



Rural Senior Food Box Program Process Evaluation

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INTRODUCTION

The New Mexico Executive Budget for the 2023 fiscal year made \$692,000 available to pilot a Rural Senior Food Box Program. This pilot program forms part of the broader Food, Farm and Hunger Initiative, which aims to create “...a food system that addresses hunger while improving economic resiliency in New Mexico communities” (*Rural Senior Food Boxes Pilot Program*, 2022). Under that broad imperative, the Rural Senior Food Box Program aims to address hunger among rural seniors by providing “...an additional 3,025 homebound seniors and adults with disabilities in rural communities with seven meals each month.” (ALTSD, 2022).

Lacking the resources to access an adequate supply of food, known as food insecurity, is a widespread condition among seniors that is associated with a range of negative health outcomes (Gundersen & Ziliak, 2015). Intervention programs typically seek to address this problem by providing food resources to seniors in need (Warren et al., 2020). Providing these services to seniors in rural settings can present unique challenges. This is because there is often a baseline lack of resources and infrastructure in these communities and because residences tend to be geographically spread out and difficult to access (Quandt & Rao, 1999). Food Box initiatives, which deliver boxes containing multiple meals of food to seniors in need, represent one approach to overcoming the logistical challenges of alleviating senior food insecurity in rural locations.

The State of New Mexico Aging and Long-Term Services Division launched its Rural Senior Food Box Program in late-September 2022. The initial pilot program was set to be implemented at nine senior centers located across seven counties and the Navajo Nation. By March of 2023, this had expanded to include 14 senior centers in nine New Mexico counties. These senior centers are: (1) Reserve Senior Center (Catron County), (2) Joy Senior Center (Chaves County), (3) Twin Lakes Senior Center (Navajo Nation/McKinley County), (4) White Horse Lake Senior Center (Navajo Nation/McKinley County), (5) Gallup Senior Center (McKinley County), (6) Ramah (McKinley County), (7) Thoreau Senior Center (McKinley County), (8) Tierra Amarilla Senior Center (Rio Arriba County), (9) Roy Senior Center (Harding County), (10) Clayton Senior Center (Union County), (11) Wagon Mound Senior Center (Mora County), (12) Mora Senior Center (Mora County), (13) Taos Senior Center (Taos County), and (14) Tucumcari Senior Center (Quay County).

The program is designed according to a “hub-and-spoke” model, whereby ALTSD issues purchase orders with food banks, food banks then package and transport food boxes to select senior centers, and finally, local senior center staff manage the logistics of delivering food boxes to appropriate clients. During the initial pilot phase, little was known about how local providers understood the aims of the program and how the program was implemented across sites (e.g., client outreach and referral, intake, service delivery, and data collection). To better understand how the program is being implemented at local sites, ALTSD contracted with the Center for Applied Research and Analysis (CARA) to conduct a process evaluation of the Food Box Program.

The primary objective of a process evaluation is to (1) assess whether a program has clear goals and an appropriate plan for achieving them, and (2) to assess the degree to which that plan is being followed in the actual implementation of the program. A secondary objective of a process evaluation is to assess whether and how program outcomes can be evaluated in the future. Based on initial discussions with ALTSD and a review of existing program documents, we identified three specific research questions we attempt to answer:

1. **Is the rural Food Box Program designed in a way that is likely to achieve its goal of reducing hunger (and food insecurity) among homebound seniors and adults with disability?** That is, is it probable the stated plan for finding and enrolling clients, and then delivering multiple food boxes to them (7 meals per month) will lead to a reduction in hunger (and food insecurity)? Additionally, is the plan optimal compared to alternative processes?
2. **How is the program implemented by local providers?** What are the different ways potential food box recipients are recruited and screened for the program, how are they enrolled, how does delivery of the food box occur, how is someone disenrolled, what data is collected throughout service delivery, and do these processes align with the overall intention described in program documents?
3. **What are the relevant outcomes for the program and how can they be evaluated?** What measures of food security and health outcomes exist and how can they be implemented to assess the effects of the program?

To address these questions, we elected to use a mixed method design, which involved collecting and analyzing data from a range of sources, including secondary data from ALTSD and the U.S. Census, as well as primary data from food box providers and consumers. CARA obtained approval to conduct this research from the Institutional Review Board of the University of New Mexico on 2/1/2023.

The remainder of the report is divided into eight sections: (1) a brief literature review where we summarize what is known about food box programs in the scientific literature, (2) a methods section which explains how we collected and analyzed our data, (3) a program and document review section where we analyze how the program is described in preliminary ALTSD documents, (4) an analysis of demographic statistics from the U.S. Census for selected sites, (5) a field observation section which presents the results of limited first-hand observations of food box deliveries and pick-ups, (6) an analysis of our focus group discussion with food box providers, (6) a review of preliminary findings from limited food box recipient surveys, (7) a summary of our main findings and conclusions, and finally, (8) a brief set of preliminary recommendations for the food box program based on evaluation data.

LITERATURE REVIEW

Food Insecurity Among Seniors

Food insecurity is defined as “the limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways” (Anderson, 1990). This concept includes the notion of hunger, which refers to suffering from a lack of sufficient food or nutrients, but it also encompasses a broader range of situations, such as worrying about having enough food in the future or having to engage in dangerous or degrading activities to access adequate food. Food insecurity measures typically capture this range of experiences using a scale and/or a set of ordinal categories, such as (1) Food Secure, (2) Mildly Food Insecure, (3) Moderately Food Insecure, and (4) Severely Food Insecure (Coates et al., 2007), or, (1) Food Secure, (2) Low Food Security, and (3) Very Low Food Security (*USDA ERS - Definitions of Food Security*, 2022).

In 2021, it was estimated that approximately 7.1% of the senior population (age 60 and older) in the United States had low food security and 2.7% had very low food security (*State of Senior Hunger / Feeding America*, 2021). Unfortunately, this situation seems to be trending in the wrong direction. The proportion of seniors who had low food security increased by 35% between 2001 and 2021, and the proportion of those who had very low food security increased by 90%. Over the same period, the absolute number of seniors in each category increased by 140% and 239% respectively, due to the growing senior population. The rate of food insecurity among seniors in New Mexico is slightly below the national average, with 5.9% having low food security and 1.8% having very low food security.

Food insecurity is associated with numerous negative health outcomes in all age groups, even after controlling for confounding factors like income (Gundersen & Ziliak, 2015). Among seniors, food insecurity is associated with worse nutrition, poorer health, depression, and increased difficulties in Activities of Daily Living (ADL) (Lee & Frongillo, 2001b; Pourmotabbed et al., 2020; Ziliak et al., 2022). Interestingly, even marginal food insecurity can have large effects on health outcomes. For example, the effect of being marginally food insecure on nutrient intake is equivalent to receiving \$15,000 less in income and the effect on having difficulties with Activities of Daily Living (taking care of one’s basic needs, like personal hygiene, dressing, eating, etc.) is equivalent to being 14 years older (Gundersen & Ziliak, 2015, p. 1835).

A range of factors are associated with food insecurity, such as race/ethnicity, income, educational attainment, functional impairment, receiving food stamps, social isolation, and social capital (i.e., the quantity and quality of one’s social relationships) (Björnwall et al., 2021; Brewer et al., 2010; Lee & Frongillo, 2001a; Martin et al., 2004). While there is conflicting evidence over whether rurality is in itself a predictor of food insecurity (Dean & Sharkey, 2011; Goldberg & Mawn, 2015), it is generally agreed that rural seniors experience food insecurity differently, due to a range of factors, such as higher background rates of poverty and poorer average health in rural areas, less infrastructure due to a smaller tax base, and inherent

logistical challenges to acquiring or delivering food given the large distances between residences and food distribution hubs (Quandt & Rao, 1999).

Social programs aimed at improving food security among seniors typically involve providing food or resources to purchase food. The most common of these programs include: (1) congregate meals, (2) Home-Delivered Meals (HDM), (3) Supplemental Nutrition Assistance Program (SNAP) (i.e., Food Stamps), and (4) food box programs. Food box programs are unique in that they typically involve the delivery of food items which require additional preparation or cooking. They have also received the least amount of study (Warren et al., 2020).

Food Box Programs

The largest-scale food box program in the United States is the USDA Commodity Supplemental Food Program (CSFP) (USDA, 2023). The CSFP provides low-income seniors with a monthly food box to supplement their diet. For Fiscal Year 2023, funds have been allocated to provide CSFP boxes to 760,547 seniors each month. The boxes contain cereals, cheese, fruits, juices, milk, peanut butter/dry beans, potatoes/grains, proteins, and vegetables. The administration of the CSFP within each state is managed by state and local agencies. Each state agency determines the income and eligibility requirements to be used throughout the state (*Food and Nutrition Service*, 2019). The specific income qualifications for the State of New Mexico, as established by its Human Service Department, requires that incomes be at or below 130% of the Federal poverty guidelines (*CSFP for New Mexico*, 2021).

Apart from CSFP, there is a variety of smaller scale food box programs that have been implemented at the federal, state, county, and city government levels around the country. These programs have varying target populations and goals, such as providing hunger relief to seniors during the COVID-19 pandemic (*Baltimore County Government*, 2020; Blackmon et al., 2021; English et al., 2021), providing emergency food supplies to seniors in the case of inclement weather (*Dutchess County Government, NY*, 2022), providing seniors with fresh produce from local farmers' markets (*Food and Nutrition Service*, 2023; RI.gov, 2022), and providing ethnically tailored food boxes to seniors with type-2 diabetes (Kempainen et al., 2023).

On their face, these programs seem to make sense. If people suffer from a lack of access to nutritious foods, periodically providing them with a box of nutritious food should help. However, many intervening factors can influence the degree to which these kinds of interventions help. It is unknown whether in some cases, alternative designs work better. Thus, it is important to systematically evaluate the outcomes of these programs in terms of their effect on food security, nutrition, and other health outcomes.

Food Box Evaluations

Few studies have been performed to evaluate the effectiveness of food box programs (Warren et al., 2020). A literature search using Web of Science turned up seven such evaluations [*note: we excluded from our search studies of programs that offer food boxes for purchase, such as*

Community Supported Agriculture (CSA)]. These seven studies varied considerably in terms of how program effectiveness was defined and what methods were used.

Three studies primarily used qualitative methods to better understand senior needs and how well these needs were served by different food box programs. They also attempted to understand logistical challenges and successes encountered by providers (Broad et al., 2021; English et al., 2021; Frongillo & Warren, 2018). Regarding senior needs, these studies found that food insecurity among seniors is better predicted by attributes pertaining to ability (financial, ambulatory, baseline health) rather than age, and that the specific food contents of many food boxes (e.g., CSFP food boxes) are not well-tailored to individuals with diabetes and other chronic health conditions. They also found that seniors valued having boxes delivered to them due to physical limitations, since boxes could be quite heavy. Lastly, regarding food box contents, they found that seniors desired more fresh fruits, vegetables, and meats and more ready-to-eat foods such as canned soups and cereal. A fourth study analyzed the nutritional content of food items in food boxes distributed by Montana food banks using the Healthy Eating Index (HEI). One significant finding was that the fresh food items seniors tend to prefer also have higher nutritional value, on average, than the processed, shelf-stable food items (Larison et al., 2021).

The remaining three studies used quantitative methods and scientifically validated instruments to evaluate client outcomes in terms of food security, nutrition, and health. One study evaluated the outcome of food security among seniors participating in the USDA CSFP program, by comparing recipients' pre- and post-food security scores. They accomplished this by first assessing food security using the USDA Food Security Module 2-item screener (Hager et al., 2010) immediately following program completion, and then assessing food security retrospectively by having participants recall food security prior to receiving food boxes. Interestingly, this study found that food security improved significantly among clients who were delivered food boxes to their home, but not among those who picked up their food boxes from food pantries.

The final two studies we examined utilized a randomized controlled design, which is the gold-standard of scientific rigor. The first of these two studies evaluated the Packed Promise project by the Chickasaw Nation Nutrition Services, which sought to reduce childhood food insecurity and improve nutrition by providing families with a monthly food box filled with nutrient-rich foods, as well as a \$15 check for fruits and vegetables. Researchers compared child nutrition outcomes for families who received these food boxes with those who did not. Outcomes were measured by a 19-question dietary assessment developed by the National Cancer Institute, as well as several measures of food shopping behaviors (Cabali et al., 2021). After 25 months of service delivery, researchers documented only modest improvements in child nutrition and family out-of-pocket food spending and found no significant reductions in sugar consumption or distance travelled to the store each month. Researchers posited that one reason for the modest improvements in child nutrition could have been that parents, who had previously been

sacrificing their own nutrition for that of their children's, were receiving most of the nutritional benefits from food boxes.

The second randomized controlled trial we examined was conducted by Hennepin Healthcare in Minnesota. They evaluated the effectiveness of a program designed to provide seniors living with type-2 diabetes, with biweekly food boxes containing shelf-stable foods, recipes, and educational materials about diabetes (Kempainen et al., 2023). Food box content was tailored to recipients' ethnic backgrounds, which were categorized as "standard American", Somali, or Hispanic. Researchers evaluated the program in terms of three primary outcomes: (1) food insecurity, measured using a 2-item questionnaire, (2) general health status, measured using the (CDC, *HRQOL*, 2018), and (3) depression, measured using a 2-item assessment (Kroenke et al., 2003). After 24-weeks of food box delivery service, researchers found that individuals who received food boxes had lower food insecurity and improved health.

In sum, studies we reviewed suggest the benefits of food boxes in terms of recipients' food security, nutrition, and health are somewhat mixed. While most studies find benefits for at least some recipients, the benefits are often modest and can altogether disappear based on contextual factors. For example, whether food boxes are delivered or picked up can significantly affect outcomes of interest. More research is needed to understand what design features maximize the effectiveness of food box programs and for what target populations. Qualitative research suggests that food box contents may not optimally satisfy seniors' preferences and needs in many instances, and greater attention should be paid to whether seniors are able to lift and carry boxes, to prepare food items within boxes, and to consume food items based on their unique dietary needs (e.g., dietary restrictions from diabetes).

STUDY DESIGN & METHODOLOGY

We collected program data from five distinct sources: (1) preliminary ALTSD program documents, (2) U.S. Census data for food box sites, (3) observations of food box deliveries, (4) a food box provider focus group, and (5) the food box recipient survey. The methods for collecting and analyzing data from these sources are explained below.

Program & Document Review

We solicited several program documents from ALTSD staff to better understand how the program is intended to operate, who the target population is, and how funding has been distributed to sites. We ultimately received 12 documents and program files from ALTSD staff. It is important to emphasize here that the ALTSD program still operates within a pilot stage and that many documents we requested are still in development. In some cases, documents we requested simply did not exist yet. What we have therefore included in our report is an initial review of the first-drafts of process and logic models developed by ALTSD for the Rural Senior Food Box program. Staff have explained they are actively developing new drafts of these

documents. We reviewed program documents with the intention of providing brief process descriptions about how it is *intended* to operate. Ultimately, these documents provided early-stage guidance as we developed our provider focus group interview guide and food box recipient surveys.

U.S. Census Data

The U.S. Census Bureau collects nationally representative data about the U.S. population and economy through the decennial census and other more frequently deployed surveys. Our report analyzes data specifically from the 2010 and 2020 decennial censuses and the American Community Survey (ACS). The U.S. Census Bureau conducts the decennial census every ten years by counting every resident in the country, where they live. The U.S. Census Bureau implements the ACS by sending mailout, telephone, and in-person surveys (along with non-response follow-up procedures) every month. At the end of each fiscal year, monthly data is aggregated into one-, three-, and five-year ACS survey estimates. ACS sampling frames are constructed from the Master Address File (MAF), which is maintained and continuously updated by the United States Postal Service (USPS) and U.S. Census Bureau. The ACS ultimately captures “all 3,143 counties and county equivalents in the U.S., including the District of Columbia, as well as...the 78 municipalities in Puerto Rico” (U.S. Census Bureau 2014:32).

Census data was retrieved through the new U.S. Census web portal. The data in these tables was then processed as necessary to produce tables that highlight data points and comparisons relevant to the objectives of this report. There is one additional data table used from a different source: New Mexico’s Indicator-Based Information System, or NM-IBIS. Table captions included in this report specify which source (U.S. Census ACS, U.S. Census Decennial Census, or NM-IBIS) data were drawn from.

Food Box Observations

Four semi-structured field observations of food box delivery/pick-up activities were planned for four sites in April 2023. These sites have been anonymized to protect participant confidentiality. Three observations were ultimately completed, with the fourth incomplete due to project time constraints. Observations at the three remaining sites were coordinated with senior center staff to observe all aspects of delivery and/or pick-up. This included preparation of food boxes for delivery or pick-up, distribution to consumers, and any documentation associated with post-delivery records.

Observations were structured according to a guide we developed prior to observations which is found in Appendix A. The guide was designed to organize observational data according to three general content areas: (1) Preparation, (2) Delivery, and (3) Provider/Client Interactions. Observations were scheduled for a four-hour window. Real-world observations averaged 4 hours and 1 minutes. Overall, we observed delivery and/or pick-up of 98 food boxes.

Provider Focus Group

A focus group was held virtually over Zoom with Food Box Program providers in April, 2023. The aims were to better understand how food box providers understood the goals of the program, the processes they followed in implementing the program, their perceptions regarding the successes and failures of the program, and their recommendations for improving the program. To facilitate the focus group discussion, we developed an interview guide (Appendix B) covering each of these topical areas.

We attempted to recruit providers from each of the seven counties initially established as food box locations by ALTSD in the Fall of 2022. We sent recruitment emails to contacts at the following locations: (1) Joy Senior Center, (2) Reserve Senior Center, (3) Gallup Senior Center, (4) Clayton Senior Center, (5) Wagon Mound Senior Center, (6) Tierra Amarilla Senior Center, and (7) Roy Senior Center.

At minimum, one follow-up email was sent to each contact. We incentivized participation in the focus group by offering to enter each attendee into a raffle to win one of two \$50 Amazon gift cards. Ultimately, providers from four locations attended the focus group: (1) Joy Senior Center, (2) Reserve Senior Center, (3) Gallup Senior Center, and (4) Tierra Amarilla Senior Center.

Food Box Recipient Survey

CARA developed a survey to be administered to food box consumers by providers (Appendix C). We created both an electronic and a paper and pencil version of this survey to accommodate different provider preferences. The survey contained 33 questions, including 9 questions assessing food insecurity adapted from the USAID Household Food Insecurity Access Scale (HFIAS) (Coates et al., 2007), 4 questions assessing tangible social support adapted from the MOS Tangible Support Subscale (Sherbourne & Stewart, 1991), and 12 questions assessing social capital (Dean & Sharkey, 2011; Ziersch et al., 2009). Eight questions on the survey assessed demographic attributes like educational attainment, income, workforce participation, household composition, primary means of transport to the store, and distance to the store in minutes. Additional key demographic variables (e.g., race, gender) were omitted since they are collected by providers during normal assessment and already exist in the WellSky database.

We originally planned to ask providers to administer the survey in two successive food box deliveries during the months of March and April, as this would allow us to assess positive changes in food security over time, particularly for consumers who were receiving their first food boxes. Providers were ultimately sent a copy of the survey by ALTSD to gather feedback on the appropriateness of the questions given their client base as well as their willingness to administer the survey. Due to miscommunication, providers instead administered the survey to recipients shortly after receiving the surveys. It is therefore unclear what specific procedures were followed during the administration of surveys (e.g., what was said to recipients about the survey, whether they were assisted in filling it out, etc.). Ultimately, we received 79 completed or partially completed surveys from 4 sites: Mora, Ramah, Thoreau, and Wagon Mound.

LIMITATIONS

Caution is advised in generalizing results presented herein to the total population of food box providers or recipients. The providers who participated in the food box observations and focus group were purposively selected to gather perspectives from geographically and culturally diverse locations from around the state. However, due to the small sample sizes and the fact subjects were not selected at random, their responses are unlikely to perfectly represent the average views and experiences of the provider population. The same is true of the survey with regards to the consumer population. While the sample size for the survey is considerably larger (n=79), respondents were not selected at random and only capture 4 of the 14 food box sites. While data from food box observations, focus group and survey should not be assumed to depict what is average or typical across sites, it is nonetheless informative in revealing a wide range of views, experiences and behaviors of providers and consumers from around the state.

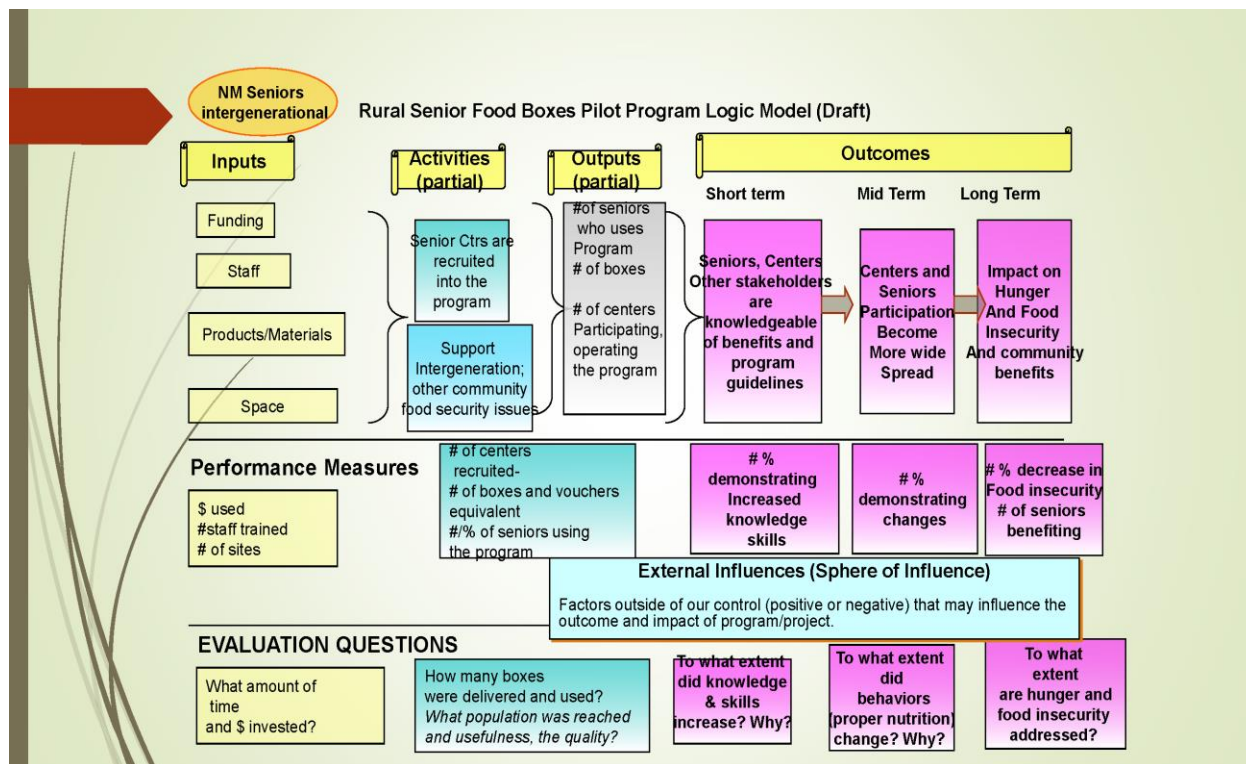
PROGRAM & DOCUMENT REVIEW

We solicited several program documents for the Food Box Program in order to understand how the program was intended to operate, who the target population is, and how funding has been distributed to sites. We ultimately received 12 documents and program files from ALTSD staff which broadly describe the program. Information from documents was organized into three core areas of program operation: (1) program logic, (2) program processes, and (3) program budget.

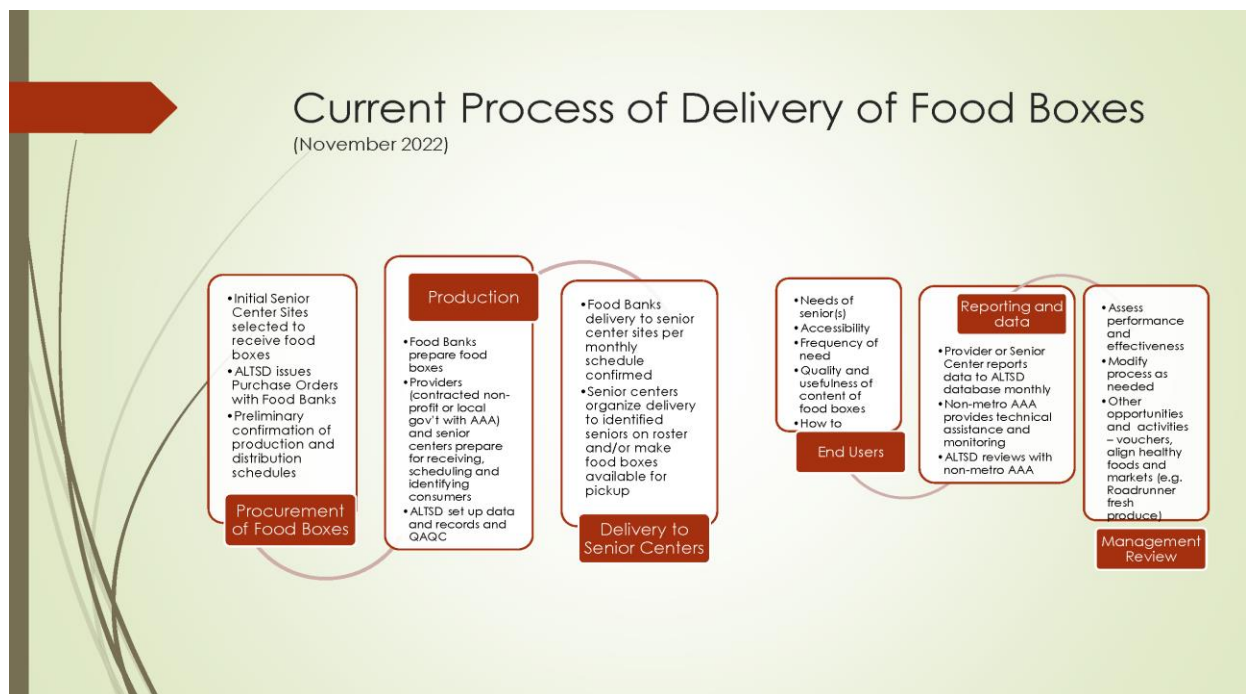
Logic Model

ALTSD staff drafted a preliminary logic model (Figure 1) which details program inputs, activities, outputs, and outcomes. Many of the program inputs – i.e., resources that sustain the program – are readily accessible to ALTSD, which already has staff, funding, and space (senior centers) to establish the program. Products and materials (food boxes) are the only inputs outsourced (food banks), which are prepared and delivered with food items to senior centers. The logic model also identifies two critical program activities: Recruitment of senior centers into the program and support of “intergeneration” and other food security issues. The model identifies three key program outputs – in other words, the immediate results of program activities – (1) number of food box recipients, (2) number of food boxes delivered, and (3) number of participating senior centers. The short-term outcome of program activities is identified as improved knowledge among seniors, senior centers, and stakeholders about the benefits of the Food Box Program and its guidelines. The mid-term outcome was identified as increased Food Box Program adoption and participation. Finally, the long-term outcome identified by the logic model is “improved hunger and food insecurity”, along with other broad community benefits.

Figure 1

Rural Senior Food Box Program Logic Model

Ultimately, the ATLSD rural senior Food Box Program logic model establishes a broad framework that addresses the aims of the Food Box Program. Some aspects of program design remain unclear though. Specifically, the logic model primarily addresses the role of *senior centers* in adopting food boxes, rather than the intended affect the program should have on seniors and other stakeholders. To that point, older adults are clearly the target of the food box initiative, based on a September 2022 memorandum which described the food box program. The logic model also identifies a senior-specific long-term goal – improved food insecurity – but does not link activities targeting seniors to intended effects. In this way, the logic map effectively addresses structural implementation of the Food Box Program by describing how food boxes are delivered to senior centers. It therefore remains unclear how three identified outcome metrics – (1) food insecurity, (2) changes broadly, and (3) knowledge skills among staff – are expected to change. A clearer logic model might instead trace how monthly food delivery (activity) leads to reduction in a senior’s hunger by making food available (output) and how food boxes, if consistently provided to that individual for several months, would lead to reduced food insecurity (outcome). In sum, the logic model lacks critical details about who is eligible for food boxes, whether outreach occurs to encourage older adults to participate, and how external factors may interfere with program operation. Key program activities and specific

Figure 2*ALTSD Preliminary Process Map for Rural Senior Food Box Program*

intended outcomes therefore remain unclear and should be clarified in a subsequently revised model. ALTSD has indicated they are presently working on an updated model.

Process Model

The Rural Senior Food Box Program has also established a preliminary process map as of November 2022. ALTSD staff are refining this document following initial observations and consultation with food box sites. The preliminary process map we were provided (Figure 2) documents three general processes: (1) Procurement, (2) Production, and (3) Delivery. According to the process map, the program begins with senior center site selection, submission of food box orders to food banks by ALTSD, and creation of production and distribution schedules. After order creation, delivery dates are confirmed, and food banks then prepare orders. Simultaneously, senior center staff prepare to receive food boxes, identify which consumers are to receive food boxes once delivered, and set-up data and records for quality control. Finally, food boxes are delivered to senior centers each month, and senior centers deliver food boxes according to a roster and/or make food boxes available for pick-up. The process map also offers some details regarding a review process that integrates end user information, reports, and program data, and culminates in a management review of food box recipients and program logistics.

In review of the preliminary process map some program processes were still unclear. We identify nine features which could be further elucidated in subsequent process maps, namely:

- Detail how seniors are identified to receive food boxes
- Identify who the target population is and describe how they are identified
- Detail how senior center sites are selected
- Describe guidelines for food box content and indicate who creates those guidelines
- Detail which specific data are collected and entered for records and quality control
- Detail creation of rosters and how food boxes are delegated as delivery or pick-up
- Describe under what conditions food boxes are discontinued and/or how recipients may be excluded
- Detail which specific outputs and outcomes are measured and monitored
- Clearly link specific activities to expected outputs and outcomes

The above items are essential to understand how the program is expected to operate, who is expected to be helped, and how. These details are also critical for any future outcome evaluation. Without detailed process information, it is challenging to link specific activities to any expected effects – which now are only reflected broadly in the logic model. As such, the logic model primarily suggests a key short-term outcome regarding knowledge about the program among seniors, staff, and stakeholders. Ultimately, the only long-term outcomes – for food security and hunger – are unclearly connected to program activities. Who the program intends to benefit and by how much, are also critical aspects of program design which are left unclear.

Table 1

Summary of Food Box site operating details, as of March 2023

Senior Center	County	Monthly Boxes	Bank	YTD Expenditure	Monthly Delivery Date
Reserve Senior Center	Catron	100	Roadrunner	\$72,021.25	4th Wednesday
Joy Senior Center	Chaves	100	Food Bank		4th Wednesday
Twin Lakes Senior Center/ Navajo Nation	Navajo Nation/ McKinley	25	Community Pantry	\$70,306.25	2nd Monday
White Horse Lake Senior Center	Navajo Nation/ McKinley	25			1st Friday
Gallup Senior Center	McKinley	25			2nd Tuesday
Ramah	McKinley	30			3rd Monday
Thoreau	McKinley	30			4th Thursday
Tierra Amarilla Senior Center	Rio Arriba	50			1st or 3rd Friday
Roy Senior Center	Harding	20			4th Tuesday
Clayton Senior Center	Union	50	Food Depot	\$191,623.00	4th Tuesday
Wagon Mound Senior Center	Mora	75			4th Tuesday
Mora Senior Center	Mora	100			2nd Tuesday
Taos Senior Center	Taos	140	Food Bank of Eastern NMK	\$19,218.75	UNK
Tucumcari Senior Center	Quay	75			UNK

Table 2

Summary of monthly units distributed through March 2023, by New Mexico County

Date	Food Box Units by County								
	Catron	Chaves	McKinley	Rio Arriba	Harding	Union	Mora	Taos	Quay
Sep-22	75	100			55	65	115		
Oct-22	75	100	135		55	65	115		
Nov-22	100		195	100	40	75	175		
Dec-22	100	200	175	100	100	50	214		
Jan-23	100	100	155	100	100	50	200		
Feb-23	100	100	155	100		50	200	140	75
Mar-23	100	100	155	50		50	150	140	75
Total	650	700	970	450	350	405	116.9	280	150
Average	92.9	116.7	161.7	90.0	70.0	57.9	167.0	140.0	75.0

As ALTSD further develops official documentation of the Rural Senior Food Box program, those aspects along with the other nine identified process map features should be enumerated to guide program staff and evaluation.

Budget and Program Records

The last set of program documents we reviewed pertain to the total number of distributed food boxes by site, and their associated Year-to-Date (YTD) budgets as of March 2023. While our evaluation was constrained to seven initial sites, we have included in Table below all Food Box Program sites as of March 2023. Table 1 has been adapted from an original document prepared by Duncan Sill at ALTSD, which captured much of the information below. Additional information was incorporated based on e-mails and verified in conversations with site staff. Based on that data, 845 food boxes are ideally being distributed each month, with a YTD budget of \$353,169.25 across all food box sites.

Additional data were available on food box distribution by county, per month. Table 2 summarizes that information. Data provided to us indicate the food box program delivered a total of 5,124 boxes by March 2023. Since the first deliveries in September 2022, ALTSD has delivered between 410 and 939 total food boxes per month, with an average of 732 boxes per month. ALTSD delivered the most food boxes in December 2022 – delivering 939 boxes. Food boxes have fluctuated by site and by month, in some cases fluctuating by 50 total boxes from one month to the next for a given site. Data on food box distribution indicate a broader need to review consumer data to better understand the consistency of food box provisioning over time. It is unclear from data whether inconsistent distribution is a function of availability, demand, screening, or some combination of these factors. In any case, the consistency of food box provisioning could affect outcomes related to food security and, thus, should be monitored and tracked as an output.

U.S. CENSUS DATA

We collected U.S. Census data at the county level for the nine counties in which the food box is currently being piloted (as of March 2023). The purpose of this was (1) to understand the general demographic characteristics of each site, and (2) to evaluate the degree of alignment between sites' demographic characteristics and program goals.

General Demographics

The nine food box counties had a broad range of total population sizes (Table 3). The most populous county in our sample was McKinley, with 72,902 people. This is also the county where five out of fourteen food box sites are located. The least populous county was Harding with a mere 657 people. Interestingly, the population in many of these counties has decreased in the past decade. Whereas the total population of New Mexico increased by 2.83% between 2010 and 2020, the population decreased in six out of nine food box counties over the same period. The largest percent decrease occurred in Mora County, which decreased by 14.18%. The loss of people from these counties likely has many social and economic ramifications that could impact food security and health among seniors. For example, if young working age adults are leaving to find opportunity elsewhere, then older, and retired individuals may have difficulty finding help. However, this depopulation trend is not uniform across rural counties, as evidenced by several having gained population. Taos had the largest percent population gain over this period, with a 4.71% increase. Food box counties also varied in terms of what proportion of the total population was over the age of 60 (Table 4). The highest percentage over 60 population resided in Catron County at 49.79%, followed by Mora County at 45.56%. All focus group sites had higher percentage over 60 populations than the state average (24.08%) except for two, McKinley (18.24%) and Chaves (21.73%). The gender ratios for the over 60 population also

Table 3

Population by Location, 2010 Compared to 2020

Location	2010 Population	2020 Population	% Population Increase from 2010-2020
New Mexico	2,059,179	2,117,522	2.83%
Catron	3,725	3,579	-3.92%
Chaves	65,645	65,157	-0.74%
Harding	695	657	-5.47%
McKinley	71,492	72,902	1.97%
Mora	4,881	4,189	-14.18%
Quay	9,041	8,746	-3.26%
Rio Arriba	40,246	40,363	0.29%
Taos	32,937	34,489	4.71%
Union	4,549	4,079	-10.33%

Note. Adapted from the 2010 and 2020 Decennial Censuses.

Table 4*Population 60 and Older by Gender and Location, 2021*

Location	% of Population that is 60 or Older	% Male, 60 and Older	% Female, 60 and Older
New Mexico	24.08%	46.60%	53.40%
Catron	49.79%	57.38%	42.62%
Chaves	21.73%	48.06%	51.94%
Harding	32.65%	58.62%	41.38%
McKinley	18.24%	42.50%	57.50%
Mora	45.56%	44.29%	55.71%
Quay	31.44%	47.60%	52.40%
Rio Arriba	25.98%	46.16%	53.84%
Taos	36.14%	48.67%	51.33%
Union	26.73%	44.74%	55.26%

Note. Adapted from U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates.

varied somewhat across counties. Only two counties had more over 60-year-old males than females: Harding (58.62% male) and Catron (57.38% male). Of the remaining 7 counties, McKinley had the highest ratio of females at 57.5%, followed by Mora at 55.72%.

There is also considerable racial and ethnic diversity across food box sites (Table 5). Catron County had the highest percentage White population, at 83.71%. That proportion is considerably higher than the state average of 53.01% White. McKinley County had the lowest percentage White population at 14.93%. The highest percentage Black population was Union County, at 2.03%, which is slightly above the state average of 1.65%. The lowest percent Black populations were in Harding and Mora at 0%. The highest percentage American Indian population was McKinley County at 69.72%, followed by Rio Arriba at 11%; both of which are higher than the state average of 6.71% American Indian. The highest percentage Hispanic population was in Mora at 72.83%, followed by Rio Arriba at 66.11%, which is considerably higher than the state average of 36.21% Hispanic. The lowest percentage Hispanic populations were in Catron (11.64%) and McKinley (12.49%).

Alignment of Site Demographics with Program Goals

A defining component of the Rural Senior Food Box Program is that it targets *rural* seniors. The U.S. Census defines all census blocks as either urban or rural, based on population density and the degree of land development (Ratcliffe et al., 2016). Because we do not know precisely which census blocks food box recipients reside within, we abstracted out to the county level, which is comprised of multiple census blocks. The U.S. Census measures rurality for counties along an urban-rural continuum, based on the proportion of residents who reside in urban vs.

Table 5*Population 55 and Older by Race/Ethnicity and Location, 2021*

Location	% White, Non-Hispanic, Total	% Black Alone, Total	% American Indian Alone, Total	% Hispanic Alone, Total
New Mexico	53.01%	1.65%	6.71%	36.21%
Catron	83.71%	0.59%	2.88%	11.64%
Chaves	56.35%	1.64%	0.78%	40.61%
Harding	51.64%	0.00%	0.00%	44.13%
McKinley	14.93%	0.62%	69.72%	12.49%
Mora	27.17%	0.00%	0.13%	72.83%
Quay	61.29%	1.53%	1.56%	34.26%
Rio Arriba	21.50%	0.11%	11.00%	66.11%
Taos	48.38%	0.16%	4.77%	44.84%
Union	63.38%	2.03%	3.56%	30.47%

Note. Adapted from U.S. Census Bureau, 2017-2021 American Community Survey 5-Year

Estimates. Does not include respondents who identified with more than one race/ethnicity and/or selected “other” for their race/ethnicity.

rural census blocks in a given county. By this measure, the most rural food box counties were Catron, Harding, Mora, and Union at 100% rural. This means that for those counties no urban census blocks exist (Table 6). The least rural food box county was Chaves at 25.06% rural, which is slightly below the state average of 25.45% rural.

Another core component of the Rural Senior Food Box program is to target homebound seniors or adults with disability. The U.S. Census collects data on six kinds of self-reported disability: hearing, vision, cognitive, ambulatory, self-care, and independent living. Each of these can affect whether seniors can access adequate food resources, but most relevant for the Food Box Program is the category for an ambulatory disability. This is defined as “having serious difficulty walking or climbing stairs”. Similarly, the independent living category is equally relevant, which is defined as “...having difficulty doing errands alone such as visiting a doctor’s office or shopping... because of a physical, mental, or emotional problem...” (Brault, 2009). Catron County has the highest rates of both types of disability for its 65 and older population, with 34.61% of the population suffering from an ambulatory difficulty and 26.02% of the population suffering from independent living difficulty (Table 7). The next highest was McKinley County, with 29.87% suffering from an ambulatory difficulty and 17.42% suffering from

Table 6*Population Living in Rural Census Blocks by County and for the State of New Mexico, 2010-2020*

Location	2020 Total Population	2020 % Rural Pop.
New Mexico	2,117,522	25.45%
Catron	3,579	100.00%
Chaves	65,157	25.06%
Harding	657	100.00%
McKinley	72,902	66.46%
Mora	4,189	100.00%
Quay	8,746	40.35%
Rio Arriba	40,363	56.41%
Taos	34,489	54.58%
Union	4,549	100.00%

Note. Adapted from the 2010 and Decennial Censuses.

independent living difficulty. The lowest rates of these disabilities are found in Rio Arriba County, with 14.51% of its 65 and older population suffering from an ambulatory difficulty and 8.66% suffering from independent living difficulty. These rates are considerably lower than the state average of 23.06% and 14.70%, respectively.

Looking at the leading causes of death by category provides another glimpse at the background health characteristics of each food box site. Table 8 shows, by county, the number of deaths in

Table 7*Population 65 and Older with Disabilities by Location, 2021*

Location	Percent with Disability					Independent Living
	Hearing	Vision	Cognitive	Ambulatory	Self-Care	
New Mexico	17.59%	8.06%	10.00%	23.06%	8.10%	14.70%
Catron	36.59%	24.57%	20.41%	34.61%	20.48%	26.02%
Chaves	14.46%	7.43%	9.19%	26.20%	11.17%	14.90%
Harding	23.61%	11.11%	11.11%	29.86%	6.94%	17.36%
McKinley	26.68%	13.82%	13.81%	29.87%	10.20%	17.42%
Mora	20.63%	11.50%	12.29%	20.42%	9.27%	15.67%
Quay	19.09%	11.48%	5.18%	24.59%	3.83%	10.97%
Rio Arriba	12.43%	6.03%	6.47%	14.51%	4.45%	8.66%
Taos	16.39%	8.36%	10.24%	19.21%	9.74%	11.85%
Union County	19.51%	12.54%	10.34%	28.57%	7.55%	15.21%

Note. Adapted from U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates.

Table 8

New Mexico's Top Five Leading Causes of Death for those 55 Years and Older by Location, 2021

Location	Heart Disease	Cancer	Chronic Lower Respiratory Diseases	Coronavirus Disease	Unintentional Injuries
New Mexico	3,784	3,469	971	2,641	826
Catron	14	16	-	9	-
Chaves	185	93	18	109	24
Harding	-	-	-	-	0
McKinley	81	91	8	127	37
Mora	4	8	-	8	-
Quay	25	28	7	27	0
Rio Arriba	84	71	18	58	24
Taos	73	76	19	29	21
Union	15	8	0	-	0

Note. Adapted from NM-IBIS, 15 Leading Causes of Death in New Mexico (55+ Population) and Decedent's County of Residence, 2021. Cells with a dash ("-") indicate the relevant data was missing from the NM-IBIS data tables. The number corresponding to the leading cause of death for each county is in bold.

2021 for those 55 years or older, according to the top five leading cause of death. The leading cause of death for Chaves, Rio Arriba, and Union counties was heart disease, which is also the leading cause of death for the entire state of New Mexico. Cancer was the leading cause of death in Catron, Quay and Taos counties. Lastly, Coronavirus disease was the leading cause of death in McKinley County in 2021.

Another attribute of the food box target population is food insecurity, meaning that recipients lack the resources to access an adequate food supply. We reviewed data on the percentage of food box counties where those 55 and older population live in poverty (Table 9). Among food box counties, McKinley had the highest percentage 55 and older population in poverty at 34.29%. Seven out of nine of the food box counties had higher percentage 55 and older populations in poverty than the state average of 16.38%. Harding and Quay counties had the lowest percentage 55 and older populations in poverty, at 14.52% and 15.87% respectively. Similarly, the percentage of the 60 and over population receiving Food Stamps was highest in McKinley County at 23.71%, and lowest in Harding at 0.83% (Table 10).

We further reviewed a key indicator of socioeconomic status within food box counties – educational attainment (Table 11). Among food box counties, the counties with the highest percentage of people 65 and older without a high school diploma were McKinley at 34.77%, followed by Harding at 27.08%. The lowest percentage 65 and older population without a high school diploma was in Catron County at 7.53%, followed by Taos at 9.43%. Catron and Taos proportions are significantly lower than the state average of 15.36%. The county with the

Table 9*Population 55 and Older Below Poverty by Location, 2021*

Location	% Below Poverty, 55 and Older
New Mexico	16.38%
Catron	22.81%
Chaves	22.25%
Harding	14.52%
McKinley	35.29%
Mora	25.56%
Quay	15.87%
Rio Arriba	26.42%
Taos	20.90%
Union	19.17%

Note. Adapted from U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates.

highest percentage 65 and older population with a Professional or Doctoral Degree (JD, MD, or PhD) – which is the highest category of educational attainment – was Taos at 22.33%. The lowest was for Quay County with 5.04%, which is significantly lower than the state average of 16.15%.

Apart from socio-economic status, another core factor influencing food access is social support. One useful indicator of social support is the U.S. Census measure for *household composition*. Living in a home with a spouse or other family is a good predictor that a senior has someone available to help them, whether that be financially for food purchases, or in terms of food preparation. The food box county with the highest percentage 65 and older population living in

Table 10*Population 60 and Older in Household Receiving Food Stamps by Location, 2021*

Location	% 60 or Older Receiving Food Stamps
New Mexico	13.34%
Catron	10.67%
Chaves	19.35%
Harding	0.83%
McKinley	23.71%
Mora	24.53%
Quay	13.49%
Rio Arriba	12.23%
Taos	10.13%
Union	8.52%

Note. Adapted from U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates

Table 11*Population 65 and Older by Educational Attainment and Location, 2021*

Location	% Less than High School	% High School Graduate	% Associate's Or Bachelor's	% Graduate, Professional (JD, MD), or Doctoral Degree
New Mexico	15.36%	46.26%	22.24%	16.15%
Catron	7.53%	61.23%	18.89%	12.35%
Chaves	22.81%	48.69%	20.32%	8.17%
Harding	27.08%	47.92%	18.06%	6.94%
McKinley	34.77%	45.34%	12.82%	7.06%
Mora	13.52%	64.20%	9.64%	12.65%
Quay	13.86%	67.80%	13.3%	5.04%
Rio Arriba	17.83%	54.56%	17.22%	10.39%
Taos	9.43%	43.89%	24.35%	22.33%
Union	13.82%	64.46%	12.54%	9.18%

Note. Adapted from U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates.

a family household – meaning with a spouse and/or relatives – is McKinley County at 75.63%, followed by Mora County at 69.59%, both of which are above the state average of 65.46% (Table 12). The rest of the food box counties fall below the state average, with Harding the lowest percentage 65 and older population living in a family household at 51.39%. Conversely,

Table 12*Population 65 and Older by Living Arrangement and by Location, 2021*

Location	% Living in a Family Household (Spouse, Relatives)	% Living in Non-Family Household	% Living Alone	% Living in Group Quarters
New Mexico	65.46%	5.21%	27.67%	1.67%
Catron	56.94%	8.26%	33.03%	1.78%
Chaves	62.62%	3.82%	30.25%	3.31%
Harding	51.39%	4.86%	43.75%	0.00%
McKinley	75.63%	3.35%	19.17%	1.85%
Mora	69.59%	7.91%	22.36%	0.14%
Quay	57.44%	1.12%	40.78%	0.65%
Rio Arriba	60.96%	10.30%	27.67%	1.07%
Taos	59.70%	9.22%	29.74%	1.34%
Union	53.43%	2.67%	40.07%	3.83%

Note. Adapted from U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates.

the highest percentage 65 and older population living alone is in Harding at 43.75%, which is well above the state average of 27.67%. Six out of nine food box counties have higher percentage 65 and older population living alone than the state average, which is 27.67%. McKinley and Mora have the lowest percentage 65 and older populations living alone, at 19.17% and 22.36% respectively.

FOOD BOX OBSERVATIONS

We conducted a total of three food box delivery and/or pick-up observations at three different senior centers participating in the Rural Senior Food Box program. To protect food box provider confidentiality, we anonymized each site in the discussion below, referring to them simply as Site 1, Site 2 and Site 3. The observation guide which organized the kinds of information we collected during 4-hour observation windows can be found in Appendix A. Table 13 (below) summarizes key findings.

Pick-Up

Observation of food box pick-up was completed at only one of the three sites – Site 1. A total of 32 food box pick-ups were observed. Food boxes were stored on a pallet near the back of the senior center where a loading area was located. Recipients themselves, or friends and family of a recipient, could collect food boxes and/or deliver to another recipient. In some cases friends and family of a recipient were recipients as well. We refer to “recipient” from this point forward as anyone retrieving a food box unless otherwise stated. Site 1 was the only observed site to also deliver food boxes to cities near it. Staff explained how many of the food boxes they receive are also therefore handed-off to nearby cities which are then primarily reserved for Home-Delivered Meal (HDM) recipients. This means that, while our observations at Site 1 were restricted to pick-ups, Site 1 typically distributes food boxes through both pick-up and HDM recipients simultaneously. As we describe later, this was not the case for all sites.

Table 13

Summary of key findings from Food Box delivery and pick-up observations

Site	# of boxes observed	Process Observed		Documentation Observed	
		Pick-Up	Delivery	Paper	Digital
Site 2	12		✓	✓	✓
Site 3	22		✓		
Site 1	32	✓		✓	✓

Note. An unobserved process does not indicate a site does not have a particular feature. Instead, an

unobserved process means staff could not confirm the presence of a feature within the allotted

observation window.

Generally, three pick-up patterns were documented at Site 1. First, recipients would pull-up to the back of the senior center – the loading area – walk inside, and retrieve food boxes. Alternatively, recipients would also pull-up to the front of the senior center and enter to collect food boxes. Thirdly, recipients would walk into the center to collect their food box and staff would carry food boxes to recipients' vehicles, either because recipients requested this or staff were aware of recipients' physical limitations or disability. For Site 1, staff maintained a paper list of food box recipients. Recipients signed next to their printed name before receiving a food box. This meant in some cases friends or family of the intended recipient would sign the record on behalf of them. In cases where someone other than the intended recipient picked-up food box(es), those boxes were ultimately delivered rather than picked-up. It was therefore clear from our observation at this site that an informal delivery network existed which effectively extended the senior centers delivery capacity. We could not confirm whether this occurred at other sites, but other providers who participated in our food box provider focus group (described on page 26) did not spontaneously describe similar informal networks.

In terms of staff-client interactions, we observed that staff and recipients at Site 1 seemed to know each other well, and were pleasant and friendly to one another. Interestingly, staff explained that some of the observed food box recipients did not participate at the senior center outside of food box pick-ups. Some food box recipients were instead 'working seniors' and food boxes had the unintended benefit of encouraging interest among recipients to have staff assess them for other available senior services. In other words, staff considered food boxes at Site 1 as a kind of 'gateway service,' that appeared to be engaging some pre-retirement older adults and cultivating familiarity with senior services and supports. It is important to note that this appeared to be a feature unique to Site 1 and was not documented at the other two sites.

Delivery

We observed delivery of food boxes at two sites— Site 2 and Site 3. A total of 34 boxes were observed at both locations. Site 3, like Site 1, delivered Food boxes to congregate meal and HDM recipients simulatenously – that is, in the same month. Site 2, as we describe next, distributed Food boxes somewhat differently. Site 2 also receives the fewest food boxes of all three observed sites, at 25 boxes per month.

Site 2 was the only site we observed which alternated the kinds of older adults who received food boxes each month. Every other month food boxes are distributed strictly to HDM recipients, or to congregate meal recipients – designated as 'pick-up'. Staff explained their alternating month distribution strategy was chosen to maximize fairness across recipients. In this way, staff sequentially follow a list of HDM or congregate meal recipients and deliver food boxes until they run-out. Depending on whether it is an HDM month, or congregagte recipient month, staff deliver the subsequent round of food boxes where they left-off on their list two months prior. During our observation, two staff members followed a "long" and "short" route, and divided available boxes between the two lists. Staff explained that with 69 HDM recipients,

it is essential to track who received food boxes with prior deliveries to improve distribution of limited food resources.

In terms of food box records, staff indicated they maintained physical and digital records of who received and/or were designated to receive food boxes. That document also tracked whether clients received food boxes in the previous round of distribution – i.e., whether through HDMs or pick-up. We confirmed this feature in our observation of food box delivery. Staff would record who had received a food box with an ‘x’ or a check-mark next to their typed name – in a food box-specific column – as part of regular HDM paper documentation.

While staff at Site 2 are efficiently and fairly distributing limited resources to a high need population, such a process has an important consequence for outcomes. Namely, the distribution strategy means recipients potentially wait 4-6 months for a subsequent food box. This is because there are more recipients than food boxes and distribution in this case alternates between delivery and congregate recipients. Therefore, it can take 2-3 delivery cycles before the same food box recipient is eligible to receive a food box again. Such a process would impact how consistently food is delivered to recipients, and how many monthly meals are ultimately provided to each older adult.

Our second observation of food box delivery occurred at Site 3 which, like Site 1, distributed food boxes each month at the senior center through pick-up (congregate meal recipients) and delivery (HDMs). Like Site 2, Site 3 staff maintained a “delivery sheet” for HDMs, but did not record receipt of food box delivery through any record. Instead, staff explained they remember from month to month who already received food boxes or who had yet to receive one. Observations confirmed this process. Staff also noted that while all food boxes are distributed each month, intended recipients do vary. Observations confirmed this aspect as well. Food box recipients would vary as people declined a food box, or were unexpectedly not home. In both cases, the food box would be made available for the next eligible client.

Critically, one aspect was unclear from observations of Site 3’s food box program: whether client records of food box delivery would accurately capture who has or has not received food boxes, since documentation of food box deliveries did not appear to be collected at all. This would mean any future study or review of food box delivery consistency of distribution would be difficult. It is clear, however, that Site 3 receives 50 monthly food boxes which are not enough to distribute to all HDM recipients at Site 3 in a given month – suggesting that food boxes are not delivered to recipients every month, but likely every other month or two. Interestingly, Site 3 had also initially been allotted 100 food boxes per month but had requested that this be reduced to 50 boxes due to a lack of willing senior recipients. Providers at Site 3 asserted that 50 boxes was sufficient for everyone who needed a food box to receive one, and that staff always found willing recipients for the 50 boxes. Although Site 3 appeared to implement a more informal system of food box delivery during our observation window, staff at Site 3 appeared to be very familiar and friendly with HDM recipients and demonstrated knowledge of who had or had not received food boxes previously.

Food Box Content

Food box content at all three observation sites was collected in order to compare the kinds of food offered across site. Table 14 summarizes the general food items we observed at each site. Of the 24 categories of food items, only two were shared by all three sites – white chicken breast and whole wheat pasta. Nine items were shared among two sites, but not all three – applesauce, brown rice, canned corn, dry beans, canned green beans, canned tuna, mixed fruit, mixed veggies, and shelf-stable milk. Finally, 13 food items were only available at a specific site. In general, three conclusions could be made about food box content at sites we observed.

First, food box items appeared to provide recipients with consistent and dependable access to shelf-stable food. Food boxes in all cases include a wide-range of food items that seem to satisfy broad nutritional standards – vegetables, fruit, meat, grain, water, and milk. All items we observed were also shelf-stable and could be used to prepare a full meal or supplement a home-made meal. Staff indicated that food boxes rarely varied, and therefore provided a stable

Table 14

Summary of Food Box food items, by site

Food Item	Observation Site		
	Site 1	Site 2	Site 3
White chicken breast	X	X	X
Whole wheat pasta	X	X	X
Unsweetened apple sauce		X	X
Brown rice	X	X	
Canned corn	X	X	
Dry beans	X	X	
Canned green beans	X	X	
Canned tuna	X		X
Canned mixed fruit	X		X
Canned mixed veggies	X		X
Shelf-stable milk	X		X
Bottled water		X	
Bran flakes cereal		X	
Coffee beans		X	
Ensure bottles		X	
Peanut butter		X	
Sliced peaches		X	
Instant oatmeal			X
Regular pasta			X
Spaghetti Sauce			X
Sweet Peas			X
Diced pears	X		
Diced tomatoes	X		
Quick-rolled oats	X		

and consistent supply of food which recipients could rely on. As we discuss in our focus group section, providers described the primary benefit of food boxes as supporting *food availability*. That feature is certainly evident from a review of food box content which appear, overall, to excel at shoring-up recipients supply of food for living situations where food runs-out or is under threat of running-out each month.

Second, many of the food items contained in food boxes would require physical coordination and strength to open (e.g., canned food), or likely require the use of a stove top (e.g., dry beans, pasta, and quick-rolled oats). This feature of food box items is potentially problematic considering the target population – homebound seniors. To this point, the Instrumental Activities of Daily Living (IADL) screener which is used to assess older adult need for HDMs, identifies individuals who are unable or struggle to either prepare their own meals, or to shop for food and other household items. However, many food box food items were easily accessible and required little to no preparation, such as ensure, applesauce and bran flakes. Further consideration might be warranted regarding homebound seniors' physical capacity to utilize and access all food items.

Third, limited food items across all sites could readily and practically be combined to constitute a full meal. In particular, five items – bottles of Ensure, instant oatmeal, canned or bagged white chicken breast, boxes of bran flakes, and containers of shelf-stable milk – could conceivably constitute their own meals without much preparation. Three of five items are also generally considered breakfast meals. Aside from these five items, the remaining food items require preparation or would typically constitute sides to a meal. Reflecting on food items altogether, it is unclear whether food box food items are intended to be consumed by recipients as discrete meals or as more modular food items to be combined with existing food stores. This is especially critical if the guiding principle of the food box program is to "...provide seven meals a month.." to older adults. The most cogent example of this feature is how two of three sites did not include meat or spaghetti sauce with whole wheat pasta noodles. This seemed to suggest a pervasive assumption in food box design that recipients have access to both supplemental primary meals (e.g. meat), and/or ingredients that enhance the flavor and quality of food items (e.g., sauce and spices).

The opposite hypothetical assumption – that food boxes do provide seven meals – would suggest some rather unconventional combinations. For example, hypothetically a meal might include plain whole wheat pasta noodles or whole wheat pasta noodles with chicken, and combined with canned vegetables or fruit. Staff at all sites confirmed that food box items rarely vary, so recipients would likely eat the same meals every month. Overall, the primary benefit of food box content, based on a review of content, appears to be consistency and availability of food, rather than providing appealing and nutritionally balanced, complete meals. The exception to this would be the five items previously mentioned, which primarily constitute breakfast meals.

PROVIDER FOCUS GROUP

We conducted a virtual focus group on 4/14/2023 via Zoom with providers from four food box sites. Researchers led this focus group using an interview guide (Appendix B) which covered eight topics: (1) the goals of the program, (2) the target population, (3) the processes for outreach, screening, intake, and disenrollment of food box clients, (4) the process of food box delivery, (5) the contents of the food box, (6) data collection activities, (7) observed successes and failures of the program, and (8) suggested improvements to the program.

Our focus group lasted approximately 1 hour and 21 minutes. Focus group participants had work experience with ALTSD that ranged from 6 to 20 years. All participants had between 6- and 8-months of work experience supporting the Rural Senior Food Box program, which began approximately 8-months prior to the time of the focus group interview.

Program Logic

Focus group participants identified several goals of the program. One of these matched the goal explicitly stated in a September 2022 memorandum: to “relieve hunger through 7 meals per month.” One participant put it succinctly when asked to describe what they thought was the goal of the program: “I guess our goals are to reduce hunger and keep distributing the food.” Participants viewed at least some of the clients they served as lacking access to enough food. They attributed this situation to a range of potential causes, such as lacking economic resources, being too far from the store to reliably acquire affordable groceries, or suffering from unexpected personal hardships. As participants explained in their own words:

Participant 2: we do have people who, whether they're displaced from their home, or because of... abuse and... stuff, who need food.
 ...[For example, one] person was basically **displaced due to an abuse situation happening in their home**. They had to go stay at a hotel ... so they could be relocated to Arizona. And, so, **for that week they would be without food**.

Participant 1: ... We live in an area where **it's hard to get food...** because it's **an hour drive to go to a grocery store** for us.

Providers in our focus group generally viewed the food box program as well-designed to address these situations. They highlighted the fact that food items were shelf-stable, which made the boxes well-suited for supporting those who periodically or unexpectedly run out of food.

Participant 1: I mean to go to a **Walmart is 2 hours from anywhere here...** so, it is **nice to have shelf-stable meals here for us**.

Participant 4: **It helps them get through the month**, maybe extend their food supply that they have for the month ... I would say **it's definitely fighting hunger...**

It became clear through our discussion, however, that participants inferred a broader set of goals for the program than mere hunger relief, defined as providing food for those who lack sufficient quantity. Rather, participants intuitively conceptualized food needs in terms of the broader concept of food insecurity, which considers insufficient food access due to lack of resources as occurring on a spectrum – from not having enough food, to consuming low quality or undesirable foods, to simply worrying about having enough food in the future. This broader range of food access experiences is exemplified by the following quote:

Participant 1: Especially with this generation of seniors... they grew up where they didn't have food. **So having that food, sitting on a shelf, saying, "You know I have something there, if everything goes crazy... I'm gonna have a little bit of food there." And then you have some situations where they have... no food. Or they're eating hot dogs or something, and you know that they need it... It can be varied.**

Participants seemed to believe that many of their clients were not, in fact, going hungry. Instead, they described them as being in a precarious position financially, due to broad trends like inflation and other unexpected costs. They pointed out that, because many seniors in their community were not technically classified as living in poverty, they did not qualify for other support programs they actually needed, including other food box programs like the USDA Commodity Supplemental Food Program (CSFP).

Participant 1: **We have other food boxes... that are income-based. And so, if you don't fall within that income... [you can't receive them].** People move here thinking they can... live here cheap.... But then you realize you have to drive everywhere to get anything, so it's expensive... Then they have to get a job, because... you can't make ends meet... which makes them a little bit higher income, but not actually high income. So, **there's a lot of in-between for us. [The food box] is definitely filling in the gap.**

Participant 3: ... [I give food boxes] to whoever needs food boxes, because right now you know, the prices all went up. **So even though they weren't considered in poverty. You know they are. Probably they need that extra help.** So, we just give it to whoever... wants those food boxes from here...

Seniors like these in situations of economic precariousness may rarely have to skip a meal due to lack of food. However, to avoid that situation they may have to sacrifice the quality of food they eat, such that it is less appealing or nutritionally balanced.

Participant 2: When people live in poverty, **the fresh food, fresh fruits and vegetables, and the fresh meat... are overpriced...**

Participant 4: **Our seniors struggle financially to put other things on their table.** You know the fresh fruits, the fresh meat...

Our participants saw the food box program as targeting clients experiencing these 'milder' forms of food insecurity, which could supplement the nutritional quality of their diets, freeing

up some of their food budget for other items, and providing insurance against possible future emergencies.

It remains unclear from our focus group discussion what proportion of clients fall into the different categories of food insecurity. However, providers seemed to reference and discuss the moderate to mild forms of food insecurity more than extreme cases where seniors go without food. That could indicate that the providers we spoke with perceive the majority of older adult clients as falling on this less extreme end of the food insecurity spectrum. If true, that would not necessarily mean there is not still a high need for food assistance. As outlined in our literature review, even mild situations of food insecurity are associated with negative health outcomes, especially in a vulnerable elderly population. However, if most clients are suffering from milder forms of food insecurity, that does raise the question of whether the current food box program is optimally designed to address their needs, as we discuss later in this report.

It is noteworthy that, whereas the 2022 memorandum specifies that the program is for “homebound seniors,” all participants reported offering food boxes to non-homebound seniors via pickup at the senior centers, in addition to delivering food boxes to homebound clients through HDMs.

Implementation Process

Next, we review how providers in our focus group described implementing the food box program at their local sites. According to the process map, the plan is for local providers to receive food boxes from the food banks on a set, monthly schedule and to take charge of delivering the boxes to appropriate recipients in their area. Delivery of boxes to the appropriate recipients can be further broken down into several component processes: (1) Referral and Outreach, (2) Intake and Screening, (3) Service Delivery, and (4) Disenrollment.

Referral and Outreach processes described by focus group participants broadly fell into three categories: (1) targeted outreach to existing senior center clients who are seen as prime candidates for the food box program, (2) outreach efforts broadcast to the broader public, and (3) referrals from outside agencies. Outreach to existing clients seems to have been the most common form of outreach, partly because homebound and congregate meal recipients at senior centers had typically already been “assessed” using the Non-Metro AAA SAMS Consumer Assessment Form. Therefore, providers in our focus group already claimed to know a great deal about seniors’ personal situations, as well as how to contact them to enroll them in the program. This could occur by calling a client over the phone or by approaching them at the center. Examples of outreach efforts targeting the broader public included putting out advertisements on the radio or posting flyers at the post office. Participants did not seem to view these methods as particularly effective. Similarly, referral of new clients from outside agencies did not constitute a significant source of new clients for any of the providers. However, such referrals were reported to have occurred on a few occasions via agencies like Adult Protective Services (APS) and from food banks.

Participant 2: We didn't do any outreach. We just **identified participating consumers through our own database**, and then started distributing that way. **We have not advertised for the service.** We didn't realize, honestly, that it was available to people outside of our senior center.

Participant 4: Through our **wellness calls, we are still reaching clients that didn't know or aren't aware that we have the boxes**, and so we are making them available that way.

Participant 3: **We've been getting on the radio and stuff like that**, and then just by word-of-mouth from other people.

Participant 2: **We had APS contact us, and the person was not a client at the time**, so we just did a short form and gave them an emergency box of food, because that person didn't have any food and APS was the one who contacted us. Other than that, we haven't had many referrals. **Maybe one or two [referrals] from the food pantry.**

Interestingly, several participants reported having a significant number of new seniors seek staff out on their own initiative for the explicit purpose of receiving a food box. It was often unclear to the providers how, exactly, these individuals became aware of the program. They speculated it occurred via word-of-mouth from seniors already receiving the food box, as well as from people simply observing the boxes arriving to their center from the food banks.

Participant 1: When the road runner food truck goes through town, people follow it up to the senior center, and... while we're delivering, **they're actually out there asking if they can get a food box... We've done absolutely no outreach...** It's been wonderful. People are very into [the food boxes].

Participant 4: We haven't had referrals... not from other organizations. But probably, [via] **word of mouth, as in senior to senior...** because they might **see that their neighbor got one, and they want one as well.**

Intake and Screening for all participants involved assessing clients using the Non-Metro AAA SAMS Consumer Assessment Form. However, most clients had already been assessed by the center for either congregate or HDMs prior to being enrolled in the food box program. Providers explained the only eligibility requirement to be assessed for congregate meals is being 60 years old or older. Most participants reported that they would offer the food box to any senior who had been assessed for congregate meals, regardless of their income or other qualifications.

Participant 3: If you're **assessed for either** ... [homebound or congregate meals], **then we have to checkmark the rural food boxes** [on the client list].

Researcher: *If they no longer qualify for a Home-Delivered Meal. Will you still give them a food box?*

Participant 4: **Yes. Yes, we would.**

However, one participant noted that they would additionally screen for clients who were (1) homebound (i.e., had frailty/mobility issues), and/or (2) in poverty, both of which could be determined based on the aforementioned assessment.

Researcher: *Really, **the only cut off is just the requirement [of being] 60 [years old] and over**, and then that would be the same, for where you're distributing to congregate. **That's really the only eligibility requirement?***

Participant 4: Well, **we also have to clarify whether or not they are in poverty**. So, when you're doing the assessment, you do ask them... "does your income fall below this amount?" And if they say "yes", then they actually qualify for poverty. And, so, in our congregate, **that's kind of like the red flag for adding them to the list of consumers who would get a food box**. Now, **if they are not in poverty, then we don't**.

Service Delivery occurred in two forms: (1) delivering food boxes to homebound clients, and (2) making food boxes available for pickup from the senior center. Homebound clients who receive HDMs are seen as ideal candidates for the food box because they are isolated in their homes, are dependent on the centers for food already, and often have poor baseline health. Providers typically deliver food boxes to these clients simultaneous with their delivery of the HDMs. This requires the extra work of loading boxes onto the delivery truck and carrying them to the clients' doorstep or into their home but does not typically require any extra driving. It also largely solves the problem of scheduling a time when the client is present, because they are already scheduled to receive a HDM and are supposed to call ahead of time if they will be out. Data collection is also simple, as drivers can simply record food box deliveries alongside the deliveries of HDM's.

Participant 2: Our bus **drivers who deliver the meals will also deliver the food boxes**. We do not leave the food boxes if there's nobody home. They may just get carried over to the next day, or whatever... because **they're supposed to call us anyway, if they're not going to be home**, so... that's a very rare incident. But **the bus drivers will record that they delivered the food boxes**, along with the regular meal for the day.

Participant 4: For our home bound [delivery], same thing. **We don't leave anything, if anybody is not home**. But we do make them sign for it. **So we actually have a signature to associate with the person and the box**. We will actually even help them pack it up or load it in... if they need our assistance.

Participant 3: And the way we do ours is **we just make a route sheet with our drivers... and they'll check it off on there** and we'll just enter them into SAMS [ALTSD database].

The other delivery process providers described was to make the boxes available for pickup from the centers. This often involves calling clients to notify them when and where to retrieve their food box. Most, but not all participants reported that they would assist the clients with carrying the food box to their vehicle, if necessary or requested.

- Participant 1: I usually do my setup for people to pick them up here one day, and then... **we have our list that we use from the previous month to know who we're going to call and let him know it's gonna be here.**
- Participant 4: **If they need us to wheel it out in a cart and load it in the vehicles [we do that for them]...** because, although they are participating in the congregate site some of them may still be having walkers, canes, some kind of walking devices. **So we still assist in either way.**
- Researcher: *In the congregate, setting... do people just come and pick them up? Do you take them out to their car? What does that look like?*
- Participant 2: **We don't carry out for the congregate.** So they will come in and they will pick up their box. And then **they're responsible for taking it back out to their car** and then returning to come eat lunch.

Apart from some subtle differences, food box delivery and pickup processes were fairly uniform across participants. This is likely because the strategy of supplementing existing processes for HDM and congregate meals represents a natural and efficient solution to streamlining the food box delivery process. The most significant distinction we observed was that one participant would rotate between delivering to all homebound clients one month and making all boxes available for pickup by congregate meal clients the next month.

Disenrollment seems to be a rare occurrence across providers. Three situations were mentioned that would lead to a client being disenrolled from the program. The first is if a client requested that they no longer wanted the food box. The second was if there was clear evidence of misuse of the food, such as feeding it to their pets. The third was death of a client.

- Participant 2: They are very, **very communicative about telling us when they don't want [the food box] the following month.** So it's gonna go to somebody else...
- Participant 4: If we saw something that was pretty blatant... **If you see that they're feeding it to their pets or whatever, just misusing it. You're definitely not gonna continue providing the service for them...** If we have any kind of knowledge of them not utilizing that for what it's intended for then we're definitely not going to repeat it.
- Researcher: *Are there any other circumstances where someone would not have a food box delivered again to them?*
- Participant 3: [If] they **don't want senior services anymore...** Or, **if they die.**

Challenges and Successes

Participants discussed several logistical challenges posed by the program. These primarily centered around receiving and delivering food boxes and assessing clients. It can take time and considerable physical effort if a small number of staff must unload food boxes at the center and then again into trucks for delivery. These issues can be compounded by inclement weather events and equipment problems. The deliveries themselves can also place extra burdens on staff, given the spread-out nature of clients in rural settings and the fact that not all clients who are delivered a food box to their home are on the existing HDM routes. Lastly, while many

clients were already assessed for homebound or congregate meals, the program also introduced new clients who also need to be assessed, which providers explained could be a time-consuming process.

Participant 1: The **delivery of the programs for us is really challenging** because... roadrunner has really big trucks and during the winter they can only back in [to the loading bay]. So their pallets got stuck a lot of times, so **we had to hand move everything... in the rain and snow and wind, and move one at a time.**

And a lot of times, it's just me and my cook here during the day. So, she was cooking because she had to get ready for the next round of home delivers coming out. So I was doing it, **and any seniors that came in. They helped me... We're all short staffed...**

We have to remind ourselves why we're doing this because it's an extra step, and we're going, "really?!" **There's some days I'm like, "oh, no, it's a Food Box day."** I don't think I can fit it all in, and... I know I'm not the only one who feels that way.

Participant 3: **Being short-handed, it does take time.** Especially for those homebound, **maybe 45 min per assessment.**

I'm pretty slammed on a day-to-day basis. **It's not easy.** We have to love our job, for what we're doing. **It takes a special person to be able to do this work.** You know, people think food service is one of the easiest jobs because we're delivering. It's not.

Participant 3: **It's just the lack of extra hands** that we would be able to utilize, to be able to get these boxes out, [instead of] **adding more work to our truck drivers...** Because here in [provider location] **we serve... a pretty wide range area, and it's mountainous...** So, you know **it's pretty rough.**

The primary design shortcoming mentioned by participants was described as an issue with food box food items. These were not issues of insufficient quantity, but rather, insufficient quality and variety of foods. Providers in our focus groups felt that seniors would benefit from, and prefer, more fresh fruits and meats as well as ready-to-eat snack food. They were sometimes told this directly by seniors, or else inferred it by the fact that food boxes were being refused, or left on the shelf in some senior's homes instead of being eaten. Apart from seniors' food preferences, providers attributed this under-utilization of food items to the fact that some seniors did not have the physical capacity or know-how to prepare many of the items in food boxes.

Participant 4: The shelf-stable items are great, no doubt, and definitely gonna keep you from going hungry, [but] I'm sure **they would like to add another variety to it** that is oftentimes unaffordable for them.

Participant 3: So what we're finding out in [provider location]... is that the city... has their own food delivery there every Saturday. So [seniors] are getting meats and fresh vegetables and different things like that. So **this past month, we kind of had a little set back because [they] don't want our Food boxes because it's a shelf-**

stable food. It's not the good, the chicken, the hamburger meat. So we still got some food boxes left over from last month.

Participant 2: The food that's being offered are usually high in salt and sodium and preservatives and low in nutrition. So yeah, you're keeping them fed. But **they're not necessarily getting a nutritious meal. And if they are not able to cook, then a lot of the stuff we're giving them is gonna continue to sit on the shelf** until someone's able to cook for them or prepare those foods. Yeah, I mean, **it's better than nothing. But it's not that much better.**

Underutilization of food boxes creates its own challenges for providers – i.e., determining what do with unwanted boxes. Most providers in our discussion said they deal with this situation by finding somewhere to store the boxes until they can find another recipient. However, one provider found a different solution, which was to alternate who would receive the food box from month to month. This gave each client more time to utilize the contents between deliveries.

Participant 3: We could have like **4 or 5 of the same things in [the box]** and... next month the same thing comes back in, and **they don't want it**, you know, and then **we have to store it or find somebody else to give it to.**

Participant 2: They don't get a box each and every month... **We rotate the 25 [boxes]**, and it seems to be working nicely because by the time we get back to the initial 25 [clients], they've used up most of those shelf-stable supplies, and they're ready for a new box. And so that seems to be helpful for them, because **I don't think they could use the same products every month as it builds up.**

Overall, however, participants appeared to retain positive attitudes toward the food box program and generally thought the program provided more benefits than costs. For example, despite the extra workload for staff, several participants indicated that the program was a net positive for the overall functioning of their senior centers. The reason for this was that they saw the food box as a tool for building rapport and trust with seniors who might otherwise be difficult to reach. This, in turn, made it easier to identify and address other needs these seniors might have.

Researcher: What have you liked? What, what has been successful about [the Food Box Program]?

Participant 1: ... It did **help bring in more consumers for congregate meals...** [and] introducing myself to more seniors, and **finding more seniors in need.** And it really has helped with that for us.

Participant 4: I also believe that it helps you build that relationship with the seniors, because if you're coming to them asking them, "Hey. I think you might benefit from this food box." **It's something as simple as a food box. But you're building that relationship with them, and they're gaining that confidence with you.** There

might be other things that come along the way that you may have to help assist them with... and so I think they build that trust in you that they'll come to you and say, hey, I have this problem... And, so, **they're more willing to tell us these things, and then we're able to help advocate in other ways.**

Participant 3: ...Yes, I agree with that.

Lastly, and perhaps most significantly, all participants reported at least some direct benefits to clients' wellbeing from the food box. Some of these reports were of specific instances in which they observed the food box satisfying an acute client need, such as when a food box was given to a senior leaving an abusive home environment. In that case, a food box reportedly kept the client from going hungry. However, more often participants cited general indicators of senior need, such as the high demand for the food box. While some food boxes were refused by seniors on occasion, most seniors were, apparently, grateful to accept them.

Researcher: Are there any indicators that you're paying attention to really know if the food boxes are working or not?

Participant 1: To me. Honestly, **I think the indicators is that you have so many people who are looking for them, who are calling me and talking to me about it, or checking me down at the post office.** You know what I mean. I think that the word-of-mouth of this is, you know... the best indicator I can find.

Participant 3: As long as [the **seniors**] **are coming in** [for the boxes]. And, as long as [the **food boxes**] **are going out**, then **that shows the need for the service.**

Participant 2: It's filling a gap because... in our area, **we're not seeing many people turn down this opportunity...** They're just, you know, **very thankful for it.**

The general willingness and appreciativeness of seniors to accept the food boxes was corroborated by our observations of food box deliveries. While these kinds of informal indicators of client need and program success are not objective measures, they are, nonetheless, important preliminary indicators that the program may be working and, at the very least, is deserving of future scientific study.

Suggested Improvements

Suggested improvements corresponded to the above-mentioned challenges. For example, one participant suggested the food box program could benefit from increasing the staffing budget, which aligns with the challenges around staffing outlined above. However, most suggestions for improving the program centered around the contents of the food box itself. While having shelf-stable foods was seen as valuable for some situations, participants thought the program would benefit from including more ready-to-eat snacks, more fresh fruits, vegetables, and meats, and, generally, having greater variation in box contents from month to month.

Researcher:	<i>What kind of concrete changes then could be made to improve the Food Box Program?</i>
Participant 1:	I think that we could also look at rotating the food . I think that that would be nice, you know, and if you can get in, you know fresh produce, fruit , whatever that would be great to... so it's not the same thing every time . They will utilize it better that way.
Participant 4:	During Covid we were receiving food boxes for seniors that actually had some fresh fruit and sour cream, and other items that needed to be refrigerated . I think it was well-received, and yet at the same time it was the same thing every month so you still kind of had that complaint. So, I would say that the happy medium might be alternating... one month throwing in that fresh and the other month the shelf-stable . If you're able to alternate that, then I could see where there might be a little more variety and less waste .
Participant 4:	Some of those food boxes did come with, like snacks and stuff that, like individually wrapped, ready to eat . And I think for the people that we had that were not cooking, those were things that they were really grateful to have . But I wouldn't say that that would be 100% the way to go...

FOOD BOX RECIPIENT SURVEY

As explained in our methods section, the consumer food box survey was available for our review and analysis for four food box sites – the remaining sites where the survey was distributed were not yet collected by ALTSD. Ultimately, we were able to analyze preliminary data from Ramah, Thoreau, Wagon Mound, and Mora. In total, we received 79 food box surveys (Table 15). The number of surveys we received by site ranged between 10 and 40, with an average of roughly 19 surveys by site. Table 16 (page 39) summarizes key demographic details of survey respondents, as well as preliminary findings about food box recipients' level of need, including important descriptive statistics about two scales capturing food box recipient food insecurity and level of social support.

Program Implementation

The food box recipient survey provides crucial insight into how the Rural Senior Food Box program has been implemented. Firstly, the survey provides preliminary data on whether the program has supported its target population. As stated in the 2022 memorandum, the food box program has the intention of providing hunger relief to rural homebound seniors and adults with disability. Two of these factors were assessed in surveys, namely age, and indicators of implicit level of need.

Age

With regard to age, food box recipient survey data indicate, on average, recipients are about 73.8 years of age across all sites, with 50% of all recipients 73 or older. Two sites were significantly different than the average for all four sites we obtained data for. Specifically, age

was not provided by any respondent from Mora and the average age of recipients from Ramah was much higher than the cross-site average. Ramah food box recipients were, on average, 84.9 years of age, with 50% of all food box recipients 87 or older. The youngest individuals were between 55 and 60 years of age, with one respondent over 100 years old.

Socioeconomic Status

Food box recipient survey respondents were also asked to self-report annual household income, educational attainment, and employment status. Most respondents were high school graduates, or had obtained higher degrees. A minority of respondents (11.8%) had less than a high school education. In terms of income, most recipients who participated in the food box survey indicated low incomes, with an average annual household income of \$23,826. Fifty percent of respondents reported annual incomes of \$16,000 or less. Roughly one-fifth (21.5%) of respondents reported incomes of less than \$10,000 per annum. Finally, over three-quarters (75.9%) of our sample of food box recipients were retired or disabled and not working. Approximately 11% of respondents were also not working but were looking for work or had some other employment status. About 8.9% of recipients were actively working.

Isolation

The food box recipient survey incorporated two self-reported questions to assess isolation as it pertains to food access: primary means of travel to the grocery store, and total time it takes to travel to the grocery store. Nearly two-thirds of respondents (65.7%) drove their own car to access food, while roughly one-third indicated they required some level of support from others to access groceries; either needing someone else to drive them to the store or for someone else to pick-up groceries for them. This distribution was slightly higher for two of the four sites – Thoreau and Wagon Mound – where 75-78% of surveyed recipients still drove their own car to access groceries. In contrast, one site – Ramah - was significantly different, with most respondents (60%) indicating they needed someone else to help them access groceries.

Survey respondents also reported estimates of the time it takes them to travel to a store to get groceries. The average across all sites was about 42 minutes, with 50% of all sites reporting travel times of 45 minutes or more. Most respondents indicated taking 90 minutes or less to

Table 15

Number of Survey Respondents by Site

Site	Count	Percent
Mora	10	12.6%
Ramah	12	15.2%
Thoreau	17	21.5%
Wagon Mound	40	50.6%
All sites	79	100.0%

travel to grocery stores, with just one respondent reporting a travel time of more than 120 minutes. Thoreau was the only site with significantly different travel times. Recipients in Thoreau reported an average travel time of roughly 30 minutes, with 50% of all respondents indicating travel times of 15 minutes or less.

Social support

Our sample of food box recipients were also evaluated for level of social support they receive. This factor was chosen to better understand whether food box recipients were also individuals living in communities without many other friends or family to rely on for support. This factor is arguably important for all older adults, but especially important for those unable to access food for themselves. As we described above, nearly one-third of all recipients in our sample reported needing someone else's support to access food. To assess social support, we utilized the MOS Tangible Social Support Subscale questionnaire, which asks respondents how often they have someone available who they can rely on for help with critical tasks, such as daily chores, preparing meals, or visiting a doctor. For the 88 respondents who filled out this portion of the survey, the average level of tangible social support was 52.21 on a 100-point scale. This is quite low, as the average from a large, nationally representative sample of medical patients (n=2,987) was 69.8 (Sherbourne & Stewart, 1991, p. 710). Further research is recommended to understand the role social support, or lack thereof, plays in food insecurity among rural New Mexican seniors.

Measured Food Insecurity

The key intention of the initiative supporting the Rural Senior Food Box Program, is to foster "...a food system that addresses hunger while improving economic resiliency in New Mexico." Additionally, the program itself "...aims to provide an additional 3,025 homebound seniors and adults with disabilities in rural communities with seven meals each month." Food insecurity is therefore an important metric for assessing not just hunger, but also other tangential effects like anxiety and quality of food. For this reason, we incorporated a scale called the Household Food Insecurity Access (HFIA) scale, which teases out three domains of food insecurity: (1) anxiety and uncertainty about household food supply, (2) Insufficient quality of food, and (3) Insufficient food intakes and its physical consequences (Coates et al., 2007, p. 5). The scale ultimately categorizes responses into types of food security: (1) food secure, (2) mildly food insecure, (3) moderately food insecure, and (4) severely food insecure.

Based on food box recipient responses, 44.6% (33) of all respondents were mildly to severely food insecure. Surprisingly, the majority of respondents (55.6%; 41) were food secure. However, this feature was not true for all individual sites. Three of the four sites we received data for reported a minority of food secure individuals. Wagon Mound was the only site in which many respondents (72.5%; 29) reported being food secure. Among the other sites, 50% or more of all respondents indicated mild to severe food insecurity. To that point, 10-35% of respondents in sites *other than Wagon Mound* reported severe food insecurity.

It is important to note that according to the HFIA scale, respondents reporting ***mild food insecurity*** on this scale reflect individuals who, in the past month, worry “...about not having enough food sometimes or often, and/or [are] unable to eat preferred foods, and/or eats a more monotonous diet than desired, and/or [eats] some foods considered desirable, but only rarely” (Coates et al., 2007, p. 18). Further, ***severely food insecure*** individuals according to the HFIA scale are people who experience severe food conditions including cutting back on the number of meals they eat, running out of food, going to bed hungry because they cannot afford food, or going a full day without eating. Nearly one-quarter (24.1%; 19) of all food box recipients in our sample indicated they were moderately to severely food insecure.

Food Box Outcomes

Most recipients in our sample were classified as food secure or mildly food insecure. However, this does not necessarily mean these individuals are *outside* the target population. Many, if not all these clients had likely already been receiving food boxes regularly for several months. Therefore, it is conceivable that these clients were more food insecure in the past and, through their participation in the food box program, improved their food security just as the program intends. To reliably assess whether this is the case, it would be necessary to first measure clients’ food security scores *prior* to receiving their first food box and then assessing their food security score again after they have received several boxes. These pre- and post- scores could then be compared to determine the degree to which clients’ food security improved over the course of their involvement in the program. Additional outcome measures that could be assessed in this way – and which should be considered for inclusion in any future outcome evaluation of the food box program – are:

- (1) General physical health
- (2) Measures of depression, anxiety, and stress
- (3) Measures of program satisfaction

A second component for evaluating the food box program’s effectiveness could include assessing whether it is optimally reaching the people most in need. Food insecurity measures are an important element of this. However, beyond simply categorizing need using a food insecurity measure, it is also useful to understand what is causing that need. By knowing which factors seem most predictive of food insecurity within and across sites, it may be possible to focus outreach efforts on regions and subpopulations where need is likely to be highest. For example, if survey data reveals that the lack of social support is an important predictor of food insecurity among Hispanic, widowed men over the age of 65, programs could potentially use that information to target outreach to that group. Moreover, by gaining insight into the root causes of food insecurity, it may be possible to alter existing or develop new services that target those root causes. Many of the questions in the recipient survey reported on herein, such as those assessing income, social support and relevant demographic characteristics like household composition, were selected specifically for this purpose. However, the survey would need to be implemented systematically, at scale to yield these insights.

Table 16*Summary of Food Box Recipient Survey findings*

	Mora		Ramah		Thoreau		Wagon Mound		All Sites	
	n	%	n	%	n	%	n	%	n	%
Age										
Average	N/A		84.9		73.8		71.3		73.8	
Median	N/A		87.0		73.5		71.0		73.0	
Educational Attainment										
Less than HS	1	10.0%	4	40.0%	3	18.8%	1	2.5%	9	11.8%
HS Graduate	7	70.0%	4	40.0%	11	68.8%	31	77.5%	53	69.7%
Associates or Bachelor's Degree	1	10.0%	2	20.0%	2	12.5%	8	20.0%	13	17.1%
Graduate or Professional Degree	1	10.0%	0	0.0%	0	0.0%	0	0.0%	1	1.3%
Annual Household Income										
Average	\$28,882		\$6,497		\$23,015		\$26,875		\$23,826	
Median	\$21,000		\$914		\$16,500		\$20,000		\$16,000	
Employment Status										
Working	0	0.0%	0	0.0%	1	6.3%	6	15.0%	7	9.2%
Not working										
Retired	8	80.0%	5	50.0%	12	75.0%	26	65.0%	51	67.1%
Disability	1	10.0%	1	10.0%	1	6.3%	6	15.0%	9	11.8%
Looking for work	0	0.0%	0	0.0%	0	0.0%	1	2.5%	1	1.3%
Other	1	10.0%	4	40.0%	2	12.5%	1	2.5%	8	10.5%
Primary means of travel for groceries										
Drives own car	6	66.7%	1	10.0%	11	78.6%	28	75.7%	46	65.7%
Someone else drives you	2	22.2%	5	50.0%	2	14.3%	4	10.8%	13	18.6%
Someone else goes to store for you	1	11.1%	4	40.0%	1	7.1%	5	13.5%	11	15.7%
Travel time to store (in minutes)										
Average	39.2		51.3		32.9		45.8		42.7	
Median	45.0		50.0		15.0		45.0		45.0	

Table 16 (cont).*Summary of Food Box Recipient Survey findings*

	Mora		Ramah		Thoreau		Wagon Mound		All Sites	
	n	%	n	%	n	%	n	%	n	%
Household Food Insecurity Access Score (HFIA)										
Food Secure	3	37.5%	3	25.0%	6	40.0%	29	74.4%	41	55.4%
Mildly food insecure	2	25.0%	3	25.0%	2	13.3%	7	17.9%	14	18.9%
Moderately food insecure	2	25.0%	2	16.7%	1	6.7%	1	2.6%	6	8.1%
Severely food insecure	1	12.5%	4	33.3%	6	40.0%	2	5.1%	13	17.6%
MOS Tangible Social Support Subscale Score										
Average	50.0		71.3		39.3		52.4		52.2	
Median	46.9		90.6		25.0		62.5		59.4	

CONCLUSIONS

Program & Document Review

Our review of program documents focused on the logic model, process map, and budget information provided to us. The logic model we were provided by ALTSD centered around the role of senior centers in adopting food boxes. A clearer logic model would be organized around the ultimate goal of the program and the program's strategy for achieving that goal. In this case, the ultimate goal might be improved food security among rural, homebound seniors, and the mechanism of achieving that improvement would be the delivery of food boxes with specific contents at specific delivery intervals. This reframing of the logic model will help to clarify other aspects of the program's design, like specifying what inputs and outputs should be tracked and what outcomes should be measured.

Reframing the logic model would also help in refining the process map. A process map should specify the plan for implementing the program at a more granular level. The process map we were provided by ALTSD is lacking specificity with regards to who the target population is, the criteria for selecting senior centers to distribute food boxes, the procedures participating senior centers should follow in identifying eligible recipients, the guidelines for selecting food box contents by food banks, the process for creating a roster, the process for delegating food boxes between HDM and pick-up clients by senior centers, the data to be collected for records and quality control, the conditions under which a client should be disenrolled, and the specific outputs and outcomes that should be measured and monitored.

A review of budget documents revealed that food box deliveries by site have fluctuated considerably from month to month. This raises questions about the consistency of food box provisioning over time, especially for individual recipients. It is currently unclear whether this variability is a function of availability, demand, screening, or some combination of these factors. In any case, consistent provisioning of food boxes could affect outcomes related to food security and should be studied and tracked with regards to individual clients, in addition to tracking the total number of food boxes delivered over time.

U.S. Census Data

In general, U.S. Census data reveal that the counties where the food box program is implemented have high levels of rurality and disability and large proportions of their population over the age of 60, when compared to the state averages. Interestingly, some of the most rural counties, such as Mora and Union, also have experienced the highest rates of depopulation in recent years. This could be indicative of a broader demographic trend of people moving from rural to urban areas. The fact that these areas also had among the highest percentage senior populations, suggests these depopulation trends may be primarily due to young, working age adults moving away – a feature which could have wide-ranging social and economic implications for seniors in these communities now and into the future.

Two of the counties that seemed among the most vulnerable along multiple socio-economic metrics (poverty status, educational attainment, and receiving food stamps) were McKinley and Mora. Seniors in these two counties were also among the highest in social support, according to the rough indicator of household composition. This could indicate these communities have a degree of resiliency not captured by traditional economic metrics. It is also noteworthy that these two counties had the highest proportion non-white populations, suggesting there may be a cultural component to these social and economic patterns. Further research might look at whether these communities, in fact, have higher levels of social support for their seniors, why that might be, and what the implications are for addressing food insecurity in these communities and rural New Mexico more broadly.

Food Box Observations

Food box observations revealed some important variation in program implementation across sites. For example, there was considerable variation in delivery schedules, with one site rotating deliveries through a roster of congregate and HDM clients. There is nothing in the program documents that forbids this and it makes sense on the grounds of fairness and spreading the boxes out across uses, particularly if the shelf-stable foods are infrequently consumed in a single month. However, receiving food boxes on a sporadic basis can undermine the outcome of food security, which is based not only on having enough to consume but also one's certainty about having enough food in the future. This variability in service delivery across sites will also raise issues for evaluating program outcomes.

Lack of clarity around the process of food box pickup was also documented for some sites. Is it offered to everyone? Are enough available? If not, are providers allowed to allot for specific individuals? If so, how do providers choose? What rules or procedures should exist for distributing food boxes (e.g., first come, first served basis)? These questions are important considerations for program consistency, since opaque procedures or rules of distribution can lead to perceptions of unfairness, whether real or imagined. The lack of consistent data collection procedures for determining eligibility and recording who is receiving food boxes from month to month could add to these concerns. Developing transparent food box distribution procedures and standardizing data collection within and across sites is therefore recommended.

Another potential issue we observed was a lack of knowledge about the program by consumers. To this point, "knowledge of food box program" is a key outcome identified in the logic model. Observations revealed the vast majority of consumers were confused about what food boxes were and why they were receiving them. This lack of program understanding among clients can affect food security for the same reason we describe above: if clients do not understand what the food box is and when they will be receiving the next one, it is unlikely to reduce their stress about whether they can meet their future food needs. It is not only important that clients receive the food on a reliable schedule, but also that they are aware of that schedule and what to expect in terms of food box contents. Thus, improving marketing and

education around the program could itself influence the program goal of improving recipients' food security.

Finally, we observed several potential issues with the contents of food boxes. Firstly, many of the foods require physical strength and dexterity to prepare, such as opening cans and cooking pasta. Utilizing these items could pose a challenge to seniors who have physical frailties and disabilities, which are precisely the characteristics that describe the stated target population: "homebound seniors and adults with disability" (ALTSD 2022). Providers in our focus group described how some homebound seniors they serve did not consume certain food box items specifically because they were unable to cook them. A second potential issue with food box food items is that, while program documents intend for food boxes to provide seven meals, it is not obvious how current food items could be combined into complete, balanced, and appetizing meals. This feature could prevent seniors from consuming all food box items if they find certain combinations unappetizing and have no other food items on-hand to create balanced and appealing meals.

Provider Focus Group

The focus group with food box program providers revealed some discrepancies between what providers saw as the purpose of the program, and the goals stated in program documents. The 2022 memorandum specifies that the purpose of the program is hunger relief for homebound seniors and adults with disability. However, focus group participants described the program as targeting a broader range of client food needs than hunger, which are better encapsulated by the concept of food insecurity. Additionally, whereas the 2022 memorandum specifies that the program is for "homebound" seniors, all providers believed that the food boxes were also intended for non-homebound seniors. It is quite possible that serving these seniors aligns with the implicit intentions of the program, as the process map from ALTSD states that senior centers should "make food boxes available for pickup." To avoid future confusion and clarify program goals among providers, it is recommended that program documents be made consistent on the above two points.

Focus group discussions revealed some important differences in program implementation across sites. In particular, it was revealed that different sites used different eligibility criteria for screening clients and followed different schedules for delivering food boxes to clients. Whereas three of the participants reported offering food boxes to congregate meal clients regardless of their income, one provider reported screening for whether seniors lived in poverty. Regarding delivery schedules, whereas three of the participants reported delivering to the same clients monthly, one provider reported rotating deliveries from one month to the next, between HDM clients and congregate meal clients. Moreover, because there were not enough boxes to reach all HDM or congregate meal clients in each month for this site, clients could conceivably go 2-4 months between food box deliveries.

While there are benefits to affording providers autonomy in how the food box program is implemented in their local communities, this can also have unintended effects. Firstly, site-level differences in implementation can make it more difficult to design improvements to the program, if policy-makers are unaware how the program is implemented at different sites. For example, adding more fresh foods may be ideal for seniors who receive boxes monthly, but the same improvement could undermine the goal of reducing food insecurity if it is delivered to clients who receive a box every 4 months. Clients receiving boxes of food every 4-months might alternatively benefit more from shelf-stable food items. Site variation could therefore lead to increased administrative costs and complexities. Secondly, if ALTSD eventually intends to evaluate the food box program in terms of its effects on outcomes like food security, it will be difficult to accomplish if significant site differences exist. Providing food boxes at markedly different intervals and to markedly different client types would likely mean outcome evaluations would need more time and resources to differentiate how program features affect program outcomes.

Overall, participants had positive perceptions about the program, although they noted some challenges stemming from staffing issues and refusal of boxes by seniors. Suggested improvements primarily centered around alterations to food box contents, which were seen as deficient in terms of their overall variety, and lack of fresh foods and ready-to-eat snacks. The first step to improving food box contents is to clarify the program goals in terms of what category of food insecurity the program seeks to target and then tailoring food box contents to address that problem. For example, if the goal is to provide emergency food relief, shelf-stable items probably make the most sense, though it may be advisable to include more ready-to-eat, shelf-stable snack items. If, on the other hand, the goal is to target those experiencing only milder forms of food insecurity, substituting shelf-stable food items with fresh fruit and meats or even a food voucher to purchase foods that fit their individual preferences may be ideal. Lastly, if the goal is to target individuals with moderate food insecurity, or a broad range of individual food insecurity levels, some combination of the above items is likely warranted. Clarifying program goals is only the first step to optimizing food box contents. Ultimately, it will require testing out alternative food box content combinations and comparing their effects on relevant client outcomes like food insecurity.

Food Box Recipient Survey

Data collected via the food box recipient survey reveal how the program is reaching people with a range of need levels, from **food secure** – proving some minimal financial support – to **mildly food insecure** – providing some food reassurance – to **moderately food secure** – providing supplement meals that free-up finances to obtain better quality food – to **severely food insecure** – providing food to clients who are skipping meals and/or going hungry. In our sample, the largest of these groups were food secure individuals, but significant numbers of other more food insecure food box recipients were documented. It is critical to keep in mind that food box recipient survey results represent only a small subset of sites and there is low

confidence that results reflect the total population of food box recipients. Moreover, no data exists for clients' food security *prior* to enrolling in the food box program, which is vital for any confident assessment of target population attributes pre-intervention. Indeed, if the program were working as intended, we would expect to see clients' food security scores improving over the course of their participation in the program. To determine to what extent client food security scores are improving as intended, we recommend systematically collecting outcome data on clients when they first enroll in the food box program and re-assessing periodically thereafter. The recipient survey (Appendix C), or something similar could be used for this purpose. Other key outcome measures to evaluate food box recipients for might include measures of general physical health, mental health, and program satisfaction. These additional measures would be expected to change through effective administration of the program and are relevant to program goals.

The food box recipient survey can be used to systematically evaluate whether the program is reaching clients in need, as well as to begin to understand the causes of that need. Eventually, such understanding could improve strategies for reaching vulnerable older adults throughout the state and perhaps even designing programs that target the underlying causes of older adult need and food insecurity. Many of the measures in the recipient survey were selected with these future uses in mind. However, to be effective as an instrument for understanding need and its causes, as well as for measuring the outcome of food security, this survey, or one like it, would need to be administered systematically and at scale moving forward.

RECOMMENDATIONS

1. Clarify Process Map and Logic Model

We recommend that the food box program process map and logic model clarify several features of the program, including (but not limited to): who the target population is, what criteria are used to select food box sites, the eligibility criteria for recipients, and the guidelines used by food banks for selecting food box contents. Additionally, specific program activities should link to intended outputs, and subsequently, outputs should link to clearly identified outcomes in the short, intermediate, and long-term.

2. Solidify logistics for Food Box Survey

We recommend solidifying how best to implement a recipient survey to assess food box program outcomes. Outcome assessment could be distributed through several different mediums (e.g., paper, digital, telephone, etc.). This will be vital for understanding who is being reached and whether the program is achieving its goal(s).

3. Transparent policies and procedures

We recommend establishing clear policies and procedures for sites regarding delivery of food boxes, and recipient selection and eligibility criteria. We especially recommend

deciding standard practices with respect to delivery intervals. Sporadic or unpredictable food box delivery likely undermines intended goals with respect to food security.

4. Standardized data collection

We recommend establishing some standard data collection procedures for all sites on provision of food boxes. Observations of food box deliveries indicate some sites maintain paper records or do not collect records at all. This information is vital for knowing who the program is helping, and whether food boxes are being consistently provided.

5. Explore alternative food box items

We recommend exploring alternative food box content packages, like shelf-stable options combined with fresh food and meat, or snack food items, etc. Food vouchers could also be combined with food boxes, as with one program we described in the literature review. Observations and provider focus groups suggested that certain food box contents can be problematic for homebound seniors who struggle with activities involved in preparing these food items. Additionally, reassessing how food boxes practically provide seven meals is also warranted.

6. Survey food box recipients' food security needs

We recommend surveying what food items food box recipients use most, what they would like added, and how seniors use food box items. Further, it might be useful to understand whether food box recipients have input on how often they would like to receive food boxes and whether alternatives like food vouchers are preferred. CARA is ready to offer technical assistance in this capacity if ALTSD desires.

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APPENDIX A

ALTSD Food Box Delivery -- Observation Form

Provider:	<input type="checkbox"/> Wagon Mound	<input type="checkbox"/> Twin Lakes	<input type="checkbox"/> Joy	<input type="checkbox"/> Reserve	<input type="checkbox"/> Gallup
	<input type="checkbox"/> Tierra Amarilla	<input type="checkbox"/> White Horse	<input type="checkbox"/> Clayton	<input type="checkbox"/> Roy	
Method:	<input type="checkbox"/> Delivery	<input type="checkbox"/> Pickup			
Date:	____ / ____ / ____		Start Time:	_____	
Observer:	_____				
# of Boxes	Delivery: _____		Pick-Up: _____		

The purpose of this observation is to understand the type, frequency, and quality of services being provided to Food Box Program clients. The intention is to be able to track indicators of program fidelity and best practice. Observation form sections should be completed after taking very thorough field notes. The field notes should begin with the preparations for food delivery and continue until observation of delivery related activities have ceased. Do not interpret what is going on. The observation must be completely objective. No information should be collected about specific clients or staff members. When filling out the form with your observation notes, do not be limited to the lined portion, they are a place holder. Record additional field notes in the appropriate section at the end of this observation guide. Fill out the observation form the same day observations are made.

PREPARATIONS:

What are in Food boxes? [e.g., canned food, fresh fruit, fresh vegetables, etc.]

What information do providers access and/or record about Food Box recipients prior to delivery?

DELIVERY:

What time of day and over what period of time are deliveries made?

Who facilitates deliveries and/or pick-ups? [Note general demographic and professional characteristics of providers only. DO NOT note names or other personal identifying information].

PROVIDER/CLIENT INTERACTIONS:

Is there a predictable script or pattern regarding provider-client interaction? If YES, describe those features. If NO, describe key variation. [e.g., greeting, explanation of service, small talk, querying of client, giving of Food Box, feedback from client, planning for future delivery and verifying up-to-date contact info, goodbye's].

What aspects of interactions vary by clients and/or providers?

How do clients respond to providers? [e.g., *Do clients recognize providers? Do clients appear to understand why the provider is there in the first place? What are clients' attitude(s) toward the provider?*]

What kinds of feedback did clients volunteer during deliveries/pick-ups?

What information did providers solicit from clients? [e.g., *assessments administered, client questions about Food boxes, etc.*]

What information did providers record about deliveries/pick-ups?

What happens when clients are absent? [e.g., *is absence documented, are Food boxes left on doorstep, etc.*]

When and how does the service delivery day end for the day?

Any other noteworthy observations?

APPENDIX B

Focus Group Guide for Food Box Providers

Objectives:

- | | | |
|---|--------------------------------------|---|
| (1) Understand the process of outreach and enrollment | (3) Understand the target population | (5) Explore perceptions of outreach effectiveness |
| (2) Understand the process of service delivery | (4) Understand pertinent outcome(s) | (6) Explore perceptions of service effectiveness |

Welcome & Overview

Thank you for participating in this focus group! The Aging & Long-Term Services Department has contracted the UNM Center for Applied Research & Analysis (CARA) to conduct an evaluation of **The Rural Senior Food Box Initiative**. The primary purpose of this focus group is to tap into your expertise and understanding of the food box program, and better understand your thoughts and ideas regarding implementation and whether the program can be improved. We will be talking with you for the next 90 minutes. Please speak from your own experience and knowledge. We are interested in hearing your honest feedback and opinions, and there are no right or wrong answers.

Assurance of Confidentiality/Anonymity

No names will be associated with the transcript of the audio recording of this focus group, notes or summaries, or reports. The information you share with us is anonymous and confidential. We hope to hear from all of you at some point during the discussion, and you are not required to answer any question.

Statement of Ground Rules

What we would like from you as participants

- About 90 minutes of your time
- To hear from each of you
- To hear from you one at a time
- Allow everyone a chance to speak
- Your patience and understanding
- Your respectful treatment of one other
 - Please keep each other's words private. You are free to talk about the ideas you hear and discuss, but please do not say who was here or what they said
 - Agree to disagree with each other

What you can expect from staff running this focus group

- It's okay to get food, answer a call, or use facilities
- Note-taking by research staff
- This discussion will be audio recorded to ensure accuracy of your responses. We don't want to interpret or paraphrase your responses
- No use of your name with anything we write down – it will be erased from the tape recordings and notes will refer to each person as a number
- We will respect your discomfort if you wish to be excused from the discussion

PRE-SURVEY & REFRESHMENTS [5 minutes]

- *Allow participants to collect food and fill-out pre-survey. Note-taker or co-facilitator should collect these as participants complete them.*

PROCESS TOUR [40 minutes]

- **OUTREACH - What kinds of outreach do you engage in?**

PROBE:

- | | |
|--|---|
| <input type="checkbox"/> How do you make sure people know about, or are aware of the food box program? | <input type="checkbox"/> Are food box recipients ever referred to you? If so, how and by who? |
|--|---|

- **INTAKE - When someone is interested in participating in the food box program, what happens as part of “intake”, before they can receive a food box?**

PROBE:

- | | |
|---|---|
| <input type="checkbox"/> How do you know if someone is eligible, or is a good fit for the food box program? | <input type="checkbox"/> What information do you collect for a client and when do you collect it relative to the actual delivery of the food box? |
| <input type="checkbox"/> Do you use any assessments with food box recipients? | <input type="checkbox"/> Where do you store/enter that data? |

- **SERVICE DELIVERY - How do clients receive food boxes?**

PROBE:

- | | |
|---|---|
| <input type="checkbox"/> What kinds of (food) items are included in food boxes? | <input type="checkbox"/> How do you follow up with clients to provide subsequent food box deliveries? |
|---|---|

- **DISCHARGE - Under what circumstances is someone unenrolled, or discharged from the program?**

PROBE:

- | | |
|--|---|
| <input type="checkbox"/> Under what circumstances are clients unenrolled or discharged from the program? | <input type="checkbox"/> Where do you enter data? |
|--|---|

CHECK TIME – HALF-WAY POINT

PROGRAM GOALS & DESIGN [10 minutes]

- **What is the goal of the program?**

PROBE:

- | | |
|--|--|
| <input type="checkbox"/> What kinds of people do you try to reach with food boxes? Why those people? | <input type="checkbox"/> Do you think the food box program fills a gap in existing services? Why or why not? |
| <input type="checkbox"/> How do you know if food boxes are working or not for [TARGET POPULATION]? | |

PROGRAM EFFECTIVENESS AND CHALLENGES [40 minutes]

- **What does food insecurity mean to you?**

PROBE:

- | | |
|--|---|
| <input type="checkbox"/> Do you think food boxes are effective at reducing anxiety and/or uncertainty about access to food among recipients? Why or why not? | <input type="checkbox"/> Do you think food boxes reduce recipients' hunger and improve the amount of food recipients consume? Why or why not? |
| <input type="checkbox"/> Do you think food boxes are effective at improving the quality of food that recipients consume? Why or why not? | |

- **What feedback have you received from clients about food boxes?**

PROBE:

- | | |
|---|--|
| <input type="checkbox"/> What kinds of challenges does the food box program have? | <input type="checkbox"/> What kinds of improvements could be made? |
| <input type="checkbox"/> What kinds of successes has the food program had? | |

CLOSING [5-Minutes]

- **Is there anything else related to the Food Box program that we haven't had a chance to discuss, and that you'd like to share?**

APPENDIX C

ALTSD Food Box Recipient Survey

Instructions: Please indicate your choice with a ✓ or X inside the appropriate box.

☐ ✓ Or ☐ X Ex.

Q1. What is the highest level of school you have completed or the highest degree you have received?

- | | |
|---|---|
| <input type="checkbox"/> Less than HS | <input type="checkbox"/> Bachelor's degree (4-year) |
| <input type="checkbox"/> High School Graduate (HS diploma or GED) | <input type="checkbox"/> Master's degree |
| <input type="checkbox"/> Some college but no degree | <input type="checkbox"/> Professional degree (JD, MD) |
| <input type="checkbox"/> Associates degree (2-year) | <input type="checkbox"/> Doctoral degree |

Q2. When answering this next question, please remember to include your income PLUS the income of all family members living in your household.

What is your best estimate of the total income of all family members from all sources, before taxes, in the last calendar year (2022)?

Q3. Which statement best describes your current employment status?

- | | |
|--|---|
| <input type="checkbox"/> Working now (paid employee) | <input type="checkbox"/> Not working (retired) |
| <input type="checkbox"/> Working now (self-employed) | <input type="checkbox"/> Not working (disability) |
| <input type="checkbox"/> Not working (temporary layoff from a job) | <input type="checkbox"/> Not working (Other) |
| <input type="checkbox"/> Not working (looking for work) | Please Specify _____ |

Q4. How many total people – adults **and** children – currently live in your household, including yourself? *Select your response from the options below.*

- | | | |
|----------------------------|-----------------------------|-----------------------------|
| <input type="checkbox"/> 1 | <input type="checkbox"/> 6 | <input type="checkbox"/> 11 |
| <input type="checkbox"/> 2 | <input type="checkbox"/> 7 | <input type="checkbox"/> 12 |
| <input type="checkbox"/> 3 | <input type="checkbox"/> 8 | <input type="checkbox"/> 13 |
| <input type="checkbox"/> 4 | <input type="checkbox"/> 9 | <input type="checkbox"/> 14 |
| <input type="checkbox"/> 5 | <input type="checkbox"/> 10 | |

Q5. How many people under 18-years old **currently** live in your household?

- | | | |
|----------------------------|----------------------------|-----------------------------|
| <input type="checkbox"/> 0 | <input type="checkbox"/> 5 | <input type="checkbox"/> 10 |
| <input type="checkbox"/> 1 | <input type="checkbox"/> 6 | <input type="checkbox"/> 11 |
| <input type="checkbox"/> 2 | <input type="checkbox"/> 7 | <input type="checkbox"/> 12 |
| <input type="checkbox"/> 3 | <input type="checkbox"/> 8 | <input type="checkbox"/> 13 |
| <input type="checkbox"/> 4 | <input type="checkbox"/> 9 | |

Q6. SKIP this question if no one under 18 years old lives in your household:

In your household, are there...*select all that apply.*

- ☐ Children under 5 years old

- ☐ Children 5 through 11 years old
☐ Children 12 through 17 years old

Q7. How do you usually get to the store where you do most of your food shopping?

- | | |
|---|--|
| <input type="checkbox"/> Drive own car | <input type="checkbox"/> Ride bicycle |
| <input type="checkbox"/> Use someone else's car | <input type="checkbox"/> Someone else goes to the store for me |
| <input type="checkbox"/> Someone else drives me | <input type="checkbox"/> Other |
| <input type="checkbox"/> Walk | Please Specify: _____ |
| <input type="checkbox"/> Bus/Shuttle | |
| <input type="checkbox"/> Taxi/Uber/Lyft | |

Q8. How long does it take to go one way from home to this store in minutes?

- _____ Minutes
☐ Don't know

Q9. Please read each question below and select the option how much it applied to you **in the past four weeks**:

a.	<i>In the past four weeks, did you worry that your household would not have enough food?</i>						
<input type="checkbox"/>	No, never	<input type="checkbox"/>	Yes, but rarely; once or twice	<input type="checkbox"/>	Yes, sometimes; three to ten times	<input type="checkbox"/>	Yes, often; more than ten times
b.	<i>In the past four weeks, were you or any household member not able to eat the kinds of foods you preferred because of a lack of resources?</i>						
<input type="checkbox"/>	No, never	<input type="checkbox"/>	Yes, but rarely; once or twice	<input type="checkbox"/>	Yes, sometimes; three to ten times	<input type="checkbox"/>	Yes, often; more than ten times
c.	<i>In the past four weeks, did you or any household member have to eat a limited variety of foods due to a lack of resources?</i>						
<input type="checkbox"/>	No, never	<input type="checkbox"/>	Yes, but rarely; once or twice	<input type="checkbox"/>	Yes, sometimes; three to ten times	<input type="checkbox"/>	Yes, often; more than ten times
d.	<i>In the past four weeks, did you or any household member have to eat some foods that you really did not want to eat because of a lack of resources to obtain other types of food?</i>						
<input type="checkbox"/>	No, never	<input type="checkbox"/>	Yes, but rarely; once or twice	<input type="checkbox"/>	Yes, sometimes; three to ten times	<input type="checkbox"/>	Yes, often; more than ten times
e.	<i>In the past four weeks, did you or any household member have to eat a smaller meal than you felt you needed because there was not enough food?</i>						
<input type="checkbox"/>	No, never	<input type="checkbox"/>	Yes, but rarely; once or twice	<input type="checkbox"/>	Yes, sometimes; three to ten times	<input type="checkbox"/>	Yes, often; more than ten times
f.	<i>In the past four weeks, did you or any household member have to eat fewer meals in a day because there was not enough food?</i>						
<input type="checkbox"/>	No, never	<input type="checkbox"/>	Yes, but rarely; once or twice	<input type="checkbox"/>	Yes, sometimes; three to ten times	<input type="checkbox"/>	Yes, often; more than ten times
g.	<i>In the past four weeks, was there ever no food to eat of any kind in your household because of lack of resources to get food?</i>						
<input type="checkbox"/>	No, never	<input type="checkbox"/>	Yes, but rarely; once or twice	<input type="checkbox"/>	Yes, sometimes; three to ten times	<input type="checkbox"/>	Yes, often; more than ten times
h.	<i>In the past four weeks, did you or any household member go to sleep at night hungry because there was not enough food?</i>						
<input type="checkbox"/>	No, never	<input type="checkbox"/>	Yes, but rarely; once or twice	<input type="checkbox"/>	Yes, sometimes; three to ten times	<input type="checkbox"/>	Yes, often; more than ten times
i.	<i>In the past four weeks, did you or any household member go a whole day and night without eating anything because there was not enough food?</i>						
<input type="checkbox"/>	No, never	<input type="checkbox"/>	Yes, but rarely; once or twice	<input type="checkbox"/>	Yes, sometimes; three to ten times	<input type="checkbox"/>	Yes, often; more than ten times

Q10. People sometimes look to others for companionship, assistance, or other types of support. **How often is each of the following kinds of support available to you if you need it?** (Select one option on each line).

a.	<i>Someone to help you if you were confined to bed.</i>				
	<input type="checkbox"/> None of the time	<input type="checkbox"/> A little of the time	<input type="checkbox"/> Some of the time	<input type="checkbox"/> Most of the time	<input type="checkbox"/> All of the time
b.	<i>Someone to take you to the doctor if you needed it.</i>				
	<input type="checkbox"/> None of the time	<input type="checkbox"/> A little of the time	<input type="checkbox"/> Some of the time	<input type="checkbox"/> Most of the time	<input type="checkbox"/> All of the time
c.	<i>Someone to prepare your meals if you were unable to do it yourself.</i>				
	<input type="checkbox"/> None of the time	<input type="checkbox"/> A little of the time	<input type="checkbox"/> Some of the time	<input type="checkbox"/> Most of the time	<input type="checkbox"/> All of the time
d.	<i>Someone to help you with daily chores if you were sick.</i>				
	<input type="checkbox"/> None of the time	<input type="checkbox"/> A little of the time	<input type="checkbox"/> Some of the time	<input type="checkbox"/> Most of the time	<input type="checkbox"/> All of the time

Q11. Select one response for each question to indicate how much you agree or disagree.

a.	<i>People in my local community share the same values.</i>					
	<input type="checkbox"/> Strongly Disagree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Slightly Disagree	<input type="checkbox"/> Slightly Agree	<input type="checkbox"/> Agree	<input type="checkbox"/> Strongly Agree
b.	<i>People in my local community respect each other's rights.</i>					
	<input type="checkbox"/> Strongly Disagree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Slightly Disagree	<input type="checkbox"/> Slightly Agree	<input type="checkbox"/> Agree	<input type="checkbox"/> Strongly Agree
c.	<i>If there is a problem in my local community, the people who live here work together to get it resolved.</i>					
	<input type="checkbox"/> Strongly Disagree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Slightly Disagree	<input type="checkbox"/> Slightly Agree	<input type="checkbox"/> Agree	<input type="checkbox"/> Strongly Agree
d.	<i>People in my local community can be trusted.</i>					
	<input type="checkbox"/> Strongly Disagree	<input type="checkbox"/> Disagree	<input type="checkbox"/> Slightly Disagree	<input type="checkbox"/> Slightly Agree	<input type="checkbox"/> Agree	<input type="checkbox"/> Strongly Agree

Q12. Select one response for each question below:

a.	<i>In a typical week, about <u>how many hours</u> do you spend socializing with people who are <u>not</u> family or close friends?</i>					
	<input type="checkbox"/> None	<input type="checkbox"/> 1-2 hours	<input type="checkbox"/> 3-4 hours	<input type="checkbox"/> 5-6 hours	<input type="checkbox"/> 7-8 hours	<input type="checkbox"/> 9 or more hours
b.	<i>In a typical week, <u>how many people</u> other than family or close friends do you spend time socializing with?</i>					
	<input type="checkbox"/> No one	<input type="checkbox"/> 1-2 people	<input type="checkbox"/> 3-5 people	<input type="checkbox"/> 6-9 people	<input type="checkbox"/> 10-14 people	<input type="checkbox"/> 15 or more people
c.	<i>In the past 12 months, <u>how many different social groups</u> have you been a member of? (E.g., church groups, community organizations, sports teams, work groups, clubs, etc.).</i>					
	<input type="checkbox"/> None	<input type="checkbox"/> 1-2 groups	<input type="checkbox"/> 3-4 groups	<input type="checkbox"/> 5-6 groups	<input type="checkbox"/> 7-8 groups	<input type="checkbox"/> 9 or more groups
d.	<i>In the past 12 months, <u>how often</u> have you joined in the activities of a social group of more than 5 people, <u>not</u> including family or close friends? (E.g., church services, community events, group games or recreational activities, group work activities, club activities, etc.).</i>					
	<input type="checkbox"/> Never	<input type="checkbox"/> Once in the year	<input type="checkbox"/> Once every 6 months	<input type="checkbox"/> Once every 2-3 months	<input type="checkbox"/> Once a month	<input type="checkbox"/> more than once a month

Q13. Select one response for each question below:

a.	<i>If you had a serious personal crisis and you needed help and comfort, how many people could you ask for help?</i>					
	<input type="checkbox"/> No one	<input type="checkbox"/> 1-2 people	<input type="checkbox"/> 3-4 people	<input type="checkbox"/> 5-6 people	<input type="checkbox"/> 7-8 people	<input type="checkbox"/> 9 or more people
b.	<i>If you had an important decision to make, how many people do you trust whom you could ask for advice?</i>					
	<input type="checkbox"/> No one	<input type="checkbox"/> 1-2 people	<input type="checkbox"/> 3-4 people	<input type="checkbox"/> 5-6 people	<input type="checkbox"/> 7-8 people	<input type="checkbox"/> 9 or more people
c.	<i>If you were in financial difficulty and needed to borrow \$50 or more how many people could you ask?</i>					
	<input type="checkbox"/> No one	<input type="checkbox"/> 1-2 people	<input type="checkbox"/> 3-4 people	<input type="checkbox"/> 5-6 people	<input type="checkbox"/> 7-8 people	<input type="checkbox"/> 9 or more people
d.	<i>If you got into a dispute with someone else in the community, how many people could you count on to take your side or "have your back"?</i>					
	<input type="checkbox"/> No one	<input type="checkbox"/> 1-2 people	<input type="checkbox"/> 3-4 people	<input type="checkbox"/> 5-6 people	<input type="checkbox"/> 7-8 people	<input type="checkbox"/> 9 or more people