

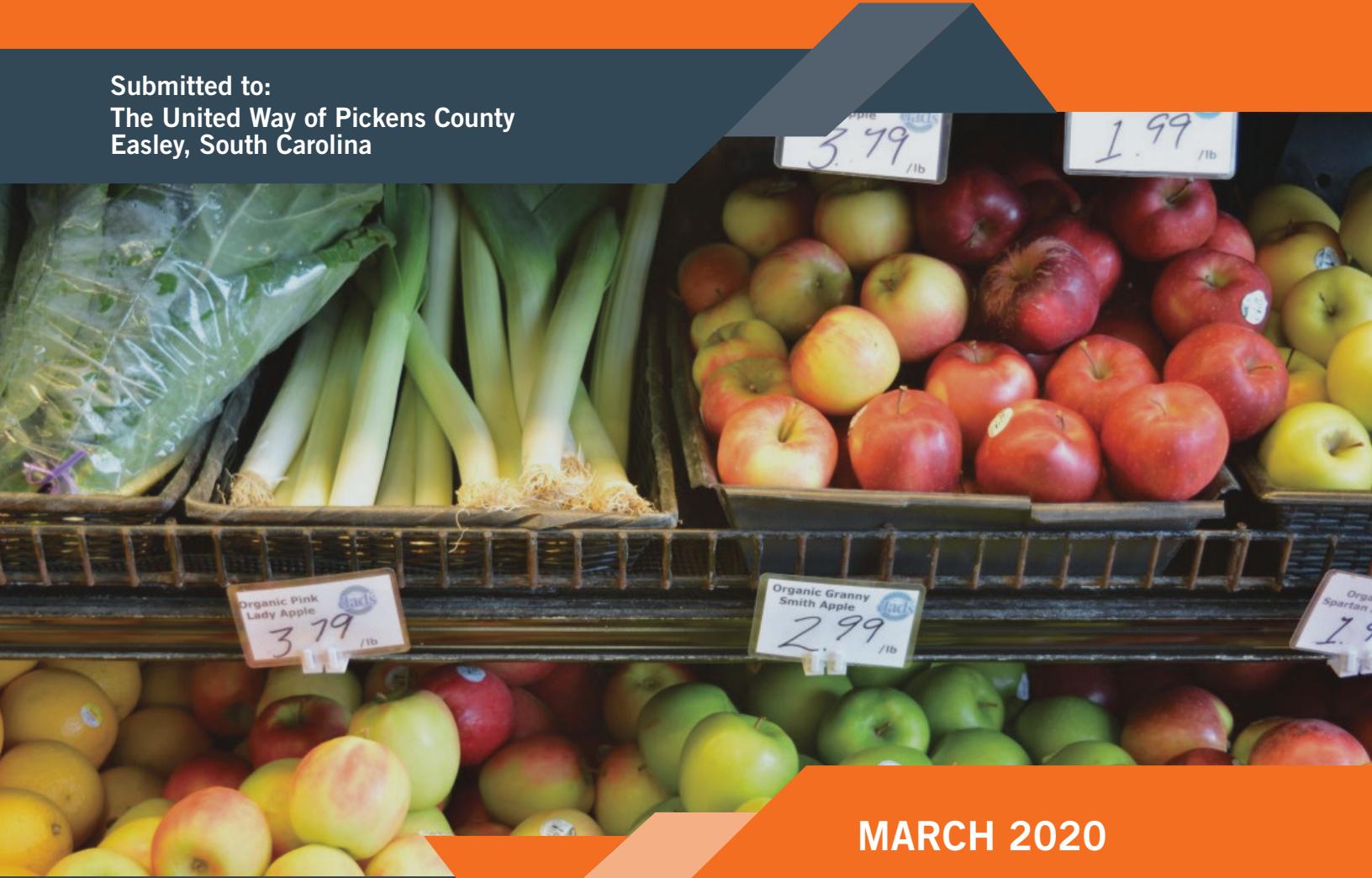
HUNGER AND FOOD INSECURITY IN PICKENS COUNTY, SOUTH CAROLINA: 2019

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*"Hunger is so terrible because it is preventable."
(Pickens County Resident)*

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INTRODUCTION

Ensuring the availability of healthy, affordable food is an essential component of individual health and well-being and is vital to a community's quality of life. While overall hunger and food security rates have improved since the 2008 Great Recession, many individuals face daily challenges in navigating their local food system and thus lack sufficient access to affordable healthy food. Hunger and food insecurity are especially a concern among certain subpopulations and in some areas of the country.

In 2019, the United Way of Pickens County (UWPC) in South Carolina commissioned this study to investigate the extent of hunger and food insecurity in the county. This project is a follow-up to the UWPC study, *Hunger in Pickens County: 2011* (United Way of Pickens County, 2011).

The goals of the current project were to:

- assess the state of hunger and food insecurity in Pickens County in 2019, with a particular focus on understanding the experiences of those who face these issues;
- document, through maps and a transportation study, the extent of the needs and gaps in services; and
- recommend steps for harnessing community assets to address the needs of individuals facing hunger and food insecurity.

This mixed-method study included the following data collection strategies:

- an in-depth survey of 200 community members to learn about their experiences with hunger and food insecurity;
- seven in-depth interviews with community members facing hunger and food insecurity;
- four focus groups, attended by 44 community leaders and agency representatives, to identify community assets and gather perceptions about hunger and food insecurity;
- in-depth interviews with four agency representatives who lead the major food banks or food pantries in Pickens County;
- spatial mapping analysis of food deserts and food establishments;
- spatial mapping of USDA Supplemental Nutrition Assistance Program (SNAP) vendors;
- a transportation study to better understand food access for community members who use the local transit system (i.e., the Clemson Area Transit system); and
- a survey of churches to gain insight into the food-related services they provide to their congregants.

This report begins with some background information on food insecurity and hunger, in general, and in South Carolina and the Upstate, in particular. The remainder of the report presents the main findings from our mixed-method data collection effort, beginning with an overview of some community agencies that address hunger and food insecurity. The results of the community member survey are then described, followed by a discussion of the broader context of hunger and food insecurity in Pickens County. We then present a sector-based approach for addressing these challenges and conclude with several more specific recommendations for moving forward with efforts to address the concerns outlined in the report.

BACKGROUND

HUNGER AND FOOD INSECURITY IN THE UNITED STATES

National food hardship rates have declined since the Great Recession of 2008, but pockets of concern remain. While there has been a decrease in overall rates of annual food insecurity in the United States since 2008, the current rates are only slightly below the rates prior to the Great Recession of 2008 (Food Research and Action Center, 2018a). Despite progress toward food security, according to the U.S. Department of Agriculture (USDA), 37.2 million people lived in food-insecure households and 6 million children lived in food-insecure households in which children, along with adults, were food insecure (USDA, 2019a). In 2018, approximately 11.1% of the U.S. population was food insecure at some time that year (Coleman-Jensen et al., 2019a), with 4.3% experiencing very low food insecurity.

This persistent state of affairs makes clear that food hardship rates “are a reflection of the nation’s long-term failure to address poverty and hunger” (Food Research and Action Center, 2018a, p. 8). In other words, there are numerous systemic barriers to obtaining an adequate supply of healthy food, including geographic obstacles, which prevent both rural and urban residents from obtaining food, and economic challenges, related to unemployment and poverty. Studies have confirmed a positive relationship between poverty and food insecurity, as low-income families are more likely to experience food insecurity, poor growth, poor health conditions, and behavioral and emotional problems (Food and Research Action Center, 2017). Food insecurity is also associated with mental distress (Liu et al., 2014). In turn, these health conditions limit the ability of community members to participate in the labor force (Research Triangle Institute, 2014) and often diminish their ability to participate in community life at large. Thus, hunger and food insecurity are ultimately economic development and health issues, having a negative impact on the overall quality of life of citizens and communities alike.

Households with children are particularly vulnerable to hunger. Food insecurity has negative health consequences for children, including stunted development, anemia and asthma, oral health problems and hospitalizations (as cited in Cook & Jeng, 2009). Children in food insecure households may experience lower reading and math scores, more significant behavior and social problems, and lower high school graduation rates (as cited in Cook & Jeng, 2009).

Children are not the only vulnerable population. According to the USDA, nearly 9% of adults aged 65 or older who lived alone (approximately 1.3 million adults) were food insecure in 2018 (Coleman-Jensen et al., 2019b). Although there was a decrease between 2018 (19.3%) and 2019 (16.9%) in the proportion of adults aged 60 and older who experienced food insecurity, many elderly remain vulnerable to hunger (United Health Foundation, 2019).

HUNGER AND FOOD INSECURITY IN THE SOUTHEASTERN U.S. AND SOUTH CAROLINA

While there has been a decline in food hardship rates in the Southeastern U.S. since 2013, hunger and food insecurity remain vexing challenges in the region as a whole and in South Carolina, in particular. In 2017, the Southern U.S. contained 87% of high food-insecurity rate counties (Gunderson et al., 2019). In 2016-2017, South Carolina ranked seventh worst in food hardship, with 18.3% of households struggling against food hardship (as compared with 15.1% nationally) and ranked 12th worst in food hardship for households with children in 2016-2017 (19.9% of these households, compared with 17.5% nationally; Food Research and Action Center, 2018a). In 2018, South Carolina ranked in the bottom 10 states (ninth worst) in terms of the Food Availability index, a set of factors that contribute to a healthy food environment (Data USA, 2019). The Greenville-Anderson-Mauldin metropolitan statistical area (MSA), in which Pickens County is located, ranks 39th (of 108 metropolitan statistical areas ranked), with an overall food hardship rate of 16.2% and 18.2% in households with children (Food Research and Action Center, 2018a).

In 2017, Pickens County's overall food insecurity rate was 11.6%, with just over 14,000 county residents experiencing food insecurity (as compared to 13.5% of South Carolina residents overall; Feeding America, 2019a). Although the overall food insecurity rate in Pickens County decreased from 13.1% in 2015 to 11.6% in 2017, Pickens County had the 9th lowest food insecurity rate in South Carolina in 2016 (Feeding America, 2019a). The child household food insecurity rate in Pickens County in 2017 was 16.4%, with nearly 4,000 children experiencing food insecurity (slightly lower than the overall state child household food insecurity rate of 18.3%; Feeding America, 2019b). It is important to also consider that 54% of young children in South Carolina (age 6 and under) live in households at or below 200% of the Federal Poverty Level (i.e., they are “low income” families); these are vulnerable families (Carolan, 2019).

BACKGROUND INFORMATION ABOUT PICKENS COUNTY, SC

[Note: The information in this section was obtained from the Appalachian Council of Governments (2019) unless otherwise noted.]

Pickens County, South Carolina is located in the northwest corner of the state. The county, 512 square miles, with a population of 128,097 in 2019, is adjacent to the urban county of Greenville and the rural counties of Anderson and Oconee. All of these counties have witnessed population growth in the past decade. The county seat is located in Pickens, and the other major cities are Clemson, Easley, and Liberty; the main towns are Central, Norris and Six Mile, all located in the lower half of the county, with the exception of Six Mile, which is slightly north of these towns. Although Pickens County is classified as an urban (“medium metro”) county (Ingram & Franco, 2014), much of the county is rural in nature, especially in the upper parts of the county, where the unincorporated, sparsely populated areas of Dacusville, Nine Times, Pumpkintown, Rocky Bottom and Sunset are located.

The county’s proximity to many historical sites, its location along the South Carolina National Heritage Corridor and the Cherokee Foothills Scenic Byway, and its rich natural beauty have made it attractive to tourists and retirees alike. The projected annual growth rate for Pickens County for 2019-2024 is 0.8%, lower than the projected growth rates for the Upstate (1.08%) and the state (1.25%). In terms of demographic characteristics, as of 2019, the county is composed of approximately 87.5% Whites, 6.6% Blacks, and 5.8% other races; 3.7% of the population is Hispanic. Just over one-fourth of county residents report earning a bachelor’s degree or higher. Nearly 14% report an educational attainment level of 9th through 12th grade, without a diploma or less than 9th grade educational attainment.

The services sector is the predominant employment sector in Pickens County (48.9%), followed by manufacturing (15.5%), and retail trade (10.2%). The largest employer in terms of number of employees is Clemson University, with 5,222 employees. The second largest employer in Pickens County is Abbott (manufacturing) with 710 individuals employed. The median household income for 2019 (\$46,893) is approximately 9.6% lower than the median household for South Carolina as a whole (\$51,398). The per capita income for Pickens County in 2019 was \$25,489, slightly lower than the per capita income for South Carolina (\$28,244). Approximately 16.6% of Pickens County residents were living at or below poverty level in 2018, as compared to 15.3% of South Carolina residents overall (U.S. Census Bureau, 2019a). Renter-occupied units comprise 30.6% of all housing units in the county.

According to the 2017 Census of Agriculture (National Agricultural Statistical Service, 2017), in 2017, there were approximately 740 farms in Pickens County (a 2% increase since 2012), accounting for a total of 39,331 acres allocated to farmland in the county. The average farm size in Pickens County in 2017 was 53 acres. Pickens County farms most frequently produce hay (forage), corn, and soybeans. In South Carolina, Pickens County ranks second of 31 counties in the sale of cultivated Christmas trees and short rotation woody crops and 12th of 45 counties selling fruits, trees, nuts and berries. In total, all 2017 Pickens County crop sales amount to \$3,728,000 and all Pickens County sales of livestock, poultry, and products amount to \$2,911,000. The market value of all farm products sold in 2017 was \$6.64 million, a 21% decrease from 2012. Although Pickens County has many farms, only 7% of these farms sell directly to consumers, and none of the 740 farms in Pickens County farm organically.

RESEARCH METHODS

The mixed-method data collection strategy described below was utilized in order to gain a comprehensive overview of food insecurity in Pickens County in 2019. This study was approved by the Clemson University Institutional Review Board in May 2019 (IRB # 2019-133). Data collection took place between May and July 2019. Additional data for the transportation study was collected in January 2020.

COMMUNITY MEMBER SURVEY

Two hundred community members completed a survey designed to elicit information about a variety of topics, including level of food insecurity, sources of food, preferences for preparing food, transportation issues, health-related information, and demographic information (see Appendix A for the survey). The survey was modeled after one used for a study of food insecurity in Ohio (Kaiser, Carr & Fontanella, 2017). To ensure respondents could speak to the issues of hunger and food insecurity, we oversampled for individuals who were already facing hunger and food insecurity. Our use of this purposive sample allowed us to better understand the depth, breadth, and nature of food insecurity among community residents. The results provide valuable insights into the challenges faced by this vulnerable segment of the community.

The survey was administered to individuals at various community agencies, including food banks and food pantries, the Pickens County Department of Social Services, Clemson Community Care, Clemson Free Clinic, the Clemson Farmers Market, Family Promise of Pickens County, Gleaning House, Holly Springs Center, Soapstone Baptist Church, and the Summer Feeding Programs at Pickens Elementary School and West End Elementary School. Participants were provided with a \$10 gift card upon survey completion.

When reporting survey results, we provide basic frequencies (i.e., descriptive data, reporting the “valid percents” and responses for those individuals who responded to a particular survey item). Thus, caution should be taken when interpreting these results as there may be a relationship between demographic and socioeconomic variables that are not fully captured with descriptive data (e.g., poverty and food insecurity are often correlated with one another).

COMMUNITY MEMBER INTERVIEWS

In-depth interviews were conducted with seven community members who were facing food insecurity, as identified by directors of agencies serving low-income residents. The purpose of these interviews was to gain more in-depth knowledge about the day-to-day challenges that community members face when attempting to meet their food needs. (See Appendix B for the interview protocol.) Interview quotes, which appear in italics below, have been edited for clarity, using standard editing methods (e.g., using ellipses to shorten quotes and brackets to clarify relevant terms mentioned earlier in the interview, removing digressions and fillers, and eliminating any identifiers). To ensure anonymity and confidentiality, generic pronouns (i.e., “they” or “their”) rather than gender-based pronouns (e.g., “he” or “she”) are used when referring to comments from the interviews with community members. Interviewees were provided with a \$20 gift card upon completion of the interview.

FOCUS GROUPS

Four focus groups were held throughout the community to gain a better understanding of key stakeholders’ views and insights about hunger and food insecurity in Pickens County and about the community agencies serving county residents. (See Appendix C for the focus group protocol and Appendix D for a list of agencies represented in the focus groups.) We used a snowball sample to recruit focus group participants, beginning with UWPC staff members who identified individuals to invite to the focus group. The focus groups were also publicized through an op-ed published in the *Pickens Sentinel* in June 2019 (see Appendix E). Focus groups included between seven and fifteen individuals (e.g., food assistance agents, health professionals, legislators, Pickens County residents, religious leaders, etc.) and lasted between 45 minutes and one hour each; a total of 44 individuals participated in the focus groups. The community leader who organized the first focus group received a \$50 Walmart gift card to honor their time in organizing and recruiting focus group participants.

KEY INFORMANT INTERVIEWS

To gain more insights into the nature of hunger and food insecurity and to learn more about the various community agencies addressing this area of need, we interviewed the leaders of four local agencies that provide food to community members in need. (See Appendix F for the interview protocol.) One key informant received a \$50 Walmart gift card (as a donation to the agency) for allowing the research team to administer surveys at their site and for completing the interview.

CHURCH SURVEY

The 2011 UWPC study on hunger in Pickens County (UWPC, 2011) identified churches as an essential asset for addressing food insecurity in the county. To extend this prior research, we surveyed local churches in Pickens County to gather insights about residents' needs and to learn whether congregations offered food pantries or other services to their congregation and the community at large. (See Appendix G for the church survey.) A list of churches in Pickens County was created using the Community Profile Builder resource on the Association of Religion Data Archives (www.thearda.com). The names and denominational affiliations of congregations shown in the community profile are based on data from Infogroup. After compiling the database with contact information for the 212 churches on the final list for Pickens County, we called or emailed these churches requesting their participation in the survey. In the end, 45 churches completed the survey, for a 21.2% response rate.

MAPPING ANALYSIS

In order to better understand the geographic nature of hunger and food insecurity in Pickens County, several maps were created. As described below, these maps provided information about the sociodemographic characteristics of county residents, transportation routes, the location of low-income housing, and retailers who are authorized vendors for the USDA Supplemental Nutrition Assistance Program (SNAP).

Demographics and Socioeconomic Data. Using data collected from the American Community Survey using 5-year estimates from 2016 (U.S. Census Bureau, 2019b), socioeconomic variables included median household income and the rate of household SNAP participation, population who completed their high school diploma, and households without access to a vehicle. Similar to the socioeconomic data, black population and Hispanic population data were collected from the American Community Survey using 5-year estimates from 2016.

Low-Income Housing Data. All low-income housing addresses and eligibility type were obtained through the website of Affordable Housing Online (2019). Housing sites were georeferenced using ArcGIS.

Bus Routes. Bus routes were obtained through the Clemson Area Transit website (Clemson Area Transit, 2019). Shapefiles for each route were downloaded and georeferenced using ArcGIS.

SNAP-Authorized Vendors. The list of SNAP-authorized vendors was downloaded from the USDA Food and Nutrition Services SNAP Food Retailer Locator website (USDA, 2020). The list was based in the 2018 Federal fiscal year and included store name, address (street, city, county and ZIP), and latitude and longitude coordinates. Each store was categorized by retail type based on the North American Industry Classification Systems (NAICS) codes. Small grocers, defined as grocery stores with less than three employees, were identified through the Business Analyst tool from ESRI ArcGIS. Each retailer was geocoded using ESRI ArcGIS. Each SNAP-authorized retailer was coded as healthy or unhealthy based on the Centers for Disease Control and Prevention (2011) criteria. This classification system is listed in Table 1.

Table 1. Classification of SNAP Retailers

RETAIL TYPE	CODE	CLASSIFICATION
SUPERMARKETS	445110	HEALTHY
FRUITS AND VEGETABLE MARKET	445230	HEALTHY
CONVENIENCE STORES	445120	UNHEALTHY
SMALL GROCERS	445110	UNHEALTHY
DISCOUNT VARIETY STORES	452319	UNHEALTHY
WAREHOUSE MEMBERSHIP CLUB	452910	HEALTHY
PHARMACY	446110	UNHEALTHY

TRANSPORTATION STUDY

Two members of the research team conducted a transportation study to better understand the challenges that community members may face when using public transportation to access food. In May 2019, the researchers rode four separate Clemson Area Transit (CAT) system routes that traveled to and from local grocery stores. The goal of this effort was to understand how the buses are used during the summer (with reduced summer “holiday hours”) when the city of Clemson has a decreased population due to the departure of university students for the summer. In January 2020, one member of the research team rode two CAT bus routes during the semester when Clemson University was in session.

While riding the bus routes, the researchers used a bus audit guide (Appendix H) to record detailed notes, such as what time the bus arrived at each stop, how long the bus waited at each stop, what food sites were at each stop, the distance from food sites to each stop, and the time that each individual arrived onto the bus and then left the bus. The researchers noted every food and beverage store the bus passed or stopped at, including convenience stores, gas stations, grocery stores, fast food restaurants, liquor stores, dine-in restaurants, and supermarkets. Additional data included whether or not each bus stop provided covered shelter.

STUDY RESULTS

This section of the report begins with a brief overview of the community agencies that address hunger and food insecurity in Pickens County and then proceeds with a description of the results of the community survey. This section provides insights into the individual-level challenges faced by community members in accessing healthy, affordable food. The report then continues with a discussion of the broader context of hunger and food insecurity, including the geographic and systemic causes of hunger related to food deserts, inadequate transportation systems, and other systemic, contextual challenges. Information from the focus groups, community member interviews, and key informant interviews is also provided to contextualize the survey results. Quotes from the in-depth interviews with community members are marked by “Community Member”; quotes from the focus groups are denoted with the label “Focus Group Participant”; and quotes from the in-depth interviews with agency leaders are labelled as “Agency Representative.”

COMMUNITY AGENCIES ADDRESSING HUNGER AND FOOD INSECURITY IN PICKENS COUNTY

Pickens County’s non-profit organizations are a vital part of the community, providing essential services and resources to community members. These agencies are located throughout the county, serving the immediate and ongoing needs of local residents. Organizations that address

hunger and food insecurity in the county are staffed by individuals who are passionate about improving the quality of life for community residents and are essential partners in efforts to address these ongoing challenges. While the main aim of this report was not to provide a comprehensive overview of community assets, it is important to recognize and honor the ongoing efforts to increase food access for the county's most vulnerable residents. These agencies will provide a valuable starting point for any future initiatives to address hunger and food insecurity in Pickens County.

Non-Profit Agencies

To provide a sense of the variety of services provided to county residents, we highlight five community-based agencies below: Clemson Community Care, Gleaning House Ministries, Golden Harvest, SHINE Soup Kitchen, and United Christian Ministries. These five agencies were an essential part of this data collection effort, with staff participating in interviews and focus groups and providing support for recruiting community members who participated in the community member surveys and in-depth interviews. The information below was obtained through the agency websites and from the key informant interviews.

Clemson Community Care (CCC) (www.clemsoncommunitycare.org), located in southwest Pickens County, was established in 1998 by religious leaders in the Clemson area. The mission of CCC is “is to assist persons in difficult circumstances with necessities such as food, shelter and utilities, and to help them to become self-sufficient through educational programs and advocacy.” The agency serves community members from Clemson, Central, and Pendleton (Anderson County), providing a variety of services including food distribution, SNAP applications, utility bill assistance and rental assistance. Individuals receive boxes of food, that contain primarily staple items. CCC’s Senior Food Box Program provides monthly boxes of supplemental groceries, averaging 20 pounds each, to qualifying low-income senior citizens. In 2018, CCC received a SNAP outreach grant through the S.C. Department of Social Services and the U.S. Department of Agriculture for 2018-2019. In 2018, CCC served 3,008 families and 7,652 individuals; 245,270 pounds of food were distributed during that same year.

Gleaning House Ministries is located in the city of Pickens, directly across the street from the Department of Social Services building. Gleaning House Ministries is the largest physical food provider the research team came across. Located in a warehouse, Gleaning House Ministries is entirely volunteer driven. Agency volunteers travel throughout the county, picking up food from various donors, such as Golden Harvest and grocery stores (e.g., Walmart). The food is then distributed on Tuesday mornings from the warehouse. On average, Gleaning House Ministries supplies food for 200-250 families each week, suggesting the massive scale of their operation.

Golden Harvest (<https://goldenharvest.org>) is a regional organization that serves Georgia and South Carolina. The local agency does not directly provide food to individuals; instead, this organization collects, stores, and distributes donated and purchased food to institutions that then provide food to community members. For example, Golden Harvest provides food to SHINE Soup Kitchen and Gleaning House Ministries. The Upstate South Carolina Distribution Center serves Anderson, Oconee, and Pickens counties. The agency also operates several other food-related programs, including a Senior Food Box program for senior citizens and a Backpack Program for children.

SHINE Soup Kitchen (www.shinesoupkitchen.org) is affiliated with and located at the DREAM Center in Easley, SC. Founded in 2004, SHINE Soup Kitchen “offers a balanced nutritious meal each day in a safe, clean and loving environment to all who are hungry.” The goal of SHINE Soup Kitchen is primarily to provide food and a sense of community to area residents. The soup kitchen is open to the public; there is no minimum income criteria to be eligible to eat. The agency offers its “no-questions-asked” meal Monday through Friday, from 5:30-6:30 pm. Staff volunteers also offer a shuttle to and from low-income housing complexes to the SHINE Soup Kitchen for the daily meal. In 2019, the agency partnered with the DREAM Center to provide meals to community members who were living in Opportunity Village, a transitional housing program located at the DREAM Center. According to the agency website, more than 22,000 meals were served to community members in 2014, the latest date for which information was provided.

United Christian Ministries (UCM) of Pickens County (www.ucmpc.org), located in Easley, SC, “is an extension of the church community; working together to meet the basic needs of [its] neighbors by offering direct services, education and advocacy.” Initiated in 1989, UCM collaborates with more than 80 churches to provide food, emergency assistance, and financial services (e.g., assistance with SNAP applications) to community residents, functioning similarly to Clemson Community Care in its capacity to serve the community. In 2003, UCM joined forces with the Samaritan Health Clinic to form the Good Samaritan Alliance. Through its food distribution program, community members receive a three-day supply of food. UCM also provides emergency food assistance through USDA’s The Emergency Food Assistance Program (TEFAP). In 2019, UCM provided 24,641 meals to 3,849 individuals. Nearly a third of those served through UCM’s food ministry were children under the age of 18 and one-fifth (20%) were seniors over the age of 60.

Local Churches

The researchers attempted to contact, via email and phone, all 212 churches listed in the ARDA database (see methods section above). Forty-five churches ultimately completed the survey, for a 21% response rate. A primary question in the survey was: “In the past year, have any church

members expressed that they are facing challenges in gaining access to healthy affordable food?” Sixteen churches answered affirmatively to this question; thus, approximately 35.5% of respondent churches said that some of their members face food shortages.

Respondents described a variety of manifestations of hunger and food insecurity among their congregants, in response to the statement “Describe the nature and extent of the need that has been expressed.” Responses included “*job loss and fixed income*”; “*purchasing less*”; “*member may need help with power bill due to cost of food purchases*”; and “*some [regular] church members come through the [church] food pantry*.”

Eleven of the churches (24%) that responded to the survey indicated that they offer a food pantry as of summer 2019. Ten of the 11 churches that offer food assistance services said they receive at least some food from church member donations; the other church said they received some food donations from restaurants. Churches provided these food-related services at a variety of times and days of the week. For example, one church described offering a “*24-hour, self-serve*” option, with food left in a location in the church parking lot. Another offered food during the fourth Friday of the month, while another offered food resources twice a week, on a “*first-come, first-serve*” basis. Another church indicated that individuals can only receive services once a month.

Churches that offer food services varied in whether they provided their food services to church members only or to all community members who express a need. Churches that offer food services also varied in the requirements for receiving food donations. While several churches indicated they are indiscriminate when providing food services, others required that community members provide identification in order to receive food assistance (to verify town of residence). Another church indicated that they specifically prefer to serve only individuals from the town in which the church is located; another limited their food pantry provisions to residents living in one of four zip codes areas.

Congregations provide assistance to community members in a variety of ways:

- Providing food to children through an outreach program
- Purchasing grocery gift cards and distributing them on an as-needed basis
- Making snack bags for distribution to individuals who are homeless
- Providing meals to members in need through the Family Promise program
- Collecting donations for the U.S. Postal Service food drive
- Providing food donations to Gleaning House Ministries
- Participating in a Clemson Community Care food drive, often on a weekly basis during church services
- Offering breakfast every Sunday at the church
- Contributing \$1000 a year to Feed-A-Hungry-Child (through member donations)

- Using the church van to transport community members to SHINE Soup Kitchen
- Providing bag lunches on weekends
- Taking a benevolence offering every Wednesday that is then provided to a local food pantry.

Although several churches indicated that some members were possibly facing food shortages, relatively few offered a food pantry on an ongoing basis. When asked why, some churches indicated that while they provided a food pantry or direct food assistance in the past, they are now unable to do so due to a lack of resources (i.e., money, time, and personnel). Churches also suggested that providing food or monetary donations to established food pantries in the area was seemingly a better use of resources than attempting to provide food services directly to church members or local residents.

Numerous additional agencies and individuals in Pickens County address hunger and food insecurity and associated challenges, such as poverty and unemployment. These agencies often collaborate with one another to help community members in Pickens County and beyond. Future efforts should build on these agencies' efforts and existing partnerships.

SURVEY RESULTS

This section of the report summarizes the results of the community member survey, beginning with an overview of the survey respondents' demographic characteristics and then proceeding with a summary of the responses to the main survey questions. Additional information from the community member interviews, key informant interviews and focus groups provides further context for the survey results.

Demographic Characteristics of Survey Respondents

The survey respondents' demographic characteristics are summarized in Appendix I. Although a random sample was not used for the survey, Census data are provided to allow for comparisons between the characteristics of survey respondents and the characteristics of Pickens County residents overall.

Nearly 71% of survey respondents were female (as compared to nearly 50% of the Pickens County population). The survey sample included a higher proportion of African Americans (22.7%) than represented amongst the Pickens County population (6.5%). Nearly 55% of survey respondents indicated they had earned a high school diploma or earned less than a high school degree (as compared to 45.7% of Pickens County residents). The income level of survey respondents was disproportionately lower for survey respondents than for Pickens County residents as a whole; for example, 23.6% of survey respondents indicated an income of less than

\$10,000, as compared to 8.5% of Pickens County residents. In terms of employment status, 41% of respondents reported that no one in their household, including themselves, was working full time (at least 35 hours per week). Nearly 1/3 (32.5%) of survey respondents indicated that one household member was working full time. Overall, then, the survey sample was disproportionately female, black, lesser educated, and poorer than the overall Pickens County population, reflecting the use of a purposive sample of individuals who were already likely facing food insecurity.

To determine the general geographic distribution of survey respondents, respondents were asked to provide either their address, zip code of residence or the location of the major intersection near their residence.

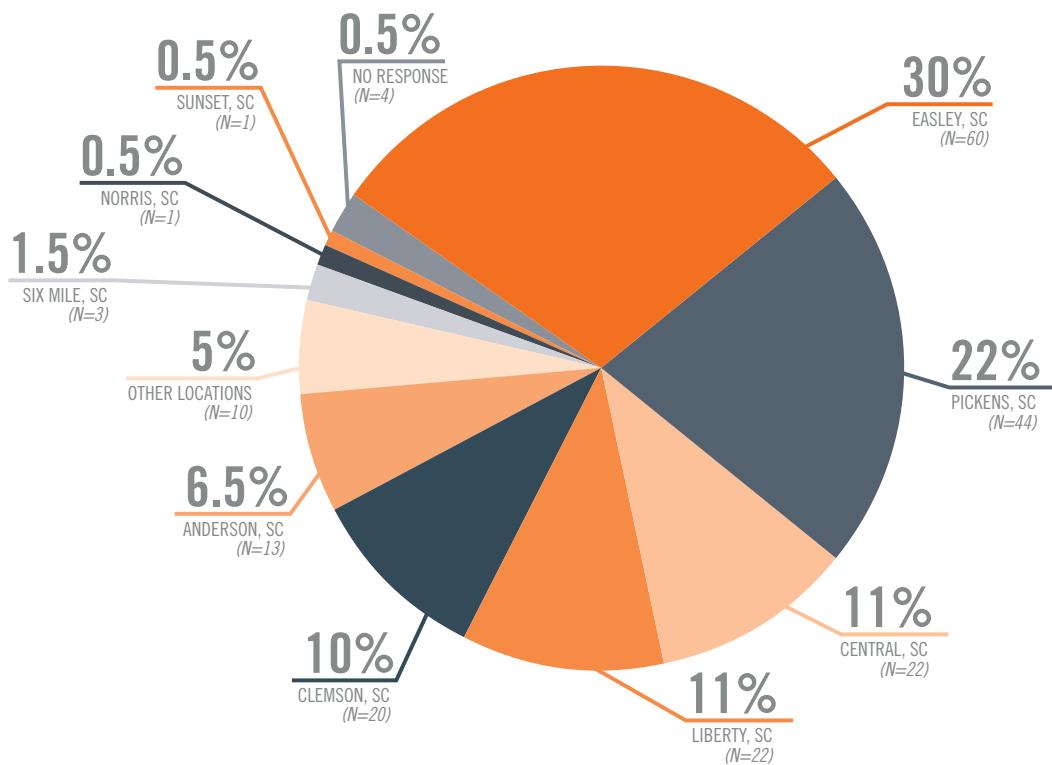


Figure 1. Zip Code Locations of Survey Respondents (n=196)

As depicted in Figure 1, the greatest proportion of respondents (30%) indicated they resided in an Easley zip code, followed by Pickens (22%), Central (11%), Liberty (11%), and Clemson (10%). Thirteen respondents (6.5%) indicated they resided in an Anderson County town, such as Pendleton, an area served by Clemson Community Care and Clemson Free Clinic, two of our survey delivery locations.

Extent of Hunger and Food Insecurity Among Survey Respondents

“Hunger is debilitating. It is crippling to motivation, to health, to the desire of wanting to better yourself and better others. Because if you have not eaten in three days, it is very hard to look past that physical need and the desire of eating, having to eat. You can’t work on finding a job, or on a resume, or on healthy living if, for some reason, you just don’t have access to food.” (Agency Representative)

According to the USDA (2016), food insecurity is defined as an “inability, at some time during the year, to provide adequate food for one or more household members due to a lack of resources.” Conversely, food security is defined as “access by all people at all times to enough food for an active, healthy life” (USDA, 2019a). Generally, hunger refers to an individual-level physiological condition that may result from food insecurity (USDA, 2019b). For the purposes of this report and to better comprehend the issues discussed, hunger and food insecurity relate to both *quantity* and *quality* of food, to the ability to have *enough* food in one’s household and also enough *nutritious* food (Hendricks et al., 2019). These definitions were crucial to our research approach as we used them to design our survey and other data collection instruments.

For this study, we used the USDA’s food insecurity measure, which includes six items related to: food not lasting in the household; the inability to afford balanced meals; eating less than one should; and going hungry or not eating for a whole day due to the lack of money. (See Appendix J for information about how this measure was calculated for this study.) This scale has been validated and used in multiple studies, thus allowing for comparisons across settings and studies.

Using the USDA (2012) calculation, the following definitions were used to designate a respondent’s level of food security:

- ***High food security***: Households had no problems or anxiety about consistently accessing adequate food.
- ***Marginal food security***: Households had problems at times, or anxiety about accessing adequate food, but the quality, variety, and quantity of their food intake were not substantially reduced.
- ***Low food security***: Households reduced the quality, variety, and desirability of their diets, but the quantity of food intake and normal eating patterns were not substantially disrupted.
- ***Very low food security***: At times during the year, eating patterns of one or more household members were disrupted and food intake reduced because the household lacked money and other resources for food.

Based on this method and these definitions, 69.8% of survey respondents indicated they experienced some level of food insecurity in the past 12 months, including marginal (13.6%), low (30.1%), or very low (26.1%) food security (Figure 2). These individuals experienced challenges or some level of anxiety about consistently accessing adequate food. Although the survey was delivered to individuals already experiencing food insecurity at some level, these more detailed results provide insights into the depth of the challenges they experience, most notably, that slightly more than one-fourth of respondents experience very low food security.

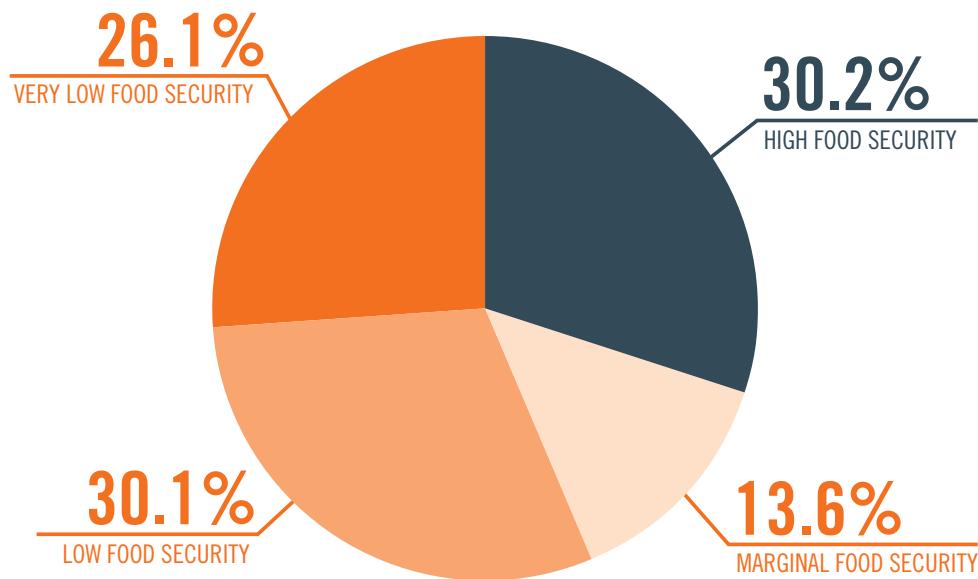


Figure 2. Household Food Security Status (n=199)

It is important to note that the survey results capture a “snapshot” of the level of hunger and food insecurity of Pickens County residents for the previous 12 months. However, research shows that individuals move in and out of food insecurity, with some households experiencing longer bouts of food insecurity than others (Coleman-Jensen et al., 2019a). That is, hunger and food insecurity are intermittent and episodic experiences for some and ongoing, chronic situations for others. For example, an individual who indicated they visited a food pantry just once in the past twelve months, may be at the beginning of a series of subsequent visits. Clients may visit periodically throughout the year, then face hard times, and become regular visitors. Thus, the survey does not capture how often and how long households may experience food insecurity over longer periods of time and thus may have resulted in an underreporting of needs over longer periods of time.

Many of those facing hunger are among the working poor. Agency representatives described the extent of food insecurity amongst their clients, with several indicating that families were facing chronic, continuous hunger:

Families I work with now rely on food banks. It's not just an emergency situation for them. Many of them regularly plan to go to food banks to supplement their food every month. (Agency Representative)

Respondents were also what prevents them from buying the food they want to eat. The most common response pertained to cost: 31% indicating that food prices were a factor (Figure 3). Food store distance (6.0%) and transportation (5.0%) were additional barriers for obtaining food.

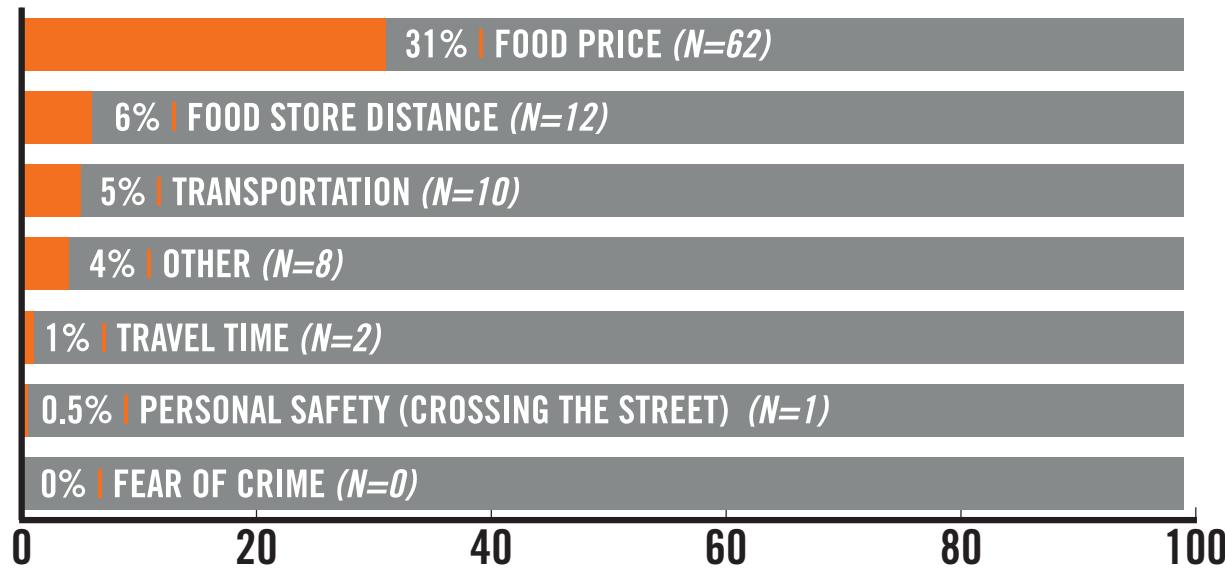


Figure 3. If you are not able to buy the food you want to eat, what prevents you from buying the food you want to eat? Select all that apply.

In the open-ended responses to this question, respondents described a variety of challenges in obtaining healthy, affordable foods, including the following:

- *[I] do not have enough money to purchase the items I want; budget; income, watching our limits/budgeting, not enough income; The only way I don't buy what I want to eat, [is] I don't have the \$, etc. (n=16)*
- *Homeless due to medical bills, so many times, I've lost count/denied all social services/disability (n=1)*
- *I budget and cook – have to work hard at it! Non-GMO/health food very expensive (n=1)*
- *If things are on sale (n=1)*
- *No teeth; diabetic; can't eat certain foods (n=1)*

The fact that food price was identified as the most significant barrier to purchasing desired foods suggests that household or individual incomes are not at an adequate level for some Pickens County residents. The proportion of residents indicating that food store distance and transportation were barriers to obtaining food confirms our findings, described in more detail below, that residents in certain areas of the county remain isolated due to the lack of public transportation or other forms of transportation.

In terms of overall trends in the numbers of individuals seeking assistance, some focus group respondents and agency representatives indicated that they noted a slight downward trend in the number of clients seeking services through their agencies (e.g., through the school-based Backpack program or at a local food bank), although the numbers seeking such services is not insignificant. For example, one health-services agency reported they had 178 patients and estimated that “*80 to 85% of them struggle with making food last.*” However, participants also recognized that they may not have accurate knowledge about the depth of the problem in Pickens County. According to one church leader: “*We have benevolence funds that we are happy to reach out to [address] the needs. The problem is becoming aware of them.*”

Several participants felt that some community members tend to “*fall through the cracks*” and thus often do not get the assistance they need to address their food insecurity and hunger. For example, the USDA Expanded Food and Nutrition Education Program (EFNEP) can only be distributed to individuals who have a fixed address, thus disqualifying individuals who are homeless. One focus group participant described the irony in this situation saying that for the EFNEP program:

The food is provided for emergency food assistance. If you’re homeless, you do not qualify [because you do not have a fixed address]...which is a true emergency...these are people that need [food] the most. (Focus Group Participant)

A community member indicated that a person with a felony criminal record is not allowed to receive SNAP benefits. Another interviewee who was experiencing food insecurity felt that they could not get food assistance because they do not have children, saying “*it’s like you’re constantly being slapped in the face because you can’t have kids.*” Programmatic policies may thus present barriers to some of the most vulnerable community members.

Income Sources of Survey Respondents

"[The food insecure] are the working poor who are making a living, but not enough to actually live on." (Focus Group Participant)

Respondents reported receiving income from a variety of sources, with SNAP, Electronic Benefits Transfer (EBT) and food stamps (23%), Social Security insurance, private or government pension, or retirement benefits (22%), and Supplemental Security Income (SSI), Disability or Veterans benefits (21%) as the largest sources of income (Figure 4).

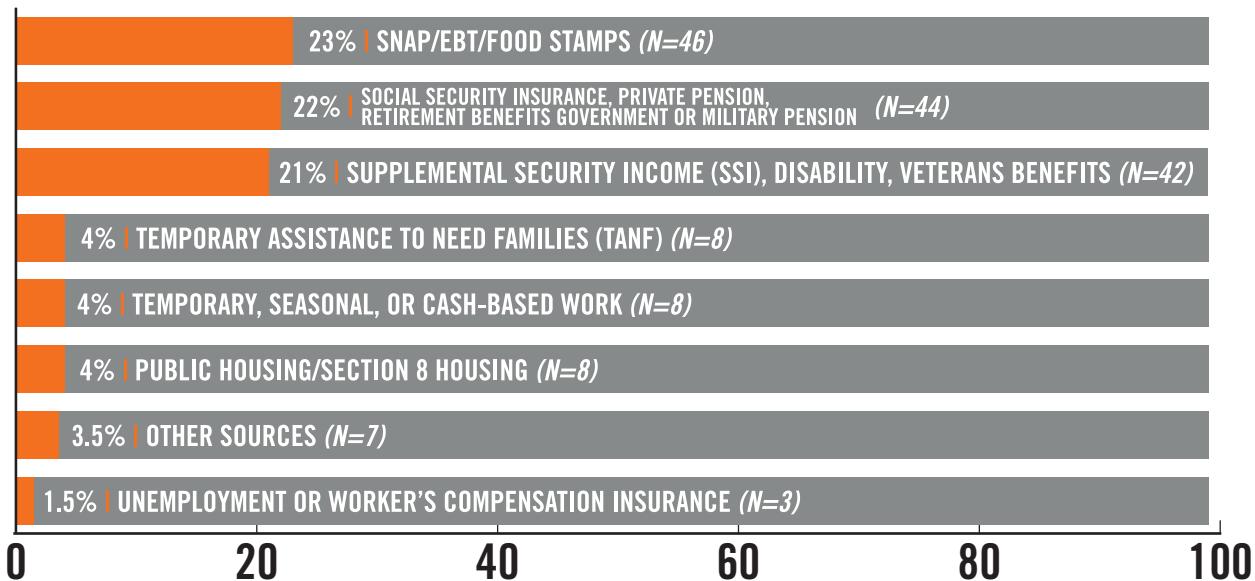


Figure 4. In the past month, including yourself, how many members of your household received income or benefits from any of the following sources? Select all that apply.

Several participants described the challenges they faced in affording enough healthy food necessary to feed themselves and their families, including underemployment, inadequate incomes, and competing household expenses, such as housing, medical care, childcare, and education. As expressed by one survey respondent, who was employed full-time as a teacher:

As a [first-grade] teacher, I will be looking into getting SNAP [benefits]. Chronic pain patients are being denied disability because doctors refuse to write the required statement for the disability application, and this is a form of torture. Food pantries help me to make ends meet. (Community Member)

For some community members, government-provided benefits are inadequate for covering basic food needs, as one focus group participant described a client: "*She gets food stamps and she goes [to the food pantry] twice a month and still doesn't have enough food.*" The free breakfast

and lunch programs are essential staples in many families' food budgets, as expressed by a focus group participant: "*We know that for 180 days of the calendar year, student and their families depend on the breakfast and lunch at school.*" An agency representative echoed these concerns, saying "*sadly sometimes breakfast and lunch at school are the only meals that some children get because of the despondency and disparity in Pickens County.*"

Summer can be an especially difficult time for these families as "*the kids are at home during the summer, the demand for food...increases, right at the time when donations fall away because people are on vacation*" (Focus Group Participant). These families are no longer receiving the breakfast and lunch provided during the school year and as a result, one's "*grocery bill may double, just because the children are not in school all day*" (Focus Group Participant). As one parent expressed, during the summer, they tell their children that they need to limit their food intake: "*They're home all day, so they're eating all day. I tell them to stop eating so much... because that's less food that's going to be in this house*" (Community Member).

Children are also vulnerable at other times of the year, such as when schools close for inclement weather:

***I know there's always that dread when we have to close school for weather because we know those children don't have food...and their parents have probably not set aside any emergency funds to go and buy food.* (Focus Group Participant)**

Participants also expressed concern about the county's older residents, as the county experiences what one focus group participant called "*the silver tsunami*", as evidenced by the increased number of elderly living in poverty:

***The one pattern I have noted is [that in the] last year we're seeing an increase in our seniors. We're slowly ticking up and I hope I'm wrong, but I'm afraid that's going to continue.* (Agency Representative)**

USDA data reflect this concern: between 2007 and 2017, the proportion of individuals 60 years and older receiving SNAP benefits increased from 8.7 to 13.1% (USDA, 2019c). A focus group participant emphasized the food insecurity and sense of isolation amongst older individuals in rural communities:

***A lot of the older folk - we are an aging community - can't drive all the way to Pickens or all the way to Travelers Rest to get their groceries.* (Focus Group Participant)**

Meals on Wheels is an essential service for the elderly, providing a warm meal and important social contact for the agency's clients. Focus group participants described a need to expand beyond Meals on Wheels services, especially for those clients who are reluctant to admit that they need assistance.

Spending Trade-Offs and Coping Mechanisms Used to Address Food Insecurity

"I've still got to...pay for medicine...You've got to pay for power, rent...Food would often be one of those things that would get left off again." (Community Member)

Individuals who face hunger and food insecurity struggle to make ends meet and must often make difficult choices between meeting their basic food needs and paying for life's other essentials, such as utilities, medical care, and rent or mortgage. These trade-offs and forced choices are inextricably connected to other challenges such as housing insecurity, energy insecurity, and health challenges (Knowles et al., 2016).

Many community members indicated they are having a tough time making ends meet and food is often the first item that is sacrificed to pay other bills. Survey respondents indicated that, in the previous 12 months, they often faced trade-offs between buying food and paying for utilities (37.5%), gas/fuel for vehicle (31%), medicine or medical care (30.0%), rent or mortgage (29.0%), and other bills, such as childcare (14.5%; Figure 5).

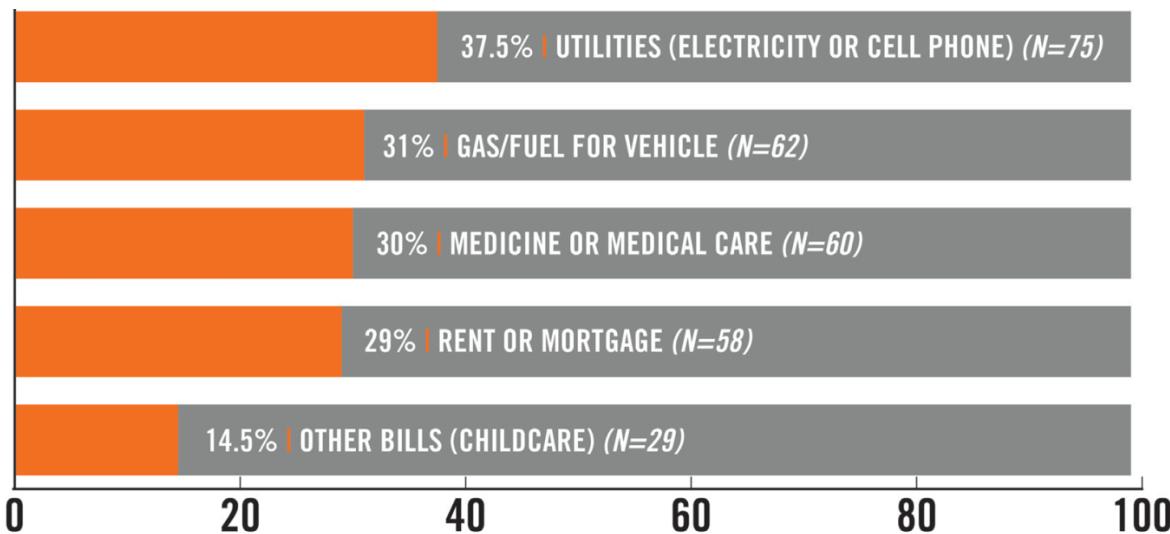


Figure 5. In the past 12 months have you or anyone in your household had to choose between buying the food you need or paying for any of the following? Select all that apply.

Community members described the stress associated with making these difficult calculations. When asked if they ever had to make these decisions, one community member described this as a regular occurrence, such as when deciding whether and how to pay their phone bill:

Most definitely, most definitely. But I try not to because I feel like being [as old as I am], then I don't want anything to happen, and not be able to call [someone] if I get sick or fall. I'm paying \$61 for a phone bill, but I like to be able to at least have a phone. And I've got to have lights. [I: So, you would eat less on those days?] Yes. I don't want to. I had to let cable go. (Community Member)

This person, who suffers from diabetes, then indicates that they are hyper-aware of the penalty for paying bills after the due date and realizing “*that's going to make a bad situation worse.*” They then go on to describe their concerns about having enough food, saying: “*I've just got to suffer...suck my thumbs if I have to.*”

Community members described the nuanced nature of food insecurity they were experiencing. They used a variety of strategies to cope with household food shortages. For example, one interviewee described having to limit their food intake so their food supply would last longer:

Of the dozen eggs that I had, and the thing of peanut butter...that was all I would have. I would wake up in the morning and I had decided I was going to eat every other day...it was that bad...I [thought] “Well, I can have an egg today and then tomorrow I won't.”...I would trade off and I would see how far I could stretch that. (Community Member)

Parents worry about their children going hungry, as expressed by this community member: “*When I think of running out of food, I'm constantly thinking about my kids because they are usually the ones that tell me 'Mom we don't have food.'*” They then go on to describe how they limit their own food intake so their children can eat:

I can wake up in the morning, drink some water and go all day without eating something and I don't notice that I do that. But my kids notice that they can't do that. They'll get up and say “We don't have any cereal. We don't have any milk. We don't have this.” But they go through food so fast [as they are growing]. (Community Member)

Another community member describes her method of addressing food shortages in their household, to the point of missing meals so their children could eat:

I usually relied on family. I had a lot of family help me if they could. But coping, I don't really know. I guess I just pushed through it. I always made sure my kids were fed [and] taken care of. If that means I have to skip a meal, then so be it. (Community Member)

This sentiment was echoed by another community member as they described their current situation of economic insecurity in general, and food insecurity in particular:

For me, personally, [hunger] is normal. It might not be normal for other people looking at it, but it's [a] struggle. (Community Member)

Additional comments from the surveys, focus groups, and in-depth interviews with community members illustrate that community members made a variety of trade-offs and used diverse coping strategies to address food insecurity in their households:

- “*I've had a few areas where I had to miss a bill and pay late fees, just so I could put food in the house...juggling bills and then paying for food itself was just a lot at once.*” (Community Member)
- “*I'm on ADHD medicine. I haven't had a [prescription] in about a month because I was having to pay all kinds of fees for surgery and [that is] more important, So, I kind of held off on that one.*” (Community Member)
- “*It's usually gas in my car. I'll try to make [my money] stretch as long as I can. I have credit cards that I try not to use, but those are like my ‘in-case-of-emergency’ [cards] ...most times I would sacrifice the gas because I know I have places to go, but I don't absolutely have to go to [that] place.*” (Community Member)
- “[*After major surgery], I'm kind of getting ahead so I can save up so hopefully I won't be back in that situation, which is why I was going to be out for one week after having this [surgery]. Because of that fear... I don't want to get back into that situation again. I'm terrified of getting back to where I don't have money for groceries or power or rent and those kinds of things.*” (Community Member)
- “*As people are aging, they're going to pay that power bill. They will cut it out of their food budget.*” (Focus Group Participant)

Agencies often provide assistance to ameliorate the stresses associated with making such difficult choices. This is especially the case at certain times of the year, when utility bills are generally higher than normal:

August is typically a very heavy month for us because we have people who have insane electric bills...that they can't pay. Or, if they have paid it, then they don't have food money. January is also a really high month for us. (Agency Representative)

A community member reported that their power bill can range from \$400 to \$500 a month. Another reported that some community members wait as long as possible during the summer to turn their air conditioners on, sometimes not turning them on until the beginning of July. Residents also face challenges during the winter months:

The average person is on a fixed income. It's hard for them to come up with food money. But they've got to stay warm, because you'll freeze out here if you don't have heat. (Focus Group Participant)

When reflecting on acquiring food for their household, one participant described their emotional response to having an ample food supply in their household for the first time in a while:

I remember the greatest feeling, to be able to go and have food in your refrigerator... Lots of times, we take it for granted that you even have stuff there. I think it was my first paycheck...I was like "My refrigerator's full. My refrigerator's not been this full since - I can't tell you when." I was in tears because I had groceries and more than enough. (Community Member)

Health Issues Faced by Survey Respondents

Research has documented a relationship between hunger and food insecurity and overall physical and mental health (Food Research and Action Center, 2017; Liu et al., 2014), including increased rates of obesity (Brown et al., 2019). Chronic physical and mental health problems may make individuals more vulnerable to food insecurity (Tarasuk et al., 2013). Food insecurity is also a stronger predictor than income of negative health outcomes (Gregory & Coleman-Jensen, 2017) and is associated with greater health care expenditures, expenses that only add to the precarious situation that many food insecure individuals and families face (Berkowitz et al., 2018).

Many survey respondents said they experience a variety of health challenges, making it even more essential to ensure they have access to healthy food. Approximately 83% of respondents indicated they had seen a doctor, nurse practitioner or health-care professional in the previous 12 months. Nearly half (49%) of respondents noted that a health-care professional had informed them that they had high blood pressure (Figure 6). Just over one-fourth (25.5%) of respondents indicated they had been informed they had high cholesterol; others indicated they had been informed they had pre-diabetes (14.0%) or Type II diabetes (13.5%). Slightly more than 37% of respondents noted that they are limited in activities because of physical, mental or emotional

problems. Nearly 18% of respondents indicated they had a health problem that required the use of special equipment, such as a cane, wheelchair, special bed, or special telephone.

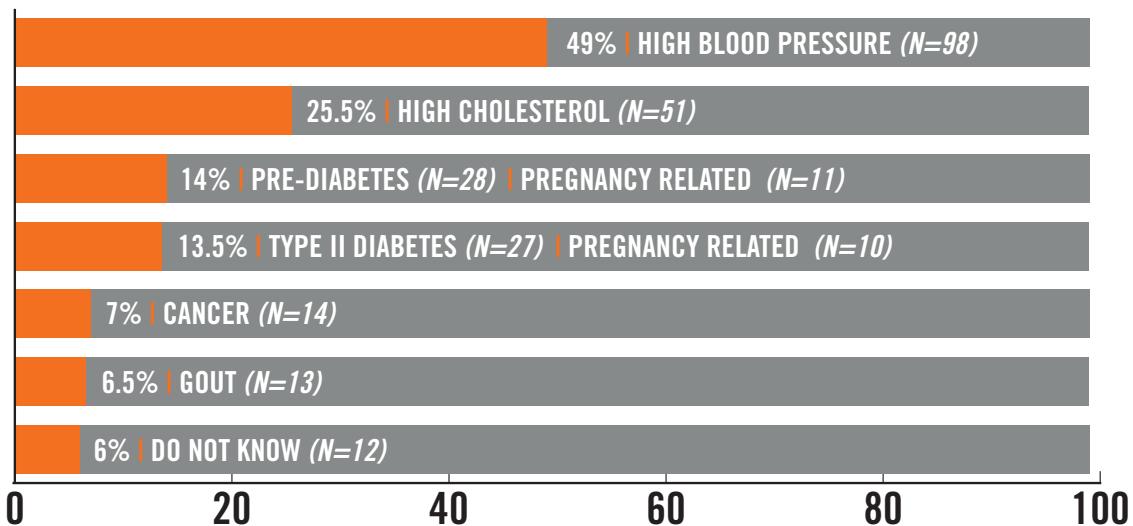


Figure 6. Has a doctor, health professional ever informed that you have any of the following? Select all that apply.

Although slightly less than 30% of respondents were of normal weight, nearly 70% were either overweight (24.2%) or obese (45.3%; Figure 7). These results confirm prior research on the relationship between food insecurity and obesity that found that the prevalence of obesity was higher in food-insecure adults (Pan et al., 2015). These findings may seem to contradict the notion that because an individual is overweight or obese, they could not be experiencing hunger or food insecurity. However, the inability to access healthy, affordable food on a regular basis often means that individuals rely on inexpensive, calorie-dense food items as regular staples, thus contributing to numerous health issues, such as weight-related challenges.

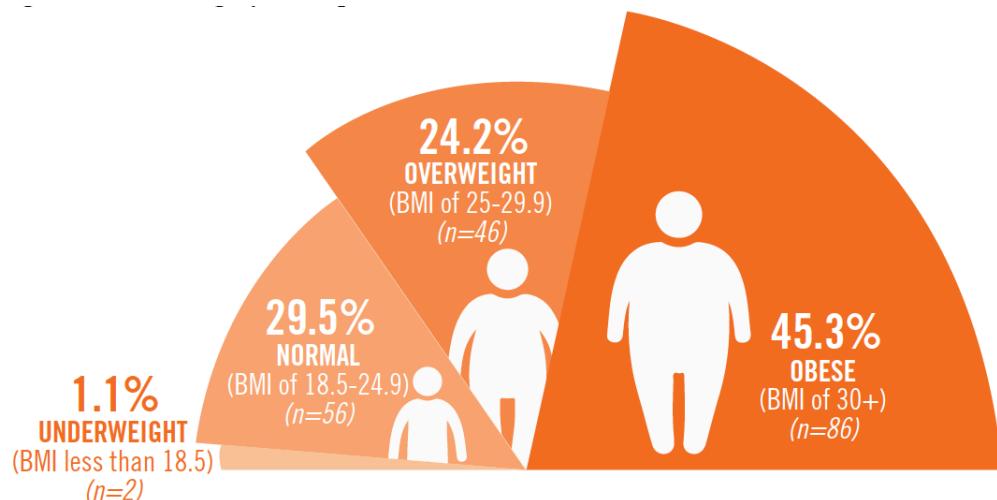


Figure 7. BMI Category of Survey Respondents (n=190)

Study participants recognized the health costs associated with food insecurity, including increased hospitalization and emergency room visits. Participants expressed concern about their inadequate diets and the resulting impact on their overall health and the likely exacerbation of existing health conditions. For example, a community member said they were experiencing added stress because they were unable to maintain a healthy diet:

I have been concerned about some things that I'm eating, especially a lot of fatty, fatty foods and stuff. So, I had to get a stress test done on my heart. (Community Member)

They felt that their symptoms were the result of added stress, “*not getting the fruits and vegetables that I want*” and the “*challenges in keeping fresh fruit*” in their home.

As expressed in the quotes below, community members experienced health-related challenges resulting from their inability to access healthy food, either through grocery stores or local food pantries:

One of the biggest issues is I'm pre-diabetic...so [the food pantry] would offer me all these pastries and muffins and breads and I took bread. But, I don't want any of the other stuff because that's not good for me. That's not going to leave you full [for] long. It's just going to temporarily fill you up because it's not protein...It's all stuff that's going to make you hungry again in a short period of time. (Community Member)

It's just really finding out what are those cheap things that will [help you] make [it] so you're not as hungry, [that] you will make...stretch. It's not just [me], [but] a lot of people that are struggling financially, they're doing the cheap stuff. Whatever is cheap. And the cheap stuff is not healthy. [They are] not really healthy-choice options. (Community Member)

Even when community members are consciously trying to look after their health, they find it difficult to do so when they are unable to access fresh food:

Even if you're just [eating] a meal or more a day...When I could afford it, I was trying to do the Keto diet, so I could lose weight, but do it in a healthy way. But juggling what you can really buy...maybe I had a little bit extra money to spend on cheese and a few vegetables. And, other times I just buy hot dogs and just kind of make those stretch. (Community Member)

Inadequate and inconsistent access to healthy food makes it challenging for individuals to manage chronic diseases such as diabetes. One respondent, who has Type II diabetes and relies

on local food banks and food pantries as their primary food source, was asked how they maintain a healthy diet. They responded:

I don't...I'm not able to...I'm supposed to be on a strict diet, but I just can't. I just got to eat what I can get. You see what I'm saying? I can't be special. I just [take] whatever it is. Whatever I can get, I got to eat it...That's why I open a can of beans, throw a hot dog in the microwave...I don't do sandwiches, because that's bread. Even though I don't have much money, I'm trying to do it as healthy as I can with all I got.
(Community Member)

According to a local agency that supports cancer patients, many community members who face more dire health conditions, such as cancer, often do not receive healthy foods that can aid in their recovery or help them manage their health issues:

When people come [to our agency] for their Ensure, they still need food for the rest of their family. Because of cancer, they can't work or they're on disability or they're working a lot less. Cancer just costs a lot of money and we don't have food. We sometimes get bread or deserts donated to us. But, that's not what they need to eat. We give that to them [because] that's what's been given to us. (Focus Group Participant)

Focus group participants described how hunger impacts students. A participant described how a nurse at a local elementary school “noticed that on Monday mornings, kids kept coming into the nurse’s office. They tracked it for a month or so and realized that the kids had not eaten all weekend.” Another focus group participant said: “If you track the nurse visits at the schools, you would see that lots of stomach aches are merely hunger.”

Study participants also remarked on the connections between food insecurity and mental health. That is, when a community member lacks access to healthy affordable food, they could likely experience depression and/or anxiety. And, existing mental health challenges could likely intensify hunger and food insecurity. The quotes below are illustrative of these challenges:

- “*I have learned that people with mental health issues are certainly not eating healthily often or they're just not hungry or they're forgetting to eat and then meds come into play. So, I think there is a real connection between the two.*” (Focus Group Participant)
- “*I already have depression just because of a chemical imbalance. But [poverty and food insecurity] made it worse because you feel like a failure... and you're like 'there's nothing I can do.' You start looking for things in your house that you can sell and I don't have anything anyway...and you start panicking and thinking 'Well, can I get a loan?' But, I can't pay [for that loan].*” (Community Member)

- “*You just go through this thing and then you don’t want to eat, Or, [as] your coping mechanism, you want to eat more. Which you can’t because there’s nothing there...it just kind of keeps spinning...I just end up sleeping, because if I’m sleeping, I don’t have to think about it...so it weighs on your emotions a lot.*” (Community Member)
- “*I just do whatever I can to try to make ends meet, just try to cover whatever bills I have left. But, mentally, I’m just drained.*” (Community Member)
- “*I guess there could be times that are a little bit harder than others. Specific times like the end of the month are so frustrating. So, you have to keep your head up until the beginning of the next month.*” (Community Member)

Methods for Sourcing Food

The community member survey included several questions designed to learn more about how respondents accessed food in their communities. Respondents were asked where they shopped for food in the previous 12 months. Nearly 94% of participants indicated they bought some or most of their food at a regular supermarket or grocery store, a likely source of healthy foods (Table 2). However, a significant proportion of respondents purchased some or most of their food at locations where it is difficult to purchase healthy food products, including locations such as fast food restaurants (66.1%), partial markets, such as Walgreens, Dollar Store, or CVS (59%), and convenience stores or corner stores (44.2%). Fourteen percent of respondents indicated they purchased some or most of their food at a specialty market.

Table 2. Please indicate how often you or members of your household shopped for food during the last 12 months at the following different types of food stores.

TYPE OF FOOD STORE	I NEVER BUY MY FOOD HERE	I BUY SOME OF MY FOOD HERE	I BUY MOST OF MY FOOD HERE
SUPERMARKET OR GROCERY STORE (ALDI, INGLES, BI-LO, PUBlix, ETC.) (N=188)	6.4	29.8	63.8
PARTIAL MARKET (WALGREENS, DOLLAR STORE, CVS, ETC.) (N=173)	41.0	48.6	10.4
SPECIALTY MARKET (ASIAN FOOD MARKET, MEXICAN FOOD MARKET, ETC.) (N=163)	85.9	11.0	3.1
CONVENIENCE STORE (CARRYOUT, CORNER STORE, GAS STATION, ETC.) (N=163)	55.8	39.9	4.3
FAST FOOD RESTAURANT (FOOD TRUCK, COUNTER SERVICE, ETC.) (N=165)	33.9	60.0	6.1

In terms of programmatic sources of support, more than half of the survey respondents indicated that, in the previous 12 months, they had depended on a food pantry at least 1 to 3 times, 4-6 times, or one or more times each month, with 18% indicating they relied on a food pantry one or more times each month in the past year (Table 3). Nearly one-fourth of respondents depended on the federal school lunch or breakfast program in the previous 12 months. Farmers markets and produce stands and relatives outside the home were also important sources of food, with 47.5% and 43.1% using these sources 1-3 times a year or more often in the previous 12 months, respectively. Friends and co-workers were another important source of food: 36.1% of respondents indicated they depended on these sources 1-3 times a year or more often in the previous 12 months. Other notable sources of food were community or personal gardens (26.9%) and hunting and fishing (26.2%).

Table 3. In the past 12 months, how often has your household depended on any of the following food sources?

FOOD SOURCE	NEVER	1-3 TIMES DURING THE YEAR	4-6 TIMES DURING THE YEAR	ONE OR MORE TIMES EACH MONTH
FOOD PANTRY (<i>N</i> =183)	45.4	16.9	19.7	18.0
FREE MEAL (SALVATION ARMY, COMMUNITY CENTER) (<i>N</i> =160)	86.3	8.1	2.5	3.1
FEDERAL SCHOOL LUNCH OR BREAKFAST PROGRAM (<i>N</i> =171)	76.0	3.5	3.5	17.0
FARMERS' MARKET OR PRODUCE STAND (<i>N</i> =181)	52.5	29.8	10.5	7.2
HUNTING/FISHING (<i>N</i> =175)	73.7	17.1	4.0	5.1
FRIENDS, CO-WORKERS, NEIGHBORS (<i>N</i> =172)	64.0	23.3	6.4	6.4
RELATIVES OUTSIDE OF THE HOME (<i>N</i> =174)	56.9	23.6	12.6	6.9
COMMUNITY OR PERSONAL GARDEN (<i>N</i> =171)	73.1	15.8	7.6	3.5

According to one focus group participant, it is not unusual for families and individuals to “pantry hop” and rely on more than one community agency to meet their needs, as illustrated by this quote from a community member:

If I'm going to need a little bit extra this month because we're not going to make it or if I'm at that point where we're not making it, then I will pop by a food pantry and see what I can get to figure something out [to feed my family]. (Community Member)

Community members who lack transportation rely on others to take them to the grocery store. One client indicated they had not “*been able to go grocery shopping for a while.*” When this resident first moved into their apartment, a local food bank gave them some food, “*canned goods...they had it all stacked up...So, it sustained me for a while, And I went shopping and got a bunch of meats and stuff, but now it’s whittled down.*”

Challenges Accessing Healthy, Affordable Food

“*Gaining access to healthy food [in Pickens County] is a challenge. If you live in a rural community and there’s a Dollar General you can go there and pick up canned goods and processed foods, but there’s no produce...So, getting healthy food is a huge challenge.*” (Focus Group Participant)

Respondents frequently described their preference for healthy food, both in the survey and in-depth interviews. When asked what was most important when food shopping, more than three-fourths of respondents (76.1%) noted that nutritional value was important or very important in their decision making (Table 4). Additionally, 39% of respondents indicated a preference for organically grown food options (foods grown without chemicals). Unfortunately, many respondents are not able to satisfy this preference due to price, transportation, and access issues. Indeed, price was at the top of many respondents’ list of priorities when food shopping, with 88% of respondents indicating price was important or very important to them when buying food.

Table 4. Please rate how important the following items are in your decisions about what food to buy.

CRITERIA	NOT AT ALL IMPORTANT	SLIGHTLY IMPORTANT	IMPORTANT	VERY IMPORTANT
NUTRITIONAL VALUE (N=184)	12.0	12.0	42.4	33.7
APPEARANCE (N=176)	11.9	13.1	42.0	33.0
PRICE (N=192)	5.7	6.3	39.6	48.4
LOCALLY GROWN (N=170)	23.5	28.8	29.4	18.2
ORGANICALLY GROWN/GROWN WITHOUT CHEMICALS (N=174)	34.5	26.4	24.1	14.9

As described in the section on health challenges above, a predominant theme in the interviews concerned the limited access to fresh, healthy food. When asked what they wished they could buy more of, if more resources were available, they said they would buy more, and a greater variety of, fruit and vegetables, items they generally cannot afford to buy. One community member said their child “*will not go without fruit or green beans.*” Another parent made similar comments, when describing their child’s love of fresh fruit: “*usually, it’s really fruit...I love all different types of fruit. I would love to have fruit in the house...My son flies through it. He’s my big fruit kid.*” Another community member said they would like to buy poblano peppers and spices, but commented on their inability to do so:

[Poblano peppers are] not cheap. I would probably like to buy more [spices] to mix with foods and [that are] just healthier. I would love to experiment with food and cooking and making different meals. I can take leftovers and make a whole new meal.

Community members expressed gratitude for the individuals and agencies that provide food-related assistance. However, logically and practically, the study results indicate that it can be challenging for agencies to provide fresh produce to families. While local food banks and food pantries are well-supported by donations from community members, those donations often are not as healthy as desired, as suggested in the following quotes from focus group participants and agency leaders:

- “*We don't receive a lot of fresh things. We have a few people who plant an extra row or tomatoes or cucumbers, things like that for us in the summer. But that's very seasonal, too. Again, we want to get items in there, in their home, that are going to last for them.*” (Focus Group Participant)
- “*But even if [our clients] were able to pick up a food box [at our agency], if you went to go get a food box, a lot of the boxes are [full off] unhealthy food, processed food. It does not help those who are diabetic, or who have high blood pressure. They need healthier food.*” (Focus Group Participant)
- “*When you do food drives, you have to tell people ‘please don’t clean out your pantry and give me food that’s ten years old. Would you want to eat that?’*” (Agency Representative)
- “*I’m not going to give food to anybody that I’m not going to personally put in my mouth and eat or feed to my family.*” (Agency Representative)

However, agencies are trying to improve the situation and are “*looking at some innovative ways to get some better food into people’s homes*” (Agency Representative). In the words of one agency leader:

It’s kind of feast or famine. We very much want to increase the amount of fresh produce, fruits and vegetables that we distribute just from a health benefit. [However], we are not set up to go glean a field and bring a whole truckload [of produce]. We just don’t have the room. So [our approach] is more personal - small farms or people that are growing for themselves. We are trying to just get more word out about that [and] trying to increase fruits and vegetables. (Agency Representative)

One client said they participate in a food share program through which they can use their SNAP dollars to purchase a large box of fresh fruits and vegetables for five dollars, saying “*this helps a lot because vegetables and produce are the two most expensive things that I usually don’t get, trying to cram everything [else] in [to my budget].*” Similar food share programs can go a long way toward addressing hunger and food insecurity in the county.

Food Preparation

An important consideration for improving food security in any community is ensuring that community members have adequate facilities and equipment to prepare healthy meals. Nearly three-fourths of respondents (73.8%) indicated that they prepared their own food; nearly 19% said a spouse or partner did so (Figure 8).

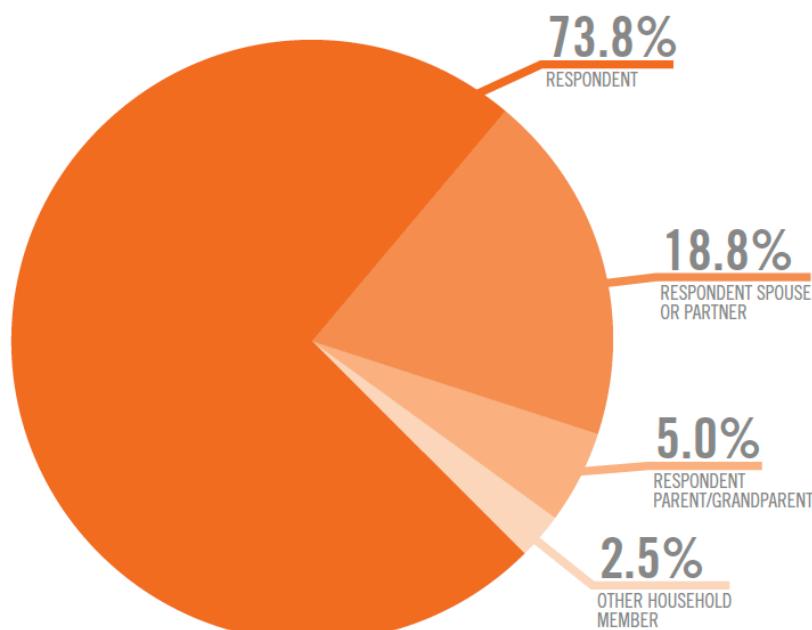


Figure 8. Who usually prepares meals in your household? (n=160)

When asked what type of cooking they do on a regular basis, a large majority of respondents (71.5%) indicated that they prepared dishes from basic ingredients or from scratch (Figure 9). Slightly more than half of the respondents (50.5%) “put together ready-made ingredients to make complete meals (e.g., boxed macaroni and cheese),” Forty-three percent “cook convenience foods and ready-meals (e.g., frozen or microwaveable meals).” In response to another question, nearly 37% of survey respondents revealed that they had access to their own garden, a neighbor’s garden or a community garden.

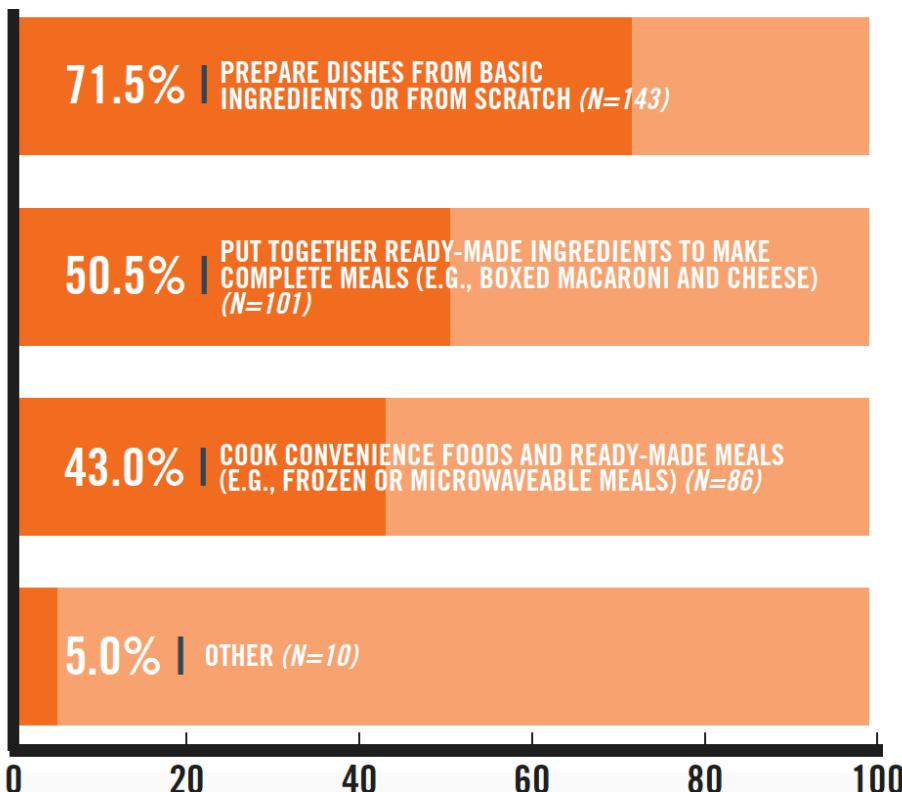


Figure 9. What kind of cooking do you do on a regular basis? Select all that apply.

In terms of food preparation and kitchen appliances, nearly all respondents indicated they had a refrigerator (95%), stove (93.5%) and/or a microwave (91%; Figure 10). Many respondents also had access to basic cooking supplies, such as knives (91.5%), pots and pans (90.5%) and measuring cups (86.5%). However, 8.5% of respondents indicated they either do not have access to any of these items (4.5%) or they do not have a kitchen or easy access to one (4%). For example, one community member shared that they are unable to cook at their own house “*because...even though I have space, I don't have the bowls, the knives and stuff like that.*” In the past, they cooked at their friend’s house. They especially enjoy making fresh salsa for family and friends, but it is often too expensive and inconvenient to do so: “*I always use the canned tomatoes...but you know you're thinking that the stuff, individually, is not very expensive, but then when you add it up, it can get expensive if you do it often.*”

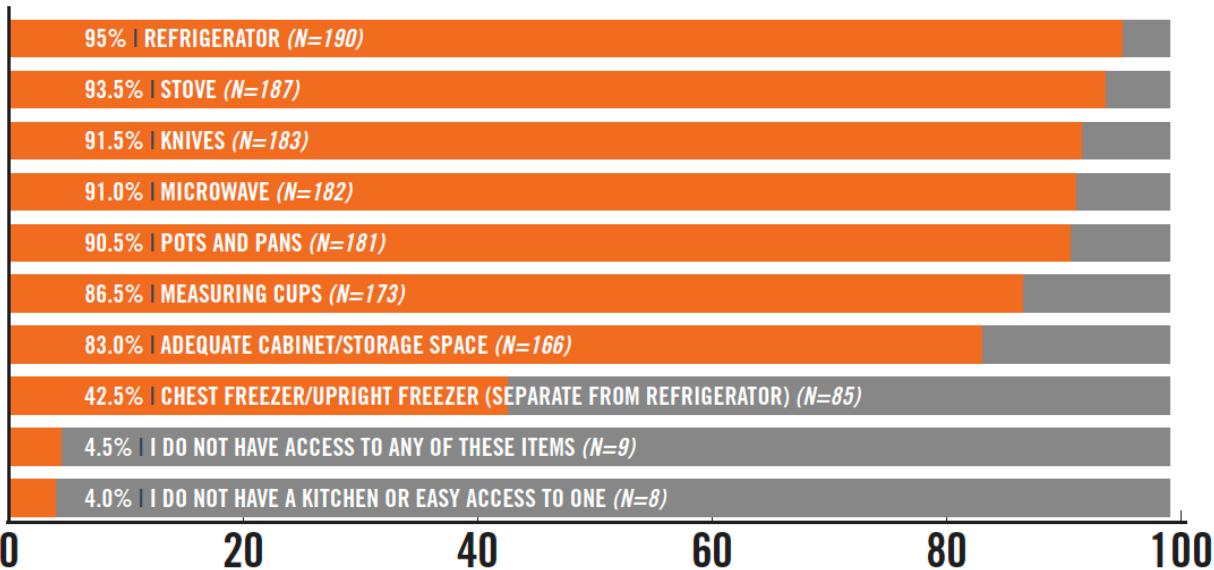


Figure 10. I have a kitchen with the following items. Select all that apply.

Access to a kitchen and kitchen supplies is essential for maintaining a healthy diet, as expressed by one community member who said she prefers “*a hot meal that I can actually cook, not something that I just throw in the microwave, because that doesn’t fill you up as fast or as easily.*”

Community members meet their nutritional needs in a variety of ways, as reflected in the quotes below:

- “*My strategies were...if there’s not enough meat, then I would have plenty of rice and beans or noodles in the cabinet. So we would just eat that until I’m able to buy more meat.*” (Community Member)
- “*This past Wednesday, I went to [a local food pantry], then Thursday I went to the food bank down there. Whatever they get, I just try to make do. It’s a little bit of this and a little bit of that. I’ll mix it up...I’ll try to allowance it out in small portions and just nibble on it....As long as I can eat some rice, or dried beans or canned goods.*” (Community Member)
- “*I buy eggs, mayonnaise and relish and I could make an egg salad and it would stretch forever.*” (Community Member)

One community member lamented not being able to cook for their friends because they lack the equipment and facilities to prepare meals in their own apartment: “*I miss being able to [treat others]. I love doing things for people... and doing something for my friend who has done all this stuff for me.*” As described below, being unable to participate in activities centered around food may lead to feeling stigmatized and may ultimately result in feelings of isolation.

Stigma Associated with Food Insecurity

Some community members often choose to not seek assistance for their food-related or other needs due to the stigma often associated with experiencing food insecurity, asking for help from local agencies, and receiving government benefits. This stigma affects young and old alike, whether it is a teenager who chooses not to participate in the Backpack program because “*I don’t want everybody to know that I’m hungry,*” or a senior citizen who may be “*too proud to reach out to family or to neighbors.*” Focus group participants described the stigma that some older school children may experience when facing food insecurity. The potential embarrassment of being identified as “hungry” could dissuade middle and high school students from accessing available resources:

My background is high school and I found that many, many high school students would not apply for free or reduced lunch because of the stigma, even though they all had an ID card and it didn’t look any different from the paying student. (Focus Group Participant)

This stigma could potentially impact the elderly as well, as expressed in the quote below:

[Older residents] are not going to admit that they are in need. They just will not do it. Sometimes you have to notice things like weight loss...you have to take notice that there is probably a need there that you’re unaware of. (Agency Representative)

Having to apply for assistance over and over again is the source of shame for some individuals. This reluctance to ask for support is “*a strain that runs through [families]. Sometimes they need help and don’t want to ask for it*” (Focus Group Participant).

Thus, the extent and depth of the hunger in the community often remains hidden, and ultimately underestimated by residents, community leaders and policy makers:

They are not going to admit that they are in need they just will not do it. You know, sometimes you have to notice things like weight loss and stuff like this going on that you have to take notice that there is probably a need there that you’re unaware of. (Focus Group Participant)

One community member, who is facing extreme food insecurity, recognized that others who face similar challenges need to overcome their pride in order to receive assistance:

I told some guys “Don’t think you’re too good to go out there [to get help] when you’re sitting around there. That’s a help to you.” Some people are too prideful to where they think they are too good to do that. But, I’m in a situation where...my pride will make me starve to death. (Community Member)

Policy initiatives and public perception are shaped by negative stereotypes about individuals suffering from hunger and food insecurity. As many of these individuals live in isolation from their local communities, the tendency is for those stereotypes to be reinforced, further isolating these community members. Indeed, as described below, some community members may experience a weaker sense of community as the result of feeling the shame and stigma associated with hunger and food insecurity.

Sense of Community

Beyond experiencing the pangs of hunger or the disappointment in having an empty pantry, food insecurity impacts community members’ quality of life in numerous ways. Hunger and food insecurity are associated with social isolation and alienation. That is, social isolation contributes to food insecurity and food insecurity can heighten social isolation (de Marco et al., 2009).

The survey included several items related to respondents’ sense of connection with others. More than half of respondents (52.2%) said they strongly disagreed or disagreed that “my friends in the neighborhood are part of my everyday activities”, with another 14.3% indicating they were not sure this was true (Table 5). Although 50% of respondents indicated that they agreed or strongly agreed with the statement that “people here know they can get help from others in the neighborhood if they are in trouble,” a significant proportion (22.8%) were not sure this was the case; another 27.2% disagreed or strongly disagreed that this was the case. Nearly 24% of respondents agreed or strongly agreed that “I have no friends in the neighborhood on whom I could depend,” another 17.7% indicated they were not sure.

Table 5. How much do you agree with each of the following statements about your neighborhood?

	STRONGLY DISAGREE	DISAGREE	NOT SURE	AGREE	STRONGLY AGREE
MY FRIENDS IN THE NEIGHBORHOOD ARE PART OF MY EVERYDAY ACTIVITIES. (N=182)	16.5	35.7	14.3	27.5	6.0
PEOPLE HERE KNOW THEY CAN GET HELP FROM OTHERS IN THE NEIGHBORHOOD IF THEY ARE IN TROUBLE. (N=180)	10.0	17.2	22.8	40.0	10.0
I HAVE NO FRIENDS IN THE NEIGHBORHOOD ON WHOM I COULD DEPEND. (N=175)	24.6	33.7	17.7	17.7	6.3

A sense of isolation is especially present in rural areas of the county where “*up here, a neighbor may live ten miles away*” (Focus Group Participant). A weak sense of community can make it difficult to know whether someone is facing food insecurity:

It's not like your neighbor...is capable of knowing what your needs are...so that you cannot identify [hunger] as a community unless someone makes you aware of it...It's not like you and your neighbor [are] passing each other in the suburbs in the morning to chit-chat and say, “how are you doing?” (Focus Group Participant)

Programs like Meals on Wheels help to stave off isolation by providing healthy meals and social interaction for isolated, rural elderly:

I think if you were to analyze that person starting prior to receiving the meal, and then afterwards, you would see there is a positive impact on receiving a healthy meal. I think whether that be their health - mentally or physically - and just the mere socialization [from] interacting with someone. Because these people are home all day with nobody. So, I think all of that comes into play. (Focus Group Participant)

Community members described how food insecurity led to their feeling isolated from their families and friends, especially during the holidays. When asked if there were times of the year that were particularly challenging, one community member said:

I would say holidays can be especially [challenging] when you're cooking and then you have to make dishes for family. Holidays can be a little bit difficult sometimes [when] you spend all, most of your money on getting the food for dinner. That's why [at] Thanksgiving, Christmas and then after that...For that one day after you've eaten, you eat leftovers. But then that eventually [is] gone and then you're like "Man, I've spent most of my money [for the month on the holiday meal]." (Community Member)

Another respondent described choosing not to attend these family events, and the resulting feelings of loneliness and isolation:

At Christmas, I wanted to be able to make a dressing and take [that] to my family. I didn't have the money to do that because I didn't have any extra stuff. I ended up not going to my family's [house] for Christmas because I didn't have anything to contribute. I just [told them] "You know my car is not in the greatest shape. Maybe I just won't go", because I didn't really have anything to take. (Community Member)

Children become especially vulnerable during these times, as expressed by a focus group participant: “*For most of us, [holidays are] a joyous time. For many children, it's not. It's hunger. It's isolation.*”

Even the rather simple act of entertaining friends at other times of the year took on entirely different dimensions in the context of food insecurity. One community member describes buying juice to have on hand in case a neighbor dropped by, even though they normally cannot afford to buy juice:

I felt the pressure of keeping some kind of fruit punch or some kind of juice so I could give her something when she came over that I really couldn't afford. I didn't drink any of it. I was saving it for when she came over so I could offer it to her, because it was humiliating having nothing. (Community Member)

The combined impacts of stigma and social isolation ultimately intensify challenges related to hunger and food insecurity and contribute to ongoing feelings of social isolation for some community members.

THE RELATIONSHIP BETWEEN POVERTY AND FOOD INSECURITY

"It's not just the physical sensation of hunger, but [also gaining] access to high quality food in some sort of quantity [through which] one is able to help their families. And we know that these issues are intertwined with other issues." (Focus Group Participant)

As food insecurity is often related to poverty, it is also indirectly or directly linked with other social problems including inadequate health care, the lack of affordable housing, and educational inequities. Many families live on the edge, just one unfortunate event away from hunger and poverty, creating a "*a domino effect*" (Focus Group Participant). In the words of one agency representative "*everything seems to be linked to poverty.*" The cyclical nature of poverty was a consistent theme throughout the study:

There are hungry people all around. It is challenge after challenge after challenge. They can't get food stamps if they're not trying to get a job. But, if they live in a rural area, how are they supposed to get [a job]? (Agency Representative)

These challenges are especially problematic for those families who are on the "borderline" and do not qualify for government benefits. According to Oxfam America (2015), while many client households seeking charitable food assistance have some form of employment, they still struggle to meet their basic needs. In Pickens County, community members are often caught in the cycle of poverty. For example, they can be employed but still "*just right above the poverty rate, which is a really tough place to be in*" (Agency Representative). According to one agency representative, clients often face financial strains that accompany getting a job:

Sometimes we have clients who can't move forward in their jobs because when your job [income] goes up, benefits go down, so you got a net loss. (Agency Representative)

This theme was reinforced during an interview with a community member facing hunger and food insecurity:

I am single with no children. I lost my job last August. I went for four months with no income. I qualified for food stamps at the time, but when I got a job making \$18,000 a year, I still could not afford all of my basic bills. I lost my food stamps because my income was \$30 a month over the amount allowed by poverty guidelines. I have always been a hard worker, but even with a Master's Degree, I can't get a job or sufficient income to meet basic needs. It is frustrating and greatly contributes to my depression. (Community Member)

Focus group participants, agency leaders, and community members recognized the broader systemic nature of hunger and food insecurity. For example, a common response to the question related to the causes of hunger and food insecurity pertained to broader economic issues, such as “*low wages*” and “*underemployment*.” Food insecure individuals are “*the working poor who are making a living, but not enough to actually live on*” (Focus Group Participant). Families often experience an “*income gap*”, which results in their inability to meet their food needs:

Even with SNAP...there's still a gap between the need, the income level, and the food need of the home...A lot of people think food stamps are there, [so] there's not a problem. But...that still leaves a gap for some of our families here. (Focus Group Participant)

Several agency representatives said they often had to combat stereotypes about the typical person seeking help at their agencies, for example:

[Some of our clients] are unemployed and some are waiting for disability; some have issues like [low] reading levels, [lack of] transportation - all of those things that are true barriers. When you weed down in it, very few people are just sitting around not working. That's a stereotype that we try to fight a lot, that our clients are not just sitting around. [Actually], they're either working [or] are disabled or something. Of those who are working, they're generally underemployed. They are working minimum wage. They can't work a lot of hours because then [the employer has]to provide benefits [if they work more hours] and, you know, that cycle. (Agency Representative)

THE FOOD ENVIRONMENT IN PICKENS COUNTY

The surveys, interviews and focus groups highlighted the complex nature of food insecurity in Pickens County. Hunger and food insecurity are not individual-level problems. Rather, there are structural explanations for the persistence of these social issues. One such structural factor is the food environment. According to the USDA (2019d), it is important to consider “food environment factors” that impact community members’ access to food. Such factors include the proximity of stores and restaurants, food prices, food and nutrition assistance programs, and community characteristics. A food-system approach to hunger and food insecurity is necessarily broader in scope, encompassing a wide variety of possible solutions and starting points for change in a positive direction.

The survey results indicate that the current food environment in Pickens County is not robust enough to feed community members and their families. Our research revealed that the food system in Pickens County is well-developed in some areas and patchy in others. Findings from the surveys and interviews suggest that obtaining healthy affordable food is an ongoing struggle

for many, that takes time and mental and emotional energy to navigate the most basic needs. In this section, we discuss some of the broader, systemic causes of hunger and food insecurity in Pickens County, with a focus on food deserts, transportation challenges, and inadequate access to retailers that sell healthy, affordable food.

Food Deserts

In our project, we utilize the concept of “food desert” to better understand the nature of food access in Pickens County and to illustrate the geographic patterns of hunger and food insecurity. Food deserts are “areas that lack access to affordable fruits, vegetables, whole grains, low-fat milk, and other foods that make up the full range of a healthy diet” (Centers for Disease Control and Prevention, 2017). Researchers use a variety of methods to measure the existence of food deserts, including distance to a grocery store or other outlets, such as farmers markets, mobile markets and corner stores.

To be qualified as a food desert, a Census tract must meet both of the following two criteria: (1) Low-Income: At least 20% of the population are at poverty, or median family income is less than or equal to 80% of the statewide family income; and (2) Low Food Access: At least 500 people or 33% of the population are greater than one mile from a supermarket in an urban area or greater than 10 miles in a rural area. According to the 2015 Food Environment Atlas, approximately 33,400 Pickens County residents had low access to a grocery store (i.e., number of people in a county living more than one mile from a supermarket, supercenter or large grocery store; USDA, 2019c).

A map depicting food deserts in Pickens County can be found in Appendix K. As depicted, the food deserts in Pickens County are located in the lower half of the county; these areas are highlighted in pink. While some areas of Pickens County are low-income, these areas (highlighted in blue) are not considered to be a food desert according to the USDA definition simply because there may be a supermarket within ten miles. However, with limited to no transit opportunities in these areas, residents without reliable transportation are limited in their access to supermarkets. Instead, these areas often have unhealthy retail that may serve as a source for household grocery shopping, or households depend on local food pantries for their regular grocery needs. The SNAP-authorized retailers are mapped (see Appendix L) and while there are healthy SNAP-authorized retail that follow the transit route, this is often served for students, and not necessarily for local residents, especially in the rural areas of the county.

Transportation Challenges

“I don’t see how people survive [in Pickens County] without transportation.” (Community Member)

A robust transportation system can be the lynchpin for addressing a variety of social challenges, including unemployment, hunger, and food insecurity. Transportation challenges are most often, but not always, associated with distance from food outlets. For example, an individual may live relatively close to a grocery store, but lack the ability to transport frozen or heavy items (Rodriguez & Grahame, 2016).

The Clemson Area Transit (CAT) system is funded by the City of Clemson, Clemson University, Seneca (Oconee County), Central, and Pendleton (Anderson County). Through the CAT, this area is provided with comprehensive bus services, especially in the lower part of the county, and especially for individuals who desire to travel to Clemson University or Southern Wesleyan University. The research team’s bus audit revealed that during the summer, the bus routes are primarily used by students, workers, and other individuals using the bus for food and other shopping purposes. During the semester, however, the bus routes are predominantly used by students to travel to and from the university, with few signs that the routes are used by enough workers and/or food shoppers to comprise a significant presence.

The bus routes are convenient for individuals in southwest Pickens County to access a variety of food sites, such as grocery stores, convenience stores, restaurants. Individuals outside of southwest Pickens County would have a difficult time accessing the CAT bus as the bus system is not designed to service Pickens County comprehensively. The CAT system cannot be easily accessed by individuals in other towns in Pickens County, including Liberty, Six Mile, Easley, Pickens, and Dacusville.

Our findings from the transportation study also suggest that the CAT faces more limitations than its geographic coverage. While the CAT buses are air-conditioned and well-maintained, adequate shelter is not provided at many CAT stops. That is, the CAT system lacks adequate shelter from rain and sun at many locations. This would make it difficult for individuals transporting cold food products during the summer, and during times of inclement weather.

The results of the focus groups, survey, and interviews reveal that transportation is a challenge for many community members. While nearly 87% of survey respondents indicated they used their own car “some of the time” or “most of the time” in the past 12 months to go food shopping, 51% indicated they relied on someone they knew to take them to a grocery store “some of the time” or “most of the time” in the past 12 months (Figure 11). One-fourth of respondents indicated they walked to the grocery store “some of the time” or “most of the time.”

These data reveal that respondents use the CAT system for the sole purpose of food shopping only on a limited basis. The research team encountered few community members who were obviously using the CAT system for their food shopping needs. This mirrors the survey results, which indicated that 9.8% of survey respondents used the CAT bus to travel to the grocery store.

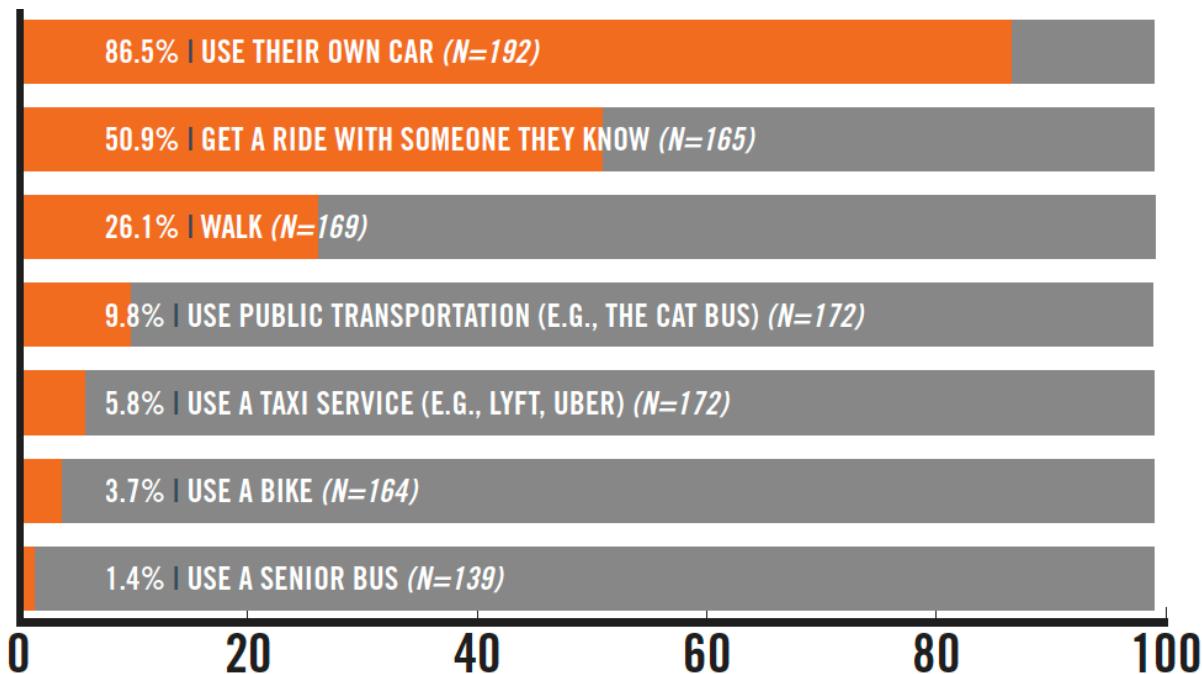


Figure 11. Over the last year, how often did you travel to go food shopping using the following types of transportation?

Thus, an inadequate transportation system leaves many Pickens County residents isolated and unable to access healthy food. There is no county-wide bus system, which is not unusual in rural areas such as Pickens County, where “*everybody is ten miles away from everybody*” (Focus Group Participant). Those who live in more remote regions, such as the northwest region of the county, are most isolated and have the fewest options for obtaining healthy, fresh food. Those who lack transportation must often rely on family and friends to transport them to the grocery store, which can be up to 15 miles away from their home.

Overall, then, a predominant theme in our study related to the transportation challenges faced by Pickens County residents and the resulting impact on food insecurity. The quotes below illustrate various dimensions of this concern:

- “*I can get someone to take me to an interview. Great. But who is going to take me to work five days a week?*” (Community Member)

- “*I’m shocked that Pickens County cannot tackle the transportation issue.*” (Focus Group Participant)
- “*It’s a fairly big county, if you don’t have the transportation, if you’re in a rural isolated part. If you’re in Easley, it may be different. But, if you’re in the northwest part, there’s not a lot going on.*” (Focus Group Participant)
- “*We have a great need for [a bus] out here. Some of the reasons why [some community members] don’t have [higher incomes] is they don’t have reliable transportation and that leads to poverty and hunger.*” (Focus Group Participant)
- “*The elderly may have the money, but they have no way to actually get [the food].*” (Focus Group Participant)
- “[Transportation] has been a huge [issue] for years. It’s a major barrier for so many things, not just to get to food in the stores, but education opportunities and jobs.” (Agency Representative)
- “*One of the true barriers [in Pickens County] is transportation. I think you’ll hear that county-wide, especially as you get out of the Clemson-Central-Seneca-Pendleton area, where the CAT bus goes. Transportation is a huge barrier to accessing services much less anything else. So, I think transportation is a big thing.*” (Agency Representative)
- “*Transportation with lower income people is a huge barrier to all kinds of things. To food services, to jobs, to, to everything, just accessing any kind of services. We are very blessed that we have the CAT bus system, so anybody can get to us and access our services. It may not be totally convenient because you may have to stop a couple of times and change, but you can access our services.*” (Agency Representative)

Such challenges are compounded for individuals who need reliable transportation for other purposes. For example, according to one focus group participant, individuals who are required to attend mandated sessions at Behavioral Health Services or to report to the Department of Social Services face especially formidable barriers. They are “*in a double, double-trouble kind of place,*” having inadequate access to reliable transportation, and “*add onto that, facing food insecurity.*” One community member described how her transportation dilemma impacted her efforts to seek employment:

I understand [having a car] can be optional. But, then again is [a car] really optional if Pickens County doesn’t have a bus system? How am I supposed to work without a vehicle?

A focus group participant described the complex issues related to poverty and lack of transportation:

It's a perfect example of the haves and the have nots of Clemson and the university area...it's all about the young and the bottom line, and the city is not much better. There is a very good [transportation] system, which does not reach anywhere else. And it's incredible that these vehicles will go by and be empty, or partially full, and people could be taking advantage of them [to access food]. (Focus Group Participant)

Focus group participants and community members were especially concerned about the recent reduction in CAT bus transportation routes in Easley and the surrounding areas. As one focus group participant remarked, “*we've gone backwards, instead of forwards, with transportation.*” When Clemson University stopped providing the Green Link service to Easley, many people were impacted.

Some organizations are attempting to develop creative solutions to the transportation challenges. For example, the Clemson Free Clinic is working with Uber Health to provide transportation for the Produce Rx program. Some agencies have provided clients with cab fare to get to the grocery store, but soon found that this strategy was not economically efficient for the agency: “*We are paying for taxis and Ubers and it's \$60 round trip. I would love not to [do this]. One day our money is going to run out*” (Focus Group Participant).

A COMPREHENSIVE MODEL FOR ADDRESSING HUNGER AND FOOD INSECURITY IN PICKENS COUNTY

The study results indicate that hunger and food insecurity are the result of the complex interactions of individual-level, community-level, and policy-level factors (Rodriguez & Grahame, 2016). The survey results, interviews with community members and agency representatives, focus groups, mapping study, and transportation analysis identified many common themes for addressing food insecurity in Pickens County. Most notably, Pickens County residents experience hunger and food insecurity under a range of circumstances and these issues impact their lives in many ways.

Individuals making decisions on food purchases for their household are faced with constraints of household budget, healthy food availability and accessing healthy food retailers, all while prioritizing an adequate and healthy diet for all members of their household. While the Federal Supplemental Nutrition Assistance Program and the National School Lunch Program aim to

address food affordability, there are still gaps in healthy food accessibility and availability. Addressing food insecurity and hunger requires a comprehensive, multi-sectoral approach. In other words, healthy food availability, accessibility and affordability must involve coordination and collaboration among committed partners from multiple settings—from the home environment, to schools and communities, to local policy decision-making.

Addressing these challenges will require a multi-faceted approach, that targets individual-level challenges and macro-level causes of hunger and food insecurity. In this section, we present a county-wide local approach to addressing hunger and food insecurity, one that relies on both top-down policy initiatives and bottom-up grassroots strategies. Such an approach is vital for addressing food insecurity during normal times and especially during times of crisis. The model presented below (Figure 12) and in Appendix M provides a structure to move toward long-term, sustainable change for food-insecure residents. This Comprehensive Model provides a framework in which multiple sectors can be engaged to improve healthy food availability, affordability and accessibility. It is essential to secure the commitment of decision makers from each sector represented in the model. Communities can work with these sectors for a coordinated response to hunger and food insecurity. Each of these sectors is briefly described below.

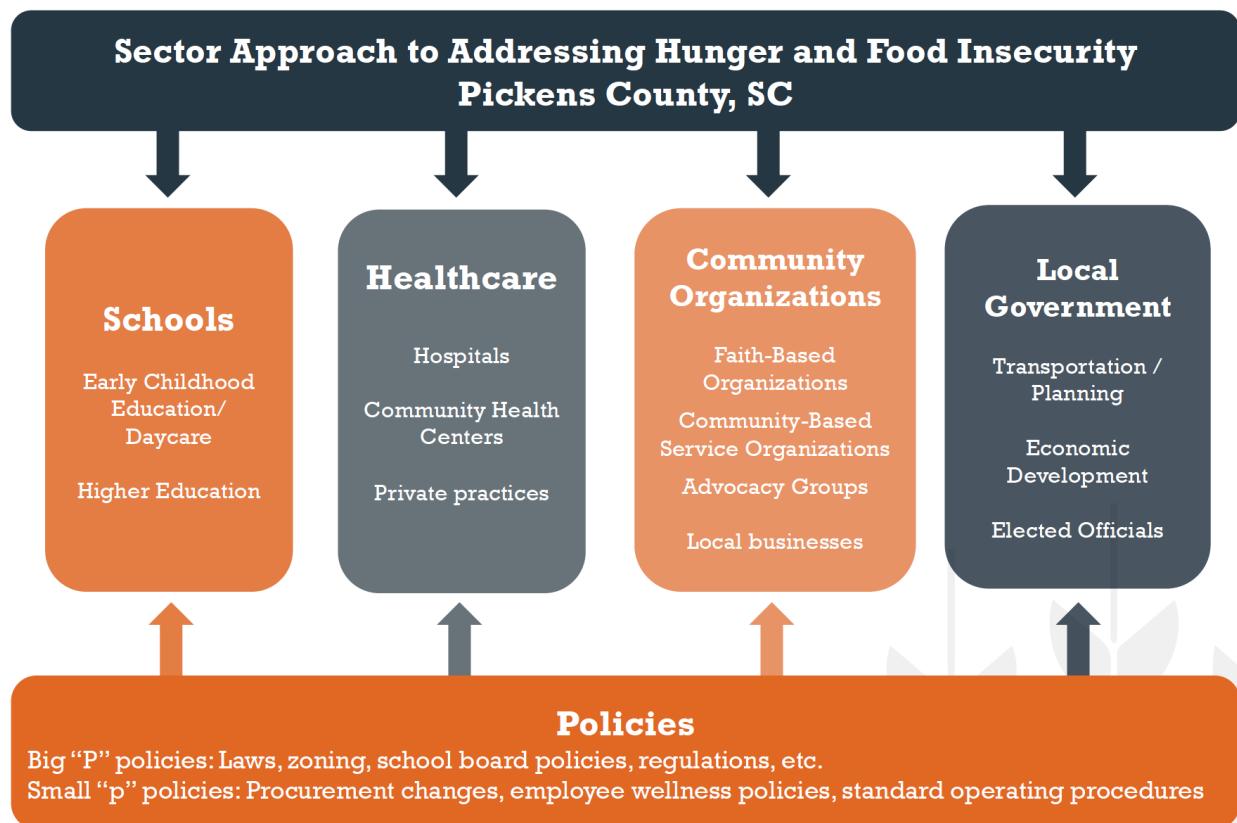


Figure 12. Sector Approach to Addressing Hunger and Food Insecurity in Pickens County

COMMUNICATION

This portion of the model represents the overarching framework for addressing hunger and food insecurity and communicates the need for a collective commitment to this effort. Having a unified message in a community demonstrates a coordinated and committed approach to improve food security and reduce hunger in the community. This unified message can serve as a “brand” that provides an identity for the community in their commitment as well as a campaign to promote a message that would be recognizable for residents. It can be incorporated among schools, community organizations and businesses.

SCHOOLS

Children experiencing food insecurity or hunger can suffer academically such as poor concentration and frequent visits to the school nurse. School-age children spend most of their day in the school or classroom setting. While schools offer school lunches and, in some cases, school breakfasts, they have the potential to screen youth for food insecurity and provide a resource for families to increase food access with backpack programs and weeknight dinners. In addition, federal programs are in place to expand free and reduced school lunch and breakfast for all school age children. For example, if 40 percent of students qualify for free meals in a school district, all students are made eligible. School districts should take advantage of this expanded federal program as universally applied approaches such as this, as opposed to targeted population approaches (e.g., only children who are income eligible), break down some of the social barriers that exist for students utilizing these programs. Child nutrition directors can work with local farmers to source local products to introduce food systems initiatives in the county (District 6 School System in Spartanburg County provides an excellent example of farm-to-school programming that Pickens County could emulate:

<https://www.spart6.org/apps/news/article/1103740>). Backpack Programs are also very effective in assisting food insecure families through nutritional staple items that are sent home with children over the weekends. Building this type of program throughout the county would ensure children have additional food support when needed. Another successful program is Food Corps, an AmeriCorps VISTA federal program that places service volunteers in partner schools to work with children and communities to learn how to grow healthy food and create healthy children.

HEALTHCARE

An increasing number of pediatricians are screening patients for household food insecurity. However, this can be a practice for all primary care providers. Hospitals and healthcare providers in private clinical settings have an opportunity to connect patients and their families to food resources. Some hospitals have started food pharmacies to address food insecurity and hunger through Healthy Rx programs that “prescribe” healthy foods to address chronic diseases and

connect patients to healthy, affordable foods. These are often in partnership with local farmers markets. Wholesome Wave is a national program that provides examples of communities and health care systems doing this type of work across the nation (see <https://www.wholesomewave.org/>). Framing Health as an Economic Development Strategy helps to strengthen sector development towards building healthy communities.

COMMUNITY ORGANIZATIONS

In the role of social services for families in need, community-based organizations provide a safety net for assisting families with their daily needs, including food provisions. They can partner with public agencies to deliver services and screen families for needs including food security, financial assistance and transportation. They have resources and capabilities to help supplement other agencies and sectors. Faith-based organizations often house food pantries and emergency meals for families in need. Public agencies can leverage the resources of community-based and faith-based organizations to provide technical assistance and contribute to a more coordinated and comprehensive approach for improving food security and hunger. Food policy councils (discussed below) can help leverage these various activities through an inclusive community stakeholder collective focused on increasing access to healthy, affordable food.

LOCAL GOVERNMENTS

While food insecurity is a social and health issue, local governments can play a significant role in improving food access, availability and affordability. Community food systems are economic development opportunities. Since most American businesses employ fewer than 20 employees, communities can integrate economic development approaches with community development strategies to foster small-business innovation to support the local economy such, as food entrepreneurs, food distribution infrastructure and regional food hubs. Planning agencies can incorporate food systems and food access in their comprehensive plans, make zoning changes to allow for urban agriculture and local food production, and incentivize for healthy, affordable food retail, such as tax increment financing or healthy food retail permitting. Transportation agencies can identify transit routes that connect residential areas to food retailers. Oconee County has begun to implement this strategy in its Oconee County Comprehensive Plan, creating planning documents that identify eight key objectives to ensuring access to healthy affordable foods in the county. (See <https://oconeesc.com/documents/community-dev/planning-zoning/comprehensive-plan/draft-agricultural-element.pdf>).

POLICY

Policies can be implemented by local governments or within institutions and organizations. These big “P” (i.e., laws and government regulations) and little “p” policies (i.e., organizational practices) can provide a sustaining and large impact in communities. For example, communities can pass a resolution for a local food policy council to prioritize needs and guide policy development. Food policy councils are common organizations in communities that bring together multiple sectors from community members, school officials, subject matter experts to business leaders, to identify, inform and develop policy priorities around food access, availability and affordability.

Every sector described above has the capacity for change and is already contributing in some way. This approach builds on community assets and capitalizes on the work that is already being accomplished by Pickens County service providers. A sector-based model makes this more explicit, connecting the dots and ideally enhancing agency strengths, ultimately filling gaps and reducing redundancies in service provision. And most importantly, this model provides a prescriptive approach and coordinated effort towards a common goal: having affordable, accessible healthy food for residents. When every sector is aligned in this common goal, deliverables, outcomes and objectives can be met that ensure the community is focused on this key social need.

ADDITIONAL RECOMMENDATIONS FOR MOVING FORWARD

The study results provide additional direction for future efforts to address hunger and food insecurity in Pickens County. Some important first steps are outlined below.

Develop a food council to promote food resilience in Pickens County.

[Note: Information adapted from the North Carolina Food Policy Council website.]

Food councils are community-based coalitions, often but not always organized by county, that help promote more resilient food systems. Councils build connections across stakeholders and collaborate to improve health, food access, natural resource protection, economic development, and production agriculture for all its community’s citizens. Using this cross-sector approach, food councils solve broad food system issues and give communities more control over the food they consume. A food policy council can help to spearhead the sector model presented in the previous section. Although the goals and aims of food councils look different in every community, in general they aim to:

- **Engage** experts to better understand the food environment
- **Connect** decision makers and stakeholders to align programs and initiatives
- **Educate** leaders and the community
- **Recommend** program and policy change to affect the local food system

Many people in different sectors work to address issues that intersect with food. Usually not one group exists to tell the story of the food system as a whole. That is what food councils can do. Councils provide a shared way of thinking about the *whole* food system by including voices from many different sectors. Food councils put the pieces together and tell the story of the whole food system.

Food councils are intentionally cross-sector, much like the sector-based approach described in the previous section and Appendix M. Various groups are represented on food policy councils, including, but not limited to, the following:

- Public health professionals
- Food insecure/food desert residents
- Local government officials
- Farmers and/or agricultural organizations – Farmers Market Managers
- Restaurant and local business owners
- Cooperative Extension staff
- Soil and Water Conservation District staff
- Faith communities
- Consumers from all socio-economic backgrounds
- Public schools
- Interested parents and consumers
- Food pantry and food security advocates
- Community colleges or universities
- After School Programs/Preschool Programs

A useful starting point for developing a food policy council in Pickens County is to consult existing models, such as the South Carolina Food Policy Council that “supports the sustainability of our food sector and the health of our communities” (www.scfoodpolicy.com) and the Western North Carolina Food Policy Council that aims to “build more effective programs and policies to strengthen WNC’s food economy and economic security” (<https://www.wcu.edu/engage/regional-development/public-policy-institute/wnc-food-policy-council.aspx>). Many states have food policy councils and there is a national coalition that helps to provide guidance and advice on local, state, and regional food policy council development (<https://foodpolicyaction.org/>)

Reinvigorate the Pickens County Hunger Coalition to promote coordination between community groups that address poverty, hunger and food insecurity in the county.

What I love about our county is...like sitting here in the room earlier today with this group, I don't feel like I'm in competition with any of those people. There's very much a network of "how can we work together?" We refer to other organizations, they refer to us. You know it's just trying to figure it out together, not being afraid to share resources. That's one thing I really appreciate about our county. (Agency Representative)

The current network of individuals and organizations in Pickens County who are addressing hunger and food insecurity is characterized by extensive sharing and collaboration. These partnerships enable individuals and organizations to be successful, for example by forming close relationships with school personnel to help children in need, communicating with a local food bank about specific types of food shortages, or relying on existing volunteers to recruit other volunteers.

Focus group participants and agency representatives emphasized the importance of coordinating resources and information among and between the various entities that address poverty, hunger, and food insecurity in the county, “*because not any one individual or organization can do it; we have to work together to help address this issue; it's a huge issue.*” Greater coordination would expand awareness about available resources so efforts are not duplicated. Such coordination would also stimulate discussion about expanding current services and possibly initiating new efforts.

To that end, we recommend reinvigorating the Hunger Coalition that was formed after the publication of the 2011 UWPC report. Many participants in the current study were energized by the discussions in the focus groups and interviews. Several individuals recommended convening a planning group that would not only share information, but would also develop action plans, encourage the sharing of resources, and collaborate on grants. Ideally, an individual would be appointed to convene the coalition. We recommend holding monthly meetings that include meeting face-to-face and electronically (e.g., through Skype or Zoom). The group could collaborate to develop an inventory and resource guide for Pickens County. When organizing the coalition, we also recommend reaching out to other groups who were not able to participate in this particular study, including farmers, doctors, grocery store managers, and nutritionists, and other stakeholders listed in the food policy council section above.

Expand access to affordable, healthy, fresh food.

Residents desire greater access to affordable healthy food, especially fruits and vegetables. There are many potential avenues for doing so. First, in an effort to “bring food to the people”, many communities in the Upstate and beyond utilize mobile markets and food trucks to expand access to healthy food. Eighty-six percent of survey respondents indicated that they were interested in a fresh food mobile market and would buy from the mobile market if it came to their neighborhood or community. Such an initiative would begin to address the transportation challenges faced by many Pickens County residents, especially those living in the more isolated parts of the county. According to the community members interviewed, this idea is “*a good one*”, and “*would benefit everyone*”, especially if the market could include some sort of educational component focusing on preparing and cooking with the food received through the mobile unit. The mobile market should have the capacity to accept SNAP-EBT benefits.

Several mobile markets are currently in operation in the Upstate. The Mill Village in Greenville offers a mobile market in areas in the county that have been defined as food deserts. The mobile unit stops at locations convenient for many community residents, such as churches and community centers, where community members visit anyway for other reasons. A similar service is offered in Spartanburg through the Hub City Mobile Market. Several individuals indicated that a mobile market was already in operation in Pickens County, in the Ingles parking lot in the city of Pickens (“Adam’s Market). Another participant indicated that the Pickens County School District operates a similar unit during the summer.

Establishing distribution substations, or mini-distribution sites, throughout the county would help reduce the transportation burden faced by many community residents, particularly in the more isolated regions of the county “*where there are no Clemson Community Cares*” (Focus Group Participant). As one focus group participant indicated “*distribution in Pickens County is the biggest challenge*” for addressing food insecurity. As an example, Meals on Wheels recently received funding to allow for meal deliveries to more remote areas of the county. The distribution centers should be located in rural areas, at neutral sites, where “*no one would be ashamed to go*” (e.g., libraries, community centers, such as the Dacusville Community Center, etc.; Focus Group Participant).

Second, local agencies could learn from existing innovative programs designed to expand access to healthy and affordable food. Most notably, we recommend expanding the “Healthy Bucks” program that would allow SNAP recipients to double their SNAP dollars for purchasing fresh fruits and vegetables at farmers markets. According to the website of the South Carolina Department of Social Services, the Healthy Bucks program is currently operational at the Easley farmers market (SC Department of Social Services, 2019). FoodShare SC, another innovative program, aspires to “ensure access to fresh produce for all in our communities”

(www.foodsharesc.org). Community members can purchase a Fresh Food Box every other week that includes a wide variety of fruits and vegetables. Another program, “Pharmacy-to-Farm Prescriptions,” encourages pharmacies to provide “fruit and vegetable” prescriptions to individuals who receive high blood pressure medication; these prescriptions can be exchanged at local farmers markets for fresh produce (also discussed above).

A third endeavor could focus on expanding opportunities for community members to donate healthy food. For example, in addition to donating traditional canned goods, individuals could purchase “shares” through farmers markets or through the Clemson Area Food Exchange (www.clemsonareafoodexchange.com) that could then be donated to community members. Local agencies could develop informational brochures with the aim of educating community members about what type of food they should donate.

It is also essential to provide information to community members about retailers and food outlets that sell fresh, healthy food and that accept SNAP, WIC, and other government benefits. This information could be made available through existing food banks and food pantries, government agencies, doctor’s offices, and local grocery stores.

Considering that nearly 60% of survey respondents buy some or most of their food at partial markets or discount stores like Dollar General or Family Dollar, it is worthwhile to consider how these stores in Pickens County can contribute to efforts to improve the food system in the county. Indeed, some municipalities across the country are taking a broader view of local food systems by encouraging businesses to sell more fresh produce. For example, in Oklahoma, local governments are requiring discount stores to sell fresh fruits and vegetables (Ansari, 2019).

Improve transportation options to expand community members’ access to healthy, affordable food.

An overwhelming study theme concerned the lack of adequate transportation options in Pickens County, especially in the more rural parts of the county. A more comprehensive approach to transportation can do much to improve access to healthy food for a significant proportion of residents facing hunger and food insecurity. Some potential options include:

- Expanding CAT Bus routes to other areas of the county
- Initiating a “rideshare” program (e.g., through Uber or Lyft) that provides individuals with discounted transportation to grocery stores, doctor appointments, etc.
- Partnering with local churches who have vans to participate in a ride-share program or meal delivery programs
- Ensuring all bus stops (existing and future) have adequate shelter/coverage from rain and inclement weather

Involve community members who are experiencing hunger and food insecurity in efforts to address these challenges.

“It’s a great way to pay back...just to help the next man or the woman who’s coming in behind me...As time goes on, if I can give some feedback, maybe it’ll be easier for the next man or the next woman coming behind me.” (Community Member)

All seven of the individuals interviewed for this project appreciated the opportunity to tell their stories. The voices, insights and experiences of other community members will provide a solid foundation for addressing food insecurity and hunger in Pickens County. It is essential that efforts to address these challenges should include community members who are experiencing hunger and food insecurity. For example, nonprofits and agencies focused on community well-being should ensure their committees and program initiatives include members from food insecure communities and that they have a voice on their boards. In addition, finding ways to develop and nurture leadership opportunities for these residents through board and committee participation will help build community capacity and resiliency in this arena.

Continue to fund, support, and if possible, expand, the strong network of community agencies addressing hunger and food insecurity in the county.

“Food banks are an important part of an overall strategy to meet food needs: to be able to afford housing in this community, you have to put all the pieces together to make it work. I think our food pantries are a huge part of that.” (Agency Representative)

Pickens County is fortunate to have a thriving network of non-profit and government agencies and programs addressing hunger and food insecurity. Together, they strive to provide support year-round, “*because hunger does not know what a vacation is*” (Agency Representative). Many of these organizations are dedicated to helping community members to become self-sufficient. In the words of one agency leader:

We are not here to be someone’s grocery store, or to enable a lifestyle or anything like that. We’re here to help [them], and work together to move [them] forward...we try to walk with somebody to see what [their] long-term solutions are.” (Agency Representative)

With more than 200 churches in Pickens County, congregations could be another essential component of community-based efforts, and could be an important “*focal point and the real hub*” for addressing hunger and food insecurity. The results of the church survey reveal that many churches throughout Pickens County are already providing assistance to their own congregations, and often beyond their own congregations. Indeed, many food banks depend on

churches and their members for donations. Churches could serve as distribution points for delivering fresh food throughout the county. We recommend that the Hunger Coalition nurture the development of a broad-scale collaborative and coordinated effort amongst churches in the county to address hunger and food insecurity

CONCLUSION

We found that hunger and food insecurity in Pickens County results from a lack of income, access and information, echoing prior research on food insecurity (Food Research and Action Center/University of South Carolina Center for Research in Nutrition and Health Disparities, 2018). Hunger and food insecurity are complex problems, with multiple causes, inextricably intertwined with broader social issues such as poverty, geographical isolation, unemployment, and health challenges.

Future efforts must address the broader food system to ensure that Pickens County residents have access to healthy, affordable food. This will require a coordinated effort to address a wide variety of issues related to transportation, food planning, healthy economies, coordination between human service agencies, and more. Addressing hunger and food insecurity through such an approach is essential as “food not only is about food production and consumption, but is also a means to build communities and develop capacity for economic growth” (Hossfeld & Mendez, 2018, p. S-11). A coordinated strategy is especially essential during times of community crisis or when natural disasters impact local residents.

The sector-based model presented in this study is an important starting point for such efforts, as are food policy councils. It is hoped that this research initiative and this report can be a springboard for considering creative approaches for addressing, and potentially making great steps toward eliminating, food insecurity in Pickens County. In the words of one focus group participant:

My dream is that we could close our [agency], that I wouldn’t have a job. And I’m ok with that...That’s what the ultimate dream is...There is no food insecurity.

Pickens County is fortunate to have a strong foundation of organizations, staffed by volunteers and staff members who are passionate and dedicated to the cause. These community assets provide a solid basis for bringing such a dream into reality.

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Appendix A

Community Member Survey

Basic Information

Are you at least 18 years of age?

- Yes
- No

Do you agree to participate in this survey?

- Yes
- No

Date: _____

What county do you live in? _____

What is your Zip Code?

- 29611 - Greenville
- 29630
- 29631
- 29632
- 29633
- 29634
- 29635
- 29640
- 29641
- 29642
- 29657
- 29661
- 29667
- 29670
- 29671
- 29682
- 29685
- Other (If other, what is your Zip Code? _____)

What is your physical address? _____

If you are unwilling to provide your physical address what is your cross street identification?

Main Survey Questions

Over the last year what store did members of your household buy food from the most often?

Where is the store located? _____

Please indicate how often you or members of your household shopped for food during the last 12 months at the following different types of food stores. Possible responses are: I never buy food here; I buy some of my food here; I buy most of my food here; do not know; refuse to answer.

- Supermarket or Grocery Store (Aldi, Ingles, Bi-Lo, Publix, etc.)
- Partial Market (Walgreens, Dollar Store, CVS, etc.)
- Specialty Store (Asian food market, Mexican food market)
- Convenience Store, Carryout, Corner Store (gas station)
- Fast Food Restaurant, Food Truck (counter service)
- Restaurant with Wait Staff (sit and order)

Over the last year how often did you travel to go food shopping using the following types of transportation? Possible responses are: never; some of the time; most of the time; do not know; refuse to answer.

- My own car
- Getting a ride with someone I know
- Public transportation (for example, the CAT Bus)
- Taxi service (for example, Uber, Lyft, taxi, etc.)
- Bike
- Walking
- Senior bus

Are you usually able to buy the food that you want to eat?

- Yes (1)
- No (2)

If no, what prevents you from buying the food you want to eat? Check all that apply

- Transportation
- Food price
- Travel time
- Food store distance
- Personal safety (crossing street)
- Fear of crime
- Other (If other, what is the reason? _____)

- Do not know
- Refuse to answer
- Not applicable

In the past 12 months how often has your household depended on any of the following food sources? Possible responses are: never; 1-3 times during the year; 4-6 times during the year; one or more times each month; do not know; refuse to answer.

- Food pantry
- Free meal (Salvation Army, Community Center)
- Federal School Lunch or Breakfast Program
- Farmers market or produce stand
- Hunting/fishing
- Friends, co-workers, neighbors
- Relatives outside of the home
- Community or personal garden

Please rate how important the following items are in your decisions about what food to buy. Possible responses are: not at all important; slightly important; important; very important; do not know; refuse to answer.

- Nutritional value
- Appearance
- Price
- Locally grown
- Organically grown or grown without the use of chemicals

I have a kitchen with the following items (check all that apply):

- Refrigerator
- Chest freezer or upright freezer (separate from refrigerator)
- Stove
- Adequate cabinet/storage space
- Pots and pans
- Microwave
- Measuring cups
- Knives
- I do not have access to any of these items
- I do not have a kitchen or easy access to one
- Do not know
- Refuse to answer
- Not applicable

Do you have access to your own garden, a neighbors garden, or a community garden?

- Yes
- No

In the past 12 months have you or anyone in your household had to choose between buying the food you need or paying for any of the following? Check all that apply

- Medicine or medical care
- Utilities (electricity or cell phone)
- Rent or mortgage
- Gas/fuel for vehicle
- Other bills (childcare)
- Do not know
- Refuse to answer
- Not applicable

Who usually prepares meals in your household?

- Respondent
- Respondent spouse or respondent partner
- Respondent parent or respondent grandparent
- Respondent child
- Other household member
- Do not know
- Refuse to answer
- Not applicable

What kind of cooking do you do on a regular basis? Check all that apply

- Cook convenience foods and ready-meals (frozen or microwaveable meals)
- Put together ready-made ingredients to make complete meals (boxed macaroni and cheese)
- Prepare dishes from basic ingredients or from scratch
- Other
- Do not know
- Refuse to answer

If other, what kind of cooking do you do on a regular basis? _____

Please state how easy it is to find the following items in your neighborhood. Possible responses include: not easy; somewhat easy; very easy; do not know; refuse to answer.

- Fresh fruits and vegetables
- Locally grown or locally made food items
- Food support services (food pantry, free meals)
- Farmers market or produce stand
- Cheap food

How satisfied are you with the ease of which you can access the food you want to eat in your neighborhood?

- Not at all satisfied
- Somewhat satisfied
- Very satisfied
- Do not know
- Refuse to answer

How much do you agree with each of the following statements about your neighborhood?

Possible responses are: strongly disagree; disagree; not sure; agree; strongly agree; refuse to answer; not applicable

- My friends in the neighborhood are part of my everyday activities.
- People here know they can get help from others in the neighborhood if they are in trouble.
- I have no friends in the neighborhood on whom I could depend

Please indicate how often you ate at the following types of restaurants in the last seven days.

Possible responses include: none; 1-2 times; 3-5 times; 6 or more times; do not know; refuse to answer

- Fast food or restaurant with walk-up counter service (McDonalds, Deli Counter, Subway)
- Food truck
- Restaurant with wait staff (sit and order)

Would you buy fresh vegetables or fruit from a food truck or Mobile Market if there was one that came to your neighborhood, community?

- Yes
- No

Description: A mobile market is like a refrigerated truck or bus that travels from neighborhood to neighborhood selling fresh fruit and produce. It can have an EBT/SNAP card swipe that you could use to pay for the fruits and vegetables.

Health Questions

In the last 12 months have you seen a doctor, nurse practitioner, health professional?

- Yes
- No
- Do not know
- Refuse to answer
- Not applicable

Has a doctor, health professional ever informed you that you have any of the following? Check all that apply.

- High blood pressure
- High cholesterol
- Pre-diabetes
- Type II diabetes
- Gout
- Cancer
- Do not know
- Refuse to answer
- Not applicable

If yes to Pre-Diabetes, was the condition pregnancy related?

- Yes
- No

If yes to type II Diabetes, was the condition pregnancy related?

- Yes
- No

What is your height? _____

What is your weight? _____

In a typical week how many days do you do at least 30 minutes of exercise like brisk walking, gardening, bicycling? _____

Are you limited in any activities because of physical, mental, emotional problems?

- Yes
- No

Do you have any health problems that require you to use special equipment like a cane, wheelchair, special bed, special telephone?

- Yes
- No

Food Insecurity Questions

"The food that I bought just didn't last, and I didn't have enough money to get more." Is this statement often, sometimes, never true for your household in the last 12 months?

- Often true
- Sometimes true
- Never true
- Do not know
- Refuse to answer
- Not applicable

"I couldn't afford to eat balanced meals." Is this statement often, sometimes, never true for your situation in the last 12 months?

- Often true
- Sometimes true
- Never true
- Do not know
- Refuse to answer
- Not applicable

In the last 12 months did your household ever cut the size of your meals, skip meals because there wasn't enough money for food?

- Yes
- No
- Do not know
- Refuse to answer
- Not applicable

If yes, how often did this happen?

- Almost every month
- Some months but not every month
- Only 1 or 2 months
- Do not know
- Refuse to answer
- Not applicable

In the last 12 months did you ever eat less than you felt you should because there wasn't enough money for food?

- Yes
- No
- Do not know
- Refuse to answer
- Not applicable

If yes, how often did this happen?

- Almost every month
- Some months but not every month
- Only 1 or 2 months
- Do not know
- Refuse to answer
- Not applicable

In the last 12 months were you ever hungry but didn't eat because there wasn't enough money for food?

- Yes
- No
- Do not know
- Refuse to answer
- Not applicable

If yes, how often did this happen?

- Almost every month
- Some months but not every month
- Only 1 or 2 months
- Do not know
- Refuse to answer
- Not applicable

Demographic Questions

Which do you feel most closely describes your gender?

- Female
- Male
- Transgender or other
- Do not know
- Refuse to answer
- Not applicable

Are you of Hispanic or Latino descent?

- Yes
- No
- Do not know
- Refuse to answer
- Not applicable

The U.S. Census uses several categories for race. How would you best describe your race?

- White/Caucasian
- Black or African-American
- Asian
- American Indian/Alaskan Native
- Native Hawaiian/Other Pacific Islander
- Two or more races
- Other
- Do not know
- Refuse to answer
- Not applicable

If two or more races, please specify.

If other, please specify.

Were you born in the United States?

- Yes
- No. If no, what is your origin country and how long have you lived in the US?
- Do not know
- Refuse to answer
- Not applicable

Is English the primary language spoken in your home?

- Yes
- No (If no, what is the primary language spoken in your home? _____)

What is the highest level of education you have completed?

- Less than high school (did not earn a high school degree)
- High school diploma or GED
- Some college, no degree
- Associates, two-year, or technical school degree
- Bachelor's degree
- Master's degree
- Ph.D., MD, etc.
- Do not know
- Refuse to answer
- Not applicable

What is your age? _____

Not including yourself, how many adults (18 or older) live in your household? _____

Not including yourself, how many adults (65 or older) live in your household? _____

How many children (0-17) live in your household? _____

How many are between the ages of 0 and 5? _____

How many are between the ages of 6 and 17? _____

In the past month, including yourself, how many members of your household were working full-time (at least 35 hours each week)? _____

In the past month, including yourself, how many members of your household were working part-time (at most 34 hours each week)? _____

In the past month, including yourself, did members of your household receive income, benefits from any of the following sources? Check all that apply.

- Temporary, seasonal, or cash-based work
- Unemployment or worker's compensation insurance
- TANF (Temporary Assistance to Needy Families)
- Child support payments
- SSI (Supplemental Security Income), Disability, or Veterans Benefits
- Social Security Insurance, private pension, retirement benefits, government or military pension
- SNAP/EBT/Food stamps
- Public Housing or Section 8 Housing
- Other
- Do not know
- Refuse to answer
- Not applicable

If SNAP/EBT/Food Stamps was selected: How much SNAP benefit (\$) did your household receive last month? _____

If Public Housing or Section 8 Housing was selected: How much is your total rent? _____

If Public Housing or Section 8 Housing was selected: How much do you pay out-of-pocket for these expenses: _____

Please choose the range that best matches your yearly household income

- Less than \$10,000
- \$10,001-\$14,999
- \$15,000-\$24,999
- \$25,000-\$34,999
- \$35,000-\$49,999
- \$50,000-\$74,999
- \$75,000-\$99,999
- \$100,000 or more
- Do not know

- Refuse to answer
- Not applicable

Comments: Thank you for completing our survey. If there is anything else you would like to tell us about the issues covered in this survey and how they impact you and your family, please use the space below.

Appendix B

Community Member Interview Protocol

Source Document:

Edin, K., Boyd, M., Mabli, J., Ohls, J., Worthington, J., Greene, S., Redel, N., & Sridharan, S. Project Officer: Sarah Zapolksy). (2013). *SNAP Food Security In-Depth Interview Study*. Alexandria VA: U.S. Department of Agriculture, Food and Nutrition Service, Office of Research and Analysis, March.

NOTE: These questions are a starting point for each interview. We will not necessarily ask every participant every single question listed below. Rather, the interview will be tailored to each participant's specific situation.

First I would like to thank you for taking the time to talk with me today. I really appreciate it.
[GIVE CONSENT FORM TO RESPONDENT]

The interview will take about 45-60 minutes, and your cooperation is completely voluntary. As a token of appreciation, we will be giving you a \$20 gift card when the interview is complete. Do you have any questions about the study or your participation in the study before we get started?

[PROVIDE RESPONDENT WITH THE USDA FOOD INSECURITY SCALE AND ASK THEM TO COMPLETE IT.]

Use the interview protocol below as a guide, selecting questions, or groups of questions, based on the interviewee's experiences.

Making Ends Meet

1. These days, a lot of people are struggling to make ends meet each month. Tell me, how is your family?
2. Let's talk specifically about your big monthly expenses. Let's take last month, for example. What were your five biggest expenses? How did you make ends meet? Did you have any challenges paying any of your bills (e.g., rent/mortgage; utilities-heat, light, water and sewer; cell phone/land line/cable/internet; credit payments; education loans; medical debt; child care; transportation).
3. So tell me, how do you cover all these expenses?
4. A lot of people say there is a lot of month left at the end of the money. How about for you? Over the last year, how have you coped during time where money was tight? Tell me all about the last time that happened? What about the time before that? How do you typically cope when the money gets tight?

Food Hardship

1. We're especially interested in food. Tell me about the last time you ran short of what you needed to pay for food. How did you cope? How about the time before that? What do you typically do when the food budget gets tight?

2. People have all kinds of ways to make do when the food budget gets tight. Some skip meals. Others eat at a relative's house. Others go to food pantries or soup kitchens, that kind of thing. How about for you? (FOR EACH STRATEGY: Tell me all about that last time that happened.). Tell me a story that can illustrate your challenges and how you overcame obstacles.
3. Some times of the year are easier on the food budget than others. For example, some families tell us it's a lot easier in months when their kids are getting free breakfast and lunch at school. Others say it's easier during the summer, when kids are off visiting relatives. How about for you?
4. For you, what are the toughest times to get by food-wise? How do you cope then? Tell me all about the last time that happened.
5. Sometimes, our strategies just aren't enough. Tell me all about the last time you ran out of food. How did you cope? Tell me the whole story from start to finish. What about the time before that? How did you cope? Tell me the whole story from start to finish.
6. Tell me about the last time you or someone in your household had to skip a meal because there wasn't enough food. Tell me the whole story from start to finish. What about the time before that? Tell me the whole story from start to finish.
7. Tell me about the last time you or someone in your household actually went hungry. Tell me the whole story from start to finish. What about the time before that?
8. Sometimes unexpected events can make it difficult to make ends meet and provide food for your family—an eviction or foreclosure, a job loss, a new baby, a divorce...even something small like a bunch of bank overdraft fees. Has something like that ever happened to you in the last few years? How did you cope? Tell me the whole story from start to finish.
9. So let's get even more specific. Think back to yesterday. Who ate breakfast, lunch and dinner at your house? What did they have?
10. Who cooked yesterday? Who was responsible for getting the food from the grocery store and planning the meals? Who paid for the groceries?
11. So how typical is yesterday of other days during the week/on the weekend (depending on whether yesterday was a weekday or a weekend). Tell me more about that.
12. Now I'm going to use your imagination. Okay, typically you do your big shopping at what store? Alright, we've just arrived at that store. You are going to shop just the way you always shop—nothing fancy. Where do you head first? What do you buy? Where do you head after that? What's next? What's after that? Let's make sure we didn't miss anything.

Fruits and Vegetables?

Meats/Fish?

Dairy?

Cereals, pasta, beans, rice, other dry goods?

The frozen section?

Canned goods?

Chips and soda?

Other snacks?

13. On this imaginary trip, where you are shopping just like you usually shop, is there anything you want to buy that you just can't afford?
14. What do you buy that you think you shouldn't be buying?

15. In general, how do you decide what to buy and what not to buy?
16. What do you put in your cart that you find yourself taking out and putting back later? Tell me all about the last time that happened.
17. Where else besides Big Store X do you shop? What do you buy there? Take me through that store, and tell me what you usually buy and what you usually don't buy and why
18. Do you shop anywhere else? Take me through that other store, and tell me what you usually buy and what you usually don't buy and why.
19. Any other stores I've missed? What food do you buy at the drug store, the Dollar Store, the farmers market, and so on?
20. Families eat out or get carry out for all kinds of reasons—sometimes they need a break from cooking or have no time to cook, sometimes it's just a treat for the kids, sometimes there's no place to store your food or to cook, and sometimes it's just too hot to turn on the stove. What about for you?

SNAP, WIC or Other Food Programs (if participants mentions receiving benefits)

1. Tell me how you first learned about [Food program: SNAP, WIC or other program]? Tell me how you first learned about XX. When did you first apply? Tell me the whole story of that experience from start to finish. What has been your experience with the program since then? Tell me the whole story from start to finish. What do you like best about [the program]? What do you like least?
2. Now think back to when you weren't receiving assistance from this/these program(s). Was your budget situation the same, better, worse? Was your food situation the same, better, worse?
3. How do you pay for food when you don't/can't use [XXX program]?
4. A lot of families these days are coping by doubling up. A lot of other families are helping out by offering struggling friends and families a place to stay for a while. Sometimes people just stay for a few nights, sometimes it's a permanent thing, and sometimes it's somewhere in between. What about for you?

Self-Assessed Health Issues

1. How would you describe your health? What about the other members of the household?
2. Describe the most recent health problem you've faced. What about other members of the household?
3. When was the last time you went to the doctor? What about other members of the household?
4. Which of your health problems are related to diet? What about other members of the household?
5. People have a lot of different ideas about what healthy eating means for them. What about for you? What are your healthiest habits? What prevents you from having more health habits?
6. If you could afford to purchase the food you really wanted, how would your eating habits change?
7. Some parents tell us that they want to feed their kids healthier foods, but their kids refuse what's given to them. How about for you?

Family Expenses

1. When your income falls short of your expenses, what do you do? Tell me more about that.
2. For example, how do you prioritize things and how do you decide what to pay first, second, and so on?
3. In the last year, what hardships has your household faced as you've struggled to make ends meet? Tell me about how you coped with these hardships.

Concluding Questions

1. What do you think can/should be done to help your family make ends meet in these tough economic times?
2. What do you think can/should be done to help families struggling to feed their families?

Appendix C

Interview Protocol for Key Informant Focus Group

Source Document:

Cohen, B. E., Andrews, M., & Kantor, L. S. (2002). *Community Food Security Assessment Toolkit* (pp. 02-013). Washington, DC: US Department of Agriculture, Economic Research Service.

Thank you for your willingness to take part in this group discussion. The purpose of the discussion is to explore each of your perceptions regarding the presence of food security in this community.

I'd like to begin by defining food security. Although they are integrally connected, they are also quite separate situations. For example, a household may be food insecure—household members may not be able to afford to purchase food from normal retail food outlets and they may have had to take several different actions to stretch their food or may have gone without food on numerous occasions. However, in the community, food may be affordable, available, and accessible through normal markets. That is, community food security may not be a problem, but some households in the community may be food insecure.

Let's try to discuss these two issues separately. First, let's talk about household food security:

1. Do you think that many households in the community have a problem with food security? What is the extent of the problem?
2. Why do you think that household food security is a problem? (That is, how do you see the problem manifest itself?)
3. How do people cope with the problem of food insecurity?
4. What are the contributing factors?

Now, let's talk about the community at large:

1. Do you think that food is accessible, available, and affordable in the community? (Probe to explain how it is or is not.)
2. Are there differences in different parts of the community?
3. What do you think are the biggest problems related to food security at the community level? Why do you think these exist?
4. How does the community address food insecurity? What resources are in place to avoid the problem if it doesn't exist?
5. What else could be done to improve the community's problems with food insecurity?
6. Who are the key players?
7. Are alternative food sources easily accessible and used in the community? What are they? Who organizes them? How could things be improved?

Now, I would like to focus on local food-related policies:

1. Are there any local ordinances or other policies that affect food production, distribution, and consumption? (e.g., zoning rules that affect supermarket development, food purchasing regulations for local schools or institutions, policies on the use of city-owned land for community gardens)
2. Are there any transportation policies that affect food access?
3. Are there any farmland preservation efforts?
4. Are there local funding sources for community food security-related activities?
5. Are food-related issues integrated into the community planning process?

Is there anything else you would like to add about hunger and food insecurity in Pickens County?

Thank you for your time.

Appendix D

Agencies Represented in Focus Groups

The following agencies were represented by at least one participant in at least one of the four focus groups:

- Access Health Mountain Lakes
- Ashton Wilkes Society
- Behavioral Health Services of Pickens County
- Cancer Association of Pickens County
- Clemson Area Food Exchange
- Clemson Free Clinic
- Cornell Dubilier Electronics, Inc.
- Dream Center of Pickens County
- Family Promise of Pickens County
- Feed-A-Hungry Child
- Golden Harvest
- Meals on Wheels
- Parenting Place
- Pickens Adventist Community Center
- Pickens County Council
- Pickens County Department of Social Services
- Pickens County School Board
- Ripple of One
- Salvation Army of Pickens County
- Saint Andrew Catholic Church, Clemson, SC
- *Seneca Daily Journal*
- Soapstone Baptist Church
- South Carolina House of Representatives
- United Christian Ministries
- United Way of Pickens County

Appendix E

Press Release about the Study on Hunger and Food Insecurity

What do you know about food insecurity?

June 12, 2019 Pickens Sentinel News 0

By Julie Capaldi - For The Sentinel-Progress

(<https://www.sentinelprogress.com/news/12590/what-do-you-know-about-food-insecurity-2>)

EASLEY — Are people going hungry in Pickens County? Based on requests for United Way funding, calls from neighbors in need, and anecdotal stories about hungry children, we would conclude, yes, hunger or “food insecurity” is an important issue in Pickens County.

How do we really know?

In July 2018, Clemson University named Dr. Leslie Hossfeld as Dean of the College of Behavioral, Social and Health Sciences. Her field of expertise? Food insecurity! As a new resident of the upstate, Dr. Hossfeld also wanted to understand the needs of her community.

It was only logical that Clemson University and United Way of Pickens County would join forces to conduct an extensive community- wide food insecurity study in Pickens County. Under the leadership of Dr. Catherine Mobley, a leading professor in the Department of Sociology, Anthropology and Criminal Justice, a research team is conducting focus groups this summer, creating maps to document areas of need and service provision, and administering surveys to individuals who access current food resources. The research team is also interested in learning how organizations throughout the county, including churches, are serving residents who are experiencing hunger and food insecurity.

Why is this important?

According to Dr. Mobley, research shows that food insecurity among children negatively affects overall health such as iron deficiency anemia, acute infection, chronic illness, and developmental and mental health problems.

U.S. adults living in food-insecure households consume fewer weekly servings of fruits, vegetables, and dairy products. They also consume lower levels of micronutrients and this is linked to the development of chronic disease, including hypertension and diabetes.

Any Pickens County resident interested in food insecurity is encouraged to participate in this important research study. In addition, if your agency or church provides any programs, services related to hunger, or food insecurity, the research team would like to hear from you.

As of the date of this article, confirmed focus groups are June 13 at Soapstone Baptist Church from 11 a.m. until 12:30 p.m., June 21 at the Kimberly Hampton Library in Easley from 12-2 p.m.

Pickens County residents are encouraged to participate in focus groups. For more information or to volunteer and to provide information for the community inventory, email Leslie Hossfeld at lhossfe@clemson.edu.

Editor's note: This story was edited to include updated contact information.

By Julie Capaldi For The Sentinel-Progress. Reach Julie Capaldi at 864-850-7094.

Appendix F

Key Informant Interview Protocol

Thank you for your willingness to take part in this group discussion. The purpose of the discussion is to learn more about your agency and the extent and character of hunger and food insecurity in Pickens County.

1. Please provide general information on your food provision service. General information can include how your food provision service began or how your food provision service functions.
2. Please describe how community members become "clients" of your food provision service. Qualification criteria can include income level, residency.
3. Please describe the typical intake process. Do clients have to complete paperwork just once? Or, each time they visit? Is there a limit to the number of visits?
4. Please describe what additional resources could help your food provision service staff and volunteers to be more effective in delivering services to community members.
5. Has the number of your food provision service clients increased over time? Are there particular common patterns in client characteristics and life circumstances?
6. Are there any factors that make Pickens County particularly unique in terms of poverty, hunger, and food insecurity and ways that agencies address those needs (i.e., community assets and the pattern of service delivery)? For example, as compared to neighboring counties such as Greenville, Anderson, or Oconee?
7. Please let us know if you have anything else to add about the issues we have covered in our discussion, pertaining to hunger and food insecurity, service provision in the county, and meeting the needs of your community members.
8. Is there anyone else in the community that you think we should speak with to gain a more comprehensive picture of what is happening in Pickens County pertaining to these issues?

Thank you for your time.

Appendix G

Church Survey

Name of church: _____

Address: _____

Phone number: _____

Website: _____

1. In the past year, have any church members expressed that they are facing challenges in gaining access to healthy affordable food? Yes No
 - a. If yes, please describe the nature and extent of the need that has been expressed:
2. Does your church offer any programs/services related to hunger and food insecurity? If yes, please describe how your church and your congregants address hunger and food insecurity in the community, including assisting other organizations in the community.
 Yes No
 - a. If yes, is this food pantry available to the community at large (that is, anyone can come get food) or is the food pantry available to church members only?
 - b. Are there any requirements for getting donations from your food pantry? If yes, please describe.
 - c. What are the days hours of operation for your food pantry?
 - d. What is the source of the donations for your food pantry? (for example, church members, other community members, etc.)
3. Would you like your food pantry to be listed in our resource list that will be publicized in the community? Yes No
 - a. If yes, beyond the information provided at the top of this survey, please provide any additional relevant information (e.g., main point of contact, etc.):
4. Are you aware of any other churches in Pickens County that provide food to their members who are facing hunger or food insecurity? Yes No
 - a. If yes, please provide a brief description of the church (name of church, point of contact, etc.) and its programs and/or services related to hunger and food availability. You may use this space to also elaborate on any other hunger-related programs and services offered through your own church.

Thank you so much for your participation - your insights are greatly appreciated! Please click on the arrow below to record your response.

Appendix H

Checklist Used for Transportation Study

This checklist is derived from the following studies:

- Van Wollenghem, G., Ghekiere, A., Cardon, G., De Bourdeaudhuij, I., D'Haese, S., Geremia, C.M., Lenoir, M., Sallis, J.F., Verhoeven, H., and Van Dyck, D. 2016. "Using an audit tool (MAPS Global) to assess the characteristics of the physical environment related to walking for transport in youth: Reliability of Belgian data." *International Journal of Health Geographics* 15: 41.
- Cain, K.L., Geremia, C.M., Conway, T.L., Frank, L.D., Chapman, J.E., Fox, E.H., Timperio, A., Veitch, J., Van Dyck, D., Verhoeven, H., Reis, R., Augusto, A., Cerin, E., Mellecker, R.R., Queralt, A., Molina-Garcia, J., and Sallis, J.F. 2018. "Development and reliability of a streetscape observation instrument for international use: MAPS-Global." *International Journal of Behavioral Nutrition and Physical Activity* 15:19.

Research Criteria and Context for the Transportation Study:

The transportation study was conducted in May 2019 in conjunction with a broader assessment on Pickens County, SC food access and food insecurity. In January 2020, a member of the research team completed another shorter transportation study in order to learn more about the Clemson Area Transit (CAT) system at a time when Clemson University was in session. The purpose of the study was to determine whether the CAT system provided individuals with an adequate means for accessing food at particular types of food establishments, such as grocery stores, restaurants, fast food restaurants, convenience stores, and gas stations).

The researchers rode the Red Route (summer holiday hours), the Red Route Truncated (normal hours), the Central Route [Walmart to SWU] (holiday hours), the Central Route [Walmart to SWU] (normal hours), the Pendleton Route, and the Seneca/Clemson Express Route. Holiday hours occur between May and August when Clemson University is not holding semester courses and the student population has decreased - leading to the bus routes primarily running on weekends or at limited capacities.

While riding the bus routes, the researchers noted several data points, including passenger demographics (race, ethnicity, approximate age, gender), what times the bus routes passed by and/or stopped at a food site, each time the bus passed by and/or stopped at a food site, when a passenger got on or off the bus, ascertaining if a passenger was using the bus to grocery shop, if a passenger was using the bus to go to/go home from work. Each route lasted between 45 minutes and 1 hour and 45 minutes.

Date _____

Auditor ID# _____

Route # _____

Start Time: _____

End Time: _____

Route: _____

Section: Land use/destinations

Count both sides of the street

1. How is audit information collected?

Foot (walked route)

Auto (drove route)

Both (walked & drove route)

2. How many of the following types of non-residential destinations are present? (Do not double count.)

Food-related land uses

- a. Fast food restaurant (*national or local chain, primarily sells burgers, fried chicken, pizza, or “Americanized” Mexican, Chinese, etc.*)

0 1 2+

- b. Sit-down restaurant

0 1 2+

- c. Grocery/supermarket

0 1 2

- d. Convenience store (*may also be a gas station*)

0 1 2+

- e. Café or coffee shop

0 1 2+

f. Liquor/alcohol store (*primarily sells alcohol, wine bar, strip club*)

0 1 2+

g. Big box store (*e.g., Home Depot, Best Buy, Sears, Super Walmart, Target*)

0 1 2+

h. Specialty Food Store (*e.g., ice cream, candy, bakery*)

0 1 2+

Route

Section: Streetscape

Count both sides of the street

1. Number of public transit stops

If NO stops, skip to 3.

(a) Bus stops _____

(b) Senior transit/paratransit _____

2. What is available at each transit stop?

Only count benches that users could be easily identified by bus drivers as waiting to ride the bus.

Route # _____

Bench Covered Shelter Timetable

APPENDIX I

Demographic Characteristics of Survey Sample (n=valid responses)

DEMOGRAPHIC CHARACTERISTIC	n	SURVEY DATA Valid %	PICKENS COUNTY, SC CENSUS DATA %
Sex (n=196). (County data from 2017 American Community Survey - ACS)			
Female	139	70.9	49.7
Male	57	29.1	50.3
Race/Ethnicity (n=194)			
White/Caucasian	137	70.6	88.6
Black or African-American	44	22.7	6.5
American Indian/Alaskan Native	2	1.0	0.3
Asian			1.8
Native Hawaiian/Other Pacific Islander			0.1
Some other race	1	0.5	1.0
Two or more races	10	5.2	1.7
Hispanic/Latino Descent (n=191)			
Native Born (n=198)	193	96.5	96.2
English Primary Language (n=199)			
	196	98.5	95.5*
Education (n=183) (County data from 2017 ACS for adults over 25)			
Less than high school (no h.s. degree)	31	16.9	15.4
High school diploma or GED	69	37.7	30.3
Some college, no degree	36	19.7	20.4
Associates, 2-year technical school degree	16	8.7	10.4
Bachelor's degree and higher	19	10.4	14.1
Graduate or professional degree	12	6.5	9.5
Yearly Household Income (n=161) (County data from 2017 ACS; income and benefits for 2017 dollars)			
Less than \$10,000	38	23.6	8.5
\$10,001-\$14,999	26	16.1	6.8
\$15,000-\$24,999	30	18.6	12.5
\$25,000-\$34,999	26	16.1	11.6
\$35,000-\$49,999	13	8.1	15.9
\$50,000-\$74,999	12	7.5	17.2
\$75,000-\$99,999	5	3.1	11.2
\$100,000 or more	11	6.8	16.3

Table (continued)

Age (n=193)	(County data from 2017 American Community Survey)		
19 years old and younger	---	---	25.1
20 to 24 years old	22	11.4	12.2
25 to 34 years old	17	8.8	11.6
35 to 44 years old	32	16.6	10.9
45 to 54 years old	41	21.2	12.5
55 to 64 years old	40	20.7	12.1
65 years or older	41	21.2	15.5
Employment Status (# of people in household, including respondent, working full-time (n=185)			
None	82	41.0	---
1	65	32.5	---
2	24	12.0	---
3 or more	14	7.0	

*Language other than English spoken at home, percent of persons age 5 years+, 2013-2017

Reference

United States Census Bureau. "American Fact Finder." Retrieved July 1, 2019

(<https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>).

United States Census Bureau. American Fact Finder. "Quick Facts." Retrieved July 1, 2019

(<https://census.gov/quickfacts/pickenscountysouthcarolina>).

Income: <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>

Gender: <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>

Race: <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>

Hispanic: <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>

Education: <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>

Appendix J

Process for Calculating the Food Security Index

The Food Security Index was calculated as follows (based on USDA, 2012, p. 4): Responses of “often” or “sometimes” on questions 1 and 2, and “yes” on 3, 4, and 5 below were coded as “yes.” Responses of “almost every month” and “some months but not every month” on 3a were coded as affirmative “yes.” The sum of affirmative responses to the six questions comprised the household’s raw score on the scale. Food security status was assigned as follows:

- Raw score 0-1: High or marginal food security
- Raw score 2-4: Low food security
- Raw score 5-6: Very low food security

For some reporting purposes, the food security status of households with raw score 0-1 is described as food secure and the two categories “low food security” and “very low food security” in combination are referred to as food insecure.

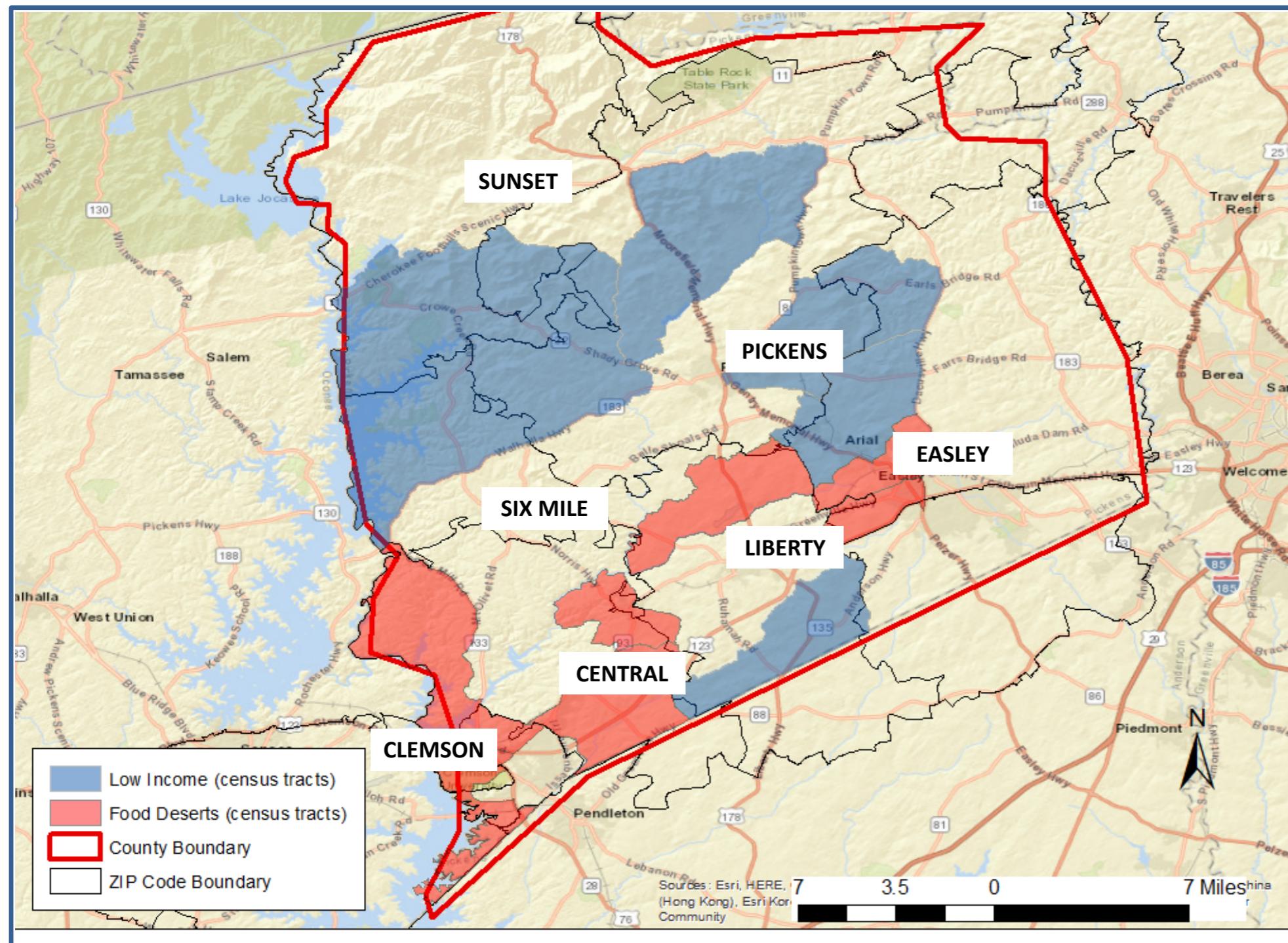
Survey items used to calculate the Food Security Index:

I’m going to read you several statements that people have made about their food situation. For these statements, please tell me whether the statement was often true, sometimes true, or never true for (you/your household) in the last 12 months—that is, since last (name of current month).

1. “The food that (I/we) bought just didn’t last, and (I/we) didn’t have money to get more.” Was that often, sometimes, or never true for (you/your household) in the last 12 months?
[] Often true ** [] Sometimes true** [] Never true [] DK or Refused.
2. “(I/we) couldn’t afford to eat balanced meals.” Was that often, sometimes, or never true for (you/your household) in the last 12 months?
[] Often true ** [] Sometimes true ** [] Never true [] DK or Refused.
3. In the last 12 months, did (you/you or other adults in your household) ever cut the size of your meals or skip meals because there wasn’t enough money for food?
[] Yes (Answer 3a) ** [] No (Skip 3a) [] DK (Skip 3a)
- 3a. How often did this happen—almost every month, some months but not every month, or in only 1 or 2 months?
[] Almost every month** [] Only 1 or 2 months
[] Some months, not every month** [] DK
4. In the last 12 months, did you ever eat less than you felt you should because there wasn’t enough money for food?
[] Yes ** [] No [] DK
5. In the last 12 months, were you ever hungry but didn’t eat because there wasn’t enough money for food?
[] Yes ** [] No [] DK

Appendix K

Food Deserts in Pickens County, SC



USDA Food Deserts

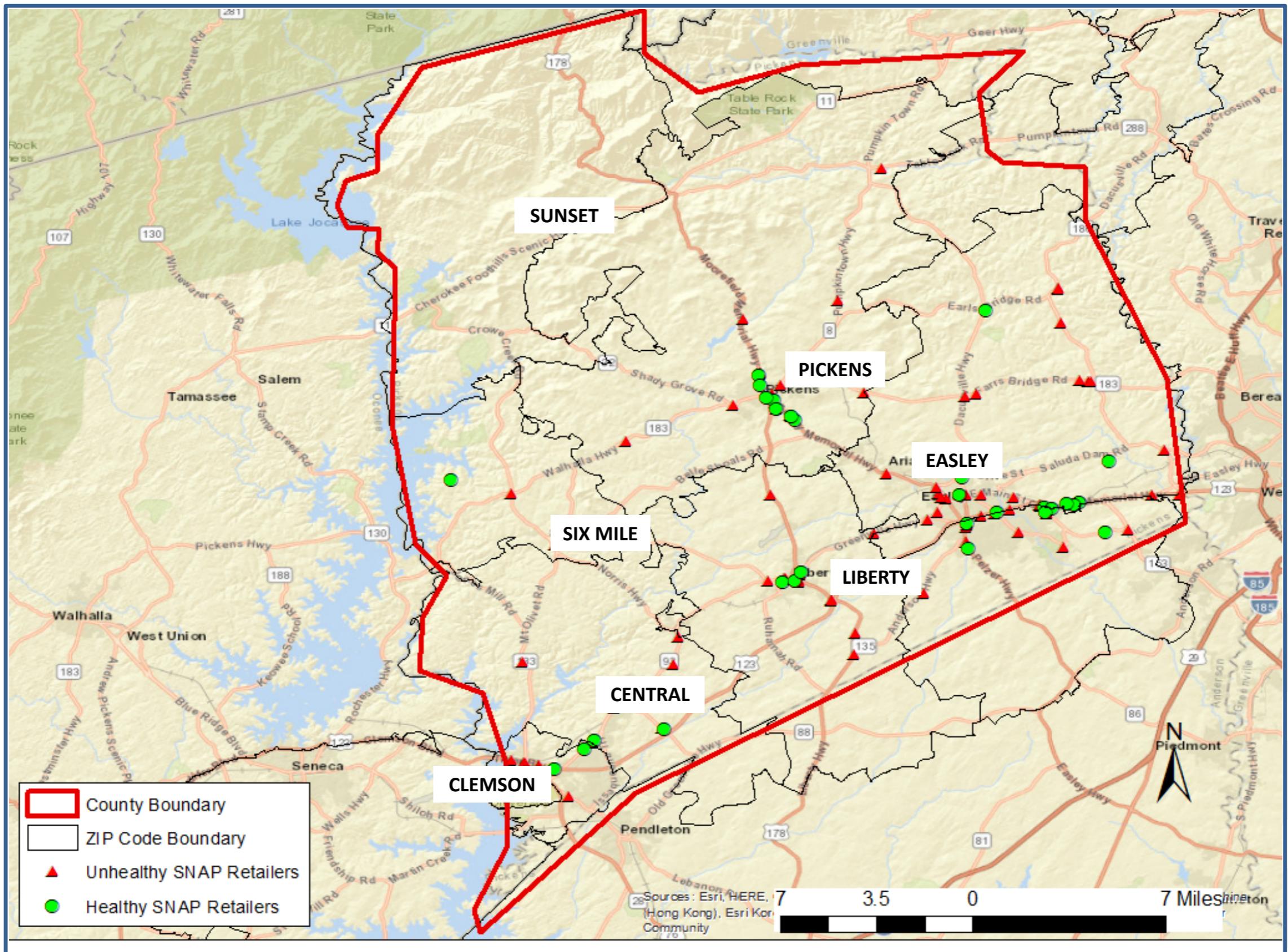
**Census tracts
must meet BOTH
Criteria below:**

(1) Low Income:
At least 20% of the population are at poverty, or median family income is less than or equal to 80 percent of the statewide median family income.

(2) Low Food Access:
At least 500 people, or 33% of the population, are greater than 1 mile from a supermarket in an urban area or 10 miles in a rural area.

Appendix L

Unhealthy and Healthy SNAP Retailers in Pickens County, SC



Appendix M

Sector Approach to Addressing Hunger and Food Insecurity Pickens County, SC

