



FOOD SUPPORTS

Conversations with Neighbors



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EXECUTIVE SUMMARY

Project Goals

Through this project, Second Harvest Heartland and its partners set out to develop a stronger understanding of the people who receive food and support through the network of hunger-relief organizations in the community. Second Harvest Heartland and its partners planned to use this information for reporting purposes and to improve programs and services to better address the COVID-era hunger surge.

Research questions:

1. How many unique people received support through Second Harvest Heartland and the network of food shelves and hunger-relief program partners within Second Harvest Heartland's service area in 2021?
2. What are the demographic and economic characteristics of people receiving support?

Second Harvest Heartland was specifically interested in learning more about the communities of color that received services from food shelves and hunger-relief program partners within the network. Given the disproportionate rate at which people of color experience food insecurity, we aimed to design the research to ensure we reach people of color and understand the experiences of those receiving support from the network's services.

Methodology

For this project, we relied on three sources of information:

1. **Counts of people** supported by food shelves and hunger-relief program partners within the network (reported regularly by program partners to Second Harvest Heartland);
2. A 15-question **survey** that we administered verbally and in-person to people receiving support at randomly selected food shelves and hunger-relief program partners within the network; and
3. 30-minute **one-on-one conversations** with 20 people who received support to gather in-depth qualitative data.

We conducted 889 in-person surveys across 55 sites between October 28 and December 14, 2021. For consistency of delivery, we prepared a detailed survey protocol for the contracted surveyors, two of whom fluently spoke Spanish. Survey findings in this report are based on the counts of people supported

(counts provided by food shelves and hunger-relief program partners within the network) and survey responses. All survey data is weighted to produce unbiased estimates.

Key Findings

In 2021, food shelves and hunger-relief program partners supported 813,130 unique individuals.

- **Age:** Over a quarter (28.0%) of individuals were between the age of 0 and 18, and 13.8% were seniors (65 or older).
- **Race and ethnicity:** Just over 43.5% individuals identified as White, and 23.1% identified as Hispanic/Latino. Black/African American individuals made up 16.5% of all individuals supported, 7.5% were Asian, and 2.6% were American Indian or Alaska Native.
- **Gender:** 48.7% identified as female, 47.9% identified as male, and .2% identified as transgender, gender non-conforming, or a gender that was not listed in the survey.
- **Household size:** Household size varied from 1 to 12 people. The largest category was individuals who lived in a household of five people (18.5%). Another 28.4% of individuals lived in a larger household (6-12 people).
- **Current living situation:** Nearly half lived in a place they rented (46.4%).
- **Income sources and income:** The majority of individuals worked for pay (either full time and/or part-time) (62.9%). Just over half of individuals fit the description of experiencing a total combined household income in the last 12 months of \$35,000 or less (53.1%).

Challenges to food security were long-standing, and people met their needs with multiple strategies:

- **History of food program use and additional needs:** Over half of individuals had received free food from meal or grocery programs before the COVID-19 pandemic (50.8%). Nearly a third of individuals needed more free meals and/or groceries than they were currently receiving (31.6%).
- **Participation in other programs:** The majority of individuals participated in SNAP, EBT/food stamps, WIC, and/or free or reduced-price school meal programs (53.0%). Looking at all three types of programs together, nearly 40% of individuals participated in one program, and 12.3% participated in two programs.

Interviews illuminated that peoples' need for food programs has been long-standing. Factors such as the high cost of food, job loss, migration, and health conditions combined in a way that necessitated nearly all interviewees to embed food programs into their lives on an ongoing basis. While the pandemic and the resulting economic downturn created additional challenges (for example, the rising cost of food), many people struggled to achieve food security before the pandemic. People met their needs by using a variety of coping strategies: making food last longer, using multiple services, adjusting their shopping habits, gardening, and sharing meals with family and friends.

People experienced multiple challenges when accessing food programs:

- **Transportation:** The vast majority of individuals benefited from driving themselves in a vehicle (71.8%), and another 10.4% benefitted from getting a ride with family or friends.
- **Challenges making meals:** The challenge most commonly experienced was accessing ingredients that meet dietary or health needs (21.1% of individuals). The majority of individuals did not experience a challenge making a meal in the last month (63.9%).

Through the interviews, we learned that people experienced multiple barriers to accessing food programs, such as having access to transportation or the negative social stigma that made some clients feel angst or shame about using these services. One means of reducing barriers appeared to be the manner in which program staff treated clients and made accommodations for their unique needs. Another opportunity that appeared to empower some clients was the ability to volunteer at the program site and serve others.

CHAPTER 1

Introduction and Background

CHAPTER 1: INTRODUCTION AND BACKGROUND

1.1 About Second Harvest Heartland and its Network

Farmers, food producers, and grocery stores provide food in large quantities to Second Harvest Heartland. Second Harvest Heartland then stores the food and distributes it to nearly 1,000 food shelves and meal program partners throughout a 59-county service area in Minnesota and Wisconsin. Once a partner receives food from Second Harvest Heartland, they then distribute food directly to neighbors in their communities.

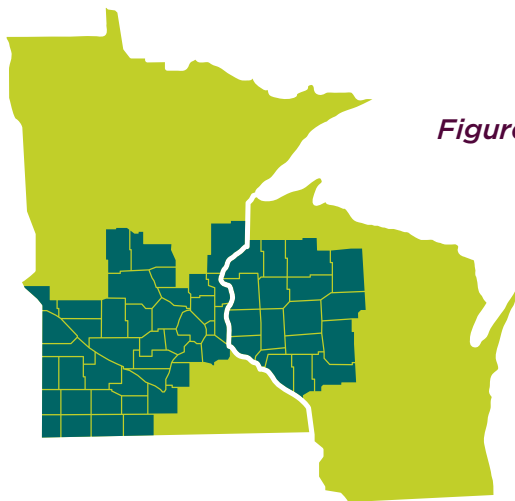


Figure 1: Second Harvest Heartland service areaⁱ

1.2 Why This Research, and Why Now

In 2019, before the COVID-19 pandemic, 10.5% of households were food insecure in the United States. While this was down significantly from the height of the Great Recession, there were still 35.2 million people living in food-insecure households for at least part of 2019.ⁱⁱ In addition, certain groups had higher rates of food insecurity than the national average. Among these groups were Black- and Hispanic-headed households, which experienced food insecurity at rates of 19.1% and 15.6% respectively.ⁱⁱⁱ An analysis of data from 2001 to 2016 showed that non-Hispanic Black and Hispanic households consistently reported food insecurity at rates at least twice that of White, non-Hispanic households.^{iv}

With the onset of the COVID-19 pandemic in early 2020 and the resulting economic implications of restrictions meant to reduce transmission, food insecurity began to increase. These increases countered the steady decrease in food insecurity that had been occurring since the last economic recession ended.^v Early in the pandemic, the Census Bureau implemented a weekly (and later bi-weekly) collection of near-real-time data through the Household Pulse Surveys. Included in this effort is a measure of food sufficiency, which indicates if households had enough food to eat; food scarcity indicated “there was either

sometimes or often not enough to eat in the last 7 days.”^{VI} While food scarcity measures a more severe condition than food insecurity, the Pulse Survey data showed that households consistently indicated elevated levels of food scarcity. The survey also showed that the COVID-19 pandemic disproportionately impacted Black and Hispanic households.^{VII}

During this time when many households struggled to secure enough food, food banks across the country experienced large increases in demand from community members.^{VIII,IX} Second Harvest Heartland saw a 30% increase in demand for food at its peak, and food shelves and hunger-relief program partners saw a 60% increase in people seeking services.^X Simultaneously, COVID-19 restrictions required Second Harvest Heartland and hunger-relief program partners to change many aspects of how they provided food support, and what type of support, while minimizing risks to the health and safety of clients, volunteers, and staff. Many services switched from on-site, client-choice shopping to drive-through or pop-up distributions, which limited or eliminated the option for self-selecting food. In addition, previous methods used to gather basic client information while providing service were too onerous during these modified interactions.

While national data illuminates the need for food support is at a high level, it is important for Second Harvest Heartland to understand more about the clients seeking services specifically within the local network. In the fall of 2020, in collaboration with Superhuman LLC, we gathered data through client surveys, both online and with clients at pop-up CFAP (Coronavirus Food Assistance Program) distribution events. 38% of respondents at the CFAP distributions reported they had not previously visited a food shelf.^{XI}

1.3 Building on Prior Research

With this research project, we aimed to build on efforts like those mentioned above to gather data about people who received support, but in a systematic way for the whole network. Two previous studies provided precedence for this work. In 2017 and again in 2019, the SuperShelf Project of the University of Minnesota conducted a statewide survey of food shelf users in collaboration with local partners.^{XII} This research provided useful information about client demographics, food shelf use, desired foods, and more. For example, the 2019 SuperShelf study indicated that 85% of respondents wanted access to fresh vegetables and fruit, but only 52% of respondents reported that these foods were always available at the food shelf.^{XIII}

However, this study has several limitations that our research aimed to overcome. First, the SuperShelf study did not gather information from clients accessing other important sources of food support, such as meal sites, school pantries, or mobile programs. Second, given the statewide nature of the study, the results included clients outside of Second Harvest Heartland’s service area. Third, the information

was gathered prior to the COVID-19 pandemic. Lastly, the study did not attempt to produce any estimates on the number of people using food support.

The second study that provided precedence for our research, Hunger in America, was conducted by Feeding America in partnership with member food banks. Hunger in America did address the issue of how many people are receiving services from the network. According to estimates from the 2014 Hunger in America study, Second Harvest Heartland and its hunger-relief program partners served 532,000 unique clients in 2013, of which 57.9% were White non-Hispanic, 19.9% were Black non-Hispanic, and 17.2% were Hispanic.^{XIV} The primary limitation of this research is its age. Even before the changes due to COVID-19, the data was out of date.

Our study drew on the Hunger in America (HIA) 2014 study and uses some of its design elements, including our study and sample design, the survey questions, and our survey analysis. Our study's findings are not directly comparable to the 2014 HIA findings, however, because of three primary characteristics:

1. Our research oversampled clients receiving support through the network who are members of communities of color. We aimed to use this information to help inform our efforts to address the heightened food insecurity among these communities.
2. Second Harvest Heartland had more robust access to counts of people supported from food shelves and hunger-relief program partners within the network, so those counts factored substantially in our analysis.
3. We conducted interviews with a small number of clients to gather in-depth qualitative data.

With this study, we aimed to develop an updated understanding of the clients receiving services within Second Harvest Heartland's service area while the network continued to see increased need due to the COVID-19 pandemic. In addition, we hoped to increase our knowledge about the communities of color that food shelves and hunger-relief program partners are serving and their experiences within the network.

CHAPTER 2

Methodology

CHAPTER 2: METHODOLOGY

Through this project, Second Harvest Heartland and its partners wanted to develop a stronger understanding of the needs of the people who receive food support and the agencies who serve them. Second Harvest Heartland and its partners planned to use this information for reporting purposes and to better adapt programs and services to the Covid-era hunger surge.

Research questions:

1. How many unique people received services through Second Harvest Heartland and the network of food shelves and hunger-relief program partners within Second Harvest Heartland's service area in 2021?
2. What are the demographic and economic characteristics of people receiving services?

Second Harvest Heartland was specifically interested in learning more about the communities of color that receive services within the network. Given the disproportionate rate at which people of color experience food insecurity, we aimed to design the research to ensure we heard from them, so we could understand who the network supports and their experiences using services.

Several entities collaborated on this project. Second Harvest Heartland hired the external consulting firm ACET, Inc. to conduct the research, and an Advisory Council was created to inform the study's design and development; see more about the Advisory Council in section 2.3.

In this chapter, we tell the story of our processes to explore the research questions above.

2.1 Ethics Review

Feeding America has an agreement with an independent Institutional Review Board (IRB), WCG IRB, that reviews the projects of Feeding America and its network. The following describes the ethics review and timeline:

- **Early June:** Second Harvest Heartland contacted the Feeding America national office to request guidance around the IRB process. The national office research team offered to review the project and decide whether the project would be exempt or if it would require review by WCG IRB.
- **Mid-July:** We assembled information about the project and submitted information to WCG IRB. See Appendix A for this document.

- **Late September:** WCG IRB requested additional information about the project to show that our study presented “no greater than minimal risk to subjects.” We submitted this additional information within a week.
- **October 5:** We received a letter communicating that the study was “exempt under 45 CFR § 46.104(d)(2), because the research only includes interactions involving educational tests, survey procedures, interview procedures, or observations of public behavior; and there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of data.”^{xv} See Appendix A for this document.

2.2 Literature Review

As noted above in the Introduction and Background chapter, we began this study with a literature review to understand the methodology of projects with similar goals. The 2014 Feeding America Client Survey was our primary inspiration, and we also considered processes and lessons learned from:

- Super Shelf 2019 Minnesota Food Shelf Survey^{xvi}
- 2018 Hunger in North Dakota: A Report on the Charitable Food Network^{xvii}
- The Lived Experience of Food Pantry Users in Minnesota: Qualitative Findings from a Statewide Survey^{xviii}
- Loaves & Fishes 2019 Client Impact Survey Findings^{xix}
- More Than A Meal Pilot Research Study: Results from a Pilot Randomized Control Trial of Home-Delivered Meal Programs^{xx}
- Dynamics of Material Hardship in the Women’s Employment Study^{xxi}

2.3 Advisory Council

The Advisory Group helped improve the design of the study, supported beneficial outcomes to all those involved, and increased feasibility for programs participating in data collection. The Advisory Council included a representative from both Feed My People and St. Croix Valley Food Bank, located in Second Harvest’s Wisconsin service area, and a group of food shelves and hunger-relief program partners from Second Harvest Heartland’s Minnesota service area. Staff members representing several internal Second Harvest Heartland teams made up the remaining members of the Council.

The Council met several times throughout the project to discuss and make key design decisions, and members provided feedback in multiple ways between meetings. Members weighed in at critical junctures, including:

- Decided on project goals, reviewed submitted proposals, and chose a vendor
- Helped prioritize questions to include on survey
- Reviewed and offered feedback on survey tool
- Field tested the survey
- Generated buy-in with project partners and helped reach out to partners
- Offered feedback on data analysis

2.4 Testing the Survey Protocol & Tool

We tested the survey protocol and tool with Second Harvest Heartland staff and hunger-relief program partners. Through this testing, we hoped to:

- Document the time it took to administer the survey so that we could ensure we included an accurate expectation when administering the survey to clients
- Identify confusing survey questions; we did so by asking the following questions after concluding the survey:
 - Were there any questions that made you pause after I asked them?
 - Were there any questions or answer options that were confusing or not quite right?
 - Do you have any follow-up questions now that you've completed the survey?

2.5 Study and Sample Design

Our study and sample design unfolded over five stages; we provide more information about the five stages in the Technical Appendix:

- Stage 1: Selected food shelves and hunger-relief program partners.
- Stage 2: Probability Proportion to Size (PPS) Sampling: Assigned variables to food shelves and hunger-relief program partners, including geography, program type, and target population. Food shelves and hunger-relief program partners located in zip codes with at least 20% of the target population of Black or African American, American Indian and Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, Hispanic or

Latino, or Some Other Race were coded as 1, while all other partner sites were coded as 0.^{xxii}

- Stage 3: Selected sample of 75 sites, and augmented the sample based on ability to participate.
- Stage 4: Assigned sites random days of the week; assigned survey hours, if applicable.
- Stage 5: Assigned each site a random ‘start’ for surveying clients.

2.5.a Program type: Determining program eligibility and desired distribution

Second Harvest Heartland categorizes programs in multiple ways. For the purposes of this study, we wanted representation from both grocery and meal programs.

- Grocery programs provide shelf-stable and perishable food.
- Onsite/meal programs provide prepared meals and/or snacks.

We decided to remove several types of programs from our sample frame, primarily following the Hunger in America 2014 methodology. Ineligible programs were those that served primarily people with severe cognitive or mental health disabilities, children, and domestic violence shelters.

Our sample frame included 656 active sites as of June 30, 2021.

2.6 About the Sites in Our Sample

We originally reached out to 75 sites to request participation. Of these, 6 declined and 7 were no longer partners and/or were not in operation. One site was not suitable due to mostly serving clients under 18, and another one was removed from our sample due to late hours of operation. In addition, after multiple calls and emails, 2 did not respond. We then selected another 25 to contact to request participation for a total of 100 sites contacted. We completed surveys at 55 sites, for a site response rate of 55%.¹ We describe them below.

¹ We collected data at one site and encountered technical difficulties, resulting in missing data; we did not include this site in our count. We collected data at another site that we learned later was not part of the original sample frame (this site was one of several sites the program operated); we did not include this site nor the survey data in our counts because we had insufficient information about their reach.

Table 1: Unweighted Distribution of Participating Food Shelves and Hunger-Relief Program Partners by Program Type

Program Type	Count	Percent
Meal	11	20.0%
Grocery	44	80.0%
Unweighted Total	55	100.0%

Table 2: Unweighted Distribution of Participating Food Shelves and Hunger-Relief Program Partners by Target Demographic

Target Demographic	Count	Percent
Food shelves and hunger-relief program partners located in zip codes with at least 20% of target population of Black or African American, American Indian and Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, Hispanic or Latino, or Some Other Race	24	43.6%
Food shelves and hunger-relief program partners located in zip codes with less than 20% of target population	31	56.4%
Unweighted Total	55	100.0%

Table 3: Unweighted Distribution of Participating Food Shelves and Hunger-Relief Program Partners by Geographic Category

Geographic Category	Count	Percent
Rural	20	36.4%
Suburban	13	23.6%
Minneapolis/St. Paul	11	20.0%
Micropolitan ²	11	20.0%
Unweighted Total	55	100.0%

² A micropolitan is a city outside of the metropolitan or suburban areas that has a population of at least 10,000 people. See the Technical Appendix for more information.

2.7 Contextualization and Practical Considerations for Interpreting Data

Below, we offer several items to consider as the reader interprets the data.

2.7.a Process of selecting sample

We selected the sample of food shelves and hunger-relief partners from a database of active partners maintained by Second Harvest Heartland. In some cases, the database did not reflect recent changes such as staff turnover, phone number and address changes, seasonal service offering changes, or other status changes that affected either eligibility or our ability to do outreach. When we found limitations, we worked with Second Harvest Heartland to find alternative contacts (e.g., email addresses and phone numbers) or location information. We ultimately removed some food shelves or hunger-relief program partners from the original sample and replaced them through resampling. We discuss sampling and resampling more in the Technical Appendix.

2.7.b Undercounting of specific groups of people supported through Second Harvest Heartland Network

To determine our sample frame, we removed food shelves and hunger-relief partners that primarily support youth, such as Backpack Programs, Camps, Daycares, and Kids Cafes. Our protocol stated that all survey respondents must be adults (18 and older). We asked survey respondents about the ages of members of their households, so children are represented in our study. Because we did not collect survey information at partner sites that specifically support children, they will be underestimated in our client estimates.

We only surveyed people who came to partner sites for food support. This included permanent brick-and-mortar sites and mobile sites. Because we did not survey people who had their food services delivered, our study does not take into consideration homebound individuals and their families.

2.7.c Understanding use of grocery and meal programs

Each food shelf and hunger-relief partner was identified as either a grocery or meal/onsite program. Survey respondents at grocery programs are represented in the weighted data as a de-duplicated count for grocery program participation; survey respondents at meal programs are represented in the weighted data as a de-duplicated count for meal program participation.

2.7.d Timing of survey administration

In the original project design, we had planned to survey sites during the summer, and the IRB process delayed our survey start date. Survey administrators visited agency partners from October 28-December 14, 2021. This involved planning around the Thanksgiving and Christmas holidays. Many food shelves and hunger-relief partners reported that both the Christmas and Thanksgiving periods would present challenges to hosting a survey administrator due to being unusually busy or offering atypical services around those times. We made extra effort to schedule survey administrator visits as far from the holidays as possible. The other seasonal consideration was the weather. In some cases, we made last minute changes to the schedule due to cold or poor road conditions. The timing of our survey window could influence our client estimates, as some sites told us that they support more clients immediately preceding Thanksgiving. Additionally, the time of year that we surveyed could have influenced survey respondents' answers to some survey questions (e.g., how they usually traveled to the food program).

2.8 Survey Implementation Preparation

It was important for Second Harvest Heartland to reduce the burden on partner program staff and to honor survey respondents' time and information.

We reduced the burden on staff in the following ways:

- Contracted with surveyors to administer the surveys instead of asking program staff to administer surveys themselves;
- Offered a choice of when we surveyed while still incorporating randomness into our methodology;
- Asked where the surveyor could stand/sit and any other details to not interfere with food support processes; and
- Provided site data in the form of an infographic if we collected at least 20 surveys at the site.

We showed appreciation to survey respondents by offering \$10 in cash upon survey completion.

Below, we describe how we prepared for survey implementation. We include more detail in Appendix C.

2.8.a Contracting with surveyors

We contracted with six surveyors during the month of August and conducted our first virtual training on September 9, 2021. We then waited to engage surveyors in

the second in-person training and material distribution, such as the tablet, paper survey, and cash incentives, until the IRB process was complete. The second training sessions occurred on October 21 and 26, 2021. Due to unforeseen circumstances (e.g., the delay in beginning survey implementation, willingness to adhere to COVID-19 protocol), two surveyors decided not to continue participating in the project.

2.8.b Planning for tailored survey implementation

We established a plan to recruit programs and collect information needed:

- Second Harvest Heartland's CEO sent email invitations to food shelves and hunger-relief program partners on October 7 and 8, 2021. The email contained project goals, a description of what to expect as a participating program, and a link to a short video about the project.
- Within a week, starting on October 11, ACET followed up with each program by phone. In these calls, we first sought confirmation to participate in the project. We then collected information to inform the research, including days/hours of operation, client flow (very random, consistent throughout the day, or concentrated at certain times of the day), languages spoken by clients, and COVID-19 protocols. From October 11 to October 16, we attempted to connect with programs. For the programs that we still had not heard from, Second Harvest Heartland and Feed My People staff followed up via phone and email. This occurred starting on October 20.
- For each program, we used a random number generator to identify the day of the week that we would survey. We then followed up by email with each program, providing two possible dates (e.g., two Wednesdays, if Wednesday was the randomly chosen day). For some programs, such as those only open once or twice per month, we only had one option of a survey day. In some cases, we did not hear back via email and followed-up with a phone call to confirm the survey date.

2.8.c Preparing materials for survey implementation

- We prepared a series of materials for surveyors to use during survey implementation. We describe them below and include the materials in Appendix B:
- **Survey protocol & frequently asked questions and answers:** The survey protocol included a script for surveyors to use when they approached potential survey respondents and detailing how to navigate different situations, such as when more than one adult in a household was present or

if someone was under 18 years old. The back of this document included frequently asked questions and answers that prepared surveyors to answer questions clients might have about the project and ensured surveyors would answer questions consistently.

- **Observation tool:** Completed by the surveyor, this tool helped the surveyor prepare for each site and allowed us to consistently collect information about each site during and after survey implementation. In this tool, surveyors described deviations made to sampling protocol, noted each client they approached and if they completed or refused the survey, and the observed estimate of the number of adult clients or households, among other items.
- **Quarter sheet with project information:** For clients who wanted more information about this project, surveyors provided a quarter sheet of paper with ACET's contact information. We also included contact information for Second Harvest Heartland's SNAP (Supplemental Nutrition Assistance Program) team.
- **Survey tool:** The survey included 15 questions. We made two versions of the survey, identical except for a series of questions to understand participation in meal and/or grocery programs. Surveyors administered the survey in one of two ways:
 - Electronically: Surveyors verbally administered the survey and collected data via a tablet, entering responses into Zoho, a secure survey platform. This was the primary method of administration.
 - Paper: Surveyors used paper surveys when a client preferred to complete it themselves or as a backup to the tablet. People who preferred to take the survey in Spanish, Somali, or Hmong completed the survey on a translated paper copy. The surveyors were trained to scan the completed paper survey for completeness. We later entered paper survey responses into the digital survey platform.
- **Translated materials:** We translated the protocol into Spanish, Somali, and Hmong and handed the protocol to people who spoke those languages and preferred to take the survey in a language other than English. People who preferred to take the survey in Spanish, Somali, or Hmong completed the survey on a translated paper copy. Two surveyors spoke Spanish fluently; with Spanish-speaking people, they verbally translated the survey into Spanish from the English version and inputted survey answers into the tablet.

Table 4: Surveys Administered by Method and Language

Language	Electronic	Paper	Total Count	Percent of Total Count
English	777	51	828	93.1%
Spanish	51	7	58	6.5%
Hmong	0	1	1	0.1%
Somali	0	2	2	0.2%
Unweighted Total	828	61	889	100.0%

2.9 Survey implementation

2.9.a When we conducted surveys

We conducted surveys from October 28 through December 14. We hoped to complete surveys by mid-November to avoid the Thanksgiving holiday because sites might be busier than other times of the year. Because several sites required multiple communications to confirm a survey date, we conducted surveys at a handful of sites the three weeks after Thanksgiving. When confirming a survey date with sites, we communicated our desire to come on a normal day. If sites contacted us to reschedule, we rescheduled with the sites up to two times.³

2.9.b Who we sampled

Second Harvest Heartland assigned a size to each program in our sample, and we used this size assignment to randomly select the first client who we approached at each site. Because sites varied greatly in terms of hours they were open and client flow, we then asked the surveyors to approach each subsequent person or household who walked in the door. See Appendix C 1.1d, 1.1e, and 2.2b for more information on our approach.

Some sites had more than one method of providing services. For example, a drive-through option and a walk-in option. In our informational call with each site, we determined where the surveyor would stand or sit based on which service delivery would be least burdensome for staff and clients. The expected volume of clients was another consideration, as were weather and temperature. If it was cold and/or

³ We did not encounter sites that contacted us to reschedule more than one time.

snowing and the surveyor had the option to stand or sit indoors, we went forward with that option.

At the 57 sites visited, a total of 950 people were approached by survey administrators. Of these 950, 30 declined to be surveyed and 920 agreed to take the survey, resulting in a response rate of 96.8% and a refusal rate of 3.2%. Examples of reasons recorded by surveyors for people not taking the survey included not having enough time, speaking a language for which we did not have a translation available, and feeling embarrassed about being at a food support agency. In many cases, no reason was given or recorded by survey administrators.

Technical issues arose occasionally with the remote nature of the survey. Responses were mostly recorded on iPads and uploaded to a cloud service over wi-fi. In one case, all responses (20) from a site were lost in this transfer.

We validated the digitally uploaded responses through a process of reconciling the survey observation forms filled out by the survey administrators with digital time stamps, the “site name” field, and in some cases the IP addresses from which the responses were uploaded. This process eliminated responses where a surveyor might have begun a survey then reloaded to start over, where the hardware failed and needed to be rebooted, where a surveyor may have noted that the survey was a test, or in the event of glitches that caused duplicate or otherwise invalid data that could be determined to be invalid by this process. We manually transferred responses taken on paper into the survey software. This left us with 900 responses. We then removed 11 additional responses after determining that the site at which they were taken did not meet the criteria of the sampling plan. This process of eliminating invalid data and adding paper responses resulted in a total of 889 valid survey responses collected across 55 sites.

2.10 Making Sense of the Survey Data

2.10.a Weighting survey data

We weighted all usable survey data. This process allows survey data to represent the larger population from which we selected the sample. Weighted data produces unbiased estimates of population parameters. By compensating for practical limitations of sample surveys, such as differential nonresponse and undercoverage, weighting improves the external validity of survey data by enhancing the representation of respondents. We include more detailed information about weighting methodology in Appendix C.

2.10.b Valid survey responses

In this report, our analysis is based on valid survey responses, including both total weighted N and weighted nonresponse. The denominator always includes

weighted nonresponse. A nonresponse could be from a surveyor not entering an answer for a question or a survey respondent deciding not to answer the question or indicating that they did not know the answer.

2.10.c Tabular presentation

In the next chapter of this report, we show weighted estimates reflecting individual people who receive food support across the Second Harvest Heartland network. Because each value is an estimate, we include the confidence interval. We are 95% confident that the actual value falls within the confidence interval.

2.10.d Client counts

Second Harvest Heartland wanted to know how many unique people received support from its network in 2021. We understand that one person could visit a food program more than once per year, and our goal was to only count this person once in our unduplicated count. We include more nuance to describe our methodology for understanding unique counts in the technical appendix.

2.11 Interview Methodology

Second Harvest Heartland's goal was to interview 20 individuals over the phone or in-person, with each interview lasting for 30 minutes. The qualitative data from the interviews was meant to be integrated with quantitative data from a survey, delivered by ACET. Interview questions were developed in partnership with SHH and ACET.

Partner sites were chosen based on their relationship with SHH as well as the following desired mix of programs:

- 10 programs in zip codes with 20% or more people of color
- 75% of programs are grocery, 25% are onsite meal programs
- 6 in Minneapolis or St. Paul, 6 in rural, 5 in suburban, and 3 in micropolitan areas

We also strove for a diversity of participants, and the following sample, developed collaboratively and based on research, was determined to be an ideal mix.^{xxiii}

- 5-10 people who have children
- 2-3 people who are experiencing homelessness (sheltered or unsheltered)
- 2-3 people with physical disabilities

- 10 interviewees of color (Native American, Black, and Latino are important communities to include)
- 4-6 people who are seniors⁴

In Appendix E, we include more information about interview methodology, as well as key findings from the 20 interviews that we conducted.

⁴ Recommended based on 2019 SuperShelf survey where 33% of households include seniors.

CHAPTER 3

Survey and Interview Findings

CHAPTER 3: SURVEY AND INTERVIEW FINDINGS

In this chapter, we synthesize information collected through surveys and interviews to identify key findings supported by both data collection methods, when possible. Narrative key findings begin each section below, and then we include supporting tables with survey results and supporting quotations from interviewees. Please see Appendix E for the full interview analysis.

When the distribution of survey answers allowed, we conducted cross tabulations for select survey questions to explore differences by individuals' race/ethnicity, geography, and household size. To feel confident in this cross-tabulation analysis, we combined individuals into categories with large enough distributions:

- Race/ethnicity: Individuals who identified as White only compared to individuals who identified as a race other than White
- Geography: Individuals who received support from sites in Minneapolis or St. Paul compared to individuals who received support from sites in rural, micropolitan, or suburban areas (i.e. non-metropolitan areas)
- Household size: Individuals who lived in households of 3 or fewer people compared to individuals who lived in households of 4 or more people.

Finally, the items that we offered in section 2.7 above (Contextualization and Practical Considerations for Interpreting Data) could shed additional light on findings below. For example, the time of year that we collected survey response could have influenced respondents' answers to the question about how they usually traveled to the food program (e.g., someone might primarily ride their bicycle, but not when it snows).

3.1 Individuals Supported

In 2021, food shelves and hunger-relief program partners supported 813,130 unique individuals (Table 5). Over 360,000 unique individuals were supported by suburban programs, and nearly 272,800 unique individuals were supported by Minneapolis or St. Paul sites.

Table 5: Number of individuals supported by food shelves and hunger-relief program partners in 2021

Total # of individuals served by programs	Unduplicated estimated counts
Grocery	770,232
Meal	42,898
Total	813,130

Total # of individual people by geography	Unduplicated estimated counts
Suburban	360,564
Minneapolis or St. Paul	272,778
Micropolitan	94,472
Rural	85,316
Total	813,130

3.2 Demographics

Of the individuals supported by food shelves and hunger-relief program partners in 2021, the largest age grouping was 30 to 49 year-olds (22.9%). Over a quarter were between the age of 0 and 18 (28.0%), and nearly 14% were seniors (65 or older) (13.8%) (Table 6a).

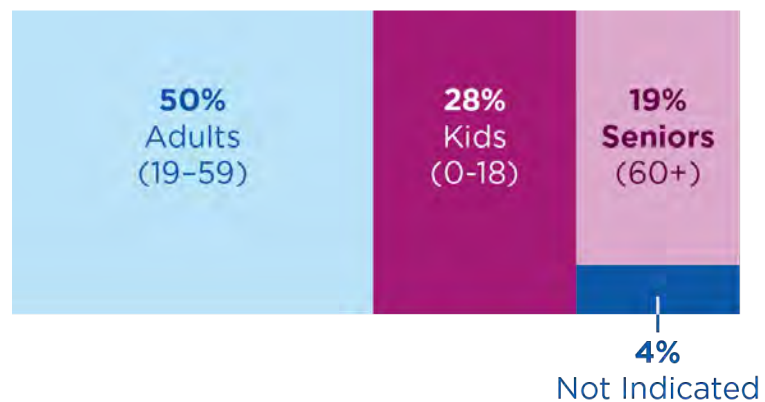
Considering race and ethnicity, just over 43.5% identified as White, and 23.1% identified as Hispanic/Latino (Table 6b). Black/African American individuals made up 16.5%; Asian individuals made up 7.5%; and American Indian or Alaska Native individuals made up 2.6%. These percentages are non-exclusive, meaning an individual who identified as White and Hispanic/Latino was counted in both categories. In Table 6b, we include the percentages noted in this paragraph, as well as the percentages that describe **exclusive** racial/ethnic identities (e.g., percentage of individuals who identified as White **only**, Hispanic/Latino **only**).

When it came to gender, 48.7% of respondents identified as female, and 47.9% identified as male. 3.2% did not indicate their gender, and .2% identified as transgender, gender non-conforming, or a gender that was not listed in the survey. (Table 6c).

Table 6a, Age: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 who fit these demographic characteristics

Age	Estimated Count	Estimated Percent	Lower 95% CI ⁵ proportion	Upper 95% CI proportion
0-5	62,501	7.7%	5.4%	9.9%
6-18	165,332	20.3%	16.9%	23.7%
19-29	130,757	16.1%	13.0%	19.2%
30-49	186,594	22.9%	19.4%	26.5%
50-59	85,840	10.6%	8.0%	13.1%
60-64	39,600	4.9%	3.1%	6.7%
65 years or older	112,533	13.8%	10.9%	16.8%
Age not indicated	29,973	3.7%	2.1%	5.3%
Total	813,130	100.0%		

Chart 1: Kids and seniors make up nearly half of all people seeking support⁶



⁵ "CI" is confidence interval.

⁶ Graph percentages within this report may not total 100% due to rounding.

Table 6b, Race and Ethnicity: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 who fit these demographic characteristics

Race and Ethnicity	Estimated Count	Estimated Percent	Lower 95% CI proportion	Upper 95% CI proportion
Non-exclusive⁷				
White	353,973	43.5%	39.4%	47.7%
Hispanic/Latino	187,664	23.1%	19.5%	26.6%
Black/African American	134,436	16.5%	13.4%	19.7%
Asian	60,778	7.5%	5.3%	9.7%
American Indian or Alaska Native	21,418	2.6%	1.3%	4.0%
Another race and/or ethnicity not listed	1,634	0.2%	0.0%	0.6%
Race and/or ethnicity not indicated ⁸	63,765	7.8%	5.6%	10.1%
Exclusive				
White only	333,425	41.0%	36.9%	45.2%
Hispanic/Latino only	178,636	22.0%	18.5%	25.5%
Black/African American only	121,627	15.0%	11.9%	18.0%
Asian only	57,856	7.1%	4.9%	9.3%
American Indian or Alaska Native only	15,620	1.9%	0.8%	3.1%
Another race and/or ethnicity not listed only	1,633	0.2%	0.0%	0.6%
Multiple races and/or ethnicities ⁹	40,568	5.0%	3.2%	6.8%
Race and/or ethnicity not indicated ¹⁰	63,765	7.8%	5.6%	10.1%
Total	813,130	100.0%		

⁷ This part of the table captures non-exclusive race and ethnicity data. In other words, if someone identifies as White and Black/African American, they are captured twice, both in White and in Black/African American. Therefore, percentages will add up to more than 100% and counts will add up to more than 813,130.

⁸ Additional answer options included “Middle Eastern or North African” and “Native Hawaiian and other Pacific Islander.” We collapsed categories if they made up less than 1% of the weighted estimate.

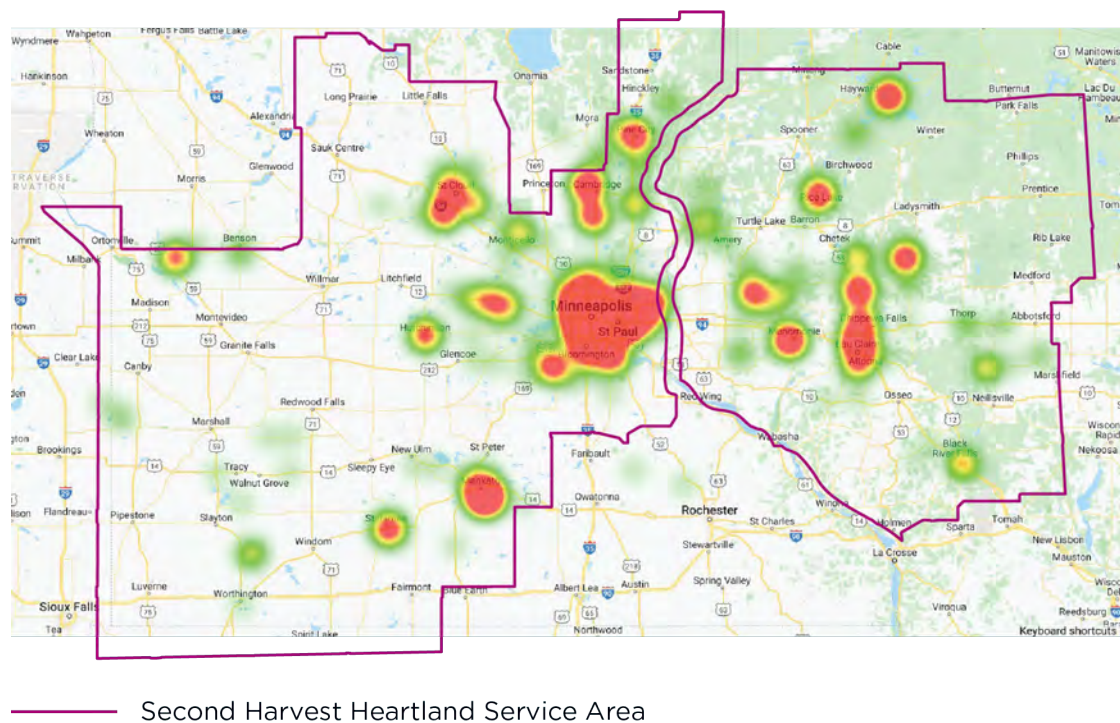
⁹ Survey respondents could select multiple race/ethnicity answers. To analyze weighted survey data, we re-coded all respondents who checked multiple races/ethnicities as “multiple races and/or ethnicities.”

¹⁰ Additional answer options included “Middle Eastern or North African” and “Native Hawaiian and other Pacific Islander.” We collapsed categories if they made up less than 1% of the weighted estimate.

Table 6c, Gender: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 who fit these demographic characteristics

Gender	Estimated Count	Estimated Percent	Lower 95% CI proportion	Upper 95% CI proportion
Female	395,931	48.7%	44.5%	52.9%
Male	389,779	47.9%	43.7%	52.1%
Another gender not listed ¹¹	1,551	0.2%	0.0%	0.6%
Gender not indicated	25,869	3.2%	1.7%	4.7%
Total	813,130	100.0%		

Figure 2: Unweighted heatmap of home zip codes of survey respondents (darker colors indicate higher density of survey respondents) (n=862)¹²



¹¹ Additional answer options included “Gender non-conforming,” “Trans female/trans woman,” “Trans male/trans man,” “A gender not listed above.” We collapsed categories into “another gender not listed” if they made up less than 1% of the weighted estimate.

¹² 27 survey respondents are not reflected in this map because of missing data or invalid zip codes.

3.3 Transportation

The vast majority of individuals supported by food shelves and hunger-relief program partners in 2021 benefited from driving themselves in a vehicle to food shelves and hunger-relief programs (71.8%), 13.0% benefitted from walking, and another 10.4% benefitted from getting a ride with family or friends (Table 7a). We describe transportation findings in this way—“benefited from [type of transportation]”—because these estimated number of individuals include everyone supported by program partners. For example, a young child could benefit from belonging to a household where someone drives themselves in a vehicle to get food support; this young child is then counted in the 71.8% noted above.

Our interviews illuminated that transportation was a common barrier to using food programs, and a number of interviewees said it limited their options when choosing where to get their food. Some interviewees spoke of relying on others to drive them or lend them their vehicle; others planned their visits to the grocery store or food programs around the bus schedule or their access to a car. A few participants mentioned difficult experiences with parking, including a concern about having to park illegally due to limited parking at the site.

Many communities lack accessible and reliable public transportation options. Additionally, some people may travel long distances to reach their nearest food shelf or hunger-relief program. Only 2.2% individuals supported by food shelves and hunger-relief program partners in 2021 benefitted from using public transportation to receive food supports, 13.0% benefitted from walking, and less than 1% benefitted from riding a bike. Even though the survey question asked how respondents “usually” get to the program, the timing of our survey administration could have also influenced this finding, as it snowed some survey days.

We explored differences in individuals benefitting from driving themselves in a vehicle to receive food supports (Table 7b). Individuals who identified as a race/ethnicity other than White were **less likely** to benefit from driving themselves in a vehicle than individuals who identified as White only (70.1% vs. 79.3%). Additionally, a **greater proportion** of individuals who received support from sites in non-metropolitan areas benefitted from driving themselves compared to individuals who received support from Minneapolis or St. Paul sites (85.1% vs. 33.8%). When it came to household size, individuals in households of four or more people were **more likely** to benefit from driving themselves in a car compared to individuals with households of three or fewer people (80.0% vs 58.8%).

Table 7a: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 who benefitted from this mode of transportation

Transportation option	Estimated Count	Estimated Percent	Lower 95% CI proportion	Upper 95% CI proportion
Drive yourself in a vehicle	583,777	71.8%	68.0%	75.6%
Walk	105,712	13.0%	10.2%	15.8%
Get a ride with family or friends	84,952	10.4%	7.9%	13.0%
Use public transportation	18,041	2.2%	1.0%	3.5%
Ride a bicycle	6,244	0.8%	0.0%	1.5%
Other	7,214	0.9%	0.1%	1.7%
Not indicated	7,190	0.9%	0.1%	1.7%
Total	813,130	100.0%		

Chart 2:

Nearly 72% of people drive themselves to get food support

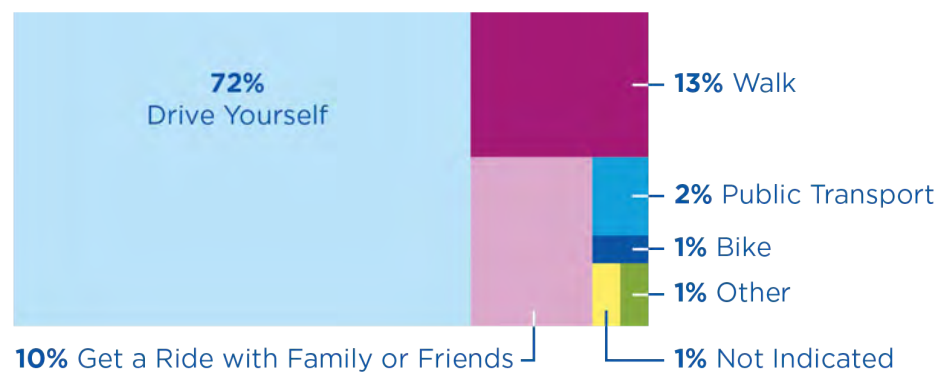


Table 7b: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 who benefitted from driving themselves in a vehicle

Drive yourself in a vehicle	Estimated Count	Estimated Percent	Lower 95% CI proportion	Upper 95% CI proportion
A race/ethnicity other than White	291,483	70.1%	66.2%	73.9%
White only	264,528	79.3% ¹³	75.9%	82.8%
Minneapolis or St. Paul	71,272	33.8% ¹⁴	29.8%	37.8%
Non-metropolitan	512,529	85.1%	82.1%	88.1%
Household size: 3 or fewer	184,929	58.8%	54.6%	62.9%
Household size: 4 or more	398,849	80.0% ¹⁵	76.6%	83.4%

3.4 History of Food Program Use and Additional Needs

Half of the individuals supported by food shelves and hunger-relief program partners in 2021 received free food from meal or grocery programs before the COVID-19 pandemic (50.8%), and 47.4% reported that they did not receive food from meal or grocery programs before the COVID-19 pandemic.

This finding was echoed in our interviews. High living costs were mentioned as one factor in interviewees' decision to use food services; specifically mentioned were food prices and the cost of health insurance. Using food programs was an important way to offset increasing costs. Some referenced a sense that more people in the community, especially during the pandemic, were experiencing the same challenges as they were. One interviewee said using the food program cut their food bill in half, which was a significant relief:

¹³ A greater proportion of white individuals benefit from driving themselves compared to people who identified as a race other than white ($p = .0004$).

¹⁴ A greater proportion of individuals who received support from a site in a non-metropolitan area benefitted from driving themselves compared to individuals who received support from Minneapolis or St. Paul sites ($p < .0001$).

¹⁵ A greater proportion of individuals from households of 4 or more benefitted from driving themselves compared to individuals from households of 3 or fewer ($p < .0001$).

“With the prices and everything going up like gas. I can’t believe our utility bills right now. And it’s COVID and everybody’s behind the 8-ball trying to catch up.”

Despite COVID-19 presenting new challenges, participants spoke of their need for food programs years before the pandemic, be that due to a mental health or physical health crisis, immigration, or other longstanding difficult situations. Many participants described their use of food programs as simply a way of life.

When it came to exploring differences among individuals, a **greater proportion** of individuals who received support from food shelves and hunger-relief program partners in non-metropolitan areas reported not receiving free food from meal or grocery programs before the COVID-19 pandemic compared to individuals who received support from sites in metropolitan areas (49.4% vs 41.9%).¹⁶

Nearly a third of individuals supported by food shelves and hunger-relief program partners in 2021 needed more free meals and/or groceries than they are currently receiving (31.6%) (Table 9a). A greater proportion of individuals from households of four or more people needed more meals and/or groceries compared to those from households of three or fewer (36.0% vs 24.7%) (Table 9b).¹⁷

Our conversations with interviewees provided nuance to this survey finding. A common coping strategy for making their food last longer was to eat less or eat different food, such as less meat. Interviewees also talked about the shopping tactics they use to stretch out their food budget, such as shopping at discount grocery stores, looking for discounts and low prices, buying cheaper and less healthy food, closing down their credit cards and using cash only, not eating in restaurants, buying no more than the minimum, and generally being conscious of their budget.

For some interviewees, however, the quantity of food they receive is a lot for their household, or there are items they won’t eat, so they share with neighbors, friends, etc. They understand others need it more than they do, and some said that helping makes them feel good. One participant said she appreciates what her parents can share because their cooking provides a variety for her children that she cannot provide alone.

¹⁶ In terms of food support before COVID-19, no difference existed between individuals who identified as White only and individuals who identified as a race/ethnicity other than White. Nor did a difference exist between individuals who live in a household with 4 or more people compared to those who live in a household with 3 or fewer people.

¹⁷ In terms of needing more food support, no difference existed between individuals who identified as White only and individuals who identified as a race/ethnicity other than White. Nor did a difference exist between individuals receiving support at Minneapolis or St. Paul sites compared to those receiving support at non-metropolitan sites.

Table 8a: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 that did or did not receive free food from meal or grocery programs before the start of the COVID-19 pandemic (March 2020)

Received free food	Estimated Count	Estimated Percent	Lower 95% CI proportion	Upper 95% CI proportion
Yes	413,292	50.8%	46.6%	55.0%
No	385,692	47.4%	43.2%	51.6%
Not indicated	14,146	1.8%	0.6%	2.8%
Total	813,130	100.0%		

Table 8b: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 that **did not** receive free food from meal or grocery programs before the start of the COVID-19 pandemic (March 2020)

No, did not receive free food	Estimated Count	Estimated Percent	Lower 95% CI proportion	Upper 95% CI proportion
A race/ethnicity other than White	195,709	47.1% ¹⁸	42.8%	51.3%
White only	158,664	47.6%	43.4%	51.8%
Minneapolis or St. Paul	88,359	41.9% ¹⁹	37.7%	46.1%
Non-metropolitan	297,333	49.4%	45.2%	53.6%
Household size: 3 or fewer	144,087	45.8% ²⁰	41.6%	50.0%
Household size: 4 or more	241,605	48.5%	44.3%	52.7%

¹⁸ There is no significant difference between white individuals and individuals of a race/ethnicity other than White only who received free food from programs prior to the COVID-19 pandemic ($p = .86$).

¹⁹ There is a greater proportion of non-metropolitan individuals who reported *not* receiving free food from meal or grocery programs before the start of the COVID-19 pandemic ($p = .01$)

²⁰ There is no significant difference between individuals from houses of 3 or fewer and individuals from houses of 4 or more who received free food from programs prior to the COVID-19 pandemic ($p > .37$).

Chart 3: People living in **non-Metropolitan** areas were more likely to receive food support for the first time since the start of COVID. No significant difference existed based on race or household size.

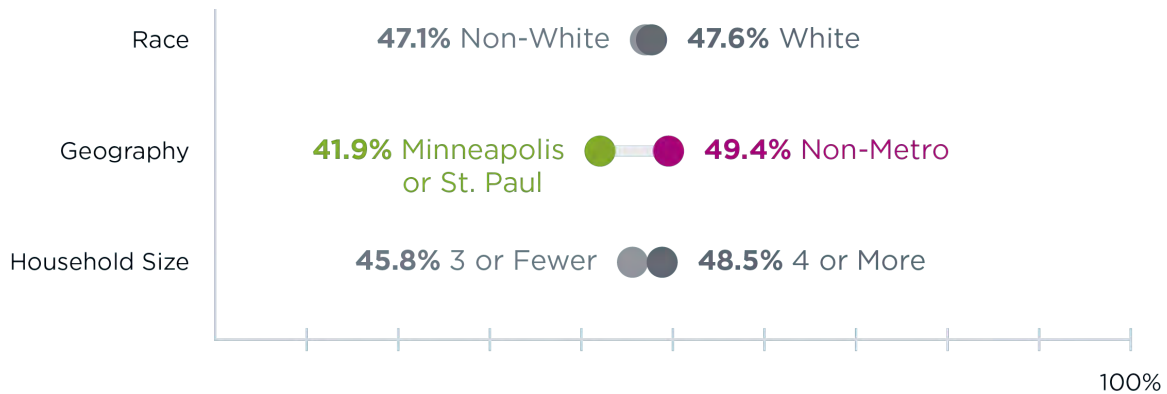


Table 9a: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 that need or do not need more free meals and/or groceries than they are currently receiving

	Estimated Count	Estimated Percent	Lower 95% CI proportion	Upper 95% CI proportion
Yes, need more	257,337	31.6%	27.7%	35.6%
No, do not need more	536,976	66.0%	62.0%	70.0%
Not indicated	18,817	2.4%	1.0%	3.6%
Total	813,130	100.0%		

Table 9b: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 that **do need** more free meals and/or groceries than they are currently receiving

Yes, need more	Estimated Count	Estimated Percent	Lower 95% CI proportion	Upper 95% CI proportion
A race/ethnicity other than White	134,676	32.4% ²¹	28.4%	36.3%
White only	101,195	30.4%	26.5%	34.2%
Minneapolis or St. Paul	66,567	31.6% ²²	27.6%	35.5%
Non-metropolitan	190,770	31.7%	27.8%	35.6%
Household size: 3 or fewer	77,881	24.7% ²³	21.1%	28.4%
Household size: 4 or more	179,456	36.0%	32.0%	40.1%

3.5 Participation in Other Programs

The majority of individuals supported by food shelves and hunger-relief program partners in 2021 participated in SNAP, EBT, or food stamps, WIC, and/or free or reduced-price school meal programs (53.0%) (we refer to these as “additional programs” below) (Table 10a). In our interviews, a number of interviewees described relying on other services to obtain the food they need, for example, free meals at church, children’s school, EBT, other meal programs, and county services. An interviewee said, “I have the EBT card and it fills in the gaps, for me, but I could never and I don’t know how people do it, but I could never afford on the freshest. I look at some of these salads and I’m amazed at them and I get to eat them and I’m looking at the store and I think, I can’t never afford that.”

²¹ There is no significant difference between white individuals and individuals identifying as another race in needing more meals and/or groceries ($p=.61$).

²² There is no significant difference between individuals who received support from metropolitan sites and individuals who received support from non-metropolitan sites in needing more meals and/or groceries ($p=.97$).

²³ There is a difference between individuals from houses of 3 or fewer and individuals from houses of 4 or more in needing more meals and/or groceries ($p<.0001$).

As we explored differences among individuals supported by food shelves and hunger-relief program partners in 2021, those who identified as a race/ethnicity other than White were **more likely** to report using an additional program than individuals who identified as White only (59.4% vs. 42.3%) (Table 10b). A **greater proportion** of individuals from households of four or more people used additional programs compared to those from households of three or fewer (59.7% vs 42.5%). In addition, a **greater proportion** of individuals who received support from Minneapolis or St. Paul sites used an additional program compared to those who received support from non-metropolitan sites (57.6% vs 51.4%).

Looking at all three types of programs together, nearly 38.3% of all individuals participated in one program, and 12.3% participated in two programs (Table 11). The program that individuals participated in at the highest rate was SNAP, EBT, or food stamps (30.6%) (Table 12).

Table 10a: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 that did or did not participate in another program²⁴

	Estimated Count	Estimated Percent	Lower 95% CI proportion	Upper 95% CI proportion
Participated in a program	431,034	53.0%	48.8%	57.2%
Did not participate in a program	336,539	41.4%	37.2%	45.5%
Not indicated	45,557	5.6%	3.7%	7.5%
Total	813,130	100.0%		

²⁴ The tables in this section contain information about participation in other programs. By other programs, we mean SNAP, EBT, or food stamps, WIC, and/or free or reduced-price school meal programs.

Table 10b: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 that **did** participate in at least one other program

Participated in another program	Estimated Count	Estimated Percent	Lower 95% CI proportion	Upper 95% CI proportion
A race/ ethnicity other than White	247,271	59.4% ²⁵	55.3%	63.6%
White only	141,009	42.3%	38.1%	46.5%
Minneapolis or St. Paul	121,379	57.6% ²⁶	53.4%	61.7%
Non-metropolitan	309,654	51.4%	47.2%	55.6%
Household size: 3 or fewer	133,683	42.5%	38.3%	46.6%
Household size: 4 or more	297,351	59.7% ²⁷	55.5%	63.8%

²⁵ There is a greater proportion of individuals identifying as a race/ethnicity other than White reporting using additional programs compared to White only individuals ($p=.00000001$).

²⁶ A greater proportion of individuals who received support from Minneapolis or St. Paul sites reported using an additional program (e.g., SNAP, WIC, free/reduced lunch) compared to individuals who received support from non-metropolitan sites ($p = .04$).

²⁷ There is a greater proportion of individuals from a household of 4 or more reporting using an additional program compared to individuals from households of 3 or fewer ($p=.04$).

Chart 4: Significant differences in other program use were found between each subgroup. **Non-white, Minneapolis or St. Paul** and **households with 4 or more people** were more likely to use federal programs

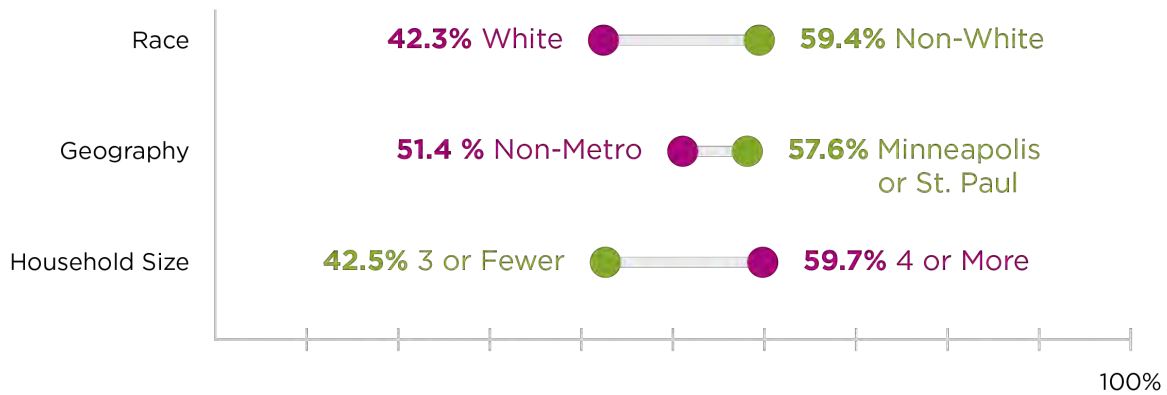


Table 11: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 that participated in 0, 1, 2, or 3 other programs

	Estimated Count	Estimated Percent	Lower 95% CI proportion	Upper 95% CI proportion
0	336,539	41.4%	37.2%	45.5%
1	311,065	38.3%	34.2%	42.4%
2	100,315	12.3%	9.6%	15.1%
3	19,654	2.4%	1.1%	3.7%
Not indicated	45,557	5.6%	3.7%	7.5%
Total	813,130	100.0%		

Chart 5: Of households that used federal programs, most only used one

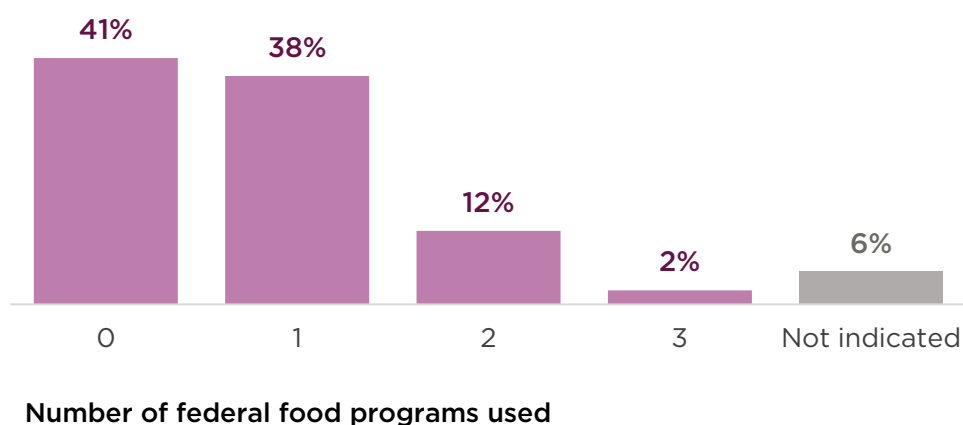


Table 12: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 that participate in other specific programs

Program name	Estimated Count	Estimated Percent	Lower 95% CI proportion	Upper 95% CI proportion
SNAP, EBT, or food stamps	248,541	30.6%	26.7%	34.5%
Free or reduced-price school meal programs	242,372	29.8%	25.9%	33.7%
WIC (the Nutrition Program for Women, Infants, and Children)	79,744	9.8%	7.3%	12.3%

Chart 6: SNAP and Free/Reduced school meals were used the most



3.6 Challenges Making Meals

The majority of individuals supported by food shelves and hunger-relief program partners in 2021 did not experience challenges to making a meal in the last month (63.9%) (Table 13a). A **greater proportion** of individuals who received support from Minneapolis or St. Paul sites encountered challenges in making meals in the last month compared to individuals who received support from non-metropolitan sites (41.7% vs. 34.2%) (Table 13b).²⁸

The challenge most commonly experienced was accessing ingredients that meet dietary or health needs (21.1%) (Table 14). In Appendix C, we include a qualitative analysis of answers provided when survey respondents answered “another challenge not listed above.” A fifth of individuals experienced one unique challenge over the last month, and 11.6% experienced two different challenges (Table 15).²⁹

Table 13a: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 who fit this description regarding challenges to making meals in the past month

	Estimated Count	Estimated Percent	Lower 95% CI proportion	Upper 95% CI proportion
Experienced a challenge	293,770	36.1%	32.1%	40.2%
Did not experience a challenge in the last month	519,360	63.9%	59.8%	67.9%
Total	813,130	100.0%		

²⁸ No difference existed between individuals who identified as White only and individuals who identified as a race/ethnicity other than White. Nor did a difference exist between individuals who live in a household with 4 or more people vs those who live in a household with 3 or fewer people.

²⁹ This statistic should not be interpreted as their having experienced only two challenges in total; for example, they may have experienced the same type of challenge multiple times.

Table 13b: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 **who did experience a challenge** to making meals in the past month

Experienced a challenge	Estimated Count	Estimated Percent	Lower 95% CI proportion	Upper 95% CI proportion
A race/ethnicity other than White	160,363	38.6% ³⁰	34.4%	42.7%
White only	114,764	34.4%	30.4%	38.4%
Minneapolis or St. Paul	87,969	41.7% ³¹	37.6%	45.9%
Non-metropolitan	205,800	34.2%	30.2%	38.2%
Household size: 3 or fewer	113,678	36.1% ³²	32.1%	40.2%
Household size: 4 or more	180,092	36.1%	32.1%	40.2%

³⁰ There is no significant difference between White only individuals and individuals identifying as a race other than White regarding having challenges making meals (p=.16).

³¹ A greater proportion of individuals who received support from a Minneapolis or St. Paul site encountered challenges when making meals compared to individuals who received support from a site in a non-metropolitan area (p=.01).

³² There is no significant difference between individuals from households of 3 or fewer and individuals identifying from households of 4 or more regarding having challenges making meals (p=1.00).

Table 14: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 who fit this description regarding specific types of challenges to making meals experienced in the past month

Challenge	Estimate Count	Estimated Percent	Lower 95% CI proportion	Upper 95% CI proportion
Accessing ingredients that meet dietary or health needs	171,513	21.1%	17.7%	24.5%
Having the physical ability to make meals	66,244	8.1%	5.8%	10.5%
Dealing with a crisis and unable to make meals	42,464	5.2%	3.3%	7.1%
Having access to a kitchen and the tools needed to make meals	36,291	4.5%	2.7%	6.2%
Accessing ingredients that meet religious needs	24,009	3.0%	1.5%	4.4%
Another challenge not listed above	134,171	16.5%	13.4%	19.6%
No challenges making meals	519,360	63.9%	59.8%	67.9%

Chart 7: The most common challenge to making meals was accessing ingredients that meet dietary or health needs

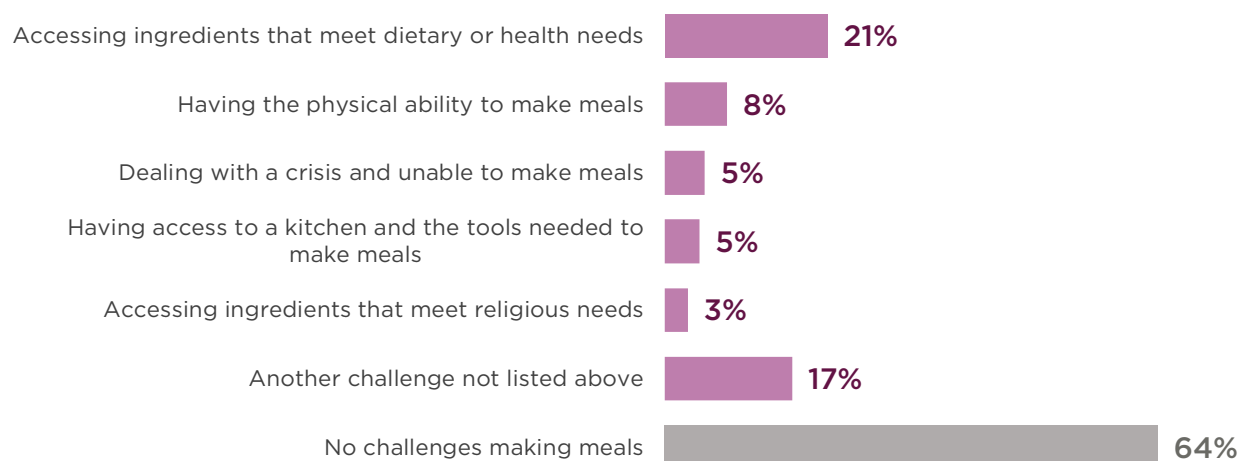
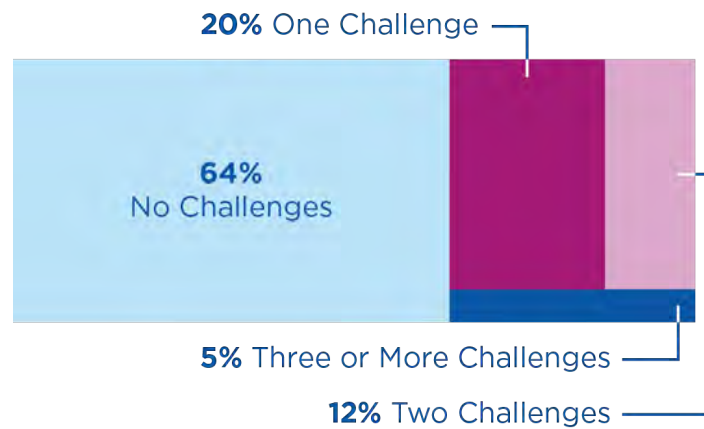


Table 15: Most people did not have challenges making meals, but for those who did, experiencing 1 type of challenge was most common

Number of unique challenges	Estimated Count	Estimated Percent	Lower 95% CI proportion	Upper 95% CI proportion
0	519,360	63.9%	59.8%	67.9%
1	162,564	20.0%	16.6%	23.4%
2	94,057	11.6%	8.9%	14.3%
3 or more	37,149	4.5%	2.8%	6.3%
Total	813,130	100.0%		

Chart 8: Most people did not experience challenges making meals, but for those who did, experiencing 1 type of challenge was most common.



3.7 Household Size and Current Living Situation

Household size varied across the individuals supported by food shelves and hunger-relief program partners in 2021. The largest category was individuals who lived in a household of five people (18.5%). Another 28.4% of individuals live in a larger household (6-12 people) (Table 16). Nearly half of individuals lived in a place they rented (46.4%) (Table 17).

Table 16: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 who fit this description for household size

	Estimated Count	Estimated Percent	Lower 95% CI proportion	Upper 95% CI proportion
1 person	96,977	11.9%	9.2%	14.7%
2 people	115,698	14.2%	11.3%	17.2%
3 people	102,027	12.5%	9.8%	15.3%
4 people	117,016	14.4%	11.4%	17.4%
5 people	150,302	18.5%	15.2%	21.8%
6 people	82,856	10.2%	7.6%	12.7%
7 people	74,128	9.1%	6.7%	11.5%
8 people	29,525	3.6%	2.1%	5.2%
9 people	24,892	3.1%	1.6%	4.5%
10 people	9,552	1.2%	0.3%	2.1%
12 people	10,157	1.3%	0.3%	2.1%
Total	813,130	100.0%		

Chart 9: The households supported varied greatly in size

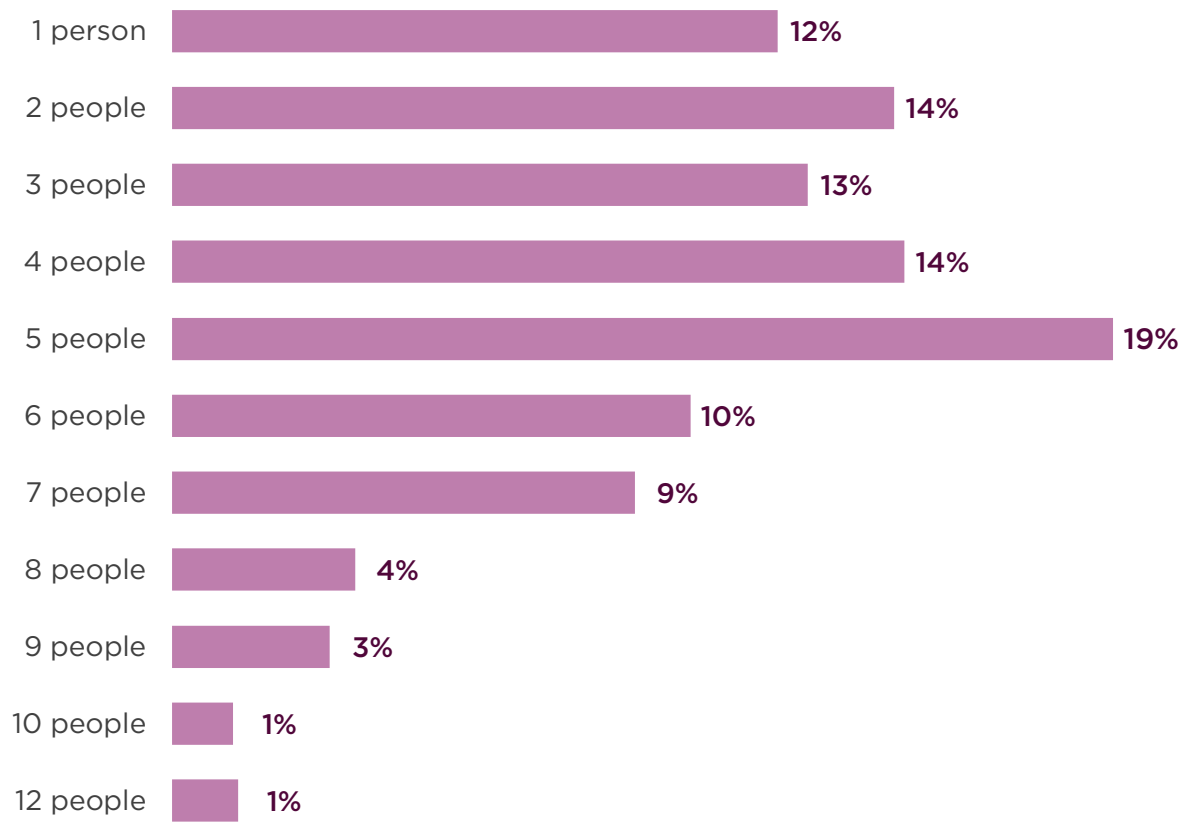
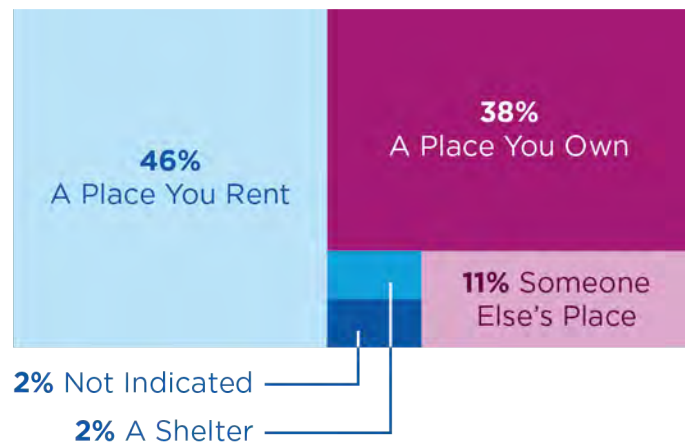


Table 17: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 who fit this description for living situation

Living situation	Estimated Count	Estimated Percent	Lower 95% CI proportion	Upper 95% CI proportion
A place you rent	377,388	46.4%	42.2%	50.6%
A place you own	310,961	38.2%	34.1%	42.3%
Someone else's place	92,477	11.4%	8.7%	14.1%
A shelter	12,715	1.6%	0.5%	2.6%
Not indicated	19,589	2.4%	1.1%	3.7%
Total	813,130	100.0%		

Chart 10: Most people who receive support live in a place they rent, but many live in a place they own



3.8 Income Sources and Income

The majority of individuals supported by food shelves and hunger-relief program partners in 2021 benefitted from compensation from full-time and/or part-time work with no other types of compensation (e.g., Social Security and/or Pension) (62.9%) (Table 18). Nearly half of individuals benefitted from compensation from full-time work (46.7%), and 36.4% benefitted from compensation from part-time work (Table 19). Just over half of individuals experienced a total combined household income in the last 12 months of \$35,000 or less (53.1%) (Table 20).

Through our interviews, we learned that some interviewees described difficult situations when they had to choose between paying their bills and buying food. Overall, people prioritized paying their bills and coped with less food or relied on outside sources such as the food pantries. One interviewee said:

“I’ll forego something, whether it’s not eating, to pay the bill. Those things will come first because usually I can get help. There’s not usually a time when you have absolutely zero in the house. And when that happens, the food shelf is there Monday, Wednesday and Friday.”

Table 18: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 who benefitted from compensation from full-time and/or part-time work with no other type of compensation

	Estimated Count	Estimated Percent	Lower 95% CI proportion	Upper 95% CI proportion
Benefitted from compensation from full-time and/or part-time work with no other type of compensation	511,495	62.9%	58.8%	67.0%
Benefitted from work and/or from other compensation ³³	301,635	37.1%	33.0%	41.2%
Total	813,130	100.0%		

Table 19: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 who benefitted from types of compensation

	Estimated Count	Estimated Percent	Lower 95% CI proportion	Upper 95% CI proportion
Working for pay full-time (30 hours per week or more)	379,613	46.7%	42.5%	50.9%
Working for pay part-time (less than 30 hours per week)	295,604	36.4%	32.3%	40.4%
Social Security and/or Pension	163,004	20.0%	16.7%	23.4%
Disability (SSDI), workman's compensation, or Supplemental Security Income (SSI)	154,062	18.9%	15.6%	22.3%
Unemployment compensation	24,329	3.0%	1.6%	4.4%

³³ The individuals represented in this category answered yes to at least one of the following answer options: "Unemployment compensation," Disability (SSDI), workman's compensation, or Supplemental Security Income (SSI)," "Social Security and/or Pension."

Chart 11: Working for pay full-time and part-time were the most common sources of household income among those supported by the network

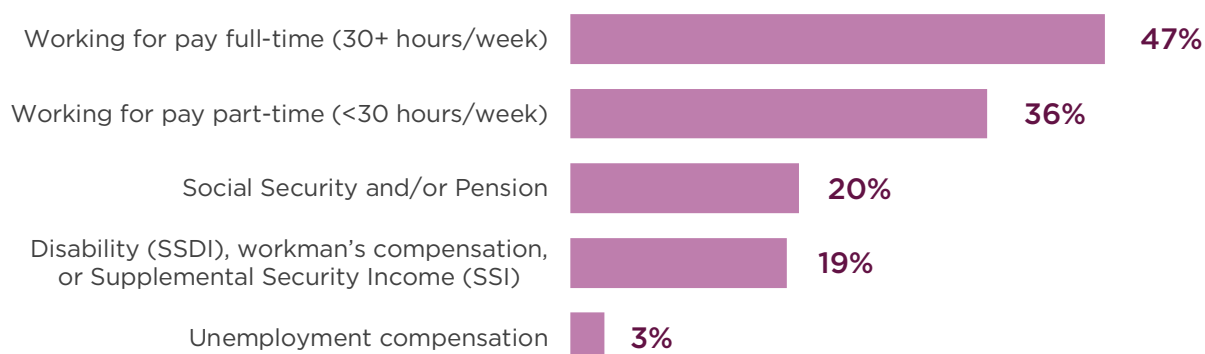


Table 20: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 that experienced a total combined income of all household members during the last 12 months

	Estimated Count	Estimated Percent	Lower 95% CI proportion	Upper 95% CI proportion
Zero	25,850	3.1%	1.7%	4.7%
\$5,000 or less	53,919	6.6%	4.5%	8.7%
\$5,001-\$10,000	44,597	5.5%	3.6%	7.4%
\$10,001-\$15,000	58,191	7.2%	5.0%	9.3%
\$15,001-\$20,000	40,952	5.0%	3.2%	6.9%
\$20,001-\$25,000	101,704	12.5%	9.7%	15.3%
\$25,001-\$30,000	29,839	3.7%	2.1%	5.3%
\$30,001-\$35,000	77,085	9.5%	7.0%	12.0%
\$35,001-\$50,000	83,448	10.3%	7.7%	12.8%
More than \$50,000	61,055	7.5%	5.3%	9.7%
Not indicated	236,490	29.1%	25.3%	32.9%
Total	813,130	100.0%		

3.9 Additional Key Findings from Interviews

In this section, we include additional key findings from the interviews not mentioned in the previous section.

3.9.a Challenges to food security are consistent, and individuals meet their needs with multiple strategies

Interviewees' need for food programs has been long-standing, and it was difficult for interviewees to isolate examples of when they found themselves needing food support programs. Factors such as the high cost of food, job loss, migration, and health conditions combined in a way that necessitated nearly everyone in this study to embed food programs into their lives on an ongoing basis. While the pandemic and the resulting economic downturn have created additional challenges, for example, the rising cost of food, individuals continued to experience a need for achieving food security. People met their needs by using a variety of coping strategies, such as making food last longer, using multiple services, adjusting their shopping habits, gardening, and sharing meals with family and friends.

"We always made ends meet but sometimes I have had to cook more like dry foods that I've had. We always make it month-to-month. If we were not to have this extra help, it'd be a lot more difficult paying for the food. It's nice to have a wide variety of food (i.e., veggies, meat, fruit, dairy, bread)."

3.9.b COVID-19 has resulted in innovation

The pandemic created new needs, and the resulting strategies for addressing those needs, such as providing contactless service, have resulted in innovative practices that are mostly appreciated by interviewees. Program sites have adopted new technologies to serve people in efficient ways. Many, although not all, interviewees appreciated food being boxed up, getting what they need from their cars, and the overall streamlined processes.

"The food shelf is a great help... In August we were all sick from COVID. Even when we were self-quarantined, we had enough food for the month...beef, chicken, fish...With COVID, the cost of living increased."

"...before people would often get together and talk and chit chat, it was kind of a social thing, but now with COVID...you were only [allowed] to come down at the time you signed up for it."

3.9.c Interviewees had deep appreciation for programs that provide positive experiences

Interviewees appreciated the food programs that provided them with access to a variety of food, especially fresh produce, meat, and household items. They also felt gratitude toward program staff who made accommodations for peoples' unique needs or schedules, including making home deliveries to people on quarantine for COVID-19. Program staff were generally described as kind and respectful of participants' dignity. There were differences between programs, however, and some interviewees have had experiences with programs that were more challenging, which at times led them to stop going.

“And also, the staff there is very, very helpful and they encouraging, you know, they talk to you nicely, they don't treat you like as if you were a beggar so that makes a difference. ...they treat people as if they are all human, not like beggars.”

3.9.d People experienced multiple challenges when accessing food programs

Interviewees experienced multiple barriers to accessing food programs, such as transportation and the negative social stigma that makes some clients feel angst or shame about using these services. A common challenge was related to the quality and quantity of food provided, with clients receiving rotten food, not enough or too much, and wishing for different items.

One means of reducing barriers appeared to be how program staff treated clients and made accommodations for their unique needs. Another opportunity that appeared to empower some clients was the ability to volunteer at the program site and serve others.

“I had that stigma in me really holding me back, but what happened is when I started going there, the way they treated me, it was just like I was going to the grocery store...that breaks the barrier to be honest.”

CHAPTER 4

Lessons Learned

4. LESSONS LEARNED

In this chapter, we provide lessons learned to help readers understand the project's context and serve as information for others embarking on similar projects. For a more detailed discussion of lessons learned specific to this project's methodology, please refer to Appendix C.

4.1 Balance research goals and outcomes for multiple stakeholders

When we conceived of our workplan, we wanted to 1) gather enough survey responses to be able to provide a representative count of all people who received support from food shelves and hunger-relief program partners and 2) share back data with individual sites about the survey respondents we collected at their locations. As we finalized our methodology, we learned that the needs to deliver on the two priorities stated above were different: To calculate a representative count, we needed approximately 12 surveys per site; to share back data, we needed a minimum of 20 surveys per site. Attempting to meet both goals added to the complexity of the data collection process.

We reviewed several studies at the beginning of this project, and we learned that Second Harvest Heartland preferred a sampling plan and survey tool most closely modeled on the 2014 Hunger in America study. Refining the team's understanding of expectations around using existing methodology would have informed the characteristics of both the project team and budget (e.g., we would have planned to engage a statistician from the beginning of the project). In addition, for future studies, we recommend either securing IRB approval before engaging a consultant or state expectations during work plan development regarding the consultant's role in the IRB process. Engaging in the IRB process proved substantially influential in determining the project timeline.

4.2 Leverage Second Harvest Heartland's relationships with food shelves and hunger-relief program partners

Second Harvest Heartland's relationships with food shelves and hunger-relief program partners was helpful to bridge connections between ACET and participating sites. This was clear in the director's introductory email connecting sites to ACET. The relationship between Second Harvest Heartland leadership and food shelves and hunger-relief program partners was especially important at the beginning of the project when they first were invited to participate, as well as during follow-ups with partners who we had trouble reaching. This connection helped secure a quick "yes" from some partners, but we encountered challenges reaching others (outdated contact information, no calls back, etc.)

Based on this experience, we recommend that in the future, Second Harvest Heartland leadership and staff secure a "yes" for participation and in the process

confirm or update contact information; we would recommend that Second Harvest Heartland then connect the food shelves and hunger-relief program partners with the research consultant for follow-up logistics.

4.3 Account for a lower response rate than expected

Despite Second Harvest Heartland's help reaching out to food shelves and hunger-relief program partners after we experienced high non-response rates, fewer food shelves and hunger-relief program partners participated in the study than we originally anticipated. Similarly, our response rate was lower than expected for interviews (both food shelves and hunger-relief program partners who provided names and contact information for people who received support, as well as people who agreed to be interviewed). We originally planned to mention the interviews in our exploratory phone conversations with sites. However, for some, this was challenging because we already needed to gather and cover a lot of information in this initial phone call, and we prioritized getting a yes regarding the survey and collecting important survey logistics.

In light of these sampling challenges, we recommend identifying a larger sample of food shelves and hunger-relief program partners to initially contact, while at the same time planning for more time to contact and communicate with these partners. This is in part to account for the numerous follow-up emails, call backs, and voicemails required to secure participation from the majority of partners. To reduce the number of contact attempts regarding interviews, interviewers could accompany surveyors to select sites and conduct in-person interviews.

Having a solid plan for supporting surveyors and sites was key, but so was responsiveness and flexibility as we navigated multiple priorities

We created a system that captured detailed logistics and allowed us to effectively and efficiently coordinate the surveyors' visits to the sites. Our work upfront resulted in smooth survey administration, both on the surveyors' end and the sites' end (e.g., not too many surveyors or sites canceled day-of, sites were prepared to host a surveyor, surveyor was prepared to adapt to expected challenges, such as having people get support in two different ways like drive-through and walk-up).

Surveyors also navigated multiple priorities while surveying, from gathering quality data in a consistent way to taking care of themselves (e.g., warming up in their car if needed). Throughout trainings and conversations with surveyors during the project, we reviewed the priorities and how to practically balance them as real-world conditions varied. Surveyors also navigated COVID-19 protocols, including surveying people waiting in their cars in drive-through locations.

Open communication was key to maintaining consistency of data collection under a broad range of conditions. A designated person served as the primary contact

for survey administrators in the field and was for the most part able to work through questions and obstacles as they arose.

Although the two trainings we conducted with surveyors covered important information, we could neither predict exactly nor replicate the conditions they would ultimately experience on-site. In addition, surveyors' experienced different learning curves, partially due to the fact that some surveyors started surveying before others and overall surveyed at more sites; this required more individualized support to surveyors, especially at the beginning of the project. As conditions proved to be dynamic and required revisiting and adapting certain protocols, we recommend for future studies that a trainer accompany each surveyor on their first day of surveying for at least one hour. This could allow surveyors to ask the trainer questions on the spot. Another recommendation is to budget for a training with all surveyors about a third of the way through survey administration. In this training, we could remind surveyors of protocol, and surveyors could share their experiences adapting to a variety of conditions across different geographies and types of sites (grocery vs. onsite/meal). The goal of this training would be to ensure an overall more consistent pattern of survey administration to increase quality data collection.

While not in the original timeline for the project, this survey was conducted in the winter months in often harsh conditions. This is not a recommended season considering the network area climate. The data itself was in some cases at risk, as iPads used to collect data failed in the cold weather. Participation rates may have also been affected by a disinclination to stand in the cold to take the survey. In one case, a survey administrator left a site due to health concerns related to breathing outside in the cold for an extended amount of time. For future studies, we recommend strict safety protocols prioritizing the health and safety of survey administrators. This project did not include these, as surveying was originally planned for earlier in the season.

Other than this less-than-ideal timing over two major holidays and the onset of colder weather, we recommend that future studies of this scale set a longer timeline for the surveying portion that allows for unforeseen circumstances.

4.4 Test tools and technology more extensively before launching data collection

The survey questions, while thoroughly considered in terms of the insights to be gained from their answers, were in some cases potentially confusing in practice. Based on the numbers given in response to the series of questions about frequency of use of food supports, it was apparent that some survey respondents did not understand what was being asked, even with a survey administrator to clarify.

When it came to interviews, interviewees often struggled to provide isolated examples of when they found themselves using food support programs. Similarly, they struggled to provide examples of obstacles that stand in their way of meeting their needs. Their responses seemed to indicate that “this is just how it is,” and these questions were confusing to many.

More thorough testing of the survey tool and technology could improve the data collected. Spending additional sessions to train the survey administrators in the use of iPads, wi-fi connections, and personal hotspots could smooth data collection and retention. Additionally, a fully integrated audio translation and translated digital survey might increase participation by non-English speakers.

Further, involving food program participants in the research design and implementation phases of future engagement projects could improve data collection tools, add authenticity to the process, and increase alignment between clients and program providers. For example, prior to data collection, a small number of people could validate interview or survey questions by testing the protocol and providing insight into areas where additional clarity or other changes are needed. Involving people who participate in the network in this way will help ensure that Second Harvest Heartland is asking questions with appropriate language that will elicit rich stories and insight.

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REFERENCES

- ^I “Service Area” Second Harvest Heartland. Accessed 02/14/2022. <https://www.2harvest.org/who--how-we-help/services-and-programs/services/our-service-areas.html#.YgpzZe7ML0o>
- ^{II} Coleman-Jensen, A., Rabbitt, MP., Gregory, CA., & Singh, A. (2020). USDA Economic Research Services. Household Food Security in the United States in 2019. Economic Research Report No. ERR-275. Accessed from: https://www.ers.usda.gov/webdocs/publications/99282/err275_summary.pdf?v=3126.1
- ^{III} Ibid
- ^{IV} Coleman-Jensen ARM, Gregory CA., Singh, A. (2017). Household Food Security in the United States in 2016. United States Department of Agriculture Economic Research Service. Economic Research Report No. ERR-237.
- ^V Coleman-Jensen, A., Rabbitt, MP., Gregory, CA., & Singh, A. (2020). USDA Economic Research Services. Household Food Security in the United States in 2019. Economic Research Report No. ERR-275. Accessed from: https://www.ers.usda.gov/webdocs/publications/99282/err275_summary.pdf?v=3126.1
- ^{VI} U.S. Census Bureau. (2021). Household Pulse Survey: Food Scarcity. Accessed from: <https://www.census.gov/data-tools/demo/hhp/#/?measures=FOODSCARCE>
- ^{VII} U.S. Census Bureau. (2021). Household Pulse Survey Data Tables. Accessed from: <https://www.census.gov/programs-surveys/household-pulse-survey/data.html>
- ^{VIII} Lakhani, N. & Sing, M. (2020). ‘No end in sight’: hunger surges in America amid a spiraling pandemic. Accessed from: <https://www.theguardian.com/food/2020/nov/25/us-hunger-surges-spiraling-pandemic>
- ^{IX} Feeding America. (2021). Donate to Feeding America’s Coronavirus Response Fund. Accessed from: <https://www.feedingamerica.org/take-action/coronavirus>
- ^X Second Harvest Heartland (2021). The COVID-19 Hunger Surge. Accessed from: <https://www.2harvest.org/who--how-we-help/the-face-of-hunger-today/the-coming-hunger-surge.html>
- ^{XI} Second Harvest Heartland & Superhuman LLC. (2020). Unpublished research.
- ^{XII} SuperShelf, Minnesota Department of Human Services, & Hunger Solutions. (2020). Minnesota Food Shelf Survey. Accessed from: <https://www.supershelfmn.org/minnesota-statewide-survey>
- ^{XIII} Caspi, CE., Davey, C., Barsness, CB., Gordon, N., Bohen, L., Canterbury, M., et al. Needs and Preferences Among Food Pantry Clients. *Prev Chronic Dis* 2021;18:200531. DOI: <http://dx.doi.org/10.5888/pcd18.200531>external icon.
- ^{XIV} Urban Institute, Westat, Mills, G., Weinfeld, N., Vericker, T., Montaquila, J., Gearing, ME., Mendonca, S., & Zedlewski, S. (2014). Hunger in America 2014 Food Bank Report: Second Harvest Heartland.
- ^{XV} “IRB EXEMPTION—REGULATORY OPINION.” October 5, 2021.
- ^{XVI} 2019 Minnesota Food Shelf Survey (2019). SuperShelf. Accessed from: <https://www.supershelfmn.org/resources>
- ^{XVII} Sobolki, M. and Syvertson, T. (2018). 2018 Hunger in North Dakota: A Report on the Charitable Food Network. Great Plains Food Bank.
- ^{XVIII} Rivera, G. et. al. (2021). The Lived Experience of Food Pantry Users in Minnesota: Qualitative Findings from a Statewide Survey. *Journal of Hunger & Environmental Nutrition*, DOI: 10.1080/19320248.2021.1932663
- ^{XIX} Caratao, E. (2019). 2019 Client Impact Survey Findings: Prepared for Loaves & Fishes.
- ^{XX} Thomas, K. et. al. (2015) More Than A Meal Pilot Research Study: Results from a Pilot Randomized Control Trial of Home-Delivered Meal Programs. Meals on Wheels America.
- ^{XXI} Heflin, C. (2006). Dynamics of Material Hardship in the Women’s Employment Study. Institute for Research on Poverty.
- ^{XXII} 2019: ACE 5-Year Estimates Data Profiles. DPO5 ACE Demographic and Housing Estimates.
- ^{XXIII} Demographic mix is based on research including Feeding America Report, 2021; Fitzpatrick and Willis, 2021; Baggett et al. (2011); Gundersen et al. (2003); Lee and Greif, (2008); Goldrick-Rab et al., (2015).

APPENDIX A:

Ethics Review

- a.** Submitted IRB Documentation
- b.** IRB Decision Letter

Second Harvest Heartland Hunger-Relief Supports: Understanding Neighbors and Their Need

INVESTIGATORS / KEY PERSONNEL

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PROJECT GOALS

The goal of this project is to develop a new baseline understanding of the people who are receiving support through Second Harvest Heartland directly and the network of local food shelves, meal programs, and partners throughout the Minnesota and Wisconsin. The information will be used for reporting purposes and to make informed decisions about the programs and services offered within the network, especially considering the recent changes that occurred because of the COVID-19 pandemic. Within the two research questions we are specifically interested in learning more about the communities of color that receive services within the network. Given the disproportionate rate people of color experience food insecurity we aim to design the research to ensure we reach these clients so we can understand who we are serving and what their experiences are with the network's services.

RESEARCH QUESTIONS:

1. How many unique people receive services through Second Harvest Heartland and the network of agencies within SHH's service area in 2021?
2. What are the demographic and economic characteristics of people receiving services?

SIGNIFICANCE / BACKGROUND

In 2019, prior to the COVID-19 pandemic, 10.5 percent of households were food insecure in the United States. While this was down significantly from 2018, there were still 35.2 million people living in food-insecure households at some point during 2019.¹ In addition, certain groups had had higher rates of food insecurity than the national average. Among these groups were Black- and Hispanic-headed households which experienced food insecurity at rates of 19.1% and 15.6% respectively.² An analysis of data from 2001 to 2016 showed that non-Hispanic Black and Hispanic households consistently reported food insecurity at rates at least twice that of white, non-Hispanic households.³

With the onset of the COVID-19 pandemic in early 2020, and the resulting economic implications of restrictions meant to reduce transmission, food insecurity began to increase. These increases countered the steady decrease in food insecurity that had been occurring since the last economic recession ended.⁴ Early in the pandemic the

Census Bureau implemented a weekly, and later bi-weekly, collection of near real-time data through the Household Pulse Surveys. Included in this effort is a measure of food sufficiency, which indicates if households had enough food to eat; food scarcity indicated “there was either sometimes or often not enough to eat in the last 7 days”.⁵ While food scarcity measures a more severe condition than food insecurity the Pulse Survey data showed that households were consistently indicating elevated levels of food scarcity, and also showed Black and Hispanic Households being disproportionately impacted.⁶

During this time when many households were struggling to secure enough food, foodbanks across the country were experiencing large increases in demand from community members.^{7,8} At Second Harvest Heartland we have seen a 30% increase in demand for food at our peak and agency partners have seen a 60% increase in people seeking services.⁹ Simultaneously COVID restrictions changed many things about how we and agency partners have had to provide food support, and what type of support, while minimizing risks to the health and safety of clients, volunteers, and staff. Many services switched from on-site, client choice shopping to drive through or pop-up distributions which limited or eliminated the option for self-selecting food. In addition, previous methods used to gather basic client information while providing service were too onerous during these modified interactions.

While national data helps understand the need for food support at a high level, it is important for Second Harvest Heartland to understand more about the clients seeking services specifically within our network. In fall of 2020 in collaboration with Superhuman LLC we gathered data through online client surveys and surveys with clients at pop-up CFAP (Coronavirus Food Assistance Program) distribution events. 38% of respondents at the CFAP distributions reported they had not previously visited a food shelf.¹⁰

With this research project we aim to build on these efforts to gather client data, but in a systematic way for the whole network. Two previous studies provide precedence for this work. In 2017 and again in 2019 a statewide survey of food shelf users was conducted as part of the SuperShelf Project of the University of Minnesota and local partners.¹¹ This research provided useful information about client demographics, food shelf use, desired foods, and more. For example, in the 2019 SuperShelf study indicated that 85% of respondents wanted access to fresh vegetables and fruit, but only 52% of respondents reported that these foods were always available at the food shelf.¹² However, this study has several limitations which our currently proposed research aims to overcome. First, the SuperShelf study is limited because the study did not gather information from clients accessing other important sources of food support such as meal sites, school pantries, or mobile programs. Second, given the statewide nature of the study the results include clients outside of Second Harvest Heartland’s service area. Third, the information was gathered prior to the COVID pandemic, Lastly, the study does not attempt to produce any estimates on the number of people using food support.

The second study, Hunger in America, was conducted by Feeding America in partnership with member foodbanks does address the issue of how many people are

receiving services from the network. According to estimates from the 2014 Hunger in America study, Second Harvest Heartland served 532,000 unique clients in 2013, 57.9% which were white non-Hispanic, 19.9% were black non-Hispanic, and 17.2% were Hispanic.¹³ The primary limitation of this research is its age. Even before the changes brought by COVID the data was out of date. The proposed study will draw from the Hunger in America 2014 study and utilize some of its design elements, however it will be distinct in two primary characteristics. First, this research will oversample clients receiving support through the network that are members of communities of color. We aim to use this information to help inform our efforts to address the heightened food insecurity among these communities. The proposed study is unique from both the SuperShelf and Hunger in America research because we will be conducting interviews with a small number of clients to gather in-depth qualitative data.

With this study we aim to develop an update understanding of the clients receiving services with Second Harvest Heartland's service area while we continue to see increased need due to the COVID pandemic. In addition, we will increase our knowledge about the communities of color that are being served and how their experiences within the network.

The project is a collaboration of several organizations. Second Harvest has hired external consulting firm ACET, Inc. to conduct the research. An Advisory Council has been created to inform the study's design and development. The Advisory Council is comprised of a representative from each Feed My People and St. Croix Valley Food banks, both located in Second Harvest's Wisconsin service area, and several agency partners from our Minnesota service area. Staff members representing several internal Second Harvest Heartland teams make up the remaining members of the Council. The Council has met several times over the course of the project to discuss and make key design decisions, and members have provided feedback in multiple ways between meetings. This collaborative effort has helped improve the design of the study, support beneficial outcomes to all those involved, and increased feasibility for programs participating in data collection.

METHODS

DESIGN

This study is designed as a cross-sectional study using mixed methods. Data will be collected in collaboration with agency partners in the 59-county area of Minnesota and western Wisconsin covered by Second Harvest Heartland's service area.

Quantitative data will be collected through surveys of clients using probability proportion to size (PPS) sampling centered on target population and program type: Partner sites located in communities with at least 20% of target population of Black or African American, American Indian and Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, Hispanic or Latino, or Some Other Race

and partner sites identified as either a grocery program or an onsite program offering meals.

The survey sampling frame was developed using a multistage stratified sample with disproportionate allocation to ensure communities of color are meaningfully represented. Qualitative data will be gathered through in-depth interviews with a purposeful sample of clients recruited at the end of the survey. All locations for client recruitment for surveys will meet the same criteria as programs within the survey sampling frame.

Second Harvest Heartland, in collaboration with Feed My People Food bank in Eau Claire, Wisconsin created a list of every program that was operational on June 30, 2021. Included in the list for each program includes a site address, program type (grocery or onsite), program category (see list below), program number, and county. From this list programs were determined to be eligible or ineligible for inclusion in the sampling frame. Wherever possible, and fitting with the purpose of the project, we followed the precedent from Hunger in America 2014. Following that precedent, programs that serve people with severe cognitive or mental health disabilities, children only, and domestic violence shelters. These programs were identified by Agency Relations staff members responsible for that partnership relationship. When a designation was unable to be made by staff the program was left in the list. Additional screening will be conducted prior to full agency partner engagement in order to have another opportunity to remove programs that did not meet eligibility criteria. If programs are removed during this additional screening, we will thoroughly document this process to ensure transparency of methods.

Unlike Feeding America's study we did not automatically exclude school pantries or home delivery program from eligibility. Home delivery programs were not excluded because of their increased importance to provide services during the COVID pandemic. School pantries were not excluded because we have antidotal evidence that they reach households that may not seek out other support and because in our service area most of them serve families, not children directly.

The program category inclusion and exclusion were as follows:

Program Category	Eligible for client data collection
Abuse	No
Backpack Programs	No
Camp	No
College	Yes
Daycare	No
Emergency Shelter	Yes
Food Pantry/Food Shelf	Yes
Food Pharmacy	Yes
Group Home	No
Halfway	Yes

Homeless	Yes
Kids Café	No
Mass Distribution	Yes
Meal Site	Yes
Minnesota Central Kitchen	Yes
Mobile Food shelf/pantry	Yes
Other	Yes
Pantry2	Yes
Produce	Yes
Rehab	Yes
Rehab-Children's	No
Senior	Yes
Soup Kitchen	Yes
Support	Yes
Transitional Housing	Yes
Youth	No

Programs that did not meet inclusion criteria were removed from the full list of programs. The remaining programs became the list of programs for the final sampling frame. For each of these programs a geographic category was determined which was used to inform the multistage stratified sample. Geographic categories were designated based on the program site address and are follows:

Geographic Category	Description
Rural	Located in place with less than 10,000 people
Micropolitan	Located in a place with over 10,000 people
Metropolitan	Located within the cities of Minneapolis and Saint Paul
Suburban metropolitan	Located within Anoka, Washington, Dakota, Carver, Scott, Sherburne, Chisago, Isanti counties AND in direct geographic proximity of highest population area of Twin Cities

The data used to designate geographic category was based on 2019 Census estimates¹⁵ and cross-checked with 2019 Minnesota Population Estimates of Cities and Townships¹⁶, and Census Bureau list of Urbanized and Urban Clusters.¹⁷ We used a modified version of the Office of Management and Budget (OMB) definition of micropolitan and metropolitan areas for this project.¹⁸ OMB's classification is done at a county level, but this was determined to be too broad of a classification for the purposes of this project because in some counties, especially on the edges of the Twin Cities, there is important difference in population and resource availability within the county. Therefore, we used a city-based designation which we believed would better group geographies based on people's access to food resources.

Similarly to the OMB, we designated areas with a population between 10,000 and 50,000 people as a micropolitan.¹⁹ We also classified cities outside the Twin Cities metro area that were over 50,000 (e.g. Mankato) as micropolitan, as opposed to OMB's metropolitan classification. This was done because we felt it was important to distinguish programs outside of the Twin Cities metro and those in greater Minnesota to ensure we had adequate representation from each group.

Similarly, we felt it was important to distinguish programs in the most population dense cities of Minneapolis and Saint Paul, from those of the remaining metro. Therefore, all programs located in Minneapolis and Saint Paul proper were classified as Metropolitan. The other cities in Ramsey and Hennepin counties were grouped as suburban metropolitan. Cities that were within the main population area of the Twin Cities metro (in the counties of Anoka, Washington, Dakota, Carver, Scott, Sherburne, Chisago, Isanti) were classified as Metropolitan regardless of city size. Cities that did not geographically border the highest population areas of the Twin Cities in these counties were classified based on whether they reached the micropolitan designation of at least 10,000 people. The U.S. Census QuickFacts maps were used as the reference to determine geographic borders with highest population areas in the Twin Cities.^{20,21}

Every program not categorized as micropolitan, metropolitan, or suburban metropolitan were characterized as rural (under 10,000 people).

For the survey, we plan to utilize probability sampling to make estimates on the total number of clients served and unduplicated client counts over 3 time periods: by week, by month, and annualized. We plan to use a multistage design that involves selection of: (1) programs providing food services to clients; (2) survey data collection day/hours; and (3) clients invited through a systematic process to take the survey (e.g., can be based on random start of 4th client and sampling interval of every 12th).

For administration, flexibility will be important as we will work with each program to finalize logistics based on their capacity. Our goal is to maintain standardization of how the surveys are communicated to clients as they get invited to take the survey and that the process used in identifying clients to take the survey are followed. As such, survey administrators (ACET subcontractors) will be provided with clear guidelines and training to ensure consistency of survey administration. At the end of each survey data collection day/hours, the survey administrator will be asked to complete a brief checklist so we can capture any deviation in protocol for the survey. We will also work closely with programs to ensure they have what they need to participate in a way that results in smooth and consistent data collection.

The survey will be made available in a paper format and/or electronically via a tablet. Ideally, the survey administrator interviews the client and records their responses. If clients prefer to self-administer the survey, a paper version will be made available with guidance for the survey administrators to scan for completeness. Clients will then be given a \$10 incentive for their participation.

For the qualitative study, we plan to recruit participants using the survey administration window as a vehicle to raise interest for the study. Participants who express interest will be given a card to submit their contact information for selection. To choose the sample of 20 interviewees, we'll engage in purposeful sampling from the pool of people who express interest that aligns with project goals. To account for the probability that some people who originally expressed interest in an interview will not be available, unreachable, or decline participation at a later time, we will select 10 additional people as back-up interviewees. The interviews will be scheduled and conducted via telephone. Each interviewee will receive a \$25 gift card in exchange for their participation.

PARTICIPANTS

All participants for this study will be recruited and engaged while they seek services from a program offered within the network of local food shelves, meal programs, and partners in the throughout the 59-county area of Minnesota and western Wisconsin covered by Second Harvest Heartland's service area. Survey and interview data is planned for September and October of 2021.

Participants will only be chosen to participate when seeking services from a program which meets the study inclusion criteria as described above. At the service site additional criteria must be met for a participant to be asked to complete the survey and potentially participate in an interview at a later time. The inclusion and exclusion criteria are as follows:

-Inclusion Criteria

- Adult 18 years of age or older
- Only 1 representative per household

-Exclusion Criteria

- Youth under the age of 18 year
- Individuals with severe cognitive or mental health disabilities
- Individuals who are unwilling or unable to go through consent process

The survey administrator will follow protocol when approaching clients and throughout the duration of contact with the clients. Survey administrators will read a script when approaching clients, which will include such information as the purpose of the survey, how confidentiality will be maintained, potential risks, benefits, voluntary participation (e.g., that their participation or lack thereof has no bearing on their ability to receive services and that they can stop the survey at

any time), as well as inclusion and exclusion criteria. The survey administrator will then ask for verbal consent to continue administering the survey. If the client gives consent, the client will complete the survey. If the client does not give consent, the interaction with the survey administrator and the client ends immediately. A 1-page handout will be made available for participants if they would like more information about the study and their consent. This written handout will also contain contact information for receiving an electronic copy of the final report or questions in general about the study.

If the client would like to take the survey in a language other than English (e.g., Spanish, Somali), we will make translated surveys available in a self-administered format in up to three other languages determined to be most prevalent across the sites.

PROCEDURES / VARIABLES / DEFINITIONS

The primary sampling unit are sites that provide grocery and onsite meals. The goal is to identify sites that include a broad range of stakeholders from communities often underrepresented using a simple random sampling approach. As such, we plan to examine data by target population (primary) and program type (secondary). For target population, for example, partner sites located in communities with at least 20% of target population of Black or African American, American Indian and Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, Hispanic or Latino, or Some Other Race were coded as 1 while all other partner sites were coded as 0. For program type, partner sites were identified as either a grocery program or an onsite program offering meals.

Variables by program type were available and tracked by Second Harvest Heartland for nearly all partner programs. The file contained, for example, program schedules and locations for grocery or meal distribution, contact information, and estimated program size based on counts and program volume data. For the variable of target population, ACET added 2015-2019 Census population estimates for race and ethnicity counts matched by site zip code. As mentioned above, sites in zip codes with least 20% of target populations for the study were identified as 1 whereas all other partner sites were coded as 0.

The survey contains other variables to be included for the analysis that will provide: (1) detailed information about clients' household members, such as ages, race and ethnicity, gender, and income; and (2) clients' experiences with food assistance and preparing meals. The survey contains 16 items primarily pulled from the Feeding America Client Survey (FACS).²² Other client surveys reviewed included:

- *Super Shelf 2019 Minnesota Food Shelf Survey*²³
- *2018 Hunger in North Dakota: A Report on the Charitable Food Network*²⁴
- *The Lived Experience of Food Pantry Users in Minnesota: Qualitative Findings from a Statewide Survey*²⁵

- *Loaves & Fishes 2019 Client Impact Survey Findings*²⁶
- *More Than A Meal Pilot Research Study: Results from a Pilot Randomized Control Trial of Home-Delivered Meal Programs*²⁸
- *Dynamics of Material Hardship in the Women's Employment Study*²⁹

A copy of the survey is attached.

SAMPLE SIZE CALCULATION / POWER ANALYSIS

We will also utilize the methodology of the Hunger In America 2014 study as a basis for this initial write-up. We anticipate that 80% of sampled agencies will participate in the study with at least a 60% response rate from clients identified to participate in the survey. Our list for the survey contained 654 eligible programs. We plan to sample from 75 programs to reach approximately 1,500 clients (average of 20 clients per program) during the 2-month data collection window.

In determining the sample size, the following assumptions were made. The stratum allocation has been revised to retain an equal number of sites per target group while maintaining a design effect of 1. We aimed to collect a total of 1,500 completed surveys across all sample sites. Please note that this number can change to accommodate higher than anticipated nonresponses. We also assumed an intraclass correlation (ICC) of 0.15 for rate of “similarity” of clients in a given site. We understood a design with more sites and fewer clients surveyed per site will decrease the overall unequal weighting effect (i.e., where more sites with fewer clients to be surveyed per site would reduce clustering effect). However, being able to provide site level reports was an important component of the project and to its stakeholders. At such, we determined that a sample of at least 20 completed surveys per site was needed (keeping number of sites to 75 and increasing the number of responses per survey day). This number is consistent with the protocol from SuperShelf study.

In a simple estimate of a 0.80 power level and significance level of 0.05, for example, 387 completed surveys in each of the two subgroups will need to be collected to detect difference between a proportion of 0.50 and 0.60. At a significance level of 0.10, for example, 305 completed surveys in each of the two subgroups will need to be collected to detect difference between a proportion of 0.50 and 0.60. Fewer completed surveys will be needed if assumptions of proportion differences are expected (i.e., proportion of 0.50 and 0.65).

DATA ANALYSES

Survey data will be analyzed using the SPSS software. We will analyze the data file to view the unweighted distribution of data. Similar to the HIA 2014 study, we will likely weight the characteristics of the actual survey respondents to improve upon estimating and to take account for sample losses (e.g., non-participating agencies, programs selected that declined to participant, clients who did not

complete the survey). We will also examine demographic information and determine if further statistical adjustments need to be made.

Items of interest for additional analysis may include performing inferential statistics to explore differences on how types of food programs and needs may differ by household demographics. As such we will explore relaxing the criterion for significance to p-value equal to or less than 0.10. Although a 0.05 p-value is traditional used to identify statistically significant findings in the social sciences, we have selected a more relaxed value to ensure that important results suggested by previous studies and supported by the data were not ignored. Please note that for those looking for more traditional statistical null-hypothesis testing, we will provide actual estimated p-values where relevant.

Interview data will first be reviewed for emerging themes. Once themes are identified, responses will be coded and grouped for analysis. We will use an analytical coding method to quantify and consider each individual comment made in an interview so that no inputs are lost. This coding of comments reveals to us themes and allows us to analyze the strength of those themes, move to findings and from there, put together initial recommendations for client consideration.

TIMELINE

Use this section to include timeframes for project milestones. Often, this information is presented in a chart or table of some kind.

Project Planning- sampling frame and method, tool development	May- August
Data Collection- surveys and interviews	September-October
Data Analysis	November
Reporting and presenting results	November

MONITORING PLAN

Elements of our monitoring plan include:

- All paper surveys will have a code at the top that corresponds to each site, which will allow us to connect the survey with the agency partner and program.
- Survey administrators will be asked to complete a short checklist at the end of the survey administration window. This will help gauge participation rates and troubleshoot challenges that may arise.
- Provide envelopes and postage that survey administrators will use to return completed paper surveys.

REFERENCES

- ¹ Coleman-Jensen, A., Rabbitt, MP., Gregory, CA., & Singh, A. (2020). USDA Economic Research Services. *Household Food Security in the United States in 2019*. Economic Research Report No. ERR-275. Accessed from: https://www.ers.usda.gov/webdocs/publications/99282/err275_summary.pdf?v=3126.1
- ² Ibid
- ³ Coleman-Jensen ARM, Gregory CA., Singh, A. (2017). *Household Food Security in the United States in 2016*. United States Department of Agriculture Economic Research Service. Economic Research Report No. ERR-237.
- ⁴ Coleman-Jensen, A., Rabbitt, MP., Gregory, CA., & Singh, A. (2020). USDA Economic Research Services. *Household Food Security in the United States in 2019*. Economic Research Report No. ERR-275. Accessed from: https://www.ers.usda.gov/webdocs/publications/99282/err275_summary.pdf?v=3126.1
- ⁵ U.S. Census Bureau. (2021). *Household Pulse Survey: Food Scarcity*. Accessed from: <https://www.census.gov/data-tools/demo/hhp/#/?measures=FOODSCARCE>
- ⁶ U.S. Census Bureau. (2021). *Household Pulse Survey Data Tables*. Accessed from: <https://www.census.gov/programs-surveys/household-pulse-survey/data.html>
- ⁷ Lakhani, N. & Sing, M. (2020). 'No end in sight': hunger surges in America amid a spiraling pandemic. Accessed from: <https://www.theguardian.com/food/2020/nov/25/us-hunger-surges-spiraling-pandemic>
- ⁸ Feeding America. (2021). *Donate to Feeding America's Coronavirus Response Fund*. Accessed from: <https://www.feedingamerica.org/take-action/coronavirus>
- ⁹ Second Harvest Heartland (2021). *The COVID-19 Hunger Surge*. Accessed from: <https://www.2harvest.org/who--how-we-help/the-face-of-hunger-today/the-coming-hunger-surge.html>
- ¹⁰ Second Harvest Heartland & Superhuman LLC. (2020). Unpublished research.
- ¹¹ SuperShelf, Minnesota Department of Human Services, & Hunger Solutions. (2020). *Minnesota Food Shelf Survey*. Accessed from: <https://www.supershelfmn.org/minnesota-statewide-survey>
- ¹² Caspi, CE., Davey, C., Barsness, CB., Gordon, N., Bohen, L., Canterbury, M., et al. *Needs and Preferences Among Food Pantry Clients*. Prev Chronic Dis 2021;18:200531. DOI: <http://dx.doi.org/10.5888/pcd18.200531>external icon.
- ¹³ Urban Institute, Westat, Mills, G., Weinfeld, N., Vericker, T., Montaquila, J., Gearing, ME., Mendonca, S., & Zedlewski, S. (2014). *Hunger in America 2014 Food Bank Report: Second Harvest Heartland*.
- ¹⁴ United States Census Bureau. (2019). *QuickFacts: Minnesota. Population Estimates, July 1, 2019, (V2019)*. Accessed from: <https://www.census.gov/quickfacts/fact/map/MN/PST045219>
- ¹⁵ United States Census Bureau. (2019). *QuickFacts: Wisconsin. Population Estimates, July 1, 2019, (V2019)*. Accessed from: <https://www.census.gov/quickfacts/fact/map/WI,US/PST045219>
- ¹⁶ MN State Demographic Center. (August 2020). *Latest annual estimates of Minnesota and its cities' and townships' population and households, 2019*. Accessed from: <https://mn.gov/admin/demography/data-by-topic/population-data/our-estimates/>
- ¹⁷ United States Census Bureau. *A National, State-Sorted List of All 20101 Urbanized Areas for the U.S., Puerto Rico, and Island Areas first sorted by State FIPS Code, the*

sorted by UACE code. Accessed from: <https://www.census.gov/programs-surveys/geography/guidance/geo-areas/urban-rural/2010-urban-rural.html>

¹⁸ Office of Management and Budget: 2010 Standards for Delineating Metropolitan and Micropolitan Statistical Areas; Notice.75 Fed. Reg.37,246 (June 28, 2010). Accessed from: <https://www.govinfo.gov/content/pkg/FR-2010-06-28/pdf/2010-15605.pdf>

¹⁹ Ibid.

²⁰ United States Census Bureau. (2019). *QuickFacts: Minnesota. Population Estimates, July 1, 2019, (V2019)*. Accessed from: <https://www.census.gov/quickfacts/fact/map/MN/PST045219>

²¹ United States Census Bureau. (2019). *QuickFacts: Wisconsin. Population Estimates, July 1, 2019, (V2019)*. Accessed from: <https://www.census.gov/quickfacts/fact/map/WI,US/PST045219>

²² *Feeding America Client Survey (FACS) Survey Items*. (2020). IMPAQ International and Feeding America.

²³ *2019 Minnesota Food Shelf Survey (2019)*. SuperShelf. Accessed from: <https://www.supershelfmn.org/resources>

²⁴ Sobolki, M. and Syvertson, T. (2018). *2018 Hunger in North Dakota: A Report on the Charitable Food Network*. Great Plains Food Bank.

²⁵ Rivera, G. et. al. (2021). *The Lived Experience of Food Pantry Users in Minnesota: Qualitative Findings from a Statewide Survey*. Journal of Hunger & Environmental Nutrition, DOI: 10.1080/19320248.2021.1932663

²⁶ Caratao, E. (2019). *2019 Client Impact Survey Findings: Prepared for Loaves & Fishes*.

²⁷ Thomas, K. et. al. (2015) *More Than A Meal Pilot Research Study: Results from a Pilot Randomized Control Trial of Home-Delivered Meal Programs*. Meals on Wheels America.

²⁸ Heflin, C. (2006). *Dynamics of Material Hardship in the Women's Employment Study*. Institute for Research on Poverty.



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October 5, 2021

Rebecca Mino, MS
Second Harvest Heartland
7101 Winnetka Avenue N.
Brooklyn Park, Minnesota 55428

Dear Rebecca Mino:

SUBJECT: IRB EXEMPTION—REGULATORY OPINION
Investigator: Rebecca Mino
Institution Tracking No.: 2021-09-01-SHHEARTLAND
Protocol Title: Second Harvest Heartland Hunger-Relief Supports:
Understanding Neighbors and Their Need

This is in response to your request for an exempt status determination for the above-referenced protocol. WCG IRB's IRB Affairs Department reviewed the study under the Common Rule and applicable guidance.

We believe the study is exempt under 45 CFR § 46.104(d)(2), because the research only includes interactions involving educational tests, survey procedures, interview procedures, or observations of public behavior; and there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of data.

This exemption determination can apply to multiple sites, but it does not apply to any institution that has an institutional policy of requiring an entity other than WCG IRB (such as an internal IRB) to make exemption determinations. WCG IRB cannot provide an exemption that overrides the jurisdiction of a local IRB or other institutional mechanism for determining exemptions. You are responsible for ensuring that each site to which this exemption applies can and will accept WCG IRB's exemption decision.

WCG IRB's determination of an Exemption only applies to US regulations; it does not apply to regulations or determinations for research conducted outside of the US. Please discuss with the local IRB authorities in the country where this activity is taking place to determine if local IRB review is required.

Please note that any future changes to the project may affect its exempt status, and you may want to contact WCG IRB about the effect these changes may have on the exemption status before implementing them. WCG IRB does not impose an expiration date on its IRB exemption determinations.

If you have any questions, or if we can be of further assistance, please contact Viviana Coppo, DPharm, R.Ph., at 360-570-1362, or e-mail RegulatoryAffairs@wirb.com.

VC:mr
D2-Exemption-Mino (10-05-2021)
cc: William Summerfelt, Feeding America
WCG IRB Accounting
WCG IRB Work Order #1-1481113-1

APPENDIX B:

Survey Tools, Protocols, and Other Materials

- a.** Survey Protocol
- b.** Survey Observation Form
- c.** Handout with Project Details for
People Receiving Services
- d.** Grocery Survey Tool
- e.** Onsite/Meal Survey Tool

Survey Protocol

Step 1 [Introductions]

Hello, my name is [provide first and last name] and I am conducting a survey for [name of program] to find out more about people who use food programs. I would like to ask you some questions about your experiences and needs. It will take less than 10 minutes, and you'll receive a \$10 bill when we're finished. Would you be willing to participate?

Step 2 [If yes]

- **Individual:** *Great! Thank you very much.*
- **Two or more people in a group from the same household:** *Great! We need to designate one person responsible for filing out the survey for your household. This could be the person who deals with groceries and household finances. Who from your household would you like to answer our questions?*
- **Two or more people in a group from different households:** *[take the person who answered first]. We have a schedule of doing every [insert number] person who comes in for the survey so I can do the survey with you only. I do appreciate you all for offering to take the survey.*

Step 3 [Interview]

The survey contains questions about you, your household, and overall needs. Please know that your participation is voluntary. You can stop the survey at any time and you do not have to answer any questions that you don't want to. Whether or not you take the survey, it will not change the services you receive from [name of program] now or in the future.

As a thank you for taking the survey, we have a \$10 bill for you when we're finished. For this survey, we do not need you to tell us your name and all the information you provide will be grouped with others that we are surveying throughout Minnesota and Wisconsin in a report for the sponsor of the survey, Second Harvest Heartland [hand client paper with Rachel's contact info] in partnership with [program name]. Do you have any questions before we begin? [pause]

Okay, I do have one question before we begin the survey.

- *Are you 18 or older? [If yes, proceed with the survey. If no, end the survey and communicate that we're only doing the survey with people 18 or older.]*

At any time of the survey, please let me know if you need additional assistance answering my questions

Step 4 [If client tells you that they do not have time right now but can complete the survey later]

Unfortunately, we have to complete the survey right now, if you are not able to do it, we will have to move on to the next available person.

Frequently Asked Questions and Answers

1. Why did you pick me for this survey?

We approach every ___ person to ensure that we are randomly selecting participants.

2. Can I get a copy of the report? When is the report available?

We anticipate that the results will be posted on Second Harvest Heartland's website in 2022.

3. I thought you were interested in my needs for food, why are you asking me all these other questions about my household?

The questions about your household will help us better understand who is accessing food support. This information, combined with the answers to the other questions about food, will help us provide the right kind of support in the communities we work in.

4. I am not comfortable answering these questions about my race, age, and income. How are you using my information?

This information will be used to help understand if specific communities of people seeking food support have different experiences than others and if there are ways we can provide services that are more equitable for everyone. We also use this information to help increase awareness that people of all ages, races, and incomes sometimes need help to make sure they have enough food for their household.

5. I am not happy that you are asking me these questions and would like to file a complaint.

I'm sorry that we have asked questions you don't appreciate. You can reach out to Rebecca Mino at Second Harvest Heartland with your concerns at 612.655.9200.

6. I think these questions are better answered by my spouse/partner. Can they take the survey instead of me?

- When to answer yes: If the 5th person, for example, wanted their spouse/partner (the 6th or 7th person, for example) to fill out the survey, this is allowable. The surveyor will need to note that deviation in the observation tool.
- When to answer no: If the spouse/partner comes in later in the day or after the survey day, the surveyor will encourage the person who came in (5th person, for example) to complete the survey based on their experiences/feedback.]

7. My family needs more food, can you get me more help?

You can get more support by calling Second Harvest Heartland's SNAP team at 651-209-7963 or toll-free at 1-844-764-5513 or visiting our website at <https://www.2harvest.org/who--how-we-help/how-to-get-help/>. The SNAP team can help you identify resources in your area and help you with a SNAP/EBT application.

8. Can I skip a question if I'm not comfortable answering it or I don't know the answer?

Yes. If you do not understand a question, it is okay to ask the surveyor for help.

9. I don't understand the question

I can repeat the question, and if it is still unclear or you are not sure how to answer, that's okay, we can move on to the next question.



Survey Observation Form

To be completed for each site

Directions: Please complete all items of this form and send this within 24 hours after the observation to max@acetinc.com or text 952.214.8007. If you have any questions or run into issues while administering surveys, please call the office at 952.214.8007.

1. General Information

Name of program site:	
Program type: <input type="checkbox"/> Meal program <input type="checkbox"/> Grocery program	
Starting point (count to that number for approaching a client):	
Recruitment (the number between clients after the first client starting point):	
Site contact and phone:	
Sampling date (month/day):	Name of Surveyor (first name):
Scheduled start time:	Scheduled end time:

2. Checklist

<input type="checkbox"/> Tablet charged (n=1)	<input type="checkbox"/> \$10 bills (n=30)	<input type="checkbox"/> Clip boards (n=2)	<input type="checkbox"/> Storage box (n=1)
<input type="checkbox"/> Bag for tablet (n=1)	<input type="checkbox"/> Name tag (n=1)	<input type="checkbox"/> Paper surveys (n=15)	<input type="checkbox"/> Large envelope (n=1)
<input type="checkbox"/> Clicker (n=1)	<input type="checkbox"/> About study (n=30)	<input type="checkbox"/> FAQ sheet (n=1)	<input type="checkbox"/> Pens (n=5)

3. Implementation

Actual start time:	Actual end time:
Did you lose count at any point: <input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, approximately how many minutes?
Program flow (check one box):	
<input type="checkbox"/> Visits were uniformly distributed throughout the hours of operation	
<input type="checkbox"/> Visits congregated as soon as they opened	
<input type="checkbox"/> Visits were clustered around certain times (specify when):	
<input type="checkbox"/> Visits were random throughout the day	
Mileage (2021 IRS guidelines of 0.56 per mile):	

4. Deviations made to sampling protocol (please describe)

--

5. Challenges (please describe)

--

It is important we know how clients are responding to your request to complete the survey. Please complete this for all clients you approach and the outcome.

Status: C=Completed, R=Refused, NR=Non-response and state reasons why in comments

Method: I=Interviewed, P=Paper copy

Language: E=English, O=Other language (please specify language in comments column)

6. Program count						
Counted client	Sampled client	Status (Circle)	Method (Circle)	End time	Language (Circle)	Comments
	1	C R NR	I P		E O	
	2	C R NR	I P		E O	
	3	C R NR	I P		E O	
	4	C R NR	I P		E O	
	5	C R NR	I P		E O	
	6	C R NR	I P		E O	
	7	C R NR	I P		E O	
	8	C R NR	I P		E O	
	9	C R NR	I P		E O	
	10	C R NR	I P		E O	
	11	C R NR	I P		E O	
	12	C R NR	I P		E O	
	13	C R NR	I P		E O	
	14	C R NR	I P		E O	
	15	C R NR	I P		E O	
	16	C R NR	I P		E O	
	17	C R NR	I P		E O	
	18	C R NR	I P		E O	
	19	C R NR	I P		E O	
	20	C R NR	I P		E O	
	21	C R NR	I P		E O	
	22	C R NR	I P		E O	
	23	C R NR	I P		E O	
	24	C R NR	I P		E O	
	25	C R NR	I P		E O	
	26	C R NR	I P		E O	
	27	C R NR	I P		E O	
	28	C R NR	I P		E O	
	29	C R NR	I P		E O	
	31	C R NR	I P		E O	
	32	C R NR	I P		E O	
	33	C R NR	I P		E O	
	34	C R NR	I P		E O	
	35	C R NR	I P		E O	
	36	C R NR	I P		E O	
	37	C R NR	I P		E O	

7. Outcome (aim for 20-30 completed responses per site)			
Completed surveys		Total clients (adults)*	
Total refusals		Observed estimate	<25, 25-50, 51,74, 75+
Total non-responses			

* Get meal program count from site: Each individual adult is a client count.

* Get grocery program count from site: Each family is a client count.

If you have questions about **Hunger-Relief Supports: Understanding Neighbors and Their Needs**, please contact Rachel Engh at ACET, Inc.

Rachel@acetinc.com
952.922.1811

Second Harvest Heartland's SNAP team can help you identify resources in your area and help you with a SNAP/EBT application.

Call **651-209-7963** or toll-free at **1-844-764-5513** or visit the website:
<https://www.2havest.org/who--how-we-help/how-to-get-help/>.



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Food Support: Conversations with Neighbors

Thank you for taking the time to give feedback on our services



1. How do you usually get to this program? *Select one option.*

- ☐ Walk ☐ Use public transportation ☐ Get a ride with family or friends
☐ Ride a bicycle ☐ Drive yourself in a vehicle ☐ Take a taxi or rideshare

Throughout the survey we will ask you questions about your “household.” This includes you, any child, or adult such as family members, friends, or roommates who share expenses.

2. How many people total are in your household? Please include yourself in this count.

The next questions are about grocery programs such as the program that we’re at today. This could also include other programs that give food and other supplies to make meals or snacks at home.

3. How many times did you or your household get food from a grocery program in the past week, including today?

4. In the past 4 weeks, including this week, how many times did you or your household get food from grocery programs?

5. Some people get food from grocery programs every month, others less often. How many of the past 12 months did you or your household get food from grocery programs? If you don’t know the number of months, give your best guess.

The next questions are about meal programs such as soup kitchens, shelters, or other live-in programs that give prepared meals or snacks that are ready-to-eat either on-site or at home.

6. In the past week, including today, did you get food from meal programs?

- ☐ **Yes** If you answer yes, skip to item 7. ☐ **No** If you answer no, complete item 6a.

6a. In the past 4 weeks, did you get food from meal programs?

- ☐ **Yes** If you answer yes, please skip to item 7. ☐ **No** If you answer no, complete item 6b.

6b. In the past 12 months did you get food from meal programs?

- ☐ **Yes** ☐ **No**

7. Before the start of the COVID-19 pandemic (March 2020), did you or anyone in your household receive free food from meal or grocery programs? ☐ Yes ☐ No

8. Do you or anyone in your household need more free meals and/or groceries than you are currently receiving? ☐ Yes ☐ No

9. Do you or anyone in your household currently participate in any of the following programs?

Select all that apply.

- ☐ SNAP, EBT, or food stamps
☐ WIC (the Nutrition Program for Women, Infants and Children)
☐ Free or reduced price school meal programs

10. What challenges, if any, have you or anyone in your household experienced in making meals over the last month? *Select all that apply.*

- ☐ Having access to a kitchen and the tools needed to make meals
☐ Accessing ingredients that meet religious needs
☐ Accessing ingredients that meet dietary or health needs
☐ Having the physical ability to make meals
☐ Dealing with a crisis and unable to make meals
☐ Another challenge not listed above Please specify.
☐ No challenges making meals

11. Which of the following best describes your current living situation? Select one option.

- ☐ A place you rent ☐ A shelter
☐ A place you own ☐ None of these
☐ Someone else's place

12. What is the zip code where you are currently living? *If you don't know your zip code, what is the city or town where you live most of the time?* *Please specify.*

The information we will ask for next is really important for this program to know in order to best meet the needs of everyone in your home.

13. Starting with you, what is your age, gender, and race and ethnicity? Please put this information in row 1. *After you provide information about yourself, please provide the age, gender, and race and ethnicity of each person in your household in the subsequent rows. Please do not share their names.*

Age: <i>For children under the age of 1, please write 0.</i>	Gender: <i>Select <u>one</u> option per person. Please write the letter corresponding to the right answer for each person below.</i>	Race and ethnicity: <i>Select <u>all</u> that apply. Please write the letter(s) corresponding to the right answer(s) for each person below.</i>
You (Person 1) <input type="text"/>	<input type="text"/>	<input type="text"/>
Person 2 <input type="text"/>	<input type="text"/>	<input type="text"/>
Person 3 <input type="text"/>	<input type="text"/>	<input type="text"/>
Person 4 <input type="text"/>	<input type="text"/>	<input type="text"/>
Person 5 <input type="text"/>	<input type="text"/>	<input type="text"/>
Person 6 <input type="text"/>	<input type="text"/>	<input type="text"/>
Person 7 <input type="text"/>	<input type="text"/>	<input type="text"/>
Person 8 <input type="text"/>	<input type="text"/>	<input type="text"/>
Person 9 <input type="text"/>	<input type="text"/>	<input type="text"/>

14. Did you or did anyone in your household get money in the last month from any of the following sources? Select all that apply.

- ☐ Working for pay full-time (30 hours per week or more)
☐ Working for pay part-time (less than 30 hours per week)
☐ Unemployment compensation
☐ Disability (SSDI), workman's compensation, or Supplemental Security Income (SSI)
☐ Seguro social y/o pensión

15. Which category represents the total combined income of all members of your family who are 15 years of age or older during the past 12 months? Please select one option and include money from things such as jobs, net income from business, pensions, social security payments, and any other money income received.

- ☐ Zero ☐ \$15,001-\$20,000 ☐ \$35,001-\$50,000
☐ 5,000 or less ☐ \$20,001-\$25,000 ☐ More than \$50,000
☐ \$5,001-\$10,000 ☐ \$25,001-\$30,000
☐ \$10,001-\$15,000 ☐ \$30,001-\$35,000



Food Support: Conversations with Neighbors



Thank you for taking the time to give feedback on our services

1. How do you usually get to this program? *Select one option.*

- ☐ Walk
- ☐ Use public transportation
- ☐ Get a ride with family or friends
- ☐ Ride a bicycle
- ☐ Drive yourself in a vehicle
- ☐ Take a taxi or rideshare
- ☐ You reside here

Throughout the survey we will ask you questions about your “household.” This includes you, any child, or adult such as family members, friends, or roommates who share expenses.

2. How many people total are in your household? *Please include yourself in this count.*

The next questions are about meal programs, such as the program that we’re at today. This could also include other programs that give prepared meals or snacks that are ready-to-eat either on-site or at home.

3. How many times did you get food from meal programs in the past week, including today?

4. In the past 4 weeks, including this week, how many times did you get food from meal programs?

5. Some people get food from meal programs every month, others less often. How many of the past 12 months did you get food from meal programs? *If you don’t know the number of months, give your best guess.*

The next questions are about grocery programs such as food shelves, backpack programs, free home delivered groceries, and mobile food shelves that give people food and other supplies to make meals or snacks at home.

6. In the past week, including today, did you or anyone in your household get food from grocery programs?

- ☐ **Yes** *If you answer yes, skip to item 7.* ☐ **No** *If you answer no, complete item 6a.*

6a. In the past 4 weeks, did you or anyone in your household get food from grocery programs?

- ☐ **Yes** *If you answer yes, please skip to item 7.* ☐ **No** *If you answer no, complete item 6b.*

6b. In the past 12 months did you or anyone in your household get food from grocery programs?

- ☐ **Yes** ☐ **No**

7. Before the start of the COVID-19 pandemic (March 2020), did you or anyone in your household receive free food from meal or grocery programs? ☐ **Yes** ☐ **No**

8. Do you or anyone in your household need more free meals and/or groceries than you are currently receiving? ☐ **Yes** ☐ **No**

9. Do you or anyone in your household currently participate in any of the following programs?

Select all that apply.

- ☐ SNAP, EBT, or food stamps
- ☐ WIC (the Nutrition Program for Women, Infants and Children)
- ☐ Free or reduced price school meal programs

10. What challenges, if any, have you or anyone in your household experienced in making meals over the last month? *Select all that apply.*

- ☐ Having access to a kitchen and the tools needed to make meals
- ☐ Accessing ingredients that meet religious needs
- ☐ Accessing ingredients that meet dietary or health needs
- ☐ Having the physical ability to make meals
- ☐ Dealing with a crisis and unable to make meals
- ☐ Another challenge not listed above *Please specify.*
- ☐ No challenges making meals

11. Which of the following best describes your current living situation? *Select one option.*

- ☐ A place you rent ☐ A shelter
☐ A place you own ☐ None of these
☐ Someone else's place

12. What is the zip code where you are currently living? *If you don't know your zip code, what is the city or town where you live most of the time?* *Please specify.*

The information we will ask for next is really important for this program to know in order to best meet the needs of everyone in your home.

13. Starting with you, what is your age, gender, and race and ethnicity? Please put this information in row 1. *After you provide information about yourself, please provide the age, gender, and race and ethnicity of each person in your household in the subsequent rows. Please do not share their names.*

Age: For children under the age of 1, please write 0.	Gender: <u>Select one</u> option per person. Please write the letter corresponding to the right answer for each person below.	Race and ethnicity: <u>Select all</u> that apply. Please write the letter(s) corresponding to the right answer(s) for each person below.
You (Person 1) <input type="text"/>	<input type="text"/>	<input type="text"/>
Person 2 <input type="text"/>	<input type="text"/>	<input type="text"/>
Person 3 <input type="text"/>	<input type="text"/>	<input type="text"/>
Person 4 <input type="text"/>	<input type="text"/>	<input type="text"/>
Person 5 <input type="text"/>	<input type="text"/>	<input type="text"/>
Person 6 <input type="text"/>	<input type="text"/>	<input type="text"/>
Person 7 <input type="text"/>	<input type="text"/>	<input type="text"/>
Person 8 <input type="text"/>	<input type="text"/>	<input type="text"/>
Person 9 <input type="text"/>	<input type="text"/>	<input type="text"/>

14. Did you or did anyone in your household get money in the last month from any of the following sources? *Select all that apply.*

- ☐ Working for pay full-time (30 hours per week or more)
☐ Working for pay part-time (less than 30 hours per week)
☐ Unemployment compensation
☐ Disability (SSDI), workman's compensation, or Supplemental Security Income (SSI)
☐ Social Security and/or pension

15. Which category represents the total combined income of all members of your family who are 15 years of age or older during the past 12 months? Please select one option and include money from things such as jobs, net income from business, pensions, social security payments, and any other money income received.

- ☐ Zero ☐ \$15,001-\$20,000 ☐ \$35,001-\$50,000
☐ 5,000 or less ☐ \$20,001-\$25,000 ☐ More than \$50,000
☐ \$5,001-\$10,000 ☐ \$25,001-\$30,000
☐ \$10,001-\$15,000 ☐ \$30,001-\$35,000



APPENDIX C:

Technical Information

Appendix C: Technical Appendix

1. Sample Frame Details

This study was designed as a cross-sectional study using mixed methods. Data was collected in collaboration with food shelves and hunger-relief program partners in the 59-county area of Minnesota and western Wisconsin covered by Second Harvest Heartland's service area.

1.1 Multistage Design

The survey sampling frame was developed using a multistage stratified sample with disproportionate allocation to ensure communities of color were meaningfully represented.

- Stage 1: Selected eligible programs.
- Stage 2: Probability Proportion to Size (PPS) Sampling: Assigned variables to sites, including geography, program type, and target population.
- Stage 3: Selected sample of 75 sites and augmented the sample based on response rate.
- Stage 4: Assigned sites random days of the week; assigned survey hours, if applicable.
- Stage 5: Assigned each site a random 'start' for surveying clients.

1.1.a Stage 1: Selected eligible programs

Second Harvest Heartland, in collaboration with Feed My People Food Bank in Eau Claire, Wisconsin created a list of every program that was operational on June 30, 2021. Included in the list for each program was a site address, program type (grocery or onsite), program category (see list below), program number, and county. From this list programs were determined to be eligible or ineligible for inclusion in the sampling frame. Wherever possible, and fitting with the purpose of the project, we followed the precedent from *Hunger in America 2014*. Following that precedent, we deemed ineligible programs that primarily served people with severe cognitive or mental health disabilities, primarily children, and domestic violence shelters. These programs were identified by Second Harvest Heartland Agency Relations staff members responsible for that partnership relationship. When a designation was unable to be made by staff, the program was left on the list.

Additional screening was conducted prior to full agency partner engagement to have another opportunity to remove programs that did not meet eligibility criteria. If programs were removed during this additional screening, we documented this process.

Unlike Feeding America's study, we did not automatically exclude school pantries or home delivery programs from eligibility. Home delivery programs were not excluded because of their increased importance to provide services during the COVID-19 pandemic. School pantries were not excluded because Second Harvest Heartland had anecdotal evidence that they reached households that may not seek out other support and because in the service area, most of them serve families, not children directly.

Table 1: Program eligibility by program category

Eligible for client data collection	Program categories
Yes, eligible	<ul style="list-style-type: none"> • College • Emergency Shelter • Food Pantry/Food Shelf • Food Pharmacy • Halfway • Homeless • Mass Distribution • Meal Site • Minnesota Central Kitchen • Mobile Food shelf/pantry • Other • Pantry2 • Produce • Rehab • Senior • Soup Kitchen • Support • Transitional Housing
No, not eligible	<ul style="list-style-type: none"> • Abuse • Backpack Programs • Camp • Daycare • Group Home • Kids Café • Rehab-Children's • Youth

Programs that did not meet inclusion criteria were removed from the full list of programs. The remaining programs became the list of programs for the final sampling frame.

1.1.b Stage 2: Probability proportion to size (PPS) sampling

The goal was to identify primary sampling units (PSUs) that included a broad range of stakeholders from communities often underrepresented using a simple random sampling approach.

Quantitative data was collected through surveys of clients using probability proportion to size (PPS) sampling centered initially on two key variables:

- Target population: Agency partners located in zip codes with at least 20% of target population of Black or African American, American Indian and Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, Hispanic or Latino, or Some Other Race were coded as 1 while all other partner sites were coded as 0. We considered three different potential cut-off points for Target population = 1: 15%, 20%, and 30%. (Data source: 2019: ACE 5-Year Estimates Data Profiles. DPO5 ACS Demographic and Housing Estimates.) We took the following steps to decide:

- Selected site zip codes with the highest proportion (at least 70%) identified as “white” or “non Hispanic or Latino” (coded 0) and all other races and Hispanic or Latino (coded 1), and prepared frequency for code 1 by zip code, county, category, and state.
- We then split the file by populations to examine program category, state, and county. From this analysis, we understood that choosing 30% as a cut-off would not result in a large enough pool of sites to confidently randomly select a sample that would meet our needs in terms of other important variables (program type and geography). We felt confident that a 20% cut-off would meet these needs.
- Program type: Agency partners were identified as either a grocery program or an onsite program offering meals.

As such, 75 sites were selected by PPS; within each site, we initially anticipated sampling an average of 8 clients to cover the various days of the week and times of the day with an aim of surveying 600 clients. However, sampling an average of 8 clients per site would not allow us to share data back with participating sites, a goal that Second Harvest Heartland prioritized. With these dual purposes in mind, we advised the surveyors to try to sample at least 8 and no more than 30 people per site, with the assumption that we would share data with participating sites for which we collected at least 20 surveys.

We recommended utilizing systematic random selection with geography as an implicit sort variable to ensure geographic coverage across the 4 groupings: Minneapolis or St. Paul, micropolitan, rural, and suburban (see below Table 3: Geographic categories and descriptions). Table 2 contains three sample allocation options (50 to 100 sites). Assumptions to note for this table:

- The Stratum allocation was revised to retain an equal number of sites per target group while maintaining a design effect of 1.
- We aimed to collect a total of 600 completed surveys across all sample sites. We knew that this number could change during the data collection phase to accommodate higher than anticipated nonresponses.
- We also assumed an intraclass correlation (ICC) of 0.15 for rate of “similarity” of clients in a given site. If ICC is set to 0.10, we would achieve a higher weighting efficiency.
- As the number of sites increased, the overall unequal weighting effect decreased. Hence, more sites with fewer clients to be surveyed per site to reduce clustering effect. Here, we balanced the desired unequal weighting effect with the goal of collecting enough surveys to report data back to the participating site.

Table 2: Frequency table of three sample allocation options

Stratum	Characteristics		Site		Allocation Options		
	Target Pop	Program	Units	Frequency	Option A	Option B	Option C
1	1	Grocery	260	39.5%	18	27	35
2	1	Onsite	68	10.3%	7	10	14
3	0	Grocery	283	43.0%	19	29	39
4	0	Onsite	47	7.1%	6	9	12
Total			658	100.0%	50	75	100
Surveyed Clients			Average/Site		12	8	6
			Total		600		
Unequal Weighting Effect			Site Level		1.0	1.0	1.0
			Intraclass Correlation		0.15		
			Overall		2.8	2.1	1.8
			Weighting Efficiency		36.3	47.4	54.9
			Effective Sample Size		217.7	284.2	367.5

Geography consideration: For each of these programs, a geographic category was determined, which was used to inform the multistage stratified sample. Geographic categories were designated based on the program site address and are detailed in Table 3.

Table 3: Geographic categories and descriptions

Geographic Category	Description
Rural	Located in place with less than 10,000 people
Micropolitan	Located in a place with over 10,000 people
Minneapolis or St. Paul	Located within the cities of Minneapolis and Saint Paul
Suburban	Located within Anoka, Washington, Dakota, Carver, Scott, Sherburne, Chisago, Isanti counties OR located in Ramsey or Hennepin County but not in Minneapolis or St. Paul AND in direct geographic proximity of highest population area of Twin Cities

The data used to designate geographic category was based on 2019 Census estimatesⁱ and cross-checked with 2019 Minnesota Population Estimates of Cities and Townships,ⁱⁱ and Census Bureau list of Urbanized and Urban Clusters.ⁱⁱⁱ We used a modified version of the Office of

Management and Budget (OMB) definition of micropolitan and metropolitan areas for this project.^{iv} OMB's classification is done at a county level, but this was determined to be too broad of a classification for the purposes of this project because in some counties, especially on the edges of the Twin Cities, there is important difference in population and resource availability within the county. Therefore, we used a city-based designation, which we believed would better group geographies based on people's access to food resources.

Similarly to the OMB, we designated areas with a population between 10,000 and 50,000 people as a micropolitan.^v We also classified cities outside the Twin Cities metro area that were over 50,000 (e.g. Mankato) as micropolitan, as opposed to OMB's metropolitan classification. We did this because we felt it was important to distinguish programs outside of the Twin Cities metro and those in greater Minnesota to ensure we had adequate representation from each group.

Similarly, we felt it was important to distinguish programs in the most population-dense cities of Minneapolis and Saint Paul from those of the remaining metro. Therefore, all programs located in Minneapolis and Saint Paul proper were classified separately. The other cities in Ramsey and Hennepin counties were grouped as suburban. Cities that were within the main population area of the Twin Cities metro (in the counties of Anoka, Washington, Dakota, Carver, Scott, Sherburne, Chisago, Isanti) were classified as suburban regardless of city size. Cities that did not geographically border the highest population areas of the Twin Cities in these counties were classified based on whether they reached the micropolitan designation of at least 10,000 people. The U.S. Census QuickFacts maps were used as the reference to determine geographic borders with highest population areas in the Twin Cities.^{vi,vii}

Every program not categorized as Minneapolis or St. Paul, micropolitan, or suburban was characterized as rural (under 10,000 people).

1.1.c Stage 3: Selection of additional sites

As reference above in Table 2, we selected a sample of 75 sites, and we assumed at least 10% would decline initial participation.

When we began contacting sites, we learned the following:

- 8 sites were no longer partners and/or were not in operation (10.7% of our sample of 75). Second Harvest Heartland had reviewed the sample frame and removed those that were no longer partners and/or were not in operation. However, due to the IRB delay, several weeks passed between Second Harvest Heartland's review and when we identified the sample.
- 6 sites declined participation. Sites declined for a variety of reasons, including the inopportune timing (e.g., the site was moving to a new location). Some sites cited concerns about COVID-19, others about client privacy. In one case the site was too busy to consider hosting a survey administrator.
- 2 sites didn't respond to us after multiple attempts via phone and email.
- 1 site was deemed ineligible due to mostly serving clients under 18.

- 1 site was removed from our sample after we mutually decided it would not be a good fit due to late night hours of operation.¹

When we learned that 8 sites from our original sample were no longer partners and/or were not in operation, Second Harvest Heartland revisited the sample frame so that we could remove from our sample frame any more sites that were also no longer partners and/or were not in operation before selecting replacement sites. The new list resulted in removing an additional 72 sites. We did not add new sites (e.g., those that became part of Second Harvest Heartland's network between the time we originally identified the sample and when we identified replacements) to our sample frame. We then randomly selected 8 substitute sites that aligned with characteristics of the 8 that we removed (i.e. by program type and target population)

After replacing these 8 sites, and accounting for the sites that declined, were unresponsive, or ineligible, our sample did not align with our desired distribution based on program type and target population. Therefore, we pulled a second replacement sample of 17 sites; all were onsite/meal sites, and 12 were target population sites.

In total, we contacted 100 sites, and we completed surveys at 55 sites for a 55% response rate.

1.1.d Stage 4: Randomly assigned sites survey days/times

Surveyors were asked to survey at a site for up to 8 hours total. For the sites that were open more than 8 hours in the day, we decided on the 8-hour time period using multiple strategies: in most cases, we randomly assigned a start/end time. For sites that we anticipated encountering challenges reaching our desired survey amount, we choose an 8 hour time period that would likely be the busiest. In other cases, we chose the 8 hours to accommodate the surveyor visiting multiple sites during one day.

1.1.e Stage 5: Randomize "start" assigned to each site

Using Measure of Size, we assigned each site a random 'start;' the surveyor started surveying that client and then every client thereafter. We offer more details in 2.2.b below.

¹ For future research, we would more strongly consider surveying at sites such as this because people who access these sites might be different from people accessing food supports during standard daytime hours. If surveying at sites like this, we would clearly state when recruiting and training surveyors that we might ask them to survey very late at night.

2. Sampling Clients

2.1 Eligible Survey Respondents

All participants for this study were recruited and engaged while they sought services from a program offered within the network of local food shelves, meal programs, and partners throughout the 59-county area of Minnesota and western Wisconsin covered by Second Harvest Heartland's service area. Participants were only chosen to participate when seeking services from a program that met the study inclusion criteria as described above. At the service site, additional criteria were met for a participant to be asked to complete the survey. The inclusion and exclusion criteria were as follows:

- Inclusion Criteria
 - Adult 18 years of age or older
 - Only 1 representative per household
- Exclusion Criteria
 - Youth under the age of 18 year
 - Individuals with severe cognitive or mental health disabilities²
 - Individuals who were unwilling or unable to go through consent process

2.2 Survey Protocol

The survey administrator followed protocol when approaching people and throughout the duration of contact with them. Survey administrators read a script when approaching people, which included such information as the purpose of the survey, how confidentiality will be maintained, potential risks, benefits, voluntary participation (e.g., that their participation or lack thereof has no bearing on their ability to receive services and that they can stop the survey at any time), as well as inclusion and exclusion criteria. The survey administrator then asked for verbal consent to continue administering the survey. If the person gave consent, the people completed the survey. If the person did not give consent, the interaction with the survey administrator and the person ended immediately. A quarter-page handout was made available for people if they wanted more information about the study and their consent.

If the person wanted to take the survey in a language other than English, we made translated surveys available in a self-administered format in three other languages determined to be most prevalent across the sites (Spanish, Somali, and Hmong).

2.2.a Preparing surveyors for survey implementation

We contracted with four surveyors and provided training before beginning survey implementation. The goal of the training was to maintain standardization of how the surveys were administered. In the first training, completed in 90 minutes via Zoom, we introduced the project, provided an overview of the survey protocol and frequently asked questions, survey tool, and observation form. We also covered dress attire and other guidelines. We met surveyors in-person for the second training and gave them each a tote with survey materials. In the second

² As a way to invite survey respondents to advocate for their needs, in the survey protocol, we included the language "At any time of the survey, please let me know if you need additional assistance answering my questions."

training, we reviewed the survey, question by question, and practiced inputting data into the tablets.

Surveyors managed multiple priorities.

- Gathered quality data in a consistent way, following the protocol (top priority);
- Took care of themselves (high priority). This could include taking a 10-minute break to warm up in their car, taking a break for lunch, finding a place to sit and rest, and quickly switching to paper surveys if the iPad ran out of batteries unexpectedly.
- Responsiveness to people receiving services (high priority). We understood that some survey respondents would want to go through the survey quickly, but we communicated to the surveyors that it was still important to stick to the protocol.
- Stayed at the site from when they open to when they close (high priority). If they found that they were almost at 20 surveys and still had several hours before the site closes, we asked the surveyor to adjust to approaching every second, third, fourth, etc. person instead of every person.
- Gathered 20 surveys per site (lower priority). This was a lower priority than the ones noted above, and we communicated to the surveyors that it was more important to follow protocol than to get 20 completed surveys.

2.2.b How we sampled respondents

The sampling method was designed to ensure a random sample of the people at each site and to receive between 20 and 30 responses over the course of time spent at the site. To select which person to approach first, we first referenced the MoS (measure of size) supplied by Second Harvest Heartland (small, medium, large). To assign sites as small, medium, and large, we used a cumulative percentage of total people served (<50% large, 50-80% medium, 80-100% small). We then cross referenced information we gathered through calls with the program to understand the average number of people supported per week. Most sites appeared to match. If MoS and average number of people supported per week did not align, we deferred to the average number of people per week. If we didn't have information about the average number of people per week, we deferred to MoS. For sites with no MoS value and no value for average number of clients per week, we conservatively considered them small.

We then generated a random number based on the assigned small, medium, and large designation. For small, we randomly assigned a 1 or 2 start (i.e. first or second person to approach first). For medium, we randomly assigned 1-5. For large, we randomly assigned 1-10.

The survey administrator arrived 15 minutes early to set up, connect with local staff or volunteers, and begin surveying as soon as the site opened. The survey administrator counted people who entered to receive services up to the random start number, and approached that person as the first person to survey. On completion of the first survey, the survey administrator then surveyed the subsequent client or household who entered, regardless of how many had entered while the first survey was taking place.

At sites where the number of expected people and the time open was such that the protocol would result in a survey administrator reaching 30 responses before the agency closed, an interval between surveys was added to spread the sample over the full opening hours.

At the few sites with multiple access points, such as one line for cars and another for walk-ins, with each expected to receive a similar number of clients, survey administrators flipped a coin to determine which point to survey at. If one of the access points was expected to receive significantly less traffic, the survey administrator chose the access point that would be more likely to offer 20-30 survey responses.

2.2c Weather and other factors that influenced surveying

Each site brought unique circumstances that sometimes required changes to protocol. The survey administrator's location might change throughout the administration of the survey to accommodate the flow of service. Due to precautions for COVID-19, many of the sites were outdoors, and weather often prohibited strict adherence to the protocol of continuous surveying, as warming breaks were needed. In some cases, sites closed early due to weather.

2.2d Technology

Technical issues arose occasionally with the remote nature of the survey. Responses were mostly recorded on iPads and uploaded to a cloud service over wi-fi. In one case, all responses from a site were lost in this transfer. Battery operated tablets needed more frequent recharging in the extreme cold and occasionally shut down completely.

2.2.e Adjustments to the translated survey protocol

The original protocol called for recordings of the survey in three languages. These were to be available to play quickly on the iPad while a respondent filled out a paper survey in their preferred language, simulating a verbally administered survey that would be consistent with the surveys administered in English. Or, in the case of Spanish and English bilingual survey administrators, in Spanish. However, in practice, having the multiple recordings integrated into the survey platform proved to be technically challenging, and complicated to implement across the four surveyors' equipment as they were working remotely. The protocol was adjusted to give respondents a paper copy of the survey instructions and consent form in their preferred language and let them fill out the survey at their own pace rather than concurrently playing a recording of the full survey.

2.2.f Other adjustments to the survey tool

A question on the survey for meal programs was adjusted after sharing it with a meal site that served clients living on site. When asking about transportation used to get to the site (Q1), the response option "You currently reside at this location" was added. This did not affect the sites surveyed up to that point.

2.2.g How we monitored survey administration

ACET checked in with each surveyor 1-4 business days before survey implementation at a site to relay information about the site (e.g., the contact person, special COVID-19 protocols, etc.) and make sure they had enough materials. We instructed the surveyors to arrive 15 minutes before

the program opened its doors to clients, to text us when they first arrived, and locate the site contact and introduce themselves. The surveyors stayed for the entire duration of food services up to 8 hours and then located the site contact to thank them and say goodbye. They then texted us to communicate that they had left the site. Within 24 hours, the surveyor completed and submitted the survey observation form by taking a photo on their tablet or cellphone and sending it to us via email. Surveyors had no more than \$1,500 cash (enough for up to five sites) on them at all times.

2.2h Deviations to survey protocol

For two sites early in the project, surveyors left before the site was closed for the day. In both cases, they had already collected the maximum number of surveys per site (30), but they did not adhere to protocol, which instructed them to stay the duration of the day and leave more space between surveys if they thought they would reach 30 before the site closed. After these two experiences, we sent an email to all surveyors re-emphasizing the multiple priorities of the project, including the importance to pace themselves and survey throughout the entire time of operation. After we sent that email, our records show that surveyors stayed at their sites until wrap-up.

We don't believe the two instances mentioned above alter our findings, because we performed an initial sensitivity analysis to examine the effects on demographics differences (all survey respondents vs. all survey respondents minus those from the two sites we described above). We found no differences in most, and small differences in only two. Given this sensitivity analysis, we kept the data from those two sites in our analysis.

3. Analyzing Survey Data

3.1 Incorporating “Book Value” Data in our Analysis

To determine weighting, we first considered “book values,” which was data that sites provided to Second Harvest Heartland on a regular basis about the number of people they support. Most sites report both a unique (unduplicated) count and a duplicate count. Since this study focused on unique counts, we focused our efforts on the unique book values. Below we describe the differences in how programs reported the number of people they support:

- For grocery programs, the unique annual client count is truly a unique count.
- For onsite/meal programs, the unique annual client count is a sum of the monthly reports of unique individuals served each month. So while clients are only counted once a month, because this is a yearly sum if they received at least one meal each month, they will be counted in this figure 12 times. Therefore this number is not equivalent to the number of unique clients reported for grocery programs.
- Minnesota Central Kitchen (MCK) sites reported client counts on a weekly basis, which was different from all other sites. The MCK program was developed in 2020 in response to the COVID-19 pandemic. In this program, restaurants teamed up with food shelves and hunger-relief program partners to provide meals to individuals. The client counts for MCK data were unique monthly counts. We only had 2021 data for MCK sites because the MCK program began in the spring/summer of 2021. The 2021 data we have was from a snapshot in time and was from a low point in terms of MCK activity in 2021.

We provide more details about how these differences influenced weighting in section 3.2.

We worked with book value data from 656 sites. We made the following assumptions and corresponding decisions about book values:

- We removed data for sites that had more “unique” than “total” clients because we didn’t know which number was accurate. We treated this data as “missing.”
- If “unique” or “total” count was a “0” or “-” *and* there was a value for the other for the other (either “unique” or “total”), we treated the “0” or “-” as “missing.”
- If there was a “0” or “-” in both cells, we treated it one of two ways:
 - If it was for a site that didn’t have other sites in the same agency, we treated it as “zero/none.”
 - If it was for a site that did have other sites in the same agency, we couldn’t be sure what the “0” or “-” meant, so we considered the data as “missing.”

To weight the data, we needed to re-group some types of categories. We made decisions based on categories that shared similarities and on the number of sites in each category that could provide meaningful estimations (Table 4). The third column of Table 4 shows how we regrouped categories. The regrouped categories are:

- Housing: the main function is to provide housing support.
- Mass distribution: sites, such as pop-up distributions and seasonal produce distributions, that can happen in places like church or school parking lots, parks, etc.

- Pantry: brick and mortar food shelves/pantries and mobile pantries that provide ingredients to make meals at place of residence.
- Prepared meals: any site serving meals that are already prepared for consumption (regardless of whether they're eaten onsite or taken elsewhere to be eaten).

Table 4: Original categories and regrouped categories

Category (sample frame)	Category (survey sites)	Regrouped categories
College	College	Pantry
College Food Pantry	n/a	Pantry
Emergency Shelter	n/a	Housing
Foodshelf	Foodshelf	Pantry
Food Pantry	Food Pantry	Pantry
Food Pharmacy ³	n/a	Pantry
Halfway	n/a	Housing
Homeless	Homeless	Housing
Mass Distribution	Mass Distribution	Mass
Mn Central Kitchen	n/a	Prepared meals
Mobile Fs	Mobile Fs	Pantry
Meal Site	Meal Site	Prepared meals
Mobile Pantry	n/a	Pantry
Other	n/a	Pantry (1) and Housing (1) ⁴
Pantry2	n/a	Pantry
Produce	n/a	Mass
Rehab	n/a	Housing
Rehab Housing	n/a	Housing
Residential Senior Pantry	n/a	Pantry
Senior	Senior	Prepared meals
Soup Kitchen	Soup Kitchen	Prepared meals
Support	n/a	Prepared meals
Senior Program	n/a	Pantry
Trans Housing	n/a	Housing
Transitional Housing	Transitional Housing	Housing

³ Only one site in the sample frame was in this category; based on this individual site's characteristics, we regrouped it as a pantry.

⁴ Only two sites in the sample frame were in this category; based on these two sites' individual characteristics, we recategorized one as pantry and one as housing.

3.2 Survey Respondents and Who they Represented: Weighting Methodology

We surveyed people at meal and grocery programs. In most cases, grocery programs support whole households and meal programs support individual people who receive prepared meals. Surveyors counted people who received services differently at these two types of programs.

- **Meal programs:** The person who receives a meal onsite is counted as one person who receives support. Their household members may or may not receive meals at the same site on the same day. Surveyors at meal programs counted individuals who received meals, meaning we could have surveyed multiple people from one household at a site. Surveyors asked program staff for a final count of all individuals who received meals on the day of our survey.
- **Grocery programs:** An entire household could benefit from groceries. Everyone in a household is counted as a person who receives support. Surveyors at grocery programs counted households and interviewed one person per household. Surveyors asked program staff at the end of the survey day how many households received support that day.

We asked each survey respondent about themselves and their household members. In this report, we describe people who receive support and their household members to provide a picture of people who receive support and their household circumstances, regardless of if everyone in the household benefitted from food support.

3.2.a Variance estimation for weighted data

This survey secured a total of 889 respondents across 55 sites. Table 5 provides a summary of these surveys by site, geography, minority status, and program type.

Table 5: Survey respondent distribution by program, target population, geography, and category

Site ID	Program	Target Population	Geography	Category	Surveyed Clients
Site ID1	Onsite	0	Micropolitan	Prepared Meals	16
Site ID2	Grocery	0	Rural	Pantry	3
Site ID3	Grocery	0	Micropolitan	Pantry	23
Site ID4	Onsite	0	Rural	Housing	10
Site ID5	Grocery	1	Rural	Pantry	24
Site ID6	Grocery	0	Rural	Pantry	13
Site ID7	Grocery	0	Rural	Pantry	6
Site ID8	Onsite	0	Micropolitan	Prepared Meals	20
Site ID9	Onsite	0	Micropolitan	Housing	10
Site ID10	Grocery	0	Rural	Pantry	10
Site ID11	Grocery	0	Rural	Pantry	31
Site ID12	Grocery	0	Rural	Pantry	15
Site ID13	Onsite	1	Minneapolis/St. Paul	Prepared Meals	30
Site ID14	Grocery	0	Rural	Pantry	7
Site ID15	Onsite	0	Rural	Prepared Meals	8
Site ID16	Grocery	1	Micropolitan	Pantry	30
Site ID17	Grocery	0	Micropolitan	Pantry	9
Site ID18	Onsite	0	Suburban	Housing	12
Site ID19	Grocery	0	Micropolitan	Pantry	27

Site ID	Program	Target Population	Geography	Category	Surveyed Clients
Site ID20	Grocery	0	Rural	Pantry	10
Site ID21	Grocery	0	Rural	Pantry	21
Site ID22	Grocery	0	Rural	Pantry	14
Site ID23	Grocery	0	Rural	Pantry	17
Site ID24	Grocery	1	Suburban	Pantry	18
Site ID25	Grocery	1	Minneapolis/St. Paul	Pantry	9
Site ID26	Grocery	1	Minneapolis/St. Paul	Pantry	18
Site ID27	Grocery	1	Minneapolis/St. Paul	Pantry	16
Site ID28	Grocery	1	Suburban	Pantry	20
Site ID29	Grocery	1	Suburban	Pantry	4
Site ID30	Grocery	1	Minneapolis/St. Paul	Pantry	41
Site ID31	Grocery	1	Minneapolis/St. Paul	Pantry	11
Site ID32	Grocery	1	Micropolitan	Pantry	9
Site ID33	Grocery	1	Minneapolis/St. Paul	Pantry	24
Site ID34	Grocery	1	Rural	Pantry	12
Site ID35	Grocery	0	Suburban	Pantry	30
Site ID36	Grocery	1	Suburban	Pantry	30
Site ID37	Grocery	0	Suburban	Mass	10
Site ID38	Grocery	0	Rural	Pantry	3
Site ID39	Grocery	1	Minneapolis/St. Paul	Pantry	20
Site ID40	Onsite	0	Rural	Prepared Meals	9
Site ID41	Onsite	0	Micropolitan	Prepared Meals	12
Site ID42	Onsite	1	Minneapolis/St. Paul	Housing	32
Site ID43	Grocery	1	Suburban	Pantry	30
Site ID44	Grocery	1	Suburban	Pantry	8
Site ID45	Grocery	1	Suburban	Pantry	11
Site ID46	Grocery	0	Micropolitan	Pantry	25
Site ID47	Onsite	1	Suburban	Prepared Meals	12
Site ID48	Grocery	1	Suburban	Mass	10
Site ID49	Grocery	1	Minneapolis/St. Paul	Mass	17
Site ID50	Grocery	0	Rural	Mass	28
Site ID51	Grocery	0	Micropolitan	Pantry	23
Site ID52	Grocery	0	Rural	Pantry	13
Site ID53	Grocery	0	Suburban	Pantry	2
Site ID54	Grocery	1	Minneapolis/St. Paul	Pantry	12
Site ID55	Grocery	0	Rural	Pantry	4

All survey data must be weighted before they can be used to produce unbiased estimates of population parameters. By compensating for practical limitations of sample surveys, such as differential nonresponse and undercoverage, weighting improves the external validity of survey

data by enhancing the representation of respondents.

Weights for this survey were computed using the WgtAdjust procedure of SUDAAN, which relies on a constrained logistic model to predict the likelihood of responding as a function of a set of explanatory variables.^{viii} These variables describe the composition of all clients indexed by program type, target population status, location type, and program category. It should be noted that before the weighting process could begin, missing values of client counts had to be imputed. For this purpose, the Survey Impute procedure of SAS was used to select eligible donors based on a hot-deck algorithm.^{ix}

Survey estimates can only be interpreted properly in light of their associated sampling errors. Since weighting often increases variance of estimates, use of standard variance calculation formulae with weighted data can result in misleading statistical inferences. With weighted data, two general approaches for variance estimation can be distinguished. One is Taylor Series linearization, while the second method of variance estimation is replication.

An approximation method for variance estimation can be used to avoid the need for special software packages. Researchers who do not have access to such tools for design-proper estimation of standard errors can approximate the resulting variance inflation due to weighting and incorporate that in subsequent calculations of confidence intervals and tests of significance. With W_i representing the final weight of the i^{th} respondent, the inflation due to weighting, which is commonly referred to as Design Effect, can be approximated by:

$$\delta = 1 + \frac{\sum_{i=1}^n \frac{(W_i - \bar{W})^2}{n-1}}{\bar{W}^2}$$

For calculation of a confidence interval for an estimated percentage, \hat{p} , one can obtain the conventional variance of the given percentage, multiply it by the approximated design effect, δ , and use the resulting quantity as adjusted variance. That is, the adjusted variance would be given by:

$$\hat{S}^2(\hat{p}) \approx S^2(\hat{p})(\hat{p}) \times \delta = \frac{\hat{p} \times (1 - \hat{p})}{n-1} \left(\frac{N-n}{N} \right) \times \delta$$

Subsequently, the $(100-\alpha)$ percent confidence interval for P would be given by:

$$\hat{p} - z_{\alpha/2} \sqrt{\frac{\hat{p} \times (1 - \hat{p})}{n-1} \left(\frac{N-n}{N} \right) \times \delta} \leq P \leq \hat{p} + z_{\alpha/2} \sqrt{\frac{\hat{p} \times (1 - \hat{p})}{n-1} \left(\frac{N-n}{N} \right) \times \delta}$$

It should be noted that the 2021 population counts of onsite/meal clients included duplicate numbers. Survey data were used to account for such frame multiplicities, separately for sites with low and high minority status as summarized in the following table.

Table 6. Client deduplication factor by minority status of sites

Minority Status	Target population	Deduplication Factor
0-20	0	$1-0.906=0.094$
21+	1	$1-0.917=0.083$
Average		$1-0.912=0.088$

Although questions were asked about getting food from grocery or meal programs in the past, it is unknown whether survey respondents actually received additional meals or groceries at other sites with the Second Harvest Heartland network or at other organizations providing food support outside of the network. As such, we did not apply a secondary reduction factor.

To use this deduplication factor, we first removed data from respondents who had missing data for survey question 5 (grocery program participants: “How many of the past 12 months did you or your household get food from grocery programs?”; onsite/meal participants: “How many of the past 12 months did you get food from meal programs?”) or if they understood the question incorrectly. For respondents who understood the question incorrectly, and who answered 13 or more, we made the assumption that these respondents visited the food program more than one month during the last 12 months.

3.3 Population and Respondent Distributions

In Table 7, we provide information about people supported by food shelves and hunger-relief program partners (weighted data) and unweighted survey respondent counts.

Table 7: Population and respondent distributions by minority status, program, location, & category

Minority	Clients 2021		Surveyed Clients	
0 – 20	196,079	24.1%	441	49.6%
20+	617,051	75.9%	448	50.4%
Total	813,130	100.0%	889	100.0%

Program	Clients 2021		Surveyed Clients	
Grocery	770,232	94.7%	718	80.8%
Onsite/Meals	42,898	5.3%	171	19.2%
Total	813,130	100.0%	889	100.0%

Geography	Clients 2021		Surveyed Clients	
Minneapolis/St. Paul	272,778	33.5%	230	25.9%
Micropolitan	94,472	11.6%	204	22.9%
Rural	85,316	10.5%	258	29.0%
Suburban	360,564	44.3%	197	22.2%
Total	813,130	100.0%	889	100.0%

Category	Clients 2021		Surveyed Clients	
Housing	19,3169	2.4%	64	7.2%
Mass	184,349	22.7%	65	7.3%
Pantry	585,883	72.1%	653	73.5%
Prepared Meals	23,582	2.9% ⁵	107	12.0%
Total	813,130	100.0%	889	100.0%

3.4 Unweighted Qualitative Data

In response to the survey question “What challenges, if any, have you or anyone in your household experienced in making meals over the last month?” 130 survey respondents selected “Another challenge not listed above.” When prompted to specify, 129 of these offered some response. Some mentioned challenges listed in the multiple choice options, but with more detail, such as listing specific ingredients they lacked or their individual dietary or health needs. Some also described their individual physical challenges or crises. The most frequently mentioned (n=32) challenge in the write-in responses was that of living in a shelter. Many (n=20) also mentioned depression or mental health as a challenge to making meals. A number of responses (n=15) mentioned Diabetes. Other health challenges mentioned (n=9) were stroke, heart attack, and Alzheimer’s disease. Some respondents (n=15) described lacking ingredients that meet dietary or health needs, and others (n=13) described lacking ingredients without mentioning dietary, health, or religious needs. Eight (n=8) of these specifically mentioned lacking spices or seasoning.

⁵ Rounding to nearest tenth produces a total over 100%.

References

- ⁱ United States Census Bureau. (2019). QuickFacts: Wisconsin. Population Estimates, July 1, 2019, (V2019). Accessed from: <https://www.census.gov/quickfacts/fact/map/WI,US/PST045219>
- ⁱⁱ MN State Demographic Center. (August 2020). Latest annual estimates of Minnesota and its cities' and townships' population and households, 2019. Accessed from: <https://mn.gov/admin/demography/data-by-topic/population-data/our-estimates/>
- ⁱⁱⁱ United States Census Bureau. A National, State-Sorted List of All 20101 Urbanized Areas for the U.S., Puerto Rico, and Island Areas first sorted by State FIPS Code, the sorted by UACE code. Accessed from:
- ^{iv} Office of Management and Budget: 2010 Standards for Delineating Metropolitan and Micropolitan Statistical Areas; Notice.75 Fed. Reg.37,246 (June 28, 2010). Accessed from: <https://www.govinfo.gov/content/pkg/FR-2010-06-28/pdf/2010-15605.pdf>
- ^v Ibid.
- ^{vi} United States Census Bureau. (2019). QuickFacts: Minnesota. Population Estimates, July 1, 2019, (V2019). Accessed from: <https://www.census.gov/quickfacts/fact/map/MN/PST045219>
- ^{vii} United States Census Bureau. (2019). QuickFacts: Wisconsin. Population Estimates, July 1, 2019, (V2019). Accessed from: <https://www.census.gov/quickfacts/fact/map/WI,US/PST045219>
- ^{viii} Shah, B., Barnwell, B., & Bieler, G. (1995). *SUDAAN Software for Analysis of Correlated Data*, RTI International.
- ^{ix} Mukhopadhyay, P. (n.d.). "Survey Data Imputation with PROC SURVEYIMPUTE." <https://support.sas.com/resources/papers/proceedings16/SAS3520-2016.pdf>.

APPENDIX D:

Full Report Tables

Table 6a: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 who fit these demographic characteristics: Age

Age	Estimated Count	Estimated Percent	Lower 95% CI ¹ number	Lower 95% CI proportion	Upper 95% CI number	Upper 95% CI proportion
0-5	62,501	7.7%	44,231	5.4%	80,771	9.9%
6-18	165,332	20.3%	137,727	16.9%	192,936	23.7%
19-29	130,757	16.1%	105,562	13.0%	155,953	19.2%
30-49	186,594	22.9%	157,753	19.4%	215,435	26.5%
50-59	85,840	10.6%	64,764	8.0%	106,916	13.1%
60-64	39,600	4.9%	24,837	3.1%	54,362	6.7%
65 years or older	112,533	13.8%	88,849	10.9%	136,217	16.8%
Age not indicated	29,973	3.7%	17,050	2.1%	42,896	5.3%
Total	813,130	100.0%				

¹ "CI" is confidence interval.

Table 6b: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 who fit these demographic characteristics: Race and Ethnicity

Race and Ethnicity	Estimated Count	Estimated Percent	Lower 95% CI number	Lower 95% CI proportion	Upper 95% CI number	Upper 95% CI proportion
Non-exclusive ²						
White	353,973	43.5%	319,967	39.4%	387,978	47.7%
Hispanic/Latino	187,664	23.1%	158,765	19.5%	216,563	26.6%
Black/African American	134,436	16.5%	108,957	13.4%	159,915	19.7%
Asian	60,778	7.5%	42,741	5.3%	78,815	9.7%
American Indian or Alaska Native	21,418	2.6%	10,434	1.3%	32,402	4.0%
Another race and/or ethnicity not listed	1,634	0.2%	1	0.0%	4706	0.6%
Race and/or ethnicity not indicated ³	63,765	7.8%	45,327	5.6%	82,203	10.1%
Exclusive						
White only	333,425	41.0%	299,690	36.9%	367,159	45.2%
Hispanic/Latino only	178,636	22.0%	150,239	18.5%	207,034	25.5%
Black/African American only	121,627	15.0%	97,165	11.9%	146,089	18.0%
Asian only	57,856	7.1%	40,223	4.9%	75,488	9.3%
American Indian or Alaska Native only	15,620	1.9%	6,205	0.8%	25,034	3.1%
Another race and/or ethnicity not listed only	1,633	0.2%	1	0.0%	4,706	0.6%
Multiple races and/or ethnicities ⁴	40,568	5.0%	25,635	3.2%	55,500	6.8%
Race and/or ethnicity not indicated ⁵	63,765	7.8%	45,327	5.6%	82,203	10.1%
Total	813,130	100.0%				

² This part of the table captures non-exclusive race and ethnicity data. In other words, if someone identifies as White and Black/African American, they are captured twice, both in White and in Black/African American. Therefore, percentages will add up to more than 100% and counts will add up to more than 813,130.

³ Additional answer options included “Middle Eastern or North African” and “Native Hawaiian and other Pacific Islander.” We collapsed categories if they made up less than 1% of the weighted estimate.

⁴ Survey respondents could select multiple race/ethnicity answers. To analyze weighted survey data, we re-coded all respondents who checked multiple races/ethnicities as “multiple races and/or ethnicities.”

⁵ Additional answer options included “Middle Eastern or North African” and “Native Hawaiian and other Pacific Islander.” We collapsed categories if they made up less than 1% of the weighted estimate.

Table 6c: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 who fit these demographic characteristics: Gender

Gender	Estimated Count	Estimated Percent	Lower 95% CI number	Lower 95% CI proportion	Upper 95% CI number	Upper 95% CI proportion
Female	395,931	48.7%	361,649	44.5%	430,213	52.9%
Male	389,779	47.9%	355,514	43.7%	424,043	52.1%
Another gender not listed ⁶	1,551	0.2%	1	0.0%	4,544	0.6%
Gender not indicated	25,869	3.2%	13,832	1.7%	37,907	4.7%
Total	813,130	100.0%				

Table 7a: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 who benefitted from this mode of transportation

Transportation option	Estimated Count	Estimated Percent	Lower 95% CI number	Lower 95% CI proportion	Upper 95% CI number	Upper 95% CI proportion
Drive yourself in a vehicle	583,777	71.8%	82,645	68.0%	128,779	75.6%
Walk	105,712	13.0%	257	10.2%	12,231	15.8%
Get a ride with family or friends	84,952	10.4%	7,939	7.9%	28,144	13.0%
Use public transportation	18,041	2.2%	552,912	1.0%	614,642	3.5%
Ride a bicycle	6,244	0.8%	63,973	0.0%	105,931	1.5%
Other	7,214	0.9%	783	0.1%	13,646	1.7%
Mode of transportation not indicated	7,190	0.9%	769	0.1%	13,610	1.7%
Total	813,130	100.0%				

⁶ Additional answer options included “Gender non-conforming,” “Trans female/trans woman,” “Trans male/trans man,” “A gender not listed above.” We collapsed categories into “another gender not listed” if they made up less than 1% of the weighted estimate.

Table 7b: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 who benefitted from driving themselves in a vehicle

Drive yourself in a vehicle	Estimated Count	Estimated Percent	Lower 95% CI number	Lower 95% CI proportion	Upper 95% CI number	Upper 95% CI proportion
A race/ ethnicity other than White	291,483	70.1%	275,417	66.2%	307,549	73.9%
White only	264,528	79.3% ⁷	253,141	75.9%	275,916	82.8%
Minneapolis or St. Paul	71,272	33.8% ⁸	62,858	29.8%	79,685	37.8%
Non-metropolitan	512,529	85.1%	494,439	82.1%	530,618	88.1%
Household size: 3 or fewer	184,929	58.8%	171,861	54.6%	197,996	62.9%
Household size: 4 or more	398,849	80.0% ⁹	382,039	76.6%	415,659	83.4%

Table 8a: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 that did or did not receive free food from meal or grocery programs before the start of the COVID-19 pandemic (March 2020)

Received free food	Estimated Count	Estimated Percent	Lower 95% CI number	Lower 95% CI proportion	Upper 95% CI number	Upper 95% CI proportion
Yes	413,292	50.8%	379,003	46.6%	447,581	55.0%
No	385,692	47.4%	351,444	43.2%	419,941	51.6%
Not indicated	14,146	1.8%	5,178	0.6%	23,113	2.8%
Total	813,130	100.0%				

⁷ A greater proportion of white individuals benefit from driving themselves compared to people who identified as a race other than white ($p = .0004$).

⁸ A greater proportion of individuals who received support from a site in a non-metropolitan area benefitted from driving themselves compared to individuals who received support from Minneapolis or St. Paul sites ($p < .0001$).

⁹ A greater proportion of individuals from households of 4 or more benefitted from driving themselves compared to individuals from households of 3 or fewer ($p < .0001$).

Table 8b: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 that **did not** receive free food from meal or grocery programs before the start of the COVID-19 pandemic (March 2020)

No, did not receive free food	Estimated Count	Estimated Percent	Lower 95% CI number	Lower 95% CI proportion	Upper 95% CI number	Upper 95% CI proportion
A race/ethnicity other than White	195,709	47.1% ¹⁰	178,197	42.8%	213,220	51.3%
White only	158,664	47.6%	144,619	43.4%	172,710	51.8%
Minneapolis or St. Paul	88,359	41.9% ¹¹	79,583	37.7%	97,135	46.1%
Non-metropolitan	297,333	49.4%	271,935	45.2%	322,732	53.6%
Household size: 3 or fewer	144,087	45.8% ¹²	130,862	41.6%	157,312	50.0%
Household size: 4 or more	241,605	48.5%	220,594	44.3%	262,617	52.7%

Table 9a: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 that need or do not need more free meals and/or groceries than they are currently receiving

	Estimated Count	Estimated Percent	Lower 95% CI number	Lower 95% CI proportion	Upper 95% CI number	Upper 95% CI proportion
Yes, need more	257,337	31.6%	225,437	27.7%	289,237	35.6%
No, do not need more	536,976	66.0%	504,494	62.0%	569,457	70.0%
Not indicated	18,817	2.4%	8,505	1.0%	29,130	3.6%
Total	813,130	100.0%				

¹⁰ There is no significant difference between white individuals and individuals of a race/ethnicity other than White only who received free food from programs prior to the COVID-19 pandemic ($p = .86$).

¹¹ There is a greater proportion of non-metropolitan individuals who reported *not* receiving free food from meal or grocery programs before the start of the COVID-19 pandemic ($p = .01$).

¹² There is no significant difference between individuals from houses of 3 or fewer and individuals from houses of 4 or more who received free food from programs prior to the COVID-19 pandemic ($p > .37$).

Table 9b: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 that **do need** more free meals and/or groceries than they are currently receiving

Yes, need more	Estimated Count	Estimated Percent	Lower 95% CI number	Lower 95% CI proportion	Upper 95% CI number	Upper 95% CI proportion
A race/ethnicity other than White	134,676	32.4% ¹³	118,260	28.4%	151,093	36.3%
White only	101,195	30.4%	88,264	26.5%	114,126	34.2%
Minneapolis or St. Paul	66,567	31.6% ¹⁴	58,300	27.6%	74,834	35.5%
Non-metropolitan	190,770	31.7%	167,137	27.8%	214,403	35.6%
Household size: 3 or fewer	77,881	24.7% ¹⁵	66,426	21.1%	89,337	28.4%
Household size: 4 or more	179,456	36.0%	159,275	32.0%	199,637	40.1%

Table 10a: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 that did or did not participate in another program¹⁶

	Estimated Count	Estimated Percent	Lower 95% CI number	Lower 95% CI proportion	Upper 95% CI number	Upper 95% CI proportion
Participated in a program	431,034	53.0%	396,802	48.8%	465,266	57.2%
Did not participate in a program	336,539	41.4%	302,757	37.2%	370,320	45.5%
Not indicated	45,557	5.6%	29,784	3.7%	61,331	7.5%
Total	813,130	100.0%				

¹³ There is no significant difference between white individuals and individuals identifying as another race in needing more meals and/or groceries (p=.61).

¹⁴ There is no significant difference between individuals who received support from Minneapolis or St. Paul sites and individuals who received support from non-metropolitan sites in needing more meals and/or groceries (p=.97).

¹⁵ There is a difference between individuals from houses of 3 or fewer and individuals from houses of 4 or more in needing more meals and/or groceries (p<.0001).

¹⁶ The tables in this section contain information about participation in other programs. By other programs, we mean SNAP, EBT, or food stamps, WIC, and/or free or reduced-price school meal programs.

Table 10b: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 that **did** participate in at least one other program

Participated in another program	Estimated Count	Estimated Percent	Lower 95% CI number	Lower 95% CI proportion	Upper 95% CI number	Upper 95% CI proportion
A race/ ethnicity other than White	247,271	59.4% ¹⁷	230,045	55.3%	264,497	63.6%
White only	141,009	42.3%	127,115	38.1%	154,903	46.5%
Minneapolis or St. Paul	121,379	57.6% ¹⁸	112,588	53.4%	130,170	61.7%
Non-metropolitan	309,654	51.4%	284,264	47.2%	335,045	55.6%
Household size: 3 or fewer	133,683	42.5%	120,561	38.3%	146,804	46.6%
Household size: 4 or more	297,351	59.7% ¹⁹	276,726	55.5%	317,977	63.8%

Table 11: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 that participated in 0, 1, 2, or 3 other programs

	Estimated Count	Estimated Percent	Lower 95% CI number	Lower 95% CI proportion	Upper 95% CI number	Upper 95% CI proportion
0	336,539	41.4%	302,757	37.2%	370,320	45.5%
1	311,065	38.3%	277,731	34.2%	344,399	42.4%
2	100,315	12.3%	77,759	9.6%	122,870	15.1%
3	19,654	2.4%	9,121	1.1%	30,188	3.7%
Not indicated	45,557	5.6%	29,784	3.7%	61,331	7.5%
Total	813,130	100.0%				

¹⁷ There is a greater proportion of individuals identifying as a race/ethnicity other than White reporting using additional programs compared to White only individuals (p=.00000001).

¹⁸ A greater proportion of individuals who received support from Minneapolis or St. Paul sites reported using an additional program (e.g., SNAP, WIC, free/reduced lunch) compared to individuals who received support from non-metropolitan sites (p = .04).

¹⁹ There is a greater proportion of individuals from a household of 4 or more reporting using an additional program compared to individuals from households of 3 or fewer (p=.04).

Table 12: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 that participate in other specific programs

Program name	Estimated Count	Estimated Percent	Lower 95% CI number	Lower 95% CI proportion	Upper 95% CI number	Upper 95% CI proportion
SNAP, EBT, or food stamps	248,541	30.6%	216,944	26.7%	280,139	34.5%
Free or reduced-price school meal programs	242,372	29.8%	211,000	25.9%	273,745	33.7%
WIC (the Nutrition Program for Women, Infants, and Children)	79,744	9.8%	59,346	7.3%	100,143	12.3%

Table 13a: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 who fit this description regarding challenges to making meals in the past month

	Estimated Count	Estimated Percent	Lower 95% CI number	Lower 95% CI proportion	Upper 95% CI number	Upper 95% CI proportion
Experienced a challenge	293,770	36.1%	260,822	32.1%	326,717	40.2%
Did not experience a challenge in the last month	519,360	63.9%	486,413	59.8%	552,308	67.9%
Total	813,130	100.0%				

Table 13b: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 **who did experience a challenge** to making meals in the past month

Experienced a challenge	Estimated Count	Estimated Percent	Lower 95% CI number	Lower 95% CI proportion	Upper 95% CI number	Upper 95% CI proportion
A race/ethnicity other than White	160,363	38.6% ²⁰	143,286	34.4%	177,439	42.7%
White only	114,764	34.4%	101,402	30.4%	128,126	38.4%
Minneapolis or St. Paul	87,969	41.7% ²¹	79,199	37.6%	96,740	45.9%
Non-metropolitan	205,800	34.2%	181,706	30.2%	229,894	38.2%
Household size: 3 or fewer	113,678	36.1% ²²	100,927	32.1%	126,429	40.2%
Household size: 4 or more	180,092	36.1%	159,895	32.1%	200,288	40.2%

²⁰ There is no significant difference between White only individuals and individuals identifying as a race other than White regarding having challenges making meals ($p=.16$).

²¹ A greater proportion of individuals who received support from a Minneapolis or St. Paul site encountered challenges when making meals compared to individuals who received support from a site in a non-metropolitan area ($p=.01$).

²² There is no significant difference between individuals from households of 3 or fewer and individuals identifying from households of 4 or more regarding having challenges making meals ($p=1.00$).

Table 14: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 who fit this description regarding specific types of challenges to making meals experienced in the past month

Challenge	Estimate Count	Estimated Percent	Lower 95% CI number	Lower 95% CI proportion	Upper 95% CI number	Upper 95% CI proportion
Accessing ingredients that meet dietary or health needs	171,513	21.1%	143,532	17.7%	199,496	24.5%
Having the physical ability to make meals	66,244	8.1%	47,482	5.8%	85,007	10.5%
Dealing with a crisis and unable to make meals	42,464	5.2%	27,205	3.3%	57,723	7.1%
Having access to a kitchen and the tools needed to make meals	36,291	4.5%	22,128	2.7%	50,454	6.2%
Accessing ingredients that meet religious needs	24,009	3.0%	12,399	1.5%	35,620	4.4%
Another challenge not listed above	134,171	16.5%	108,713	13.4%	159,630	19.6%
No challenges making meals	519,360	63.9%	260,822	59.8%	326,717	67.9%

Table 15: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 who fit this description regarding number of unique challenges to making meals experienced in the past month

Number of unique challenges	Estimated Count	Estimated Percent	Lower 95% CI number	Lower 95% CI proportion	Upper 95% CI number	Upper 95% CI proportion
0	519,360	63.9%	486,413	59.8%	552,308	67.9%
1	162,564	20.0%	135,132	16.6%	189,995	23.4%
2	94,057	11.6%	72,120	8.9%	115,993	14.3%
3 or more	37,149	4.5%	22,828	2.8%	51,471	6.3%
Total	813,130	100.0%				

Table 16: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 who fit this description for household size

	Estimated Count	Estimated Percent	Lower 95% CI number	Lower 95% CI proportion	Upper 95% CI number	Upper 95% CI proportion
1 person	96,977	11.9%	74,748	9.2%	119,206	14.7%
2 people	115,698	14.2%	45,868	11.3%	69,829	17.2%
3 people	102,027	12.5%	26,436	9.8%	41,582	15.3%
4 people	117,016	14.4%	23,235	11.4%	35,272	17.4%
5 people	150,302	18.5%	24,736	15.2%	35,385	21.8%
6 people	82,856	10.2%	10,351	7.6%	17,267	12.7%
7 people	74,128	9.1%	7,769	6.7%	13,410	11.5%
8 people	29,525	3.6%	2,087	2.1%	5,294	5.2%
9 people	24,892	3.1%	1,453	1.6%	4,079	4.5%
10 people	9,552	1.2%	216	0.3%	1,694	2.1%
12 people	10,157	1.3%	212	0.3%	1,481	2.1%
Total	813,130	100.0%				

Table 17: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 who fit this description for living situation

Living situation	Estimated Count	Estimated Percent	Lower 95% CI number	Lower 95% CI proportion	Upper 95% CI number	Upper 95% CI proportion
A place you rent	377,388	46.4%	343,182	42.2%	411,593	50.6%
A place you own	310,961	38.2%	277,628	34.1%	344,293	42.3%
Someone else's place	92,477	11.4%	70,701	8.7%	114,252	14.1%
A shelter	12,715	1.6%	4,206	0.5%	21,225	2.6%
Not indicated	19,589	2.4%	9,073	1.1%	30,106	3.7%
Total	813,130	100.0%				

Table 18: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 who benefitted from compensation from full time and/or part time work with no other type of compensation

	Estimated Count	Estimated Percent	Lower 95% CI number	Lower 95% CI proportion	Upper 95% CI number	Upper 95% CI proportion
Benefitted from compensation from full time and/or part time work with no other type of compensation	511,495	62.9%	478,363	58.8%	544,627	67.0%
Benefitted from work and/or from other compensation ²³	301,635	37.1%	268,503	33.0%	334,767	41.2%
Total	813,130	100.0%				

Table 19: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 who benefitted from types of compensation

	Estimated Count	Estimated Percent	Lower 95% CI number	Lower 95% CI proportion	Upper 95% CI number	Upper 95% CI proportion
Working for pay full-time (30 hours per week or more)	379,613	46.7%	345,395	42.5%	413,831	50.9%
Working for pay part-time (less than 30 hours per week)	295,604	36.4%	262,612	32.3%	328,596	40.4%
Social Security and/or Pension	163,004	20.0%	135,545	16.7%	190,462	23.4%
Disability (SSDI), workman's compensation, or Supplemental Security Income (SSI)	154,062	18.9%	127,183	15.6%	180,940	22.3%
Unemployment compensation	24,329	3.0%	12,644	1.6%	36,014	4.4%

²³ The individuals represented in this category answered yes to at least one of the following answer options: "Unemployment compensation," Disability (SSDI), workman's compensation, or Supplemental Security Income (SSI)," "Social Security and/or Pension."

Table 20: Estimated number of individuals supported by food shelves and hunger-relief program partners in 2021 that experienced a total combined income of all household members during the last 12 months

	Estimated Count	Estimated Percent	Lower 95% CI number	Lower 95% CI proportion	Upper 95% CI number	Upper 95% CI proportion
Zero	25,850	3.1%	13,816	1.7%	37,882	4.7%
\$5,000 or less	53,919	6.6%	36,853	4.5%	70,985	8.7%
\$5,001-\$10,000	44,597	5.5%	28,981	3.6%	60,213	7.4%
\$10,001-\$15,000	58,191	7.2%	40,511	5.0%	75,870	9.3%
\$15,001-\$20,000	40,952	5.0%	25,952	3.2%	55,952	6.9%
\$20,001-\$25,000	101,704	12.5%	79,015	9.7%	124,393	15.3%
\$25,001-\$30,000	29,839	3.7%	16,944	2.1%	42,735	5.3%
\$30,001-\$35,000	77,085	9.5%	56,993	7.0%	97,177	12.0%
\$35,001-\$50,000	83,448	10.3%	62,634	7.7%	104,263	12.8%
More than \$50,000	61,055	7.5%	42,980	5.3%	79,130	9.7%
Not indicated	236,490	29.1%	205,341	25.3%	267,639	32.9%
Total	813,130	100.0%				

APPENDIX E:

Interview Memo



Second Harvest Heartland

Food Supports: Understanding Neighbors and Their Needs Final Report

Prepared for **ACET Inc.** by **DeYoung Consulting Services**
Submitted: March 7th, 2022



Introduction



Introduction

Project Purpose

Second Harvest Heartland seeks to understand who is receiving support through its network of over 300 partner agencies in a 59-county service area in Minnesota and Wisconsin. Specifically, Second Harvest Heartland wants to understand barriers to food security that community members may experience, their experiences overall with food insecurity, and how COVID-19 has impacted who receives support. An important element of this project was to engage racially and ethnically diverse clients so that Second Harvest Heartland and its network can effectively address inequities that have been exacerbated by COVID-19. Information gleaned from this exploration will be used to make decisions on how to distribute food now and in the future; it will also influence Second Harvest Heartland's communications to volunteers, partners, and funders.

Reading This Report

This report begins with an explanation of the engagement methodology used, the stakeholders engaged, the data analysis process, and project limitations. This is followed by a comprehensive summary of findings from the interview engagement with Second Harvest Heartland clients. Findings are organized by the following major themes, each of which contains multiple subthemes:

- Necessity of food services
- Barriers to access
- Use of multiple coping strategies to meet needs
- Appreciation for program systems and staff
- Impact of COVID-19 on food programs
- Role of word of mouth in program awareness
- Opportunities suggested by participants

Themes are presented as section headings. The strength of each theme is represented with an "n," which is a tally of how many times participants referred to this theme. Each theme is further explained using a narrative summary of the evidence supporting the finding. Examples of participants' comments supporting the findings are provided following the narrative summary. Unless otherwise indicated, quotes are representative of sentiments expressed by multiple stakeholders. Quotes are not necessarily verbatim but are written to reflect participants' words as closely as possible. Quotes have been indented and italicized.



Methodology

Design

Second Harvest Heartland's goal was to interview 20 individuals over the phone with each interview lasting for 30 minutes. The qualitative data from the interviews was meant to be integrated with quantitative data from a survey, delivered by ACET. Interview questions were developed in partnership with Second Harvest Heartland and ACET.

Partner sites were chosen based on their relationship with Second Harvest Heartland as well as the following desired mix of programs:

- 10 programs in zip codes with 20% or more BIPOC populations
- 75% of programs are grocery, 25% are onsite meal programs
- 6 in metropolitan areas, 6 in rural, 5 in suburban metro, and 3 in micropolitan

It was also desired to have diversity of participants, and the following sample, developed collaboratively and based on research, was determined to be an ideal mix¹.

- 5-10 people who have children
- 2-3 people who are experiencing homelessness (sheltered or unsheltered)
- 2-3 people with physical disabilities
- 10 BIPOC interviewees (Native American, Black, and Latino are important communities to include)
- 4-6 people who are seniors²

We were successful in engaging a mix of programs but despite the consultants' attempts (see below), we were not able to achieve the exact desired sampling. After completing the interviews, the actual diversity of programs was as follows:

- 5 programs were in zip codes with 20% or more BIPOC populations
- 83% of programs were grocery programs, 8% of programs were onsite meal program
- 4 programs were in metropolitan areas, 2 were in rural areas, 3 were in suburban metro areas, and 3 programs were in micropolitan areas

¹ Demographic mix is based on research including Feeding America Report, 2021; Fitzpatrick and Willis, 2021; Baggett et al., 2011; Gundersen et al., 2003; Lee and Greif, 2008; Goldrick-Rab et al., 2015.

² Recommended based on 2019 SuperShelf survey where 33% of households include seniors.



Participants

To select individual participants, site coordinators were asked to identify one or two individuals who may fall into any number of the demographic categories. The actual diversity of participants cannot be reported, in part because Second Harvest Heartland did not want to over burden the site coordinator with reporting tasks, and in part to respect the privacy of the individuals who chose to participate.

Analysis

Qualitative data analysis methods were used to identify themes across interviews. Two interviews were conducted in Spanish, and notes were then translated into English. Interview notes were reviewed by question and topic to draw out common themes. Both inductive and deductive approaches were used in the analysis. This report provides a summary of findings with conclusions and opportunities for future engagement.

Limitations

It was a challenge to reach some of the participants identified by partner sites. After making multiple attempts to reach some participants (three phone calls and one text message), it was decided to pursue others. In addition, it was also a challenge to reach some partner sites. A minimum of three attempts were made to connect with the identified partner sites via a combination of email, phone calls and a text message. To respond to this limitation, a list of unresponsive sites was sent to Second Harvest Heartland. Second Harvest Heartland reached out to these sites via email, after which one last attempt was made within 24 hours. This final outreach from Second Harvest Heartland resulted in 2 additional phone interviews and one site visit where one interview was conducted.

The interview protocol posed an additional challenge. Two protocol questions were difficult for interviewees to understand and relate to. Those questions were:

- What are some examples of when you find yourself using food support programs like a food shelf or meal site (i.e., unexpected bill, job loss or loss of hours due to the pandemic, always difficult to cover food with my current pay, food support from government programs like WIC, SNAP is insufficient or inaccessible)?
- Think about what it takes for you to get the food from [their preferred food shelf/meal program]. What are some examples of what makes it difficult to get what you need and provide it to your family? (Prompt: transportation, social stigmas about your race, class, gender, etc.)?

This limitation is discussed further in the conclusions section of this report.

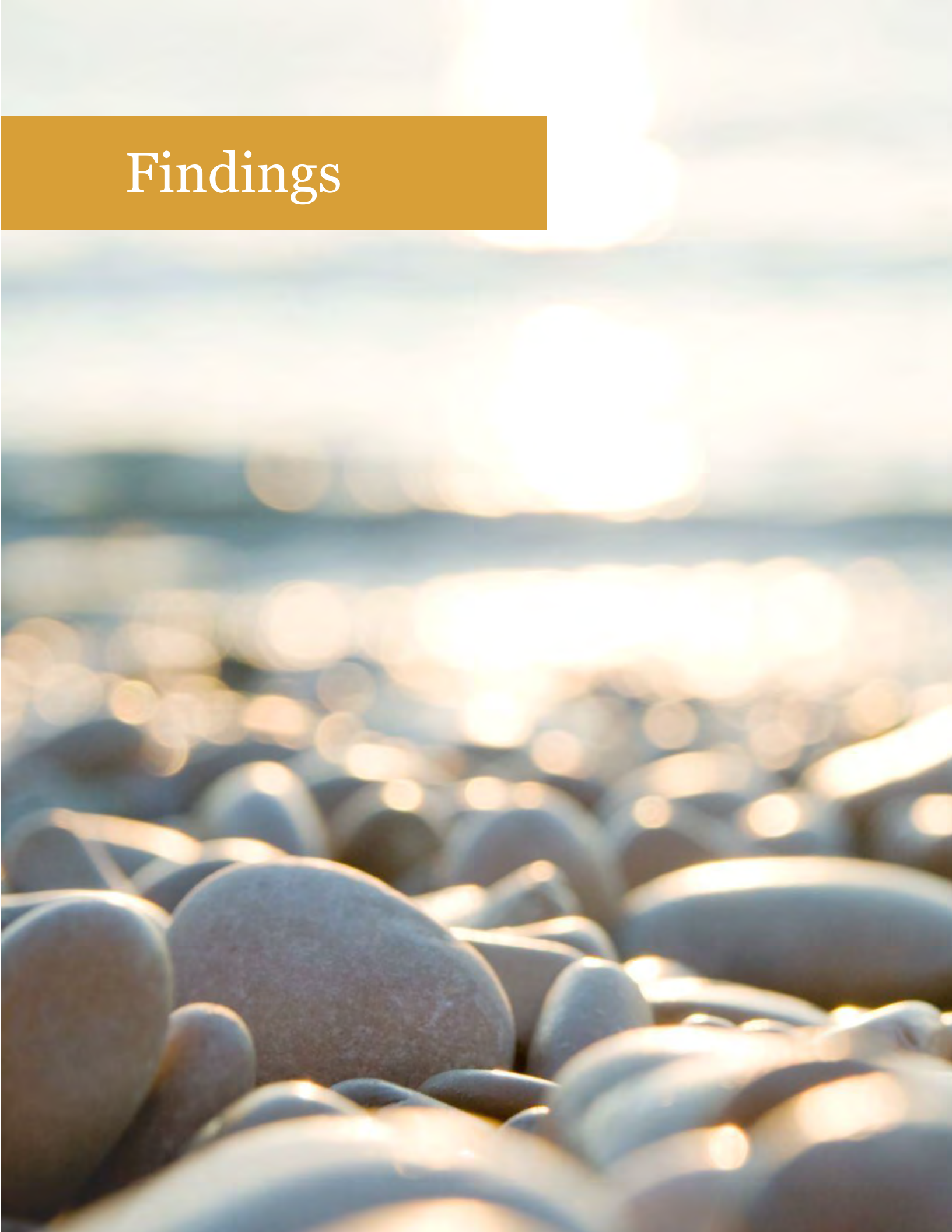


Finally, while interviewers did not collect demographic data for participants, many offered personal information during conversation. Based on interviewers' observations, groups that are likely missing from this study are:

- American Indians/Native Americans
- Single men
- People who are currently experiencing homelessness



Findings



Necessity of Food Services

Necessary supplement to other resources (n=26)

It is clear that participants piece together financial resources on an ongoing basis that will give them what they need. They collect income from jobs, unemployment benefits, disability payments, tax rebates or stimulus, alimony, social security, and more. Given multiple economic challenges, the food programs are one part of building their sense of food security.

"It was giving me food security. Even if I go broke I would be able to provide basic stuff like rice."

"I have an ex-husband and...he has to pay me support every single month and he's had some challenges in his life where he can't pay me. He had a dental emergency or whatever. I got a tax rebate and I lived off of it for 2 months. ...I wouldn't have survived the last few months without that."

"It was really, really difficult when we arrived. My husband also is sick...My husband got a job and then stopped working ...I stay home to take care of my 4 kids...I don't have money for daycare and preschool. I learned about PICA about free preschool through [the program] also."

"At first with the COVID impact... we had to apply for economic assistance...The only thing we could get is free food... how to buy gas...When we applied for emergency service and they helped us pay our rent...We can have free food and to be homeless is no fun...no more stress... sometimes our kids want this kind of food."

Increased cost of living, particularly price of food (n=18)

High living costs were mentioned as one factor in participants' decision to use food services; specifically mentioned were food prices and the cost of health insurance. Using food programs is an important way to offset increasing costs. Some referenced a sense that more people in the community, especially during the pandemic, are experiencing the same challenges as they are. One participant said using the food program cut their food bill in half, which was a significant relief.

"With the prices and everything going up like gas. I can't believe our utility bills right now. And it's COVID and everybody's behind the 8-ball trying to catch up."

"Usually, my food cost was about \$400 a month. I was the only person so I had to buy all the stuff myself. I found out when I started going there, my food cost went down 50%."



"The food shelf is a great help... In August we were all sick from COVID. Even when we were self-quarantined, we had enough food for the month...beef, chicken, fish...With COVID, the cost of living increased."

"Right now, I'm on disability and have been out. Especially this last year with everything increasing price-wise, groceries. It helps to supplement. Especially on Fridays when they have extra produce. Being able to help just supplement with groceries. And being on a limited income. It's that increase in groceries. Everything has been enormous, the little bits here and there. The grocery bill goes up so much. Especially with the seniors, which is me, it's that little bit you can't get help with. It offsets food."

Long-standing need for services (n=15)

Despite COVID-19 presenting new challenges, participants spoke of their need for food programs years before the pandemic, be that due to a mental health or physical health crisis, immigration, or other longstanding difficult situations. Many participants described their use of food programs as simply a way of life. One person spoke of dealing with grief after her mother's death, being unable to pay for her mother's house, and waiting for assisted housing with no success.

"Well, usually we go twice a week and then there's the [the program] that's three days a week, so Monday through Friday we're basically there for suppers you know, we go to these free meals. And then the pantry usually once a week or [another program] but that's the only pantry that I go to. And they took away the [program in a micropolitan area in Wisconsin]...when I first started going there in 2012, I believe it was."

"I had a nervous breakdown at the age of 50 and ended up hospitalized and I started from scratch."

"For us we had to relocated from Michigan to find jobs...all of the unemployment. We lived in a camper for a while and that. Slowly we're starting to turn everything back around, but it's taken...we've been here 9 years." "We're from the UP, the Upper Peninsula where the ski hills are. ...and then everything started closing. They closed the mines and that did it. Then they closed the prisons, then logging went down. There was no money. The schools weren't the greatest anymore and they used to be some of the best. ...it happens, everybody moves away. And it brought us here. And you'd be surprised at the people that have come here. The jobs just dried up".



Job loss (n=8)

Some people lost their jobs recently in the economic downturn resulting from the pandemic, and some specifically referenced business closures. The impact of losing their income affected their decision to use food programs.

“Up until two years ago I was able to work because of the contact with people. When COVID hit...I started to have issues with diabetes due to lack of mobility...when the shutdown came, and all of a sudden, there was no money and looking at what the electric bill was and I still have a car payment because I bought a car, just before the shutdown, I wasn’t planning not to be working ...that’s when I investigated the food distribution option.”

“For us, with my husband losing his job, having the extra food really helps for the month.”

“A couple years ago my husband lost his job and he’s the only breadwinner. I remember, we were scared, but I don’t think it ever came down to that. He went back to school stuff but decisions were made to kind of make us more hopeful. That you know, like we have to invest in our future. He went back to school for a couple years. ...I think he had applied for like 100 jobs, but the job situation was really bad at that time.”

Challenges and Barriers to Access

Quality and quantity of food (n=17)

Participants indicated that the most common challenge when using food programs was related to the quality and quantity of food provided. Some people described being frustrated with poor quality food options provided at other food banks in the community. These were not always Second Harvest Heartland programs, but in some cases they were. People described “good” quality food as meat, milk or dairy, vegetables, and a diverse variety of healthy foods, which they said are provided at some pantries but not all. In one interview, participants recounted receiving “disgusting” or rotten food, and food spillage in the box. Receiving too much food was also a concern for some, leading people to throw food away, share with others, or stop using that particular food pantry. Two participants felt they didn’t receive enough food, in part due to an increase in people in need. A few people wished their pantry provided non-food items as well, such as cleaning supplies or menstrual hygiene products.



"They have [the church], but they just give you a couple of sacks. Most of the time that's just canned goods that you can't even use and you just end up giving it away. You don't get to have a choice of what you want...you want it to feel like you have a little bit of dignity, where you can pick what you want and what you don't want because like at [the program] you can pick out what you want, and what you don't want...Because when [another program] ...when I first started going there in 2012 I believe it was, they just handed you a couple sacks...it was always like Chef Boyardee and all that... I was like, well I never grew up on Chef Boyardee and I don't like it. I got to the point where I just told the lady don't give me any....save that for somebody that has children. ...even the Chef Boyardee...I was to the point that I was so hungry that I opened it up and cooked it in the microwave, but I couldn't eat it. I was crying, I was like 'oh God'. I was so hungry. This was before I started going to [a different program].

And they [the previous program] give you things that nobody wants. Like huge jars of beans that once you open them would feed like 20 people. Like what restaurants would use.... Pantries will give you things that are close to being expired. We ain't got 3 freezers. We don't need a whole pickup full of bread. Some of the stuff is donuts and cookies. They're good but we can't eat or freeze that much. Some of it goes into the garbage."

"Sometimes there's not that much stuff being donated, like with meat and stuff...We're not getting as much meat as we used to."

"I could get most of the carbohydrates, like rice, and oil. Sometimes they bring vegetables but most of the time... they had canned food I didn't like. But the eggs, and starting [in the beginning], they didn't have the meat option but later they started giving chicken and other meat. That helped me a lot."

Social stigma (n=17)

Participants recognize that a stigma exists around accepting free food. Some referred to struggling against that stigma themselves or friends or family who struggle (n=11). Some said they have picked up food for others who are in need but who refuse to go because of the social stigma. Participants who identified as immigrants had additional feelings about the stigma. They described coming to the U.S. with aspirations of improving their economic wellbeing and feeling disappointed that they were struggling to meet their needs. Some of the same participants who acknowledged that the stigma exists said they don't let it bother them or that they have overcome it (n=6). A few expressed comfort knowing they could give back someday or in another way, or they spoke of how well the staff treated them.

"The stigma had to do with, me from my country, I didn't use to go places to get food. I had food; my mom could provide three different meals a day. When I came here and



most of Minnesota life isn't going well. And somebody told me about the food shelf...and for me that was a very big deal for me to go stand in line to go grab food. You know it's kind of like degrading, shameful you know. If my parents back home know about that, they would be mad at me."

"My ex, he was so proud, he wouldn't go at all. He wouldn't unload the car. I looked at him and said, 'how do you think we're getting fed right now? I don't see you buying food because we have no money to buy food.' But he never went to any pantry ever."

"Sometimes it's embarrassing....it's [the food pantry] in a small outside [location]. People see you waiting in line outside...it shouldn't be a barrier...and so you know if other workers or people are there, you might feel a little like waiting in line outside is probably a little barrier for some people. I think it's less and less of a barrier because everybody's having a harder time trying to make it."

"I had that stigma in me really holding me back, but what happened is when I started going there, the way they treated me, it was just like I was going to the grocery store...that breaks the barrier to be honest".

"Everybody in there understands why other people are there and I've had nothing but friendly people there and I'm not one to really care what other people think whether they see me walking in or out with food like I tell all my friends about it."

"Back home... they sell food like one penny, everything you buy you have to pay one penny... You have the feeling you are buying the stuff. I had the stigma in the beginning...And some people know that if they know you go there, they'll look at you in a different way...But for me I'll go there today and later give back."

Transportation and parking (n=15)

Transportation was also a common barrier to using food programs, and a number of participants said it limited their options when choosing where to get their food. Some participants spoke of relying on others to drive them or lend them their vehicle; others planned their visits to the grocery store or food programs around the bus schedule or their access to a car. Food pantries that were close by and that had flexible schedules were appreciated. A few participants mentioned difficult experiences with parking, including a concern about having to park illegally due to limited parking at the site.

"I don't have a vehicle, so I use my mother's car. I use her vehicle and go once per week".

"I don't have a car, so it's really nice that they come to me. I don't have to go out and take a bus or find somebody to take me grocery shopping. So that's a big help to me."



"Yea that's [transportation] definitely a big one. I do have an ICLS (Independent Community Living Services) worker now who will take me out like once per week".

[Tells a story about limited access to a car during the week.] "If you can't make it throughout the week, they also have a weekend option, which is really nice."

"If you go to Walmart on the bus, it takes 40 minutes to get there. So, you are wasting like 3-4 hours because you have to wait for another bus. So, I make a plan to spend those 3 hours in a weekend to buy fruits and vegetables."

"[speaking of a previous program they used] But the one downtown was hard to get to, and sitting in your car waiting. A lot of times I didn't even go because it was so inaccessible. The times, like there was only one time slot and sitting there waiting. There was only one time, Saturday morning... It was difficult. There was nowhere to park,... so you had to park several blocks away, and getting into the building was hard. It was an unpleasant experience to try to even get to."

Request for personal information not a barrier overall (n=18)

Most participants felt that the request for personal information was not a barrier. They see that as a necessary part of the system. Some felt somewhat sensitive about providing some information, especially when they first began using the services, but they've grown to trust the staff and do not want to stop using the services.

"No, I'm grateful. It's not something to get my hackles up over, I'm grateful to have this bridge."

"I don't mind giving them your name and your, if they want your address I'll give it to them. If it's part of a program. They want your age. But they don't ask a whole lot of information from you, just want to know how many people are in the household and ages of people."

"I recommend not asking. If you want to leave your number, I think that would be good enough. Social security would be unreasonable...I would probably give my name, but if you ask can you show my ID, that would feel uncomfortable."

"Yes, it does, when they are asking my family's income or something like I might be less apt to do that...However at [the program] if you're a student you're welcome. You just show your student ID badge and there's not questions asked."

"At first, I had that stigma. I had never done that (went to a food shelf) before...I thought, what do these people want to do with my personal information?...I was



distrustful. But what happened, they [staff] explained to me it's for program management...I feel confident with them at [the program] now."

Other barriers to access

The following barriers were mentioned less frequently:

- Cold weather (n=3)
- Limiting hours of food program, particularly for young and working families (n=3)
- Uncomfortable interpersonal dynamics around the food program building (n=2)
- Building or staff is inadequate/inaccessible to meet demand (e.g., stairs, small space, insufficient staff to distribute food) (n=2)

"Now with the cold... I can't go out anymore. Since November I've had to buy enough in order to not go out and risk falling down."

"[The program] need a bigger place, and just one level so nobody falls down the stairs."

"I can only get in there when I'm off of work."

Use of Multiple Coping Strategies to Meet Needs

Making food last longer and stocking up (n=17)

A common coping strategy for making their food last longer was to eat less or eat different food, such as less meat. A few participants spoke about being raised to understand the importance of not wasting food. Stocking up on food at home, such as storing canned goods or preserving their own fruits or vegetables, was a commonly mentioned strategy to deal with dire emergencies or in case of a job loss. A few participants said they use food pantries specifically to make sure they have enough food available during urgent situations.

"I don't buy as much meat as I usually do."

"We always made ends meet but sometimes I have had to cook more like dry foods that I've had. We always make it month-to-month. If we were not to have this extra help, it'd be a lot more difficult paying for the food. It's nice to have a wide variety of food (i.e., veggies, meat, fruit, dairy, bread)"



"One pound [of meat], you separate it in two. You make it last twice as long...That's what you do. So, you're stocked up. Like right now with the bad weather it's what we have to do. Make it last longer."

"I would go once a week or every other week to get basic stuff so I don't have to stress myself. I don't want to go to a 'oh my god' situation at all."

"I try to keep something like canned goods stored away. So, if something happens for a month, so you don't have absolutely nothing. Whether it's peanut butter and some crackers or a can of something."

"I try to go once a month at least. That's what I do. Or maybe twice. I try not to get to that point [when things get tricky]. I have a little reserve so that makes me feel more comfortable in this COVID pandemic."

Using multiple services concurrently (n=11)

A number of participants described relying on other services to obtain the food they need, for example, free meals at church, children's school, EBT, other meal programs, and county services.

"I have the EBT card and it fills in the gaps, for me, but I could never and I don't know how people do it, but I could never afford on the freshest. I look at some of these salads and I'm amazed at them and I get to eat them and I'm looking at the store and I think, I can't never afford that."

"Five, sometimes six, days a week, I go to these places (meal programs/food shelves)...on Saturdays at [the program] they have music and supper there too."

"The student dining center they have bread like expired 2 days. So, you can use that. That was another thing. They usually sell food for \$1, and if you are really busy you just go and spend \$1. And if you don't have the cash that's fine with them."

Shopping habits (n=11)

Participants talked about the shopping tactics they use to stretch out their food budget, such as shopping at discount grocery stores, looking for discounts and low prices, buying cheaper and less healthy food, closing down their credit cards and using cash only, not eating in restaurants, buying no more than the minimum, and generally being conscious of their budget.

"And since we came across the Dave Ramsey Program...it's just really about knowing where every single dollar of yours is being spent...My husband and I realized that in one



month for four of us, we spent like close to \$1200 on groceries and we're like what, what! And so, we decided to payoff and close all of our credit cards and live off of cash and so that has really proven to do us well because we know where all of our dollars are and how many you have and we're not just swiping the card blindly and hoping that the money is there."

"We utilize Aldi a great deal, Walmart, HyVee. We find ways to make it."

"One thing I stopped doing, don't go out with people to restaurants to waste that money. Don't buy, just the bare minimum."

Prioritizing bills over food (n=10)

Some participants described difficult situations when they had to choose between paying their bills and buying food. Overall, people prioritized paying their bills, and coped with less food or relied on outside sources such as the food pantries. One participant was concerned that, as an immigrant, falling behind on bills could get her into legal trouble.

"I always try to make sure I get my bills paid for before... that comes first and then like well, I guess, you just do without. And like I said, you go to these food pantries or you're going to like [the program] or [another program] you know where you get the meal. That cuts down on how much you're spending on food, because I don't really spend that much on food, and the rest is for the car payment and everything else you know."

"There were times in the past, when my husband and I had to choose between you know, paying a bill or buying groceries and things like that. What we found to help us is really setting a budget and sticking to it. And since we came across the Dave Ramsey Program...it's just really about knowing where every single dollar of yours is being spent."

"I'll forego something, whether it's not eating, to pay the bill. Those things will come first because usually I can get help. There's not usually a time when you have absolutely zero in the house. And when that happens, the food shelf is there Monday, Wednesday and Friday."

Gardening (n=8)

A number of participants spoke of keeping a garden to provide some of their food needs. Two people mentioned making compost for their garden, as well.

"We do garden vegetables and we pick berries in the summer and freeze all that."



"We also have a garden that we plant potatoes and that kind of stuff to help. My husband goes hunting and when he gets a deer we get meat."

"I grow tomatoes, peas and beans...complements what you already eat and helps me save money. It's what I'd buy anyway....I feel grateful."

Mutual aid among friends and family (n=6)

For some participants, the quantity of food they receive is a lot for their household, or there are items they won't eat, so they share with neighbors, friends, etc. They understand others need it more than they do, and some said that helping makes them feel good. One participant said she appreciates what her parents can share because their cooking provides a variety for her children that she cannot provide alone.

"I'm a vegetarian, so I give meat to people. I've got this one friend in Minneapolis and she takes care of two sisters...I do and I don't like to even tell people that because it seems like I'm taking more than I need, but I am making sure it gets to the right people."

"I share it [extra food from Aldi and the food program] at my workplace. I'm not just receiving for myself but share with others. With neighbors and workplace. I distribute the foods. I know what it's like to not have food...If I have the chance to help, I will help."

Other coping methods

These additional methods were also mentioned:

- Purchasing discounted food or food past the expiration date (n=2)
- Listing items online for sale (n=1)

Appreciation for program systems and staff

Appreciation for systems and food quality/quantity (n=27)

Many participants expressed strong appreciation for the quality and variety of food they received, as well as the overall systems that they experienced at the food pantry. Specifically, some mentioned receiving better and healthier food than they would be able to purchase on their own; they acknowledged that the food may come from higher-end grocery stores or food partners. Others spoke of the efficiency of the program staff and systems, with some expressing appreciation for contactless processes.



"I know that they just partnered with [a grocery store] downtown, so they do their best to get like fresh fruits and vegetables. They always have milk and eggs and cheese. And then recently they've been getting like the refrigerated or the frozen prepared meals. So, there will be like tamales or enchiladas or stuff like that they get off of the hot bar from [the grocery store], so they actually have really good selection."

"I love everything about the place. I can get mostly what I want from there. Even though I'm from Africa, we can have varieties of food...so, when I want to cook maybe I'll just buy a few other items. ...I can get most of the items from the food shelf. ...I can get my fruits and vegetables there. I can get my good meat there. I get onions. Sometimes they'll have palm oil...sometimes they'll have spicy peppers in the summertime in the farmer's market."

"I've got stuff that I can't get myself. Steaks, hamburger. It's amazing, I'm able to supplement. I haven't had to buy hamburger because of what I'm able to get there. So, then I can get more produce and other stuff. So, they've had a great selection."

"Actually, they have been amazing over there [at the program]. Their set up, they went to the speaker system, driving up there. It's so well organized over there. I love them. Everything is boxed, you drive up and there's no contact. It's so efficiently done and just so convenient. I've never seen a place so organized and so friendly. They remember you. If you need any help, any extra this, and there's never been an issue with them. An A+ all around."

"They go by how many people are in the house and that's how much food they'll give you. They do a good job of figuring out our needs."

"I tried [the program] once and I was blown away by the variety and the quantity, yeah and it was like oh my gosh this is not a brown bag with rice and a can of soup and can of vegetables. This is support for a household and I went a second time and I called some of my neighbors."

"A lot of things are donated to [the program] are from those higher priced markets. Those are things people can't afford. That's fun because normally I wouldn't choose to buy because they're higher priced. It's like a special treat. And I'd think people who don't have a lot would... they think people should be happy to get anything and I don't believe that. I think people can have a treat once in a while."

Appreciation for friendly and accommodating staff (n=13)



Participants had very positive things to say about the staff working at the food programs, such as their friendliness, their accommodation of their unique needs, and the way they treat people with respect. Some people appreciated that the staff wore masks.

“And also, the staff there is very, very helpful and they encouraging, you know, they talk to you nicely, they don't treat you like as if you were a beggar so that makes a difference. ...they treat people as if they are all human, not like beggars”.

“They make it so nice to come here. They go out of their way.”

“Those ladies who work there are really nice and if I have a break, I could put some groceries aside and go pick it up, they would put some groceries aside. Some students, one friend had class every time. They're not open 7 days a week. If somebody tells you they put food aside and they can pick it up later.”

“I have watched the people there [staff] engage all the different people from all the different backgrounds and they are wonderful. They are they're able to defuse situations that look like they're going to get explosive.

Appreciation that food is not wasted (n=3)

A few participants expressed appreciation for food programs because they help avoid food waste. They said their programs do a good job of distributing what they have and ensuring “extras” don't get thrown away.

“I don't go because I'm particularly needy but I like the idea of not throwing away stuff and having it used, even if it's outdated. I go once a week, it's not real close to me but if I'm in the area I'll stop and see what's available. I don't feel like I'm taking it away from anybody. [They] don't make it a requirement that you have to be low income, it's just available and I like that, I like the idea.”

Impact of COVID-19 on Food Programs

Appreciation for new and accommodating systems and protocols (n=16)

When asked about how COVID-19 has affected their decision or habits related to using food services, participants expressed appreciation for changes to protocols, particularly their convenience. Changes they mentioned included the introduction of a smartphone app to shop at the food pantry, the use of pagers, serving people in their cars, and more. Some expressed appreciation for how food programs remained accessible during the pandemic, even delivering



food to someone's home after they got sick with COVID-19. Several said they like that the program staff wear masks.

"Covid hasn't impacted access. They are very accommodating."

"Everything is boxed, you drive up and there's no contact. It's so efficiently done and just so convenient."

"You can choose what you need [from the smartphone app] and then they bring things to your car."

"They figured out how to make the queue work with pagers through COVID... they have been pretty decent as far as adapting and keeping themselves accessible [during COVID]...their website is informative."

"I feel really secure, everyone at [the program] is wearing masks...COVID has not negatively impacted access to the food shelf. And they use the parking lot in back and the food shelf itself is inside and then the produce giveaway, and I say produce but they've got a lot of stuff there, you know pastries that kind of stuff but yeah it's an amazing thing. With COVID-19...they would let like 10 people go through the parking lot at a time, and people are fairly quick about it."

Some negative impact of COVID-19 (n=9)

A few participants mentioned having to wait in longer lines at the food program, due to increased regulation of how many shoppers can enter at one time. Others spoke of missing the ability to choose their food while they shop (now they are given a pre-packaged box). Other negative impacts mentioned were increased sense of "competition" for food resulting from the economic downturn, a loss of connection to others who use the services, and general life changes such as having to wear a mask and being afraid to get together with others.

"The mechanics of food distribution has changed since COVID with drive through food pick-up protocol. Before COVID19 shoppers could walk into the pantry and shop. Now groceries are pre-sorted and boxed/bagged."

"Know that before it was in-person, now it's a little difficult with people having to wait in the car like an hour or two during the cold... Prior to COVID it was selecting what you want, but now it's premade boxes."

"...before people would often get together and talk and chit chat, it was kind of a social thing, but now with COVID...you were only some to come down at the time you signed up for it."



Role of Word of Mouth in Program Awareness

When asked how they learned about their food program, most participants (n=13) said that they heard through word of mouth (friends, family, church, hairdresser, others at their apartment complex). Two people said they learned about their program from a poster or flyer. A few people described a lack of awareness about the program they use, specifically, the program's name, whether it was free, or whether it was a volunteer opportunity.

"A friend told me, never saw any advertising. Just word of mouth."

"We learned about it through the Veterans Resource Center on campus."

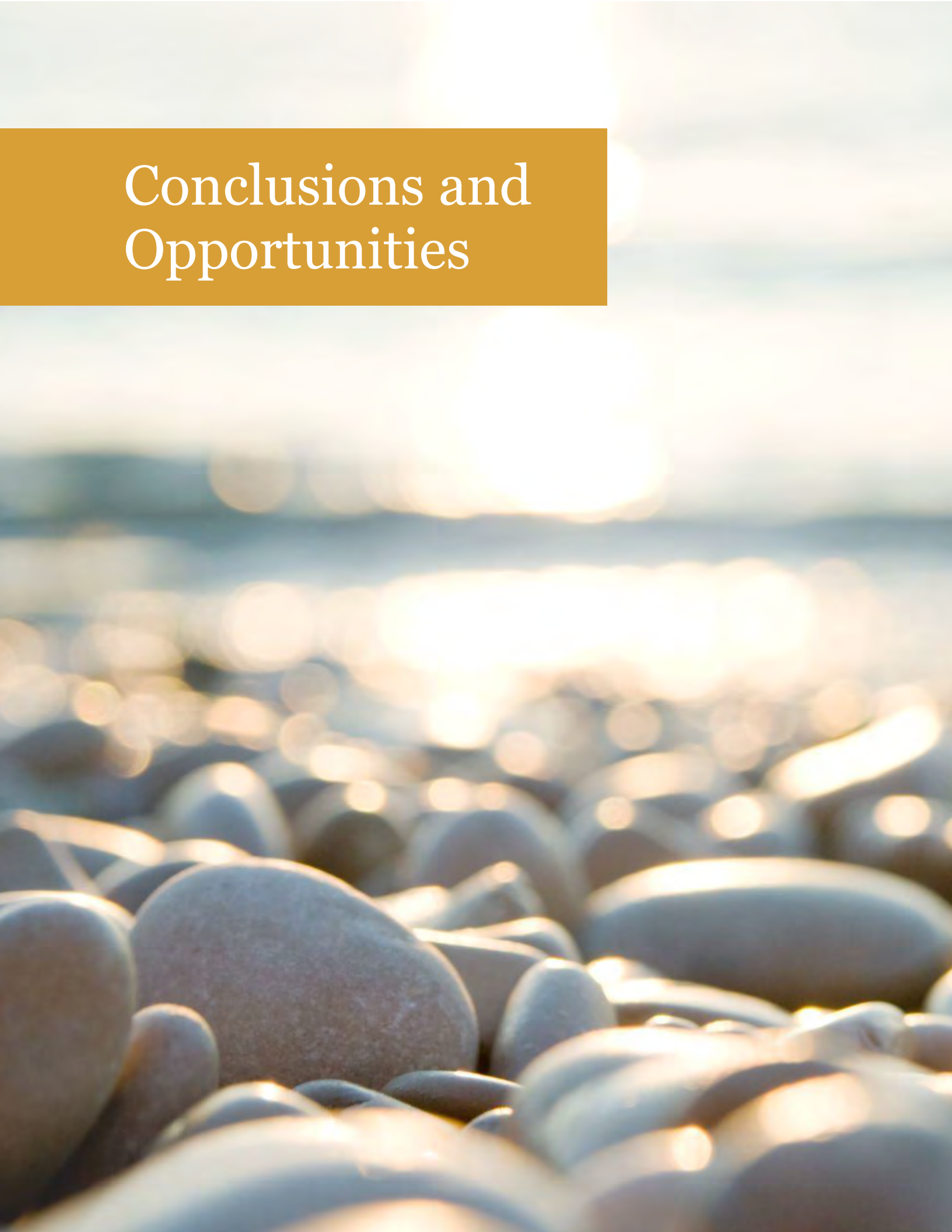
"I live in a building with 80 other people who rent. In conversation I was looking at it as a supplement. I wasn't going to get a whole lot as food stamps. I looked for it and found it. So word of mouth."

"Mom's friend told her about it, then she [mom] told us."

"Actually, the lady that has the hairdresser right next us. She is a friend of mine and she told us."



Conclusions and Opportunities



Conclusions

Challenges to food security are consistent and people meet their needs with multiple strategies

People's need for food programs has been long standing, and it is difficult for clients to isolate examples of when they find themselves needing food support programs. Factors such as the high cost of food, job loss, migration, and health conditions combine in a way that necessitates nearly everyone in this study to embed food programs into their lives on an ongoing basis. While the pandemic and the resulting economic downturn have created additional challenges, for example the rising cost of food, clients continue to experience a need for achieving food security. People meet their needs by using a variety of coping strategies, such as making food last longer, using multiple services, adjusting their shopping habits, gardening, and sharing meals with family and friends.

COVID-19 has resulted in innovation

The pandemic created new needs, and the resulting strategies for addressing those needs, such as providing contactless service, have resulted in innovative practices that are mostly appreciated by clients. Program sites have adopted new technologies to serve clients in efficient ways. Many, although not all, clients appreciate food being boxed up, getting what they need from their cars, and the overall streamlined processes.

Clients have deep appreciation for programs that provide positive experiences

Clients appreciate the food programs that provide them with access to a variety of food, especially fresh produce, meat, and household items. They also feel gratitude toward program staff who make accommodations to clients' unique needs or schedules, including making home deliveries to people on quarantine for COVID-19. Program staff were generally described as kind and respectful of participants' dignity. There are differences between programs, however, and some clients have had experiences with programs that were more challenging, which at times led them to stop going.

People experience multiple challenges when accessing food programs

People experience multiple barriers to accessing food programs, such as transportation and the negative social stigma that makes some clients feel angst or shame about using these services. A common challenge is related to the quality and quantity of food provided, with clients receiving rotten food, not enough or too much, and wishing for different items.



One means of reducing barriers appears to be the manner in which program staff treat clients and make accommodations for their unique needs. Another opportunity that appears to empower some clients is the ability to volunteer at the program site and serve others.

Opportunities

Suggestions offered by participants

Desire to be helping on “the other side” (n=10)

Several participants expressed a desire to be able to give back to others or “be on the other side” of service. A few spoke of shopping and volunteering at the same time or during the same time period, which helps them feel like a valuable part of the community or that they are “repaying” the help they’ve received. One person said volunteering someday would help her overcome the stigma about receiving free food.

This presents an opportunity for Second Harvest Heartland and its partners to explore, enhance, and systematize existing ways for clients to contribute and connect with others.

“I wish I could help more. I wish I could be on the other side, be there helping.”

“We used to donate a little bit. They are helping us so much, when I get a job, we have to give... we feel how much they are helping... There are people who have stigma against getting a donation. That’s kind of a stigma. I had that. I’m comfortable, a little. Since I volunteered, it’s not that difficult.”

“It’s what I can do [volunteering her time at the food pantry]...It’s a social life too...I need to feel like I’m...There’s a saying: ‘We want to feel needed but we need to feel wanted,’ and it feels like that somewhat for me.”

“I love volunteering...it’s the feeling of satisfaction that it gives me. It’s not a paycheck, it’s a mental paycheck.”

Perception of food waste (n=2)

While a small number of participants brought this up, it is worth noting their perception that food waste is a problem. These two participants spoke specifically about their frustration with a food pantry that disposes of outdated food and gives it to a local pig farm. They perceived that as wasteful and wished the food could still be given out to people who need it.



This presents an opportunity for Second Harvest Heartland and its partners to explore opportunities, ideally in collaboration with clients and partners, to preserve and distribute additional food.

“...And then they throw so much food out and then it ends up in the pig farm, which is just a total waste. I've seen the truck go away and the cauliflower and everything like. It's just such a shame, because there's a lot of people that could still use it, but the hours are awful.”

Other participant suggestions

Other suggestions, while mentioned less frequently, included the following.

- Improve accessibility by assessing onsite parking, extending hours of operation into evenings and weekends, and increasing onsite space
- Increase the number of food programs in some communities (e.g., a micropolitan area in Wisconsin)
- Continue to build on the technological innovations adopted during COVID-19 to streamline the shopping experience (i.e., smartphone app, food delivery services, drive-through protocols)
- Continue expanding programs that provide not only fresh produce, but other household products such as cleaning supplies, and other social services such as healthcare
- Use household size as a guide to determine the appropriate quantity of food to be distributed
- Continue to request only basic information, such as a phone number, but no more. For example, do not request an ID.

Involve clients in engagement research design

The limitations mentioned at the beginning of this report included challenges with two interview questions. Participants often struggled to provide isolated examples of when they found themselves using food support programs. Similarly, they struggled to provide examples of obstacles that stand in their way of meeting their needs. Their responses seemed to indicate that “this is just how it is,” and these questions were confusing to many.

Involving food program clients in the research design and implementation phases of future engagement projects could improve data collection tools, add authenticity to the process, and increase alignment between clients and program providers. For example, prior to data collection, a small number of clients can validate interview questions by testing the protocol and providing insight into areas where additional clarity or other changes are needed. Involving clients in this way will help ensure that Second Harvest Heartland is asking questions with appropriate language that will elicit rich stories and insight.



Appendix



Second Harvest Heartland –Interview Protocol for Food Shelf and Meal Program Clients

Date:

Name of Program:

First name of Interviewee:

Name of Interviewer:

Introduction

Thank you for taking time out of your busy day to speak with me. I am with DeYoung Consulting Services, and we were asked by [insert program name] and Second Harvest Heartland, to conduct interviews with people who have used food support services in Minnesota and Wisconsin over the past year. [insert program name] and Second Harvest Heartland want to know how COVID-19 has impacted who receives services and how those services have been impacted, like emergency grocery pop-ups and drive-thru food distributions. [insert program name] and Second Harvest Heartland also want to learn about any barriers to services in order to improve how they distribute food now and in the future.

You've been selected for this interview because of your experience using food shelves or meal programs. You'll be asked about how you use them, what can make it hard to access food services, and the choices you've had to make to keep your family fed.

Our interview today should take about 30 minutes. Your participation is voluntary; you can decline to answer any questions without giving a reason. Whether or not you choose to participate, it won't change the services you receive from [insert site name] now or in the future. The input you provide is important and will be combined with information we hear from others, in order to highlight common themes. We want to ensure your anonymity, so while I will record your name here, please understand that the ideas you share will not be tied with your name or listed in our report. If you are worried about anything you may say or how I will use it, let me know. If you have a unique perspective



that is not common among others we interview, but that would be valuable to share, we will work with you to find a way to do so that maintains the level of anonymity you desire.

Do you have any questions before we begin?

Interview Questions

Intro and Purpose

1. What city do you live in and what's the name of the food shelf or meal program that you typically use?
2. How did you first learn about this food shelf/meal program?

Food Shelf & Meal Program Usage

3. What are some examples of when you find yourself using food support programs like a food shelf or meal site (i.e., unexpected bill, job loss or loss of hours due to the pandemic, always difficult to cover food with my current pay, food support from government programs like WIC, SNAP is insufficient or inaccessible)?
4. How has COVID-19 impacted your experience accessing and using food shelves or meal programs, if at all? (Prompts: use of emergency grocery pop-up and drive-thru food distributions, how frequent you used them, etc.)

Barriers to Access



5. Think about what it takes for you to get the food from [their preferred food shelf/meal program]. What are some examples of what makes it difficult to get what you need and provide it to your family? (Prompt: transportation, social stigmas about your race, class, gender, etc.)?
 - a. What have you done, or what do you do, to overcome these challenges?
 - b. Most food shelves and other programs ask for some personal information when they provide services. How do you feel when asked to share personal information as part of the process to receive food? Does it impact your decision to seek support?

Coping Strategies in the Face of Limited Options

6. Can you tell me about a time, if any, when you've had to choose between feeding yourself and your family and paying for another family need, like your light bill or gas for your car?
 - a. What led up to that situation?
 - b. What choice did you make and what happened as a result?
7. In addition to shopping at the shelves and/or using meal program services, what else do you do to meet your household food needs? (Prompts: received help from family or friends, sold or pawned some personal property, grown food in a garden either at home or in a community garden, bought the cheapest food available even if you knew it wasn't the healthiest option, bought food indented or damaged packages to save money, eaten food after the expiration date, watered down food or drinks to make them last longer?)

Close

8. Is there anything else you would like to say that I haven't asked you about, especially about how to improve access to food shelves/meal programs?



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