both groups of treatment households in the analysis sample and the group of control households in that sample representative of the broader household population.

If the sample included all households in the population, one can think of weights being equal to 1 for all sample households. In reality, the sample did not include all households in the population, so the sample weights were adjusted to account for five key aspects of the study design and data collection—initial sampling, eligibility determination, baseline survey nonresponse, random assignment, and follow-up survey nonresponse.

The Nevada HHFK project's population of interest included SNAP households headed by an adult with children less than age 5 and with income below 75% of the poverty line in 12 participating zip codes within Clark County. First, a sample of these households was selected, and then a baseline survey was conducted among them. The population contained 11,305 households, of which 8,995 were sampled and 7,246 were released (see Exhibit A.9). Only those households that completed a baseline survey were then included in the evaluation sample and randomly assigned, and these were also the households for which a follow-up survey was attempted.<sup>9</sup>

***Initial sampling (adjustment 1).*** Ultimately, the sample for which data were collected should be representative of the broader population of eligible households.

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<sup>9</sup> Because random assignment was conducted using only households that completed the baseline survey, one could make the argument that the relevant population of interest should include only eligible households in the participating zip codes that would complete a baseline survey if given the chance. Random assignment ensures that the intervention was given at random to households in this group and does not give information about the eligible households that did not (or would not, if selected into the sample) complete a baseline survey. While this is true in a technical sense, from a policy perspective there is more interest in the broader population of all eligible households and so the weights were designed to be representative of this broader group.

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Adjusting the weight for initial sampling was not essential, but the weight was divided by the probability of selection to ensure that the weighted size of the sample was equal to the population size. With simple random sampling (i.e., without strata), the weight was adjusted only for the probability of sampling and was equal to the overall inverse probability of selection, which is the same for all households.

$$p_i^s = \text{Prob}\{HH\ i\ \text{selected into sample}\} = \frac{n^s}{N}$$

The numerator represents the number of households that were selected and released into the sample, and the denominator represents the total number of households in the sampling frame. A backup sample was selected in case enough completes were not obtained from the original sample, and eventually the backup sample was released. Therefore, *all* released cases (initial sample releases and backups) were included in the numerator for the selection probability.

The weight for household  $i$  that accounts for selection into the initial sample, where sample members were asked to complete the baseline survey, is:

$$w_i^s = \frac{1}{p_i^s}$$

**Eligibility determination (adjustment 2).** The sample ultimately used for analysis differed from the sample initially selected for analysis because of households found to be ineligible (discussed in this step) as well as survey nonresponse (discussed in adjustments 3 and 5).<sup>10</sup> Eligibility was defined as of baseline based on the characteristics of the household at that point in time. Once households were determined to be eligible at baseline, there was no attempt to determine their ongoing eligibility status over time during the follow-up period as their household characteristics changed.<sup>11</sup> Prior to selecting the sample, any eligibility information obtained was taken into account so that known ineligible households were excluded from the sample frame. However, some households were deemed ineligible after they were selected to be in the sample (due to updated information from administrative records or from survey responses). There were also households in the sample that had an unknown eligibility status, which could have been due to a noncomplete survey, refusal to complete the survey, or inability to contact the household. These households with unknown eligibility status were accounted for with an adjustment to the

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<sup>10</sup> These last two adjustments to the weights were different for different data sources, since the analysis sample of households with non-missing data presumably differs for different data sources. Separate weights were created for analysis of follow-up versus baseline survey data.

<sup>11</sup> However, it was possible that at some time during the follow-up period new information was received about the household's baseline eligibility. The data collection did not set out to obtain updated information on baseline eligibility throughout the follow-up period. However, there were several cases of households determined to have duplicate records in the data files. In these cases, one of these records was defined as baseline ineligible and the other record was retained, so that each household would be represented only once in the analysis file.

weights, giving more weight to sample members from groups with low rates of eligibility determination and less weight to those from groups with high rates of eligibility determination.

To perform this adjustment, at least some information on the characteristics of the full population of households was needed so that which sorts of households had higher and which had lower eligibility determination rates was known. The challenge was that there was limited information available on the full population, though some household-level demographic information such as household size, language, income, and race was available. In addition to these first order variables, interaction terms were considered for inclusion in the model predicting eligibility determination status (using Chi-square Automatic Interaction Detector).<sup>12</sup>

The adjustment was set to the inverse of the probability of having a known eligibility status for the survey ( $p_i^e$ ), which was obtained from a stepwise regression model. For example, if district and language were found to be significant predictors of having a known eligibility status from the stepwise logistic regression, then an English-speaking household would have a different probability of having a known eligibility status (and thus a different eligibility determination adjustment) than a non-English-speaking household. This adjustment was applied to the respondents, eligible nonrespondents, and ineligible households, and the weight was set to 0 for the nonrespondents with undetermined eligibility. After this adjustment, the weights approximately added up to the sample frame, which included some ineligible households. After dropping the undetermined and ineligible households, the weights added up to the best estimate of the eligible population.<sup>13</sup>

This eligibility determination adjustment was applied to the weight adjusted for initial sampling (described above). The weight that includes adjustments for sampling and eligibility determination is:

$$W_i^{s,e} = \frac{1}{p_i^s} * \frac{1}{p_i^e} = \frac{1}{(p_i^s * p_i^e)}$$

**Baseline survey nonresponse (adjustment 3).** Not all eligible households selected to be in the sample completed the baseline survey. A nonresponse adjustment to the eligibility-adjusted weights in the previous step accounted for this by giving more weight to responding sample members from groups with low response rates and less weight to those from groups with high response rates. Similar to the eligibility determination adjustment, some information about both responding and nonresponding households was needed so that the sorts of households with

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<sup>12</sup> For more information about this procedure, see: <http://www.statisticssolutions.com/non-parametric-analysis-chaid/>.

<sup>13</sup> In Nevada, administrative data received before data collection indicated that households in the population were receiving SNAP. However, some cases became SNAP ineligible and later excluded from the sample after initial sampling but before completion of the baseline survey. Some of the SNAP eligible households that were not contacted or who did not complete the baseline survey could have been ineligible for another reason, and thus when the eligibility determination adjustment was calculated, SNAP ineligible households that were known about before data collection were not included because they were ineligible for a reason that does not apply to the households with unknown eligibility.

higher and lower response rates could be determined. The actual adjustment to the weights was the inverse of a household's probability of responding to the survey—more specifically, the probability that a household with that set of characteristics responded to the survey ( $p_i^{r1}$ ), where the probability was again determined by a stepwise logistic regression model. In this model, the goal was to look for variables significantly associated with response. This adjustment was applied to the eligibility-adjusted sampling weights from the previous step for all respondents to the baseline survey, and the weight was set to 0 for the eligible nonrespondents, who were then dropped from analysis.

The weight which combines the adjustments for initial sampling, eligibility determination, and baseline survey nonresponse is:

$$W_i^{s,e,r1} = \frac{1}{p_i^s} * \frac{1}{p_i^e} * \frac{1}{p_i^{r1}} = \frac{1}{(p_i^s * p_i^e * p_i^{r1})}$$

**Random assignment (adjustment 4).** Randomly assigning households selected into the sample groups can be thought of as another stage of randomly selecting samples. In other words, the treatment groups are subsamples of the full randomly selected sample, and so is the control group. As above, if every household had exactly the same probability of being selected into each treatment group and the control group, there would be no need to adjust the weights for random assignment. In the Nevada HHFK project, however, blocked or stratified random assignment was conducted, and in practice not all households had the same probability of being selected into each group. A separate adjustment to the weights was used to account for the random assignment probability in the case of the treatment groups and control group. For households that ended up in one of the two treatment groups, the weight was divided by the probability of being assigned to that treatment group ( $p_{ij}^{T1}, p_{ij}^{T2}$ ). For households in the control group, the weight was divided by the probability of being assigned to the control group (or one minus the probability of being assigned to either treatment group).

In the Nevada HHFK project, random assignment was conducted at the household level, and was only conducted among households that completed the baseline survey. However, there was blocking (stratification) prior to random assignment. Households were randomly assigned into one of three groups—two treatment groups (T1 and T2) and a control group (C). The random assignment was stratified based on zip code, number of children in the household, and baseline food security. The probability of being assigned to each of the three groups was approximately equal (1/3) but when rounding was necessary it generally favored the control group. Thus, the control group ended up being slightly larger than either treatment group. The logic of the weight adjustment is that each household's weight was adjusted based on the inverse of the probability of being assigned to the group to which they were actually assigned. This probability depended on the group they were assigned to as well as their stratum.

For a given household  $i$  in stratum  $j$ , the probability of being assigned to the first treatment group is:

$$p_{ij}^{T1} = \text{Prob}\{HH i \text{ in stratum } j \text{ assigned to T1 group}\} = \frac{\sum_{i \in t1_k} W_i^{s,e,r1}}{\sum_{i \in t1_k + t2_k + c_k} W_i^{s,e,r1}}$$

where  $t1_k$  denotes the households in the first treatment group,  $t2_k$  denotes the households in the second treatment group, and  $c_k$  denotes the households the control group.

The numerator is the sum of the weights among sampled households in stratum  $j$  that were assigned to the first treatment group, and the denominator is that number plus the sum of the weights among sampled households in stratum  $j$  assigned to the second treatment group, plus the sum of the weights among households in stratum  $j$  assigned to the control group. In other words, the denominator is the sum of the weights of all households in that stratum that completed a baseline survey and were randomly assigned. The probability of being assigned to the second treatment group was calculated analogously, and the probability of being assigned to the control group was set equal to 1 minus the probability of being assigned to either the first or second treatment group.

The weight from the first three adjustments was divided by the probability of being assigned to the group that the household was, in fact, assigned to. In addition, the adjustment for each group was multiplied by approximately one third to ensure that the weighted sum of the full sample equals the population size and each group's weights sum up to one-third the estimate of the eligible population.

In other words, the final baseline weight for treatment group 1 household  $i$  in stratum  $j$  is:

$$W_i^{s,e,br,T1} = \frac{1}{(p_{ij}^s * p_i^e * p_i^{r1})} * \frac{1}{p_{ij}^{T1}} * 0.333 = \frac{0.333}{(p_i^s * p_i^e * p_i^{r1} * p_{ij}^{T1})}$$

The final baseline weight for treatment group 2 household  $i$  in stratum  $j$  is:

$$W_i^{s,e,br,T2} = \frac{1}{(p_{ij}^s * p_i^e * p_i^{r1})} * \frac{1}{p_{ij}^{T2}} * 0.333 = \frac{0.333}{(p_i^s * p_i^e * p_i^{r1} * p_{ij}^{T2})}$$

And for control group households it is:

$$W_i^{s,e,r1,C} = \frac{1}{(p_{ij}^s * p_i^e * p_i^{r1})} * \frac{1}{(1 - p_{ij}^{T1} - p_{ij}^{T2})} * 0.333 = \frac{0.333}{(p_i^s * p_i^e * p_i^{r1} * (1 - p_{ij}^{T1} - p_{ij}^{T2}))}$$

This final baseline weight accounts for sampling, baseline eligibility determination, baseline survey nonresponse, and random assignment, and the sum of the weights should equal the best

guess of the number of eligible households in the population at baseline. Due to the variability of propensity score adjustments in the previous steps, the weight did not exactly sum to this target, so a final adjustment was applied to the baseline weight that involved multiplying each weight in a given treatment group by the ratio of the target sum (of one-third of all eligible households in the population) divided by the sum of the current weights.

***Follow-up survey nonresponse (adjustment 5).*** In administering the follow-up survey, only those households that had completed the baseline survey were randomly assigned, and were defined to be in the evaluation sample were targeted; no follow-up survey was attempted for those households that did not complete the baseline survey. So in creating the weights for the follow-up survey, the final baseline weights were used as the starting point, and these weights were then adjusted to account for nonresponse on the follow-up survey.<sup>14</sup>

Because the follow-up analysis included only those households that completed a follow-up survey, the weights of nonrespondents had to be reallocated to these respondents, in inverse proportion to their estimated likelihood of responding. The probability of responding was calculated by running a stepwise regression model that included characteristics of the evaluation sample (those that completed the baseline survey) and relevant interaction terms, separately for the treatment and control groups. The resulting adjustment was then applied to all responding households. The model determined which characteristics were significantly associated with responding to the follow-up survey, and the resulting fitted values from the model could be interpreted as the probability of responding ( $p_i^{r2}$ ). The inverse of this probability is the fifth adjustment factor. The baseline weights that resulted from the first four adjustments were multiplied by this factor for responding households (with nonresponding households being assigned a weight of 0).

Thus, the final follow-up weight for treatment group 1 household  $i$  in stratum  $j$  is:

$$W_i^{s,e,r1,T1,r2} = \frac{0.333}{\left(p_i^s * p_i^e * p_i^{r1} * p_{ij}^{T1} * p_i^{r2}\right)}$$

The final follow-up weight for treatment group 2 household  $i$  in stratum  $j$  is:

$$W_i^{s,e,r1,T2,r2} = \frac{0.333}{\left(p_i^s * p_i^e * p_i^{r1} * p_{ij}^{T2} * p_i^{r2}\right)}$$

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<sup>14</sup> In theory, if any new information about households' baseline eligibility status had been found during follow-up data collection, the adjustment for eligibility status would have been revised. However, no new information was found during follow-up data collection in the Nevada HFFK project on households' baseline eligibility status.

And for control group households it is:

$$W_i^{s,e,r1,C,r2} = \frac{0.333}{\left( p_i^s * p_i^e * p_i^{r1} * \left( 1 - p_{ij}^{T1} - p_{ij}^{T2} \right) * p_i^{r2} \right)}$$

As with the baseline weight, a final adjustment was applied to the follow-up weight that involved multiplying each weight in a given treatment group by the ratio of the target sum (of one-third of all eligible households in the population) divided by the sum of the current weights.

After applying and combining all weighting adjustments for a given set of weights, the weight distribution and associated design effect was examined to determine whether weight trimming was necessary to mitigate the impact of weighting on the variance of estimates, and to avoid the risk of any one household having undue influence on estimates due to a very high weight. One large weight given to a household in the control group was trimmed, and weights for all other households in the control group increased slightly so that the sum of weights would be maintained as an estimate of the full population of eligible control households. Because of the small amount of trimming, however, the change to the weights for each non-trimmed control household was negligible. At the end of the weighting process, each household that completed a survey has a positive weight, and the sum of the weights should equal the estimate of the full population of eligible households.

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## A.4 NONRESPONSE BIAS ANALYSIS FOR THE FOLLOW-UP SURVEY

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The 3,088 households responding to the Nevada HFFK project baseline survey were randomized into three groups: treatment 1, treatment 2, or control. All of these randomly assigned baseline survey respondents were contacted for the follow-up survey. Sixty-seven percent of the households contacted for follow-up provided responses to the follow-up survey (n=2,074). This response rate fell short of an 80 percent benchmark (FNS 2015), so a nonresponse bias analysis was conducted to analyze any differences between households responding and not responding to the follow-up survey.

To address the implications of survey nonresponse, as well as to account for the sampling design, survey weights to be used in the analysis were created. The baseline survey weights accounted for sampling from the frame, survey eligibility, nonresponse to the baseline survey, and random assignment to one of the three study groups. The follow-up survey weights, calculated after the follow-up survey, account for nonresponse to the follow-up survey, such that only follow-up survey respondents have a positive final weight. This was done in order to make estimates that reflect the entire eligible population based on only the responses received.

Because only households that responded to the baseline survey were contacted for the follow-up survey, the follow-up nonresponse bias analysis was based on a sample of baseline survey respondents, and comparisons between follow-up survey respondents and nonrespondents could be based on data from the baseline survey, as well as administrative variables for which data are available for all household in the frame. For the Nevada HFFK project, seven demographic variables from the frame file were used in analyzing differences between respondents and nonrespondents: number of children in the household, household size, gender, race, ethnicity,<sup>15</sup> language, and gross income. Additionally, several baseline survey variables were also used: employment of at least one adult in the household; ages of the baseline survey respondent as well as children in the household; receipt of WIC benefits, free or reduced-price lunch, or food from sources such as food pantries; a variety of measures of food insecurity; and total dollar amount spent on food at supermarkets and restaurants. Although all households included in the follow-up survey completed the baseline survey, individual baseline survey items were missing in a small number of cases. In the analysis, the distributions of these baseline and sample frame variables among follow-up respondents were compared with those of nonresponding households. This comparison is made after applying the baseline weight but not the follow-up weight, but the distribution of these variables among respondents is also shown after the follow-up weight has been applied. Since response rates are similar among the three study groups (see Exhibit A.10), this nonresponse analysis is aggregated across groups.

Many of the baseline characteristics had similar mean values and distributions among households responding versus not responding to the follow-up survey (Exhibit A.11.). The number and ages of children in the household and household size were quite similar between respondents and nonrespondents. Characteristics of the household's primary guardian (gender, race, ethnicity, and preferred language) also did not differ by a statistically significant amount depending on whether the household responded to the follow-up survey. Other characteristics

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<sup>15</sup> Hispanic versus non-Hispanic.

that were similar among the two groups included the percentage of households with at least one employed adult in the past 30 days (as reported at baseline), the percentage who received free or reduced-price lunch in the past 30 days, household-level food insecurity or food insecurity among household adults, and the monthly amount spent on food at restaurants.

There were statistically significant differences between follow-up respondents and nonrespondents, however. Respondents to the follow-up survey were more likely to be older (42% of respondents were 30 to 39 years old versus 35 percent of nonrespondents), to have household members receiving WIC benefits (63% versus 55%) or food from sources such as food pantries in the past 30 days (15% versus 11%), and to have children in the household who were food insecure (36% versus 32%). There was also a significant difference of \$45 in mean monthly gross income, with responding households having a higher mean than nonrespondents (\$438 versus \$393). Although gross income was higher among responding households, out-of-pocket food expenditures at grocery stores were lower (\$130 versus \$142 per month). The final follow-up survey weight accounted for these differences, as evidenced by the distribution of final weighted data falling between that of respondents and nonrespondents for most of the variables showing significant differences.

### **Exhibit A.11. Household characteristics at baseline in the Nevada HHFK project, among respondents and nonrespondents at follow-up**

Characteristic	Adjustments for sampling, eligibility, baseline response, random assignment <sup>a</sup>		Final weight
	Respondents to follow-up (n=2,074)	Nonrespondents to follow-up (n=1,014)	Respondents to follow-up (n=2,074)
Number of children in household (%)			
1	22.0	24.5	22.5
2	30.4	28.2	29.8
3	24.4	23.4	24.4
4+	23.3	23.9	23.3
Household size (%)			
2	27.5	28.5	28.3
3-4	50.0	47.6	49.1
5+	22.5	23.9	22.6
Gender - male (%)	5.1	6.5	5.7
Race (%)			
White	64.3	63.7	64.1
Non-White	35.7	36.3	35.9
Hispanic (%)	53.1	53.9	53.3
Language (%)			
English	69.6	73.4	70.2
Spanish	30.2	26.3	29.4
Unknown	0.3	0.3	0.4
Monthly gross income (\$)	438	393*	435
At least one adult in household employed in past month (%)			
Employed	56.5	56.7	57.4
Missing	0.5	2.6	0.6

Characteristic	Adjustments for sampling, eligibility, baseline response, random assignment <sup>a</sup>		Final weight
	Respondents to follow-up (n=2,074)	Nonrespondents to follow-up (n=1,014)	Respondents to follow-up (n=2,074)
Respondent age (%)		*	
Under 20	1.0	1.5	1.1
20 to 29	42.1	46.3	43.5
30 to 39	41.6	35.7	40.9
40 to 49	11.1	8.2	10.4
50 to 59	1.9	1.9	1.9
60 or older	0.8	0.7	0.7
Missing	1.5	5.7	1.5
At least one child living in household age (%)			
Under 5	100.0	100.0	100.0
5 to 11	60.4	60.6	60.8
12 to 17	27.5	30.1	28.1
18 or older	2.7	3.5	3.0
Currently receiving SNAP (% at baseline)	100.0	100.0	100.0
Reported receiving WIC benefits in past 30 days (%)		*	
Received benefits	62.5	54.5	60.2
Missing	0.3	1.7	0.3
Children received free or reduced-price lunch past 30 days (%)	66.0	63.4	65.8
Anyone in household received food from food pantries, food banks, soup kitchen, senior center, shelter, Meals on Wheels, church (%)		*	
Received food	14.5	10.8	13.5
Missing	0.3	1.6	0.4
Household food insecure (%)	56.0	54.4	55.5
Household very low food security (%)	22.3	24.6	23.0
Adults in household food insecure (%)	51.9	51.7	51.7
Adults in household very low food security (%)	21.6	23.5	22.3
Children in household food insecure (%)	35.8	31.9*	34.8
Children in household very low food security (%)	5.4	5.8	5.5
Monthly out-of-pocket amount spent on food at supermarkets and grocery stores (\$)	130	142*	130
Monthly amount spent on food at restaurants (\$)	55	57	56

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2015-2016 baseline survey and 2017 follow-up survey. Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research.

Note: For variables for which less than 1% of households in each column have missing values, the percentage missing is not shown.

<sup>a</sup>This sample represents the estimated 91% of the 11,305 households in the demonstration area that were eligible.

\*Difference between groups is statistically significant at the 0.05 level. Significance was tested for eligible respondents versus nonrespondents (sample weighted). For categorical variables with more than two groups (shown in more than one row of the table) the significance is reported above the set of rows representing that variable.

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## **APPENDIX B**

### **DATA COLLECTION METHODS**

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## **B.1. SURVEY DATA COLLECTION METHODS**

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Sample members were contacted to complete two computer-assisted telephone interviews (CATI). The first survey was administered at baseline, prior to the start of the intervention. The second follow-up survey was administered approximately 12 months after the start of the intervention. During the follow-up data collection, field locators visited the demonstration area to find non-respondents. The following sections describe the instruments, obtaining Office of Management and Budget (OMB) clearance and institutional review board (IRB) approval, data collector training, and survey data collection.

### **A. Survey contents**

The purpose of the baseline survey was to describe the household characteristics of the eligible target populations before the start of each intervention. The purpose of the follow-up survey was to measure experiences and outcomes among study households to allow for the estimation of the impacts of the intervention as well as mediating factors among both treatment and control households after the intervention was implemented. The surveys used at baseline and follow-up contain items used in other surveys, including national studies and studies of low-income populations, along with items developed specifically for this evaluation.

Child and household food security was measured with USDA's standard 18-item U.S. Household Food Security Survey Module, used to monitor food security in large-scale population studies such as the Current Population Survey and the National Health and Nutrition Examination Survey (NHANES), and to assess food security in research studies (ERS 2017a, b). The USDA 18-item food security survey module includes 10 questions about the whole household and adults, and 8 questions about children (ERS 2017c). A 30-day reference period was used to measure food security because the 12-month food security measure would cover a period that includes the baseline period before treatment households had the opportunity to receive project benefits. In addition, the 30-day measure has less recall bias than a 12-month period; it can be measured contemporaneously with household income, food expenditures, and program participation; and the findings can be compared to other studies that also used a 30-day food security measure (e.g., Collins et al. 2016; Kabbani and Kmeid 2005; Mabli et al. 2013; Nord and Coleman-Jensen 2010; Nord and Prell 2011; Yen et al. 2008).

The standard procedures for scoring item responses were used to classify households, adults, and children as experiencing food security, food insecurity, or very low food security (ERS 2017b). The EDECH study used the adult/child cross-classification method, which eliminates a misclassification that affects a small percentage of cases, and is consistent with the underlying statistical theory that if either any adult or any child in the household is food insecure, then the household is classified as food insecure (Nord and Coleman-Jensen 2014). Food security outcomes were not imputed.<sup>16</sup>

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<sup>16</sup> Food security measures were missing for less than 0.5% of households across categories and survey rounds because of item nonresponse. Among survey respondents at baseline, child food security constructs were missing for 8 households, adult constructs for 6 households, and household constructs for 9 households (12 for VLFS-HH). Among survey respondents at follow-up, child food security constructs were missing for 2 households, adult constructs for 4 households, and household constructs for 5 households (6 for VLFS-HH).

Other relevant survey questions were adapted from the Summer Electronic Benefits Transfer for Children (SEBTC) evaluation (Collins et al. 2016) and the SNAP Food Security Study (Mabli et al. 2013) to measure food expenditures and program participation—critical intermediate outcomes in the causal chain leading to improved food security. Feedback from eight pretest participants and FNS and Economic Research Service reviewers informed revisions to the questionnaires. Exhibit B.1 presents a high-level overview of topics included in the surveys; the baseline and follow-up instruments are in Appendix B.2 and B.3, respectively.

## **B. OMB clearance and IRB approval**

OMB clearance was obtained on August 20, 2015 (FNS 2015). The New England IRB approved the evaluation activities and instruments on June 12, 2015.

## **C. Telephone interviewer and field locator training**

Prior to each round of survey data collection, telephone interviewers completed 16 hours of general and project-specific training. The 8-hour general training ensured that interviewers were well-versed in establishing rapport, maintaining participant confidentiality, minimizing nonresponse, and administering the CATI. The 8-hour project-specific training covered the study background, data collection procedures and goals, refusal aversion techniques, and data security. Interviewers passed a certification test before they began to collect data.

During the follow-up data collection, field locators completed a 4-hour locating training that highlighted key aspects of the study, locating procedures and goals, and data security. Locators passed a certification test before they began to search for households in the demonstration area.

**Exhibit B.1. Key topics included in the EDECH household surveys**

Survey modules (topics)	Baseline questionnaire	Follow-up questionnaire
<b>Food security (last 30 days)</b>		
Food security (among children, adults, and households)	X	X
Food insecurity and very low food security (among children, adults, and households)	X	X
<b>Sociodemographic characteristics</b>		
Household size and composition	X	Q
Ages of children (presence of teenager)	X	Q
Employment of adult household members (last 30 days)	X	Q
Household income (last calendar year, last month) and sources of income	X	X
Respondent demographics and self-reported health status	X	X
<b>Nutrition assistance program participation and supports</b>		
Participation in nutrition assistance programs (SNAP, WIC, SBP, NSLP) and other programs (free school suppers, school food backpacks, and after school and child care programs)	X	X
Length of time on SNAP	X	X
Amount of SNAP benefit	X	X
Use of food banks, soup kitchens, or community or senior programs	X	X
Family, friend, and community support	X	X
Participation in EDECH services		X
<b>Food expenditures and food access (last 30 days)</b>		
Food expenditures including out-of-pocket food costs	X	X
<b>Food behavior</b>		
Number of family dinners per week	X	X
Prepare dinner/supper at home (past 7 days)	X	X
Shop with a grocery list	X	X
Nutrition education (past 12 months)	X	X
<b>Children's diet quality</b>		
School breakfast eating	X	X
Frequency of fast food consumption of household	X	X

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2015–2016 baseline survey and 2017 follow-up survey.

Note: “X” indicates that the topic was included in the survey. “Q” indicates that survey questions were included that asked about households’ change in status since baseline.

EDECH = Evaluation of Demonstration Projects to End Childhood Hunger; NSLP = National School Lunch Program; SBP = School Breakfast Program; SFSP = Summer Food Service Program; SNAP = Supplemental Nutrition Assistance Program; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

**D. Survey data collection**

Before baseline data collection, the grantee submitted files containing eligible households and contact information. The evaluation sample was then selected, as described in greater detail in Appendix A.2. Sample members’ contact information was then submitted to two commercial locating databases before data collection began. The purpose of these submissions was twofold: (1) to obtain additional telephone numbers for households, and (2) to triangulate the telephone numbers already available on the sampling frames. Telephone numbers found in more than one

source (for example, the sampling frame and one or both of the databases) were prioritized for dialing. Before the follow-up data collection, the grantee provided updated contact information for households, and contact information was again submitted to a commercial locating database.

The baseline and follow-up CATI surveys were administered in both English and Spanish. Approximately 37% of respondents in the Nevada HHFK project completed the baseline survey in Spanish, and 39% completed the follow-up survey in Spanish. The target respondents were parents/guardians in eligible households. Exhibit B.2 presents the field periods for each round of data collection.

### **Exhibit B.2. Survey data collection periods**

Round	Survey start	Survey end
Baseline	October 2015	March 2016
Follow-up	January 2017	June 2017

A total of 7,246 households were contacted for the baseline survey. Households received an advance letter describing the evaluation and the purpose of the interview, and inviting sample members to call a toll-free number to complete the survey. Shortly after the letters were mailed, outbound calls were placed to households. Household interviews were attempted multiple times at different times of the day, from the morning to the evening, and across all days of the week to maximize the chances of speaking with a sample member. Participating households were mailed a \$30 gift card as a thank-you payment for their participation.

Response rates were monitored daily and follow-up strategies were adapted to address local considerations to maximize participation. Households received mail, email (if an email address was available), and postcard reminders throughout the field period. Sample members who refused to participate received an additional refusal conversion letter. Updated contact information was requested from grantees during data collection so that new telephone numbers and addresses could be attempted. Additional in-house locating, including Internet searches and more in-depth searches in commercial locating databases, were also performed.

A total of 3,088 households were contacted for the follow-up survey. The follow-up sample was limited to households that completed the baseline survey. Procedures used at baseline were repeated for the follow-up data collection. In addition, non-responding households received text messages requesting their participation, and field locators attempted to locate and persuade non-respondents to complete the interview. Participating households received a \$30 gift card.

**B.2. BASELINE SURVEY INSTRUMENT**

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The final baseline questionnaire for households is shown in Appendix B.2.

OMB Clearance Number: 0584-0603

Expiration Date: 08/31/2018

# **Evaluation of Demonstration Projects to End Childhood Hunger**

## **Baseline Questionnaire for Households**

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection will be entered after clearance. The time required to complete this information collection is estimated to average 30 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection.

**A. Introduction**

ALL
IF DEMONSTRATION NE CHICKASAW NATION FILL1=two parts - an interview that will take about 30 minutes today, and a second interview about 12 months later. AND FILL2=interview
IF DEMONSTRATION=CHICKASAW NATION FILL1=three parts - an interview that will take about 30 minutes today, a second interview about 12 months from now, and a third interview about 18 months from now. The second and third interviews will also each take about 30 minutes. AND FILL2=interviews

**BA1. For quality assurance purposes, this call may be monitored or recorded.**

The study has [two parts - an interview that will take about 30 minutes today, and a second interview about 12 months later/three parts - an interview that will take about 30 minutes today, a second interview about 12 months from now, and a third interview about 18 months from now. The second and third interviews will also each take about 30 minutes.] As a way of saying thank you, you will get \$30 for completing the interview today and a similar amount for the future [interview/interviews]. We will send you a prepaid gift card after you complete each interview.

The interviews have questions about your children’s food choices as well as general questions about you and your household. Your answers will help the government make its child nutrition programs better.

Your participation in this interview is voluntary and you may stop at any time. You may also refuse to answer any question. Your benefits will not be affected by any answers to questions or if you choose not to participate.

All the information you give us will be kept private to the extent allowed by law. There is a small risk of the loss of confidentiality of your data, but procedures are in place to minimize this risk. Your name will not be attached to any of your answers. Your information will be used only in combination with information from other households for research purposes.

**Do you have any questions about the interview before I begin?**

- YES .....1 GO TO FAQ
- NO .....0 GO TO BB1
- DON'T KNOW .....d
- REFUSED .....r

**B. Household Size and Composition**

ALL

The first few questions are about the people you live with.

**BB1.** Including yourself, how many people live in your household? Don't forget to include non-relatives who live in your household and, of course, babies, small children and foster children. Also include people who usually live in your household but may have been away within the last 30 days for reasons such as: vacation, traveling for work, or in the hospital. Do not include children living away at school or anyone who is now incarcerated

**PROBE IF NEEDED:** By temporarily away we mean away within the last 30 days

\_\_\_\_|\_\_\_\_| NUMBER OF PEOPLE  
(1-20)

DON'T KNOW ..... d      Status refusal, Exit  
REFUSED ..... r      Status refusal, Exit

IF BB1=1

**BB1a.** Just to confirm, you are the only person living in the household. There are no children, non-relatives, or people who usually live there but are currently away?

YES ..... 1      Status ineligible, Exit  
NO, CORRECT NUMBER ..... 0      Repeat BB1  
DON'T KNOW ..... d      Repeat BB1  
REFUSED ..... r      Status refusal, Exit

[IF BB1 >1] AND [DEMONSTRATION = KENTUCKY]

**BB1b.** In which county do you currently live?

[List of eligible counties]

OTHER..... 99      Status ineligible, Exit  
DON'T KNOW ..... d      Status refusal, Exit  
REFUSED ..... r      Status refusal, Exit

[IF BB1 > 1] AND [DEMONSTRATION = NEVADA]

**BB1c.** What is your current ZIP Code?

[List of eligible ZIP Codes]

OTHER..... 13      Status ineligible, Exit  
DON'T KNOW ..... d      Status refusal, Exit  
REFUSED ..... r      Status refusal, Exit

IF [DEMONSTRATION] = KENTUCKY OR NEVADA

**BB1d. Are you or others in your household currently receiving Supplemental Nutrition Assistance Program (SNAP)?**

**PROBE IF NEEDED: SNAP is the program formerly known as 'Food Stamps.'**

- YES ..... 1
- NO ..... 0 GO TO BB1e
- DON'T KNOW ..... d GO TO BB1e
- REFUSED ..... r Status refusal, Exit

IF [DEMONSTRATION = KENTUCKY OR NEVADA] AND [BB1D = 0 OR DK]

**BB1e. PROBE: In the past three months, have you or others in your household received SNAP benefits?**

- YES ..... 1 Status ineligible, Exit
- NO ..... 0
- DON'T KNOW ..... d
- REFUSED ..... r Status refusal, Exit

IF BB1 > 1

**BB2. Do all the people who live with you share the food that is bought for the household?**

- YES ..... 1 GO TO BB3
- NO ..... 0 GO TO BB2a
- DON'T KNOW ..... d GO TO BB2a
- REFUSED ..... r GO TO BB2a

BB2 = 0, D, OR R

**BB2a. Including yourself, how many people in your household share the food that is bought for the household?**

\_\_\_\_ NUMBER OF PEOPLE  
(1-20)

- DON'T KNOW ..... d GO TO BB3
- REFUSED ..... r GO TO BB3

**HARD CHECK: [IF BB2a > BB1]; The number of people in your household who share food is greater than the total number of people in your household. Did I make a mistake?**

[IF BB1 > 1] OR [IF BB2A > 1]

[IF BB2 = 1 FILL= NUMBER FROM BB1], OTHERWISE FILL=NUMBER FROM BB2a

**BB3. How many of those [NUMBER FROM BB1 OR BB2a] people in your household are children age 18 or younger or over 18 but still in high school?**

\_\_\_\_ NUMBER OF PEOPLE  
(0-20)

DON'T KNOW .....d Go to BB3a

REFUSED .....r Go to BB3a

**HARD CHECK: [IF BB3 > BB1]; The number of children living in your household is greater than or equal to the total number of people in your household. Did I make a mistake?**

**HARD CHECK: [IF BB3 > BB2a]; The number of children living in your household is greater than the total number of people sharing food in your household. Did I make a mistake?**

PROGRAMMER BOX BB3  
IF BB3 GTE 1 AND DEMONSTRATION=KENTUCKY OR NEVADA, GO TO BB3B. ELSE IF BB3=D OR R GO TO BB3A. ELSE GO TO BB4.

BB3 = 0, D, OR R

**BB3a. Is there at least one child living in your household?**

YES ..... 1 REPEAT BB3

NO .....0 Status ineligible, Go to BB6

DON'T KNOW .....d Status refusal, Exit

REFUSED .....r Status refusal, Exit

IF DEMONSTRATION = KENTUCKY OR NEVADA

IF DEMONSTRATION = KENTUCKY FILL1= "was born after" AND FILL2 = "March 31, 2000"

IF DEMONSTRATION = NEVADA FILL1 = "will be under age 5 as of" AND FILL2 = "April 1, 2016"

**BB3b. Is there at least one child living in your household who [was born after/will be under age 5 as of] [March 31, 2000/April 1, 2016]?\***

YES ..... 1

NO .....0 Status ineligible, Go to BB9

DON'T KNOW .....d Status refusal, Go to BB9a

REFUSED .....r Status refusal, Go to BB9a

\*Represents the wording used to field the question; revised from the OMB version to coincide with eligibility age cut-offs and the intervention dates for the projects.

**BB4. [I'd like to make a list of the first names or initials of the children in your household. This will help me with asking some questions later.] What is the name of the [first/next] child?**

**IF NEEDED: You can give me the child's initials or some other way to refer to the child.**

\_\_\_\_\_  
NAME

DON'T KNOW .....d

REFUSED .....r

BB3 > 0
FILL [ANSWER FROM BB4] IF BB4 = D OR R FILL "this child"

**BB4a. What is [ANSWER FROM BB4/this child]'s date of birth?**

PROGRAMMER: COLLECT DATE WITH SEPARATE FIELDS

|\_|\_|/|\_|\_|/|\_|\_|\_|\_|  
 MONTH DAY YEAR  
 (1-12) (1-31) (1996-2016)

DON'T KNOW .....d

REFUSED .....r

BB4A = D OR R
FILL [ANSWER FROM BB4] IF BB4 = D OR R FILL "this child"

**BB4b. How old is [ANSWER FROM BB4/this child]? This information will help me with asking some questions later.**

|\_|\_| AGE OF CHILD  
 (0-52)

BB4B = 0-52
-------------

**BB4c. Is that weeks, months, or years?**

WEEKS ..... 1

MONTHS..... 2

YEARS ..... 3

DON'T KNOW .....d

REFUSED .....r

SOFT CHECK: [IF BB4b > 18 AND BB4c = 3]; The age is [ANSWER FROM BB4b] years old?
---

BB3 > 0
FILL [ANSWER FROM BB4] IF BB4 = D OR R FILL "this child"
BB3 GTE 1 AND AGE GTE 3 YEARS AND DEMONSTRATION = CHICKASAW NATION OR VIRGINIA
FILL NAME1 FROM BB4

**BB4d. Is [ANSWER FROM BB4/this child] a boy or girl?**

INTERVIEWER: ASK IF RESPONDENT HAS NOT ALREADY MENTIONED CHILD'S SEX.

CODE ONE ONLY

- BOY ..... 1
- GIRL ..... 2
- DON'T KNOW ..... d
- REFUSED ..... r

[IF BB3 > 0] AND  
 [IF DEMONSTRATION = CHICKASAW NATION OR VIRGINIA] AND  
 [[IF BB4A [YEAR] < 2013] OR [IF BB4B > 3 AND BB4C = 3] OR [IF BB4B > 36 AND BB4C = 2]]

FILL [ANSWER FROM BB4]  
 IF BB4 = D OR R FILL "this child"

**BB4e. Is [ANSWER FROM BB4/this child] in grades pre-K through 12 in your local school system?**

- YES ..... 1
- NO ..... 0
- DON'T KNOW ..... d
- REFUSED ..... r

[IF BB4E = 1] AND [IF DEMONSTRATION = CHICKASAW NATION OR VIRGINIA]

**BB4f. What school does [ANSWER FROM BB4/this child] attend?**

[List of schools + "other" option; "other" option routes respondent to BB9]

- DON'T KNOW ..... d
- REFUSED ..... r

[IF BB4E = 1] AND [IF DEMONSTRATION = CHICKASAW NATION]

**BB4g. On school days during the last 30 days, did [ANSWER FROM BB4/this child] get free lunches at school?**

- YES ..... 1
- NO ..... 0
- DON'T KNOW ..... d
- REFUSED ..... r

[IF BB4E = 1] AND [IF DEMONSTRATION = VIRGINIA]

**BB4h. On school days during the last 30 days, did [ANSWER FROM BB4/this child] get free or reduced price lunches at school?**

- YES ..... 1
- NO ..... 0
- DON'T KNOW ..... d
- REFUSED ..... r

[IF BB1A = 1] OR  
[IF BB3A = 0]

**BB6. I apologize, this survey is for individuals with at least one child under the age of 18 in the house.**

Go to END

[IF BB1 = R OR DK] or  
[IF BB1a = R] or  
[IF BB3a = R OR DK]

**BB6a. I apologize, this survey is for individuals with at least one child under the age of 18 in the house.**

Status refusal. Go to END

IF BB1B = 99

**BB7. I apologize, only certain counties are eligible for participation.**

Status ineligible. Go to END

IF BB1B = R OR DK

**BB7a. I apologize, only certain counties are eligible for participation.**

Status refusal. Go to END

IF BB1C = 13

**BB8. I apologize, only certain zip codes are eligible for participation.**

Status ineligible. Go to END

IF BB1C = R OR DK

**BB8a. I apologize, only certain zip codes are eligible for participation.**

Status refusal. Go to END

[IF BB3B = 0] OR

IF [BB1E = 1 OR DK] OR

IF [[DEMONSTRATION = CHICKASAW NATION OR VIRGINIA]] AND NO  
CHILDREN ATTEND AN ELIGIBLE SCHOOL IN BB4F]

**BB9. I apologize, you do not meet the eligibility criteria for this study at this time. We may try to contact you again in the future.**

Status ineligible. Go to END

[IF BB3B = R OR DK] OR

IF [BB1E = R] OR

**BB9a. I apologize, you do not meet the eligibility criteria for this study at this time. We may try to contact you again in the future.**

Status refusal. Go to END

### C. Children’s Program Participation

For the next series of questions we’ll be asking about meals and snacks the children in your household may have had during the last 30 days, that is, since [MONTH] [DAY].

AT LEAST ONE CHILD GTE AGE 3 YEARS

**BC1. On school days during the last 30 days, how many children in your household usually ate breakfast at school?**

|\_\_|\_\_| NUMBER OF CHILDREN  
(0-20)

DON'T KNOW .....d

REFUSED .....r

IF BC1 = 1-20, D, R

**BC1a. On school days during the last 30 days, how many children in your household got free or reduced-price breakfasts at school?**

|\_\_|\_\_| NUMBER OF CHILDREN  
(0- 20)

DON'T KNOW .....d

REFUSED .....r

AT LEAST ONE CHILD GTE AGE 3 YEARS

**BC1b. On school days during the last 30 days, how many children in your household usually ate a school lunch?**

|\_\_|\_\_| NUMBER OF CHILDREN  
(0- 20)

DON'T KNOW .....d

REFUSED .....r

IF BC1B = 1-20, D, R

**BC1c. On school days during the last 30 days, how many children in your household got free or reduced-price lunches at school?**

|\_\_|\_\_| NUMBER OF CHILDREN  
(0- 20)

DON'T KNOW .....d

REFUSED .....r

AT LEAST ONE CHILD GTE AGE 3 YEARS

**BC1d. During the last 30 days, how many children in your household got free supper meals at an after school program held in their school building?**

\_\_\_\_|\_\_\_\_| NUMBER OF CHILDREN

(0- 20)

DON'T KNOW .....d

REFUSED .....r

AT LEAST ONE CHILD GTE AGE 3 YEARS

**BC1e. During the last 30 days, how many children in your household participated in any other after school program where meals or snacks are served?**

\_\_\_\_|\_\_\_\_| NUMBER OF CHILDREN

(0- 20)

DON'T KNOW .....d

REFUSED .....r

ALL [Asked only for period when the last 30 day period included summer.]

**BC1f. During the last 30 days, how many children in your household received free meals or snacks at places such as summer school, a community center, day camp or park?**

\_\_\_\_|\_\_\_\_| NUMBER OF CHILDREN

(0- 20)

DON'T KNOW .....d

REFUSED .....r

AT LEAST ONE CHILD LTE AGE 5 YEARS

**BC1g. During the last 30 days, how many children in your household received meals or snacks at a daycare center, family or group daycare home, or Head Start center?**

**IF NEEDED: Please include children who received meals or snacks whether the meals or snacks were free, reduced-price, or paid. Please also include meals and snacks that were included in any payment you made to the center or home.**

\_\_\_\_|\_\_\_\_| NUMBER OF CHILDREN

(0- 20)

DON'T KNOW .....d

REFUSED .....r

AT LEAST ONE CHILD GTE AGE 3 YEARS

**BC2. During the last 30 days, how many children in your household got food through a school backpack food program for children?**

**PROBE IF NEEDED: The Backpack Food Program provides food for children to take home from school over weekends and holidays.**

\_\_\_\_|\_\_\_\_| NUMBER OF CHILDREN  
(0- 20)

DON'T KNOW ..... d

REFUSED ..... r

[IF BC2 > 0] AND [IF DEMONSTRATION = VIRGINIA]

If BC2 = 1: "child"

IF BC2 > 1: "children"

**BC2a. During the most recently completed school year, that is, school year 2014-2015, how often did your [child/children] usually take home a food backpack from school? Would you say...**

**Less often than once per month, ..... 1**

**Once per month, ..... 2**

**Two or three times per month, or ..... 3**

**Every week? ..... 4**

DON'T KNOW ..... d

REFUSED ..... r

IF DEMONSTRATION = CHICKASAW NATION

**BC3. How many children in your household received Summer EBT for Children benefits this past summer, that is, summer 2015?**

\_\_\_\_|\_\_\_\_| NUMBER OF CHILDREN  
(0- 20)

DON'T KNOW ..... d

REFUSED ..... r

**D. Food Purchase Behavior**

**These next questions are about where you shop for food for your household.**

IF DEMONSTRATION = CHICKASAW NATION OR KENTUCKY

**BD1. During the past 30 days, about how many times did you or someone in your household shop for food?**

\_\_\_\_|\_\_\_\_| NUMBER OF TIMES  
(0-30)

DON'T KNOW .....d

REFUSED .....r

IF DEMONSTRATION = CHICKASAW NATION OR KENTUCKY

**BD2. During the past 30 days, at what kind of store did you buy most of your groceries?**

INTERVIEWER: READ ONLY IF NECESSARY

INTERVIEWER: CODE "ALDI" AS A SUPERMARKET/GROCERY STORE

CODE ONE ONLY

SUPERMARKETS/GROCERY STORES ..... 1

DISCOUNT STORES SUCH AS WAL-MART, TARGET, OR KMART ..... 2

WAREHOUSE CLUBS, SUCH AS PRICE CLUB, COSTCO, PACE, SAM'S CLUB, OR BJ'S ..... 3

CONVENIENCE STORES SUCH AS 7-11, QUICK CHECK, QUICK STOP ..... 4

GAS STATIONS, SUCH AS SHELL, FLYING J, EXXON, MARATHON OR AMACO ..... 5

ETHNIC FOOD STORES SUCH AS BODEGAS, ASIAN FOOD MARKETS, OR CARIBBEAN MARKETS ..... 6

FARMERS' MARKETS ..... 7

DOLLAR STORES ..... 8

SURPLUS/CLOSE-OUT RETAILERS SUCH AS BIG LOTS ..... 9

OTHER (SPECIFY) ..... 99

\_\_\_\_\_ DON'T KNOW .....d

REFUSED .....r

IF DEMONSTRATION = KENTUCKY

**BD3. What is the main reason you shop at that store?**

CODE ONE ONLY

- LOW PRICES..... 1
  - SALES..... 2
  - QUALITY OF FOOD ..... 3
  - VARIETY OF FOODS (GENERAL) ..... 4
  - VARIETY OF SPECIAL FOODS (SUCH AS GLUTEN FREE)..... 5
  - CLOSE TO HOME/CONVENIENT ..... 6
  - EASY TO GET TO ..... 7
  - PRODUCE SELECTION..... 8
  - MEAT DEPARTMENT ..... 9
  - LOYALTY/FREQUENT SHOPPER PROGRAM..... 10
  - OTHER (SPECIFY)..... 99
- 
- DON'T KNOW ..... d
  - REFUSED ..... r

IF DEMONSTRATION = KENTUCKY

**BD4. How do you usually get to the store where you bought most of your groceries in the past 30 days?**

CODE ALL THAT APPLY

- DRIVE OWN CAR..... 1
  - DRIVE SOMEONE ELSE'S CAR..... 2
  - SOMEONE ELSE DRIVES ME..... 3
  - WALK ..... 4
  - BUS, SUBWAY, OR OTHER PUBLIC TRANSIT ..... 5
  - TAXI OR OTHER PAID DRIVER ..... 6
  - RIDE BICYCLE ..... 7
  - OTHER (SPECIFY)..... 99
- 
- DON'T KNOW ..... d
  - REFUSED ..... r

IF DEMONSTRATION = KENTUCKY

**BD4a. About how many minutes does it take to go one way from home to that store?**

INTERVIEWER: ENTER MIDPOINT IF RANGE IS GIVEN

|\_|\_| NUMBER OF MINUTES ONE WAY

(0-120)

DON'T KNOW .....d

REFUSED .....r

SOFT CHECK: IF BD4a > 60; I just want to make sure I recorded your answer correctly. Did you say [ANSWER FROM BD4a]?

DEMONSTRATION = CHICKASAW NATION OR KENTUCKY

**BD4b. And approximately how many miles away is that store from your home – one way?**

INTERVIEWER: ENTER MIDPOINT IF RANGE IS GIVEN; IF LESS THAN ONE MILE ENTER "0"

|\_|\_| NUMBER OF MILES ONE WAY

(0-99)

DON'T KNOW .....d

REFUSED .....r

SOFT CHECK: IF BD4b > 30; I just want to make sure I recorded your answer correctly. Did you say [ANSWER FROM BD4b]?

ALL

**BD5. How many nights a week does your family typically sit down together to have dinner as a family?**

CODE ONE ONLY

EVERY NIGHT .....1

5 OR 6 NIGHTS .....2

3 OR 4 NIGHTS .....3

1 OR 2 NIGHTS .....4

NEVER .....5

DON'T KNOW .....d

REFUSED .....r

IF DEMONSTRATION = NEVADA OR VIRGINIA

**BD6. During the past 7 days, how many times did you or someone else in your family prepare food for dinner or supper at home? Include times spent putting the ingredients together for dinner or supper, but do not include heating up leftovers.**

|\_| NUMBER (0-7)

DON'T KNOW .....d

REFUSED .....r

IF DEMONSTRATION = NEVADA OR VIRGINIA

**BD7. How often do you shop with a grocery list? Would you say...**

CODE ONE ONLY

**Never,** ..... 1

**Rarely,** ..... 2

**Sometimes,** ..... 3

**Most of the time, or** ..... 4

**Always?** ..... 5

DON'T KNOW .....d

REFUSED .....r

IF DEMONSTRATION = NEVADA OR VIRGINIA

**BD8. In the past 12 months, about how many classes, lectures, events, or demonstrations about how to shop for or prepare nutritious food and meals did you or another adult in your household attend?**

|\_|\_| SESSIONS  
(0-24)

DON'T KNOW .....d

REFUSED .....r

**E. Food Security**

PROGRAMMER:  
SELECT APPROPRIATE FILLS DEPENDING ON NUMBER OF ADULTS AND CHILDREN IN THE HOUSEHOLD. DEFAULT TO MULTIPLE ADULTS AND MULTIPLE CHILDREN IN HOUSEHOLD.

ALL  
FILL [MONTH] [DAY]

**BE1. Now I'm going to read you several statements that people have made about their food situation. For these statements, please tell me whether the statement was often true, sometimes true, or never true for your household in the last 30 days, that is, since [MONTH] [DAY].**

**The first statement is "We worried whether our food would run out before we got money to buy more." Was that often true, sometimes true, or never true for your household in the last 30 days?**

CODE ONE ONLY

- OFTEN TRUE ..... 1
- SOMETIMES TRUE..... 2
- NEVER TRUE ..... 3
- DON'T KNOW ..... d
- REFUSED ..... r

ALL

**BE2. "The food that we bought just didn't last, and we didn't have money to get more." Was that often, sometimes, or never true for your household in the last 30 days?**

CODE ONE ONLY

- OFTEN TRUE ..... 1
- SOMETIMES TRUE..... 2
- NEVER TRUE ..... 3
- DON'T KNOW ..... d
- REFUSED ..... r

ALL

**BE3. “We couldn’t afford to eat balanced meals.” Was that often, sometimes, or never true for your household in the last 30 days?**

CODE ONE ONLY

- OFTEN TRUE ..... 1
- SOMETIMES TRUE..... 2
- NEVER TRUE ..... 3
- DON'T KNOW ..... d
- REFUSED ..... r

PROGRAMMER BOX BE3  
 IF BE1=1 OR 2 OR BE2=1 OR 2 OR BE3=1 OR 2, GO TO BE4;  
 OTHERWISE, SKIP TO BE9.

[IF BE1 = 1 OR 2] OR [IF BE2 = 1 OR 2] OR [IF BE3 = 1 OR 2]  
 IF [BB1 – BB3] > 1: “or other adults in your household”  
 FILL [MONTH] [DAY]

**BE4. In the last 30 days, that is, since [MONTH] [DAY], did you [or other adults in your household] ever cut the size of your meals or skip meals because there wasn’t enough money for food?**

- YES ..... 1
- NO ..... 0 GO TO BE5
- DON'T KNOW ..... d GO TO BE5
- REFUSED ..... r GO TO BE5

IF BE4 = 1

**BE4a. In the last 30 days, how many days did this happen?**

- \_\_\_\_ NUMBER OF DAYS GO TO BE5  
 (1-30)
- DON'T KNOW ..... d
- REFUSED ..... r GO TO BE5

IF BE4A = D

**BE4b. Do you think it was one or two days, or more than two days?**

CODE ONE ONLY

- ONE OR TWO DAYS..... 1
- MORE THAN TWO DAYS .....2
- DON'T KNOW .....d
- REFUSED .....r

BE1=1 OR 2 OR BE2=1 OR 2 OR BE3=1 OR 2

**BE5. In the last 30 days, did you ever eat less than you felt you should because there wasn't enough money for food?**

- YES ..... 1
- NO .....0
- DON'T KNOW .....d
- REFUSED .....r

[IF BE1 = 1 OR 2] OR [IF BE2 = 1 OR 2] OR [IF BE3 = 1 OR 2]

**BE6. In the last 30 days, were you ever hungry but didn't eat because there wasn't enough money for food?**

- YES ..... 1
- NO .....0
- DON'T KNOW .....d
- REFUSED .....r

[IF BE1 = 1 OR 2] OR [IF BE2 = 1 OR 2] OR [IF BE3 = 1 OR 2]

**BE7. In the last 30 days, did you lose weight because there wasn't enough money for food?**

- YES ..... 1
- NO .....0
- DON'T KNOW .....d
- REFUSED .....r

PROGRAMMER BOX BE7  
 IF BE4=1 OR BE5=1 OR BE6=1 OR BE7=1, GO TO BE8;  
 OTHERWISE, SKIP TO BE9.

[IF BE4 = 1] OR [IF BE5 = 1] OR [IF BE6 = 1] OR [IF BE7 = 1]  
 IF [BB1 – BB3] > 1: “or other adults in your household”

**BE8. In the last 30 days, did you [or other adults in your household] ever not eat for a whole day because there wasn't enough money for food?**

- YES ..... 1
- NO ..... 0 GO TO BE9
- DON'T KNOW ..... d GO TO BE9
- REFUSED ..... r GO TO BE9

IF BE8 = 1

**BE8a. In the last 30 days, how many days did this happen?**

- |\_\_| NUMBER OF DAYS GO TO BE9  
(1-30)
- DON'T KNOW ..... d
- REFUSED ..... r GO TO BE9

IF BE8a = D

**BE8b. Do you think it was one or two days, or more than two days?**

CODE ONE ONLY

- ONE OR TWO DAYS ..... 1
- MORE THAN TWO DAYS ..... 2
- DON'T KNOW ..... d
- REFUSED ..... r

ALL
<p>IF BB3 = 1; FILL 1 "your child"</p> <p>IF BB3 &gt; 1; FILL 1 "children living in your household"</p> <p>IF BB1= 2 AND BB3 = 1; FILL 2 "I relied on only a few kinds of low-cost food to feed my child because I was running out of money to buy food."</p> <p>[IF [BB1 – BB3] = 1] AND [BB3&gt;1]; FILL 2 "I relied on only a few kinds of low-cost food to feed my children because I was running out of money to buy food."</p> <p>[IF [BB1 – BB3] &gt; 1] AND [BB3 = 1]; FILL 2 "We relied on only a few kinds of low-cost food to feed our child because we were running out of money to buy food."</p> <p>[IF [BB1 – BB3] &gt; 1] AND [BB3 &gt; 1]; FILL 2 "We relied on only a few kinds of low-cost food to feed our children because we were running out of money to buy food"</p>

**BE9. Now I'm going to read you several statements that people have made about the food situation of their children. For these statements, please tell me whether the statement was often true, sometimes true, or never true in the last 30 days for [your child/children living in your household].**

**["I relied on only a few kinds of low-cost food to feed my child because I was running out of money to buy food."/]**

**"I relied on only a few kinds of low-cost food to feed my children because I was running out of money to buy food."/]**

**"We relied on only a few kinds of low-cost food to feed our child because we were running out of money to buy food."/]**

**"We relied on only a few kinds of low-cost food to feed our children because we were running out of money to buy food."/]**

Was that often, sometimes, or never true for your household in the last 30 days?

- OFTEN TRUE ..... 1
- SOMETIMES TRUE..... 2
- NEVER TRUE ..... 3
- DON'T KNOW ..... d
- REFUSED ..... r

ALL
IF BB1= 2 AND BB3 = 1; FILL 1 "I couldn't feed my child a balanced meal, because I couldn't afford that."
[IF [BB1 – BB3] = 1] AND [BB3>1]; FILL 1 "I couldn't feed my children a balanced meal, because I couldn't afford that."
[IF [BB1 – BB3] > 1] AND [BB3 = 1]; FILL 1 "We couldn't feed our child a balanced meal, because we couldn't afford that."
[IF [BB1 – BB3] > 1] AND [BB3 > 1]; FILL 1 "We couldn't feed our children a balanced meal, because we couldn't afford that."

**BE10. ["I couldn't feed my child a balanced meal, because I couldn't afford that."/**  
**"I couldn't feed my children a balanced meal, because I couldn't afford that."/**  
**"We couldn't feed our child a balanced meal, because we couldn't afford that."/**  
**"We couldn't feed our children a balanced meal, because we couldn't afford that."]**

Was that often, sometimes, or never true for your household in the last 30 days?

OFTEN TRUE ..... 1  
 SOMETIMES TRUE..... 2  
 NEVER TRUE ..... 3  
 DON'T KNOW ..... d  
 REFUSED ..... r

ALL
IF BB1= 2 AND BB3 = 1; FILL 1 "My child was not eating enough because I just couldn't afford enough food."
[IF [BB1 – BB3] = 1] AND [BB3>1]; FILL 1 "My children were not eating enough because I just couldn't afford enough food."
[IF [BB1 – BB3] > 1] AND [BB3 = 1]; FILL 1 "Our child was not eating enough because we just couldn't afford enough food"
[IF [BB1 – BB3] > 1] AND [BB3 > 1]; FILL 1 "Our children were not eating enough because we just couldn't afford enough food."

**BE11. ["My child was not eating enough because I just couldn't afford enough food."/**  
**"My children were not eating enough because I just couldn't afford enough food."/**  
**"Our child was not eating enough because we just couldn't afford enough food."/**  
**"Our children were not eating enough because we just couldn't afford enough food."]**

Was that often, sometimes, or never true for your household in the last 30 days?

OFTEN TRUE ..... 1  
 SOMETIMES TRUE..... 2  
 NEVER TRUE ..... 3  
 DON'T KNOW ..... d  
 REFUSED ..... r

**PROGRAMMER BOX BE11**  
 IF BE9=1 OR 2 OR BE10=1 OR 2 OR BE11=1 OR 2, GO TO BE12;  
 OTHERWISE, SKIP TO BF1.

[IF BE9 = 1 OR 2] OR [IF BE10 = 1 OR 2] OR [IF BE11 = 1 OR 2]

FILL 1 [MONTH] [DAY]  
 IF BB3 = 1; FILL 2 "your child's"  
 IF BB3>1; FILL 2 "any of your children's"

**BE12. In the last 30 days, that is, since [MONTH] [DAY], did you ever cut the size of [your child's/any of your children's] meals because there wasn't enough money for food?**

- YES ..... 1
- NO ..... 0
- DON'T KNOW ..... d
- REFUSED ..... r

[IF BE9 = 1 OR 2] OR [IF BE10 = 1 OR 2] OR [IF BE11 = 1 OR 2]

IF BB3 = 1; FILL "your child"  
 IF BB3>1; FILL "any of your children"

**BE13. In the last 30 days, did [your child/any of your children] ever skip meals because there wasn't enough money for food?**

- YES ..... 1
- NO ..... 0      GO TO BE14
- DON'T KNOW ..... d      GO TO BE14
- REFUSED ..... r      GO TO BE14

BE13 = 1

**BE13a. In the last 30 days, how many days did this happen?**

- \_\_\_\_ NUMBER OF DAYS ..... GO TO BE14  
 (1-30)
- DON'T KNOW ..... d      GO TO BE13b
- REFUSED ..... r      GO TO BE14

BE13a = D

**BE13b. Do you think it was one or two days, or more than two days?**

CODE ONE ONLY

- ONE OR TWO DAYS..... 1
- MORE THAN TWO DAYS .....2
- DON'T KNOW .....d
- REFUSED .....r

[IF BE9 = 1 OR 2] OR [IF BE10 = 1 OR 2] OR [IF BE11 = 1 OR 2]

IF BB3 = 1; FILL "was your child"  
 IF BB3>1; FILL "were your children"

**BE14. In the last 30 days, [was your child/were your children] ever hungry but you just couldn't afford more food?**

- YES ..... 1
- NO .....0
- DON'T KNOW .....d
- REFUSED .....r

[IF BE9 = 1 OR 2] OR [IF BE10 = 1 OR 2] OR [IF BE11 = 1 OR 2]

IF BB3 = 1; FILL "your child"  
 IF BB3>1; FILL "any of your children"

**BE15. In the last 30 days, did [your child/any of your children] ever not eat for a whole day because there wasn't enough money for food?**

- YES ..... 1
- NO .....0
- DON'T KNOW .....d
- REFUSED .....r

### F. Food Expenditures

ALL

Now, I'd like to ask some questions about shopping for food and eating at restaurants. These questions are about out-of-pocket spending on food. Later on I will ask you about purchases made with government benefits like SNAP, WIC, or FDPIR.

ALL

FILL DATE = [DATE] [MONTH]

**BF1.** First I'll ask you about money spent on food at supermarkets and other stores. Then we will talk about money spent at fast food restaurants and other restaurants.

Excluding any government benefits like SNAP or WIC, since [DATE] [MONTH] how much money did your family spend out of pocket at supermarkets, grocery stores, and other stores? Please do not include fast food restaurants and other types of restaurants.

**PROBE:** This includes stores such as Wal-Mart, Target, and Kmart, convenience stores like 7-11 or Mini Mart, stores like Costco or Sam's Club, dollar stores, bakeries, meat markets, vegetable stands, or farmer's markets.

**PROBE:** Please include the total amount spent in the past 30 days, since [DATE] [MONTH].

|\_|\_|\_|\_| MONEY SPENT (\$0-\$9,999)

DON'T KNOW .....d GO TO BF4

REFUSED .....r GO TO BF4

IF BF1 = \$1-\$9,999

FILL AMOUNT FROM BF1

**BF2.** Was any of this \$[AMOUNT FROM BF1] spent on nonfood items such as cleaning or paper products, pet food, cigarettes or alcoholic beverages?

YES .....1 GO TO BF3

NO .....0 GO TO BF4

DON'T KNOW .....d GO TO BF4

REFUSED .....r GO TO BF4

IF BF2 = 1
FILL AMOUNT FROM BF1

**BF3. About how much of the \$[AMOUNT FROM BF1] was spent on nonfood items?**

|\_|\_|\_|\_| MONEY SPENT (\$0-\$9,999)

DON'T KNOW .....d GO TO BF4

REFUSED .....r GO TO BF4

**HARD CHECK: IF [BF1 = \$0-9,999] AND IF [BF3 > BF1]; The amount spent on nonfood items is greater than the total amount spent at supermarkets, grocery stores, and other stores. Did I make a mistake?**

ALL
-----

**BF4. During the last 30 days, how many times did your family eat food from a fast food restaurant or other kinds of restaurants? Include restaurant meals at home, at fast food or other restaurants, carryout, or drive thru.**

**PROBE IF NEEDED:** Please include the total number of visits in the past 30 days, since [DATE] [MONTH].

**PROBE IF NEEDED:** Such as food you get at McDonald's, KFC, Panda Express, Taco Bell, Pizza Hut, food trucks, Applebee's, Chili's, TGI Fridays, etc.

|\_|\_|\_| TIMES (0-99)

DON'T KNOW .....d GO TO BG1

REFUSED .....r GO TO BG1

BF4 = 1-99
------------

**BF5. About how much money did your family spend on food at all types of restaurants including fast food restaurants during the last 30 days?**

**PROBE:** Please include the total amount spent in the past 30 days, since [DATE] [MONTH].

|\_|\_|\_|\_| MONEY SPENT (\$0-\$9,999)

DON'T KNOW .....d GO TO BG1

REFUSED .....r GO TO BG1

**G. Other Program Participation**

ALL

**Next, I'm going to read the names of some programs that provide food or meals or other services to individuals or households.**

ALL  
 FILL DATE = [DATE] [MONTH]

**BG1. In the last 30 days, that is, since [DATE] [MONTH], did you or anyone in your household receive food or benefits from the Women, Infants and Children program called WIC?**

- YES .....1 GO TO BG1A
- NO .....0 GO TO BG2
- DON'T KNOW .....d GO TO BG2
- REFUSED .....r GO TO BG2

BG1 = 1

**BG1a. How many women, infants, or children in the household got WIC foods or benefits?**

\_\_\_\_ NUMBER OF WOMEN, INFANTS, OR CHILDREN  
 (1-20)

- DON'T KNOW .....d GO TO BG2
- REFUSED .....r GO TO BG2

BG1A=1-20

**BG1b. Of those, how many were infants or children up to age 5?**

\_\_\_\_ NUMBER OF INFANTS OR CHILDREN  
 (0-20)

- DON'T KNOW .....d
- REFUSED .....r

ALL

**BG2. In the last 30 days did you or anyone in your household receive food or meals from food pantries, food banks, local soup kitchens or emergency kitchens, community program, senior center, shelter, Meals on Wheels (or other programs delivering meals to your home), or church?**

- YES .....1
- NO .....0
- DON'T KNOW .....d
- REFUSED .....r

DEMONSTRATION = CHICKASAW NATION

**BG3. Do you or others in your household currently receive monthly commodity foods as part of the Food Distribution Program on Indian Reservations, also called FDPIR, *fi-dipper*, or *fid-purr*?**

- YES ..... 1
- NO ..... 0
- DON'T KNOW ..... d
- REFUSED ..... r

### H. SNAP Enrollment

ALL

**BH1. In the last 12 months, has your household ever been enrolled in the Supplemental Nutrition Assistance Program (SNAP)?**

- YES ..... 1
- NO ..... 0      GO TO BH2a
- DON'T KNOW ..... d      GO TO BH2a
- REFUSED ..... r      GO TO BH2a

BH1=1

**BH1a. In the last 12 months, how long did your household receive the Supplemental Nutrition Assistance Program (SNAP)? If your household received SNAP, stopped receiving it, and then started again, please include all of that time.**

|\_|\_|\_| AMOUNT OF TIME

(0-365)

- DON'T KNOW ..... d      GO TO BH2a
- REFUSED ..... r      GO TO BH2a

BH1A = 1-365

**BH1b. Is that days, weeks, or months?**

- DAYS ..... 1
- WEEKS ..... 2
- MONTHS ..... 3
- DON'T KNOW ..... d      GO TO BH2a
- REFUSED ..... r      GO TO BH2a

ALL

**BH2a. In total, how long have you and your household ever received the Supplemental Nutrition Assistance Program (SNAP)?**

**IF NEEDED: Please include all of the time your household has received SNAP, even if your household has started and stopped receiving benefits more than once.**

|\_|\_|\_| AMOUNT OF TIME

(0-365)

- DON'T KNOW ..... d      GO TO BH3
- REFUSED ..... r      GO TO BH3

IF BH2A = 1-365

**BH2b. Is that days, weeks, months, or years?**

CODE ONE ONLY

- DAYS..... 1
- WEEKS ..... 2
- MONTHS..... 3
- YEARS ..... 4
- DON'T KNOW ..... d GO TO BH3
- REFUSED ..... r GO TO BH3

[BB1D=1 OR BH1=1] AND [DEMONSTRATION = CHICKASAW NATION OR KENTUCKY OR VIRGINIA]

**BH3. Are you or others in your household currently receiving SNAP?**

- YES ..... 1
- NO ..... 0 GO TO BI1
- DON'T KNOW ..... d GO TO BI1
- REFUSED ..... r GO TO BI1

BB1D=1 OR [BB1E=0 OR DK] OR BH3=1 AND [DEMONSTRATION = KENTUCKY]

**BH4. What is the amount of the SNAP your household receives per month?**

\_\_\_\_|\_\_\_\_|\_\_\_\_|\_\_\_\_| DOLLAR AMOUNT  
(\$1 - \$9999)

- DON'T KNOW ..... d GO TO BI1
- REFUSED ..... r GO TO BI1

BB1D=1 OR [BB1E=0 OR DK] OR BH3=1 AND [DEMONSTRATION = KENTUCKY]

**BH5. In the last 12 months, did the amount of the benefit increase, decrease, or stay the same?**

CODE ONE ONLY

- INCREASED ..... 1
- DECREASED ..... 2
- BOTH INCREASED AND DECREASED ..... 3
- STAYED SAME..... 4
- DON'T KNOW ..... d GO TO BI1
- REFUSED ..... r GO TO BI1

BB1D=1 OR [BB1E=0 OR DK] OR BH3=1 AND [DEMONSTRATION = KENTUCKY]

**BH6. How many weeks do your SNAP benefits usually last?**

INTERVIEWER: CODE ANY ANSWER GREATER THAN 8 WEEKS AS 8

|\_\_| NUMBER OF WEEKS  
(0-8)

DON'T KNOW .....d GO TO B11

REFUSED .....r GO TO B11

**I. Household Resources**

ALL
FILL [DATE] [MONTH]

**BI1. The next questions are about working or jobs. Were you or any other adult in your household working for pay in the last 30 days that is, since [DATE] [MONTH]?**

- YES ..... 1
- NO ..... 0
- DON'T KNOW ..... d
- REFUSED ..... r

DEMONSTRATION = KENTUCKY AND BI1 = 1, D, R
--

**BI2. And what was your household's total earnings before taxes last month? Please include earnings from wages and salaries from a job or self-employment, or income from a rental property. Do not include income from Social Security, pensions, child support, or cash welfare benefits, or the value of SNAP benefits or food stamps, WIC, Medicaid, or public housing.**

\$ |\_|\_|\_|\_|\_|\_| DOLLAR AMOUNT (\$0 – 99,999)

- DON'T KNOW ..... d GO TO BI2a
- REFUSED ..... r GO TO BI2a

BI2 = D OR R
--------------

**BI2a. Some people find it easier to select earnings from a range. Please stop me when I reach your household's total earnings for last month. Was it...**

CODE ONE ONLY

- Less than \$500, ..... 1
- \$500 to less than \$1,000, ..... 2
- \$1,000 to less than \$1,500, ..... 3
- \$1,500 to less than \$2,000, ..... 4
- \$2,000 to less than \$2,500, ..... 5
- \$2,500 to less than \$3,000, or ..... 6
- \$3,000 or more? ..... 7
- DON'T KNOW ..... d GO TO BI3
- REFUSED ..... r GO TO BI3

ALL
FILL [LAST MONTH]

**BI3. What was your household’s total income last month, during [LAST MONTH] before taxes? Please include all types of income received by all household members last month, including all earnings, Social Security, pensions, Veteran’s Benefits, Unemployment Insurance, worker’s compensation benefits, child support, payments from roomers or boarders, and cash welfare benefits such as TANF (*TAH-nif*) and SSI. Do not include the value of SNAP benefits or food stamps, WIC, Medicaid, or public housing.**

\_\_\_\_|\_\_\_\_|\_\_\_\_|\_\_\_\_| DOLLAR AMOUNT (\$0 – 99,999)

- NO INCOME ..... 0 GO TO BI4
- GAVE ANSWER ..... 1 GO TO BI4
- DON'T KNOW ..... d GO TO BI3B
- REFUSED ..... r GO TO BI3B

BI3 = D OR R
--------------

**BI3b. Some people find it easier to select an income range. Please stop me when I reach your household’s total income for last month. Was it...**

CODE ONE ONLY

- Less than \$500, ..... 1
- \$500 to less than \$1,000, ..... 2
- \$1,000 to less than \$1,500, ..... 3
- \$1,500 to less than \$2,000, ..... 4
- \$2,000 to less than \$2,500, ..... 5
- \$2,500 to less than \$3,000, or ..... 6
- \$3,000 or more? ..... 7
- DON'T KNOW ..... d
- REFUSED ..... r

ALL

**BI4. And, what was your household’s total income last year before taxes?**

PROBE IF NEEDED: **Please include all types of income received by all household members last year, including all earnings, Social Security, pensions, Veteran’s Benefits, Unemployment Insurance, worker’s compensation benefits, child support, payments from roomers or boarders and cash welfare benefits such as TANF (*TAH-nif*) and SSI. Do not include the value of SNAP benefits or food stamps, WIC, Medicaid, or public housing.**

INTERVIEWER: “LAST YEAR,” MEANING 2015.

|\_|\_|\_|\_|\_| DOLLAR AMOUNT (\$0 – 150,000)

DON’T KNOW .....d GO TO BI4A  
 REFUSED .....r GO TO BI4A

BI4 = D OR R

**BI4a. Some people find it easier to select an income range. Please stop me when I reach your household’s total income for last year. Was it...**

CODE ONE ONLY

Less than \$10,000, ..... 1 GO TO BI5  
 \$10,000 to less than \$20,000, ..... 2 GO TO BI5  
 \$20,000 to less than \$35,000, ..... 3 GO TO BI5  
 \$35,000 to less than \$50,000, ..... 4 GO TO BI5  
 \$50,000 to less than \$75,000, ..... 5 GO TO BI5  
 \$75,000 to less than \$100,000, ..... 6 GO TO BI5  
 \$100,000 to less than \$150,000, or ..... 7 GO TO BI5  
 \$150,000 or more? ..... 8 GO TO BI5  
 DON’T KNOW .....d GO TO BI5  
 REFUSED .....r GO TO BI5

ALL
FILL [MONTH] [DAY]

**BI5.** The next questions are about sources of income. The answers to these and all other questions on this survey will be kept private and will never be associated with your name. During the last 30 days, that is, since [MONTH] [DAY], did you or anyone in your household receive...

	CODE ONE PER ROW			
	YES	NO	DON'T KNOW	REFUSED
a. TANF, Temporary Assistance to Needy Families or other welfare such as General Assistance?	1	0	d	r
b. Social Security from the government for retirement, disability, or survivors' benefits, or other retirement benefits such as a government or private pension or annuity?	1	0	d	r
c. SSI or Supplemental Security Income from the federal, state, or local government?	1	0	d	r
d. Veteran's Benefits?	1	0	d	r
e. Unemployment Insurance or worker's compensation benefits?	1	0	d	r
f. Child support payments or payments from roomers or boarders?	1	0	d	r
g. Financial support from friends or family?	1	0	d	r
h. Any other income besides earnings?	1	0	d	r

BI5H = 1
----------

**BI5H\_Specify. What is that other income?**

DESCRIPTION \_\_\_\_\_  
 DON'T KNOW .....d  
 REFUSED .....r

[BI6 on household limitations deleted per OMB on August 10, 2015.]

ALL

**B17. Now I'd like to ask you about how much help you would expect to get from different sources if your household had a problem with which you needed help, for example, sickness or moving. After I read each source, please tell me if you would expect to get all of the help needed, most of the help needed, very little of the help needed, or no help?**

INTERVIEWER: REPEAT ANSWER CHOICES AS NEEDED.

CODE ONE PER ROW

	ALL OF THE HELP NEEDED	MOST OF THE HELP NEEDED	VERY LITTLE OF THE HELP NEEDED	NO HELP	DON'T KNOW	REFUSED
a. Family living nearby?	1	2	3	4	d	r
b. Friends?	1	2	3	4	d	r
c. Other people in the community besides family and friends, such as a social service agency or a church?	1	2	3	4	d	r

### J. Trigger Events

The next few questions are about changes that may have occurred in your household in the past 6 months.

ALL

- BJ1. Has there been a change in the number of people living in your household over the past 6 months?**
- YES ..... 1
  - NO ..... 0 GO TO BJ2
  - DON'T KNOW ..... d GO TO BJ2
  - REFUSED ..... r GO TO BJ2

BJ1 = 1

**BJ1a. What caused that change?**

CODE ALL THAT APPLY

- BIRTH OF CHILD ..... 1
- NEW STEP, FOSTER OR ADOPTED CHILD ..... 2
- MARRIAGE/ROMANTIC PARTNER ..... 3
- SEPARATION OR DIVORCE ..... 4
- DEATH OF HOUSEHOLD MEMBER ..... 5
- FAMILY/BOARDER/OTHER ADULT MOVED IN ..... 6
- FAMILY/BOARDER/OTHER ADULT MOVED OUT ..... 7
- HOUSEHOLD MEMBER INCARCERATED ..... 8
- OTHER (SPECIFY) ..... 99
- \_\_\_\_\_
- DON'T KNOW ..... d
- REFUSED ..... r

ALL

- BJ2. At any time in the past 6 months was your household evicted from your house or apartment?**
- YES ..... 1
  - NO ..... 0
  - DON'T KNOW ..... d
  - REFUSED ..... r

ALL

**BJ3. Have you or anyone in your household had a change in employment or a change in pay or hours worked from a job in the past 6 months?**

- YES ..... 1
- NO ..... 0 GO TO BK1
- DON'T KNOW ..... d GO TO BK1
- REFUSED ..... r GO TO BK1

BJ3=1

**BJ3a. What was that change in employment or a change in pay or hours worked from a job that you or someone in your household experienced in the past 6 months?**

CODE ALL THAT APPLY

- OBTAINED A JOB ..... 1
  - LOST JOB ..... 2
  - INCREASE IN PAY OR HOURS ..... 3
  - DECREASE IN PAY OR HOURS ..... 4
  - OTHER (SPECIFY) ..... 99
- 
- DON'T KNOW ..... d
  - REFUSED ..... r

**K. Respondent Demographics and Health Status**

ALL

**BK1. Now, I have a few questions about you.**

[RECORD GENDER FROM OBSERVATION.]

[PROBE ONLY IF NECESSARY: Because it is sometimes difficult to determine over the phone, I am asked to confirm with everyone...Are you male or female?]

INTERVIEWER: CODE DON'T KNOW IF RESPONDENT DOES NOT WANT TO IDENTIFY AS MALE OR FEMALE

- MALE.....1
- FEMALE .....2
- DON'T KNOW .....d
- REFUSED .....r

ALL

**BK2. What is your relationship to the children living in the household?**

INTERVIEWER: READ ONLY IF NECESSARY

CODE ALL THAT APPLY

- BIOLOGICAL/ADOPTIVE PARENT .....1
- STEP-PARENT .....2
- GRANDPARENT.....3
- GREAT GRANDPARENT .....4
- SIBLING/STEPSIBLING .....5
- OTHER RELATIVE OR IN LAW .....6
- FOSTER PARENT .....7
- OTHER NON-RELATIVE .....8
- PARENT'S PARTNER .....9
- DON'T KNOW .....d
- REFUSED .....r

ALL

**BK3. Are you of Hispanic or Latino origin?**

- HISPANIC OR LATINO .....1
- NOT HISPANIC OR LATINO .....0
- DON'T KNOW .....d
- REFUSED .....r

ALL

**BK4. I am going to read a list of five race categories. Please choose one or more races that you consider yourself to be. American Indian or Alaska Native; Asian; Black or African American; Native Hawaiian or other Pacific Islander; White?**

CODE ALL THAT APPLY

- AMERICAN INDIAN OR ALASKA NATIVE ..... 1
- ASIAN.....2
- BLACK OR AFRICAN AMERICAN .....3
- NATIVE HAWAIIAN OR OTHER PACIFIC ISLANDER.....4
- WHITE.....5
- DON'T KNOW .....d
- REFUSED .....r

ALL

**BK5. What is your current marital status? Are you now married, divorced, separated, widowed, never married, or living with a partner?**

CODE ONE ONLY

- MARRIED..... 1
- SEPARATED OR DIVORCED .....2
- WIDOWED .....3
- NEVER MARRIED .....4
- LIVING WITH PARTNER.....5
- DON'T KNOW .....d
- REFUSED .....r

ALL

**BK6. What is your date of birth?**

PROGRAMMER: COLLECT DATE WITH SEPARATE FIELDS

|\_|\_|/|\_|\_|/|\_|\_|\_|\_|  
 MONTH DAY YEAR  
 (1-12) (1-31) (1916-2001)

- DON'T KNOW .....d
- REFUSED .....r

BK6 = D OR R

**BK6a. I can record your age instead if you would like. How many years old are you?**

|\_|\_| YEARS

(18-99)

DON'T KNOW .....d

REFUSED .....r

ALL

**BK7. What is the highest grade or level of school you have completed or the highest degree you have received?**

**[ENTER HIGHEST LEVEL OF SCHOOL.]**

NEVER ATTENDED/KINDERGARTEN ONLY.....0

1ST GRADE .....1

2ND GRADE .....2

3RD GRADE .....3

4TH GRADE.....4

5TH GRADE.....5

6TH GRADE.....6

7TH GRADE.....7

8TH GRADE.....8

9TH GRADE.....9

10TH GRADE.....10

11TH GRADE.....11

12TH GRADE, NO DIPLOMA.....12

HIGH SCHOOL GRADUATE.....13

GED OR EQUIVALENT .....14

SOME COLLEGE, NO DEGREE.....15

ASSOCIATE DEGREE: OCCUPATIONAL, TECHNICAL, OR VOCATIONAL PROGRAM.....16

ASSOCIATE DEGREE: ACADEMIC PROGRAM .....17

BACHELOR'S DEGREE (EXAMPLE: BA, AB, BS, BBA).....18

MASTER'S DEGREE (EXAMPLE: MA, MS, MEng, MEd, MBA).....19

PROFESSIONAL SCHOOL DEGREE (EXAMPLE: MD, DDS, DVM, JD) .....20

DOCTORAL DEGREE (EXAMPLE: PhD, EdD) .....21

DON'T KNOW .....d

REFUSED .....r

ALL

**BK8. In general, would you say your health is excellent, very good, good, fair or poor?**

CODE ONE ONLY

- EXCELLENT ..... 1
- VERY GOOD ..... 2
- GOOD ..... 3
- FAIR ..... 4
- POOR ..... 5
- DON'T KNOW ..... d
- REFUSED ..... r

### L. Closing Information

ALL

**BL1. Thank you very much for your time. You have really helped us with this study. I'd like to confirm your address so we can send you a \$30 gift card within the next few weeks.**

According to our records we have...

[FILL NAME FROM SAMPLE FRAME OR SCREENER]

[FILL STREET ADDRESS FROM SAMPLE FRAME]

[FILL CITY, STATE, ZIP CODE FROM SAMPLE FRAME]

[IF SECOND FOLLOW-UP FILL EMAIL ADDRESS]

[IF SECOND FOLLOW-UP FILL PHONE NUMBER]

CONTACT INFORMATION IS CORRECT ..... 1 GO TO BL2

CONTACT INFORMATION NEEDS UPDATING ..... 0

UPDATE: NAME

UPDATE: STREET ADDRESS:

\_\_\_\_\_ STREET 1

\_\_\_\_\_ STREET 2

\_\_\_\_\_ STREET 3

\_\_\_\_\_ CITY

\_\_\_\_\_ STATE

\_\_\_\_\_ ZIP

|\_|\_|\_| - |\_|\_|\_| - |\_|\_|\_| - |\_|\_|\_|\_|

\_\_\_\_\_ EMAIL

DON'T KNOW ..... d

REFUSED ..... r

ALL

**BL2. [We would also like to do a second telephone interview 12 months from now to see how you are doing. You will get another prepaid card for participating in that interview.]**

**In case we can't reach you at this number, is there another number we should try?**

CODE ONE ONLY

- YES ..... 1
- NO ADDITIONAL PHONE AVAILABLE ..... 2      GO TO BL2C
- REFUSED TO GIVE PHONE NUMBER ..... 3      GO TO BL2C
- REFUSED TO PARTICIPATE IN SECOND INTERVIEW ..... 9      STATUS REFUSAL,  
GO TO END
- DON'T KNOW ..... d      GO TO BL2C
- REFUSED ..... r      GO TO BL2C

BL2 = 1

**BL2a. What is the telephone number we should try?**

|\_|\_|\_| - |\_|\_|\_| - |\_|\_|\_| - |\_|\_|\_|\_|

- DON'T KNOW ..... d      GO TO BL2C
- REFUSED ..... r      GO TO BL2C

IF BL2A = ANSWERED

**BL2b. What type of phone number is this?**

CODE ONE ONLY

- HOME PHONE ..... 1
- OFFICE PHONE ..... 2
- HOME AND OFFICE PHONE ..... 3
- CELL PHONE ..... 4
- PAGER ..... 5
- COMPUTER/FAX LINE ..... 6
- OTHER ..... 7
- DON'T KNOW ..... d
- REFUSED ..... r

[IF BL2B = 2] AND [DEMONSTRATION = KENTUCKY, NEVADA, OR VIRGINIA]

**BL2c. May we send text messages to your cell phone regarding the second interview?**

- YES ..... 1
- NO ..... 0
- DON'T KNOW ..... d
- REFUSED ..... r

[BL2 = 1, 2, 3, D OR R] OR [BL2A = D OR R]

**BL2d. Do you have an email address where we can try to reach you?**

- YES ..... 1
- NO ..... 0 GO TO BL3
- DON'T KNOW ..... d GO TO BL3
- REFUSED ..... r GO TO BL3

BL2D = 1

**BL2e. What is the email address where we can reach you?**

- \_\_\_\_\_
- EMAIL ADDRESS
- DON'T KNOW ..... d
  - REFUSED ..... r

BL2E = ANSWERED

**BL2f. What type of email address is this? Is this a home email, office email, or something else?**

CODE ONE ONLY

- HOME EMAIL ..... 1
- OFFICE EMAIL ..... 2
- HOME AND OFFICE EMAIL ..... 3
- OTHER ..... 4

ALL

**BL3. In case we have trouble reaching you in 12 months, please give me the names and telephone numbers of two relatives or friends who would know where you could be reached. These should be relatives or friends not currently living in your household. Let's start with one friend or relative. What is his or her name?**

[BE SURE TO VERIFY SPELLING]

\_\_\_\_\_  
FIRST NAME

\_\_\_\_\_  
LAST NAME

DON'T KNOW .....d GO TO END

REFUSED .....r GO TO END

IF BL3 FIRST NAME = ANSWERED OR  
IF BL3 LAST NAME = ANSWERED

**BL3a. What is the telephone number we should try?**

|\_|\_|\_| - |\_|\_|\_| - |\_|\_|\_| - |\_|\_|\_|

DON'T KNOW .....d

REFUSED .....r

IF BL3 FIRST NAME = ANSWERED OR  
IF BL3 LAST NAME = ANSWERED

FILL = FIRST NAME FROM BL3  
IF BL3 = D, FILL "this person"

**BL3b. And what is [FIRST NAME FROM BL3/this person]'s relationship to you?**

\_\_\_\_\_  
RELATIONSHIP

DON'T KNOW .....d

REFUSED .....r

BL2 = 1, 2, 3, OR BL3A PHONE NUMBER ANSWERED

**BL4. How about a second friend or relative? What is his or her name?**

**[BE SURE TO VERIFY SPELLING]**

\_\_\_\_\_  
FIRST NAME

\_\_\_\_\_  
LAST NAME

DON'T KNOW .....d

REFUSED .....r

GO TO END

BL4 FIRST NAME = ANSWERED

BL4 LAST NAME = ANSWERED

**BL4a. What is this person's telephone number, beginning with the area code?**

|\_|\_|-|\_|\_|-|\_|\_|-|\_|\_|

DON'T KNOW .....d

REFUSED .....r

BL4 FIRST NAME = ANSWERED

BL4 LAST NAME = ANSWERED

FILL= FIRST NAME FROM BL4

IF BL4 = D, FILL "this person"

**BL4b. And what is [FIRST NAME FROM BL4/this person]'s relationship to you?**

\_\_\_\_\_  
RELATIONSHIP

DON'T KNOW .....d

REFUSED .....r

ALL

IF BL2 NE 9: We look forward to speaking with you again in 12 months.

**END. Thank you again for your help and have a good day/evening. [We look forward to speaking with you again in 12 months.]**

**B.3. FOLLOW-UP SURVEY INSTRUMENT**

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The final follow-up questionnaire for households is shown in Appendix B.3.

OMB Clearance Number: 0584-0603  
Expiration Date: 08/31/2018

# **Evaluation of Demonstration Projects to End Childhood Hunger**

## **Follow-Up Questionnaire for Households**

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection will be entered after clearance. The time required to complete this information collection is estimated to average 30 to 35 minutes per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection.

**A. Introduction**

DEMONSTRATION = CHICKASAW NATION AND BASELINE NON-RESPONDENT
IF FIELD LOCATOR PRESENT, FILL= "give" ELSE FILL= "send"

**SampMembA.**

**For quality assurance purposes, this call may be monitored or recorded.**

**The interview will take approximately 30 minutes. It has questions about your children’s food choices as well as general questions about you and your household. Your answers will help the government make its child nutrition programs better. As a way of saying thank you, we will [send/give] you \$30 for helping us. We will also follow up 6 months from now for a final interview that will also take approximately 30 minutes to complete. Will give you another prepaid card at that time for helping us.**

**Your participation in this interview is voluntary and you may stop at any time. You may also refuse to answer any question. Your benefits will not be affected by any answers to questions or if you choose not to participate.**

**All the information you give us will be kept private to the extent allowed by law. There is a small risk of the loss of confidentiality of your data, but procedures are in place to minimize this risk. Your name will not be attached to any of your answers. Your information will be used only in combination with information from other households for research purposes.**

**Do you have any questions about the interview before I begin?**

CODE ONE ONLY

- YES ..... 1 GO TO FAQ
- NO ..... 0 GO TO TB2
- DON'T KNOW ..... d
- REFUSED ..... r

**CASES NOT ROUTED TO SAMPMEMBA**

IF FIELD LOCATOR PRESENT, FILL1 = "give"

ELSE, FILL1 = "send"

IF DEMONSTRATION=CHICKASAW NATION FILL2= "We will also follow up 6 months from now for a final interview that will also take approximately 30 minutes to complete. Will give you another prepaid card at that time for helping us."

**SampMembB.**

**For quality assurance purposes, this call may be monitored or recorded.**

**The interview will take approximately 30 minutes. It has questions about your children's food choices as well as general questions about you and your household. As a way of saying thank you, we will [give/send] you \$30 for helping us. [We will also follow up 6 months from now for a final interview that will also take approximately 30 minutes to complete. We will give you another prepaid card at that time for helping us.]**

**Do you have any questions before I begin?**

CODE ONE ONLY

- YES .....1 GO TO FAQ
- NO .....0 GO TO TB1
- DON'T KNOW .....d
- REFUSED .....r

### B. Household Size and Composition

BASELINE RESPONDENT
FILL HHNUMB FROM BASELINE SURVEY

**TB1. Let's start by updating our information from last year. According to my records from our last interview, there were [HHNUMB] people in your household that share their food together. Is that still correct?**

- YES ..... 1 GO TO TB4
- NO ..... 0 GO TO TB2
- DON'T KNOW ..... d GO TO TB2
- REFUSED ..... r GO TO TB2

BASELINE NON-RESPONDENT OR [TB1=0, D, OR R]
---

**TB2. Including yourself, how many people live in your household? Don't forget to include non-relatives who live in your household and, of course, babies, small children and foster children. Also include people who usually live in your household but may have been away within the last 30 days for reasons such as: vacation, traveling for work, or in the hospital. Do not include children living away at school or anyone who is now incarcerated.**

**PROBE: By temporarily away we mean away within the last 30 days.**

\_\_\_\_ NUMBER OF PEOPLE  
(1-20)

- DON'T KNOW ..... d GO TO TB9A
- REFUSED ..... r GO TO TB9A

TB2=1
-------

**TB2a. Just to confirm, you are the only person living in the household. There are no children, non-relatives, or people who usually live there but are currently away?**

- YES ..... 1 GO TO TB9
- NO ..... 0 REPEAT TB2
- DON'T KNOW ..... d REPEAT TB2
- REFUSED ..... r GO TO TB9A

TB2 GT 1

**TB3. Do all the people who live with you share the food that is bought for the household?**

- YES ..... 1 GO TO BOX TB3
- NO ..... 0 GO TO TB3A
- DON'T KNOW ..... d GO TO TB3A
- REFUSED ..... r GO TO TB3A

PROGRAMMER BOX TB3  
 IF TB3=1 AND BASELINE RESPONDENT, GO TO TB4. IF TB3=1 AND BASELINE NON-RESPONDENT, GO TO TB5.

TB3 NE 1

**TB3a. Including yourself, how many people in your household share the food that is bought for the household?**

- NUMBER OF PEOPLE (1-20)
- DON'T KNOW ..... d
- REFUSED ..... r

**HARD CHECK: IF TB3A GT TB2; The number of people in your household who share food is greater than the total number of people in your household. Did I make a mistake?**

PROGRAMMER BOX TB3A  
 IF BASELINE NON-RESPONDENT, GO TO TB5. OTHERWISE, GO TO TB4.

(TB1=1 OR TB2>1) AND BASELINE RESPONDENT

IF TB4a\_DOB1 = ANSWERED, FILL1 = "date of birth"

ELSE, FILL1 = "age"

IF TB4\_1 = ANSWERED AND NE D OR R, FILL2 = [NAME1]

ELSE, FILL2 = "a child"

IF TB4a\_DOB1 = ANSWERED, FILL3 = "a date of birth [DOB1]"

ELSE, FILL3 = "an age of [AGE1]"

IF TB4\_1 = ANSWERED AND NE D OR R, FILL4 = [NAME1]

ELSE, FILL4 = "this child"

For first child in HH, fill: We would now like to confirm... still live in your household?

For additional children in HH, fill: Now I'd like to ask about the next child...still live in your household?

**TB4. FIRST CHILD: We would now like to confirm the information we collected 12 months ago regarding the children living in your household. I am going to read you the name or initials for each child that we have from last year's interview. I will also read each child's [date of birth/age] and gender. I would like for you to confirm whether the child still lives in your household and if his or her information is correct. I have [[NAME1]/a child] with [a date of birth of [DOB1]/an age of [AGE1] and [GENDER1]. Does ([NAME1]/this child) still live in your household?**

**ADDITIONAL CHILD: Now I'd like to ask about the next child we learned about in last year's interview. I have [[NAME2]/this child] with [a date of birth of [DOB2]/an age of [AGE2]] and [GENDER2]. Does [[NAME2]/this child] still live in your household?**

INTERVIEWER: IF CHILD IS DECEASED: I'm very sorry for your loss. CODE "3."

**CODE ONE ONLY**

- CHILD STILL LIVES IN HOUSEHOLD .....1 GO TO BOX TB4
- CHILD INFORMATION IS INCORRECT .....2 GO TO BOX TB4
- CHILD NO LONGER LIVES IN HOUSEHOLD OR IS DECEASED .....3 GO TO BOX TB4
- DON'T KNOW .....d GO TO BOX TB4
- REFUSED .....r GO TO BOX TB4

PROGRAMMER BOX TB4  
 IF TB4=1 AND DOB1=.M AND AGE1=.M, GO TO TB4B.  
 ELSE IF TB4=1 AND GENDER1=.M, GO TO TB4C.  
 ELSE IF TB4=1 AND DEMONSTRATION = CHICKASAW  
 NATION OR VIRGINIA, GO TO TB4\_1.  
 ELSE IF TB4=2, GO TO TB4A.  
 ELSE, GO TO TB4D.

TB4=2
IF TB4_1 = ANSWERED AND NE D OR R, FILL = [NAME1] ELSE, FILL = "this child"

**TB4a. What is ([NAME1]/this child)'s date of birth?**

PROGRAMMER: COLLECT DATE WITH SEPARATE FIELDS

|\_|\_|/|\_|\_|/|\_|\_|\_|\_|  
 MONTH DAY YEAR  
 (1-12) (1-31) (1996-2016)

- GO TO TB4C
- DON'T KNOW ..... d GO TO TB4B
- REFUSED ..... r GO TO TB4B

(TB4=1 AND DOB1=.M AND AGE1=.M) OR TB4A=D OR R
IF TB4A=D OR R FILL1=Some people find it easier to select an age group. IF TB4_1 = ANSWERED AND NE D OR R, FILL2 = [NAME1] ELSE, FILL2 = "this child"

**TB4b. [Some people find it easier to select an age group.] Please stop me when I reach ([NAME1]/this child)'s age group. Is it...**

**CODE ONE ONLY**

- Under 2 years old, ..... 1 GO TO TB4C
- Age 2 to 5 years, ..... 2 GO TO TB4C
- Age 6 to 11 years, ..... 3 GO TO TB4C
- Age 12 to 17 years, or ..... 4 GO TO TB4C
- Age 18 or older and still in school? ..... 5 GO TO TB4C
- DON'T KNOW ..... d GO TO TB4C
- REFUSED ..... r GO TO TB4C

(TB4=1 AND GENDER1=.M) OR TB4A=ANSWERED OR TB4B = ANSWERED
IF TB4_1 = ANSWERED AND NE D OR R, FILL = [NAME1] ELSE, FILL = "this child"

**TB4c. Is ([NAME1]/this child) a boy or girl?**

INTERVIEWER: ASK IF RESPONDENT HAS NOT ALREADY MENTIONED CHILD'S SEX.

**CODE ONE ONLY**

BOY ..... 1  
 GIRL ..... 2  
 DON'T KNOW ..... d  
 REFUSED ..... r

(DEMONSTRATION=CHICKASAW NATION OR VIRGINIA) AND ((BASELINE DOB YEAR <2015) OR (TB4A YEAR <2015) OR (TB4B=2, 3, 4, OR 5))
IF TB4_1 = ANSWERED AND NE D OR R, FILL = [NAME1] ELSE, FILL = "THIS CHILD"

**TB4\_1. Is ([NAME1]/this child) in grades pre-K through 12 in your local school system?**

YES ..... 1      GO TO TB4\_2  
 NO ..... 0  
 DON'T KNOW ..... d  
 REFUSED ..... r

TB4_1=1
IF TB4_1 = ANSWERED AND NE D OR R, FILL = [NAME1] ELSE, FILL = "THIS CHILD"

**TB4\_2. What school does ([NAME1]/this child) attend?**

[List of schools + "other" option]

DON'T KNOW ..... d  
 REFUSED ..... r

PROGRAMMER BOX TB4\_4  
 IF [(TB1=1 OR TB2>1)] AND [NUMCHILDBL > 1], LOOP  
 OVER TB4 THROUGH TB4\_2 FOR ALL CHILDREN ON  
 BASELINE HOUSEHOLD ROSTER THEN GO TO TB4H.

BASELINE RESPONDENT

**TB4h. Are there any other children, age 18 or younger, or over 18 but still in high school, in your household that I have not asked about yet?**

- YES .....1 GO TO TB4I
- NO .....0 GO TO SECTION TC
- DON'T KNOW .....d GO TO SECTION TC
- REFUSED .....r GO TO SECTION TC

TB4H=1

**TB4i. How many additional children age 18 or younger, or over 18 but still in high school, are in your household that I have not asked about yet?**

- \_\_\_\_ NUMBER OF CHILDREN  
(1-20)
- DON'T KNOW .....d
- REFUSED .....r

PROGRAMMER BOX TB4I  
 IF TB4I = 1-20, GO TO TB7. IF D OR R, GO TO SECTION  
 TC.

BASELINE NON-RESPONDENT

**TB5. How many children are currently living in your household that were age 18 or younger or over 18 but were still in high school during the most recently completed school year?**

|\_|\_| NUMBER OF CHILDREN  
(0-20)

GO TO SECTION B  
PROGRAMMER BOX

DON'T KNOW .....d

REFUSED .....r

**HARD CHECK: IF TB5 GT TB2; The number of children living in your household is greater than the total number of people living in your household. Did I make a mistake?**

**HARD CHECK: IF TB5 GT TB3a; The number of children living in your household is greater than the total number of people sharing food in your household. Did I make a mistake?**

TB5=0 OR D OR R

**TB6. Is there at least one child living in your household?**

YES .....1

REPEAT TB5

NO .....0

GO TO SECTION B  
PROGRAMMER BOX

DON'T KNOW .....d

GO TO SECTION B  
PROGRAMMER BOX

REFUSED .....r

GO TO SECTION B  
PROGRAMMER BOX

(TB4I GTE 1) OR (TB5 GTE 1)
IF TB4I=1 TO 20: For the children we haven't discussed already, IF TB4I GT 1 OR TB5 GT 1: first For additional children, fill: What is the name of the next child?

**TB7. [For the children we haven't discussed already,] I'd like to make a list of the first names or initials of the children in your household. This will help me with asking some questions later. What is the name of the [first] child?**

ADDITIONAL CHILD: **What is the name of the next child?**

**IF NEEDED: You can give me the child's initials or some other way to refer to the child.**

\_\_\_\_\_ (STRING 25)

NAME

DON'T KNOW .....d

REFUSED .....r

(TB4I GTE 1) OR (TB5 GTE 1)
IF TB7 = ANSWERED AND NE D OR R, FILL = ANSWER FROM TB7 ELSE, FILL = "THIS CHILD"

**TB7a. What is ([ANSWER FROM TB7]/this child)'s date of birth?**

PROGRAMMER: COLLECT DATE WITH SEPARATE FIELDS

|\_|\_|/|\_|\_|/|\_|\_|\_|\_|

MONTH DAY YEAR

(1-12) (1-31) (1996-2016)

GO TO TB7C

DON'T KNOW .....d

GO TO TB7B

REFUSED .....r

GO TO TB7B

TB7A=D OR R
IF TB7 = ANSWERED AND NE D OR R, FILL = ANSWER FROM TB7 ELSE, FILL = "THIS CHILD"

**TB7b. Some people find it easier to select an age group. This information will help me with asking some questions later. Please stop me when I reach ([ANSWER FROM TB7]/this child)'s age group. Is it...**

**CODE ONE ONLY**

- Under 2 years old, ..... 1 GO TO TB7C
- Age 2 to 5 years, ..... 2 GO TO TB7C
- Age 6 to 11 years, ..... 3 GO TO TB7C
- Age 12 to 17 years, or ..... 4 GO TO TB7C
- Age 18 or older and still in school? ..... 5 GO TO TB7C
- DON'T KNOW ..... d GO TO TB7C
- REFUSED ..... r GO TO TB7C

(TB4I GTE 1) OR (TB5 GTE 1) OR (TB7B = RESPONSE OR D OR R)
IF TB7 = ANSWERED AND NE D OR R, FILL = ANSWER FROM TB7 ELSE, FILL = "THIS CHILD"

**TB7c. Is ([ANSWER FROM TB7]/this child) a boy or girl?**

INTERVIEWER: ASK IF RESPONDENT HAS NOT ALREADY MENTIONED CHILD'S SEX.

**CODE ONE ONLY**

- BOY ..... 1
- GIRL ..... 2
- DON'T KNOW ..... d
- REFUSED ..... r

(TB4I GTE 1) OR (TB5 GTE 1) AND [TB7A GTE 3 YEARS OR TB7B = 2,3,4, OR 5] AND DEMONSTRATION=CHICKASAW NATION OR VIRGINIA

IF TB7 = ANSWERED AND NE D OR R, FILL = ANSWER FROM TB7  
 ELSE, FILL = "THIS CHILD"

**TB7d. Is ([ANSWER FROM TB7]/this child) in grades pre-K through 12 in your local school system?**

YES ..... 1  
 NO ..... 0  
 DON'T KNOW ..... d  
 REFUSED ..... r

TB7D=1 AND [DEMONSTRATION=CHICKASAW NATION OR VIRGINIA]

IF TB7 = ANSWERED AND NE D OR R, FILL = ANSWER FROM TB7  
 ELSE, FILL = "THIS CHILD"

**TB7e. What school does ([ANSWER FROM TB7]/this child) attend?**

**[List of schools + "other" option]**

DON'T KNOW ..... d  
 REFUSED ..... r

PROGRAMMER BOX TB8G  
IF TB4I GT 1 OR TB5 GT 1, LOOP OVER TB8 THROUGH  
TB8G FOR ALL CHILDREN IN TB4I OR TB5.

PROGRAMMER BOX SECTION B:  
CREATE PROGRAMMED VARIABLES FOR NUMBER  
OF CHILDREN IN HOUSEHOLD (NUMCHILDFU1),  
TOTAL HOUSEHOLD SIZE (HHNUMBFU1), A FLAG FOR  
CHICKASAW NATION CHILDREN AGE 2 YEARS OR  
OLDER (CNAGEFLAGFU1), AND NUMBER OF  
CHILDREN IN CHICKASAW NATION HOUSEHOLDS  
AGE 2 YEARS OR OLDER (TOTCNAgeFU1).  
IF (TB5=0) OR (TB6=0, D, OR R) THEN  
NUMCHILDFU1=0. IF (TB5=D OR R) AND (TB6=0, D, OR  
R) THEN NUMCHILDFU1=0.  
IF NUMCHILDFU1=0 GO TO SECTION D. ELSE GO TO  
TC1.

IF [TB2 = DK OR R] OR [TB2A = R]

**TB9a. I apologize, this survey is for individuals with at least one child under the age of 18 in the house.**

Status refusal. Go to END.

### C. Children’s Program Participation

For the next series of questions we’ll be asking about meals and snacks the children in your household may have had during the last 30 days, that is, since [DATE OF INTERVIEW-30].

[KIDSGTE3FU1] GTE 1

**TC1. On school days during the last 30 days, how many children in your household usually ate breakfast at school?**

|\_\_|\_\_| NUMBER OF CHILDREN  
(0- 20)

DON’T KNOW .....d GO TO TC1A  
REFUSED .....r GO TO TC1A

TC1 NE 0

**TC1a. On school days during the last 30 days, how many children in your household got free or reduced-price breakfasts at school?**

|\_\_|\_\_| NUMBER OF CHILDREN  
(0- 20)

DON’T KNOW .....d  
REFUSED .....r

[KIDSGTE3FU1] GTE 1

**TC1b. On school days during the last 30 days, how many children in your household usually ate a school lunch?**

|\_\_|\_\_| NUMBER OF CHILDREN  
(0- 20)

DON’T KNOW .....d GO TO TC1C  
REFUSED .....r GO TO TC1C

TC1B NE 0

**TC1c. On school days during the last 30 days, how many children in your household got free or reduced-price lunches at school?**

|\_\_|\_\_| NUMBER OF CHILDREN  
(0- 20)

DON’T KNOW .....d  
REFUSED .....r

[KIDSGTE3FU1] GTE 1
IF DEMONSTRATION = VIRGINIA FILL "in school or"

**TC1d. During the last 30 days, how many children in your household got free supper meals [in school or] at an after school program held in their school building?**

|\_|\_| NUMBER OF CHILDREN  
(0- 20)

DON'T KNOW .....d

REFUSED .....r

[KIDSGTE3FU1] GTE 1
---------------------

**TC1e. During the last 30 days, how many children in your household participated in any other after school program where meals or snacks are served?**

|\_|\_| NUMBER OF CHILDREN  
(0- 20)

DON'T KNOW .....d

REFUSED .....r

DEMONSTRATION = KENTUCKY [Asked only for period when the last 30-day period included summer.]
---

**TC1f. During the last 30 days, how many children in your household received free meals or snacks at places such as summer school, a community center, day camp or park?**

|\_|\_| NUMBER OF CHILDREN  
(0- 20)

DON'T KNOW .....d

REFUSED .....r

[KIDSLTE5FU1] GTE1
--------------------

**TC1g. During the last 30 days, how many children in your household received meals or snacks at a daycare center, family or group daycare home, or Head Start center?**

**IF NEEDED: Please include children who received meals or snacks whether the meals or snacks were free, reduced-price, or paid. Please also include meals and snacks that were included in any payment you made to the center or home.**

|\_|\_| NUMBER OF CHILDREN  
(0- 20)

DON'T KNOW .....d

REFUSED .....r

[KIDSGTE3FU1] GTE1

**TC2. During the last 30 days, how many children in your household got food through a school backpack food program for children?**

**PROBE IF NEEDED: The Backpack Food Program provides food for children to take home from school over weekends and holidays.**

|\_|\_| NUMBER OF CHILDREN  
(0- 20)

DON'T KNOW .....d

REFUSED .....r

TC2 GTE 1 AND DEMONSTRATION=VIRGINIA

TC2=1: child  
TC2 GT 1: children

**TC2a. During the most recently completed school year, that is, school year 2015-2016, how often did your [child/children] usually take home a food backpack from school? Would you say...**

**Less often than once per month, ..... 1**

**Once per month,..... 2**

**Two or three times per month, or..... 3**

**Every week? ..... 4**

DON'T KNOW .....d

REFUSED .....r

DEMONSTRATION=CHICKASAW NATION AND KIDSGTE3FU1 GTE1

**TC3. How many children in your household received Summer EBT for Children benefits this past summer, that is, summer 2016?**

|\_|\_| NUMBER OF CHILDREN  
(0- 20)

DON'T KNOW .....d

REFUSED .....r

**D. Food Purchase Behavior and Other Food Behavior**

These next questions are about where you shop for food for your household.

DEMONSTRATION = CHICKASAW NATION OR KENTUCKY

**TD1. During the past 30 days, about how many times did you or someone in your household shop for food?**

|\_|\_| NUMBER OF TIMES  
(0-30)

DON'T KNOW .....d

REFUSED .....r

DEMONSTRATION = CHICKASAW NATION OR KENTUCKY

**TD2. During the past 30 days, at what kind of store did you buy most of your groceries?**

INTERVIEWER: READ ONLY IF NECESSARY

INTERVIEWER: CODE "ALDI" AS A SUPERMARKET/GROCERY STORE

**CODE ONE ONLY**

SUPERMARKETS/GROCERY STORES SUCH AS ALDI OR SAVE-A-LOT ..... 1

DISCOUNT STORES SUCH AS WAL-MART, TARGET, OR KMART ..... 2

WAREHOUSE CLUBS, SUCH AS PRICE CLUB, COSTCO, PACE, SAM'S CLUB, OR BJ'S ..... 3

CONVENIENCE STORES SUCH AS 7-11, QUICK CHECK, QUICK STOP ..... 4

GAS STATIONS, SUCH AS SHELL, FLYING J, EXXON, MARATHON, OR AMACO ..... 5

ETHNIC FOOD STORES SUCH AS BODEGAS, ASIAN FOOD MARKETS, OR CARIBBEAN MARKETS ..... 6

FARMERS' MARKETS ..... 7

DOLLAR STORES ..... 8

SURPLUS/CLOSE-OUT RETAILERS SUCH AS BIG LOTS ..... 9

OTHER (SPECIFY)..... 99

DON'T KNOW .....d

REFUSED .....r

TD2 = 99

**TD2\_Specify.** INTERVIEWER: SPECIFY OTHER KIND OF STORE.

\_\_\_\_\_ (STRING 100)  
 DESCRIPTION  
 DON'T KNOW .....d  
 REFUSED .....r

DEMONSTRATION = KENTUCKY

**TD3.** What is the main reason you shop at that store?

- |   | <b>CODE ONE ONLY</b> |
|---|----------------------|
| LOW PRICES.....   | 1                    |
| SALES.....  | 2                    |
| QUALITY OF FOOD .....                                       | 3                    |
| VARIETY OF FOODS (GENERAL) .....                            | 4                    |
| VARIETY OF SPECIAL FOODS (SUCH AS GLUTEN FREE).....         | 5                    |
| CLOSE TO HOME/CONVENIENT .....                              | 6                    |
| EASY TO GET TO .....  | 7                    |
| PRODUCE SELECTION.....                                      | 8                    |
| MEAT DEPARTMENT .....                                       | 9                    |
| LOYALTY/FREQUENT SHOPPER PROGRAM.....                       | 10                   |
| ONLY STORE IN AREA.....                                     | 11                   |
| AVAILABILITY OF FOOD AND NON-FOOD ITEMS IN SAME STORE ..... | 12                   |
| GAS OR OTHER DISCOUNTS .....                                | 13                   |
| OTHER (SPECIFY).....  | 99                   |
| DON'T KNOW .....  | d                    |
| REFUSED .....   | r                    |

TD3 = 99

**TD3\_Specify.** INTERVIEWER: SPECIFY OTHER REASON.

\_\_\_\_\_ (STRING 100)  
 DESCRIPTION  
 DON'T KNOW .....d  
 REFUSED .....r

DEMONSTRATION = KENTUCKY

**TD4. How do you usually get to the store where you bought most of your groceries in the past 30 days?**

**CODE ALL THAT APPLY**

- DRIVE OWN CAR..... 1
- DRIVE SOMEONE ELSE'S CAR.....2
- SOMEONE ELSE DRIVES ME.....3
- WALK.....4
- BUS, SUBWAY, OR OTHER PUBLIC TRANSIT .....5
- TAXI OR OTHER PAID DRIVER .....6
- RIDE BICYCLE .....7
- OTHER (SPECIFY).....8
- DON'T KNOW .....d
- REFUSED .....r

TD4 = 8

**TD4\_Other. INTERVIEWER: SPECIFY OTHER WAY.**

- \_\_\_\_\_ (STRING 100)
- DESCRIPTION
- DON'T KNOW .....d
  - REFUSED .....r

DEMONSTRATION = KENTUCKY

**TD4a. About how many minutes does it take to go one way from home to that store?**

INTERVIEWER: ENTER MIDPOINT IF RANGE IS GIVEN

[\_][\_][\_] NUMBER OF MINUTES ONE WAY  
(0-120)

- DON'T KNOW .....d
- REFUSED .....r

**SOFT CHECK: IF GT 60; I just want to make sure I recorded your answer correctly. Did you say [ANSWER FROM TD4A]?**

DEMONSTRATION = CHICKASAW NATION OR KENTUCKY

TD4b. And approximately how many miles away is that store from your home – one way?

INTERVIEWER: ENTER MIDPOINT IF RANGE IS GIVEN; IF LESS THAN ONE MILE ENTER "0"

\_\_\_\_ NUMBER OF MILES ONE WAY  
(0-99)

DON'T KNOW .....d

REFUSED .....r

SOFT CHECK: IF GT 30; I just want to make sure I recorded your answer correctly. Did you say [ANSWER FROM TD4B]?

ALL

TD5. How many nights a week does your family typically sit down together to have dinner as a family?

CODE ONE ONLY

EVERY NIGHT ..... 1

5 OR 6 NIGHTS ..... 2

3 OR 4 NIGHTS ..... 3

1 OR 2 NIGHTS ..... 4

NEVER ..... 5

DON'T KNOW .....d

REFUSED .....r

DEMONSTRATION = NEVADA OR VIRGINIA

**TD6. During the past 7 days, how many times did you or someone else in your family prepare food for dinner or supper at home? Include times spent putting the ingredients together for dinner or supper, but do not include heating up leftovers.**

\_\_\_\_ NUMBER (0-7)

NEVER .....0

DON'T KNOW .....d

REFUSED .....r

DEMONSTRATION = NEVADA OR VIRGINIA

**TD7. How often do you shop with a grocery list? Would you say...**

**CODE ONE ONLY**

**Never,** ..... 1

**Rarely,** ..... 2

**Sometimes,** ..... 3

**Most of the time, or** ..... 4

**Always?** ..... 5

DON'T KNOW .....d

REFUSED .....r

DEMONSTRATION=NEVADA OR VIRGINIA

**TD8. In the past 12 months, about how many classes, lectures, or demonstrations about how to shop for or prepare nutritious food and meals did you or another adult in your household attend?**

\_\_\_\_ SESSIONS  
(0-24)

DON'T KNOW .....d

REFUSED .....r

**E. Food Security**

PROGRAMMER BOX SECTION E  
 SELECT APPROPRIATE FILLS DEPENDING ON NUMBER OF  
 ADULTS [ADULTSFU1] AND CHILDREN IN THE HOUSEHOLD  
 [NUMCHILDFU1]. DEFAULT TO MULTIPLE ADULTS AND MULTIPLE  
 CHILDREN IN HOUSEHOLD.

ALL

FILL DATE = [DATE OF INTERVIEW-30]

**TE1. Now I'm going to read you several statements that people have made about their food situation. For these statements, please tell me whether the statement was often true, sometimes true, or never true for your household in the last 30 days, that is, since [DATE OF INTERVIEW-30].**

**The first statement is "We worried whether our food would run out before we got money to buy more." Was that often true, sometimes true, or never true for your household in the last 30 days?**

**CODE ONE ONLY**

- OFTEN TRUE ..... 1
- SOMETIMES TRUE.....2
- NEVER TRUE .....3
- DON'T KNOW .....d
- REFUSED .....r

ALL

**TE2. "The food that we bought just didn't last, and we didn't have money to get more." Was that often, sometimes, or never true for your household in the last 30 days?**

**CODE ONE ONLY**

- OFTEN TRUE ..... 1
- SOMETIMES TRUE.....2
- NEVER TRUE .....3
- DON'T KNOW .....d
- REFUSED .....r

ALL

**TE3. “We couldn’t afford to eat balanced meals.” Was that often, sometimes, or never true for your household in the last 30 days?**

**CODE ONE ONLY**

- OFTEN TRUE ..... 1
- SOMETIMES TRUE ..... 2
- NEVER TRUE ..... 3
- DON'T KNOW ..... d
- REFUSED ..... r

PROGRAMMER BOX TE3  
 IF TE1=1 OR 2 OR TE2=1 OR 2 OR TE3=1 OR 2, GO TO TE4;  
 OTHERWISE, SKIP TO TE9.

TE1=1 OR 2 OR TE2=1 OR 2 OR TE3=1 OR 2

IF [ADULTSFU1] > 1: “or other adults in your household”  
 FILL DATE = [DATE OF INTERVIEW -30]

**TE4. In the last 30 days, that is, since [DATE OF INTERVIEW-30], did you [or other adults in your household] ever cut the size of your meals or skip meals because there wasn’t enough money for food?**

- YES ..... 1 GO TO TE4A
- NO ..... 0 GO TO TE5
- DON'T KNOW ..... d GO TO TE5
- REFUSED ..... r GO TO TE5

TE4=1

**TE4a. In the last 30 days, how many days did this happen?**

- \_\_\_\_|\_\_\_\_| NUMBER OF DAYS GO TO TE5  
 (1-30)
- DON'T KNOW ..... d GO TO TE4B
- REFUSED ..... r GO TO TE5

TE4A=D

**TE4b. Do you think it was one or two days, or more than two days?**

**CODE ONE ONLY**

- ONE OR TWO DAYS ..... 1
- MORE THAN TWO DAYS ..... 2
- DON'T KNOW ..... d
- REFUSED ..... r

TE1=1 OR 2 OR TE2=1 OR 2 OR TE3=1 OR 2

**TE5. In the last 30 days, did you ever eat less than you felt you should because there wasn't enough money for food?**

- YES ..... 1
- NO ..... 0
- DON'T KNOW ..... d
- REFUSED ..... r

TE1=1 OR 2 OR TE2=1 OR 2 OR TE3=1 OR 2

**TE6. In the last 30 days, were you ever hungry but didn't eat because there wasn't enough money for food?**

- YES ..... 1
- NO ..... 0
- DON'T KNOW ..... d
- REFUSED ..... r

TE1=1 OR 2 OR TE2=1 OR 2 OR TE3=1 OR 2

**TE7. In the last 30 days, did you lose weight because there wasn't enough money for food?**

YES ..... 1  
 NO ..... 0  
 DON'T KNOW ..... d  
 REFUSED ..... r

PROGRAMMER BOX TE7  
 IF TE4=1 OR TE5=1 OR TE6=1 OR TE7=1, GO TO TE8; OTHERWISE,  
 SKIP TO TE9.

TE4=1 OR TE5=1 OR TE6=1 OR TE7=1

IF [ADULTSFU1] > 1: "OR OTHER ADULTS IN YOUR HOUSEHOLD"

**TE8. In the last 30 days, did you [or other adults in your household] ever not eat for a whole day because there wasn't enough money for food?**

YES .....	1	GO TO TE8A
NO .....	0	GO TO BOX TE8B
DON'T KNOW .....	d	GO TO PROG BOX TE8B
REFUSED .....	r	GO TO PROG BOX TE8B

TE8=1

**TE8a. In the last 30 days, how many days did this happen?**

__ __  NUMBER OF DAYS (1-30)		GO TO PROG BOX TE8B
DON'T KNOW .....	d	GO TO TE8B
REFUSED .....	r	GO TO PROG BOX TE8B

TE8A=D

**TE8b. Do you think it was one or two days, or more than two days?**

**CODE ONE ONLY**

- ONE OR TWO DAYS ..... 1
- MORE THAN TWO DAYS ..... 2
- DON'T KNOW ..... d
- REFUSED ..... r

PROGRAMMER BOX TE8B  
IF NUMCHILDFU1= 0 SKIP TO TF1. OTHERWISE, GO TO TE9.

[NUMCHILDFU1] GT 0
IF [ADULTSFU1] = 1 AND [NUMCHILDFU1] = 1, FILL = "I RELIED ON ONLY A FEW KINDS OF LOW-COST FOOD TO FEED MY CHILD BECAUSE I WAS RUNNING OUT OF MONEY TO BUY FOOD."
IF [ADULTSFU1] = 1 AND [NUMCHILDFU1] >1, FILL = "I RELIED ON ONLY A FEW KINDS OF LOW-COST FOOD TO FEED MY CHILDREN BECAUSE I WAS RUNNING OUT OF MONEY TO BUY FOOD."
IF [ADULTSFU1]>1 AND [NUMCHILDFU1] =1, FILL = "WE RELIED ON ONLY A FEW KINDS OF LOW-COST FOOD TO FEED OUR CHILD BECAUSE WE WERE RUNNING OUT OF MONEY TO BUY FOOD"
IF [ADULTSFU1]>1 AND [NUMCHILDFU1]>1, FILL = "WE RELIED ON ONLY A FEW KINDS OF LOW-COST FOOD TO FEED OUR CHILDREN BECAUSE WE WERE RUNNING OUT OF MONEY TO BUY FOOD."

**TE9. Now I'm going to read you several statements that people have made about the food situation of their children. For these statements, please tell me whether the statement was often true, sometimes true, or never true in the last 30 days for [your child/children living in the household who are under 18 years old or 18 or older but still in high school].**

**[IF SINGLE ADULT AND SINGLE CHILD:**

**"I relied on only a few kinds of low-cost food to feed my child because I was running out of money to buy food."**

**IF SINGLE ADULT AND MULTIPLE CHILDREN:**

**"I relied on only a few kinds of low-cost food to feed my children because I was running out of money to buy food."**

**IF MULTIPLE ADULTS AND SINGLE CHILD:**

**"We relied on only a few kinds of low-cost food to feed our child because we were running out of money to buy food."**

**IF MULTIPLE ADULTS AND MULTIPLE CHILDREN:**

**"We relied on only a few kinds of low-cost food to feed our children because we were running out of money to buy food."]**

**SHOW FOR ALL:**

Was that often, sometimes, or never true for your household in the last 30 days?

- OFTEN TRUE ..... 1
- SOMETIMES TRUE..... 2
- NEVER TRUE ..... 3
- DON'T KNOW ..... d
- REFUSED ..... r

[NUMCHILDFU1] GT 0

IF [ADULTSFU1] = 1 AND [NUMCHILDFU1] = 1, FILL = "I COULDN'T FEED MY CHILD A BALANCED MEAL, BECAUSE I COULDN'T AFFORD THAT."

IF [ADULTSFU1] = 1 AND [NUMCHILDFU1] >1, FILL = "I COULDN'T FEED MY CHILDREN A BALANCED MEAL, BECAUSE I COULDN'T AFFORD THAT."

IF [ADULTSFU1]>1 AND [NUMCHILDFU1] =1, FILL = "WE COULDN'T FEED OUR CHILD A BALANCED MEAL, BECAUSE WE COULDN'T AFFORD THAT."

IF [ADULTSFU1]>1 AND [NUMCHILDFU1]>1, FILL = "WE COULDN'T FEED OUR CHILDREN A BALANCED MEAL, BECAUSE WE COULDN'T AFFORD THAT."

**TE10. IF SINGLE ADULT AND SINGLE CHILD:**

"I couldn't feed my child a balanced meal, because I couldn't afford that."

**IF SINGLE ADULT AND MULTIPLE CHILDREN:**

"I couldn't feed my children a balanced meal, because I couldn't afford that."

**IF MULTIPLE ADULTS AND SINGLE CHILD:**

"We couldn't feed our child a balanced meal, because we couldn't afford that."

**IF MULTIPLE ADULTS AND MULTIPLE CHILDREN:**

"We couldn't feed our children a balanced meal, because we couldn't afford that."

**SHOW FOR ALL:**

**Was that often, sometimes, or never true for your household in the last 30 days?**

- OFTEN TRUE ..... 1
- SOMETIMES TRUE..... 2
- NEVER TRUE ..... 3
- DON'T KNOW ..... d
- REFUSED ..... r

[NUMCHILDFU1] GT 0

IF [ADULTSFU1] = 1 AND [NUMCHILDFU1] = 1, FILL = "MY CHILD WAS NOT EATING ENOUGH BECAUSE I JUST COULDN'T AFFORD ENOUGH FOOD."

IF [ADULTSFU1] = 1 AND [NUMCHILDFU1] >1, FILL = "MY CHILDREN WERE NOT EATING ENOUGH BECAUSE I JUST COULDN'T AFFORD ENOUGH FOOD."

IF [ADULTSFU1]>1 AND [NUMCHILDFU1] =1, FILL = "OUR CHILD WAS NOT EATING ENOUGH BECAUSE WE JUST COULDN'T AFFORD ENOUGH FOOD."

IF [ADULTSFU1]>1 AND [NUMCHILDFU1]>1, FILL = "OUR CHILDREN WERE NOT EATING ENOUGH BECAUSE WE JUST COULDN'T AFFORD ENOUGH FOOD"

**TE11. IF SINGLE ADULT AND SINGLE CHILD:**

"My child was not eating enough because I just couldn't afford enough food."

**IF SINGLE ADULT AND MULTIPLE CHILDREN:**

"My children were not eating enough because I just couldn't afford enough food."

**IF MULTIPLE ADULTS AND SINGLE CHILD:**

"Our child was not eating enough because we just couldn't afford enough food."

**IF MULTIPLE ADULTS AND MULTIPLE CHILDREN:**

"Our children were not eating enough because we just couldn't afford enough food."

**SHOW FOR ALL:**

**Was that often, sometimes, or never true for your household in the last 30 days?**

- OFTEN TRUE ..... 1
- SOMETIMES TRUE..... 2
- NEVER TRUE ..... 3
- DON'T KNOW ..... d
- REFUSED ..... r

PROGRAMMER BOX TE11  
 IF [TE9=1 OR 2 OR TE10=1 OR 2 OR TE11=1 OR 2] AND  
 [NUMCHILDFU1] GT 0, GO TO TE12; OTHERWISE, SKIP TO TF1.

[NUMCHILDFU1] GT 0 AND (TE9=1 OR 2 OR TE10=1 OR 2 OR TE11=1 OR 2)
IF [NUMCHILDFU1] = 1, FILL = "your child's"
IF [NUMCHILDFU1] > 1, FILL = "any of your children's"
FILL DATE = [DATE OF INTERVIEW-30]

**TE12. In the last 30 days, that is, since [DATE OF INTERVIEW-30], did you ever cut the size of [your child's/any of your children's] meals because there wasn't enough money for food?**

- YES ..... 1
- NO ..... 0
- DON'T KNOW ..... d
- REFUSED ..... r

[NUMCHILDFU1] GT 0 AND (TE9=1 OR 2 OR TE10=1 OR 2 OR TE11=1 OR 2)
IF [NUMCHILDFU1] = 1, FILL = "your child"
IF [NUMCHILDFU1] > 1, FILL = "any of your children"

**TE13. In the last 30 days, did [your child/any of your children] ever skip meals because there wasn't enough money for food?**

- YES ..... 1      GO TO TE13A
- NO ..... 2      GO TO TE14
- DON'T KNOW ..... d      GO TO TE14
- REFUSED ..... r      GO TO TE14

[NUMCHILDFU1] GT 0 AND TE13=1
-------------------------------

**TE13a. In the last 30 days, how many days did this happen?**

- \_\_\_\_|\_\_\_\_| NUMBER OF DAYS (1-30)      GO TO TE14
- DON'T KNOW ..... d      GO TO TE13B
- REFUSED ..... r      GO TO TE14

[NUMCHILDFU1] GT 0 AND TE13A=D

**TE13b. Do you think it was one or two days, or more than two days?**

**CODE ONE ONLY**

- ONE OR TWO DAYS ..... 1
- MORE THAN TWO DAYS ..... 2
- DON'T KNOW ..... d
- REFUSED ..... r

[NUMCHILDFU1] GT 0 AND (TE9=1 OR 2 OR TE10=1 OR 2 OR TE11=1 OR 2)

IF [NUMCHILDFU1] = 1, FILL = "was your child"  
 IF [NUMCHILDFU1] > 1, FILL = "were your children"

**TE14. In the last 30 days, [was your child/were your children] ever hungry but you just couldn't afford more food?**

- YES ..... 1
- NO ..... 0
- DON'T KNOW ..... d
- REFUSED ..... r

[NUMCHILDFU1] GT 0 AND (TE9=1 OR 2 OR TE10=1 OR 2 OR TE11=1 OR 2)

IF [NUMCHILDFU1] = 1, FILL = "your child"  
 IF [NUMCHILDFU1] > 1, FILL = "any of your children"

**TE15. In the last 30 days, did [your child/any of your children] ever not eat for a whole day because there wasn't enough money for food?**

- YES ..... 1
- NO ..... 0
- DON'T KNOW ..... d
- REFUSED ..... r

### F. Food Expenditures

Now, I'd like to ask some questions about shopping for food and eating at restaurants. These questions are about out-of-pocket spending on food. Later on I will ask you about purchases made with government benefits like SNAP, WIC, or FDPIR.

ALL
FILL DATE = [DATE OF INTERVIEW-30]

**TF1. First I'll ask you about money spent on food at supermarkets and other stores. Then we will talk about money spent at fast food restaurants and other restaurants.**

**Excluding any government benefits like SNAP or WIC, since [DATE OF INTERVIEW-30] how much money did your family spend out of pocket at supermarkets, grocery stores, and other stores? Please do not include fast food restaurants and other types of restaurants.**

**PROBE: This includes stores such as Wal-Mart, Target, and Kmart, convenience stores like 7-11 or Mini Mart, stores like Costco or Sam's Club, dollar stores, bakeries, meat markets, vegetable stands, or farmer's markets.**

**PROBE: Please include the total amount spent in the past 30 days, since [DATE OF INTERVIEW-30].**

INTERVIEWER: RECORD "0" IF NO MONEY WAS SPENT

\$ |\_\_|\_\_|\_\_|\_\_| MONEY SPENT (\$0-\$9,999)

DON'T KNOW .....d GO TO TF4

REFUSED .....r GO TO TF4

TF1=1 TO 9,999
FILL1=AMOUNT FROM TF1

**TF2. Was any of this \$[AMOUNT FROM TF1] spent on nonfood items such as cleaning or paper products, pet food, cigarettes, or alcoholic beverages?**

YES .....1 GO TO TF3

NO .....0 GO TO TF4

DON'T KNOW .....d GO TO TF4

REFUSED .....r GO TO TF4

TF2=1
FILL=AMOUNT FROM TF1

**TF3. About how much of the \$[AMOUNT FROM TF1] was spent on nonfood items?**

INTERVIEWER: RECORD "0" IF NO MONEY WAS SPENT

\$ |\_\_|\_\_|\_\_|\_\_| MONEY SPENT (\$0-\$9,999) GO TO TF4  
 DON'T KNOW .....d GO TO TF4  
 REFUSED .....r GO TO TF4

**HARD CHECK: IF [TF1 = \$0-9,999] AND [TF3>TF1]; The amount spent on nonfood items is greater than the total amount spent at supermarkets, grocery stores, or other stores. Did I make a mistake?**

ALL
-----

**TF4. During the last 30 days, how many times did your family eat food from a fast food restaurant or other kinds of restaurants? Include restaurant meals at home, at fast food or other restaurants, carryout, or drive thru.**

**PROBE IF NEEDED:** Please include the total number of visits in the past 30 days, since [DATE OF INTERVIEW-30].

**PROBE IF NEEDED:** Such as food you get at McDonald's, KFC, Panda Express, Taco Bell, Pizza Hut, food trucks, Applebee's, Chili's, TGI Fridays, etc.

|\_\_|\_\_| TIMES (0-99)  
 DON'T KNOW .....d GO TO SECTION TG  
 REFUSED .....r GO TO SECTION TG

TF4 = 1-99
------------

**TF5. About how much money did your family spend on food at all types of restaurants including fast food restaurants during the last 30 days?**

**PROBE:** Please include the total amount spent in the past 30 days, since [DATE OF INTERVIEW-30].

INTERVIEWER: RECORD "0" IF NO MONEY WAS SPENT

\$ |\_\_|\_\_|\_\_|\_\_| MONEY SPENT (\$0-\$9,999)  
 DON'T KNOW .....d  
 REFUSED .....r

### G. Other Program Participation

Next, I'm going to read the names of some programs that provide food or meals or other services to individuals or households.

ALL
FILL DATE = [DATE OF INTERVIEW-30]

**TG1.** In the last 30 days, that is, since [DATE OF INTERVIEW-30], did you or anyone in your household receive food or benefits from the Women, Infants and Children program called **WIC**?

YES ..... 1 GO TO TG1A  
 NO ..... 0 GO TO TG2  
 DON'T KNOW ..... d GO TO TG2  
 REFUSED ..... r GO TO TG2

TG1=1
-------

**TG1a.** How many women, infants, or children in the household got WIC foods or benefits?

|\_|\_| NUMBER OF WOMEN, INFANTS, OR CHILDREN  
 (1-20)

DON'T KNOW ..... d GO TO TG2  
 REFUSED ..... r GO TO TG2

[NUMCHILDFU1] GT 0 AND TG1A=1-20 AND [KIDSLTE5FU1]>0
--

**TG1b.** Of those, how many were infants or children up to age 5?

|\_|\_| NUMBER OF INFANTS OR CHILDREN  
 (0-20)

DON'T KNOW ..... d  
 REFUSED ..... r

ALL
-----

**TG2.** In the last 30 days did you or anyone in your household receive food or meals from food pantries, food banks, local soup kitchens or emergency kitchens, community program, senior center, shelter, Meals on Wheels (or other programs delivering meals to your home), or church?

YES ..... 1  
 NO ..... 0  
 DON'T KNOW ..... d  
 REFUSED ..... r

DEMONSTRATION = CHICKASAW NATION

**TG3. Do you or others in your household currently receive monthly commodity foods as part of the Food Distribution Program on Indian Reservations, also called FDPIR, *fi-dipper*, or *fid-purr*?**

- YES ..... 1
- NO ..... 0
- DON'T KNOW ..... d
- REFUSED ..... r

DEMONSTRATION = CHICKASAW NATION AND TREATMENT GROUP=T

**TG4. How often did you try the recipes included with each Packed Promise food delivery?**

- Every time or nearly every time,**..... 1 GO TO TG4A
- Sometimes, or** ..... 2 GO TO TG4A
- None of the time or nearly none of the time?** ..... 3 GO TO TG4A
- DID NOT ORDER/RECEIVE A FOOD DELIVERY (VOLUNTEERED) ..... 4 GO TO TH1
- DON'T KNOW ..... d GO TO TG4A
- REFUSED ..... r GO TO TG4A

TG4=1, 2, 3, D, OR R

**TG4a. About how much of the Packed Promise food delivery does your household eat each time you receive it? Would you say...**

**CODE ONE ONLY**

- All or most of the items,** ..... 1 GO TO TH1
- Some of the items, or**..... 2
- None or nearly none of the items?** ..... 3
- DON'T KNOW ..... d GO TO TH1
- REFUSED ..... r GO TO TH1

TG4A=2 OR 3

**TG4b. What does your household do with the items that aren't used in the month they are delivered? Does your household...**

**CODE ALL THAT APPLY**

- Save the items for another time, ..... 1
- Give the items to family or friends, or ..... 2
- Throw the items away?..... 3
- DON'T KNOW ..... d
- REFUSED ..... r

**H. SNAP Enrollment**

ALL

**TH1. In the last 12 months, has your household ever been enrolled in the Supplemental Nutrition Assistance Program (SNAP)?**

**PROBE IF NEEDED: SNAP is the program formerly known as 'Food Stamps.'**

- YES ..... 1 GO TO TH1A
- NO ..... 0 GO TO TH2
- DON'T KNOW ..... d GO TO TH2
- REFUSED ..... r GO TO TH2

TH1=1

**TH1a. In the last 12 months, how long did your household receive the Supplemental Nutrition Assistance Program (SNAP)? If your household received SNAP, stopped receiving it, and then started again, please include all of that time.**

|\_|\_|\_| AMOUNT OF TIME

(1-365)

- DON'T KNOW ..... d GO TO TH2
- REFUSED ..... r GO TO TH2

IF TH1A = 1-365

**TH1b. Is that days, weeks, or months?**

- DAYS..... 1
- WEEKS ..... 2
- MONTHS..... 3
- DON'T KNOW ..... d
- REFUSED ..... r

ALL

**TH2. In total, how long have you and your household ever received the Supplemental Nutrition Assistance Program (SNAP)?**

**IF NEEDED: Please include all of the time your household has received SNAP, even if your household has started and stopped receiving benefits more than once.**

INTERVIEWER: RECORD "0" IF NEVER ON SNAP

|\_|\_|\_| AMOUNT OF TIME

(0-365)

DON'T KNOW .....d

REFUSED .....r

IF TH2 = 1-365

**TH2a. Is that days, weeks, months, or years?**

DAYS..... 1

WEEKS ..... 2

MONTHS..... 3

YEARS ..... 4

DON'T KNOW .....d

REFUSED .....r

TH1=1

**TH3. Are you or others in your household currently receiving SNAP?**

YES ..... 1 GO TO TH4

NO ..... 0 GO TO T11

DON'T KNOW .....d GO TO T11

REFUSED .....r GO TO T11

TH3=1

**TH4. What is the amount of the SNAP your household receives per month?**

\$ |\_|\_|\_|\_| DOLLAR AMOUNT

(\$1 - \$9999)

DON'T KNOW .....d GO TO T11

REFUSED .....r GO TO T11

TH3=1

**TH5. In the last 12 months, did the amount of the benefit increase, decrease, or stay the same?**

**CODE ONE ONLY**

- INCREASED ..... 1
- DECREASED ..... 2
- BOTH INCREASED AND DECREASED ..... 3
- STAYED SAME ..... 4
- DON'T KNOW ..... d GO TO T11
- REFUSED ..... r GO TO T11

TH3=1

**TH6. How many weeks do your SNAP benefits usually last?**

INTERVIEWER: CODE ANY ANSWER GREATER THAN 8 WEEKS AS 8

[ ] NUMBER OF WEEKS  
(0-8)

- DON'T KNOW ..... d GO TO T11
- REFUSED ..... r GO TO T11

## I. Children's Food Consumption (Chickasaw Nation only)

### PROGRAMMER BOX SECTION I

IF DEMONSTRATION = KENTUCKY, NEVADA, OR VIRGINIA, GO TO TJ1. IF TOTCNAGEFU1 = 0 GO TO TJ1.

ELSE IF DEMONSTRATION = CHICKASAW NATION AND TOTCNAGEFU1 GTE 1, USE RANDOM SELECTION TO CHOOSE FOCAL CHILD FROM AMONG ROSTERED CHILDREN WITH CNAGEFLAGFU1=1.

### J. Household Resources

ALL
FILL DATE = [DATE OF INTERVIEW-30]

**TJ1. The next questions are about working or jobs. Were you or any other adult in your household working for pay in the last 30 days, that is, since [DATE OF INTERVIEW-30]?**

YES ..... 1  
 NO ..... 0  
 DON'T KNOW ..... d  
 REFUSED ..... r

DEMONSTRATION=KENTUCKY AND TJ1 NE 0
-------------------------------------

**TJ2. And what was your household's total earnings before taxes last month? Please include earnings from wages and salaries from a job or self-employment, or income from a rental property. Do not include income from Social Security, pensions, child support, or cash welfare benefits, or the value of SNAP benefits or food stamps, WIC, Medicaid, or public housing.**

\$ |\_|\_|\_|\_|\_| DOLLAR AMOUNT (\$0 – 99,999)

DON'T KNOW ..... d GO TO TJ2B  
 REFUSED ..... r GO TO TJ2B

TJ2=D OR R
------------

**TJ2b. Some people find it easier to select earnings from a range. Please stop me when I reach your household's total earnings for last month. Was it...**

**CODE ONE ONLY**

Less than \$500, ..... 1  
 \$500 to less than \$1,000, ..... 2  
 \$1,000 to less than \$1,500, ..... 3  
 \$1,500 to less than \$2,000, ..... 4  
 \$2,000 to less than \$2,500, ..... 5  
 \$2,500 to less than \$3,000, or ..... 6  
 \$3,000 or more? ..... 7  
 DON'T KNOW ..... d  
 REFUSED ..... r

ALL
FILL [LAST MONTH]

**TJ3. What was your household’s total income last month, during [LAST MONTH] before taxes? Please include all types of income received by all household members last month, including all earnings, Social Security, pensions, Veteran’s Benefits, Unemployment Insurance, worker’s compensation benefits, child support, payments from roomers or boarders, and cash welfare benefits such as TANF (*TAH-nif*) and SSI. Do not include the value of SNAP benefits or food stamps, WIC, Medicaid, or public housing.**

\$ |\_\_|\_\_|\_\_|\_\_|\_\_| DOLLAR AMOUNT (\$0 – 99,999)

DON'T KNOW .....d GO TO TJ3B  
 REFUSED .....r GO TO TJ3B

TJ3=D OR R
------------

**TJ3b. Some people find it easier to select an income range. Please stop me when I reach your household’s total income for last month. Was it...**

**CODE ONE ONLY**

- Less than \$500, ..... 1
- \$500 to less than \$1,000, ..... 2
- \$1,000 to less than \$1,500, ..... 3
- \$1,500 to less than \$2,000, ..... 4
- \$2,000 to less than \$2,500, ..... 5
- \$2,500 to less than \$3,000, or ..... 6
- \$3,000 or more? ..... 7
- DON'T KNOW .....d
- REFUSED .....r

ALL
-----

**TJ4. And, what was your household’s total income last year before taxes?**

PROBE IF NEEDED: Please include all types of income received by all household members last year, including all earnings, Social Security, pensions, Veteran’s Benefits, Unemployment Insurance, worker’s compensation benefits, child support, payments from roomers or boarders, and cash welfare benefits such as TANF (*TAH-nif*) and SSI. Do not include the value of SNAP benefits or food stamps, WIC, Medicaid, or public housing.

INTERVIEWER: “LAST YEAR,” MEANING 2016.

\$ |\_\_|\_\_|\_\_|,|\_\_|\_\_|\_\_| DOLLAR AMOUNT (\$0 – 150,000)

DON'T KNOW .....d GO TO TJ4a  
 REFUSED .....r GO TO TJ4a

TJ4=D OR R

**TJ4A. Some people find it easier to select an income range. Please stop me when I reach your household’s total income for last year. Was it...**

**CODE ONE ONLY**

- Less than \$10,000, ..... 1
- \$10,000 to less than \$20,000, ..... 2
- \$20,000 to less than \$35,000, ..... 3
- \$35,000 to less than \$50,000, ..... 4
- \$50,000 to less than \$75,000, ..... 5
- \$75,000 to less than \$100,000, ..... 6
- \$100,000 to less than \$150,000, or ..... 7
- \$150,000 or more? ..... 8
- DON'T KNOW ..... d
- REFUSED ..... r

ALL

FILL DATE = [DATE OF INTERVIEW-30]

**TJ5. The next questions are about sources of income. The answers to these and all other questions on this survey will be kept private and will never be associated with your name. During the last 30 days, that is, since [DATE OF INTERVIEW-30], did you or anyone in your household receive...**

**CODE ONE PER ROW**

	YES	NO	DON'T KNOW	REFUSED
a. TANF or Temporary Assistance to Needy Families, or other welfare such as General Assistance?	1	0	d	r
b. Social Security from the government for retirement, disability, or survivors’ benefits, or other retirement benefits such as a government or private pension or annuity?	1	0	d	r
c. SSI or Supplemental Security Income from the federal, state, or local government?	1	0	d	r
d. Veteran’s Benefits?	1	0	d	r
e. Unemployment Insurance or worker’s compensation benefits?	1	0	d	r
f. Child support payments or payments from roomers or boarders?	1	0	d	r
g. Financial support from friends or family?	1	0	d	r
h. Any other income besides earnings?	1	0	d	r

TJ5H=1

**TJ5h\_Specify. What is that other income?**

\_\_\_\_\_ (STRING 50)  
 DESCRIPTION

DON'T KNOW .....d

REFUSED .....r

[TJ6 on household limitations deleted per OMB on August 10, 2015.]

ALL

**TJ7. Now I'd like to ask you about how much help you would expect to get from different sources if your household had a problem with which you needed help, for example, sickness or moving. After I read each source, please tell me if you would expect to get all of the help needed, most of the help needed, very little of the help needed, or no help?**

INTERVIEWER: REPEAT ANSWER CHOICES AS NEEDED.

CODE ONE PER ROW

	ALL OF THE HELP NEEDED	MOST OF THE HELP NEEDED	VERY LITTLE OF THE HELP NEEDED	NO HELP	DON'T KNOW	REFUSED
a. Family living nearby?	1	2	3	4	d	r
b. Friends?	1	2	3	4	d	r
c. Other people in the community besides family and friends, such as a social service agency or a church?	1	2	3	4	d	r

### K. Trigger Events

The next few questions are about changes that may have occurred in your household in the past 6 months.

ALL

- TK1. Has there been a change in the number of people living in your household over the past 6 months?**
- YES ..... 1 GO TO TK2
  - NO ..... 0 GO TO TK3
  - DON'T KNOW ..... d GO TO TK3
  - REFUSED ..... r GO TO TK3

TK1=1

**TK2. What caused that change?**

**CODE ALL THAT APPLY**

- BIRTH OF CHILD ..... 1
- NEW STEP, FOSTER OR ADOPTED CHILD ..... 2
- MARRIAGE/ROMANTIC PARTNER ..... 3
- SEPARATION OR DIVORCE ..... 4
- DEATH OF HOUSEHOLD MEMBER ..... 5
- FAMILY, BOARDER, OR OTHER ADULT MOVED IN ..... 6
- FAMILY, BOARDER, OR OTHER ADULT MOVED OUT ..... 7
- HOUSEHOLD MEMBER INCARCERATED ..... 8
- SAMPLE MEMBER MOVED ..... 9
- OTHER (SPECIFY)..... 10
- DON'T KNOW ..... d
- REFUSED ..... r

TK2 = 10

TK2\_Specify. INTERVIEWER: SPECIFY OTHER CHANGE.

- \_\_\_\_\_ (STRING 50)
- DESCRIPTION
- DON'T KNOW ..... d
  - REFUSED ..... r

ALL

**TK3. At any time in the past 6 months was your household evicted from your house or apartment?**

- YES ..... 1
- NO ..... 0
- DON'T KNOW ..... d
- REFUSED ..... r

ALL

**TK4. Have you or anyone in your household had a change in employment or a change in pay or hours worked from a job in the past 6 months?**

- YES ..... 1 GO TO TK4A
- NO ..... 0 GO TO TL1
- DON'T KNOW ..... d GO TO TL1
- REFUSED ..... r GO TO TL1

TK4=1

**TK4a. What was that change in employment or a change in pay or hours worked from a job that you or someone in your household experienced in the past 6 months?**

CODE ALL THAT APPLY

- OBTAINED A JOB ..... 1
- LOST JOB ..... 2
- INCREASE IN PAY OR HOURS ..... 3
- DECREASE IN PAY OR HOURS ..... 4
- QUIT A JOB ..... 5
- CHANGED JOBS ..... 6
- TEMPORARY LEAVE (MATERNITY, DISABILITY, OR WORKMAN'S COMPENSATION) ..... 7
- SEASONAL WORK ..... 8
- OTHER ..... 9
- DON'T KNOW ..... d
- REFUSED ..... r

TK4A = 9

TK4a\_Specify. INTERVIEWER: SPECIFY OTHER CHANGE.

\_\_\_\_\_ (STRING 50)  
DESCRIPTION

- DON'T KNOW ..... d
- REFUSED ..... r

**L. Respondent Demographics and Health Status**

ALL

**TL1. Now, I have a few questions about you.**

**[RECORD GENDER FROM OBSERVATION.]**

**[PROBE ONLY IF NECESSARY: Because it is sometimes difficult to determine over the phone, I am asked to confirm with everyone...Are you male or female?]**

INTERVIEWER: CODE DON'T KNOW IF RESPONDENT DOES NOT WANT TO IDENTIFY AS MALE OR FEMALE

- MALE.....1
- FEMALE .....2
- DON'T KNOW .....d
- REFUSED .....r

IF [NUMCHILDFU1] GT 0

**TL2. What is your relationship to the children living in the household?**

INTERVIEWER: READ ONLY IF NECESSARY

**CODE ALL THAT APPLY**

- BIOLOGICAL/ADOPTIVE PARENT .....1
- STEP-PARENT .....2
- GRANDPARENT.....3
- GREAT GRANDPARENT .....4
- SIBLING/STEPSIBLING .....5
- OTHER RELATIVE OR IN LAW .....6
- FOSTER PARENT .....7
- OTHER NON-RELATIVE .....8
- PARENT'S PARTNER .....9
- DON'T KNOW .....d
- REFUSED .....r

ALL

**TL3. Are you of Hispanic or Latino origin?**

- HISPANIC OR LATINO ..... 1
- NOT HISPANIC OR LATINO ..... 0
- DON'T KNOW ..... d
- REFUSED ..... r

ALL

**TL4. I am going to read a list of five race categories. Please choose one or more races that you consider yourself to be. American Indian or Alaska Native; Asian; Black or African American; Native Hawaiian or other Pacific Islander; White?**

**CODE ALL THAT APPLY**

- AMERICAN INDIAN OR ALASKA NATIVE ..... 1
- ASIAN..... 2
- BLACK OR AFRICAN AMERICAN ..... 3
- NATIVE HAWAIIAN OR OTHER PACIFIC ISLANDER..... 4
- WHITE..... 5
- DON'T KNOW ..... d
- REFUSED ..... r

ALL

**TL5. What is your current marital status? Are you now married, divorced, separated, widowed, never married, or living with a partner?**

**CODE ONE ONLY**

- MARRIED..... 1
- SEPARATED OR DIVORCED ..... 2
- WIDOWED ..... 3
- NEVER MARRIED ..... 4
- LIVING WITH PARTNER ..... 5
- DON'T KNOW ..... d
- REFUSED ..... r

ALL

**TL6. What is your date of birth?**

PROGRAMMER: COLLECT DATE WITH SEPARATE FIELDS

|\_|\_|/|\_|\_|/|\_|\_|\_|\_|  
MONTH DAY YEAR  
(1-12) (1-31) (1916-2001)

DON'T KNOW .....d GO TO TL6A

REFUSED .....r GO TO TL6A

TL6 = D OR R

**TL6a. I can record your age instead if you would like. How many years old are you?**

|\_|\_| YEARS  
(18-99)

DON'T KNOW .....d

REFUSED .....r

ALL

**TL7. What is the highest grade or level of school you have completed or the highest degree you have received?**

**[ENTER HIGHEST LEVEL OF SCHOOL.]**

NEVER ATTENDED/KINDERGARTEN ONLY.....	0
1ST GRADE.....	1
2ND GRADE.....	2
3RD GRADE.....	3
4TH GRADE.....	4
5TH GRADE.....	5
6TH GRADE.....	6
7TH GRADE.....	7
8TH GRADE.....	8
9TH GRADE.....	9
10TH GRADE.....	10
11TH GRADE.....	11
12TH GRADE, NO DIPLOMA.....	12
HIGH SCHOOL GRADUATE.....	13
GED OR EQUIVALENT.....	14
SOME COLLEGE, NO DEGREE.....	15
ASSOCIATE DEGREE: OCCUPATIONAL, TECHNICAL, OR VOCATIONAL PROGRAM.....	16
ASSOCIATE DEGREE: ACADEMIC PROGRAM.....	17
BACHELOR'S DEGREE (EXAMPLE: BA, AB, BS, BBA).....	18
MASTER'S DEGREE (EXAMPLE: MA, MS, MEng, MEd, MBA).....	19
PROFESSIONAL SCHOOL DEGREE (EXAMPLE: MD, DDS, DVM, JD).....	20
DOCTORAL DEGREE (EXAMPLE: PhD, EdD).....	21
DON'T KNOW.....	d
REFUSED.....	r

ALL

**TL8. In general, would say your health is excellent, very good, good, fair or poor?**

**CODE ONE ONLY**

- EXCELLENT ..... 1
- VERY GOOD ..... 2
- GOOD ..... 3
- FAIR ..... 4
- POOR..... 5
- DON'T KNOW ..... d
- REFUSED ..... r

**M. Closing Information**

DEMONSTRATION = ALL AND TREATMENT GROUP=T, T1, OR T2
FILL1=DEMONSTRATION PROJECT NAME

**TM1. Thank you very much for your time. You have really helped us with this study. We are also conducting in-person interviews to learn more about some families' experiences with [DEMONSTRATION PROJECT] and your household's access to healthy food. Those who are selected for the in-person interview will get \$50 in addition to the gift card for this telephone interview. If you agree to take part, one of my colleagues may contact you in the next few weeks with more information and to schedule an interview.**

**Are you willing to be contacted about taking part in an in-person interview? You can change your mind about participating at a later time.**

- YES ..... 1
- NO ..... 0
- DON'T KNOW ..... d
- REFUSED ..... r

ALL

**TM2. Thank you very much for your time. You have really helped us with this study. I'd like to confirm your address so we can send you a \$30 gift card within the next few weeks.**

**Field: [To thank you for completing the survey, your field interviewer will give you a \$30 gift card. We would just like to confirm your contact information.]**

**[ASK ALL:] According to our records we have...**

**[FILL FIRSTNAME LASTNAME FROM SMS]**

**[FILL STREET ADDRESS FROM SMS]**

**[FILL CITY, STATE, ZIP CODE FROM SMS]**

**[IF DEMONSTRATION=CHICKASAW NATION FILL EMAIL ADDRESS FROM SMS]**

**[IF DEMONSTRATION=CHICKASAW NATION FILL PHONE NUMBER FROM SMS]**

CONTACT INFORMATION IS CORRECT .....1 GO TO TM3

CONTACT INFORMATION NEEDS UPDATING .....0

UPDATE: NAME

UPDATE: STREET ADDRESS:

\_\_\_\_\_
STREET 1

\_\_\_\_\_
STREET 2

\_\_\_\_\_
STREET 3

\_\_\_\_\_
CITY

\_\_\_\_\_
STATE

\_\_\_\_\_
ZIP

|\_|\_|\_|\_| - |\_|\_|\_|\_| - |\_|\_|\_|\_|\_|
PHONE

\_\_\_\_\_
EMAIL

DON'T KNOW .....d

REFUSED .....r

DEMONSTRATION=CHICKASAW NATION

IF FIRST TIME THROUGH LOOP: INCLUDE FILL 1: "WE WOULD ALSO LIKE TO DO A THIRD TELEPHONE SURVEY SIX MONTHS FROM NOW TO SEE HOW YOU ARE DOING. YOU WILL GET ANOTHER PREPAID CARD FOR PARTICIPATING IN THAT INTERVIEW."

AFTER FIRST TIME THROUGH LOOP, DO NOT INCLUDE FILL1

TM3. [We would also like to do a third telephone survey six months from now to see how you are doing. You will get another prepaid card for participating in that interview.]

In case we can't reach you at this number, is there another number we should try?

|\_|\_|\_| - |\_|\_|\_|\_| - |\_|\_|\_|\_|\_|

- YES ..... 1 GO TO TM3.1
- NO ADDITIONAL PHONE AVAILABLE ..... 2 GO TO TM3B
- REFUSED TO GIVE PHONE NUMBER ..... 3 GO TO TM3B
- REFUSED TO PARTICIPATE IN THIRD INTERVIEW ..... 9 GO TO END
- DON'T KNOW ..... d GO TO END
- REFUSED ..... r GO TO END

TM3 = 1

TM3.1 What is the telephone number we should try?

|\_|\_|\_| - |\_|\_|\_|\_| - |\_|\_|\_|\_| - |\_|\_|\_|\_|\_|

- DON'T KNOW ..... d
- REFUSED ..... r

TM3.1 PHONE NUMBER PROVIDED

**TM3a. What type of phone number is this?**

SELECT CODING TYPE

- HOME PHONE..... 1
- OFFICE PHONE ..... 2
- HOME AND OFFICE PHONE..... 3
- CELL PHONE ..... 4
- PAGER..... 5
- COMPUTER/FAX LINE..... 6
- OTHER..... 7
- DON'T KNOW ..... d
- REFUSED ..... r

PROGRAMMER BOX  
 IF TM3 = ANSWERED LOOP OVER TM3 THROUGH TM3A UNTIL  
 TM3 DOES NOT EQUAL 1. MAX 3 LOOPS.

TM3=1, 2, 3, OR PHONE NUMBER PROVIDED

**TM3b. What is the email address where we can reach you?**

- \_\_\_\_\_ (STRING 100)  
 EMAIL ADDRESS
- NO EMAIL ADDRESS AVAILABLE ..... 0
  - DON'T KNOW ..... d
  - REFUSED ..... r

TM3=1, 2, 3, OR PHONE NUMBER PROVIDED

**TM4. In case we have trouble reaching you in 6 months, please give me the names and telephone numbers of two relatives or friends who would know where you could be reached. These should be friends or relatives not currently living in your household. Let's start with one friend or relative. What is his or her name?**

[BE SURE TO VERIFY SPELLING]

\_\_\_\_\_ (STRING 25) GO TO TM4A  
 FIRST NAME

\_\_\_\_\_ (STRING 25)  
 LAST NAME

DON'T KNOW .....d GO TO TM4A

REFUSED .....r GO TO END

TM4 NE R

**TM4a. What is this person's telephone number, beginning with the area code?**

|\_|\_|\_| - |\_|\_|\_| - |\_|\_|\_|\_|

(VOL) GAVE INTERNATIONAL PHONE NUMBER .....2

DON'T KNOW .....d

REFUSED .....r

TM4A NE 2, D, OR R

FILL= TM4 FIRST NAME

**TM4b. And what is [FIRST NAME]'s relationship to you?**

\_\_\_\_\_ (STRING 25)  
 RELATIONSHIP

DON'T KNOW .....d

REFUSED .....r

TM3=1, 2, 3, OR PHONE NUMBER PROVIDED

**TM5. How about a second friend or relative? What is his or her name?**

[BE SURE TO VERIFY SPELLING]

\_\_\_\_\_ (STRING 25) GO TO TM5A

FIRST NAME

\_\_\_\_\_ (STRING 25)

LAST NAME

DON'T KNOW .....d GO TO TM5A

REFUSED .....r GO TO END

TM5 NE R

**TM5a. What is this person's telephone number, beginning with the area code?**

|\_|\_|-|\_|\_|-|\_|\_|\_|\_|

(VOL) GAVE INTERNATIONAL PHONE NUMBER .....2

DON'T KNOW .....d

REFUSED .....r

TM5 NE 2, D, OR R

FILL= TM5 FIRST NAME

**TM5b. And what is [FIRST NAME]'s relationship to you?**

\_\_\_\_\_ (STRING 25)

RELATIONSHIP

DON'T KNOW .....d

REFUSED .....r

ALL

IF DEMONSTRATION = CHICKASAW NATION AND TM3 NE 9: **We look forward to speaking with you again in six months.**

**END. Thank you again for your help and have a good day/evening. [We look forward to speaking with you again in six months.]**

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## B.4. QUALITATIVE DATA COLLECTION METHODS

Several qualitative data collection methods were used to describe the Nevada demonstration project and how it was implemented. The main sources of information to support the implementation analyses were: (1) site visits, including interviews with project staff and observations of project activities; (2) focus groups with project participants; (3) data on service delivery and take-up from the management information system (MIS) that the grantee developed to track its efforts; and (4) reviews of grantee documents including the proposal, quarterly progress reports to FNS, and operational materials (such as notification letters to project participants). Exhibit B.3 identifies the objectives that each of the data sources helped to address. The remainder of this section details the data collection methods for the site visit interviews and focus groups. Section B.5, on quantitative data, describes the administrative and MIS data collection methods.

### Exhibit B.3. Implementation analysis objectives and data sources

Objectives	Data sources				
	Site visits				
	Staff interviews	Observations	Participant focus groups	Project documents	MIS data
<b>Project vision/description</b>					
Intervention components	X			X	
Logic model	X			X	
Target population	X	X		X	X
Partners	X			X	
<b>Implementation processes</b>					
Outreach/enrollment/retention	X		X	X	X
Service structure and provision	X	X	X	X	X
Staffing structure	X	X		X	
Role of partners	X	X		X	
Challenges	X	X	X		X
Perceptions	X		X		
<b>Interpretation of project impacts</b>					
Participant characteristics					X
Influence of project design	X		X		
Influence of implementation	X		X		X

MIS = management information system.

#### A. Interviews with project staff

Two site visits were conducted in Nevada. The first visit occurred at the end of the planning period to coincide with the initial efforts to launch the intervention to (1) document planning processes, (2) describe the selected intervention model and vision, and (3) understand the project's cost components. The first site visit took place over two days, on March 8th and 9th, 2016, and included semi-structured interviews with key project staff in Reno. Interview topics included the vision or logic model for the project, planned project design and staffing structure,

implementation plans and timelines, changes to information technology systems or data infrastructure, staff hiring and training, community context, and the planning process itself.

The second site visit occurred 12 months into full project operations, May 17-19, 2017, in Las Vegas. The goal of the second site visit was to describe operations at a steady-state level. The semi-structured interviews covered the same topics as the first site visit but with a focus on activities and experiences during the implementation period. The interviews probed about leadership and partner roles, staffing structures, recruitment and engagement strategies, specific services offered and received, deviations from plans, and interviewees' perceptions of challenges and successes.

Nevada interviewees included staff from SNAP, WIC, and partner agencies. State staff interviewees included the project manager, information systems and EBT systems staff, senior staff responsible for SNAP, representatives from WIC, and the case management and nutrition education directors. From the community partners, interviewees included the organizations' directors and the case managers involved in HHFK. In total, 15 interviews were conducted with over 30 staff. The semi-structured interviews were scheduled for up to 60 minutes. Two members of the research team conducted the visits. Site visitors completed a training before the first visit, with a refresher training before the second visit, to ensure they understood the data collection goals and tools, could capture the necessary data, and could lead interviews with appropriate cultural sensitivity.

Regular telephone calls with project staff were conducted during the planning and implementation phases to supplement the staff interviews. The purpose of the calls was to obtain regular updates on both accomplishments and challenges encountered and how they were addressed. The calls were also an opportunity to provide Nevada with ongoing evaluation technical assistance to support and monitor all data collection activities (including survey outreach and consent activities and administrative data collection). The same members of the evaluation team conducted both the telephone calls and the site visits.

## **B. Focus groups with project participants**

In addition to interviews with key project staff, the second site visit included focus groups with HHFK participants. Two 90-minute focus groups were conducted with the parents or guardians from families assigned to the treatment groups. They were recruited from the pool of households that completed the follow-up survey, indicated they would be willing to be contacted for an interview, and resided in zip codes near the focus group location. Participants provided a firsthand account of service components offered and received and their experiences with and impressions of those services and the staff delivering them. Although the participants were not intended to be representative of the whole treatment group, their experiences complemented data collected from project staff to provide a holistic view of project implementation and help interpret project impacts. Guided by a semi-structured protocol, discussions covered how participants learned of the project, their motivation to participate, the services they received, their experiences interacting with project staff and the online system for checking SNAP benefits, their perceptions on the usefulness of the project for feeding their children, thoughts on the project's successes and challenges, and their suggestions for project improvement.

Focus groups were held in the evening at convenient locations (a church and a local Boys and Girls Club center). One focus group was conducted in English for households in the second treatment arm (T2), and one in Spanish for households in treatment arm 1 (T1). A total of 21 parents or caregivers attended the focus groups. Attendees provided active consent before participating in the discussion and were offered a \$50 gift card afterward. The telephone interviewers who administered the household surveys were trained to recruit focus group participants. The site visitors were trained to lead the focus group discussions and take detailed notes.

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## **B.5. QUANTITATIVE DATA COLLECTION METHODS**

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The impact and implementation analyses drew on three main quantitative data sources in addition to data from the baseline and follow-up surveys described previously: (1) administrative data from Nevada's SNAP caseload and EBT transaction records, (2) data on case management and nutrition education delivery and take-up from the management information system (MIS); and (3) records of costs incurred. Households that declined to consent to data collection activities (up to 14 households) were dropped from all quantitative analyses.

### **A. Administrative data**

SNAP administrative data were used for sampling, descriptive analysis of benefits issued and redeemed in the treatment households and the evaluation sample, and as outcomes in the impact analysis for the evaluation sample. SNAP caseload files included monthly records of households participating in SNAP. These files provided the frame for sampling households for the evaluation and randomizing households to one of the two treatment groups or the control group. SNAP EBT transaction data were available for the months during the period July 2016 through May 2017; data from the first month of implementation was not available. The SNAP EBT data had a record for every transaction (debits and credits) households made with their EBT cards.

The SNAP administrative data were cleaned and screened for duplicate observations, illogical values, and outliers. Variables were constructed for the descriptive analysis of SNAP benefits issued and redeemed and the impact analysis of monthly food spending.

### **B. MIS data**

Nevada developed an MIS to track the State's progress and outcomes in delivering case management and nutrition education services to the T2 group. The MIS was designed to record information needed for the evaluation and ongoing project delivery. In support of the implementation analysis and to provide context for impact estimates, the data documented the degree of outreach to engage T2 group members, the degree to which households spoke with staff and joined new assistance programs, and attendance at nutrition classes. Specifically, staff recorded in the MIS:

- The number of times staff attempted to contact each household and mode of each contact (telephone, email, and in-person)
- For every assistance program of interest (such as WIC), the household's program participation status as of the first contact, and the household's participation status as of the latest contact. That is, during the initial contact, a case manager recorded whether or not the household was already receiving the service or support, and if not, whether or not the household was eligible and interested in receiving it. During subsequent contacts, as applicable, the case manager recorded whether the household applied for the program and the ultimate status of the application. Staff also recorded pertinent notes for each program assistance (such as the reason a client was not interested in the program).
- Whether households were (1) interested in attending a nutrition education class, (2) mailed an invitation or flyer, and (3) attended a class.

All case management and nutrition education staff had access to the web-based MIS database and could edit the database simultaneously. They recorded information directly in the database during and following telephone calls, meetings, nutrition classes, and any other client activities. Key fields were setup as drop-down menus to minimize data entry error and promote consistency across staff. The MIS was developed by an information technology staff with East Valley Family Services and housed with East Valley Family Services (which was home to the case management and nutrition education staff). The case management director actively used the database to track progress of case management service delivery throughout the implementation period and trained staff on using the database.

MIS fields and early data were reviewed several times by the site visit team before and in the first few months after it went live to ensure the system was capturing the type and quality of data needed for the analysis. Regular telephone calls with key project staff to provide evaluation technical assistance provided interim opportunities to review the intent of the MIS and check that the types of data being collected were consistent with current service delivery practices and evaluation needs. Final data capturing the 12-month implementation period were submitted after the project concluded.

### C. Cost data

The resource cost method was used to collect and analyze the costs of the project. The resource cost method identifies a set of resources used for the project, collects data on the costs of each resource, and then calculates (or “builds up”) an estimate of the total cost (Ohls and Rosenberg 1999; Ponza et al. 1996). For this study, data on labor costs, other direct costs, and vendor or partner costs were collected, and administrative and MIS data were obtained to assess the cost of supplemental SNAP benefits. Exhibit B.4 provides a detailed description of each resource category.

#### Exhibit B.4. Description of resource categories and collected costs

Resource	Description
<b>Labor</b>	Wages and value of fringe benefits for staff that contributed to the intervention. For volunteer or donated labor, data on the wages that would have been paid if the work performed by the volunteer had been performed by paid staff was collected. The fringe benefit rate for volunteer or donated labor is always set to zero.
<b>Other direct costs<sup>a</sup></b>	Other direct costs include any costs that are not considered direct material costs or direct labor costs. Other direct costs (ODCs) include items such as travel, printing, postage, shipping, and computer equipment.
<b>Partner or contractor costs</b>	Partner and contractor costs associated with the intervention. Partners and contractors whose costs accounted for 10% or more of the project's total cost were asked to provide detailed labor and ODC costs by completing individual cost workbooks. Costs for partners and contractors whose costs accounted for 10% of the project's total cost were reported as a line item on the grantee's cost forms.
<b>Supplemental SNAP benefits</b>	The Nevada HHFK project provided a \$40 per month of extra SNAP benefits per child under age five. The cost of the extra SNAP benefits per month were calculated from administrative data by taking the difference between the extra benefits distributed to households through the 12 months of the HHFK demonstration and the benefits remaining at the end of the intervention, and dividing that difference by twelve. The project also incurred costs for processing the supplemental SNAP distributions. The costs of the processing fees was obtained from the Nevada HHFK project's final quarterly report to FNS.

<sup>a</sup>Data on indirect costs were not collected because they were not always tracked, and requesting information on the costs for space, utilities, et cetera would have been both overly burdensome and unlikely to be affected by the intervention.

FNS = Food and Nutrition Service; HHFK = Healthy, Hunger Free Kids; ODC = other direct costs; SNAP = Supplemental Nutrition Assistance Program.

Data on labor costs, other direct costs, and vendor or partner costs were collected on a quarterly basis using minimally burdensome, easy to customize, Excel workbooks. The Nevada HHFK project designated a cost data liaison, who coordinated completion of the workbooks at the State agency level and provided workbooks (or selected worksheets) to vendors and partners that participated in the demonstration.

As the workbooks were distributed, a webinar was held to train the grantee's cost data liaisons on how to complete the forms. The cost study team was available to respond to questions throughout the study period. In addition, all cost forms were reviewed by Mathematica site liaisons, who alerted the cost team to any missing information, issues, or questions on the forms. The cost team worked with the site liaisons to communicate questions back to the grantee cost data contact.

Since the Nevada HHFK project utilized donated and in-kind resources to sustain their projects, data on the monetary value of volunteer labor, donated commodities, and services provided at no cost were also collected, and the report differentiates between paid and unpaid costs. The report also differentiates between start-up costs (costs associated with preparations for the provision of project benefits that were incurred during the project start-up period of February 1, 2015 to May 31, 2016) and implementation costs (the ongoing costs associated with providing services during the implementation period of June 1, 2016 to May 31, 2017).

During the analysis, the evaluation team assigned specific categories of costs to the specific components of the project including (1) the provision of enhanced SNAP benefits (for T1 and T2); (2) the provision of case management and nutrition education services (for T2 only); and (3) costs that were associated with both of these activities (for T1 and T2). Costs were assigned to each of these components by Mathematica's project liaison, who manually reviewed and assigned each reported cost to one of the above categories. The Mathematica project liaison worked with the grantee's cost data contact to ensure that all costs were assigned to the correct component of the project.

Component costs were estimated by summing the cost of resources used for each component. Once component costs were estimated, these costs were summed across components to estimate the total cost of the intervention. Finally, the cost per household was estimated by dividing the total and component costs by the total number of consenting treatment households ( $n = 3,824$ ).

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**APPENDIX C**

**SUPPLEMENTAL EXHIBITS ON PROJECT IMPLEMENTATION  
AND COSTS**

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## C.1. SUPPLEMENTAL IMPLEMENTATION EXHIBITS

Appendix C contains supplemental exhibits on implementation and cost information to complement Chapter II. Section C.1 includes exhibits on the types of nutrition classes offered, the monthly receipt of the extra SNAP benefits, case management outreach and outcomes, and outreach and participation in nutrition classes. Section C.2 includes one exhibit detailing the project costs.

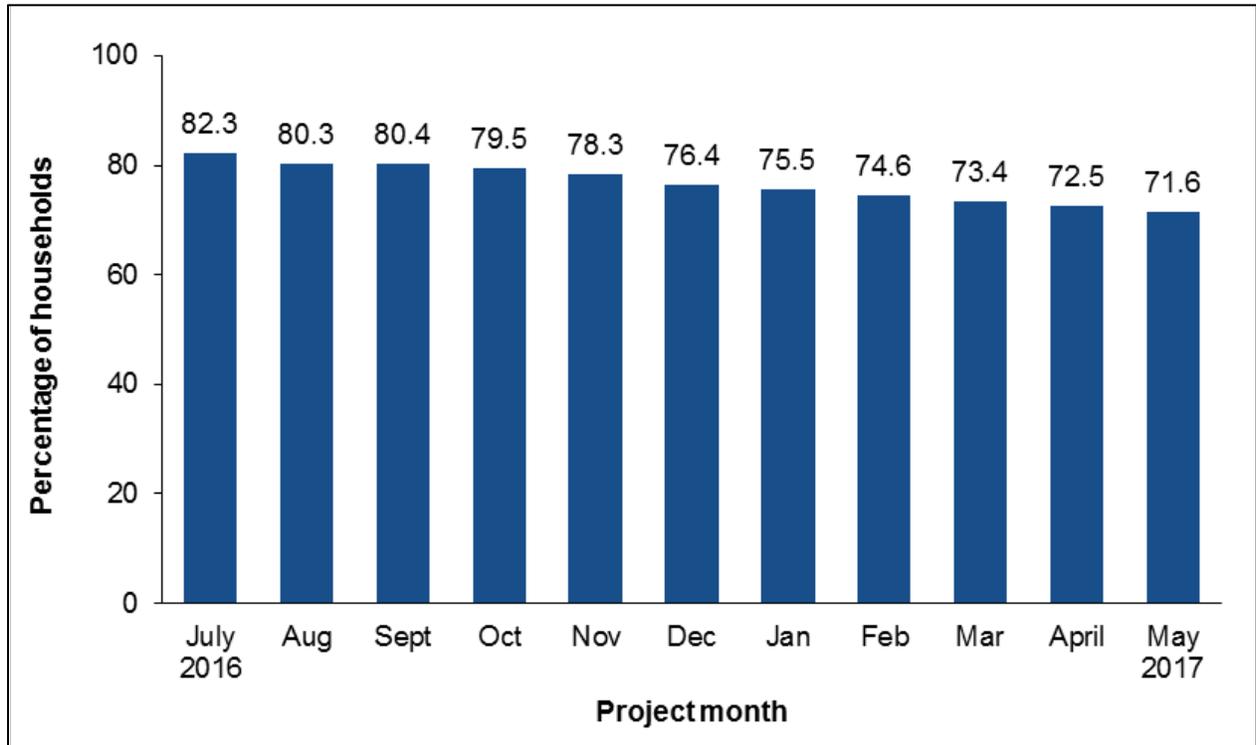
### Exhibit C.1. Number and characteristics of nutrition education classes offered throughout the demonstration period

Outcome	Number	Percentage
<b>Number of nutrition classes offered</b>	29	
By topic		
Topic 1: Smart grocery shopping	13	44.8
Topic 2: Healthy cooking	11	37.9
Topic 3: Healthy kids and picky eaters	5	17.2
By language		
English	14	48.3
Spanish	12	41.4
Bilingual (English and Spanish)	3	10.3
By location		
East Valley Family Services	17	58.6
Lutheran Social Services	5	17.2
Dept. of Welfare and Social Services office	4	13.8
United University Methodist Church	3	10.3

Source: Evaluation of Demonstration Projects to End Childhood Hunger, Nevada HHFK project case management and nutrition education database, and Nevada SNAP EBT database, 2016–2017. Tabulations were prepared by Mathematica Policy Research.

EBT = electronic benefits transfer; HHFK = Healthy, Hunger Free Kids; SNAP = Supplemental Nutrition Assistance Program.

**Exhibit C.2. Percentage of households that received extra SNAP benefits, by month (T1 and T2 groups)**



Source: Evaluation of Demonstration Projects to End Childhood Hunger, Nevada SNAP administrative data from the EBT system, 2016-2017. Tabulations were prepared by Mathematica Policy Research.

Note: Sample size = 3,826 treatment households. This analysis combined households in the T1 and T2 groups. Diagnostic testing indicated there were no differences in SNAP benefit receipt and spending between the two groups. Data represent months 2 through 12 of the demonstration period because the first month of data could not be obtained. This figure shows the percentage of households that had an extra SNAP benefit loaded onto their EBT cards in a given month.

EBT = electronic benefits transfer; SNAP = Supplemental Nutrition Assistance Program; T1 = treatment group 1; T2 = treatment group 2.

### Exhibit C.3. Extent of outreach provided to households and participation in case management (T2 group)

Outcome	Number	Percentage
<b>Outreach among all households</b>		
Households staff attempted to contact (n = 1,891)	1,724	91.2
<b>Outreach among households staff attempted to contact</b>		
Households staff attempted to contact, by mode (n = 1,724)		
Phone	1,615	93.7
Email	805	46.7
Mail	156	9.0
In-person	39	2.3
Number of contact attempts (n = 1,724)		
1	704	40.8
2 or 3	393	22.8
4 or more	627	36.4
Mean	2.6	
Number of phone call attempts (n = 1,615)		
1	1,333	82.5
2 or 3	274	17.0
4 or more	8	0.5
<b>Participation among all households</b>		
Received case management services <sup>a</sup> (n = 1,891)	473	25.0
Number of contact attempts (among those that received case management services) (n = 473)		
1	117	24.7
2 to 3	172	36.4
4 or more	184	38.9
Mean	3.0	
Number of phone call attempts (among those that received case management services) (n = 466)		
1	329	70.6
2 to 3	129	27.7
4 or more	8	1.7
Did not receive case management services <sup>a</sup>		
Number of contact attempts (among those that did not receive case management services) (n = 1,251)		
1	587	46.9
2 to 3	221	17.7
4 or more	443	35.4
Mean	2.4	
Number of phone call attempts (among those that did not receive case management services) (n = 1,149)		
1	1,004	87.4
2 to 3	145	12.6
4 or more	0	0.0
<b>Outreach and participation among households eligible throughout the demonstration<sup>b</sup></b>		
Eligible throughout the demonstration (n = 1,891)	744	39.3
Households staff attempted to contact (n = 744)	717	96.4
Received case management services <sup>a</sup> (n = 744)	266	35.8

Outcome	Number	Percentage
Did not receive case management services		
Number of contact attempts (among those that did not receive case management services) (n = 451)		
1	246	54.5
2 to 3	55	12.2
4 or more	150	33.3
Mean	2.2	
Number of phone call attempts (among those that did not receive case management services) (n = 440)		
1	385	87.5
2 to 3	55	12.5
4 or more	0	0.0

Source: Evaluation of Demonstration Projects to End Childhood Hunger, Nevada HHFK project case management and nutrition education database and Nevada SNAP electronic benefits transfer (EBT) database, 2016-2017. Tabulations are prepared by Mathematica Policy Research.

Note: Overall sample size = 1,891 households. Sample sizes vary by category and are shown in the row heading.

<sup>a</sup> Case management service receipt is defined as having spoken with a case manager about nutrition or other assistance programs, as indicated in the case management and nutrition education database.

<sup>b</sup> Households were eligible throughout the demonstration if they received \$40 extra SNAP benefits per eligible child for months 2 through 12 of the demonstration period. Data from the EBT system could not be obtained for the first month.

EBT = electronic benefits transfer; HHFK = Healthy, Hunger Free Kids; SNAP = Supplemental Nutrition Assistance Program; T2 = treatment group 2.

**Exhibit C.4. Household need for and interest in nutrition and other assistance programs, among households that received case management services (T2 group)**

Assistance program	Percentage of households					
	Enrolled prior to case management	Enrolled with case management support	In process of applying	Interested	Not eligible or not interested	Not discussed or not recorded <sup>a</sup>
The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)	52.2	2.5	0.8	11.6	32.8	0.0
School Breakfast Program	69.3	2.7	NA	NA	27.1	0.8
National School Lunch Program	71.7	3.0	NA	NA	24.5	0.8
School Food Supper Program	2.1	0.4	NA	NA	92.8	4.7
Summer Food Service Program	5.1	10.4	NA	NA	82.2	2.3
Child and Adult Care Food Program	6.6	1.1	0.6	7.4	78.6	5.7
Food pantries <sup>b</sup>	17.1	NA	NA	NA	NA	NA
Temporary Assistance for Needy Families (TANF)	10.6	1.5	1.5	3.4	82.5	0.6
Medicaid	92.0	1.7	0.4	0.8	3.8	1.3
Nevada Checkup <sup>c</sup>	7.2	0.4	0.0	0.4	87.5	4.4
Medicare	1.1	0.4	0.2	0.0	95.8	2.5
Social Security Disability Insurance (SSDI)	11.6	0.4	1.3	1.1	83.3	2.3
Housing assistance	10.8	2.5	1.7	18.8	63.8	2.3
Energy assistance	7.6	6.3	4.9	37.0	42.1	2.1
Child care subsidy	6.3	1.3	1.3	21.1	66.8	3.2
Chance, Choice, Change <sup>d</sup>	0.6	3.8	1.1	17.8	73.2	3.6
Sample size	473					

Source: Evaluation of Demonstration Projects to End Childhood Hunger, Nevada HHFK project case management and nutrition education database, 2016-2017. Tabulations were prepared by Mathematica Policy Research.

<sup>a</sup> Household status for a given assistance program was missing.

<sup>b</sup> Case managers asked participants whether or not they currently used food pantries. If not, and if the participant was interested, case managers provided information on where to access local food pantries. The data in this row indicate that 17% of the households reported that they were accessing food pantries.

<sup>c</sup> Nevada Checkup is the State of Nevada's Children's Health Insurance Program.

<sup>d</sup> Chance, Choice Change was a program offered by East Valley Family Services, Nevada's partner for case management, to build employment and nutrition skills.

NA = not applicable; for the school and summer feeding programs, case managers did not record whether a household was interested in or in the process of applying for these programs.

HHFK = Healthy, Hunger Free Kids; T2 = treatment group 2.

### Exhibit C.5. Extent of outreach provided to households and participation in nutrition education classes (T2 group)

Outcome	Number	Percentage
<b>Outreach among all households (n = 1,891)</b>		
Households staff attempted to contact for nutrition education	403	21.3
<b>Outreach among households staff attempted to contact for nutrition education (n = 403)</b>		
Households staff attempted to contact, by mode		
Phone	306	75.9
Email	21	5.2
Mail	321	79.7
Number of contact attempts		
1	133	33.0
2 or 3	170	42.2
4 or more	100	24.8
<b>Participation among all households (n = 1,891)</b>		
Attended at least 1 nutrition class	58	3.1
Received nutrition handouts on at least one topic	53	2.8
<b>Outreach and participation among households eligible throughout the demonstration<sup>a</sup> (n = 744)</b>		
Households staff attempted to contact	217	29.2
Attended at least 1 nutrition class	45	6.0
<b>Participation among households that attended a nutrition class (n = 58)</b>		
Number of topics attended		
1 topic	39	67.2
2 topics	14	24.1
3 topics	5	8.6
Attendance by topic <sup>b</sup>		
Topic 1: Smart grocery shopping	40	69.0
Topic 2: Healthy cooking	27	46.6
Topic 3: Healthy kids and picky eaters	15	25.9
Attendance by language <sup>b</sup>		
English	26	44.8
Spanish	25	43.1
Language not indicated	8	13.8
<b>Overlap with case management among all households (n = 1,891)</b>		
Households staff attempted to contact for nutrition education <i>and</i> case management	402	21.3
Households that attended a nutrition class <i>and</i> received case management services <sup>c</sup>	56	3.0

Source: Evaluation of Demonstration Projects to End Childhood Hunger, Nevada HHFK project case management and nutrition education database, 2016-2017. Tabulations were prepared by Mathematica Policy Research.

Note: Overall sample size = 1,891 households. Sample sizes vary by category and are shown in the row heading.

<sup>a</sup> Households were eligible throughout the demonstration if they received \$40 extra SNAP benefits per eligible child for months 2 through 12 month of the demonstration period.

<sup>b</sup> A household may have attended more than one topic, or attended topics in different languages. Thus, the numbers within a category might sum to more than the number of unique households attended a class.

<sup>c</sup> Case management service receipt was defined as having spoken with a case manager about assistance programs.

HHFK = Healthy, Hunger Free Kids; T2 = treatment group 2.

## C.2. SUPPLEMENTAL COST EXHIBITS

### Exhibit C.6. Nevada HHFK project costs

Component	Implementation costs <sup>a</sup>				Total cost (\$)
	Startup costs (\$)	First two quarters (\$)	Average per quarter (\$)	Total (\$)	
<b>Paid labor costs (wages plus fringe)</b>					
SNAP administrative	22,184	15,558	4,059	20,296	42,480
Case management and nutrition education	16,776	43,409	26,869	134,344	151,120
Both	72,663	15,464	9,117	45,583	118,246
<b>Total paid labor costs</b>	<b>111,623</b>	<b>74,431</b>	<b>40,045</b>	<b>200,223</b>	<b>311,846</b>
<b>Paid nonlabor resources</b>					
SNAP administrative	1,520	6,334	2,055	10,274	11,794
Case management and nutrition education	4,724	2,687	2,222	11,109	15,832
Both	3,588	2,191	3,099	15,493	19,082
<b>Total paid nonlabor resources</b>	<b>9,832</b>	<b>11,212</b>	<b>7,375</b>	<b>36,876</b>	<b>46,708</b>
<b>Paid vendor and contractor costs</b>					
Benefits-related partners or contractors	37,245	11,302	6,420	32,099	69,344
MIS or other IT contractor	0	0	5,848	29,240	29,240
<b>Total paid vendor and contractor costs</b>	<b>37,245</b>	<b>11,302</b>	<b>12,268</b>	<b>61,339</b>	<b>98,584</b>
<b>Paid SNAP benefits</b>	<b>0</b>	<b>657,235</b>	<b>375,514</b>	<b>1,877,568</b>	<b>1,877,568</b>
<b>Total paid costs</b>	<b>158,700</b>	<b>754,180</b>	<b>435,201</b>	<b>2,176,006</b>	<b>2,334,706</b>
<b>Volunteer labor costs (wages plus fringe)</b>					
SNAP administrative	0	0	0	0	0
Case management and nutrition education	0	1,403	677	3,383	3,383
Both	0	0	0	0	0
<b>Total volunteer labor costs</b>	<b>0</b>	<b>1,403</b>	<b>677</b>	<b>3,383</b>	<b>3,383</b>
<b>Donated or in-kind nonlabor resources</b>					
SNAP administrative	0	0	0	0	0
Case management and nutrition education	0	0	0	0	0
Both	0	0	0	0	0
<b>Total donated or in-kind nonlabor resources</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Donated or in-kind vendor and contractor costs</b>					
Benefits-related partners or contractors	0	0	0	0	0
MIS or other IT contractor	0	0	0	0	0
<b>Total donated or in-kind vendor and contractor costs</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total value of donated or in-kind resources</b>	<b>0</b>	<b>1,403</b>	<b>677</b>	<b>3,383</b>	<b>3,383</b>
<b>Total cost (paid plus donated/in-kind resources)</b>	<b>158,700</b>	<b>755,583</b>	<b>435,878</b>	<b>2,179,389</b>	<b>2,338,089</b>

Source: Nevada HHFK project cost data-collection instruments. Start-up costs cover February 1, 2015 to May 31, 2016. Implementation costs cover June 1, 2016 to June 30, 2017. The grantee provided services through May 2017, so the costs reported here include costs for closing out operations. Costs per household can be calculated by dividing the amounts here by the total number of treatment households (n = 3,824).

<sup>a</sup> Quarters represent calendar quarters. Because the implementation period was from June 1, 2016 to June 30, 2017, the first and last quarters of the implementation include less than three months of costs.

HHFK = Healthy, Hunger Free Kids; IT = information technology; MIS = Management Information System; SNAP = Supplemental Nutrition Assistance Program.

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**APPENDIX D**

**SUPPLEMENTAL EXHIBITS ON PROJECT IMPACTS**

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## **D.1. SUPPLEMENTAL EXHIBITS ON DIFFERENCES BETWEEN TREATMENT ARMS**

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Appendix D contains supplemental exhibits on impacts to complement Chapter III. Section D.1 includes exhibits comparing outcomes among members of the first treatment group (T1), which received extra SNAP benefits through the project, to outcomes among members of the second treatment group (T2), which received extra SNAP benefits plus the offer of case management and nutrition education. Section D.2 includes an exhibit presenting the results of sensitivity analyses that assess whether different approaches to impact estimation lead to substantive differences in estimated impacts on the main outcome of interest, child food insecurity. Section D.3 contains an exhibit that presents project impacts among subgroups of households and displays the 95% confidence interval associated with each estimated impact. Section D.4 shows differences between the treatment and control groups on individual items from the food security module for each follow-up survey.

### Exhibit D.1. SNAP benefit receipt and spending in the Nevada HHFK project, among treatment households

	Treatment #1 (SNAP benefits)	Treatment #2 (SNAP benefits plus case management/ nutrition education)	Difference (SE)	p-value
<b>Regular SNAP benefit in follow-up survey month (\$)</b>	388	401	12 (11)	0.239
<b>HHFK benefit in follow-up survey month (\$)</b>	43	43	-1 (1)	0.547
<b>Total SNAP benefit in follow-up survey month (\$)</b>	432	443	12 (11)	0.295
<b>Average monthly SNAP benefit (\$)</b>				
Regular SNAP Benefit	396	393	-3 (6)	0.653
HHFK benefit	42	42	-1 (1)	0.447
Total SNAP Benefit	438	435	-3 (6)	0.601
<b>Percentage of months eligible for SNAP</b>	85.6	83.5	-2.0	0.081
<b>Days between exhausting benefits and next month's benefit load, in follow-up survey month ("gap days")</b>	6.7	6.0	-0.7	0.148
<b>Percentage of households with each level of gap days</b>				0.013
Zero days	41.0	43.6	2.6	
1 to 7 days	4.8	7.0	2.2	
8 to 14 days	6.5	9.2	2.7	
15 to 21 days	15.6	13.0	-2.7	
More than 21 days	13.0	7.7	-5.3	
Did not receive SNAP in response month	13.8	13.5	-0.3	
<b>SNAP benefit redemption</b>				
Ratio of EBT spending to month's SNAP benefit in survey response month	0.99	0.99	0.00 <sup>a</sup>	0.779
Funds remaining in EBT account at end of demonstration	10	13	3 (2)	0.242
<b>Mean food expenditures (\$)</b>				
SNAP purchases in survey response month (\$)	425	439	14 (11)	0.210
Out-of-pocket spending in survey response month (\$) <sup>a</sup>	223	244	21 (11)	0.053
SNAP plus out-of-pocket spending in survey response month (\$) <sup>b</sup>	648	683	35 (13)	0.007
<b>Median food expenditures (\$)</b>				
SNAP purchases in survey response month (\$)	398	401	3 (5)	0.580
Out-of-pocket spending in survey response month (\$)	180	188	8 (8)	0.352
SNAP plus out-of-pocket spending in survey response month (\$)	632	640	8 (10)	0.384
Sample size	981	990		

Source: Nevada SNAP administrative data and, where noted, EDECH 2017 follow-up survey data. Tabulations are weighted to be representative of all eligible households in the Nevada demonstration and prepared by Mathematica Policy Research.

Note: Questions were asked about the last 30 days. Regressions controlled for baseline measures of child and adult food insecurity and very low food security; household income and employment status; the survey respondent's age, race/ethnicity, health status, and primary language spoken; the number of children in the household and presence of a teenager; and household participation in WIC, free or reduced-price breakfast and lunch; the amount of SNAP benefits received at baseline; and the duration of SNAP participation in the year before the baseline survey. Differences are calculated as the value for second treatment arm minus the value for the first treatment arm.

<sup>a</sup>Sum total of reported out-of-pocket food expenditures at stores and restaurants in the last 30 days. Excludes purchases made with SNAP and WIC. This was measured using the EDECH 2017 follow-up survey.

<sup>b</sup>Sum total of reported out-of-pocket food expenditures at stores and restaurants in the last 30 days, plus SNAP expenditures in the month prior to the survey response. This measure combines information on EBT purchases from Nevada administrative data with information from the EDECH 2017 follow-up survey.

<sup>^</sup>Greater than zero but less than 0.05.

EBT = electronic benefits transfer; EDECH = Evaluation of Demonstration Projects to End Childhood Hunger; HHFK = Healthy, Hunger Free Kids; SNAP = Supplemental Nutrition Assistance Program; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

**Exhibit D.2. Food insecurity at follow-up, among treatment households**

	Treatment #1 (SNAP benefits) (%)	Treatment #2 (SNAP benefits plus case management and nutrition education) (%)	Difference	p-value
<b>Children</b>				
Secure	67.6	69.2	1.6	0.245
Insecure	32.4	30.8	-1.6	0.245
VLFS	5.3	5.6	0.3	0.594
<b>Adults</b>				
Secure	53.9	58.2	4.2	0.035
Insecure	46.1	41.8	-4.2	0.035
VLFS	18.4	17.0	-1.4	0.238
<b>Households</b>				
Secure	50.2	54.7	4.5	0.029
Insecure	49.8	45.3	-4.5	0.029
VLFS	19.6	17.3	-2.3	0.119
Sample size	652	680		

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 follow-up survey. Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research.

Note: Food security was measured using the standard USDA 18-item survey module and a 30-day reference period. VLFS is a subcategory within the food insecure category. Differences are calculated as the value for second treatment arm minus the value for the first treatment arm. The p-value associated with each estimated difference between treatment groups is from a one-tailed test of statistical significance. Regressions controlled for baseline measures of child and adult food insecurity and very low food security; household income and employment status; the survey respondent's age, race/ethnicity, health status, and primary language spoken; the number of children in the household and presence of a teenager; and household participation in WIC, free or reduced-price breakfast and lunch; the amount of SNAP benefits received at baseline; and the duration of SNAP participation in the year before the baseline survey. Regressions also controlled for the month of survey response.

HHFK = Healthy, Hunger Free Kids; SNAP = Supplemental Nutrition Assistance Program; USDA = U.S. Department of Agriculture; VLFS = Very low food security; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

### Exhibit D.3. Food insecurity among children at follow-up in each treatment arm, by subgroup

Characteristic	Treatment #1 (SNAP benefits)		Treatment #2 (SNAP benefits plus case management and nutrition education)		Difference	Difference within subgroup: p-value	Difference between subgroups: p-value <sup>a</sup>
	Sample size	FI-C (%)	Sample size	FI-C (%)			
<b>Household composition</b>							0.632
Single adult	288	30.6	284	31.0	0.4	0.543	
Two or more adults	365	33.9	391	32.1	-1.8	0.274	
<b>Number of non-HHFK-eligible children in household</b>							0.522
1 or fewer	348	31.4	341	29.3	-2.1	0.239	
2 or more	305	33.5	334	34.2	0.7	0.580	
<b>Number of HHFK-eligible children in household</b>							0.702
1 or fewer	470	30.5	500	30.5	0.0 <sup>^</sup>	0.506	
2 or more	183	37.2	175	35.1	-2.1	0.327	
<b>Presence of a teenager in the household</b>							0.841
Household has no teens	456	29.4	454	28.9	-0.5	0.427	
Household has 1 or more teens	197	39.3	221	37.8	-1.5	0.352	
<b>Respondent race/ethnicity</b>							0.746
Hispanic (all races)	387	35.3	405	35.9	0.6	0.576	
Non-Hispanic black	164	30.3	143	28.2	-2.1	0.325	
Non-Hispanic white or non- Hispanic other race	102	25.1	127	21.7	-3.3	0.252	
<b>Respondent level of education</b>							0.487
Less than high school	307	39.1	326	36.8	-2.2	0.251	
High school, GED	189	25.7	183	29.0	3.2	0.786	
Some college or higher	152	28.4	151	25.2	-3.1	0.234	
<b>Baseline food security among children</b>							0.484
Secure (FS-C)	417	18.3	429	16.5	-1.9	0.234	
Insecure (FI-C)	236	58.4	246	59.5	1.1	0.604	
<b>WIC participation</b>							0.162
Participates in WIC	401	33.8	448	30.4	-3.3	0.112	
Does not participate	252	30.5	227	33.5	3.1	0.797	
<b>Expected level of HHFK benefit</b>							0.861
Expected benefits are less than 10% of monthly total	248	33.7	299	31.1	-2.6	0.215	
Expected benefits are 10% or more	355	32.8	323	31.0	-1.8	0.284	
Sample size	653		675				

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 follow-up survey. Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research.

Note: Food security was measured using the 30-day survey module. Differences are calculated as the value for second treatment arm minus the value for the first treatment arm. The p-value associated with each estimated difference between treatment groups is from a one-tailed test of statistical significance, while the p-value associated with the test of differences in these differences across subgroups is from a two-tailed test. Regressions controlled for baseline measures of child and adult food insecurity and very low food security; household income and employment status; the survey respondent's age, race/ethnicity, health status, and primary language spoken; the number of children in the household and presence of a teenager; and household participation in WIC, free or reduced-price breakfast and lunch; the amount of SNAP benefits received at baseline; and the duration of SNAP participation in the year before the baseline survey. Regressions also controlled for the month of survey response.

<sup>a</sup>p-value in this column is from a chi-square test of significant difference between subgroup impacts.

<sup>^</sup>Greater than zero but less than 0.05.

FI-C = food insecurity among children; FS-C: food security among children; GED = general educational development; HHFK = Healthy, Hunger Free Kids; SNAP = Supplemental Nutrition Assistance Program; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

### Exhibit D.4. Reported household changes in the six months before follow-up, among treatment households

	Treatment #1 (SNAP benefits)	Treatment #2 (SNAP benefits plus case management and nutrition education)	Difference	p-value
<b>Percentage of households with a change in number of people living in household (HH size)</b>	15.8	19.3	-3.5	0.102
<b>Reasons for change in HH size (%)<sup>a</sup></b>				
<i>Percent of households with:</i>				
Birth, new step, foster or adopted child	42.6	42.8	0.2	0.973
Marriage, romantic partner	2.7	3.2	0.5	0.835
Family, boarder, other child, other adult moved in	25.8	22.8	-2.9	0.615
Family, boarder, other child, other adult moved out	23.5	27.9	4.5	0.453
Separation or divorce	4.8	4.9	0.0 <sup>^</sup>	0.989
Death of HH member	3.6	2.2	-1.4	0.506
HH member incarcerated	0.0	2.7	2.7	0.060
Sample member moved	5.3	2.3	-3.0	0.311
Other <sup>b</sup>	0.0	1.2	1.2	0.266
<b>Percent of households with a change in employment or change in pay</b>	24.1	25.8	1.7	0.502
<i>Percentage of households that:<sup>c</sup></i>				
Obtained a job	15.9	24.3	8.4	0.075
Changed jobs	13.5	16.1	2.6	0.526
Increase in pay or hours	17.2	14.9	-2.3	0.589
Lost a job	26.9	32.2	5.3	0.328
Quit a job	6.1	2.9	-3.2	0.175
Decrease in pay or hours	27.6	22.5	-5.1	0.313
Seasonal work	0.5	3.3	2.8	0.052
Temporary leave (maternity, workers compensation, disability)	4.6	2.3	-2.3	0.295
Other <sup>d</sup>	3.1	1.5	-1.6	0.386
<b>Percentage of households reporting an eviction</b>	2.5	4.5	2.0	0.062
<b>Of three categories of changes, number reported in the past six months<sup>e</sup> (%)</b>				0.240
None	61.2	62.3	1.2	
One	31.7	29.9	-1.9	
Two	7.1	7.2	0.1	
Three	0.0	0.6	0.6	
Sample size	649	672		

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 follow-up survey. Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research.

Note: F-tests of independence were conducted to test for significant differences in proportions between the two treatment groups for each characteristic. Differences are calculated as the value for second treatment arm minus the value for the first treatment arm.

<sup>a</sup>Calculated among households that reported a change. Multiple reasons could be reported.

<sup>b</sup>Other reasons include: child went to college; different custody arrangements; evicted; personal issues.

<sup>c</sup>Calculated among households that reported a change. Multiple reasons could be reported.

<sup>d</sup>Other reasons include: change in job location; change in job shift; retirement.

<sup>e</sup>Includes changes in household size; changes in employment or pay; and eviction.

<sup>^</sup>Greater than zero but less than 0.05.

HH = household; HHFK = Healthy, Hunger Free Kids; SNAP = Supplemental Nutrition Assistance Program.

### Exhibit D.5. Reported access to help from family, friends, and the local community among treatment households at follow-up

Percent of households reporting they could get help, if needed for a problem, from:	Treatment #1 (SNAP benefits)	Treatment #2 (SNAP benefits plus case management and nutrition education)	Difference	p-value
<b>Family living nearby</b>				0.328
All of the help needed	12.3	14.7	2.4	
Most of the help needed	18.0	19.9	1.8	
Very little of the help needed	36.0	35.7	-0.3	
No help	33.7	29.7	-4.0	
<b>Friends</b>				0.575
All of the help needed	3.4	5.0	1.5	
Most of the help needed	10.7	11.2	0.5	
Very little of the help needed	37.8	36.9	-0.9	
No help	48.1	46.9	-1.2	
<b>Other people in the community</b>				0.953
All of the help needed	4.2	4.0	-0.2	
Most of the help needed	10.1	11.0	0.9	
Very little of the help needed	32.8	33.1	0.3	
No help	52.9	51.9	-1.0	
Sample size	648	670		

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 follow-up survey. Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research.

Note: F-tests of independence were conducted to test for significant differences in proportions between the two treatment groups for each characteristic. Differences are calculated as the value for second treatment arm minus the value for the first treatment arm.

HHFK = Healthy, Hunger Free Kids; SNAP = Supplemental Nutrition Assistance Program.

### Exhibit D.6. Reported participation in household and child nutrition programs among treatment households at follow-up

	Treatment #1 (SNAP benefits)	Treatment #2 (SNAP benefits plus case management/ nutrition education)	Difference (SE)	p-value
<b>Household nutrition benefit program (%)<sup>a</sup></b>				
Reported currently receiving SNAP	80.2	81.0	0.7	0.724
Reported receiving WIC	43.5	44.0	0.5	0.832
Reported none of the above nutrition benefits	12.1	10.2	-2.0	0.257
<b>Children's nutrition program (%)<sup>a</sup></b>				
Reported receiving NSLP <sup>b</sup>	67.4	71.0	3.6	0.093
Reported receiving SBP <sup>b</sup>	71.7	75.2	3.4	0.075
Reported receiving free supper meals at an after school program held in their school building	10.7	11.8	1.2	0.514
Reported receiving backpack program	15.6	14.5	-1.1	0.548
Reported receiving food at after school program where snacks are received	14.0	13.0	-1.0	0.600
Reported receiving food at another center, e.g., Head Start or daycare	17.0	14.0	-3.0	0.120
Reported none of the child nutrition benefits listed above <sup>c</sup>	18.3	17.0	-1.3	0.463
<b>Mean number of 8 listed programs that household reported participating in</b>	3.2	3.3	0.0 (0.07) <sup>^</sup>	0.619
<b>Reported receiving food from food pantry or emergency kitchen (%)</b>	12.7	14.1	1.3	0.472
Sample size	655	680		

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 follow-up survey. Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research.

Note: Program participation questions generally reflected current participation at the time of the interview, defined as 'during the last 30 days'. Differences are calculated as the value for second treatment arm minus the value for the first treatment arm. Reported p-values are from two-tailed tests of statistical significance. Regressions controlled for baseline measures of household income and employment status; the survey respondent's age, race/ethnicity, health status, and primary language spoken; the number of children in the household and presence of a teenager; the amount of SNAP benefits received at baseline; the duration of SNAP participation in the year before the baseline survey; and household participation in the program being analyzed at follow-up. Regressions also controlled for the month of survey response.

<sup>a</sup>Calculated for all households as a descriptive variable and not constrained to only those households that are eligible for a specific program listed.

<sup>b</sup>The numerator in this proportion includes free or reduced-price school breakfast or school lunch, and excludes paid school meals.

<sup>c</sup>Calculation excludes free meals or snacks at summer food programs due to the timing of data collection.

<sup>^</sup>Greater than zero but less than 0.05.

HH = household; HHFK = Healthy, Hunger Free Kids; NSLP = National School Lunch Program; SBP = School Breakfast Program; SNAP = Supplemental Nutrition Assistance Program; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

### Exhibit D.7. Reported monthly food expenditures among treatment households at follow-up

	Treatment #1 (SNAP benefits) (\$)	Treatment #2 (SNAP benefits plus case management/ nutrition education) (\$)	Difference (SE)	p-value
<b>Total out-of-pocket food expenditures<sup>a</sup></b>				
Household mean	223	244	21 (11)	0.053
Household median	180	188	8 (8)	0.352
Per-person mean	53	58	6 (3)	0.057
Per-person median	40	42	2 (2)	0.231
<b>Food expenditures at supermarkets, grocery stores, and other types of stores<sup>b</sup></b>				
Household mean	172	187	15 (9)	0.106
Household median	125	132	7 (7)	0.319
Per-person mean	40	45	5 (3)	0.052
Per-person median	28	29	1 (2)	0.625
<b>Expenditures at restaurants<sup>c</sup></b>				
Household mean	52	57	5 (3)	0.144
Household median	40	44	4 (2)	0.020
Per-person mean	13	13	0 (1) <sup>^</sup>	0.672
Per-person median	8	9	1 (0) <sup>^</sup>	0.122
Sample size	645	671		

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 follow-up survey. Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research.

Note: Questions were asked about the last 30 days. Differences are calculated as the value for second treatment arm minus the value for the first treatment arm. Regressions controlled for baseline measures of child and adult food insecurity and very low food security; household income and employment status; the survey respondent's age, race/ethnicity, health status, and primary language spoken; the number of children in the household and presence of a teenager; and household participation in WIC, free or reduced-price breakfast and lunch; amount of SNAP benefits received at baseline; and duration of SNAP participation in the year before the baseline survey. Regressions also controlled for a baseline measure of the outcome being analyzed and for the month of survey response. Reported p-values are obtained from two-tailed t-tests of statistically significant differences.

<sup>a</sup>Sum total of reported out-of-pocket food expenditures at stores and restaurants in the last 30 days. Excludes purchases made with SNAP and WIC.

<sup>b</sup>Out of pocket expenditures on food at supermarkets, grocery stores, and other stores. Excludes purchases made with SNAP and WIC.

<sup>c</sup>Includes carryout, drive through, and all types of restaurants.

<sup>^</sup>Greater than zero but less than 0.5.

HHFK = Healthy, Hunger Free Kids; SNAP = Supplemental Nutrition Assistance Program; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

### Exhibit D.8. Food shopping and nutrition behaviors among treatment households at follow-up

	Treatment #1 (SNAP benefits)	Treatment #2 (SNAP benefits plus case management and nutrition education)	Difference	p-value
<b>Percentage of respondents that reported shopping with a grocery list</b>				0.612
Always	27.0	28.7	1.7	
Most of the time	25.6	27.0	1.4	
Sometimes	25.1	21.2	-3.9	
Rarely	11.5	11.7	0.2	
Never	10.8	11.3	0.5	
<b>Distribution of the number of nights a week family typically sits down together to have dinner as a family (%)</b>				0.054
Every night	61.7	57.3	-4.4	
5 or 6 nights	15.4	21.7	6.3	
3 or 4 nights	15.9	14.6	-1.3	
1 or 2 nights	5.2	5.5	0.2	
Never	1.7	0.9	-0.9	
<b>Mean number of times dinner prepared at home in last 7 days</b>	5.7	5.7	0.0 (0.10) <sup>^</sup>	0.961
<b>Percentage of respondents that reported attending a nutrition education class, lecture, event, or demonstration in past 12 months</b>	26.9	31.7	4.8	0.059
<b>Mean number of nutrition education classes, lectures, events, demonstrations attended in past 12 months among participants<sup>a</sup></b>	2.5	3.1	0.6 (0.33)	0.083
Sample size	654	680		

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 follow-up survey. Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research.

Note: For continuous measures, reported p-values are obtained from two-tailed t-tests of statistically significant differences; for binary and categorical measures, p-values are from F-tests of independence. Differences are calculated as the value for second treatment arm minus the value for the first treatment arm.

<sup>a</sup>Calculated among households that reported attending at least one nutrition education event in the past 12 months.

<sup>^</sup>Greater than zero but less than 0.05.

HHFK = Healthy, Hunger Free Kids; SNAP = Supplemental Nutrition Assistance Program.

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## D.2. SUPPLEMENTAL EXHIBIT ON SENSITIVITY OF ESTIMATED IMPACTS TO ANALYTIC METHODS

As described in Appendix A, the main estimates of the impact of the Nevada HHFK project on child food insecurity use logistic models and implement an approach known as “dummy variable adjustment” to address missing data on baseline covariates. Exhibit D.9 below presents estimates of the project’s impact on food security using three alternative analytic approaches.

### Exhibit D.9. Alternative estimates of the impact of the Nevada HHFK project on child food insecurity

	Treatment <sup>a</sup> (%)	Control (%)	Difference	p-value	Sample size
<b>Main impact model</b>					2,064
Secure	68.8	69.4	-0.6	0.620	
Insecure	31.2	30.6	0.6	0.620	
VLFS	5.6	4.3	1.3	0.915	
<b>Strata as only covariates</b>					2,064
Secure	68.8	69.4	-0.6	0.610	
Insecure	31.2	30.6	0.6	0.610	
VLFS	5.5	4.3	1.1	0.884	
<b>Listwise deletion sample<sup>b</sup></b>					1,905
Secure	68.2	69.7	-1.4	0.759	
Insecure	31.8	30.3	1.4	0.759	
VLFS	5.4	4.0	1.5	0.936	
<b>Linear probability model</b>					2,064
Secure	68.9	69.4	-0.5	0.596	
Insecure	31.1	30.6	0.5	0.596	
VLFS	5.4	4.3	1.1	0.882	

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 follow-up survey. Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research.

Note: Food security was measured using the standard USDA 18-item survey module and a 30-day reference period. VLFS is a subcategory within the food insecure category. The p-value associated with each impact estimate is from a one-tailed test of statistical significance.

<sup>a</sup>Includes total households in treatment 1 and treatment 2 groups.

<sup>b</sup>The listwise deletion sample excludes households with a missing value for any model covariate (such as households that did not complete the baseline survey). As with all of the models, listwise deletion also excludes households with a missing value for the dependent variables (such as those that failed to complete the follow-up survey).

HHFK = Healthy, Hunger Free Kids; USDA = U.S. Department of Agriculture; VLFS = very low food security.

The top panel presents the main impact estimates on child food insecurity and very low food security discussed in Chapter III, for convenience. The next panel presents impact estimates obtained using a logistic model with no covariates except indicators for a household’s random assignment stratum, which control for interactions of baseline child food insecurity, number of demonstration-eligible children, and zip code of residence and never have missing values. The similarity of these estimates to the main estimates indicates that the inclusion of additional

covariates—and imputation of missing values on those covariates—do not result in substantive differences in the estimated impacts or their statistical significance.<sup>17</sup>

The third panel presents impact estimates obtained using a logistic model with the full set of covariates described in Appendix A but with a sample that excludes observations that have missing data on any covariate. The estimates obtained from this approach to missing data, known as listwise deletion, are also similar to the main impact estimate, and each point estimate is within the 95% confidence interval of the other. The bottom panel presents an impact estimated using a linear probability model, in which outcomes are analyzed using a linear regression model rather than a logistic model. Again, the estimates do not differ from the main impact estimates in a substantive way, nor does their statistical significance change meaningfully.

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<sup>17</sup> A model that also excluded the random assignment stratum indicators, not presented here, obtained point estimates that were identical, to the tenth of a percentage point, to those with the strata as covariates.

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### D.3. ESTIMATED SUBGROUP IMPACTS WITH CONFIDENCE INTERVALS

Exhibit D.10 below presents the subgroup impacts presented in Exhibit III.4, but with 95% confidence intervals indicating the precision of the impact estimates.

#### Exhibit D.10. Impact of the Nevada HHFK project on food insecurity among children, by subgroup, with confidence intervals

Characteristic	Treatment <sup>a</sup>		Control		Difference	95% confidence interval	Difference within subgroup: p-value	Difference between subgroups: p-value <sup>b</sup>
	Sample size	FI-C (%)	Sample size	FI-C (%)				
<b>Household composition</b>								0.921
Single adult	572	29.8	342	29.5	0.4	[-5.4, 6.2]	0.550	
Two or more adults	756	32.5	394	31.7	0.8	[-4.3, 5.9]	0.619	
<b>Number of non-HHFK-eligible children in household</b>								0.001
1 or fewer	689	30.0	430	24.0	6.0	[1.3, 10.9]	0.993	
2 or more	639	33.0	306	39.7	-6.6	[-12.6, -0.5]	0.018	
<b>Number of HHFK-eligible children in household</b>								0.060
1 or fewer	970	30.0	526	31.7	-1.7	[-6.2, 2.8]	0.228	
2 or more	358	34.5	210	28.0	6.5	[-0.7, 13.9]	0.962	
<b>Presence of a teenager in the household</b>								0.046
Household has no teens	910	29.0	525	25.7	3.2	[-1.1, 7.7]	0.926	
Household has 1 or more teens	418	37.3	211	43.0	-5.7	[-13.3, 2.0]	0.073	
<b>Respondent race/ethnicity</b>								0.512
Hispanic (all races)	792	34.4	443	33.2	1.2	[-3.9, 6.3]	0.679	
Non-Hispanic black	307	29.3	185	26.8	2.5	[-4.9, 9.9]	0.748	
Non-Hispanic white or Non-Hispanic other race	229	23.9	108	28.3	-4.4	[-13.7, 5.0]	0.182	
<b>Respondent level of education</b>								0.905
Less than high school	633	37.0	331	37.3	-0.3	[-6.2, 5.7]	0.464	
High school, GED	372	26.7	238	26.1	0.7	[-6.0, 7.3]	0.579	
Some college or higher	303	26.5	161	24.7	1.8	[-5.9, 9.6]	0.680	

Characteristic	Treatment <sup>a</sup>		Control		Difference	95% confidence interval	Difference within subgroup: p-value	Difference between subgroups: p-value <sup>b</sup>
	Sample size	FI-C (%)	Sample size	FI-C (%)				
<b>Baseline child food security status</b>								0.318
Secure (FS-C)	846	16.2	462	17.2	-1.0	[-5.2, 3.3]	0.327	
Insecure (FI-C)	482	60.0	274	56.4	3.6	[-3.7, 10.8]	0.831	
<b>WIC participation</b>								0.899
Participates in WIC	849	30.0	465	29.6	0.4	[-4.4, 5.2]	0.564	
Does not participate in WIC	479	33.1	271	32.2	0.9	[-5.4, 7.2]	0.611	
<b>Expected level of HHFK benefit</b>								0.918
Expected benefits are less than 10% of monthly total	547	32.3	294	31.9	0.4	[-5.8, 6.6]	0.552	
Expected benefits are 10% or more	678	29.3	393	29.3	-0.01	[-5.1, 5.1]	0.499	
Sample size	1,328		736					

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 follow-up survey. Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and prepared by Mathematica Policy Research.

Note: Food security was measured using the 30-day survey module. The p-value associated with each impact estimate is from a one-tailed test of statistical significance, whereas the p-value associated with the test of differences in impacts across subgroups is from a two-tailed test. Regressions controlled for baseline measures of child and adult food insecurity and very low food security; household income and employment status; the survey respondent's age, race/ethnicity, health status, and primary language spoken; the number of children in the household and presence of a teenager; and household participation in WIC, free or reduced-price breakfast and lunch; the amount of SNAP benefits received at baseline; and duration of SNAP participation in the year before the baseline survey. Regressions also controlled for the month of survey response.

<sup>a</sup>Includes total households in T1 and T2 groups.

<sup>b</sup>p-value is from a chi-square test of significant difference between subgroup impacts.

FI-C = food insecurity among children; FS-C = food security among children; GED = general educational development; HHFK = Healthy, Hunger Free Kids; SNAP = Supplemental Nutrition Assistance Program; T1 = treatment group 1; T2 = treatment group 2; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

## D.4. ADDITIONAL MEASURES OF FOOD SECURITY

### Exhibit D.11. Differences on individual items of the 30-day food security module, follow-up survey

		Percentage with an affirmative response			
		Treatment	Control	Difference <sup>a</sup>	p-value
<b>Items measuring household and adult(s)' food security</b>					
1	Worried food would run out before (I/we) got money to buy more (often true or sometimes true)	66.7	63.2	3.6	0.078
2	Food bought didn't last and (I/we) didn't have money to get more (often true or sometimes true)	52.2	50.4	1.8	0.401
3	Couldn't afford to eat balanced meals (often true or sometimes true)	42.0	39.8	2.3	0.283
4	Adult(s) cut size of meals or skipped meals	26.3	24.9	1.4	0.437
4a	Adult(s) cut size of meals or skipped meals in more than 2 of the last 30 days	19.6	18.9	0.7	0.683
5	Respondent ate less than felt he/she should	29.1	27.5	1.6	0.416
6	Respondent hungry but didn't eat because couldn't afford	17.0	16.9	0.1	0.934
7	Respondent lost weight	10.1	9.4	0.7	0.605
8	Adult(s) did not eat for whole day	7.7	5.7	2.0	0.077
8a	Adult(s) did not eat for whole day in more than 2 of the last 30 days	4.9	3.9	1.1	0.274
<b>Items measuring children's food security</b>					
9	Relied on few kinds of low-cost food to feed child(ren) (often true or sometimes true)	46.5	45.0	1.5	0.488
10	Couldn't feed child(ren) balanced meals (often true or sometimes true)	31.7	31.1	0.5	0.782
11	Child(ren) were not eating enough (often true or sometimes true)	16.7	17.0	-0.3	0.858
12	Cut size of child(ren)'s meals	11.1	10.3	0.9	0.508
13	Child(ren) skipped meals	4.7	3.6	1.1	0.188
13a	Child(ren) skipped meals in more than 2 of the last 30 days	2.9	2.5	0.4	0.562
14	Child(ren) were hungry	7.1	5.6	1.6	0.182
15	Child(ren) did not eat for whole day	1.0	0.4	0.5	0.239
Sample size		1,335	739		

Source: Evaluation of Demonstration Projects to End Childhood Hunger, 2017 first follow-up survey. Tabulations are weighted to be representative of all eligible households in the Nevada HHFK project and were prepared by Mathematica Policy Research.

Note: Food security items are from the standard USDA 18-item survey module and use a 30-day reference period. Food security is classified using items to measure household, adult, and children's food security using 3, 7, and 8 items, respectively. Items 4 through 8 are preceded by "You or other adults in your household," depending on whether there was one adult (the respondent) in the household or more than one. The wording for items 11 through 15 is based on the number of adults and children in the household. Item numbers align with the follow-up instrument in Appendix B.3.

Regressions controlled for baseline measures of child and adult food insecurity and VLFS; the presence of a single adult in the household versus more than one; ages of children in the household; household income and employment status; respondent age, health status, race/ethnicity, and language preference; baseline participation in SNAP, WIC, school-based meal programs, or food pantries; and indicator variables for the month of follow-up survey response.

<sup>a</sup>Values may not reflect exact differences between columns 3 and 5 due to rounding.

HHFK = Healthy, Hunger Free Kids; SNAP = Supplemental Nutrition Assistance Program; USDA = U.S. Department of Agriculture; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children.

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## **APPENDIX E**

### **APPENDIX REFERENCES**

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**APPENDIX REFERENCES**

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