

RESEARCH REPORT

Experiences and Outcomes from the 2022 Meals-to-You Program

Insights from the Pilot Program's Fourth Year

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Executive Summary

This report summarizes findings from year 4 of an ongoing evaluation of Meals-to-You (MTY), a pilot program administered by the Baylor Collaborative on Hunger and Poverty (BCHP) and funded by the US Department of Agriculture (USDA). The MTY program is designed to deliver shelf-stable boxes of food to children in eligible households during the summer, when school meals are not available. The goal of the program is to address the increased risk of children’s food insecurity during the summer in rural and remote communities that lack access to summer meal sites.

The first year of the program in 2019 tested the model in multiple school districts in Texas. In 2020, the program was expanded to include children in parts of Alaska and New Mexico. As part of the emergency response to reductions in access to school meals resulting from COVID-19 school closures, the program was also expanded across the country in 2020 (Waxman et al. 2021). In 2021, BCHP continued the program in certain areas of Alaska, New Mexico, Texas, and Utah. The MTY pilot was originally meant to last for three years and expire in summer 2021, but USDA decided to extend the program to a fourth summer. This report covers the 2022 summer MTY program, which we refer to throughout as MTY.

Data Collection

We developed our insights through a mixed-methods approach to data collection and include survey data and state-level advisory groups with school districts responsible for outreach and enrollment, survey data and state-level advisory groups with participating households, interviews with food vendors, site visits in four school districts in Alaska, New Mexico, and Texas that consisted of key stakeholder interviews and adolescent focus groups, interviews with state child nutrition and education agency personnel, and analysis of administrative data, including shipping information.

Program Reach

Households were eligible for MTY if they had a child enrolled in a MTY participating district, if the child qualified for free or reduced-price school meals, and if the household signed up for the program during its district’s enrollment window. Forty-nine school districts participated in MTY, with 33 in Texas, 10 in New Mexico, 5 in Alaska, and 1 in Utah. The 2022 MTY program served 3,510 households and 7,870

participants in Alaska, New Mexico, Texas, and Utah. Through weekly shipments of boxes, the program successfully delivered roughly 466,800 meals during the summer.

Timeliness of Program Initiation

In 2022, MTY enrollment occurred on an expedited timeline because of a delay in BCHP receiving the program contract from USDA. School districts, vendors and BCHP team members emphasized that the most vital and overarching consideration to maximize the success of this program is to be funded and planned well in advance of the intended launch date. Adequate time for planning and implementation affects the ability of BCHP to execute contracts with vendors and conduct outreach to school districts. Vendors need time to secure affordable products that also meet nutrition standards and establish plans for complex shipping to remote locations. School districts need sufficient time to recruit and enroll parents and caregivers, especially given many competing activities as the school year comes to an end. Timely program initiation can maximize the ability of the program to serve high-need families and limit gaps in food access between the end of the school year and the start of summer, which is a period of increased hunger and food insecurity among families with children.

We found that about 15 percent of eligible students across districts participated in MTY. Take-up may have been lower for many external reasons, but most notably, in 2022, the truncated enrollment timeline prevented districts from conducting sufficient outreach to reach families. School district perspectives on enrollment processes are described in more detail throughout the report, but overall, we found that school districts found the timeline challenging. However, districts did feel well-supported by the BCHP team in terms of resources provided to conduct outreach.

Impact and Participant Experience

To understand whether MTY alleviated household food insecurity, we measured food insecurity at the beginning and the end of the summer. Overall, we found that household food insecurity declined from baseline (64.8 percent) to follow-up (57.8 percent), except for Alaska Native households, where food insecurity stayed the same.

We also estimated changes in food insecurity using information on the number of meals households received during the summer 2022 MTY program, as households varied in the number of meals they received. We found that receiving more MTY meals was associated with lower rates of very low food

security, which is the most severe form of hardship. Households in Texas and white non-Hispanic households saw the largest program impacts on reducing food insecurity.

MTY survey participants generally reported a positive experience with the program. The majority (94 percent) found enrollment easy, and four in five (80 percent) were satisfied with the variety of food present. However, damages to shipped boxes increased substantially compared with the prior summer, with over half of participants (54.3 percent) reported receiving at least one damaged box (compared with 28 percent in 2021). Finally, advisory group participants noted misalignments between the program period and the summer break, which were in large part a result of USDA's late award notice that pushed shipping into mid-June. Moreover, school districts that offer a federal summer feeding program have not been permitted to also offer MTY at the same time, regardless of whether students within a district are able to attend the sites due to transportation or other barriers; this also pushed the start date of MTY for some districts further into the summer. This gap in food service is difficult for families when they cannot rely on having food available consistently.

Learnings from Case Studies in Rural School Districts

We gathered a substantial set of learnings from site visits conducted in four rural school districts in Alaska, New Mexico, and Texas. Specifically, each area functions slightly differently in terms of postal service, shipping, and last-mile delivery. These communities also all had different levels of retail food access, summer meal availability, walkability and transportation infrastructure, and internet and technology access. It is valuable to be in direct conversation with communities that are impacted by the program, and we recommend conducting similar visits for future program implementers to understand the intricacies of ground-level logistics.

Recommendations

Above all, we recommend addressing timeliness of program initiation, as the impact of late initiation has cascade effects throughout the program. Finalizing contracts between BCHP, USDA, and vendors at the beginning of the calendar year would allow for more flexible planning periods, allow vendors to adequately plan for and achieve timely shipping, especially to hard-to-reach areas like remote areas in Alaska, provide school districts more time for outreach, and give households more time to register and enroll. We also recommend that implementing organizations convene parental and school district advisory groups to inform choices about program procedures.

Introduction

The Meals-to-You (MTY) program is designed to deliver shelf-stable boxes of food to children in eligible households during the summer, when school meals are not available. The goal of the program is to address the increased risk of children’s food insecurity during the summer, specifically students in rural and remote communities who lack access to summer meal sites. Beginning in 2019, the US Department of Agriculture (USDA) funded the Baylor Collaborative on Hunger and Poverty (BCHP) to pilot this home-delivered food box program. Households were eligible if they had children enrolled in public schools in a participating MTY school district, if the children qualified for free or reduced-price school meals, and if the household signed up for the program during its district’s enrollment window. If a household had one child who qualified for the program, all children under 18 in the household could receive an allotment of meals regardless of age or school enrollment status.

BCHP contracted the Urban Institute as the independent program evaluator of the original three-year pilot program and subsequent expansions of MTY in 2022 and 2023. This report covers the 2022 summer MTY program in Texas, New Mexico, Alaska, and Utah.¹ For additional information and background about the Meals-to-You program, please see prior reports published through 2020–21 (Waxman et al. 2021; Gupta et al. 2022; Gutierrez, Gupta, Waxman, Blagg et al. 2022; Gutierrez, Gupta, Waxman, Anderson et al. 2022).

BOX 1

Overview of the MTY Program Structure

The summer 2022 MTY enrollment process began with BCHP reaching out to school districts that had participated in MTY in 2021. Interested districts signed up with BCHP to offer the program to eligible households in their schools. Households began enrolling in the program in May 2022.

Similar to the previous three program summers, participating households received boxes shipped weekly containing five days’ worth of prepackaged, shelf-stable food, including five breakfasts, five lunches, shelf-stable milk and juice, and five snack items for each enrolled child. In 2022, the MTY program served 3,510 households and 7,870 participants across 49 school districts in Texas, New Mexico, Alaska, and Utah.

MTY in Summer 2022

In 2022, MTY enrollment occurred on an expedited timeline due to a delay in BCHP receiving the program contract from USDA.² In early May, BCHP began enrollment and found substantial interest from districts, particularly in Alaska. To accommodate the additional interest, the BCHP team requested additional funding from USDA to expand the program, but this proposal was not approved until late in the summer, at which point it was too late for most school districts to participate. We discuss the impact of this truncated timeline and the limited resources on several aspects of the program throughout the report.

As a new component of the 2022 MTY program evaluation, the Urban Institute evaluation team conducted site visits to the Bethel School District in Bethel, Alaska; the Gadsden Independent School District in Santa Teresa, New Mexico; and the Buffalo and Charlotte Independent School Districts in Buffalo and Charlotte, Texas. These site visits allowed the research team to complement their online data collection efforts and better understand MTY-eligible families' local environmental contexts and on-the-ground experiences accessing food in their communities. These insights can help improve future MTY programming and implementation, as the evaluation over the years has suggested that a one-size-fits-all approach does not attend to the location-specific circumstances that relate to MTY's effectiveness (see Case Studies in appendix F for more information).

Outline of the Report

This report summarizes findings across four components of the MTY program evaluation:

1. **School district analysis** assesses the characteristics of participating school districts and their experiences with enrolling families.
2. **Program implementation analysis** assesses program operation processes, effectiveness, and challenges.
3. **Program outcome and exploratory impact analysis** reports on the effects of the program on the food security status of participating households.
4. **Participant analysis** assesses participants' experience and satisfaction with the program, as well as hardship during the COVID-19 pandemic.

The report concludes with **recommendations for future implementation**.

Evaluation Methodology

As in the 2020 MTY evaluation, we were able to identify some impacts of the MTY program based on variation in the number of meals received across participants. A stronger design would be to specify a comparison group to estimate program impact. Therefore, the impact analysis presented in this report is framed as “exploratory.” With additional advance planning and funding, a more rigorous program evaluation that included a control group could be conducted in the future.

BOX 2

Research Questions

The evaluation was structured to explore the following research questions for the 2022 program year:

1. School district experience with enrollment and program take-up
 - a. How did school districts experience and support the enrollment process? What are opportunities for improvement?
 - b. Among enrolled districts, what were the application and participation rates among eligible children? Did this participation rate vary by district type (e.g., Community Eligibility Provision participation) or other observable district or student characteristics?
 - c. How could participation rates among eligible children be improved?
2. Program Implementation
 - a. Program function
 - i. Did the program successfully deliver food boxes as expected for enrolled households? How could program implementation be improved?
 - ii. Did households with students participating in the program regularly receive food resources through this program with meals in good condition? How could this be improved?
 - iii. Did shipping and delivery experiences differ by observable participant characteristics, including geographic differences? If so, how?
 - b. Program satisfaction
 - i. What was the overall program experience of participating households?
 - ii. Did participants find their special dietary needs were accommodated, and did they still receive a variety of food options?

- iii. How satisfied were households with enrollment, delivery (or local site pick-up, if applicable), amount of food, and content of food boxes?
 - c. Program implementation and processes
 - i. What insights and learnings emerged from participant, school district, state and local agency, and, to the extent possible, Native community perspectives that could inform future iterations of the program?
 - ii. What resources and challenges affect states' abilities to operate a meal box program? What are any implications for future design?
 - iii. How does MTY fit among other summer nutrition assistance programs (congregate or non-congregate meal services or electronic benefits transfer options) from the perspective of participants, school districts, and other organizations?
- 3. Participant outcomes and impact analysis³
 - a. Did the receipt of MTY meals impact household food insecurity?
 - b. Did households experience other benefits from participation, such as changes in indicators of material hardship or household resources?
 - c. Did the MTY boxes provide access to fruits and vegetables over the course of the intervention?
 - d. Are participants with limited summer meal alternatives benefitting from this program?

Source: Urban evaluation of MTY, 2022.

Data Collection and Analysis Activities

To answer these research questions, we collected data from multiple sources, including school districts, program participants, MTY program staff and vendors, and program data. We also conducted site visits to communities in each participating state. All data collection activities were subject to Urban Institutional Review Board review.

School District Data

To understand school districts' experiences with enrolling eligible families, we administered a survey in July and August 2022 to all 49 participating school districts. Our survey assessed the districts' experience with the program and any challenges or barriers in enrollment and implementation. A

district staff member from 27 of the 49 districts responded (55 percent response rate).⁴ Survey data were analyzed descriptively, and no weights were used given the small respondent sample size.

Some district personnel also participated in an advisory group meeting in August 2022. Advisory groups provided an opportunity for school district personnel to provide timely feedback to improve the MTY program, including how well the summer MTY food box delivery program worked for community members and the improvements they wanted to see in the program. Advisory group members were recruited from school district personnel who indicated on the survey that they would be interested in participating in a virtual advisory group. Three advisory group meetings (one per state) were conducted via Zoom with school district participants from Alaska, New Mexico, and Texas. Each meeting included a BCHP representative in order to model advisory group facilitation for future program iterations. All advisory group recordings were transcribed and analyzed thematically, and key themes were used in reporting.

Participant Data

To assess participants' experiences, we fielded two rounds of surveys to households that had agreed during the enrollment process to be contacted. The goal was to provide a baseline reflecting experiences with enrollment and household food security status before program exposure and a follow-up that assessed program experience, satisfaction, and food security status at the conclusion of the intervention. Out of 3,539 total participating households, we surveyed 1,334 households that consented to be contacted in a first round fielded in June and July 2022 and a second round in August and September 2022. Of those invited to take the survey, 925 responded to the first round (69 percent response rate), and 660 responded to the second round (50 percent response rate), with 582 respondents (44 percent) participating in both surveys.

The research team fielded the survey online or by phone to one adult per household. The survey asked about the household's characteristics, household members' experiences and satisfaction with the program (enrollment, delivery, food, and customer service), and any material or food hardship faced in the household. Most respondents completed the surveys online through the survey platform Qualtrics. The research team conducted outreach and shared the link through text message, email, and a folded mailer. We utilized an external firm, Research Support Services Inc., to conduct phone surveying to reach nonrespondents in areas with low internet connectivity, particularly in Alaska. In the first survey round, roughly 16 percent of respondents completed the survey by phone, and in the second survey round, 11 percent did. Surveys were available in both English and Spanish.⁵

Because not all MTY participants consented to the research or responded to the survey, analyses of participant data included a series of statistical weights to ensure that summary responses accurately reflect the overall population in terms of respondents' race/ethnicity, program type, state, and school district. (For more information about weighting methodology, see appendix A.) This means that the results are more likely to be reflective of the overall MTY participant population, even though not all of them responded to the research surveys.

Participants also attended two rounds of advisory group meetings, with the first in July and August 2022 and the second in November 2022. Advisory groups provided an opportunity for participants to provide timely feedback to improve the MTY program, including how they experienced the enrollment process, perceptions on box contents, and the improvements they wanted to see in the program. Advisory group members were recruited from participants who indicated on the survey that they would be interested in participating in a virtual advisory group. In each round, three advisory group meetings were conducted (two in English and one in Spanish) via Zoom with participants from Alaska, New Mexico, and Texas. As with the school district advisory meetings, each meeting included a BCHP representative in order to model advisory group facilitation for future program iterations. All advisory group recordings were transcribed and analyzed thematically, and key themes were used in reporting.

MTY Program Staff and Vendor Interviews

For additional context around program implementation, from November 2022 through January 2023 we spoke with all key members of the BCHP team involved in implementation about overall program experiences and process challenges in administering the program during the summer of 2022. We conducted interviews with administrative, financial, programmatic, data management, and case management staff involved with enrollment. We also conducted interviews with contacts at each of the participating vendors, McLane Global (McLane) and PepsiCo Food for Good (PepsiCo). All interviews were conducted over video conference, and interview notes were analyzed thematically.

Shipping Data Analysis

Finally, to inform box receipt, delivery timing, and the number of meals received (program dosage), we analyzed shipping data. The BCHP team created an administrative dataset that logged every box shipped to every participant in the program. Our team took these data and created a consolidated, household-level shipping dataset that included all MTY boxes that households received. This dataset

was the source for our final counts of meals, boxes delivered, and participants and households in the program, and it was also the source for the outcome and exploratory impact analyses.

Site Visits

To complement the virtual data collection, our team conducted in-person site visits to Alaska, New Mexico, and Texas in the fall of 2022 and the beginning of 2023 to understand the environmental context in which the MTY program functions. Given that the MTY program is intended to target rural and remote areas facing challenges that have made other types of programs difficult to administer, it was critical for the team to observe where and how people shop for food, the challenges they face when getting food, the local infrastructure (e.g., mailing systems and roads), and how that impacts program implementation in order to offer recommendations for improvement. School district personnel hosted tours of their schools and the neighboring communities, provided us with statistics about their districts (e.g., language spoken at home or percentage of students who receive free lunch), and shared the contextual factors (e.g., working situations among families) that limit certain families' access to food. Given differential experiences of food insecurity between adolescents and parents, we also conducted focus groups with children in schools that were eligible for or participating in MTY. Focus groups discussed experiences with the program and perceptions of food access in the community. All participants signed consent forms in advance of participating, and parental assent was provided in advance of each focus group for children under 18.⁶ To better understand the unique needs of Alaska Native communities served by MTY in 2022, we visited two villages that were part of the Bethel School District in Alaska during our site visit and spoke with Alaska Native school staff to understand local experiences. All site visit findings were analyzed thematically, and a detailed analysis of site visit findings can be found in appendix G.

State Agency Interviews

To understand state agency perspectives on the program to inform future iterations, we conducted 45- to 60-minute interviews with state agency contacts in Alaska's Child Nutrition Program, Texas' Department of Agriculture, and New Mexico's Public Education Department/Student Success and Wellness Bureau—all of which connected BCHP and the MTY program opportunity to eligible school districts in their states. Interview topics included insights or learnings based on MTY participation, potential resources or barriers to participation, and how MTY fits among other summer nutrition assistance programs. Notes from state agency interviews were analyzed thematically.

MTY Program Reach

The summer 2022 MTY program served 3,510 households and 7,870 participants in Alaska, New Mexico, Texas, and Utah. The box shipments began in June, with the program originally scheduled to end in August, though some boxes continued to be shipped through October due to delivery issues. The program delivered 466,800 meals.

Table 1 provides information on the characteristics of participating households based on the first round of survey data, collected in June and July 2022. Participants resided in households with an average of three children, and about one in five households (20 percent) were headed by a single adult. In terms of race and ethnicity, 29 percent of respondents reported their race as white, 50 percent were Hispanic, 14 percent were Alaska Native, and 1 percent were Black, which is roughly reflective of enrolled MTY districts' student demographics (see table 1). We also asked Alaska Native, Native American, and Hawaiian or Pacific Islander respondents to report their tribal affiliation; the majority (92.2 percent, data not shown) of those that reported a tribal affiliation were in Alaska and reported their Native corporation. The vast majority of respondents reported that at least one adult in the household was working (87 percent), and the majority of households reported incomes in 2021 below 250 percent of the federal poverty level. It is notable that more than one in four households (27.8 percent) reported incomes that reflected deep poverty (below 50 percent of the federal poverty level), suggesting a particularly high risk for material hardship.

Half of respondents reported receiving Pandemic Electronic Benefit Transfer (P-EBT) in the prior 30 days, while about 4 in 10 (42.5 percent) reported receiving Supplemental Nutrition Assistance Program support (often called SNAP) in the past month. Receipt of Special Supplemental Nutrition Program for Women, Infants, and Children (known as WIC) in the last 30 days was less common (16.7 percent), which could be expected since the target recruitment population was families with children in elementary, middle, and high school, although younger children in those households could be served.⁸ Additionally, about one in three households (33.8 percent) reported that their children had received meals from school in the week prior to taking the second-round survey, which was likely through summer school or regular school for districts that had an early school year start date.

Participants gave a range of responses regarding time required to travel to the nearest grocery store: nearly half (45.3 percent) reported they could purchase groceries with a travel time of 10 minutes or less, while more than one in five (22.1 percent) needed to travel between 20 and 40 minutes and 6.8

percent traveled more than 40 minutes. About 1 percent reported ordering almost all groceries via home delivery (see table 1).

TABLE 1
Demographic and Social Characteristics of Meals-to-You Households, Beginning of Meals-to-You Program 2022

	Mean or percentage (%)
Number of children per household (mean)	2.7
Number of people per household (mean)	4.7
Single-adult household (%)	19.9
Race or ethnicity (%)	
Hispanic/Latinx	49.6
White	29.2
Alaska Native	14.2
Native American	1.4
Black	1.1
Other or mixed	4.4
Geography (%)	
Alaska	16.8
New Mexico	37.1
Texas	46.0
Retail food access (%)	
<i>Have a vehicle available</i>	93.6
<i>Distance to nearest grocery^a</i>	
Less than 5 minutes	21.1
5–10 minutes	24.2
11–20 minutes	24.9
21–40 minutes	22.1
More than 40 minutes	6.8
Order almost all groceries to be delivered	0.9
<i>Number of grocery trips in one month</i>	
Fewer than 1 trip	1.9
1–2 trips	26.3
3–4 trips	42.1
5–8 trips	18.2
More than 8 trips	11.6
Anyone in the household employed (%)	87.0
Household income levels in 2021 (%)	
Below 50% of the FPL	27.8
Between 50–138% FPL	41.3
Between 138–250% FPL	22.2
Between 250–400% FPL	6.7
Above 400% FPL	2.0
Anyone with a disability in the household (%)	12.9
Benefit receipt in 30 days prior (%)	
Medicaid, MA, or CHIP	70.9
P-EBT	50.0
SNAP	42.5
WIC	16.7
Unemployment insurance	2.6
FDPIR	1.3
Received non-MTY summer meals^b(%)	

	Mean or percentage (%)
Received from school	33.8
Received from another summer activity	3.5
Received from both	2.7

Source: MTY survey, round 1, conducted June 16–July 24, 2022, *N* = 925. Round 2 survey conducted August 22–September 26, 2022, *N* = 660. All estimates are weighted to account for nonresponse.

Notes: CHIP = Children’s Health Insurance Program; FDPIR = Food Distribution Program on Indian Reservations; FPL = federal poverty level; MA = Medical Assistance. Participation in benefit programs may be underreported because of self-reporting.

^aBased on respondent’s most common mode and route of travel.

^bReceived non-MTY summer meals’ in the week prior to taking the round 2 survey.

Food Security Outcomes and Exploratory Impacts

Children in rural areas may not have a close summer food site or may face other food access barriers. The MTY pilot's primary aim was to reduce food insecurity and hardship for children who have difficulty accessing meals in summer months when school is not in session. The primary outcome of interest for research on MTY's effectiveness was household food security status (see box 3). To understand how well MTY alleviated household food insecurity, we measured food insecurity at the beginning and the end of the summer and attempted to attribute changes in that outcome to a household's level of participation in the MTY program. We present analysis results from two approaches: a descriptive pre-post program comparison and an exploratory program impact analysis that uses varying number of meals received (sometimes called "program dosage" in research literature) as the treatment variable in a pre-post household fixed effect regression.

All outcomes and analyses were restricted to participants that completed both survey rounds and had baseline food insecurity scores that referenced the period before the beginning of the program. The descriptive outcome analysis was limited to households that received at least 75 percent of expected meals between survey waves, though the impact analysis included households that received fewer meals than expected. The exploratory impact findings suggest that the MTY program in summer 2022 alleviated deep food hardship and served white households in Texas more effectively than other groups.

Outcomes and Subgroups

The outcome variables and population subgroups were consistent across both the outcomes and the exploratory impact analyses. More details about the methods used to estimate impact appear below.

Outcome: Household Food Security

We measured food security using USDA's six-item food security module with each round of the survey (see box 3).

BOX 3

USDA Six-Item Household Food Security Survey Module

Affirmative responses in italics:

- **“The food that we bought just didn’t last, and we didn’t have money to get more.” Was that often, sometimes, or never true for your household in the last 30 days?** *Often true, Sometimes true, Never true*
- **“We couldn’t afford to eat balanced meals.” Was that often, sometimes, or never true for your household in the last 30 days?** *Often true, Sometimes true, Never true*
- **In the last 30 days, 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, No
 - » **In the last 30 days, how many days did this happen?** *Less than 3 days, 3 days or more*
- **In the last 30 days, did you ever eat less than you felt you should because there wasn’t enough money for food?** Yes, No
- **In the last 30 days, were you ever hungry but didn’t eat because there wasn’t enough money for food?** Yes, No

While food insecurity is a validated measure of measuring hunger, there is some research that points to the module’s limitations in assessing food availability and the lived experience of food insecurity (Ballard et al. 2014). We addressed this by asking additional questions related to lived experiences in our participant survey.

Source: “U.S. Household Food Security Survey Module: Six-Item Short Form,” USDA Economic Research Service, September 2012, <https://www.ers.usda.gov/media/8282/short2012.pdf>; Ballard, Terri J, Anne W. Kepple, Carlo Cafiero, Josef Schmidhuber. 2014. “Better Measurement of Food Insecurity in the Context of Enhancing Nutrition. *Ernahrungs Umschau* 61 (2): 38-41. <https://doi.org/10.4455/eu.2014.007>.

We examined food insecurity in several ways: as a categorical variable of food secure versus food insecure, as a categorical variable of very low food security versus not very low food security, and as a continuous measure, which can provide a more nuanced look at changes in the depth of food insecurity. Respondents were defined as food insecure if they responded affirmatively to at least two of the six questions, and they were defined as having very low food security if they responded affirmatively to at least five of the six questions.⁹ We calculated the continuous food insecurity measure based on the

number of affirmative responses, meaning respondents could have a score from 0 (no affirmative responses) to 6 (affirmative responses to all six questions). Consistent with the framing of the food security questions, the unit of analysis was the household.

As noted, we collected two food security time points for each participating household, one just as the program began in early summer 2022 and one at the end of the program implementation period in late summer 2022. The first-round survey captured most participants very early in the MTY program period: for 95 percent of the respondents who had food insecurity information from both rounds of the survey, more than half of the 30-day food insecurity lookback period covered time before they received their first MTY box. This provides a good baseline to understand household food security right before the program started. The second round of the survey, which was administered around the time the program ended, asked respondents to reflect on their food security in the previous 30 days.

Subgroup Population Analyses

We know from qualitative research (described later in this report) that experiences in receiving boxes varied substantially across different places and among different groups. For example, we heard from many sources that households in Alaska often received boxes late or with high rates of damages. In addition, there have been long-standing disparities in rates of food insecurity among Hispanic/Latinx (Rabbitt, Smith, and Coleman-Jensen 2016) and Alaska Native (Walch et al. 2018) populations. In light of these considerations, we analyzed outcomes for the following subgroup populations:

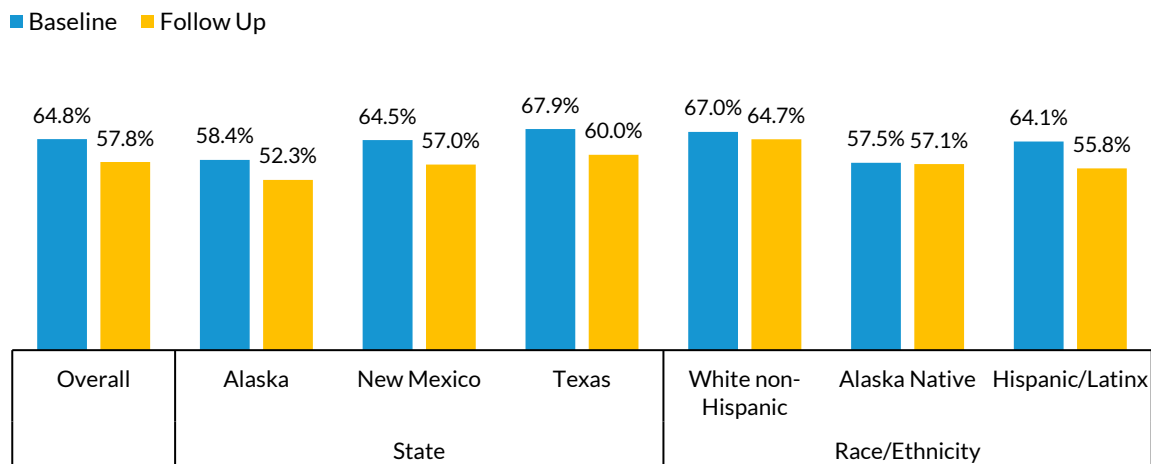
- **state:** Alaska, New Mexico, and Texas¹⁰
- **race and ethnicity of survey respondent:** white non-Hispanic, Alaska Native, and Hispanic or Latinx¹¹

Descriptive Program Outcomes

For the descriptive analysis, we analyzed changes in food insecurity from the first round of the household survey in early summer 2022 to the second round of the household survey in late summer 2022. We constrained the descriptive outcomes analysis to participating households that received at least 75 percent of the expected meals, based on the number of weekdays between each round of the survey (with an expectation of two meals per weekday). This leaves an unweighted sample size of 445, though the results are weighted to reflect the demographic profile of the overall program population.

Figure 1 summarizes the rate of reported food insecurity at baseline and follow-up for MTY participants overall, by state, and by major racial/ethnic group.¹² Overall and for almost every subgroup, household food insecurity declined from baseline to follow-up, with the exception of Alaska Native households, where food insecurity stayed the same. It is worth noting that Alaska Native households had the lowest baseline levels of food insecurity compared to all other subgroups.

FIGURE 1
Reported Share of Meals-to-You Households Reporting Food Insecurity, Overall and by State and Race/Ethnicity, Beginning and End of Summer 2022



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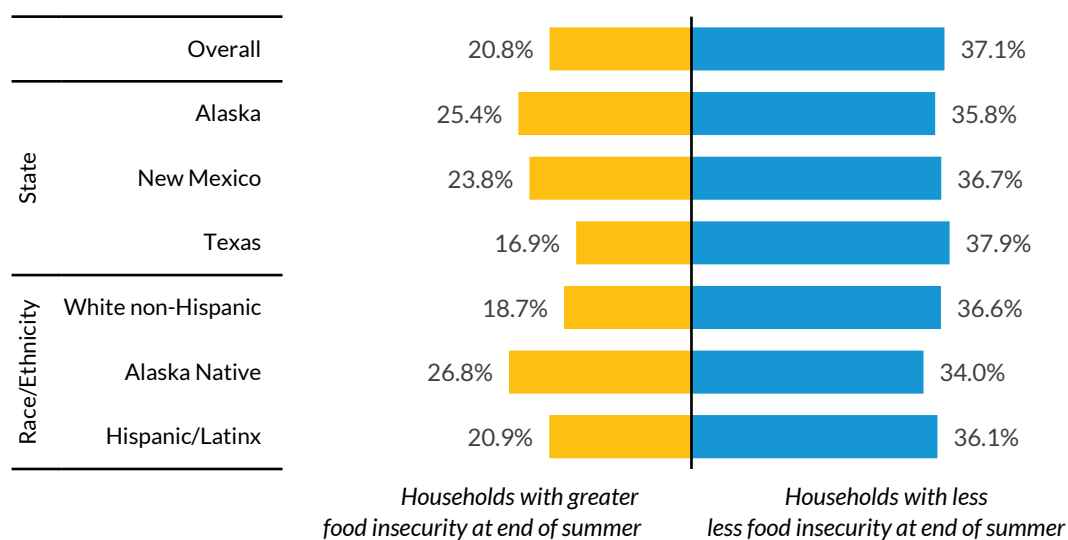
Source: MTY survey, rounds 1 and 2, conducted June 2–July 13, 2021, and August 9–24, 2021, respectively.

Note: *N* = 455; Alaska, *n* = 72; New Mexico, *n* = 206; Texas, *n* = 177; white non-Hispanic, *n* = 128; Alaska Native, *n* = 61; Hispanic/Latinx, *n* = 232. All changes are significant at *p* < 0.05.

We see an overall household food insecurity rate of 64.8 percent at the beginning of the summer, with similarly high rates across state and different racial and ethnic groups. Food insecurity for households overall was substantially higher in the MTY 2022 program year than in the 2021 program year (Gutierrez, Gupta, Waxman, Anderson et al. 2022). The rates in both program years were also much higher than the national average: in 2021, 12.5 percent of households with children reported food insecurity, with 22.7 percent of Black, non-Hispanic households and 18 percent of Hispanic households with children reporting food insecurity (Coleman-Jensen et al. 2022). The high rates of food insecurity observed in MTY-participating households demonstrate the elevated need these families face. However, notably, baseline food insecurity among Alaska Native respondents was lower than the overall average, which is contrary to baselines in past program years when it was higher than average. Nonetheless, it was still very high, affecting more than half of MTY Alaska Native households.

Figure 2 shows the percentage of households in each group that experienced improvements or declines in food insecurity scores from the baseline survey to the follow-up survey. Overall and for each group, food insecurity improved more often than it worsened over the course of the program. About a third of households overall experienced improvements in household food insecurity, but 1 in 5 households experienced worsened food insecurity outcomes during this timeframe. Compared to other subgroups, Alaska households and Alaska Natives were most likely to have worse food insecurity at the end of the summer (1 in 4).

FIGURE 2
Changes in Share of Meals-to-You Households Reporting Food Insecurity between Beginning and End of Summer 2022, Overall and by State and Race/Ethnicity



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Source: MTY survey, rounds 1 and 2, conducted June 2–July 13, 2021, and August 9–24, 2021, respectively.

Note: N = 455; Alaska, n = 72; New Mexico, n = 206; Texas, n = 177; white non-Hispanic, n = 128; Alaska Native, n = 61; Hispanic/Latinx, n = 232.

Exploratory Impact Methodology

Even though the exploratory impact analysis did not have a comparison group, large variations in the number of meals received across households allowed us to associate the amount of MTY food support a household received, adjusted for the number of participating children in the household and the time between surveys, which we call “adjusted meals received,” with differences in food insecurity at the end

of the summer. We used a similar approach in our 2020 MTY impact analysis (Anderson, Waxman, and Gundersen 2021).

Variation in adjusted meals received across the program resulted from several factors, including the timing of an individual school district's summer calendar, the availability of an onsite summer meals program for part of the summer in some districts, shipping issues, and other miscellaneous factors. These factors were unlikely to be closely related to a household's probability of being food insecure within the high-needs households and communities served by this program, and we did not see strong relationships between the adjusted meals received and baseline food insecurity scores. The variation could provide useful insight on how differences in exposure to the program related to differences in food security outcomes. Nevertheless, reasons for variation in adjusted meals received are likely not entirely random and in the absence of a control or comparison group, the findings should be treated as exploratory.

We began by using food security responses collected from the participant surveys at the beginning of the summer and at the end of the summer for participants who completed both rounds of the MTY program survey. We restricted our sample to those who had baseline food insecurity scores that referenced the period before the beginning the program and had a follow-up score, which totaled 555 households.¹³

We then used regression analysis to estimate the impacts of receiving an additional 10 MTY meals on food insecurity. The regression was a pre-post model with household-level fixed effects, which means that we looked at the change in the outcome within households across two points in time and the difference in adjusted meals received at each round to estimate the relationship between the adjusted number of MTY meals received and food insecurity outcomes. The household fixed effect controlled for everything about a household that would not change over time, including race/ethnicity, rurality, and annual income. We also controlled in the regression model for the date that the household responded to each survey and a squared term for dose, which allowed the relationship between adjusted meals received and outcomes to be nonlinear. Formally, the regression can be expressed by the following equation:

$$F_{ht} = \beta_0 + \beta_1 D_{ht} + \beta_2 D_{ht}^2 + \beta_3 S_{ht} + \lambda_h + \varepsilon_{ht}$$

where F_{ht} is the measure of food insecurity at the end of the summer, referencing the 30-day lookback prior to responding to the survey for household h in time-period t ; D_{ht} is the number of cumulative adjusted meals received in each time period; S_{ht} is the date of the survey response for each household in each round of the survey; λ_h is a household fixed-effect term; and ε_{ht} is the stochastic error term,

clustered at the household level (which is equivalent to robust standard errors). β_1 is the coefficient of interest and reflects the relationship between the number of cumulative adjusted meals received and food insecurity outcomes. We weighted the estimates using sampling weights to better reflect the overall profile of MTY participating households (see appendix A). Multiplying the β_1 coefficients in each model by 10 allowed us to estimate the marginal impact of an additional 10 MTY meals on each household food insecurity outcome.

Treatment Variable: Adjusted Meals Received

Our hypothesis was that households receiving more meals, adjusted for number of participating children and time between survey rounds, may experience improved food security outcomes. Because the meals were shelf stable, we chose to measure the cumulative number of meals received (rather than weekly average, for example) because meals could in theory be saved for consumption at a much later point in time and because money saved on food earlier in the program could translate into increased food access later. We measured adjusted meals received from the participant-level shipping data that BCHP shared with the research team after reconciling shipments with the vendors. The number of meals received was calculated based on these data, and we only counted boxes confirmed as delivered.¹⁴

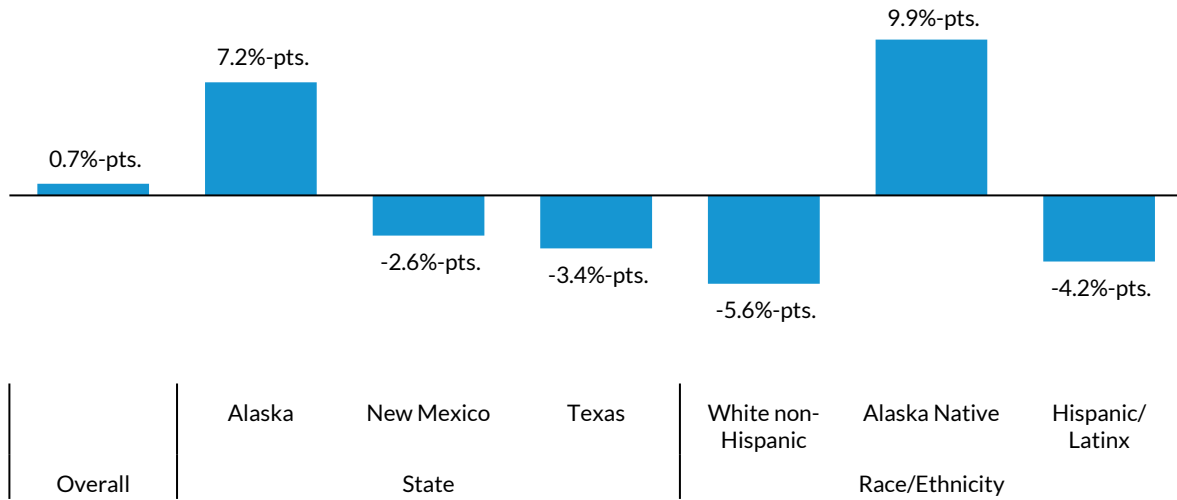
Appendix C describes the distribution of the adjusted number of meals received by each round of survey completion, overall and within state. We used this variation to estimate the marginal impact of each additional meal received on household food insecurity. The majority of households (86 percent) had received no meals at the time of the first survey, and only 6 percent had received more than one week's worth of meals (i.e., more than 10 meals). By the time of the second survey, there was considerable variation in the total number of meals received across households, with a third of households (33 percent) receiving between 0 and 40 meals per child, and similar proportions receiving either 41 to 60 meals or 61-90 meals per child. There was also substantial variation in adjusted meals received within each state.

Exploratory Impact Analysis Results

Figures 3, 4, and 5 present the results of this analysis, first for the categorical measures of food insecurity and very low food security, and then for the continuous measure. In these figures, a negative sign indicates a desirable result – a reduction in food insecurity. Unlike the descriptive outcome

analysis, the exploratory impact analysis was not constrained to households that received a minimum acceptable number of adjusted program meals, and it controls for unchanging household factors. Therefore, the overall sample size was 555 for this analysis. Similar to the descriptive analysis, the results are weighted to reflect the demographic profile of the overall program population.

FIGURE 3
Impact of 10 Additional Meals on Probability of Reporting Household Food Insecurity in Late Summer 2022, Overall and by State and Race/Ethnicity



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Source: Authors' analysis of programmatic shipping data and MTY participants' responses to food insecurity survey questions.

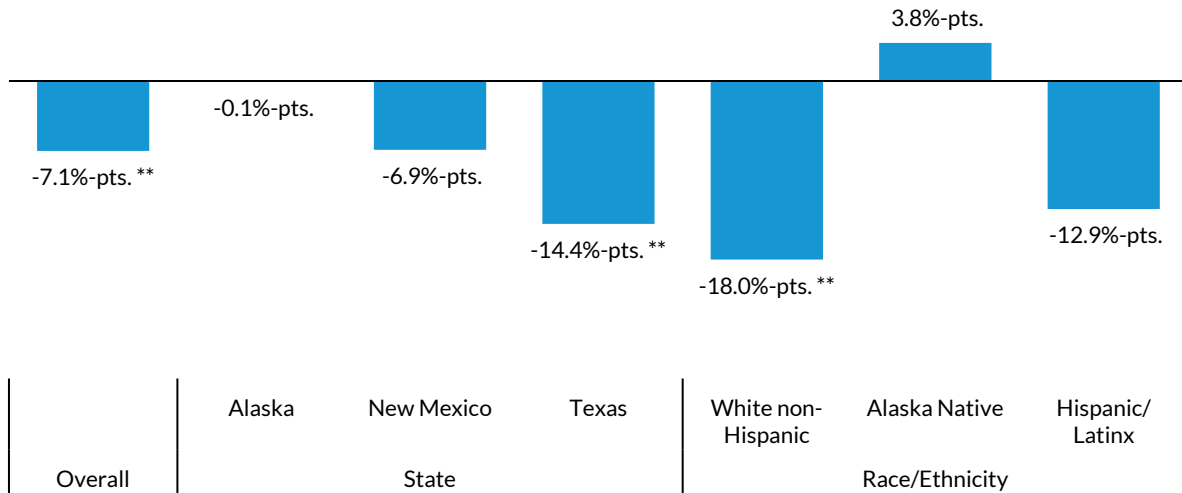
Notes: Food insecurity was defined as responding affirmatively to at least two items on a six-item food security module.

Coefficients represent percentage-point changes. $N = 555$; Alaska, $n = 122$; New Mexico, $n = 226$; Texas, $n = 206$; white non-Hispanic, $n = 140$; Alaska Native, $n = 102$; Hispanic/Latinx, $n = 268$.

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

FIGURE 4

Impact of 10 Additional Meals on Probability of Reporting Very Low Household Food Security in Late Summer 2022, Overall and by State and Race/Ethnicity



URBAN INSTITUTE

Source: Authors' analysis of programmatic shipping data and MTY participants' responses to food insecurity survey questions.

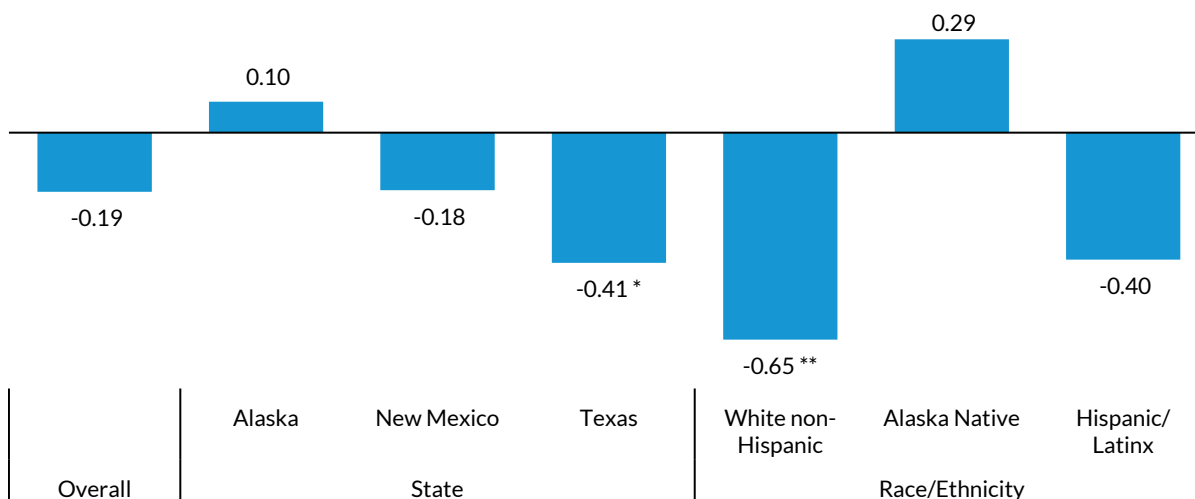
Notes: Very low food security was defined as responding affirmatively to at least five items on a six-item food security module.

Coefficients represent percentage-point changes. $N = 555$; Alaska, $n = 122$; New Mexico, $n = 226$; Texas, $n = 206$; white non-Hispanic, $n = 140$; Alaska Native, $n = 102$; Hispanic/Latinx, $n = 268$.

* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

FIGURE 5

Impact of 10 Additional Meals on Household Food Insecurity Score (0–6) in Late Summer 2022, Overall and by State and Race/Ethnicity



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Source: Authors’ analysis of programmatic shipping data and MTY participants’ responses to food insecurity survey questions.

Notes: The food insecurity score was based on a six-item food security module. Lower scores represent more food security.

Coefficients represent score changes on the seven-point scale. *N* = 555; Alaska, *n* = 122; New Mexico, *n* = 226; Texas, *n* = 206; white non-Hispanic, *n* = 140; Alaska Native, *n* = 102; Hispanic/Latinx, *n* = 268.

* *p* < 0.1; ** *p* < 0.05; *** *p* < 0.01

The findings show that, overall, more MTY meals received was associated with lower rates of very low food security (Figure 4), which was the most severe form of hardship. For every 10 meals received, households were 7 percentage points less likely to report very low food security. But overall program impacts on food insecurity status (Figure 3) and continuous food insecurity scores (Figure 5) were not significant.

Across all outcomes, households in Texas and white non-Hispanic households saw the largest program impacts on reducing food insecurity. For example, an additional 10 meals caused Texas household food insecurity scores to improve by more than half a point on a 0–6 scale. Meanwhile, Alaska and Alaska Native households did not experience statistically significant differences in outcomes. It is possible that substantial disruptions in shipping to Alaska, coupled with growing hardship in many Alaska Native villages during 2022 due to problems with salmon fishing, may have contributed to these patterns of impact. As noted previously, these groups started out with lower levels of food insecurity than other subgroups, a difference from prior years, which could suggest that food insecurity rates in early summer 2022 were temporarily abnormally low. (Specific issues facing Alaskan communities are discussed in a case study in appendix G.)

Program Enrollment and Recruitment among School Districts

Information from multiple sources informed our analysis of district participation and experiences, including publicly available data on school districts and population demographics, school district surveys, three advisory groups of school district personnel, and four site visits to participating districts. School districts that participated in the survey were largely representative of the overall group of MTY districts. Three of the 5 Alaska districts, 18 of the 33 Texas districts, and 6 of the 10 New Mexico districts responded to the survey.¹⁵ District survey respondents and advisory group participants were program points of contact and navigators who acted as district liaisons with BCHP. Both survey respondents and advisory group participants provided information on their experiences in conducting outreach to families, verifying student eligibility, and completing enrollment; their communication and interaction with the BCHP team; and any feedback, comments, or concerns they had about the program. Our in-person site visits to four districts gathered similar information but also focused on the local context to better understand how MTY could improve their operations and logistics.

School District Characteristics

Forty-nine school districts participated in the MTY program in the summer of 2022. Table 2 summarizes district characteristics from public data sources. The majority of districts were rural and located in Texas (33), followed by New Mexico (10), Alaska (5), and Utah (1). The average district included five schools and served slightly more than 1,000 students. MTY school districts were more likely to enroll Hispanic/Latinx (42 percent) and white students (39 percent), followed by Native American/Alaska Native (11 percent) and Black students (3 percent).

TABLE 2
Characteristics of School Districts Enrolled in the Meals-to-You Program, Summer 2022

	Mean/Percentage	Minimum	Maximum
Number of schools (mean)	5	1	29
Number of students enrolled (mean)	1,140	82	12,844
Demographics of all students in enrolled school districts (%)			
American Indian/Alaska Native	11.3	0	100.0
Asian	0.8	0	24.2

	Mean/Percentage	Minimum	Maximum
Black	3.9	0	56.0
Hispanic/Latinx ^a	42.0	0	97.0
Native Hawaiian/Pacific Islander	0.1	0	1.8
Two or more races	1.9	0	10.3
Unknown	0.0	0	0.0
White	39.9	0	89.1
Income and eligibility (%)			
Living at or below 100% federal poverty level	24.0	7.7	36.6
Students eligible for MTY	83.7	26.5	100.0
Household internet access (%)			
No internet	24.0	7.8	64.8
Internet on cell only	16.8	1.7	40.3
State (%)			
Alaska	10.2		
New Mexico	20.4		
Texas	67.3		
Utah	2.0		
Rurality^b (%)			
City	0		
Suburb	0		
Small	2.0		
Town			
Distant	4.1		
Remote	12.2		
Rural			
Fringe	6.1		
Distant	16.3		
Remote	59.2		
Total number of districts (N)	49		

Source: School and school district demographic and directory data from the Common Core of Data and Small Area Income and Poverty Estimates via the Urban Institute Education Data Portal, <https://educationdata.urban.org/data-explorer>, and internet and computer data at the school district level from National Historic Geographic Information System 2017–2021 five-year estimates, <https://www.nhgis.org/>.

Notes: Table describes 2020–2021 school year descriptive characteristics of 49 MTY districts. Poverty and computer/internet data are unavailable for three school districts. “Eligible for MTY” is defined as students who are eligible for free or reduced-price meals either through individual meal applications or enrollment in a CEP school or district.

^a The data source uses the term *Hispanic*, but we use the preferred terms *Hispanic/Latinx* to reflect the different ways people self-identify.

^b The following National Center for Education Statistics definitions apply to district rurality designations: “cities” include territories inside both an urbanized area and a principal city; “suburbs” include territories inside urbanized areas but outside principal cities; and “towns” are territories inside urban clusters. “Rural” describes territories outside of urban clusters. For other rurality definitions, see “NCES Locale Classifications and Criteria,” National Center for Education Statistics, accessed February 13, 2021, https://nces.ed.gov/programs/edge/docs/locale_classifications.pdf.

Internet and Computer Access

Families living in rural areas often struggle with having regular access to internet and computers due to lack of availability.¹⁶ In the average MTY district, almost one in four households did not have any kind of internet and, in one school district in Alaska, as many as 65 percent of households did not have internet. Among households with internet, an average of 17 percent of households only had internet on their phones. This context is important because MTY enrollment procedures were set up to be conducted primarily online in summer 2022, as was the case in previous years of the program. Online access was particularly a barrier in Alaska, where in some places only schools had the ability to secure internet access, though even consistent access was not guaranteed. This likely made participation more difficult and/or potentially excluded families with higher need and less access to online resources. However, all Alaska districts in 2022 were offered the mass enrollment alternative by the BCHP team to ensure that every eligible child in a household that wanted to participate would be enrolled. If a participant was required to enroll online, it was only because the school district opted for that method, potentially due to lack of capacity to manage the additional workload of mass enrollment.

Take-up of the Program

Almost one-quarter of students in the average MTY district live at or below 100 percent of the federal poverty line (see table 2). However, 60 percent of MTY districts participated in the federal school meal program Community Eligibility Provision (CEP) in 2021–22, which makes all students eligible for free meals and therefore eligible for MTY. Overall, 86 percent of students enrolled in MTY districts were eligible to participate in MTY. Of eligible students, only 15.1 percent participated in MTY. This section explores explanations for this relatively low program take-up.

In general, school meal participation rates vary with student ages. Young students, such as those in elementary school, are more likely to eat their school's breakfast and lunch compared to older students (Mirtcheva and Powell 2009). But participation rates among children across school levels do not vary in MTY. Almost 13 percent of MTY participants were under 6, compared to 35 percent who were elementary school ages (6–10 years old), 22 percent middle school (11–13 years old), and 31 percent high school (14 years old and up). One reason why so many high school students participated in the program might be that 66 percent of those students came from households that also included younger participants.

Research shows that participation rates in school meal programs also vary by students' race and ethnicity, where Black and Hispanic/Latinx students are more likely to participate than white students (Mirtcheva and Powell 2009). We explored the participation rates by race and ethnicity among districts where 100 percent of students were eligible for MTY. The first two columns in table 3 compare the racial makeup of districts where less than 100 percent were eligible for MTY and districts where 100 percent of students were eligible. Districts with 100 percent student eligibility were similar demographically to those with less than 100 percent eligibility, with the exception of the share of white students (districts with less than 100 percent eligibility were more likely to have higher shares of white students).

The two right columns in table 3 compare the share of students participating in MTY to the share of students enrolled in the district by race and ethnicity, among districts with 100 percent MTY eligibility. The racial makeup of participants statistically differs from the racial makeup of students enrolled in districts for two demographic groups: Hispanic/Latinx students and students who identified as two or more races were less likely to participate in MTY relative to their representation in the districts. See appendix E for individual district racial and ethnic group breakdowns of participation in MTY and enrollment in school.

TABLE 3

Race/Ethnicity Characteristics of Meals-to-You Participants versus Districts' Enrolled Students, 2022

	Some District	All District Students Eligible to	
	Students Eligible to Participate in MTY	Participate in MTY	
	Share students by race enrolled in district	Share students by race enrolled in district	Share of students by race among MTY participants
American Indian or Alaska Native	1.3	18.1	20.2
Asian	1.7	0.2	0.1
Black or African American	3.4	4.3	2.4
Hispanic/Latinx ^a	35.5	46.5	38.4**
Native Hawaiian or Other Pacific Islander	0.1	0.1	0.2
Two or more	2.4	1.6	0.2**
White	55.7*	29.1	35.0
Number of districts	20	29	29

Notes: Participation rates are created among MTY participants that were enrolled in the participating school district. Race is known for 100 percent of students enrolled in districts and 95.5 percent of MTY participants.

^a The Common Core of Data source uses *Hispanic*, and the MTY survey data uses *Latino/a*, but we use the preferred terms *Hispanic/Latinx* to reflect the different ways people self-identify.

* $p \leq 0.05$; ** $p \leq 0.01$

While state-level factors (such as number of districts participating, level of outreach conducted by districts, etc.) likely drive many of the differences in take-up of the program, there may be important

racial and ethnic disparities that affect a household's ability to enroll into the program. Prior research shows that Hispanic/Latinx households with lower incomes are likely to have irregular or nonstandard work schedules such as working weekends, evenings, or hours that vary from week to week (Wildsmith, Ramos-Olazagasti, and Alvira-Hammond 2018). We also know from our site visit conversations that these types of work schedules—as well as working across the border—are common among parents in New Mexico. Because of this, parents may have found out about programming late, or if not working locally, may not have felt the program fit their needs. This can affect parents' ability to respond to quick turnaround times in enrollment deadlines for summer meal programs. Moreover, school district personnel mentioned that translating information about the program in a more accessible and understandable manner would make it easier to enroll families that are primarily Spanish speaking and have lower rates of literacy.

Experiences with Program Enrollment

Motivation to Participate in the Program

School district personnel who responded to the survey were asked to rank the importance of contextual factors in deciding to participate in the MTY program. At least 74 percent of survey respondents reported that inflation, transportation costs, and the lack of availability of other meal programs were “very important” to school districts in deciding to participate in MTY. Given the unprecedented rates of food price inflation in 2022,¹⁷ school district personnel believed that participating in MTY helped alleviate some of the financial burden for families purchasing groceries and meals. Another important factor in deciding to participate in MTY was the uncertainty around school meal waivers, which provided free school meals to all during the pandemic, and the decision to extend the summer waivers occurred long after MTY participation decisions had to be made.¹⁸ Over half of participants said participating in MTY due to this uncertainty was “somewhat important” or “very important.”

District survey respondents were also asked in an open-ended format about their school district's motivation or goal for participating in the program. Most respondents (out of 13 that responded) reported that their primary goal was to provide meals during the summer to children and families in need. A few respondents specifically indicated that their goal was to help students of families who lived in rural communities and lacked transportation to access food. In a follow-up interview, one Texas school district respondent indicated that her district was “very rural” and, in some instances, families would need to travel up to 20 miles to access food supports in their community.

Enrollment Experiences

According to survey data, about half of districts reported that families enrolled in the MTY program by themselves through the MTY website, while about one-third of school districts offered enrollment assistance over the phone. Only about 15 percent of surveyed districts (4 of 27 districts) used BCHP's mass enrollment process, which allowed school district personnel to enroll on behalf of families that wanted to receive meals, so that families did not have to rely on an internet connection to enroll themselves. This process was offered to all districts in Alaska.

Over half of the respondents found that enrolling families was “very easy.” However, about one-third of respondents reported that there was not enough time to enroll families or that there were language barriers between a family and the MTY website. One school district interviewee noted that the icon toggle to switch between English and Spanish on the website was not obvious to them or families. As noted previously, school districts enrolled families on a very short timeline due to the late approval of the program from USDA. One school district survey respondent stated,

The enrollment period was not long enough. It was very difficult to reach families. With many families having little or no internet access, communication is slower. I work alone and with about 4,000 kids/families to call. I was working 10-hour days and working weekends, and it was still very difficult to reach everyone, answer calls, and enroll everyone in the about two and a half weeks that the enrollment was open. I had many families on a waiting list after Memorial Day just in case enrollment opened again over the summer.

Overall, findings from the school district survey, advisory group meetings, and our interviews during site visits highlighted that districts and families would have benefitted from more time to enroll in MTY. Several survey respondents expressed concerns about the enrollment windows. One wrote, “We had very short notice (7 days, including a weekend) from the time we were informed we could participate/enroll families to the deadline. Many families contacted us *after* the deadline passed and were denied participation.” A school administrator in New Mexico shared during a site visit that most families work multiple jobs and may be away from the house for days or weeks for work (for example, in Mexico), making a short enrollment window easy for families to miss. They may hear about the program too late or not hear about it at all.

Technical Assistance and Communication with BCHP

The BCHP team offered customer support services and dedicated district points of contact that provided technical assistance support to school districts as they navigated the different stages of the MTY enrollment process. Technical assistance materials included a slide show training, a YouTube

explainer video about how to enroll and verify families in the online system, and a sample flyer that school districts could adapt for outreach in English and Spanish. All outreach and training materials were available in English and Spanish as well. In prior years, BCHP also conducted trainings and webinars with school districts, but they could not do so this year due to the truncated enrollment and program timeline. Despite this, school district satisfaction with the process remained relatively stable this year compared to last year, perhaps because certain repeat districts had more experience with the process from previous years.

Most district respondents strongly agreed that their questions and concerns were addressed appropriately when emailing with and calling the BCHP team. They also reported that the BCHP team was “very responsive” in addressing enrollment issues, dietary matters, and cultural food sensitivities. A few respondents reported that they would have liked to know about the program earlier. One survey respondent said the process was “very easy,” but added, “Just wish that communication would have gone out sooner that they were operating the program so we could notify our families and help get them enrolled. We had like four days to enroll our families.” Many enjoyed the program’s simplicity but highlighted how more time to enroll would be very beneficial.

State Agency Perspectives

Overall, state agencies agreed that MTY was a necessary program that filled gaps in summer food resources for students in rural areas who lack transportation and access to summer meals. However, they echoed many of the challenges of the school district personnel. In addition, a salient theme was that districts do not have the staff or resources to participate in summer meal programs, nor do they have many staff available to help facilitate MTY.

Challenges with Timing of Enrollment

All three agencies interviewed highlighted the importance of starting the program months earlier. The Texas representative described how planning for other summer feeding programs occurs year-round for the Texas Department of Agriculture and takes a lot of time, strategy, and promotion. The late approval of MTY gave the department much less time to plan and ensure adequate outreach, personnel, and promotional resources. For example, school districts with at least 50 percent of students eligible for free and reduced-price meals are required to provide a summer feeding program unless they have a waiver for reasons such as lack of transportation or financial viability. Advance notice of when MTY will

operate would allow the agency to see which districts are not participating in summer feeding programs, target those districts to provide MTY, and give sufficient time to promote the program with school districts and families. An Alaska interviewee similarly stated that other summer food program outreach begins in January and wondered why it was not the same for MTY.

New Mexico and Alaska interviewees similarly stated that starting the program earlier would allow more eligible schools to participate; Alaska indicated it may have doubled or tripled the number of participating districts if given the appropriate time. One Alaska interviewee stated,

This year it wasn't approved until May. To ask schools to stop everything and sign up families ... when [schools] are trying to clean up, [do] inventory, and shut the doors [for summer], is very difficult. We won't want to complain, ... but better timing is needed.

Identifying Eligible Districts to Participate

State agencies typically worked to identify communities and school districts without summer food programs or summer food options, and then they either reached out to those districts or gave a list of those districts to BCHP team members for outreach. Alaska interviewees mentioned identifying underserved communities, particularly villages without access to the Food Bank of Alaska or Camp Fire.¹⁹

Despite targeted outreach, both Texas and New Mexico interviewees observed that several high-need districts did not participate in MTY. New Mexico state officials noted that high-need districts without summer meal programs had fewer available staff, which made them less likely to participate. For example, schools under the Bureau of Indian Education (BIE) had fewer staff, higher needs, and were much less likely to participate in the program.

MTY and Native Communities

Tribal contexts vary between the states served by MTY. Because the current mode of recruitment for MTY focuses on outreach to school districts, the school district context for Native students in each state is important. The participating school district in Utah that served two households was a BIE school, but otherwise there are currently no tribal organizations that partner directly with MTY.

NEW MEXICO

New Mexico has a significant population of individuals who identify as Native Americans residents—about 10 percent.²⁰ Of the participating states, New Mexico has the most schools that are funded by

BIE, with 45 BIE-funded schools currently in the state, including 24 operated by BIE and 21 that are tribally controlled.²¹ In March 2022, BCHP staff shared information about the potential for a 2022 summer program via email with all BIE-funded schools deemed eligible for MTY (schools that designated by USDA as being rural, low-income, low access to retail food options, and/or had a USDA rural Summer Food Service Program [SFSP] designation). Only one New Mexico BIE school signed up to participate in summer 2022. BCHP staff expressed concern that BIE schools may have limited capacity to engage with the program given the ongoing challenge of limited resources for these schools (Dortch 2018). Relatively short windows for outreach and planning may be particularly difficult for schools that are underresourced.

Although BIE schools provide one point of outreach for Native students, the majority of students identifying as Native in New Mexico attend public schools (NMPED 2020). Direct outreach to tribal communities beyond the school district partnerships would require diverse outreach strategies as there are 23 federally recognized tribes in the state in a wide array of communities. New Mexico school personnel emphasized that each tribe has its own traditions and values, meaning that discussions around MTY with one tribal organization would not necessarily apply to others.

TEXAS

Only 1 percent of individuals identify as Native in Texas.²² There are no BIE schools in Texas. Texas school personnel described Texas school districts with higher shares of Native American students as typically in rural areas and noted that districts do not often have formal connections with Native organizations.

ALASKA

In 2020, about one in six Alaska residents (15.2 percent) identified as Alaska Native or other Indigenous group.²³ However, the population of Alaska Natives is much higher in rural, high-need school districts. For example, the vast majority of students in the Lower Kuskokwim School District, which participated in MTY in 2022, identify as Alaska Native. Therefore, awareness of priorities and concerns of Alaska Native communities is critical to program success. School district personnel at the state and local level are a good source of insights, including those staff who identify as Alaska Native. Alaska contacts indicated that tension sometimes occurs between tribal councils and school districts, and those issues can have implications for the perception of school food programs and thus for strategies around providing summer food. Interviewees in Alaska suggested that in the future, BCHP connect with tribal councils through school districts to gain additional information on needs and program participation.

UTAH

In addition, staff from a BIE school in Utah who had heard about the program reached out to BCHP about participation, and BCHP secured approval to enroll students from this school. Ultimately, two households from Utah participated in the program. In 2020, about 1 percent of Utah residents identified as Native.²⁴ There is one BIE school, that participated in the program, and one tribally-controlled school.²⁵

Program Implementation

Participant Program Experience

Participants in the summer 2022 MTY program generally reported a positive experience, based on survey responses and input from the participant advisory group. Figure 6 summarizes participants' survey responses to several questions regarding their program experience related to enrollment, receipt of boxes, and customer service.

Enrollment in MTY

The vast majority of respondents (94 percent) reported that enrollment was somewhat easy or very easy. Most advisory group respondents agreed that the enrollment process posed few challenges. The main challenge reported was not having enough time to sign up. Many advisory group participants mentioned that internet access is a barrier, and one cautioned,

Especially now, with the economy the way it is, not everybody is going to be able to keep their internet.

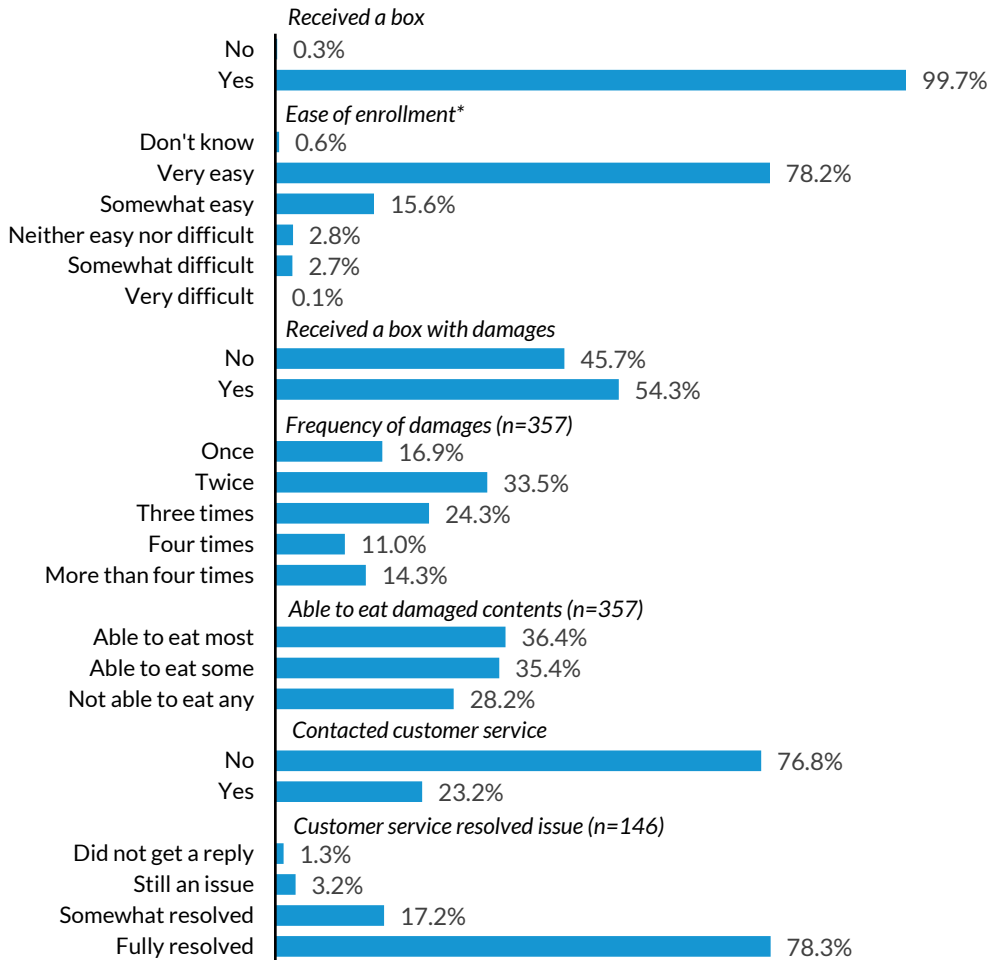
The most helpful modes of outreach were flyers, information via mail, utilizing social media, or notes sent home with children from school. A group member from Alaska also noted that their Native corporation has a television channel that could potentially be used for announcements. It is important to note that all surveyed participants and advisory group members were those who successfully completed the enrollment process; we did not have contact information for those who did not enroll. But some mentioned that they knew of others who were not able to enroll; one participant noted,

There was four or five [families] that I knew of that didn't know about [the MTY program], and it was too late for them to enroll in it.

There was also some confusion around eligibility—advisory group participants were confused about whether or not their children who were not enrolled in public K–12 schools (e.g., young children) were eligible. One participant explained that they only received boxes for their two children in public school but not their child who was homeschooled.

FIGURE 6

Participants' Experience with the Meals-to-You Program, End of Summer 2022



URBAN INSTITUTE

Source: MTY survey, round 2, conducted August 22-September 26, 2022 (N = 660). Ease of enrollment data is from MTY survey, round 1, conducted June 16-July 24, 2022 (N = 925). All estimates are weighted to account for nonresponse.

Delivery Experiences

DELIVERY FREQUENCY

Boxes could be delivered to participants' homes or to another accessible location, which was an important program flexibility in very rural areas where door-to-door delivery is not available. Approximately three in four surveyed participants (74.5 percent) reported having their boxes delivered to their home, while the remainder reported having them delivered to the post office or school. Among

those who reported delivery locations other than home, three in four (75.5 percent) reported it was very or somewhat easy to pick up their boxes. In Alaska, 95 percent of respondents reported going to the post office for their boxes, while only 14 percent reported this in Texas and 4 percent in New Mexico (data not shown).

One of the main issues several advisory group participants noted were misalignments between the program period and the summer break, which were a result of USDA's late award notice that pushed shipping into mid-June. A participant from Alaska noted that boxes arrived in late June while school finished in May. A participant from Texas reported that boxes "arrived well after [the kids] got out of school." During the advisory group with New Mexico school district personnel, one staff member stated,

[T]he week of June 13th, ... I started getting calls. ... They were stating that they didn't get their boxes and [asked] if I knew when we were going to get them or when they would get them.

This also happened at the end of the summer—a participant in Texas noted their boxes stopped in July, though her child went back to school in mid-August.

Many families found that their boxes did not come during the week they were scheduled to be delivered. In Alaska, where shipping is often irregular, a participant explained the unpredictability of boxes:

We still don't know when we'll get them. Sometimes we get two, sometimes we get six.

Another participant in Alaska noted that they had about three weeks without postal service when the single postmaster was out, so boxes piled up. A participant in Texas reported similar issues:

Instead of like once a week, we were getting them like two, three times a week. And you know, and then it was multiple boxes. So it was a little bit chaotic.

Irregularities like these are difficult for families when they cannot rely on having food available consistently. One participant noted,

If you're on a food budget, ... you've got to get your menus ready, so you're like, 'Okay. I know I've got these for lunches. I've got that.' Then if something happens, and you don't get your box, then you've got to regroup all over again. Delivery consistency, I think—for us, not for everybody, but for us—is more important to me than when I get them. I just need to know when I'm going to get them.

DAMAGES TO BOXES

Damages to shipped boxes increased substantially during summer 2022 when compared to summer 2021 and posed one of the biggest challenges to the program in 2022. According to surveys, over half of

participants (54.3 percent) reported receiving at least one damaged box by the end of the summer, and among them, the majority (83.1 percent) reporting two or more damaged boxes. Moreover, one-third of respondents to the school district survey stated that they heard of damages occurring to the food boxes, and among those who heard of damages, over two-thirds reported hearing about missed shipments from program participants, carriers, or others at least once a week. Two-thirds of participants in Alaska reported experiencing damaged boxes; while the rates were lower in New Mexico and Texas, they were still significant (66.7 percent in Alaska, 48.3 percent in New Mexico, and 54.5 percent in Texas; data not shown). About one-third (36.4 percent) of the survey respondents reported still being able to eat most of the contents of the damaged boxes, and more than one-quarter (28.2 percent) said they were not able to eat any. The most commonly damaged items were cereals getting crushed (68.7 percent) followed by liquids like milks/juices (59.7 percent). Canned goods were less likely to be damaged (26.3 percent; data not shown). School district personnel also noted in the advisory group meetings how some residents received boxes with food items that had opened during transit and could not be used. Participants noted that the boxes felt flimsy and the glued or taped sides would often be coming apart.

The majority of advisory group respondents had experiences with at least some food items arriving in poor condition. A common issue was curdled or chunky milk and melted cheese, which was a known challenge for the BCHP and the vendors. An advisory group participant from Alaska noted the first several boxes they received had this problem:

The kids would drink the milk with a straw and then they got these chunks. That was common for other families in the community. At least one I know of canceled their participation.

However, they found alternatives to continue using the milk since it was so high value, sharing,

For the milk, we found if we put it in a strainer—because milk is really hard to get in this community, and it's very expensive, so we just strained it, and it was okay.

Families in New Mexico and Texas especially were worried about using dairy items like milk and cheese, as packages would sometimes sit outside in the sun in temperatures above 100 degrees. Other commonly mentioned damages by advisory group participants were leaking vegetable cups, crushed cereal, and dented cans.

An issue specific to Alaska was the weight of the boxes, as families often walked or took a small four-wheeler with a wagon to pick up packages from the post office. Heavy boxes in large quantities were difficult to manage. Participants noted that boxes were often wet when picking them up after sitting on a plane runway.

With these issues, nearly one-quarter (23.2 percent) of participants reported contacting customer service. Among them, more than three-quarters (78.3 percent) said their issue was fully resolved. But overall, many participants were dismayed by the damages, and one participant from Alaska felt like they lost trust in the program:

I know there's not as many families that signed up, and in the future I don't know how many will sign up because of the milk. The faith and the trust in the program has been eroded.

However, participants mentioned that if the program acknowledged the issues and how they could be fixed, it would combat hesitancy in the future. One of the main suggestions among advisory group participants was for the program administrators to share tracking numbers. This way, they would know when the boxes are coming, minimizing how long boxes might sit out and allowing families to anticipate them when planning for meals. Tracking numbers were available in each household's online portal, and those that did not have access to the online portal could request an update from the customer service team via email or phone; however, it is possible that participants were not aware of this option. Some participants did report receiving text message alerts when their boxes were coming, but this was not always available or consistent.

Participants' Perceptions of MTY Boxes

Participants had mixed opinions on the quality and appeal of box contents. Over half of survey respondents (57.1 percent) said their children ate all or most of the box contents, and nearly one-third (30.8 percent) said they ate some, while about 1 in 10 (12.2 percent) said their children ate very few or none of the food items (figure 7). Advisory group participants reported that their children liked the bear-shaped graham crackers, applesauce pouches, jerky, cereals, and juices. A few advisory group participants mentioned not liking the different flavored raisins, the macaroni and cheese, and the red beans and rice specifically. Survey respondents felt that the content was equally appealing for both younger and older children: 46.6 percent of respondents said their older children found most or all of the box contents appealing, compared to 48.3 percent of respondents with younger children. Four in five survey participants (80 percent) said they were very or somewhat satisfied with the variety in the food boxes. A few of the advisory group participants felt the boxes were repetitive and that the kids would get tired of them. Similar to prior summers, advisory group parents felt the box items were too "snacky." One noted,

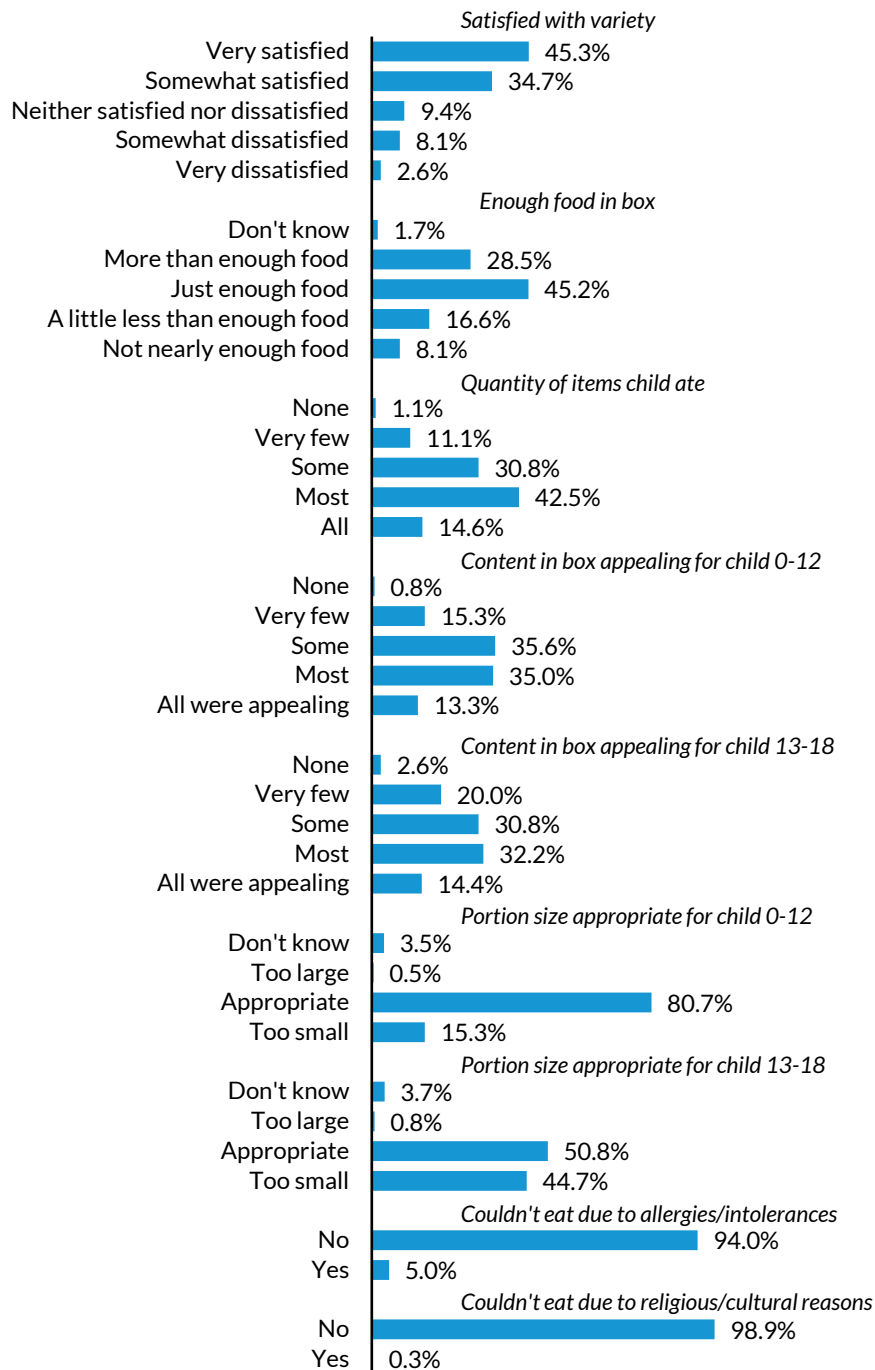
I don't think that it was actually meals. I felt like it was more snacks.

NUTRITIONAL QUALITY OF MTY BOXES

A report from Healthy Eating Research, a national program of the Robert Wood Johnson Foundation, discusses the nutritional quality of the 2020 emergency MTY program (Harnack et al. 2022). Overall, all menus met the required SFSP standards for breakfast, whereas for lunch, adherence varied. While lunch menus complied with milk and bread standards, they did not consistently include fruits, vegetables, and meat or meat alternatives. Moreover, while this was not required, none of the menus met nutrition standards for National School Lunch Program meals. In the summer of 2022, the vendors made some intentional changes to increase adherence to these requirements. Specifically, McLane was able to source vegetable cups and include them in boxes. About 80 percent of second-round survey respondents were satisfied or very satisfied with the vegetable cups (see figure B.3 in appendix B, and see example menus in appendix F).

FIGURE 7

Participants' Perceptions of Box Components, End of Summer 2022



URBAN INSTITUTE

Source: MTY survey, round 2, conducted August 22-September 26, 2022 (N = 660). All estimates are weighted to account for nonresponse.

About three in four survey respondents (73.7 percent) thought the boxes had more than enough or just enough food. However, all boxes contained the same items, regardless of the age of the child. About four in five respondents (80.7 percent) felt the portion sizes were appropriate for a child between the ages of 0 and 12, but only about half (50.8 percent) felt they were appropriate for a child between the ages of 13 and 18. However, sometimes damages made box contents insufficient. When asked if the box had enough to feed a child breakfast and lunch for a week, one advisory group participant said,

With the way that the box came, sometimes no, just because of some of the stuff being damaged. Sometimes there may be enough for a couple of days, like three or four days, and sometimes there might be enough for the week, but you know, it just depends on if the box came in damaged.

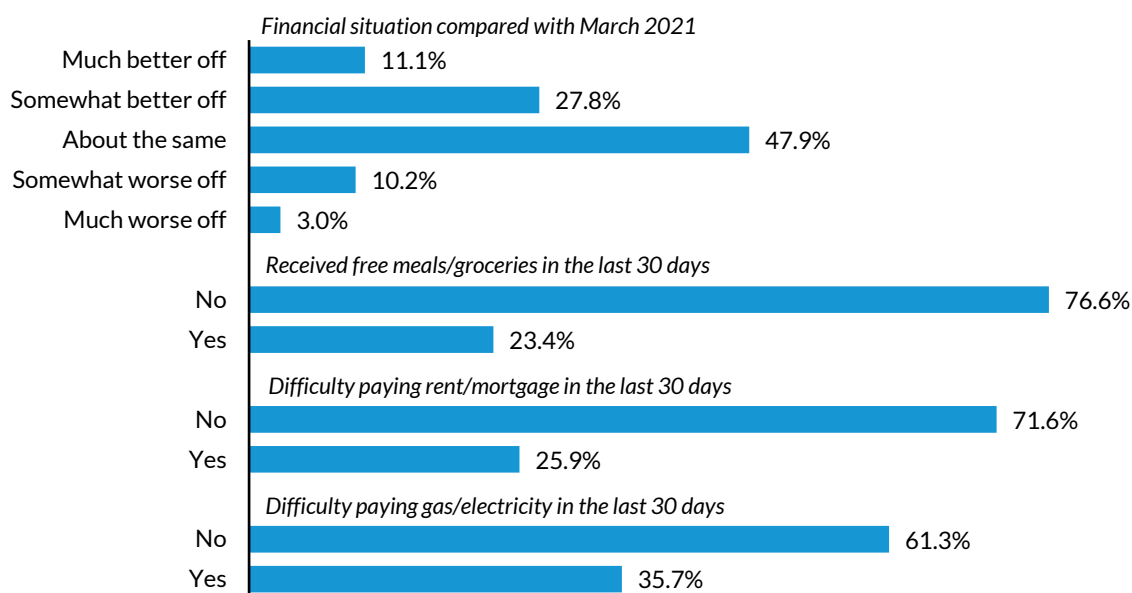
Five percent of respondents reported their children could not eat certain box contents because of allergies or intolerances, which was similar to the rate in 2021. One mother appreciated that, after receiving a call from BCHP to confirm her daughter's allergies, they were able to receive a substitution of sunflower butter. But some participants commented that the foods did not align with their cultural preferences. One Latina mother reported that, "the box is designed for American people more," but mentioned appreciating the inclusion of tortillas in the boxes. Appendix B includes a detailed breakout of surveyed participants' perceptions of box contents and a visual of the boxes.

Value of MTY to Participants

About two and a half years into the pandemic, participants were feeling less financial and material instability than in 2021. At the beginning of the program, only about 13.2 percent of respondents said their financial situation was somewhat or much worse than in March 2021, compared with 38.9 percent who reported they were somewhat or much better off (figure 8). Still, about one in four respondents had difficulty paying rent or mortgage (25.9 percent) and more than one-third (35.7 percent) had difficulty paying gas or electricity in the prior 30 days (figure 8).

FIGURE 8

Material and Economic Hardship of Participants, Beginning of Summer 2022



URBAN INSTITUTE

Source: MTY survey, round 1, conducted June 16–July 24, 2022 (N = 925). All estimates are weighted to account for nonresponse.

Over the course of summer 2022, food prices continued to increase, putting additional pressure on family food budgets. Over the course of 2022, grocery prices increased by 11.4 percent, with the peak occurring during the summer; in August 2022, grocery prices were 13.5 percent higher than they had been in August 2021.²⁶ External survey data shows that between December 2021 and 2022, food insecurity rose, and many households contending with high grocery costs had to cope by reducing or changing food purchases (Martinchek et al. 2023). Many advisory group respondents felt the effects of rising food and gas prices during the summer.

Survey respondents found the MTY program helpful in this time of need. Nearly two-thirds of respondents (63.2 percent) indicated that their household was able to save money on groceries because of the MTY program (figure 9). One advisory group participant noted their grocery bill went down by about \$50 because of the program.

Interviewees particularly valued the shelf stability of food, and many interviewees referenced the shelf-stable milk and the snacks as valuable items that decreased their grocery spending. Some parents commented that receiving snacks is especially useful during the summer when children are home. One participant explained,

As a parent it allows you to take a breath and say, “Well, I won't worry in the summer about this,” which is what they always ask for, their snacks. ... For me it means a great financial saving when I go shopping for groceries because that's what we spend the most on.

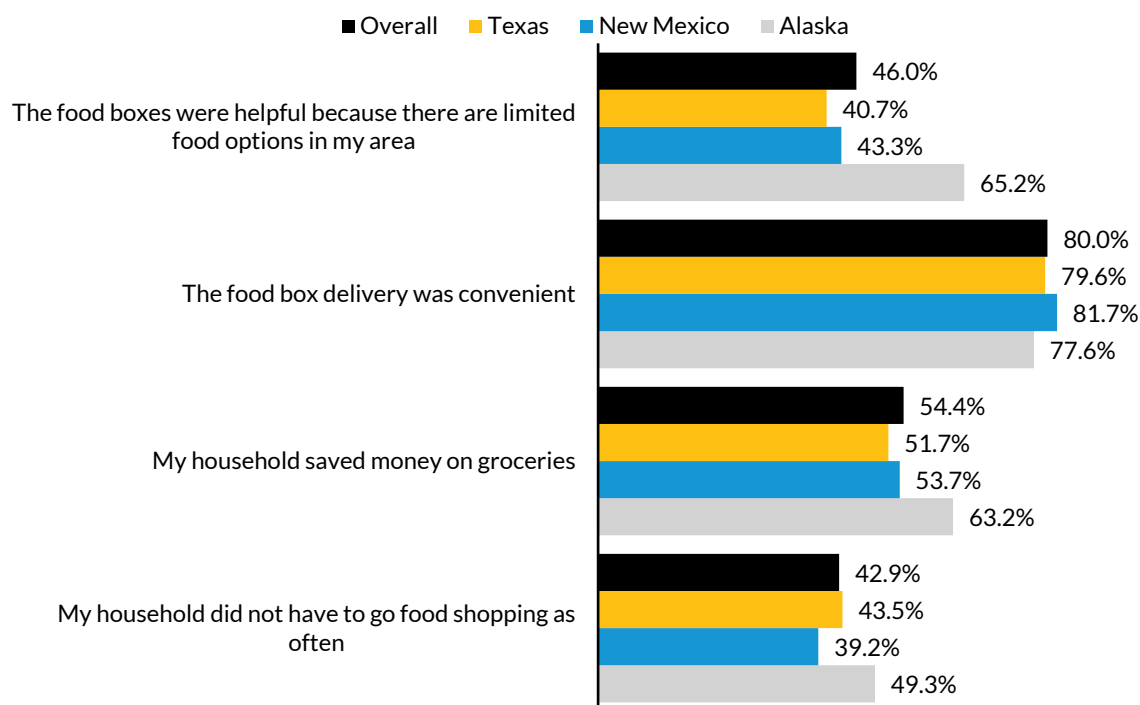
Another parent agreed that despite the program leaning toward snack items, it was still beneficial:

I felt like it helped a lot. This is my first year participating, and even to me if it was just feeling like it was snacks, it was something that I enjoyed for [my daughter] because sometimes she doesn't like to eat. So even if it's a snack that I have to get her eat, it was healthy. So I thought that it was great.

Convenience was another program benefit. Eight in 10 survey respondents rated the food box delivery as convenient, and 42.9 percent indicated that it saved them time grocery shopping. The benefits of home delivery were especially valued in Alaska, where it is especially difficult to access retail food options: 65.2 percent of respondents in Alaska agreed that the food boxes were helpful because of limited shopping options, compared with 40.7 percent of respondents in Texas and 43.3 percent of respondents in New Mexico. One advisory group participant from Texas mentioned that the stores in her area are far away from where she lives, and the boxes saved her many trips to the store.

FIGURE 9

Perceptions about Effects of Food Boxes, End of Summer 2021, Overall and by State



URBAN INSTITUTE

Source: MTY survey, round 2, conducted August 22-September 26, 2022 (N = 660). All estimates are weighted to account for nonresponse.

Notes: Participants were asked the extent to which they agreed or disagreed with the above statements on a 5-point scale (1 being “strongly agree,” 5 being “strongly disagree”). Agreement is represented here as a response of 1 or 2.

Program Implementation Challenges for BCHP and Vendors

In 2022, Baylor contracted McLane and PepsiCo as vendors. Broadly, each vendor was responsible for sourcing box contents that adhered to summer nutrition requirements, mailing boxes to families, and tracking deliveries. McLane shipped to Alaska, Utah, Texas, and some New Mexico households. PepsiCo shipped most of the boxes in New Mexico and Texas. Shipments were managed by two carriers, including the US Postal Service (USPS) and United Parcel Service (UPS). USPS was the exclusive carrier for McLane for a portion of the program. However, higher-than-expected box damages and inadequate data reported by USPS eventually motivated McLane to shift to UPS for shipping to Texas. USPS remained the main carrier for boxes in Alaska due to its higher capacity for *last mile* shipping.²⁷ PepsiCo used UPS primarily, but it relied on USPS as a last mile shipper in very rural communities. We conducted

interviews with BCHP staff and both MTY vendors to assist in documenting program experience, implementation challenges, and views on potential solutions.

A recurring performance challenge for BCHP and the vendors was the late federal approval of the program and the lack of certainty around the implementation timeline. The delay in USDA approval for the summer 2022 program caused ripple effects throughout the program. Vendors did not have sufficient time to set up ideal systems to operate daily activities, procure food items and negotiate prices and packaging with other related vendors, coordinate shipping processes and rates with carriers, and set up internal systems that were efficient in collecting shipping data and facilitating timely reporting. The limited time for planning and implementation ultimately affected the variety of the foods included in the food boxes, as vendors reported that they sometimes needed to procure more easily accessible items and had less time to procure culturally appropriate items. Challenges with shipping affected the quality of household experience because boxes often arrived delayed and/or damaged.

Another issue was that MTY's statement of work led to different expectations between the BCHP team and vendors when executing the program, though the scope of work development process was collaborative between both parties. In addition, BCHP struggled to build enforceable and credible accountability mechanisms into the vendor contracts. Some vendor activities (such as incomplete shipment reports) did not meet BCHP's performance expectations, though vendors sometimes perceived BCHP's requests as being outside of the statement of work and economically infeasible. A lack of effective enforcement mechanisms and penalties built into the vendor contracts made it difficult for BCHP to bring vendors in compliance with their expectations for the program when performance issues arose.

Returning vendors were able to archive past knowledge on MTY, which helped as new vendor staff entered into key management roles. BCHP also began onboarding sessions and one-on-one meetings with vendors in the spring of 2022 to orient new team members. One vendor had turnover in key personnel between summer 2021 and 2022, limiting institutional knowledge of program operations. Thus, despite having experience operating MTY from prior years, managers from that vendor who were charged with operating MTY struggled to carry out data collection and reporting, misunderstood pieces of the program's timeline, and faced other operational challenges. This difficulty was despite the onboarding process BCHP conducted for operational leadership on fundamental program expectations, and the fact that the program had been operating in a similar fashion for four years.

Another challenge concerned relationships with USPS and post offices. Post offices have played an important role as a last mile shipper in very rural communities that lack access to commercial shippers

such as FedEx or UPS, and USPS is the shipper of choice for packages going to Alaska. Post offices also served as pick-up locations for many families to retrieve their MTY boxes. McLane had long-established relationships with local postal officials in Alaska, which has helped McLane get MTY boxes to families and children in rural Alaska. But despite the important roles of USPS, vendors struggled to collect accurate shipping information because USPS's data system did not track MTY shipments accurately or in a timely way. USPS frequently marked boxes as damaged and did not deliver them without notifying the vendor, or delivery drivers sometimes mismarked deliveries as complete that never arrived. In addition, in site visits to Texas, Alaska, and New Mexico, the Urban team found that post offices were often caught by surprise by the influx of boxes into their facilities, especially in cases where post offices were small and did not have the space or staff to deal with the amount of MTY boxes coming their way.

Vendors struggled with shipment quality. Receiving late or damaged boxes was common among participating households, as shown previously. Damages can be attributed in part to external factors, such as the extreme summer heat in Texas and New Mexico in summer 2022, and damages also occurred when shippers mishandled the MTY boxes. However, problems also occurred because of insufficient box quality. USPS used flat rate boxes, which were smaller than boxes allowed by UPS and therefore limited the amount of packaging material included to protect food items. Vendors also had issues related to procuring food items that could withstand the harsh shipping and weather conditions, especially on short notice.

Finally, not all vendors were able to trace MTY boxes back to the inventory used to fill each food box, which became a substantial problem when some participants reported receiving recently expired food items. Tracing is crucial in identifying the source of spoiled or recalled food items and identifying any need to retool packaging. The lack of tracing also affected a vendor's ability to quickly identify deliveries not in compliance and reship replacement MTY boxes.

Comparison with Other Summer Nutrition Assistance Programs

Government agencies seeking to promote children's summer food security have explored multiple approaches to summer food access, and the landscape of options is continuing to evolve. While MTY is a relatively new and small demonstration program, in-person summer meal sites have been in operation since 1968. A summer feeding site program offers meals at a central location and may also provide the chance for students to engage in additional enrichment activities while coming on site for meals.

However, summer meal site programs are often limited to only a part of the summer and may not be offered in many rural areas due to limitations in sponsor coverage or capacity.²⁸ In addition, while overall take-up of summer meals has been far below that of the school meal programs offered during the academic year in general, it has been particularly challenging in the types of rural areas that are the core focus of MTY, often due to transportation barriers and long distances between sites and families who might be served.²⁹ School districts that offer a federal summer feeding program have not been permitted to also offer MTY concurrently, regardless of whether students within a district are able to attend the sites due to transportation or other barriers. A new state option is available for school districts to operate some non-congregate food distribution (e.g., grab-and-go meal options) in summer 2023, but this was not available for summer 2022.³⁰

Another major strategy for feeding eligible children during summer breaks is the summer Electronic Benefit Transfer (EBT) program, which provides a standard benefit via debit card to families with eligible children to use in grocery stores during the summer months. Summer EBT was first piloted by USDA in 2011. Evaluation research documented positive impacts of the Summer EBT pilot on food insecurity, and the demonstration was subsequently expanded to eight states and two Indian Tribal Organizations by 2018 (USDA 2016). Prior to the onset of the COVID-19 pandemic, the demonstration program evolved further to focus on multiyear grants to a smaller number of states and tribal organizations. Of the states served by the MTY demonstration in 2022, only Texas had any previous experience with Summer EBT, but it was not a demonstration site after 2018.

During the pandemic, Congress authorized a new program, known as Pandemic-EBT (P-EBT), which distributed benefits via debit card to eligible households to address school meals lost during school closures and periods of reduced attendance and to assist families during the summers. P-EBT was offered widely earlier in the pandemic but experienced uneven implementation, and fewer states engaged with the program by summer 2022. Among the MTY demonstration states, New Mexico and Utah continued to offer P-EBT in summer 2022, but Texas and Alaska did not.³¹ The authorization for P-EBT will end after 2023, but USDA received authority from Congress in late 2022 to establish a permanent Summer EBT option for states, beginning in summer 2024.³² To date, households have not been limited to participation in either MTY or P-EBT. In some communities with limited retail food options, MTY has served as a mode of increasing food access when EBT has not been offered or where card benefits are harder to redeem.

To gain some insight into how families view the relative benefits of these strategies, we asked survey respondents about multiple types of summer meal programs. Respondents were asked to rate

how helpful each program below would be for their family on a scale of 0 to 10, with 0 being the least helpful and 10 being the most:

- a program that delivers weekly meal boxes to your doorstep
- a program that provides a set amount of money on a card that can be spent on groceries
- a program that provides meals to children in-person at a location such as church or school

Across the MTY states, participants valued EBT benefits most highly, ranking it 9.4 out of 10 (table 4). This option can provide more stability to families, in part because the benefit may support food purchases for the household rather than only the child, and families have the most autonomy over the food they purchase and consume. EBT cards also address the challenges families may have in daily attendance at meal programs.

Congregate meal options were the least favored option among the respondents. Multiple advisory group respondents commented on the difficulty of accessing meal sites in their communities, such as barriers to transportation. One advisory group mother also described the stigma her older child felt in going to an elementary school for meals, relaying that her child would sometimes say,

“Mom—my friends, they look at me. I feel embarrassed. ... What if my friend sees me? They’re going to make fun of me.”

MTY received a ranking of 8.1, and approximately 8 out of 10 respondents (79.4 percent) said they would definitely be interested in participating next year if it were offered, with very few respondents (2.4 percent) indicating they would definitely not be interested.

TABLE 4

Average Participant Rating of Helpfulness on Summer Meal Programs, End of Summer 2022

	Overall	Alaska	Texas	New Mexico
Interest in types of summer meal programs (mean score out of 10)^a				
A program that delivers weekly meal boxes to your doorstep (<i>n</i> = 629)	8.1	7.7	8.2	8.2
A program that provides a set amount of money on a card that can be spent on groceries (<i>n</i> = 610)	9.4	9.1	9.3	9.5
A program that provides meals to children in person at a location such as church or school (<i>n</i> = 546)	6.2	7.5	5.7	6.2
Interest in participating in MTY next year (%)				
No	2.4%	3.8%	1.6%	2.5%
Yes	79.4%	78.1%	78.4%	80.6%
Maybe	18.3%	18.1%	20.0%	16.9%

Source: MTY survey, round 2, conducted August 22-September 26, 2022 (*N* = 660). All estimates are weighted to account for nonresponse.

Notes: Sample sizes are different for each question as not all survey respondents responded to each question.

^a Respondents were asked to rate how helpful each program below would be for their family on a scale of 0 to 10, with 0 being the least helpful and 10 being the most.

We also asked state personnel how MTY related to other summer nutrition assistance programs. Their answers varied by the specific context of the state and their districts. Alaska has had a particularly difficult experience with previous EBT programs. The state interviewee explained that the early Summer EBT pilots had provided a much smaller fixed monthly allotment than P-EBT, which was challenging in the Alaska context. In contrast, P-EBT utilized school year meal reimbursement values, which worked better in the context of high food prices. However, Alaska had a particularly difficult experience with P-EBT and only participated the first year as their partner SNAP agency lacked capacity to issue benefits on a timely basis due to the complex data challenges. While a Summer EBT program has the potential to be beneficial, state officials expressed concern there may be limited capacity to provide timely EBT benefits during the summer and were unsure if Summer EBT would adequately cover the cost of Alaska's high food prices.

Texas and New Mexico interviewees believed that a Summer EBT program could be easier for some families, like families in New Mexico that are geographically mobile during the summer months. The Texas state interviewee mentioned that they could see a world where both EBT and MTY can meet the varying needs of students across the state.

Some state and school district interviewees expressed concern that summer feeding programs such as Summer EBT and food box programs could end up functioning as competitors rather than as complementary options. For example, child nutrition personnel questioned whether Summer EBT or

home delivery may reduce participation in on-site programs, making it harder to keep a summer feeding site financially viable. A Texas interviewee mentioned the challenge that MTY could not operate at the same time as another summer feeding program within a district and how that created confusion, particularly because most summer feeding programs only cover six weeks of the summer. They pointed out that a student's "normal summer feeding program" does not bridge the hunger gap for the entire summer.

Recommendations for Future Implementation

Over the past four years of program implementation, MTY filled gaps left by other summer meal options in rural areas. It has shown indications of reducing household food insecurity among families receiving the intervention. However, the program cannot fully meet its potential without adequate implementation, including sufficient planning time that would allow the program operators to be responsive to feedback from participants and school districts. This section details opportunities to improve the MTY program.

Despite the focus of this report and recommendations oriented toward MTY and the various parties involved in administering this specific program, these recommendations and lessons learned can inform the implementation of other food box programs similar to MTY.

Timeliness of Program Initiation

The most vital and overarching consideration is that each program cycle be funded and planned well in advance of when it is intended to launch. This will maximize the potential of the program to provide high-need families with the support they need when they need it, as the program is intended to do. It is imperative that the program receives funding to not only start on time, but also finalizes all necessary external contracts with vendors well in advance of the launch date (including program evaluation partners).

The program needs thorough and advanced planning for several reasons. Such early planning would allow for more rigorous evaluation design, including time to construct a comparison group. Moreover, it would grant school districts sufficient time for more extensive outreach to enroll all eligible households, especially those with relatively higher needs. It also would allow food vendors time to intentionally plan for box contents that match the needs of participants, negotiate cost-effective shipping rates, and streamline distribution centers and shipping routes. Ideally, BCHP, USDA, and food vendors would finalize contracts by the beginning of the calendar year.

Enhancing Enrollment Experience

The following recommendations address difficulties that school districts have identified during the MTY outreach and enrollment process.

- Schools with lower staff capacity and higher need, such as schools under the BIE or in Alaska Native villages in more remote areas, were less likely to participate in the program. Ensuring these kinds of schools are included in early outreach to participate in the program and have adequate resources to participate is key to broaden the reach of the program overall.
- Given the confusion among advisory group participants about whether their children not enrolled in public schools were eligible for MTY, eligibility parameters should be clarified for districts and families before or during the enrollment period. A question and answer format may help families see their unique circumstances reflected in program guidance.
- Due to the sizeable number of participants who do not speak English or primarily speak another language at home, it is important that all outreach materials be created in the relevant languages to ensure that linguistically isolated families are aware of the program and can enroll.
- The program should support school districts to conduct outreach using multiple formats (e.g., flyers, text messages, materials given to children at school, and school events) to ensure the broadest reach. Limited literacy can be a consideration for some households, regardless of home language, so time to communicate at school meetings or via telephone may be important to engage with some families with significant need.
- Outreach and enrollment for programs focused on rural and remote areas should not primarily rely on an internet connection, given inequitable broadband access in many rural communities.

Improving Vendor Processes

The following recommendations focus on how food vendors can improve their processes to provide boxes more successfully to families and ultimately enhance participant program experience.

- Vendors need ample time to set up their operations given the complex logistical system involved in food box delivery programs in rural areas. Setting up systems to operate a program like MTY is also costly and could be more attractive to vendors if the program offered more certainty regarding year-to-year implementation details.

- The contract between the program manager and a vendor is the main tool to spell out responsibilities and roles for each party, including minimum performance standards. Contracts should include robust statements of work to clarify what activities are included in a program's operation, what data should be collected and what frequency it should be reported, and what to do when managing damaged shipments and food items. A comprehensive contract equips program managers with clear guidelines for action and proper enforcement mechanisms to keep vendors accountable for their performance in a program.
- An ideal vendor for a program like MTY should have experience managing food delivery programs, child nutrition programs, or (ideally) both. Additionally, a program like MTY should include resources to provide vendors with technical assistance to help them develop and retain internal knowledge and capacity over time or to orient new vendors.
- A broad engagement with local post offices and private carriers has proven useful in the past to prepare carriers for shipping MTY boxes. For programs like MTY, it is important to work with local postmasters in participating localities and provide them with the needed technical assistance to navigate box shipping and receipt. Program operators should work with local post offices to understand the shipping considerations for participating households. The USDA could also provide some support by communicating details about the program to the relevant postal authorities, encouraging reasonable shipping rates, and facilitating better data collection and sharing.
- Managing damages to food boxes relates to multiple areas of work. Accurate and timely reporting of shipments from carriers to vendors, from vendors to program managers and from program manager customer service to vendors allows program operators and vendors to identify shipping issues that result in greater-than-expected damages (e.g., box builds, routes, and weather or climate considerations) and to address them quickly so families can count on a reliable supply of food throughout the program. It is important for vendors to work with carriers to determine box specifications that would minimize damage and to test effective packaging before the delivery program is implemented. Proactive communication between vendors and carriers can also be helpful in ensuring proper handling of food boxes and mitigating last mile damages and spoiled foods.

Enhancing Participant Experience

The following recommendations from the participants themselves focus on how the program can be improved to better realize its goal of getting food to children and families in rural areas whose access to food is severely limited during the summer.

- Participants believed it is important that the program last all summer while school is out and that boxes are delivered on schedule and undamaged.
- The participants were aware that running a program as expansive as MTY is no easy feat and that there are bound to be issues with program implementation. However, some participants thought that if the program acknowledged the issues (e.g., high rates of box damages) and how they could be fixed, it would combat hesitancy to participate in the future.
- The lack of delivery tracking or communications between participants and the respective carriers was a prominent problem. Advisory group members recommended that program operators and/or vendors share tracking numbers with recipients. This way, they know when the boxes are coming so they can avoid having them sit out in the heat and anticipate them in their meal planning.
- Another suggestion was to have a quick and easy mechanism to provide timely feedback on damaged or expired box contents so that issues could be addressed right away.
- While households are generally satisfied with the variety and contents of boxes, parents have flagged that portion sizes should be different for younger versus older children to reflect different caloric needs.

We also learned that ongoing advisory groups with key stakeholders such as parents and school districts have proven very valuable in understanding program strengths and challenges. Similar programs should consider incorporating this form of feedback collection in some way.

Tailoring Program Design

Finally, based on insights learned across site visits with four rural school districts (see appendix G), it is evident that while need is highest among students and families during the summer, there is no one-size-fits-all approach when it comes to summer feeding. When deciding on the implementation of any summer meal program—whether it be an on-site congregate meal program, EBT offering, or a home

delivery program like MTY—some of the important factors to consider include, but are not limited to, the following:

- transportation infrastructure of the community
- internet and technology access, especially if needed for program enrollment
- availability and accessibility of post offices
- timing and availability of other summer meal programs being offered in the district
- retail food access

For home-delivered food programs to be as expansive as possible, implementing organizations need to be aware of the contextual factors of the communities they serve to reach as many families as they can.

Appendix A. Participant Survey Methodology

This appendix describes the sample size, response rates, and survey weight variables that were created for the analysis of the 2022 MTY participant surveys.

Summer 2022 MTY Participants

We surveyed a subset of households that were enrolled in the 2022 MTY program and consented to participate in the program evaluation ($N = 1,134$) out of 3,539 participating households. We selected all consenting participants in Alaska ($n = 386$) and a random sample of participants in New Mexico ($n = 452$) and Texas ($n = 496$). The decision to select a random sample in New Mexico and Texas was in part because we were anticipating the program would have a summer expansion group of participants, similar to the expansion that occurred in 2021 (Gutierrez et al. 2022). Ultimately, however, no summer expansion group materialized due to USDA funding delays.

The summer participants were asked to complete two surveys. The first round was fielded at the beginning of the program from June 16 to July 24, 2022. The second round was conducted at the end of the program and was in the field from August 22 to September 26, 2022. Most of the surveys were completed online via a link sent either to participants' email address or via a text message. To improve the response rate (particularly in Alaska, where internet connectivity can be challenging), many families completed a phone survey administered by Research Support Services Inc. instead of the online survey. Of the 925 round 1 responses, 145 were completed by phone and the remaining were done online. Of the 660 round 2 responses, 72 were completed by phone. The lower response rate for the round 2 survey was due in part to the major storms in Alaska during the fielding period, as well as dissatisfaction with the program. Table A.1 shows the response rates for rounds 1 and 2, as well as the response rate for those who completed both rounds. On average, the surveys took about 10 minutes to complete, and respondents were given a \$10 (Texas and New Mexico) or \$20 (Alaska) gift card for completing the survey.

TABLE A.1

2022 Meals-to-You Program Survey Response Rates

Survey	Sample size	Completed surveys	Response rate
Round 1	1,334	925	69.3%
Round 2	1,334	660	49.5%
Both round 1 and round 2	1,334	582	43.6%

Source: Author’s analysis of survey data.

Survey Weights

We used three sets of participant survey weights: (1) a round 1 summer MTY weight for estimates that used the first round survey; (2) a round 2 summer MTY weight for estimates that used the second round survey; and (3) a round 1 and 2 MTY weight for estimates that used families who responded to both surveys. The survey weights adjust our estimates to account for nonresponse and reduced potential nonresponse bias by adjusting our sample so that the respondents and nonrespondents ended up with the same distribution of characteristics given by the demographic information we had for the full population.

Survey weights affect variance estimates and as a result, tests of significance and confidence intervals. Variance estimates derived from standard statistical software packages that assume simple random sampling are generally too low, which can lead to overstated significance levels and overly narrow confidence intervals. The impact of the survey weight on variance estimates is measured by the design effect, which is explained in more detail in the next section of this appendix.

These survey weights include the following nonresponse adjustments:

- An adjustment to correct for the slightly higher response rate in summer round 1, round 2, and rounds 1 and 2 for those respondents in New Mexico who received boxes from McLane.
- A small adjustment to the summer sample to correct for slightly higher participation rates of families with fewer children.
- Some small adjustments to correct for differential school district response rates. For example, the Lower Kuskokwim school district in Alaska and the Gadsden Independent Schools in New Mexico had higher response rates than the other school districts in their states.

The final weights were then normalized so that the sum of the weights equaled the number of participants for each survey.

Design Effects

Post-data collection statistical adjustments are required due to the disproportionate participation rate of sampled families. The post-data collection adjustments require analysis procedures that adjust the standard errors that one would obtain doing a simple random sample that involved no adjustments. Therefore, when using survey weights, variance estimation requires estimating the survey design effect associated with the weighted estimate. The term *design effect* is used to describe the variance of the weighted sample estimate relative to the variance of an estimate that assumes a simple random sample.

In a wide range of situations, the adjusted standard error of a statistic should be calculated by multiplying the usual formula by the design effect (*deft*). Thus, the formula for computing the 95% confidence interval around a percentage is:

$$\hat{p} \pm (deft \times 1.96 \sqrt{\frac{\hat{p}(1 - \hat{p})}{n}})$$

Where \hat{p} is the sample estimate and n is the unweighted number of sample cases in the group being considered.

TABLE A.2

Design Effects for the Survey Weights in the Summer Meals-to-You Program, 2021

	Design effect
Round 1	1.07
Round 2	1.07
Rounds 1 and 2	1.06

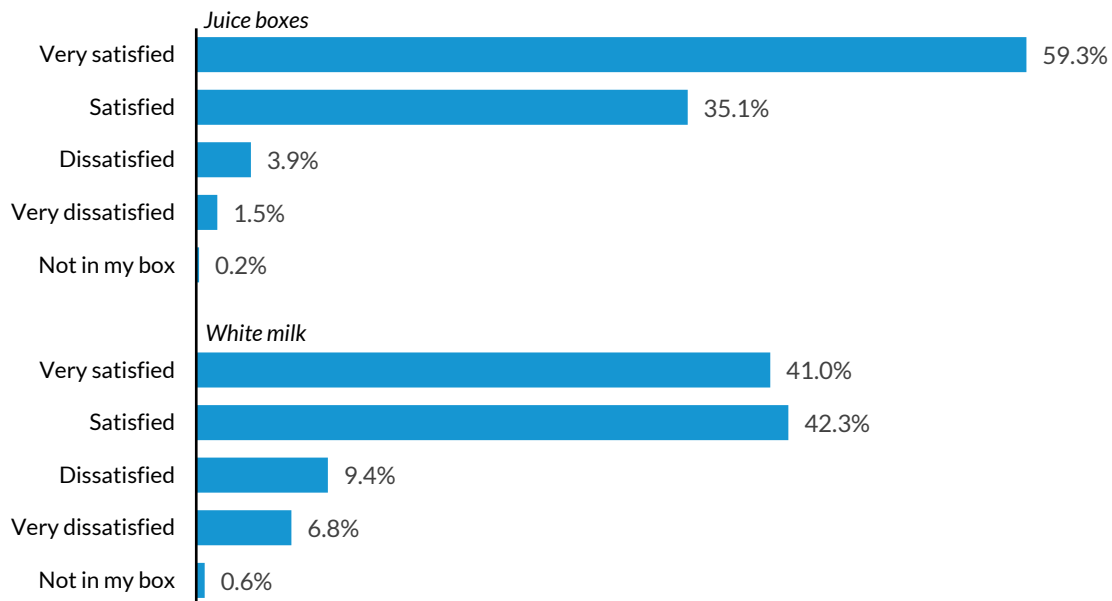
Source: Authors' analysis of survey data.

To get a more accurate estimate of the standard errors associated with a weighted estimate, one would multiply the unweighted standard error by the appropriate *deft* value shown in the table above. For example, suppose one was using the weight on a measure for the summer survey1 sample and the estimate had an unweighted standard error of .0212. The weighted estimate would not change; however, the standard error of the estimate would be 0.0227 (0.0212 x 1.07).

Appendix B. Satisfaction with McLane Box Contents

FIGURE B.1

Satisfaction with Specific Box Contents: Drinks



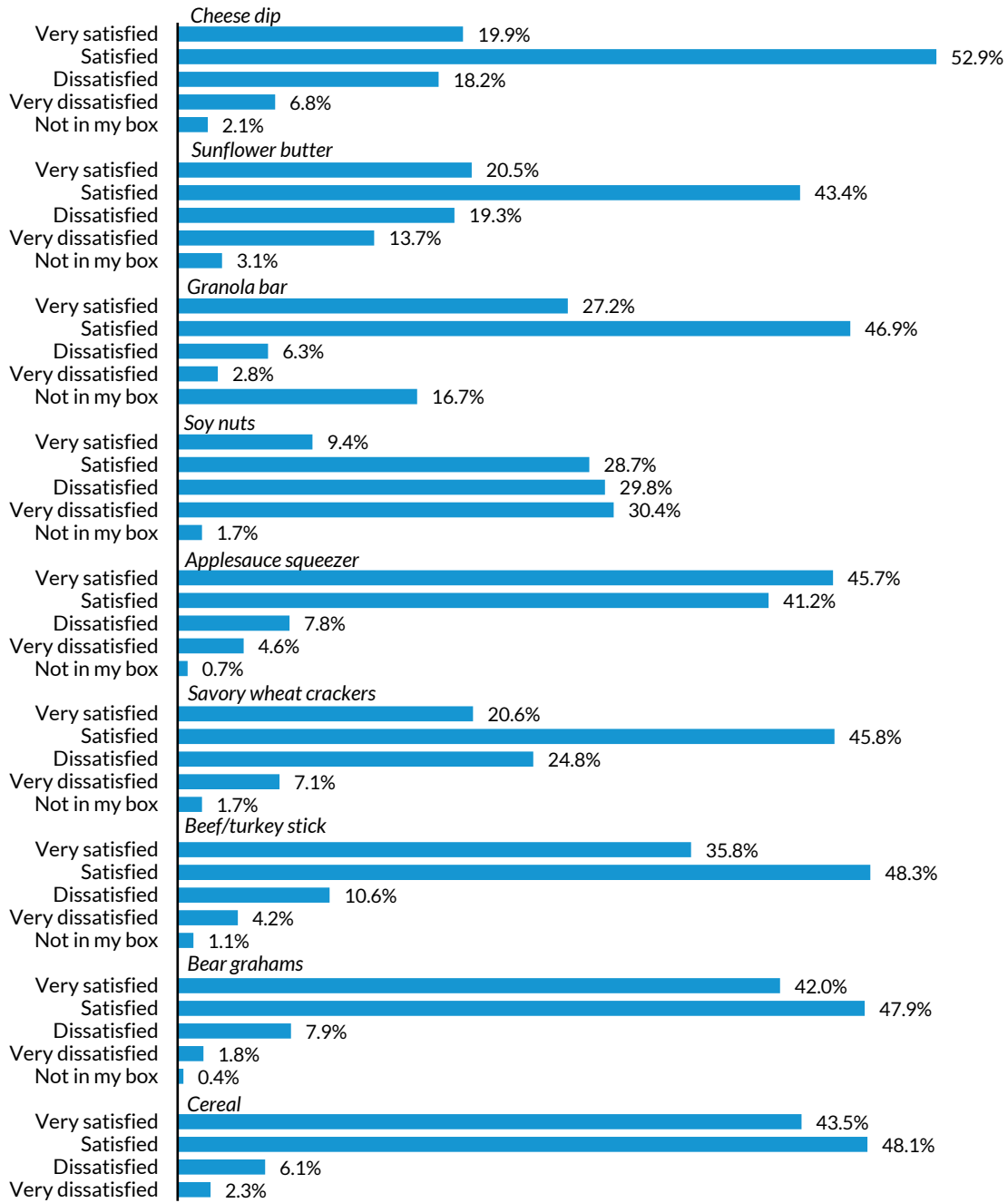
URBAN INSTITUTE

Source: MTY survey, round 2, conducted August 22-September 26, 2022 (N = 660). All estimates are weighted to account for nonresponse.

Note: Satisfaction with milk and juice was asked of everyone, since this was present in all boxes. All subsequent snacks and meal items were only asked for McLane boxes due to a programming error in the survey.

FIGURE B.2

Satisfaction with Specific Box Contents: Cereals and Snack Items



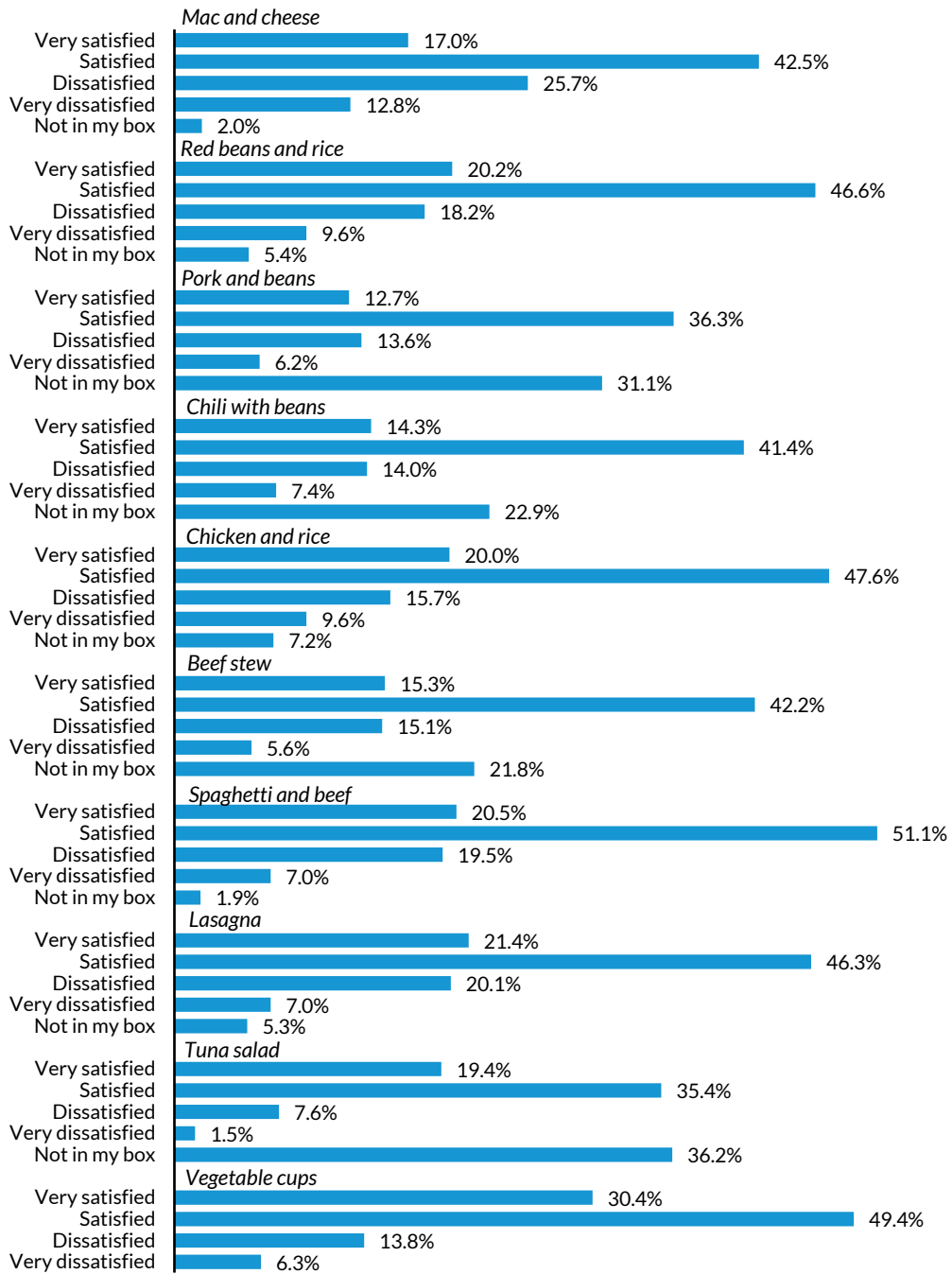
URBAN INSTITUTE

Source: MTY survey, round 2, conducted August 22-September 26, 2022 (N = 660). All estimates are weighted to account for nonresponse.

Note: Satisfaction with milk and juice was asked of everyone, since this was present in all boxes. All subsequent snacks and meal items were only asked for McLane boxes due to a programming error in the survey.

FIGURE B.3

Satisfaction with Specific Box Contents: Dinner Items



URBAN INSTITUTE

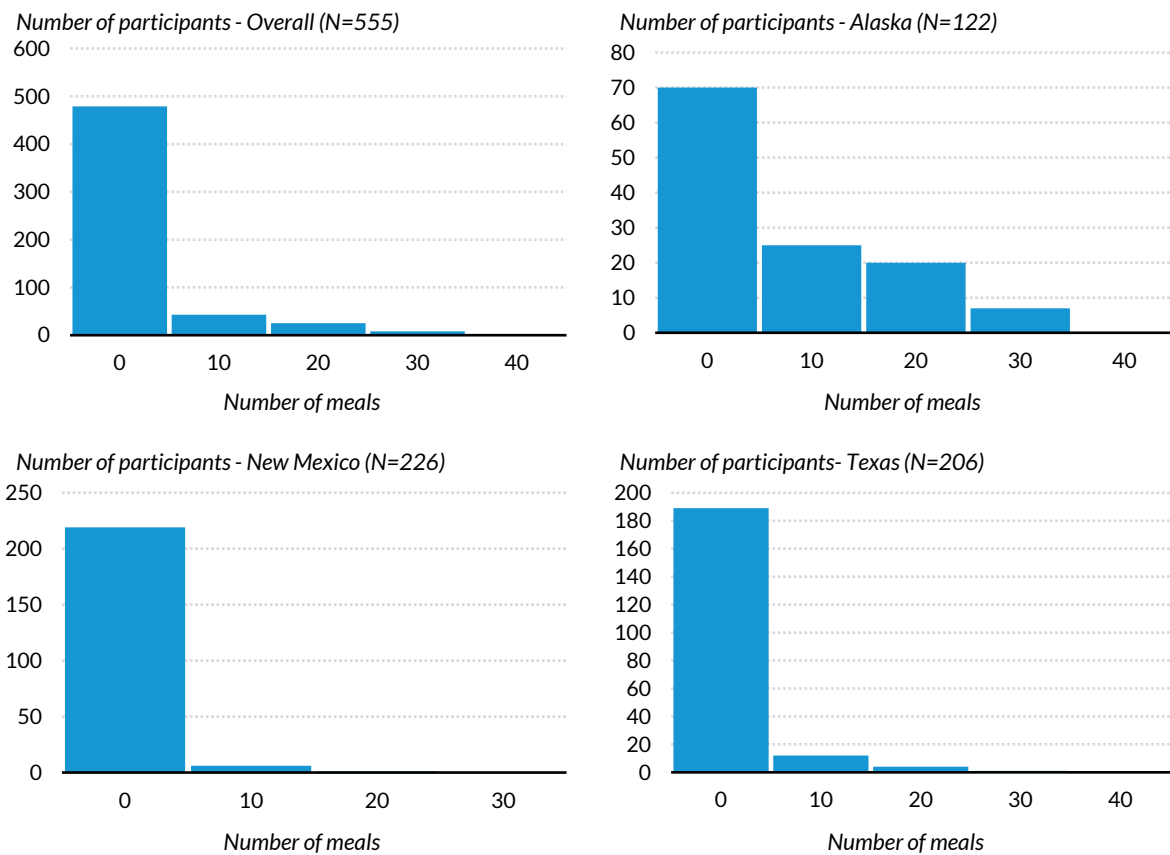
Source: MTY survey, round 2, conducted August 22-September 26, 2022 (N = 660). All estimates are weighted to account for nonresponse.

Note: Satisfaction with milk and juice was asked of everyone, since this was present in all boxes. All subsequent snacks and meal items were only asked for McLane boxes due to a programming error in the survey.

Appendix C. Distribution of Meals Received by Survey Time Point

FIGURE C.1

Number of Meals Received by Meals-to-You Participants before the Round 1 Survey, Overall and by State, 2022



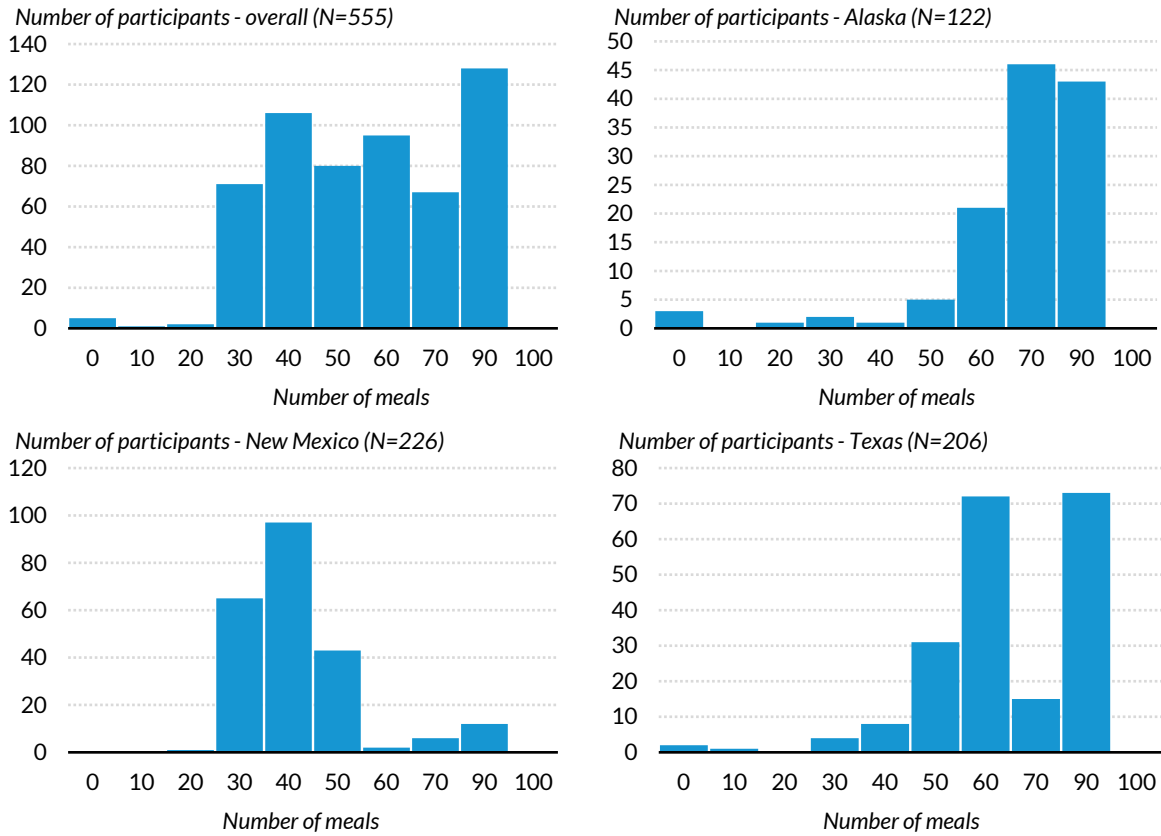
URBAN INSTITUTE

Source: Authors' analysis of programmatic shipping data. N = 555.

Note: Meal totals represent the number of meals marked as delivered.

FIGURE C.2

Number of Meals Received by Meals-to-You Participants before the Round 2 Survey, Overall and by State, 2022



URBAN INSTITUTE

Source: Authors' analysis of programmatic shipping data. N = 555.

Note: Meal totals represent the number of meals marked as delivered.

Appendix D. Regression Results

TABLE D.1

Impact of Receiving 10 Additional Meals-to-You Meals on Households' Food Insecurity and Food Insecurity Score, Overall and by State and Race/Ethnicity

	Food insecurity score (score difference on 0–6 scale)	Probability of being food insecure (percentage point change)	Probability of being very low food security (percentage point change)
Overall	-0.185 (0.134)	0.00745 (0.0368)	-0.0705** (0.0327)
Alaska	0.0967 (0.195)	0.0722 (0.0692)	-0.00085 (0.0406)
New Mexico	-0.18 (0.393)	-0.0256 (0.114)	-0.0694 (0.111)
Texas	-0.407* (0.221)	-0.0338 (0.0304)	-0.144** (0.0633)
White non-Hispanic	-0.647** (0.281)	-0.0564 (0.0453)	-0.18** (0.0737)
Alaska Native	0.292 (0.204)	0.0994 (0.0861)	0.0384 (0.424)
Hispanic/Latinx	-0.397 (0.286)	-0.0422 (0.0597)	-0.129 (0.0834)

Source: Authors' analysis of programmatic shipping data and MTY participants' responses to food insecurity survey questions.

Notes: Food insecurity was defined as responding affirmatively to at least two items on a six-item food security module. Very low food security was defined as responding affirmatively to at least five items on a six-item food security module.

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Appendix E. Comparison of Race and Ethnicity of MTY Participants and Enrolled Students by Districts

	American Indian or Alaska Native		Asian		Black or African American		Hispanic or Latino/a		Native Hawaiian or Other Pacific Islander		Two or More		White	
	MTY	District	MTY	District	MTY	District	MTY	District	MTY	District	MTY	District	MTY	District
Bering Strait School District	95.3	98.0	0.7	0.1	0.0	0.3	0.2	0.2	0.7	0.0	0.4	0.2	0.9	1.1
Lower Kuskokwim School District	97.8	95.9	0.0	0.3	0.0	0.1	0.0	0.3	0.0	0.0	0.6	0.2	0.0	3.1
Yukon Flats School District	100.0	98.5	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Yukon-Koyukuk School District	82.8	21.3	0.0	1.6	0.0	2.5	0.0	4.7	0.0	1.8	0.0	10.3	2.5	57.8
Belen Consolidated Schools	3.4	1.7	0.3	0.1	0.6	1.2	63.9	76.7	0.0	0.0	0.0	0.5	24.8	19.8
Chama Valley Independent Schools	4.9	5.8	0.0	0.0	0.0	0.5	90.2	82.9	0.0	1.3	0.0	0.5	4.9	8.9
Gadsden Independent Schools	0.3	0.2	0.1	0.0	0.6	0.4	85.0	97.0	0.0	0.0	0.1	0.0	9.5	2.4
Questa Independent Schools	0.0	1.1	0.0	0.0	0.0	0.0	87.5	87.2	0.0	0.4	0.0	0.4	8.3	11.0
Raton Public Schools	2.1	0.5	0.0	0.5	0.2	1.1	66.0	70.9	0.0	0.0	0.0	0.0	25.6	27.1
Red River Valley Charter School	0.0	0.0	0.0	0.0	0.0	2.4	40.9	47.6	4.5	0.0	0.0	0.0	36.4	50.0
Bloomington ISD	0.0	0.0	0.0	0.0	4.0	3.5	76.0	85.0	0.0	0.0	0.0	1.1	20.0	10.4
Buffalo ISD	0.6	0.2	0.3	1.2	4.0	3.8	40.9	44.0	0.0	0.0	0.0	2.6	51.4	48.2
Charlotte ISD	1.6	0.0	0.8	0.0	0.8	0.0	69.9	88.5	0.0	0.0	0.0	0.0	20.3	11.5
Crockett County Consolidated SD	0.0	0.4	0.0	0.4	0.0	0.4	66.7	76.3	0.0	0.0	0.0	0.3	33.3	22.3
Crowell ISD	0.0	0.0	0.0	0.0	0.0	2.5	0.0	42.1	0.0	0.0	0.0	5.0	100.0	50.5
Eustace ISD	2.1	0.2	0.0	0.1	3.5	0.8	11.4	13.4	0.2	0.0	0.0	3.6	80.5	82.0
Florence ISD	0.0	0.5	0.0	0.1	1.6	0.7	41.1	49.3	0.0	0.1	0.0	2.2	49.2	47.1
Grapeland ISD	0.0	0.0	0.0	1.8	27.0	23.0	12.1	8.9	0.0	0.2	0.0	3.1	60.3	63.0
Junction ISD	0.0	0.0	0.0	0.2	1.6	0.2	32.8	39.6	0.0	0.0	0.0	1.3	65.6	58.8
Malakoff ISD	0.0	0.4	1.3	0.2	7.2	11.3	19.6	19.8	0.0	0.1	0.0	3.5	65.4	64.7
Marlin ISD	0.0	0.0	0.0	0.5	0.0	56.0	0.0	34.2	0.0	0.0	0.0	2.7	100.0	6.7
Memphis ISD	0.0	0.0	0.0	0.2	9.6	8.6	54.8	61.6	0.0	0.0	0.0	1.1	35.6	28.4
Morton ISD	0.0	0.5	0.0	0.0	3.2	0.3	83.9	88.5	0.0	0.0	0.0	1.3	12.9	9.4
Nueces Canyon CISD	0.0	0.4	0.0	0.0	0.0	0.0	0.0	42.7	0.0	0.0	0.0	1.9	100.0	55.0
Sabinal ISD	1.3	0.0	0.0	0.0	0.0	0.2	73.8	86.4	0.0	0.0	0.0	0.5	20.1	12.9

	American Indian or Alaska Native		Asian		Black or African American		Hispanic or Latino/a		Native Hawaiian or Other Pacific Islander		Two or More		White	
	MTY	District	MTY	District	MTY	District	MTY	District	MTY	District	MTY	District	MTY	District
Tidehaven ISD	0.0	0.3	0.0	0.0	1.6	1.5	48.8	53.2	0.0	0.1	0.0	1.6	45.7	43.4
Yorktown ISD	2.6	0.4	0.0	0.0	4.7	2.9	42.1	48.3	0.0	0.0	0.0	1.5	40.9	46.9
Aneth Community School	100.0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Notes: ISD = Independent School District; MTY = Meals-to-You Program. Race is known for 100 percent of students enrolled in districts, and 95.5 percent of MTY participants.

Appendix F. Sample Menus and Box Pictures from Program Vendors

FIGURE F.1

Sample McLane One-Day Menu

Day 1 Menu	Size (oz)	Meal	Number of Units
Dairy Pure 1% Shelf-Stable Milk 27/8oz	8	Breakfast	1
SunCup 100% Fruit Punch Juice 40/4.23 oz	4.23	Breakfast	1
BOWLPACK FRUITY CHEERIOS 96/1oz	1	Breakfast	1
Dairy Pure 1% Shelf Stable Milk 27/8oz	8	Lunch/Supper	1
WK Corn Low Sodium Vegetable Cups 72/4oz	4	Lunch/Supper	1
Market Street Classic Apple Strawberry Puree, bulk 200/2.25o	2.25	Lunch/Supper	1
Nature's Select Dry, Roasted Soy Nuts 280/1oz	3.5	Lunch/Supper	1
Made Good Berry Granola Bar			1
Southgate Pork & Beans 24/7.5oz EZO	7.5	Lunch/Supper	1
CHERRY MIXED FRUIT IN 100% JUICE 6/4oz	1.4	Snack	1
Rockin'ola PRO Protein Granola 175/1.5oz	1	Snack	1

Source: Baylor Collaborative on Hunger and Poverty.

FIGURE F.2

Sample McLane Box Contents



Source: Baylor Collaborative on Hunger and Poverty.

FIGURE F.3

Sample PepsiCo One-Day Menu

		Day 1	Amount
Breakfast	Bread/Grain	Rice Krispies	1.0oz
	Fruit/Veg	Apple- 4.23oz Juice 100%	0.5cup
Lunch	Bread/Grain	FFG-C06 Bean Dip Meal	
		Tortilla strips	1.0oz
	Meat/Ait	Bean Dip	1.0oz
	Meat/Ait	Cheese Plank (Ranch)	1.0oz
	Fruit/Veg	Veg Juice 4.23oz - Power Punch	0.5cup
	Fruit/Veg	Amazing Raisins (Raspberry)	0.25cup
Snack	Bread/Grain	WG Pretzels, Gold Fish	1.0oz
	Meat/Ait	Peanut Butter Tube	1.0oz

Source: Baylor Collaborative on Hunger and Poverty.

FIGURE F.4

Sample PepsiCo Box Contents



Source: Baylor Collaborative on Hunger and Poverty.

Appendix G. Case Studies of Four Participating Districts

Part of 2022's summer MTY evaluation consisted of four in-person site visits to rural districts in Alaska, New Mexico, and Texas to shed light on how different rural contexts affect the success of a home-delivered meal program, what considerations may influence the success of this type of program, and recommendations for future programs. Examining these contextual factors is crucial to understanding families' needs and available resources and can inform the evolution of a responsive home delivery program that alleviates barriers to getting food into the hands of families. During the site visits, we spoke with school administrators and school nutrition directors, conducted four focus groups with adolescents attending schools in the district, and gathered other pertinent information from the community regarding shipping and retail food access. The following case studies summarize insights learned from visits made between October 2022 and January 2023 to Lower Kuskokwim School District (LKSD) in Bethel, Alaska; Buffalo Independent School District (BISD) in Buffalo, Texas; Charlotte Independent School District (CISD) in Charlotte, Texas; and the Gadsden Independent School District (GISD) in Santa Teresa, New Mexico.

Bethel, Alaska: Lower Kuskokwim School District

In October 2022, we visited the Lower Kuskokwim School District (LKSD) which consists of 28 schools: 5 located in Bethel and 23 located in villages along the Kuskokwim River Delta that are only reachable by small plane or boat. The district covers approximately 22,000 miles of roadless tundra roughly the size of West Virginia and is the largest rural school district in the state, serving about 4,000 students from prekindergarten to 12th grade. Approximately 1 in 10 (9.5 percent) of households in Alaska reported food insecurity in 2021, which is similar to the US average of 10.2 percent (Coleman-Jensen et al. 2022). However, rural areas often face higher rates of hardship, particularly among Indigenous communities. In Bethel, a staggering 1 in 5 (20.4 percent) of households report food insecurity, placing it in the top 5 percent of counties with the highest rates of food insecurity in the country.³³

Summer Feeding Options in LKSD

Two-thirds (66 percent) of LKSD students are directly certified or categorically eligible to receive free meals, making LKSD a Community Eligibility Provision (CEP) district.³⁴ That means that all students in

the district, regardless of household income, can receive free breakfast and lunch, and therefore, all students are eligible to participate in MTY.

In addition to the higher-than-average levels of food insecurity in this area, much work is needed to fill the gaps in feeding options during the summer. In LKSD, congregate summer meal options for students are very limited. Chief among the barriers noted by LKSD administrators is the fact that many school staff in villages leave the area during the summer to travel or pursue other opportunities in larger towns or even in the lower 48 states. This means local schools are essentially closed for the duration of the summer, making hosting any summer school meal site impossible. In village settings, the school is typically the only facility of significant capacity, leaving a lack of alternatives for congregate meals. Even during the regular school year, some schools may experience extended closures due to physical plant issues (e.g., lack of heating, frozen or burst pipes, or other water access issues) and may be closed for a month or more. One available summer option is 4-H, a national service organization that offers meals during the summer; however, this has several limitations. The program is only available in Bethel, not in the surrounding villages, so transportation becomes a significant barrier. Moreover, the program only allows for congregate meals (meaning they must be eaten on site) and can only feed a certain number of students at a time due to limited capacity.

Other Food Access and Local Context

During the summer, it is common for Alaska Native families and children in villages to leave for various activities, such as moving into fish camps to harvest from fish runs, or for other subsistence living activities such as hunting and gathering. These circumstances may make it more likely for families to miss out on outreach for programs offered after school concludes since they aren't around, especially if the outreach time allotted is short. While families have traditionally been able to rely on subsistence living, the unprecedented effects of climate change are also important to consider. Record-high temperatures in the Yukon River, for example, have led to significant salmon die-offs, which results in a dramatic loss of food and financial revenue for the state, as well as a critical cultural asset.³⁵ Moreover, in LKSD, there are at least two village communities that must be relocated as the river encroaches on the land, endangering school property and peoples' homes and creating intense disruption to daily life for families and communities. In these cases, a proactive plan for community food security is particularly important.

Retail food access in the region is limited as well—there are supermarkets with fresh produce in Bethel, but the villages only have small convenience-type stores that often lack inventory and have very

high prices. In general, food prices in Alaska are very high, which means that any program bringing food into the area is considered to be of high value given the limited resources. There is a food pantry in the area, but a school staff member noted it can be expensive to travel there; sometimes up to \$20 for one person. School personnel also reported that the state's food bank doesn't generally provide services directly to remote villages.

Even if daily summer meal sites were more abundant in Bethel, picking up meals to eat may also be difficult for LKSD families. Very few families, especially in the villages, have vehicles; instead, most families use boats, personal four-wheelers, or snow machines to travel. Taxi cabs are available in Bethel and generally charge \$5 per person, but again, are not available to people who live in the villages. Because numerous villages in the area cannot be accessed except by planes, offering a district hub is not a solution for many communities.

Another key barrier that any summer initiative must navigate are challenges with communications in villages, where internet access is severely limited and phone data can be prohibitively expensive. Connectivity in villages may be limited to schools, or not available at all. And while most families do have cell phones, data packages are expensive. Anecdotally, a school district administrator told us that it cost her \$169 to stream a movie and a half, which would consume all the internet data she could receive for one month.

Enrollment, Outreach, and Delivery Experiences

Similar to the experiences of everyone involved in MTY, USDA's late approval of the program meant shorter enrollment windows, and the food service director for the district noted that only about half of the schools ultimately participated in the program. Enrollment and subsequent participation was largely dependent on whether the school administrators received the flyers, other materials, and training kit from the school district contacts and passed them out in time. Two of the highest-need schools, as defined by their high rates of poverty and food insecurity, in the villages of Platinum and Oskarville were not able to participate.

Home-delivered meal programs operate slightly differently in this area—boxes do not arrive at families' doorsteps, but rather are delivered to local post offices for residents to pick up. This is because most homes do not have traditional addresses and cannot receive packages, and there is no infrastructure at the village level to support individual home delivery. However, we found that families are able to travel to their local post offices to pick up packages, especially since doing so can be flexible

to their own schedule, rather than organizing travel at predetermined times as would be necessary for congregate feeding sites.

Another unique issue that must be taken into consideration is the shipping infrastructure involved in getting boxes to Alaska. Shipping costs to Alaska, particularly to the villages, are extremely high, and were further impacted by inflation in 2022. A package sent to a Bethel village is first transported to a main hub area such as Anchorage or Juneau, then potentially stops in other hub communities along the way before arriving at the Bethel airport. From there, it may either go first to the main Bethel post office or straight to the village post office via plane or hovercraft.

One consideration for families' access to packages is that small village post offices often have just one worker, and if that worker has any extended absence of leave, the post office closes down. In these cases, someone may come by once a month to let families retrieve their packages. This can create an interruption if packages are meant to arrive weekly, and also creates a pileup in a family's home. Village families often have smaller homes with multiple family members, so there is limited room to store several boxes at a time.

Additionally, damages to packages are common. Boxes are handled roughly at each stop and may sit on tarmacs during harsh weather conditions for long periods of time. This can cause damages to the box's contents such as crushed or leaking items. Leaking items may then impact other boxes stored nearby in the post office, which are subsequently thrown away by post office workers. Improving structural integrity and packaging liquids separately were two key recommendations provided by school district and postal personnel to mitigate these issues. Finally, priority mail emerged as the most trusted method of shipping to ensure boxes reached their destination.

Box Contents and Expectations

Overall, no strong dislikes emerged regarding the existing MTY box contents. However, given the difficulties in getting fresh produce in villages, interviewees mentioned that items like fresh fruits and vegetables would add value. Bulk and family-style foods were also mentioned as ideal for a number of reasons. With larger packaged items, there would be fewer boxes needed and thus less storage area required. "Space is precious" in homes, as one school personnel noted, so bulk food would be better for storage. Additionally, trash management is difficult in the villages—they usually burn trash, but in one of the villages we visited, the incinerator was not functional. Boxes are always repurposed, either used to cut meat on or burned in the stove. Lots of small, plastic packaging creates large amounts of trash that

families cannot always manage. And finally, family-sized meals were mentioned as preferable so that parents and other siblings would not be left out.

Santa Teresa, New Mexico: Gadsden Independent School District

In January 2023, we visited the Gadsden Independent School District (GISD), which consists of 24 schools serving southern Doña Ana and Otero counties. GISD is the largest rural district in New Mexico, spanning 1,400 square miles and educating approximately 14,200 students from prekindergarten to 12th grade. Approximately one in nine households (11.5 percent) in New Mexico reported food insecurity in 2021, which is similar to the US average of 10.2 percent. (Coleman-Jensen 2022). Southern Otero and Doña Ana counties experience higher rates of hardship, with 15.5 and 13.8 percent of households being food insecure, respectively.³⁶ The higher-than-average levels of food insecurity indicate the importance of finding robust summer feeding strategies for these communities.

Overall, 58 percent of GISD students are directly certified or categorically eligible to receive free meals, making GISD a CEP district. That means that all students in the district, regardless of household income, receive free meals, and therefore, all students are eligible to participate in MTY.³⁷

Summer Feeding Options in GISD

In these two counties, multiple barriers to participation have led to a low uptake in on-site meals programs funded through the Seamless Summer Option program, which provides free breakfast or lunch to students through the public schools. Chief among the barriers GISD administrators reported were a lack of transportation options for getting children to schools during summer break, especially given the large geographic span of the district. Even families who live closer to sites may encounter challenges getting to school sites, since much of the area is unincorporated and lacks sidewalks for safe travel by foot. Nearby farming operations may also bring traffic that increases hazards of walking to schools.

Picking up meals to eat offsite, as was offered during the pandemic, may also be difficult for GISD families. While most families in these two counties have access to at least one family vehicle (over 90 percent in both counties³⁸), it is often used by parents or guardians working long and nontraditional hours. Given that many families in these counties are not from high-income backgrounds nor work in

high-paying occupations, per our conversations with school administrators, most families rely on one vehicle or on other families' abilities to give them rides. As a result, traveling anywhere from 30 minutes to an hour to pick up meals at a school may not be feasible. Further, public transportation in southern Doña Ana and Otero counties is expensive to operate, severely limited, or absent. In short, transportation, whether personal or public, is a scarce commodity, posing barriers for families to access food and other necessities.

Other Food Access and Local Context

Similar to the transportation barriers families face in picking up meals to eat offsite, families face barriers in accessing retail food options. In the most rural areas of GSD, the closest retail food options are dollar stores or gas stations that have limited produce and few nutrient-dense food options. Families have to travel closer to El Paso, Texas, to access food options that are more affordable and offer a greater variety of fresh foods.

Even if there are outlets nearby, another challenge that limits residents from equitably accessing food is the lack of infrastructure to enable safe walking. Moreover, once the sun goes down, many communities in these counties become pitch black due to the absence of streetlights. School administrators shared that people walking at night could face additional dangers from wild animals such as coyotes. Even if families wanted to walk, the distance and potential precarity would outweigh the benefit of walking to a location, making a vehicle necessary to get around these two counties.

Enrollment, Outreach, and Delivery Experiences

Knowing a community's demographic characteristics is essential for any federal nutrition program to adequately reach and serve its targeted beneficiaries. School administrators shared with us that a majority of the families in their school districts are Latinx, first- and second-generation immigrants. According to school personnel, over 90 percent of residents speak Spanish, making outreach in Spanish necessary to reach as many families as possible.

Additionally, many heads of households have jobs that require them to travel to Mexico or northern New Mexico for days on end, so families may need to periodically rely on other family members or friends to watch over their children. We also heard from older adolescents that they are often put in charge of caring for younger siblings and cousins. When speaking about a peer's household food situation, one adolescent said,

A lot of other kids actually ask for another [food] box to take home—most cases [for] little siblings that they have to take care of. They need it at the moment. Sometimes their parents are not there.

Speaking about the peer’s parents, the adolescent went on to say,

Mom or dad has to work full time to get money. ... He or she has to leave the kid there to get the money they need for the food. Either the big sibling or someone else would come take care of them.

These economic circumstances make it more likely that many families miss out on outreach for any summer program offered through school, especially if the enrollment window is short, since they are busy with work. School administrators noted that the window between when administrators were told that MTY would commence in summer and when families could enroll for MTY was too short. Many administrators noted that they felt they had about a week to realistically reach out to families, and as a result many families found out about the program far past the deadline. Outreach conducted during a short time frame can inadvertently miss many families who may be particularly in need of home delivery services. Future food delivery programs should be aware of these circumstances and incorporate multiple modes of outreach to ensure that they reach the families that can most benefit from the program.

Another factor necessary to successfully operate a home delivery program are verified mailing addresses. In the unincorporated communities within Santa Teresa, we found that multiple families may live on one plot of land with one address but live in separate homes. As a result, despite being separate families in separate physical homes, some families had issues receiving their boxes because one address could apply to more than one family, which posed an address validation issue. For these families who live on the same plot of land, it was challenging to make their address distinct from the other families on the same land, so if program administrators are not aware of the local housing context, it is possible that only one family at a particular address would be able to receive food.

Box Contents and Expectations

In general, there was no strong opposition to box contents among the adolescents who participated in the focus groups, though it is important to note that a sizeable number of them were unaware of the MTY food boxes and the program overall; we did not restrict focus group participation to program participants, as this was logistically difficult to coordinate and our questions were geared to be more general about food access. As a result, many of the adolescents offered suggestions for items they would like any program to provide, including fresh produce, high-protein options like beef, meals that

could be prepared easily, or options that resembled meals instead of snacks. Overall, adolescents who participated in focus groups also stressed the need for additional summer feeding options like MTY because of the economic precarity present in their community. One adolescent stated,

I think especially in our community—not to call us poor, but we’re kind of poor—and I think having a reliable source of food is really important to a lot of kids. We have food drives, and I know that a lot of people show up to those because it’s a necessity.

Another adolescent highlighted the structural barriers to food access that they and their families face:

It’s very difficult to get places, and you always see people walking on the side of the street or maybe even on the street because there’s no place for them to walk. I don’t think it’s typical to get places, even to get to Walmart. It’s just a longer drive. We live outside of the city kind of, and most of the school district does. We usually live outside of the city, and we have to get into the city to get necessities.

The rurality of their community, parents’ nontraditional work schedules, and a lack of physical resources (e.g. roads, physical retail food locations, and sidewalks), complicate how families feed their children, how older siblings feed their younger siblings, and how families access food.

To better serve families and their children in the GISD, the adolescents that participated in the focus groups suggested including simple recipes within boxes that demonstrate how certain foods can be cooked, especially for the children who have to cook for their siblings. They also suggested it was important to provide all outreach materials in English and Spanish since most families speak Spanish (these translated materials were provided by the BCHP team), and to market any food program through the school (e.g., having students take a flyer home) instead of relying on social media, since not all families have access to reliable internet. The adolescents also noted that delivering food boxes or offering a quick, discrete pick-up option is an efficient way to provide families food and lessens the stigma that some families feel when receiving free food. As one adolescent noted,

My father [and] my mother found it very humiliating to ask for stuff like that because it’s their pride. They’re supposed to be the ones taking care of their child. It just, it kind of sucks because ... there’s been a lot of times where I didn’t have food and I didn’t have those things, like the food drives or the little giveaways. It was hard.

Buffalo, Texas: Buffalo Independent School District

In November 2022, we visited the Buffalo Independent Schools District (BISD). BISD covers 266 square miles across Leon and Freestone counties, includes three schools, and serves approximately 950 students from prekindergarten to 12th grade. Approximately one in nine households (13.7 percent) in

Texas reported food insecurity in 2021, which was found to be significantly higher than the US average (10.2 percent of households) (Coleman-Jensen 2022). Moreover, households in the district experienced higher rates of hardship, with 19.6 percent experiencing food insecurity in Freestone County and 22.0 percent in Leon County.³⁹ BISD is a CEP district that offers free meals to all students regardless of household income, and 63 percent of BISD students are directly certified or categorically eligible for free school meals.⁴⁰ However, only 33 percent of BISD students participated in MTY.

Summer Feeding Options in BISD

BISD offered school meals under traditional National School Lunch Program and School Breakfast Program while hosting June 2022 summer school at the elementary, middle, and high schools. BISD's child nutrition director explained that there were not enough staff to host a summer meal program for the remainder of the summer, and the only summer feeding site available to students is a 45-minute drive away. They mentioned that the site is often unfamiliar to parents, and that even for parents that have a car, driving 45 minutes for one to two meals everyday often isn't worth the gas it takes to get there.

Generally, mainly the students who attend summer school are the students receiving the school's summer breakfast and lunch options. For students not attending summer school, access can be a barrier. Students can live up to 20 miles away from school and generally lack transportation to the school to receive free meals, especially twice a day. Moreover, the child nutrition director described how walking would not be a safe option as some students would have to cross up to three highways to get to school. It is critical to note that MTY is not authorized to provide deliveries while there are summer meal programs in operation, and students had to wait until after summer school was over in order to begin receiving boxes.

Other Food Access and Local Context

Through conversations with students and school administrators, we learned that the nearest affordable supermarket (i.e., Wal-Mart) is a 45-minute drive away in Huntsville, Texas. Many families do not have reliable or consistent transportation to grocery stores, and often carpool with others. Nearby options such as Dollar General, Family Dollar, and Brookshires often lack fresh produce and are comparatively expensive for last-minute, everyday needs. When we visited the dollar stores, we found that they lacked produce and raw meat options, with the exception of frozen ground beef, while the local supermarket, Brookshires, had more produce and raw meat options but was more expensive. Eligible families also

have access to a local food pantry, where families can visit once per month, and the quantity of items available to them depends on family size.

Enrollment, Outreach, and Delivery Experiences

A number of factors at the end of the school year complicated enrollment and outreach efforts for the summer 2022 program in BISD. Administrators explained that the high share of students learning English as a second language meant that all forms of communication with families about the program needed to be available in both English and Spanish. USDA's late approval of the program meant shorter enrollment windows, and an elementary administrator stated that the program did not reach some of the district's students most in need due to the late and short enrollment window. Moreover, due to the circumstances of those most in need in the district (e.g., unreliable internet and cell service or frequently changing cell phone numbers), the child nutrition director explained that outreach needed to occur in March, rather than May, and enrollment needed to begin in April to reach more families. They explained that if outreach began in March, the school could organize events on school grounds where parents could come in person, potentially see an example of food box contents, and use the school computers and internet to enroll in the program.

When we visited the local post office, we learned that the BISD post office handled about 70 MTY boxes per week. While boxes were shipped to both PO boxes and physical addresses, USPS did not deliver many of the physical address boxes, so the majority of participants were required to pick up their boxes weekly from the post office.

Box Contents and Expectations

The food items liked by focus group adolescent participants included the rice and beans packages, raisins, milk, cereal, graham crackers, and fruit cups; they did not care for canned macaroni and cheese, pizza-flavored crackers, and other canned pasta. When asked what items they would like to see in boxes, they described a number of ideas, including canned tuna, Cheez-Its crackers, dried fruit, canned beans, and drinks such as orange juice. School administrators mentioned that some of the students do not have running water, electricity, and/or microwaves, which would make it difficult to prepare some of the box contents.

Charlotte, Texas: Charlotte Independent School District

We also visited the Charlotte Independent School District (CISD) in November of 2022. CISD is located in Atascosa County and covers 244 square miles. It has three schools serving slightly more than 400 students. Approximately 11.8 percent of households in Atascosa County are food insecure.⁴¹ CISD is a CEP district where 60 percent of students are directly certified or categorically eligible for free school meals,⁴² However, only 29 percent of CISD students participated in MTY.

Summer Feeding Options in CISD

CISD offered school meals under SFSP from end of May through June 2022. However, participation rates are low, and data show that the program reached only 8–13 percent of eligible students during operation.⁴³

Similar to students at BISD, students can live up to 20 miles away from school, and the child nutrition director noted that finding transportation to the school twice a day is not feasible for the majority of these students, whose parents are using cars to drive to multiple jobs. The child nutrition director explained that students receiving summer meals were largely summer school students, meaning those that did not attend summer school had limited access. Overall, participation rates in summer meals were low compared to the school year. Moreover, because MTY is not permitted to run at the same time as another school meal program, students could not begin to receive MTY boxes until July when SFSP was no longer offered.

The school nutrition director gave additional background on school meal programs during the school year, mentioning how students appear to “stock up” on food at school because they know they will not have many options at home. Moreover, she described how well the grab-and-go method had worked during the pandemic and expressed her desire for the same type of model to be available during the summer months; a permanent noncongregate model is now available starting in summer 2023 for rural areas. A school counselor described the summer months as “disconnected,” and often worried about where students get their food during the months when school is out.

Other Food Access and Local Context

Students and school administrators gave in-depth descriptions of local food access options. We visited all three local store options: Family Dollar, Dollar General, and a convenience store called A&I grocery, all of which had limited, if any, produce. Dollar stores had relatively lower prices but few fresh meat

options (i.e., frozen ground beef). A&I had more options for produce and meat (including a meat counter with chicken, beef, and pork), but prices were more expensive.

Charlotte is located 15 miles southwest of Pleasanton, Texas, which has large supermarkets like H-E-B and Wal-Mart. Still, multiple school administrators mentioned how inflation and gas prices had affected local families. The number of students riding the bus to school had recently skyrocketed, and administrators hypothesized that it was due to gas prices. They therefore also suggested that even the drive to Pleasanton might not be as easy for families as it had been in the past.

According to those interviewed on the site visit, families generally respond well to EBT programs since the area has relatively good access to grocery stores and EBT is more inconspicuous than “a box of food showing up on your front porch.” However, one school counselor described the EBT process as “tedious” and believed some families would rather struggle than deal with the paperwork needed to apply. This issue may be relevant in the summer of 2024, when the permanent Summer EBT program will roll out and families may need to apply once more. Lastly, a food bank visits the CISD community once each month.

Enrollment, Outreach, and Delivery Experiences

Because CISD was running SFSP through June, families had relatively more time than other districts to enroll for MTY boxes to arrive in July once SFSP had ended. However, the child nutrition director described family dynamics and how they affect the outreach and enrollment process. Many children, for a variety of reasons, live with grandparents that do not speak English. The child nutrition director, who often visited families at their homes to help them enroll into MTY, asked that the program’s flyer be made simpler for older, Spanish-speaking generations to understand.

Because of these family dynamics, as well as internet access barriers, several school administrators expressed worry that the students who were harder to reach were those who needed the MTY program the most. And the fact that the outreach was conducted at the end of the school year made it more difficult to conduct timely outreach for those students. The child nutrition director also expressed interest in creating an opportunity for parents to come to the school during April to see a box of example contents and use the school resources to help enroll families.

When we visited the local post office, we learned that the Charlotte postmaster also covers multiple post offices across the region. MTY boxes are generally delivered to Jourdanton, Texas, about 10 miles away, and Charlotte post office workers drive to pick them up and bring them to the Charlotte

post office. The post office’s storage area is about 20 feet by 30 feet, and workers described being overwhelmed by the boxes. While it “isn’t nearly as bad as Christmas time,” there are usually only two workers and about 500 MTY boxes. Workers had to place boxes on shelves rather than directly on the floor after an incident of ants in the boxes occurred during the first week. While people generally come to the post office to retrieve their delivered boxes, the workers described some confusion about delivery expectations for some families. Families were expecting the box to be delivered to their door rather than to the post office, and the workers suggested that there be clearer communication with families about how they should expect to receive their boxes.

Box Contents and Expectations

Through discussions with students and parents, we learned that students generally liked the rice and bean option but did not like the chicken jerky or vegetable cups. Students suggested including more cereal, breakfast granola bars, and even powdered drinks to add to water. From these conversations, some cultural issues emerged related to the box contents. Parents and students alike shared that the largely Latinx population the program serves typically prepares and eats family meals together, making the individual meals that come in MTY boxes less than ideal. Parents described how EBT funds could be used toward family meals and wanted to know why something similar was not an option with box contents. Items they would have appreciated are rice, beans, potatoes, eggs, and flour.

Key Insights Learned

Based on insights learned across these four rural school districts, it is evident that while need is highest among students and families during the summer, there is no one-size-fits-all approach when it comes to summer feeding. When deciding on the implementation of any summer meal program—whether it be an on-site congregate meal program, EBT offering, or a home delivery program like MTY—some of the important factors to consider include, but are not limited to, the following:

- transportation infrastructure of the community
- internet and technology access, especially if needed for program enrollment
- availability and accessibility of post offices
- timing and availability of other summer meal programs being offered in the district
- retail food access

For home-delivered food programs to be as expansive as possible, implementing organizations need to be aware of the contextual factors of the communities they serve to reach as many families as they can. However, the families who could most benefit from a home-delivered food program in rural areas are often the hardest to reach. Implementing organizations need to be able to allot sufficient time for outreach and enrollment, ensure materials are in the necessary languages, allow for complex address verification given the nature of rural families' addresses and living circumstances, and collect feedback throughout the program to respond to any issues that arise in real-time. If implementing organizations are attuned to their intended beneficiaries, they will increase the likelihood of reaching the families who could benefit the most.

Notes

- ¹ One school district with two households and six participants enrolled in the summer 2022 program from Utah.
- ² The MTY pilot was originally meant to last for three years and expire in summer 2021, but USDA decided to extend the program to a fourth summer and officially requested a proposal from BCHP in March 2022.
- ³ We proposed an additional tentative subquestion (“Did participating school children [where data is available] see improvements in school outcomes?”), which would have required additional data collection from school districts. However, the research team did not have the time or funding to pursue it.
- ⁴ Respondents received either a \$50 (or \$60 if in Alaska) Amazon or prepaid VISA gift card for survey completion.
- ⁵ Participant survey respondents received either a \$10 (or \$20 if in Alaska) Amazon or prepaid VISA gift card for participating.
- ⁶ In all advisory groups (for school districts and participants) and in adolescent focus groups, participants from New Mexico and Texas were offered a \$50 gift card for their participation, and Alaska participants were offered a \$60 gift card.

The number of boxes is derived from total number of meals successfully marked as delivered to participants divided by 10 meals, which was the average MTY box size. This number comes from a shipping dataset created by BCHP.
- ⁸ WIC serves pregnant and postpartum women and their children up to age 5 if they meet income guidelines of 185 percent of the federal poverty level.
- ⁹ The six-item short form of the survey module and the associated Six-Item Food Security Scale were developed by researchers at the National Center for Health Statistics in collaboration with Abt Associates. For more information about using the six-item food security module, see “U.S. Household Food Security Survey Module: Six-Item Short Form,” USDA Economic Research Service, September 2012, <https://www.ers.usda.gov/media/8282/short2012.pdf>.
- ¹⁰ Note that Utah was dropped from the state-specific analyses because there was only one enrolled household.
- ¹¹ Only 8 percent of household identified as another race, including Black, Asian, Native American, or mixed race. These households are included in other analyses but are not included in the race/ethnicity subgroup analysis because the diversity of the category makes findings difficult to interpret.
- ¹² These rates are reported for MTY participants who took both rounds of the survey, experienced at least half of their baseline lookback period before they began the program, and received at least 75 percent of the expected adjusted program meals received between the two survey waves (meaning they received two meals per child for at least 75 percent of weekdays between survey rounds). About 10 percent of the sample was cut in response to these latter two restrictions. Survey respondents who took both rounds of the survey were weighted to reflect the overall MTY participant population to account for nonresponse bias. Further weights were not applied for the small additional restrictions to the sample.
- ¹³ We considered survey respondents to have a “valid baseline” if at least 15 days of the 30-day food insecurity lookback period occurred before the household received its first MTY meal box.
- ¹⁴ For this analysis, when boxes were re-shipped due to damages or the original box not arriving, we counted the reshipped box arrival date as the date of delivery and did not count the original boxes. While the program officially ended in August 2022, replacement shipments continued through October 2022.
- ¹⁵ The survey was also sent to the participating district in Utah, but they did not respond.

- ¹⁶ Sophia Weng, “Could Investments in Community Broadband Bridge the Digital Divide?”, *Urban Wire (blog)*, August 11, 2022, <https://www.urban.org/urban-wire/could-investments-community-broadband-bridge-digital-divide>.
- ¹⁷ “Summary Findings: Food Price Outlook, 2023,” USDA Economic Research Service, last updated February 23, 2023, <https://www.ers.usda.gov/data-products/food-price-outlook/summary-findings/>.
- ¹⁸ “Child Nutrition COVID-19 Waivers,” USDA Food and Nutrition Service, July 12, 2022, <https://www.fns.usda.gov/disaster-assistance/child-nutrition-covid-19-waivers>.
- ¹⁹ See “Food Bank of Alaska,” accessed August 9, 2023, <https://foodbankofalaska.org/> and “Camp Fire Alaska,” accessed August 9, 2023, <https://www.campfireak.org/>.
- ²⁰ “New Mexico: 2020 Census,” US Census Bureau, August 25, 2021, <https://www.census.gov/library/stories/state-by-state/new-mexico-population-change-between-census-decade.html>.
- ²¹ “BIE Schools Directory,” U.S. Department of the Interior, Bureau of Indian Education, accessed September 1, 2023, <https://www.bie.edu/schools/directory>.
- ²² “Texas: 2020 Census,” US Census Bureau, August 25, 2021, <https://www.census.gov/library/stories/state-by-state/texas-population-change-between-census-decade.html>.
- ²³ “Alaska: 2020 Census,” US Census Bureau, August 25, 2021, <https://www.census.gov/library/stories/state-by-state/alaska-population-change-between-census-decade.html>.
- ²⁴ “Utah: 2020 Census,” US Census Bureau, August 25, 2021, <https://www.census.gov/library/stories/state-by-state/utah-population-change-between-census-decade.html>.
- ²⁵ “BIE Schools Directory,” U.S. Department of the Interior, Bureau of Indian Education, accessed September 1, 2023, <https://www.bie.edu/schools/directory>.
- ²⁶ “Prices for Food at Home up 13.5 Percent for Year Ended August 2022,” *TED: The Economics Daily*, US Bureau of Labor Statistics, September 15, 2022, <https://www.bls.gov/opub/ted/2022/prices-for-food-at-home-up-13-5-percent-for-year-ended-august-2022.htm>.
- ²⁷ Last mile delivery refers to the final step of the delivery process in which a product is transported from a fulfillment center to the recipient’s address. This is challenging in rural areas where population density is low and addresses are far apart or inexact.
- ²⁸ “USDA Summer Meals Study,” USDA Food and Nutrition Service, October 20, 2021, <https://www.fns.usda.gov/cn/usda-summer-meals-study>.
- ²⁹ Katie Kellenberger, “New Report on Child Hunger in Rural America,” No Kid Hungry, February 18, 2020, <https://www.nokidhungry.org/blog/new-report-child-hunger-rural-america>.
- ³⁰ “Non-Congregate Summer Meal Service,” USDA Food and Nutrition Service, August 1, 2023, <https://www.fns.usda.gov/sfsp/non-congregate>.
- ³¹ “State Guidance on Pandemic EBT,” USDA Food and Nutrition Service, last updated August 7, 2023, <https://www.fns.usda.gov/snap/state-guidance-coronavirus-pandemic-ebt-pebt>.
- ³² “Summer EBT,” USDA Food and Nutrition Service, accessed August 9, 2023, <https://www.fns.usda.gov/sebt>.
- ³³ “Food Insecurity among Overall (All Ages) Population in the United States,” Feeding America, accessed August 8, 2023, <https://map.feedingamerica.org/>.
- ³⁴ “Eligibility for Community Eligibility Provision,” Food Research & Action Center, accessed August 9, 2023, <https://frac.org/community-eligibility-database/>.

- ³⁵ Bathsheba Demuth and Olivia Ebertz, “Yukon Salmon Populations are Falling. The Cultural Damage is Vast,” September 15, 2022, *Washington Post*, <https://www.washingtonpost.com/outlook/2022/09/15/alaska-salmon-climate-change-indigenous-communities/>.
- ³⁶ “Food Insecurity among Overall (All Ages) Population in the United States,” Feeding America, accessed August 8, 2023, <https://map.feedingamerica.org/>.
- ³⁷ “Eligibility for Community Eligibility Provision,” Food Research & Action Center, accessed August 9, 2023, <https://frac.org/community-eligibility-database/>.
- ³⁸ “2021 ACS One-Year Estimates,” Table B08201, US Census Bureau, accessed September 1, 2023, https://censusreporter.org/data/table/?table=B08201&geo_ids=16000US3570700,160|05000US35013&primary_geo_id=16000US3570700.
- ³⁹ “Food Insecurity among Overall (All Ages) Population in the United States,” Feeding America, accessed August 8, 2023, <https://map.feedingamerica.org/>.
- ⁴⁰ “Eligibility for Community Eligibility Provision,” Food Research & Action Center, accessed August 9, 2023, <https://frac.org/community-eligibility-database/>.
- ⁴¹ “Food Insecurity among Overall (All Ages) Population in the United States,” Feeding America, accessed August 8, 2023, <https://map.feedingamerica.org/>.
- ⁴² “Eligibility for Community Eligibility Provision,” Food Research & Action Center, accessed August 9, 2023, <https://frac.org/community-eligibility-database/>.
- ⁴³ “Summer Meal Programs - Summer Food Service Program (SFSP) - Contacts and Program Participation - Program Period 2022,” Texas Open Data Portal, accessed September 1, 2023, <https://data.texas.gov/dataset/Summer-Meal-Programs-Summer-Food-Service-Program-S/w74f-mcq5>.

References

- Anderson, Theresa, Elaine Waxman, and Craig Gundersen. 2022. "The Impact of the Meals-to-You Program on Food Insecurity." *Applied Economic Perspectives and Policy* 44 (3): 1499–1512.
- Blumberg, Stephen J., Karil Bialostosky, William L. Hamilton, and Ronette R. Briefel. 1999. "The Effectiveness of a Short Form of the Household Food Security Scale." *American Journal of Public Health* 89 (8): 1231–34.
- Coleman-Jensen, Alisha, Matthew P. Rabbitt, Christian A. Gregory, and Anita Singh. 2022. *Household Food Security in the United States in 2021*. Economic Research Report ERR-309. Washington, DC: US Department of Agriculture, Economic Research Service.
- Curran, Megan, and Robert P Hartley. 2021. "Food Security and Policy Effects by Family Size: How Does Quality of Well-Being Depend on Quantity of Children?" Discussion Paper DP2021-04. Lexington: University of Kentucky Center for Poverty Research.
- Dortch, Cassandra. 2018. *Indian Elementary-Secondary Education: Programs, Background, and Issues*. Report RL34205. Washington, DC: Congressional Research Service.
- Gundersen, Craig, Brent Kreider, and John Pepper. 2011. "The Economics of Food Insecurity in the United States." *Applied Economic Perspectives and Policy* 33 (3): 281–303.
- Gupta, Poonam, Emily Gutierrez, Theresa Anderson, Fernando Hernandez, Timothy Triplett, and Elaine Waxman. 2022. "Insights from the 2021 Meals-to-You Program Expansion (MTYx21)." Washington, DC: Urban Institute.
- Gutierrez, Emily, Poonam Gupta, Elaine Waxman, Theresa Anderson, Timothy Triplett, Fernando Hernandez-Lepe, Kristin Blagg. 2022. *Experiences and Outcomes from the 2021 Meals-to-You Program*. Washington, DC: Urban Institute.
- Gutierrez, Emily, Poonam Gupta, Elaine Waxman, Kristin Blagg, Timothy Triplett, Fernando Hernandez-Lepe, Theresa Anderson and Kristin Blagg. 2022. "Evaluation of the Meals-to-You Pilot." Washington, DC: Urban Institute.
- Harnack, Lisa, Julia L. Peasley, Nathan Michell, Madalyn Nones, and Darin Erickson. 2022. *Nutrition Evaluation of the Emergency Meals-to-You Program*. Durham, NC: Healthy Eating Research.
- Martinchek, Kassandra, Poonam Gupta, Michael Karpman, and Dulce Gonzalez. 2023. "As Inflation Squeezed Family Budgets, Food Insecurity Increased between 2021 and 2022." Washington, DC: Urban Institute.
- Mirtcheva, Donka M., and Lisa M. Powell. 2009. "Participation in the National School Lunch Program: Importance of School-Level and Neighborhood Contextual Factors." *Journal of School Health* 79 (10): 485–94.
- NMPED (New Mexico Public Education Department). 2020. *Tribal Education Status Report*. Santa Fe: NMPED.
- Rabbitt, Matthew P., Michael D. Smith, and Alisha Coleman-Jensen. 2016. *Food Security Among Hispanic Adults in the United States, 2011–2014*. Economic Information Bulletin 153. Washington, DC: US Department of Agriculture, Economic Research Service.
- USDA Food and Nutrition Services. 2016. "Summer Electronic Benefit Transfer for Children (SEBTC) Demonstration: Summary Report." Washington, DC: USDA Food and Nutrition Service. <https://fnsp-prod.azureedge.us/sites/default/files/ops/sebtfinalreport.pdf>.
- Walch, Amanda, Andrea Bersamin, Philip Loring, Rhonda Johnson, and Melissa Tholl. 2018. "A Scoping Review of Traditional Food Security in Alaska." *International Journal of Circumpolar Health* 77 (1): 1419678.
- Waxman, Elaine, Theresa Anderson, Kristin Blagg, Poonam Gupta, Fernando Hernandez-Lepe, Timothy Triplett, and Craig Gundersen. 2021. *Experiences and Impacts from the 2020 Meals-to-You Program: Mailing Food Boxes to Rural Children and Families during a Global Pandemic*. Washington, DC: Urban Institute.

Wildsmith, Elizabeth, Maria Ramos-Olazagasti, and Marta Alvira-Hammond. 2018. *The Job Characteristics of Low-Income Hispanic Parents*. Rockville, MD: National Research Center on Hispanic Children and Families.

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