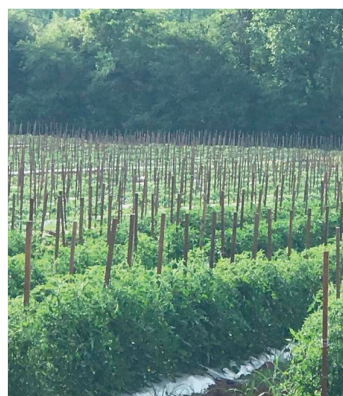
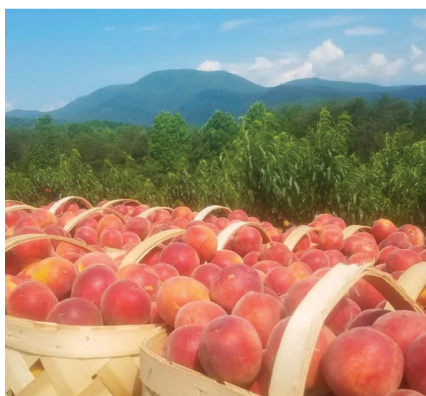




GREENVILLE-SPARTANBURG FOOD SYSTEM ASSESSMENT AND PLAN



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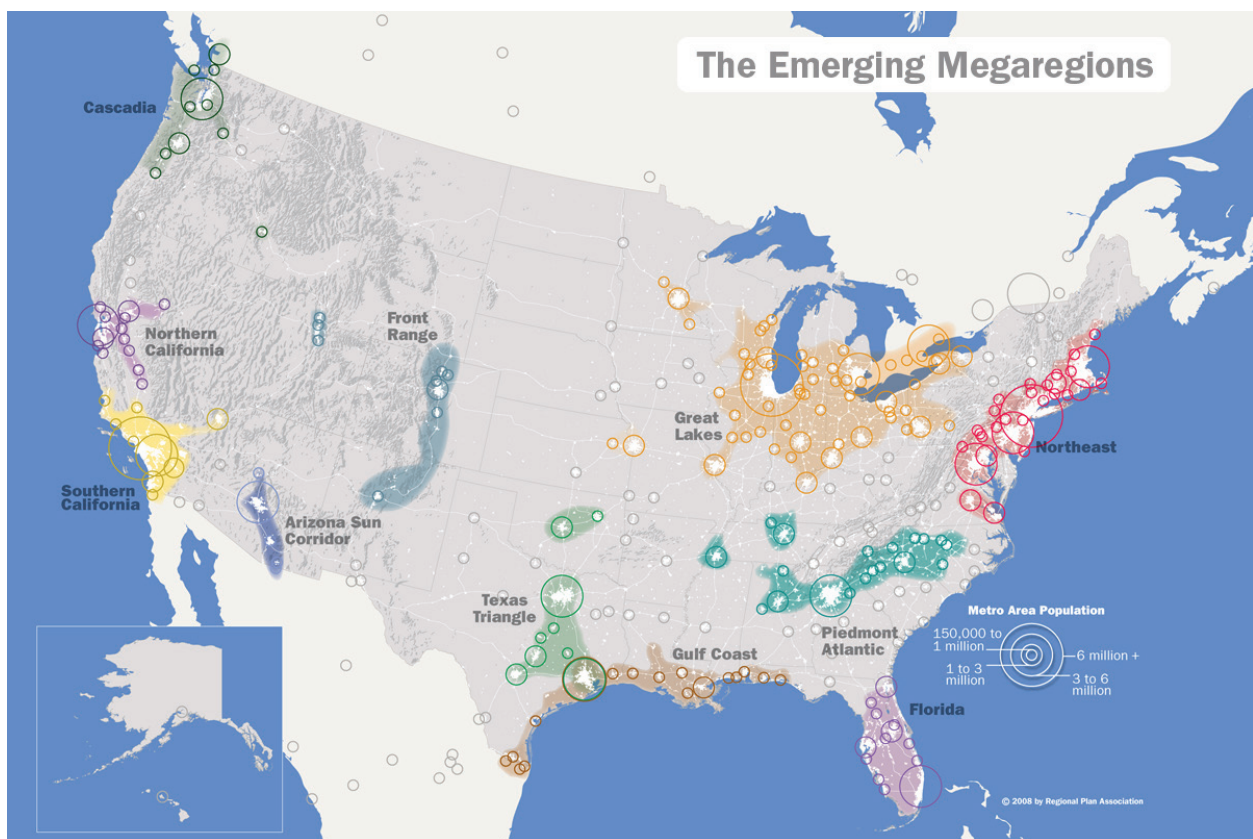
Photos from Charlene's Garden, Crooked Toe Hatchery, FoodShare Spartanburg, Full Circle Farms, Huney Grams Honey Bee, Hyder Farms, Naturally Fresh Farms, Ruth's Gleanings, Skyland Farms, Tyger River Smart Farm

GREENVILLE-SPARTANBURG FOOD SYSTEM ASSESSMENT AND PLAN

Greenville and Spartanburg Counties, located in the Upstate of South Carolina, are part of one of the fastest growing megaregions in the United States. With population and development pressures increasing, the strain on our local food system is intensifying. In light of our national obesity epidemic and the disruptions and uncertainties that the COVID-19 pandemic, trade wars, and climate change are causing in our global food system, we need to find ways to work together to develop a strong, resilient local food system that gets healthy food to our communities.

From the outset, when our Greenville–Spartanburg Assessment team began work on our assessment, we knew that we have different communities and histories in regard to our food system, but we did not realize until we dug into the work exactly how different the communities are. The result is two separate plans with a bridge between the two that identifies commonalities and opportunities for coordination.

Figure 1. Megaregions in the United States



Source: <http://www.america2050.org/maps/>

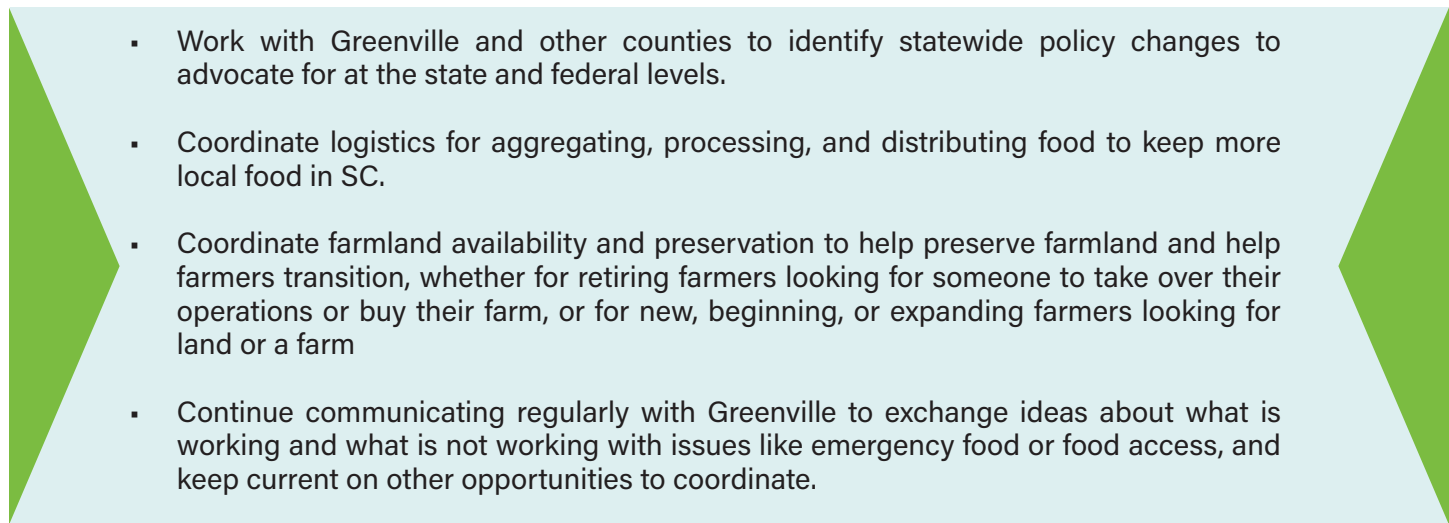
Common Themes and Opportunities for Coordination between Greenville and Spartanburg

Many of the common themes between Greenville and Spartanburg are themes that run throughout our food system nationwide, such as aging farmers, lack of available farmland, and the challenge of making profit, which needs to be addressed at the level of federal policy. However, there are opportunities for collaboration.

Our state has the SC Food Hub Network that coordinates logistics for aggregating and distributing local food. Given Greenville and Spartanburg's proximity, it makes sense for us to coordinate logistics between ourselves to increase both of our capacities for aggregating and moving local food. It also makes sense to coordinate

processing, given the potentially large investments needed to create processing facilities. Farmers may not want to take their products from one county to another for processing; however, if we already have trucks moving products between us, we could go ahead and move processed or to-be-processed items as well.

The following points are recommendations for improvement of the Greenville–Spartanburg food system.

- 
- Work with Greenville and other counties to identify statewide policy changes to advocate for at the state and federal levels.
 - Coordinate logistics for aggregating, processing, and distributing food to keep more local food in SC.
 - Coordinate farmland availability and preservation to help preserve farmland and help farmers transition, whether for retiring farmers looking for someone to take over their operations or buy their farm, or for new, beginning, or expanding farmers looking for land or a farm
 - Continue communicating regularly with Greenville to exchange ideas about what is working and what is not working with issues like emergency food or food access, and keep current on other opportunities to coordinate.

2020 GREENVILLE COUNTY FOOD SYSTEM ASSESSMENT



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Cover photo by Mac Stone Photography and provided courtesy of Wet Knot Farms

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ACRONYMS

SCDA	South Carolina Department of Agriculture
USDA	United States Department of Agriculture
ERS	Economic Research Service
AMS	Agricultural Marketing Service
NASS	National Agricultural Statistics Service
NRCS	Natural Resources Conservation Service
EQIP	Environmental Quality Incentives Program
CSP	Conservation Stewardship Program
CSA	Community Supported Agriculture
GAP	Good Agricultural Practices
DSS	South Carolina Department of Social Services
SNAP	Supplemental Nutrition Assistance Program
EBT	Electronic Benefits Transfer
GCS	Greenville County Schools
TANF	Temporary Assistance for Needy Families
WIC	Special Supplemental Nutrition Program for Women, Infants, and Children
FNS	Food and Nutrition Service
FMNP	Farmers Market Nutrition Program
SFMNP	Senior Farmers Market Nutrition Program
NSLP	National School Lunch Program
SBP	School Breakfast Program
SFSP	Summer Food Service Program
CACFP	Child and Adult Care Food Program
SSO	Seamless Summer Option

INTRODUCTION

PROJECT DESCRIPTION AND GOALS

The Greenville County Food System Assessment (Assessment) was conducted to survey the county's existing local food system and identify gaps and opportunities in five key areas: 1) growing food, 2) processing and distributing food, 3) selling food, 4) accessing food, and 5) handling food waste.

The Assessment is intended to serve as a guide for future development of Greenville County's food and farm infrastructure, including further research and analysis, and to catalyze the creation and maintenance of a countywide food policy council. The Assessment was funded through the U.S. Department of Agriculture's (USDA) Local Food Promotion Program and produced in partnership with the Spartanburg Food System Coalition.



PROVIDED COURTESY OF
MILL VILLAGE FARMS

METHODOLOGY

The findings and recommendations contained herein were informed by existing research and analysis, with a heavy reliance on the following resources:

- USDA Census of Agriculture (2012 and 2017);
- Data curated by the USDA Economic Research Service (ERS) and Agricultural Marketing Service (AMS);
- Statistics from the U.S. Census Bureau;
- Greenville County's most recent Comprehensive Plan (2019);
- Greenville Area Food System Assessment (2012);
- Making Small Farms into Big Business (2013); and
- Growing Local SC: Recommendations for South Carolina's Local Food System (2019).

Relevant secondary data indicators were selected with guidance from Community Food Strategies and other food assessment models. Anecdotal data collection for the Assessment began in spring 2018 with three in-person, open-call listening sessions, during which participants were asked to answer three basic questions:

1. What about Greenville County's food system is working well?
2. What gaps exist in Greenville County's food system?
3. What tangible policies or actions could address those gaps?

Each listening session was held in a different region of the county, specifically Greenville (Swamp Rabbit Café and Grocery), Travelers Rest (Upcountry Provisions), and Pelzer (Yum-Yum Snack Shop). Approximately 70 individuals representing various parts of the local food system participated and provided input.

It should be noted that stakeholder feedback indicated pervasive survey fatigue and a general feeling of disaffection for food systems work, due in part to a perceived lack of follow-through from local agencies, nonprofits, local food leaders, and policymakers. As such, no comprehensive stakeholder survey was distributed to inform the Assessment; instead, a mix of stakeholder-specific surveys and one-on-one interviews were employed to gather additional anecdotal feedback. Interviewees included, but were not limited to, farmers, chefs, value-added producers, distributors, service providers, elected officials, and consumers. A summary of listening session, survey, and interview feedback is included in Appendix A.

This report is not intended to provide scientific or quantitative analysis, nor does it purport to represent every perspective of each of Greenville County’s diverse food system stakeholders. Rather, the Assessment provides a snapshot of a complex and evolving system and should be viewed as a starting point for future research and development.

FOOD SYSTEM DEFINED

While no universal definition of the local food system exists, it has been described as follows:

“an interconnected web of activities, resources and people that extends across all domains involved in providing human nourishment and sustaining health, including production, processing, packaging, distribution, marketing, consumption and disposal of food. The organization of food systems reflects and responds to social, cultural, political, economic, health and environmental conditions and can be identified at multiple scales, from a household kitchen to a city, county, state or nation.”¹

KEY COMPONENTS OF GREENVILLE COUNTY'S FOOD SYSTEM



PHOTO BY MAC STONE PHOTOGRAPHY,
PROVIDED COURTESY OF WET KNOT FARMS

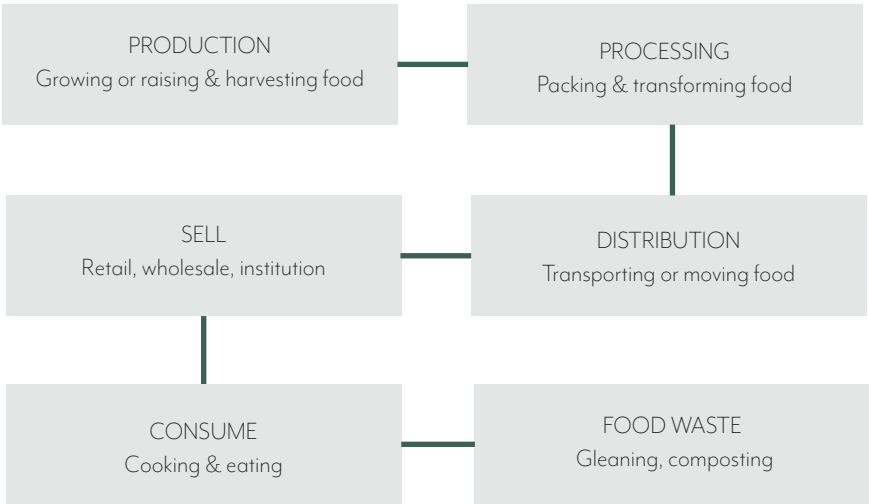


FIGURE 1

The following elements of the Greenville County food system were considered for this assessment and the accompanying definitions are borrowed from the Healthy Food Policy Project.²

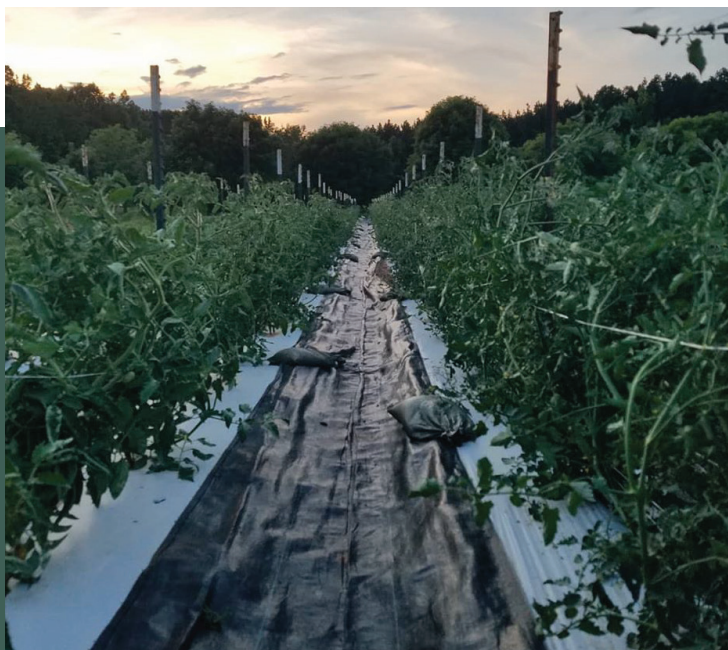
GROWING FOOD Growing and harvesting fruits, vegetables, and other forms of produce by use of soil, hydroponic/aquaculture/aquaponic, or pasture mediums; and raising or keeping animals and insects for food production or pollination, whether for personal or commercial purposes, in urban, suburban, or rural areas (i.e., backyards to large farms)

PROCESSING FOOD Turning fresh produce, honey, meat, fish, and other plant and animal-related foods into forms ready for sale, including in restaurants and other commercial settings, and including value-added processing that changes the physical form of the product (e.g., making berries into jam), and packaging

DISTRIBUTING FOOD Transporting and delivering food to wholesale, retail, institutional, and other food access points (such as food shelves, food pantries, or food banks and aggregation points such as food hubs). Includes the use of marketing strategies, such as labeling, pricing, placement, promotions, “sell-by” and similar dates, and other marketing techniques, as well as decisions about what types of food will be made available to the consumer, such as procurement decisions

SELLING AND ACCESSING FOOD Activities, practices, systems, and facilities that affect people’s ability to obtain and consume healthy food

MANAGING FOOD WASTE The process of food recovery, including gleaning, as well as minimizing, composting, and recycling of food surplus or waste



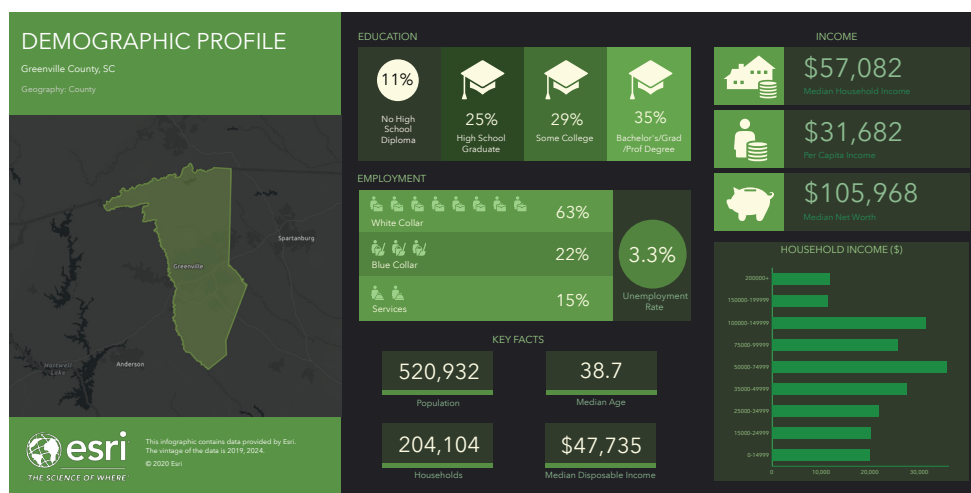
PROVIDED COURTESY OF CRESCENT FARM

A note on the term “local”: For the purposes of this assessment, local food includes, but is not limited to, food produced, raised, or procured in Greenville County and neighboring counties, South Carolina, Western North Carolina, and the Charlotte and Atlanta metro areas. The primary focus of this assessment, however, is the Greenville County and Upstate region food system.

GREENVILLE COUNTY OVERVIEW

Greenville County is located in South Carolina's Upstate region, commonly considered to include the state's westernmost ten counties.³ Situated between Charlotte and Georgia, the county covers 785 square miles. The county includes six cities, Greenville being the largest with nearly 70,000 residents, but the majority of the land area is rural or open space in character.⁴ According to the U.S. Environmental Protection Agency (EPA), Greenville County is home to two distinct ecoregions, the Blue Ridge and Piedmont

FIGURE 2



The county is the fastest growing in the Upstate with a growth rate of 14% since 2010 and a population of 513,431 in 2018.⁵ By 2040, the county is projected to grow by 222,000 residents and 108,000 jobs.⁶ The median household income is \$57,082, with 63% of the population employed in white collar jobs.⁷ Greenville County's population has a slightly higher rate of people having earned a Bachelor's degree or higher (33.3%) compared to South Carolina (27%) and the U.S. (30.9%).⁸ The county is more white than both the state and the nation, though the Hispanic population increased by 1284% between 1990 and 2016.⁹ Greenville County Schools (GCS), the largest school district in the state and 44th largest in the nation, enrolls over 76,000 students.¹⁰

Greenville County accounts for nearly 40% of the total jobs in the Upstate region. In 2018, there were approximately 245,000 jobs in the county, with the top three employment sectors being: financial, real estate, and professional services (26.3%); education, healthcare, and public services (22%), and manufacturing (17.3%). Agriculture, forestry, fishing, hunting, and mining accounted for just 1.2%.¹¹ Some of the county's largest employers include General Electric, Michelin, GCS, Prisma Health, and Fluor.¹² Tourism is also a significant economic driver, generating over \$72 million in tax revenue annually and supporting 10,300 jobs.¹³

Despite enjoying the third-lowest pre-COVID unemployment rate in South Carolina,¹⁴ Greenville County has one of the lowest economic mobility rates in the nation. Children born to parents in the bottom 20% of earners have just a 4.7% chance of reaching the top 20% in their lifetime.¹⁵ Basic necessities like safe, affordable housing are increasingly out of reach for many families as well. The Greenville Homeless Alliance has estimated that a person would need to earn approximately \$15 per hour to have a choice in housing in Greenville County, yet the state minimum wage is \$7.25 per hour. Most food system workers' wages do not meet that threshold, with restaurant cooks, waiters and waitresses, and farmworkers earning \$11.35, \$9.66, and \$12.41 per hour on average, respectively.¹⁶

SECTION ONE: GROWING FOOD

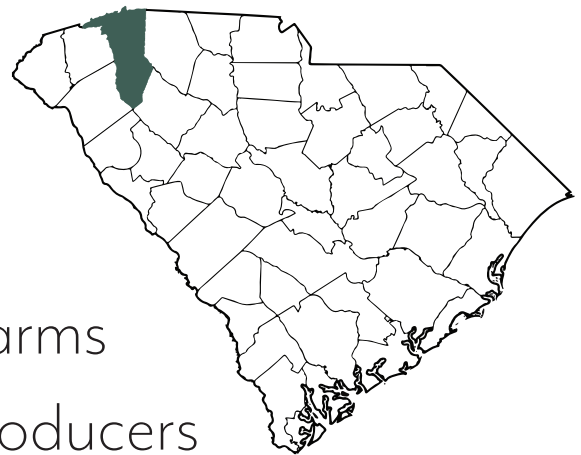
During spring 2018, farmers serving Greenville County participated in a series of listening sessions designed to elicit feedback on the strength of the local food system. Farmers' top articulated concern was about the long-term viability of farming, including anxiety about the loss of local farmland, farm profits, and a declining number of persons interested and able to farm.

Local and national trends in agriculture reflect their concerns. The U.S. lost more than 100,000 farms between 2011 and 2018,¹⁷ and Greenville County's total farm acreage fell 19% since 2012.¹⁸ While small farms, those earning less than \$350,000 a year before expenses, accounted for 90% of U.S. farms in 2015, they produced just 24% of total food (down from nearly 50% in 1991).¹⁹

These small, family-owned farms make up the overwhelming majority of Greenville County's farming community, with 86% selling less than \$10,000 of product annually.²⁰ As the county experiences tremendous growth, with more than 220,000 additional residents expected by 2040, it is important to identify, strengthen, and protect these local agricultural assets.



PROVIDED COURTESY OF
NICHOLTOWN COMMUNITY GARDEN



1,036 farms

1,715 producers

59,381 total farm acreage

57 average acres per farm

12,220 acres of harvested land

SOURCE: Census of Agriculture, Greenville County (2017)

KEY STAKEHOLDER FEEDBACK

- Greenville County's population growth has created development pressures that are encroaching on existing farmland, and decision makers in municipal, county, and state government are viewed as disinterested in protecting working agricultural land
- As existing farmers age out of the profession, young and new farmers face unique barriers to entry (e.g., cost of land, student loan debt)
- Both the high cost and unavailability of additional labor prevent farmers from hiring help and scaling up their businesses
- There are opportunities for farmers to grow and sell cooperatively, and many expressed an interest in facilitated networking and discussion opportunities
- Profit margins remain razor thin for many local, small-scale farmers
- Urban and community gardens are often cited as one solution to food insecurity, yet public and private investment in the success of these spaces remains minimal

PRODUCTION CHARACTERISTICS

According to the 2017 Census of Agriculture, Greenville County's top crops (in acres) are 1) forage (including hay), 2) crops grown for nurseries, 3) soybeans, 4) peaches, and 5) corn (for grain). The county's top livestock product is chicken (layers, or raised for their eggs) with 7,108 animals reported in 2017 – nearly double the number of layers reported in 2012. Chicken raised for its meat (broilers) saw a significant increase as well, growing from 603 in 2012 to 3,527 in 2017. The number of cattle raised in the county also saw a modest increase during the same time period (6,672 to 7,042).²¹ Dairy farming is not a huge component of local production, but Greenville County is home to several dairy operations, including one of the state's largest raw cow milk producers (Milky Way Farm).

Most farms employ conventional growing methods, including the use of pesticides, with just 1% of producers in the county growing organically. However, many farms are employing no till (6%), reduced till (2%), intensive till (7%), and cover crop (8%) practices that allow valuable soil to stay intact. According to the local Natural Resources Conservation Service (NRCS) District Conservationist Lynne Newton, 46 Greenville County farmers are participating in the Environmental Quality Incentive Program (EQIP) and Conservation Stewardship Program (CSP).

Vegetable production accounted for \$696,000 of the county's market value of agricultural products sold in 2017. By comparison, the market value of nursery products, including sod, was \$5,792,000. Greenville County ranks 6th in South Carolina for the sale of fruits, nuts, and berries (\$2.3 million) thanks in part to the large number of peaches produced locally.

FARM PROFITABILITY

Net cash farm income – a farm’s income excluding any government payments and farm-related income (e.g., agritourism) – decreased by 212% between 2012 and 2017. The \$4.7 million deficit was a result of rising production costs and decreasing sales. Individual farms, on average, saw a profit reduction of 248%. There was notable growth, however, in farm-related income between 2012 and 2017, with a 65% increase as a likely result of the rise in agritourism. Government support increased by 61% during the same period.

Average sales per farm were \$12,861 and just 5% of farms reported annual sales greater than \$25,000. Overall, the average market value of products sold per farm decreased by 15% between 2012 and 2017.²²



PHOTO BY MAC STONE PHOTOGRAPHY,
PROVIDED COURTESY OF WET KNOT FARM

\$4,200 average government payments

\$12,861 average market value of products sold

\$17,675 average farm-related income

\$21,032 average production expenses

-\$4,548 average net cash farm income

SOURCE: Census of Agriculture, Greenville County (2017)

FARMER DEMOGRAPHICS

There were 1,715 producers counted in the county in 2017, and 1,096 of them were aged 55 years or older.²³ Young farmers face unique barriers to entry into farming: the cost of land is rising and student loan debt limits their purchasing power.²⁴ Additionally, employing farm labor is often prohibitively expensive and obtaining health insurance is costly – challenges shared by new and veteran farmers alike. In fact, only 30% (522 of 1,715) of Greenville County’s farmers report farming as their primary occupation; many seek off-farm jobs to make ends meet.²⁵

“Farmers over the age of 65 now outnumber farmers under 35 by a margin of six to one, and U.S. farmland is overwhelmingly concentrated in the hands of older farmers.” – NATIONAL YOUNG FARMERS COALITION

Of Greenville County’s 1,715 producers, 61% identify as male and 94% identified as white. The number of producers identifying as African American declined from 62 in 2012 to 47 in 2017. The number of farmers identifying as Hispanic or Latino increased from 14 to 22 during the same time period.²⁶ Thus, Greenville County’s farming population is largely homogenous and aging.

FARM LABOR

As referenced above, hiring additional farm labor is an oft-cited challenge by local farmers regardless of the size of their operation. Recruiting for the physically demanding, low-wage profession is difficult: agricultural workers earned an average of \$25,840 in 2019, less than the living wage in most places.²⁷

Only 17% of Greenville County farms report hiring farm labor according to the most recent Census of Agriculture. Most farmers interviewed for this assessment reported between 1 – 5 non-family employees, though most were part-time or seasonal. Others depend on “WWOOFERS” or “volunteer” labor, which can result in state and federal labor law violations.

FARMLAND POLICY

Many of our surveyed farmers expressed concern about the loss of farmland in the county. Overall, total acreage of farmland decreased from 72,645 in 2007 to 59,382 in 2017. Likewise, the average farm has decreased in size from 96 acres in 2002 to 57 acres in 2017. The number of farms decreased from 1,101 to 1,036 during the same time period. The percentage of farmland in crops, woods, pasture, and other land uses remained consistent from 2012 – 2017.²⁸

Despite some stabilization in recent years, growth projections indicate that the county should be proactive when it comes to protecting existing agricultural acres from development and sprawl. Historically, Greenville County has employed a hands-off approach to farmland preservation. There is currently no agricultural zoning – designations that protect agricultural land uses – anywhere in Greenville County, and two-thirds of the county remain unzoned.²⁹

However, an entire section in Greenville County’s recently adopted Comprehensive Plan, Bloom, is dedicated to agriculture and food security. The stated purpose is to “protect farmland for local food production and ensure access to healthy foods for all citizens.” The section was added as a direct result of stakeholder and community input, wherein residents indicated concern about “the preservation of rural character and agriculture as a way of life.” The recommendations in a comprehensive plan are not legally binding; to protect agricultural land, Greenville County Council will need to take positive action to turn the recommended policies into law and, when necessary, allocate any requisite funding.

Local conservation organizations and land trusts also have a role to play in protecting local farmland. In April 2020, Upstate Forever, a regional nonprofit conservation organization, was awarded Regional Conservation Partnership Program funding through the USDA Natural Resources Conservation Service (NRCS) in the amount of more than \$3.9 million to “support local conservation efforts.”³⁰ According to Upstate Forever, the funding will be used “to protect the region’s most critical lands for water quality, with an emphasis on priority farmland.”



Most farmers want to minimize their labor costs. I want to have skilled, long-term employees so that I don’t have to spend valuable time retraining people. My employees start at \$12 per hour and I try to move them to \$15 quickly, they’re employed year-round, and I’m committed to a 40-hour work week. Even so, I need [but can’t afford] twice the labor we have right now.”

– Greenville County produce farmer

WATER RESOURCES

While 99% of South Carolina’s freshwater is groundwater – water that exists beneath the land’s surface – very little lies below the counties that make up the Upstate region. As a result, Greenville County water users rely almost entirely on surface water in the region’s bodies of water (e.g., streams, rivers, lakes, reservoirs). Greenville County is part of both the Saluda and Broad River Basins which include the Reedy, Pacolet, Tyger, and Enoree Rivers.



PROVIDED COURTESY OF HORSESHOE FARM

1,510
acres of
irrigated
farmland

SOURCE: Census of Agriculture,
Greenville County (2017)

The Greenville-Spartanburg area has averaged 48.27 inches of precipitation annually for the past 20 years.³¹ According to the state Climate Office, the mountains tend to be the rainiest part of the state, with an average of 70 – 80 inches falling each year. However, surface water sources are more prone to drought and Greenville County experienced “moderate drought” as recently as fall 2019.³²

Climate change is expected to intensify the water cycle and increase the frequency and severity of extreme events like drought and heavy rainfall in the southeast.³³ According to Laura Lengnick, Western North Carolina-based author of “Resilient Agriculture: Cultivating Food Systems for a Changing Climate,” the “rapid increases in the pace and intensity of climate change represents a novel risk management challenge to US agriculture.”³⁴

For example, the southeast region has experienced the most rapid warming in the nation since the 1970s, and “increasingly long, hot summers will likely cause a decline in crop and livestock production in the region as a result of more intense heat stress accompanied by longer and more intense drought periods.”³⁵ The upside is the growing season will continue to lengthen; however, longer, hotter summers will likely result in increased reliance on irrigation.

Currently, Duke Energy’s Lee Steam Station is by far the county’s largest surface water user, accounting for 58% of withdrawals; agricultural uses, by comparison, total less than 1% combined.³⁶ However, recent controversies throughout the state involving water withdrawals by “mega-farms” (and Google) indicate that growing demand, competing uses (e.g., agricultural versus residential), and a less predictable surface water supply will require prudent and proactive water resource management.

ALTERNATIVE AGRICULTURE

Urban and community agriculture create opportunities for individuals and communities to grow food hyper-locally. These projects are often characterized by raised garden bed “plots” that can be rented for a period of time at a low rate by community members. Others, like the Nicholtown Community Garden in downtown Greenville, are large spaces cooperatively cultivated by community volunteers.

According to the Greater Greenville Master Gardeners Association (GGMGA), there are more than 70 community gardens in Greenville County operated by nonprofits, churches, schools, neighborhoods, Greenville County Rec, and other local groups. The benefits of urban agriculture and community gardens are many, including: the increased availability of fresh fruits and vegetables in neighborhoods that are food insecure, the beautification of neighborhood spaces, new educational opportunities, and the strengthening of social connections among neighbors.

Several community garden coordinators commented on the difficulty of resourcing and sustaining community gardens, where success is almost entirely dependent on the commitment and coordination of volunteers. Most called for increased private and public investment in these shared spaces that would allow them to institutionalize their projects and better serve their communities.



PROVIDED COURTESY OF
NICHOLTOWN COMMUNITY GARDEN

“

Folks are quick to point to community gardens as a solution for food insecurity, but the investments sure don't follow. Cultivating these spaces is hard, long-term work.”

– Community garden coordinator



CASE STUDY – HORSESHOE FARM

Upon its founding in fall 2018, Horseshoe Farm elevated a local farmer-chef relationship to a partnership. The collaboration between farmer Chris Miller, owner of That Garden Guy, and chef Greg McPhee, owner of Greenville’s James Beard-nominated restaurant The Anchorage, resulted in an innovative farm-to-restaurant model wherein Horseshoe supplies the bulk of the produce that ends up on customers’ plates.

Located on a 21-acre piece of idyllic land near downtown Travelers Rest, with just over a half-acre in production, the farm not only supplies The Anchorage with hyper-local produce but also supports a growing CSA program and a regular booth at the Travelers Rest Farmers Market. According to Miller, the duo is projecting six-figure annual sales at their current scale.

These cooperative farmer-chef ventures have taken off in the county, with restaurants like Saskatoon, Fork and Plough, Oak Hill Café, and Topsoil each raising food on-site or working closely with a local farm. The benefits to farmer and chef are mutual and many. The Horseshoe/Anchorage partnership allows McPhee to “alleviate some of the unknowns associated with sourcing so many different items from so many different people” and plan for a more dynamic menu.³⁷ For Miller, he “essentially has a guaranteed market for [his] product, so it minimizes the risk in one of the riskiest professions there is.”



PROVIDED COURTESY OF HORSESHOE FARM



SECTION TWO: PROCESSING AND DISTRIBUTING FOOD

At the local level, both in Greenville County and across the nation, much of the infrastructure necessary to move locally produced food from farm to table has disappeared over the decades as the food industry has consolidated.³⁸ This has proven especially problematic for livestock farmers who mostly rely on state and federally regulated facilities to process, pack, and label their animals for retail sale.

Investments in local and regional infrastructure to process, aggregate, and distribute locally produced food could create new economic development opportunities for farmers and food entrepreneurs. In 2011, for example, Amy's Kitchen intended to open an East Coast prepared food manufacturing facility in Greenville; however, after conducting a number of public meetings and attempting to source within the region, the lack of organic producers and processing facilities in the area prevented its opening.³⁹

KEY STAKEHOLDER FEEDBACK

- Poultry and livestock processing bottlenecks are a persistent issue for farmers in the Upstate region
- Third-party aggregators, especially those that process, pack, store, and/or distribute products to market, are desired but price points remain a major concern
- Refrigerated transportation and cold storage were notable needs among both produce and livestock farmers
- Investing in infrastructure remains expensive and most stakeholders expressed an interest in accessing grants and/or loans
- Many stakeholders reported that they feel unsupported by the various government agencies, in part because they perceive state resources to be largely dedicated to large-scale and commodity agriculture

SORTING, PACKING, AND STORAGE

Most local produce processing happens on-farm, and can include washing, trimming, chopping, cooling, bunching, and packaging. Of the produce farmers surveyed, most were satisfied with their on-farm processing procedures. However, none reported attaining Good Agriculture Practices (GAP) certification, a food safety certification required by many retail, wholesale, and institutional buyers. The majority expressed disinterest in pursuing GAP certification; others were inclined but cited regulatory and financial burdens as barriers.

Expanded cold storage, on and off farm, was identified as a local need. Cold storage provides farmers with increased flexibility, as it enables them to hold their product for a longer period of time. The cost of coolers varies depending on size and type, but typically runs in the thousands of dollars and can be prohibitive. The SC Department of Agriculture (SCDA) does offer a Cold Storage Cost Share Program, through which farmers are eligible to receive a \$750 reimbursement for installing a Cool-Bot cooler system for the holding of specialty crops.⁴⁰

Currently there is no widely accessible shared processing or storage facility in the county. Mill Community Ministries operates a “crop stop,” a SC Department of Health and Environmental Control (DHEC)-inspected commercial kitchen and produce processing facility at Long Branch Baptist Church; currently, the facility is available to some beginning food entrepreneurs for rent. A question for further research might be whether local producers could benefit from one or several publicly accessible shared facilities, particularly if the facility would enable producers to increase their scale and serve wholesale or institutional demand.



PROVIDED COURTESY OF
EASTATOE FARM

MEAT PROCESSING

South Carolina has only two publicly accessible USDA-inspected (only one certified humane) slaughter and processing facilities. Both have long waitlists which indicates that demand for this kind of processing exceeds the existing supply. Those farmers willing to process at SCDA-inspected facilities are forced to forgo out-of-state markets and often lack access during deer season.

Many poultry farmers serving Greenville County report processing their own poultry on-site for sale. Small poultry operations that sell the birds they raise can process up to 1,000 chickens on-site without installing additional infrastructure.⁴¹ Other operations drive to Kingstree, South Carolina – a 400-mile roundtrip – to have their birds processed at the Williamsburg Packing Company, a USDA-inspected, certified humane facility.



I could produce more if I could get the stuff processed. Processing has always been the bottleneck, the most heartbreaking headache of this whole business.”

- Laurens County poultry and livestock farmer

FARMERS REPORTED USING THE FOLLOWING PROCESSORS:

Wells Jenkins in Forest City, North Carolina
(120-mile roundtrip)

Blalock Meat Processing in Rabun Gap, Georgia
(180-mile roundtrip)

Back 40 Butchery in Hodges, South Carolina
(100-miles roundtrip)

Piedmont Custom Meats in Gibsonville, NC
(360-mile roundtrip)

Williamsburg Packing Company in Kingstree, SC
(400-mile roundtrip)

Anderson Frozen Foods in Anderson, SC

Many farmers raising livestock (beef, pork, lamb, and other animals) also travel long distances, both inside and outside the state, in order to access USDA-inspected processing facilities. While a limited and dwindling number of processing facilities exist within the Upstate region, producers cited capacity, quality, and consistency as barriers to relying on those facilities. For example, the region recently lost a USDA-inspected slaughter and processing facility due to inhumane practices.⁴² These travel and processing costs are ultimately passed onto the consumer, making it more difficult for small, local farms to remain competitive.

Mobile slaughterhouses, units that travel to farms to slaughter poultry and livestock, offer an alternative approach to processing meat. However, the various components of processing, including waste disposal and

refrigeration, present challenges for farmers wishing to process on-farm. The Southeast Mobile Slaughter Cooperative, billed as the only on-farm slaughter unit in the southeast, currently calls Grassfat Farm in Hodges, South Carolina its basecamp. No farmer surveyed for this assessment reported using a mobile unit to process their animals.

VALUE-ADDED PROCESSING

Value-added processing “changes the physical form of [a] product (e.g., making berries into jam)” in order to enhance its value.⁴³ South Carolina’s Cottage Food Law allows for the limited production and sale of some foods produced in home kitchens, including some baked goods and candies. However, “potentially hazardous” foods like jams, jellies, pickles, or any products that require refrigeration must be produced in a facility licensed and inspected by DHEC.

Many of the value-added producers surveyed for this assessment reported investing – at significant cost – in their own DHEC-licensed and inspected facilities to produce their goods. Others have processed their products in shared-use commercial or community kitchens – fully-equipped kitchen facilities that local food entrepreneurs can use, usually for an hourly or monthly fee, to prepare and process food products. Some local examples include Imagine Kitchen and Old Mill Kitchen and Commissary. Most, however, rented or shared commercial kitchen space with existing farms, restaurants, and churches.

Several value-added producers remarked that a food business incubator or low-cost communal space could have eased their entry into the market. Blue Ridge Food Ventures (BRFV) in Enka, North Carolina is one example of this model, providing “infrastructure and technical assistance to enable small businesses entering the marketplace.”⁴⁴ BRFV’s parent organization is also developing a food business innovation center to provide “entry-level technical support and be able to serve more farmers’ needs for value-added processing.”

AGGREGATION AND DISTRIBUTION

Food distribution is the process of moving food from processing, storage, and aggregation facilities to consumer markets.⁴⁵ Of the farmers surveyed for this assessment, most reported managing their own distribution. Regional distributors like Marvin's Produce and Taylor Boys' Produce procure some locally-grown and raised food, but both require farms to be GAP-certified. Most interviewees acknowledged the role that the Swamp Rabbit Food Hub and GrowFood Carolina play in providing expanded access to buyers, and noted that neither requires GAP-certification (though they do require food safety plans).



What distinguishes food hubs from other food distributors is their attention to social and economic issues within their community's food system, and the use of the hub as an intermediary to form a values-based supply chain structure to address these issues.”

— Food Hubs in Georgia: A Potential Market for Small-Scale and Midscale Farms



PROVIDED COURTESY OF
SWAMP RABBIT CAFE & GROCERY

FOOD HUBS

Local food systems are unique because they go further than the traditional supply chain model of simply moving product from Point A to B, adding value elements like shared values and social mission goals. These food value chains “incorporate social or environmental mission values within the traditional scope of product differentiation strategies, focusing on such issues as:

- Supporting the local economy;
- Farmland preservation and viability;
- Providing humane treatment and animal welfare;
- Expanding community access to fresh food; and,
- Demonstrating environmental stewardship.”⁴⁶

Regional food hubs play an important role in local value chains, often “facilitating the aggregation, storage, processing, distribution, and/or marketing of locally/regionally produced food products” so that farmers can access new and larger markets.⁴⁷ Food hubs have enjoyed comparative success, with a 2017 USDA report finding that the five-year survival rate for hubs since 2005 is 88%, which is significantly higher than the survival rate for all types of new businesses, at 53%.⁴⁸

Swamp Rabbit Café and Grocery operates the Swamp Rabbit Food Hub, the Upstate member of the SC Food Hub Network (SCFHN), connecting area farms to local restaurants and broader food network buyers. GrowFood Carolina continues to work with a number of Upstate restaurants and farmers as well. The two hubs are seen as “anchor hubs” in the state and according to SCFHN’s 2019 Project Report and Recommendations, will “need to expand cold storage infrastructure to keep up with demand.” SCFHN also recommends that Swamp Rabbit Food Hub “increase distribution days and sales radius.”⁴⁹

CASE STUDY – SC FOOD HUB NETWORK

South Carolina is one of only a handful of states across the country developing a food hub network. SCFHN's mission is to ensure that the food hubs of South Carolina have the capacity, network, and support to advance the visibility and viability of local farms by connecting local foods to local markets. The creation of a hub network is a pioneering model that enables hubs to work collaboratively to increase capacity for more diverse and larger volume transactions that increase the marketability and distribution of locally grown products.

The benefits of the SCFHN naturally extend beyond the hubs to help all key players/partners in the local food system: farmers, buyers, processors, policy coordinators, etc. Members work together as a network to coordinate efforts to increase efficiency from farm to table through coordinated regional crop planning, logistics, and farmer training. SCFHN members work with local farmers from planning and harvest to sales and delivery, ensuring farmers at any scale can participate in the market.

The SCFHN is not a separate buying or selling organization; rather, it increases the capacity of member organizations which currently include GrowFood Carolina, Catawba Farm and Food Coalition, Swamp Rabbit Food Hub, and Axiom Cooperative. The network also continues to grow, with a trading partner in Charlotte, an emerging hub in Beaufort, and a food hub feasibility study underway in Florence.



PROVIDED COURTESY OF
SWAMP RABBIT CAFE & GROCERY



“

Recent research from the USDA Census of Agriculture shows that while farmers selling their food locally is still on the rise, direct-to-consumer channels like farmers markets and CSAs may be hitting a plateau after years of growth, while sales to intermediaries [like food hubs] is on the upswing.”

— Grist, “Can Food Hubs Scale Nationally and Stay True to the Cause?”

SECTION THREE: SELLING FOOD

Consumer demand for locally-produced food continues to rise, as local food sales in the U.S. grew from \$5 billion to \$12 billion between 2008 and 2014.⁵⁰ More than 167,000 farms produced and sold food through direct marketing practices, resulting in \$8.7 billion in revenue in 2015.⁵¹ In total, direct and indirect local food sales account for \$11.8 billion, or 3% of the value of total U.S. agricultural production, according to the 2017 Census of Agriculture.

South Carolina falls near the middle of the pack nationally when it comes to producing and consuming local food.⁵² 90% of the food eaten in South Carolina is imported from outside the state, which indicates a huge opportunity to increase local food production for local consumption.⁵³

\$29.9 MILLION

Value of food sold by farmers direct to consumer (through CSAs, farmers markets, etc.)

\$44.6 MILLION

Value of agricultural products sold by farmers to local retailers, institutions, and food hubs

SOURCE: Strolling of the Heifers 2019 Locavore Index (South Carolina)

A majority of farmers and value-added producers interviewed for this assessment reported selling their products through both direct-to-consumer and indirect channels. Most perceived local demand for locally-grown food to exceed our current supply, while others identified a need to educate consumers about the value and costs associated with raising local food.



PROVIDED COURTESY OF
SWAMP RABBIT CAFE & GROCERY

KEY STAKEHOLDER FEEDBACK

- Sellers and buyers alike would benefit from regular, facilitated communication to better match supply with demand
- Many local farmers are interested in accessing retail and wholesale markets, but lack the capacity to personally market their products to potential buyers
- Direct-to-consumer channels still yield the best profit-margin for local farmers at their current growing scale
- Many farmers, chefs, and consumers are concerned about truth in marketing practices of both producers and resellers, specifically restaurants
- High barriers to entry into both wholesale and institutional markets were cited as non-starters for those interested in expanding the scale and scope of their operations

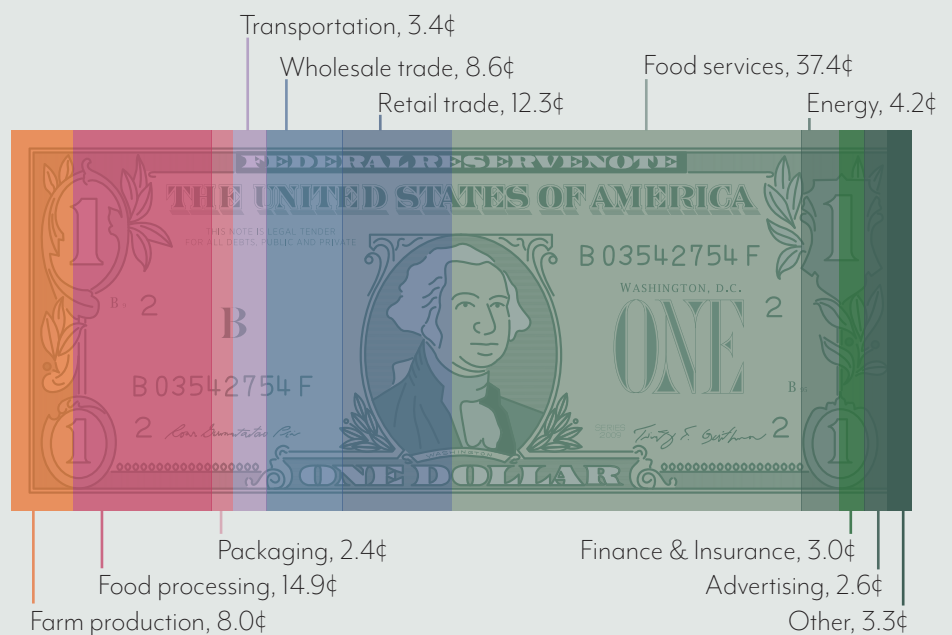
DIRECT MARKETING

Many local farms choose to sell directly to consumers through a variety of channels, including roadside stands, on-farm stores, online marketplaces, pick-your-own operations, farmers markets, and community-supported agriculture (CSA) programs. Direct markets offer a lower barrier to entry and yield higher prices for farmers in addition to the opportunity to build lasting relationships with their buyers. Direct-to-consumer sales account for \$2.8 billion nationally.⁵⁴ In Greenville County, 10% of farms sell their goods through direct markets.⁵⁵

2018 FOOD DOLLAR

Adapted from USDA, Economic Research Service, Food Dollars Series data product

FIGURE 3



FARMERS MARKETS There were 8,771 known farmers markets in the U.S. in 2019, a 6% increase since 2004.⁵⁶ According to the SCDA, there are 8 farmers markets throughout Greenville County; however, some markets like The Toasty Farmer at Brewery 85 operate seasonally or on a pop-up basis and are unaccounted for by the state.⁵⁷

As Greenville County's population has grown, so too has the size of at least some of these markets. For example, the Travelers Rest Farmers Market began in 2009 with 10 vendors in the parking lot of Sunrift Adventures in downtown Travelers Rest. Now, the market hosts around 60 vendors every Saturday during its season and vendor sales averaged approximately \$400,000 in 2019.⁵⁸

Some interviewees articulated concerns about the various markets "cannibalizing" one another, questioning whether there is sufficient demand to maintain each of the existing markets. Other respondents preferred the pace of smaller, lower-profile markets because they afforded better opportunities to connect with and educate consumers.



PROVIDED COURTESY OF
GROWING GREEN FAMILY FARMS

“

You can market more broadly if you work with – not against – other farmers. Everyone can specialize in their growing area of expertise, you can offer a more diverse product, and make the customer’s experience better.”

– Greenville County produce farmer

COMMUNITY-SUPPORTED AGRICULTURE

CSAs traditionally work as follows:

- Members (consumers) purchase a share of a farm’s anticipated production at the beginning of a growing season, providing farmers with upfront capital to invest in their operation.
- In exchange, members receive regular distributions of produce, either via delivery or pickup on-farm or at a central location.
- By sharing the risks inherent to growing food, the farmer and consumer build community and personal connections around food.

Nationally, 12,617 farms marketed through a CSA in 2012.⁵⁹ No comprehensive database of Greenville County CSA programs currently exists, though many farmers interviewed for this assessment reported operating or contributing to a CSA program. Cooperatives or multi-farm CSAs, investments in e-commerce platforms, and the inclusion of value-added products in shares (e.g., flowers, mushrooms, eggs) all present opportunities for local farms to differentiate their programs and expand their scope and scale.



PROVIDED COURTESY
OF EASTATOE FARM

RETAIL AND WHOLESALE MARKETING

Local farmers can diversify their revenue streams by selling to retail and wholesale markets, including restaurants, grocery stores, and institutions like hospitals and schools. Selling to retail and wholesale markets can require less hands-on management time on the part of the farmer, and typically offers smaller profit-margins but larger dollar amount sales overall.

In 2015, 39% of all local foods (\$3.4 billion) were sold to institutions and other local food intermediaries like restaurants and food hubs.⁶⁰ In South Carolina, indirect sales accounted for \$44.6 million. Of the farmers interviewed for this assessment, all reported selling to at least one local indirect market and many expressed an interest in scaling their operations to meet greater wholesale demand.

RESTAURANTS

Fresh on the Menu reports that at least 19 Greenville County restaurants purchase product from local producers, though contributors to this assessment reported selling to restaurants not found on this list including, but not limited to, Fork and Plough, Oak Hill Café, Upcountry Provisions, Bossy Bakers, and Sidewall Pizza.

The quantity of purchased product reportedly varies considerably from restaurant to restaurant, and interviewees – farmers, chefs, and consumers – conveyed a desire for more truth-in-marketing when it comes to local food purchasing. Other than Fresh on the Menu’s requirement that participants dedicate at least 25% of their ingredients to Certified South Carolina Grown products, no regulations or oversight exist to police businesses purporting to have locally-sourced food on their menus.

Respondents indicated a need for improving farmer-chef communication and coordination, particularly around crop planning and ordering. Swamp Rabbit Café and Grocery has facilitated grower-buyer meetings in the recent past, and the majority of respondents felt that the Swamp Rabbit Food Hub had the largest role to play in facilitating these farmer-chef connections going forward.

GROCERIES

Though consumer interest in buying directly from local farmers has increased in recent years, consumers still purchase the overwhelming majority of their food from grocery stores and supermarkets. According to a survey conducted by Forager, 87% of respondents reported going to their local grocery store for local food purchases.⁶¹

Local farmers and value-added producers currently have products on the shelves in several large retail stores, including Ingles, Lowes Foods, Whole Foods, Fresh Market, Publix, and more. The barrier to entry for selling to large chain grocers is high, as they often require heightened safety measures (e.g., Good Agricultural Practices (GAP) certification) and greater product uniformity.

Conversely, smaller, independent groceries like Swamp Rabbit Café and Grocery (Greenville) and Farmacy (Easley) buy a significant part of their inventory directly from local farmers and value-added producers without the stringent requirements of large chain grocers. Several Greenville County restaurants, including but not limited to Oak Hill Café, Fork and Plough, and Topsoil Kitchen and Market, operate small internal markets that resell local products in addition to their offerings.



PROVIDED COURTESY OF
SWAMP RABBIT CAFÉ & GROCERY

Some respondents perceived a local technical assistance gap, particularly as it relates to selling to larger grocers, distributors, and wholesalers. Several reported abandoning their attempts to sell to bigger buyers because they grew frustrated with the “red tape” and felt ill-equipped to navigate the process. As with restaurants, respondents indicated a willingness to work with an intermediary, but only if – as one farmer put it – the “price is right.”



PROVIDED COURTESY OF GROWING GREEN FAMILY FARMS

INSTITUTIONS

In 2016, Civil Eats described farm-to-institution programs as the “sleeping giant” of the local food movement.⁶² Farm-to-institution programs exist where large organizations like hospitals, schools, and colleges and universities buy local food to use in their dining or feeding programs, either through a self-operated procurement program or by contracting with food service management companies (e.g., Aramark or Bon Appetit).⁶³ Institutional buyers can create markets for local products that may not otherwise fetch a high price through other channels, as well as opportunities for a larger percentage of the community to consume fresh, local food.

South Carolina Farm to Institution (SCFTI) is a collaborative partnership between several state agencies and Clemson University that “seeks to increase the number of farmers providing locally grown products to institutions, such as schools, child care centers, food banks, hospitals, military installations, and other businesses.”⁶⁴ Greenville County is home to two large hospital systems (Prisma Health and Bon Secours), one massive consolidated public school district, a number of colleges and universities, and countless other potential institutional buyers, yet there appear to be very few Greenville County participants in SCFTI’s several initiatives (Farm to School, Farm to Retail, Farm to Food Bank).

Bon Appetit Management Company, Furman University’s food service provider, strives to purchase at least 20% of all ingredients from small, owner-operated farms located within 150-miles of their kitchens,⁶⁵ and is currently purchasing at least some product through the Swamp Rabbit Food Hub. Other institutions’ commitments to purchasing locally-produced food are unknown at this time but warrant further investigation.

The majority of interviewees did not express an interest in selling to institutional buyers, citing perceived low profit-margins, institutional disinterest in buying from local producers, and insurmountable barriers to entry. At least one local producer who wished to sell exclusively to local hospitals found the process so discouraging that they abandoned the idea entirely. For those sellers interested in expanding into institutional markets, technical assistance and impartial brokerage were identified as needs.

CASE STUDY – THE MARKET AT WALKER CENTURY FARMS

Walker Century Farms, located in Anderson, has operated in the Upstate for more than 100 years. Nancy and Bill Walker, who own and operate the farm, raise and sell Devon cattle along with beef and pork. Recently, the Walkers partnered with Colleen and Donald Snow of Providence Farm to farm cooperatively as well as build out the farm’s on-site market.

The market currently offers a variety of locally-produced goods, including both farms’ beef and pork, Sharon Hill Farm and Johnson Creek Farm chicken, and local honey, milk, cheese, and eggs. In addition to local food, the market presents customers with the opportunity to walk the grounds and experience life on a working farm. According to Colleen, visitors really enjoy the farm atmosphere and the knowledge that they are “supporting a family and not a grocery store chain.”

She reported that many first-time customers have quickly become regulars, especially in light of the coronavirus pandemic. Noting an uptick in customers since the outbreak began, Colleen recognized this as a teachable moment. “Because of the virus, we’ve sometimes run out of popular items like ground beef. We aren’t a grocery store that buys commodity beef. This is a process, and we’re helping people understand that,” she said. On-farm markets like the Walker’s present an opportunity for customers to learn about and connect with the local food system in a tangible way.

SECTION FOUR: ACCESSING FOOD



PROVIDED COURTESY OF
CRESCENT FARM

Greenville County has experienced rapid population growth over the past several years, resulting not only in changing neighborhoods and demographics but also shifts in the foodscape and increased challenges related to food security.⁶⁶ Many neighborhoods in the county lack access to grocery stores and an estimated 52,000 people are food insecure.⁶⁷ Diet-related disease persists as a local challenge, where obesity rates hover near 28%,⁶⁸ and both major health systems in the county (Prisma and Bon Secours) have identified obesity and diet-related chronic disease as a top priority based on their community health needs assessments.

PERCENTAGES OF FOOD INSECURITY

	Greenville County 2015	Greenville County 2017	South Carolina 2017	National 2017
Food Insecurity Rate	12.2	10.7	13.5	12.5
Child Food Insecurity Rate	19.1	15.7	18.3	17

TABLE 1. Adapted from Feeding America, Map the Meal Gap

KEY STAKEHOLDER FEEDBACK

- Many residents struggle with affordable grocery store access
- Existing public transportation infrastructure in the county does not meet the needs of many reliant residents
- Stakeholders, including policymakers, must collaborate to develop and implement solutions that address the root causes of poverty and respond to issues including, but not limited to, food insecurity, housing affordability, and economic inequality

FEDERAL ASSISTANCE PROGRAMS

SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM

An estimated 15.5% of Greenville County residents participate in the Supplemental Nutrition Assistance Program (SNAP) each month.⁶⁹ While the SNAP program helps to alleviate food insecurity for many Greenville County residents, it is by no means a solution to the problem. About 47% of the food insecure population in the county do not qualify for SNAP because their income exceeds the federal threshold (at or below 130% of the poverty level).⁷⁰

Often, the SNAP benefits that participants receive fail to sustain them throughout the month. For example, the average monthly SNAP benefit per participant in South Carolina is \$120, yet it is estimated that it costs at least \$250 to feed the average person monthly.⁷¹ The USDA ERS reports that nearly one-third of households enrolled in the SNAP program still have to visit a food pantry each month and approximately 45% limit food consumption by skipping meals.⁷²

OTHER FEDERAL NUTRITION ASSISTANCE PROGRAMS

In addition to SNAP, there are other federal nutrition assistance programs that provide supplemental aid for specific segments of the population. The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) program includes monthly benefits for pregnant women, new mothers and children under five to purchase healthy food. This program offers relief to some mothers and children, however, 31% of the food insecure population in Greenville County earn too much to qualify for the program.⁷³

The WIC Farmers' Market Nutrition Program (FMNP) and the Senior Farmers' Market Nutrition Program (SFMNP) provide \$25 vouchers to WIC participants and seniors to spend at approved farmers market locations. Approximately 600 Greenville County residents received SFMNP vouchers in 2018 with a 74% redemption rate, according to a program coordinator with the SC Department of Social Services (DSS).

South Carolina supplements federal nutrition assistance programs with its Healthy Bucks program, a SNAP incentives program administered through DSS. Healthy Bucks allows SNAP participants to obtain additional fresh fruits and vegetables when using SNAP benefits at approved farmers markets. SNAP participants who purchase at least \$5 with SNAP EBT cards at participating locations receive \$10 in Healthy Bucks tokens to purchase additional fresh fruits and vegetables.

According to DSS staff, despite the availability of Healthy Bucks, SFMNP and FMNP vouchers, the funding often goes largely unused due to a lack of public knowledge about the programs. According to stakeholder interviews, many SNAP participants report feeling unwelcome at local farmers markets. Although several markets accept SNAP and Healthy Bucks, SNAP participants may feel stigmatized because of the way the payments are processed (e.g., redeeming tokens).

ACCESS TO FOOD RETAILERS

The most common feedback from interviewed stakeholders was that the county needs a more equitable distribution of food retailers with healthy food options. In recent years several grocery stores, including many Bi-Los, have closed, making food inaccessible for many communities.

The USDA Food Environment Atlas maps the segments of the population with low income and low access to a supermarket or large grocery store (defining low access as those living more than one mile from a supermarket or large grocery store if in an urban area or more than 10 miles from a supermarket or large grocery store if in a rural area). In Greenville County, 36% of the population falls into the low-access range and 13% of the population falls into both the low-access and low-income categories.⁷⁴

An inadequate local public transportation infrastructure compounds the healthy food access challenge for food insecure individuals, and was the second most identified need in stakeholder interviews. In particular, stakeholders report that Greenville County's senior population is significantly impacted by a lack of transportation options.

Aside from the geographic location of food retailers, affordability and inclusivity were also identified as barriers to access. Many interviewees expressed concern that the cost of healthy food is prohibitive for many residents and that, even in communities with physical access to a full-service grocery store, culturally-relevant foods might not be available. There are many efforts in the county to increase access to affordable, healthy food. Some examples include:



PROVIDED COURTESY OF MILL VILLAGE FARMS

- FoodShare Greenville, a program operated by Mill Village Farms, that distributes fresh produce boxes to individuals by partnering with health clinics and other community sites;
- Maranatha Farms, a church-supported, nonprofit community garden located in the White Horse Road Corridor that distributes more than forty boxes of produce grown on-site each week;
- Nicholtown Community Garden, a volunteer-operated community garden that provides free seasonal vegetables to Nicholtown residents – no questions asked; and
- Sterling Pride Farms, an urban farm run by Sterling neighborhood residents and volunteers that has distributed its produce in the community since 2014 (note that the farm operations are currently on hiatus while the farm relocates to a different plot of land).

CHILD FOOD INSECURITY

In Greenville County, nearly 16% of children are food insecure.⁷⁵ Food insecurity can have devastating effects on children, impacting all aspects of their growth and development. Greenville County Schools and other community partners, with the support of federal nutrition programs, ensure that Greenville County children receive healthy meals and snacks through the National School Breakfast and Lunch Programs, the Summer Food Service Program (SFSP) and the Child and Adult Care Food Program (CACFP).

54.5%

The percentage of students at Greenville County Schools that are experiencing poverty.

SOURCE: InformEdsc.org

NATIONAL SCHOOL BREAKFAST AND LUNCH PROGRAMS

The National School Lunch Program (NSLP) and the School Breakfast Program (SBP) operate in public schools, providing nutritionally balanced meals each school day. Children in households with incomes below 130% of the poverty level and/or those receiving SNAP or Temporary Assistance for Needy Families (TANF) qualify for free meals. Those with family incomes between 130 and 185% of the poverty level qualify for reduced-price meals.⁷⁶

Within GCS, 36,439 students or 49.4% of the student body participated in the program in the 2018 – 19 school year.

SUMMER AND AFTER SCHOOL MEAL PROGRAMS

During the school day, many children rely on school meals for nourishment. However, food insecure children are vulnerable to hunger after school, on weekends, and during summer months. This need is partially addressed through federal funding for the Seamless Summer Option (SSO), the Summer Food Service Program (SFSP) and the Child and Adult Food Service Program (CACFP).

In the summer of 2019, five sponsoring organizations provided meals across Greenville County at over 130 community sites according to the SC Department of Education. These organizations include Freedom Within Walls, Meals on Wheels, Project Host, Upstate Circle of Friends, and GCS. Both GCS and Project Host have food trucks with the ability to travel to additional sites such as apartment complexes.

EMERGENCY HUNGER RELIEF EFFORTS

Several local hunger relief organizations work to fill the hunger gap that remains after the provision of government nutrition assistance programs. Food pantries and meal sites throughout the county provide crucial emergency hunger relief efforts. They receive food to distribute to food insecure families from three main sources:

- **Harvest Hope Food Bank:** Headquartered in Columbia, the Upstate branch serves Greenville and Laurens Counties, has an 85,000 square foot warehouse at 2818 White Horse Road, and runs a daily food pantry. They work with approximately 100 partner agencies throughout Greenville and Laurens Counties, and distributed over 7 million pounds of food to over 170,000 families in 2018. They also distribute USDA senior food boxes and weekend food backpacks in Title I schools, and partner agencies can pick up what is available for a minimal fee.
- **Loaves and Fishes:** The organization rescues food that would otherwise be wasted and delivers it to approximately 100 partner agencies for distribution. Rather than storing rescued food in a warehouse, deliveries are made on the same day that they are received. In 2018, Loaves and Fishes rescued and delivered over 2.2 million pounds of food.
- **Community-organized food donation drives:** One of the strengths mentioned the most during stakeholder interviews was the generous spirit throughout the Greenville County community. Many local churches and schools organize donation drives throughout the year to donate to their neighborhood food pantries, or to Harvest Hope or Loaves and Fishes for distribution.

There are over 100 community-run food pantries across Greenville County, operated out of churches, nonprofit organizations, community centers, housing developments and schools. There is a lot of variation in food pantry models in the county, ranging from informal, volunteer-run pantries that are used on an as-needed basis to well-established pantries with paid staff who are open at certain times each week and have formal policies in place. Several pantries integrate case management into their model, offering pantry clients connections to community resources including healthcare, nutrition assistance, housing, and more.

Most pantries in the county distribute donated food through pre-packed boxes. There are some exceptions to this model. For example, Our Ladies Pantry in the Sans Souci community uses a “client-choice” model, wherein individuals can choose the food items that they prefer and need. Similarly, the Greenville Free Medical Clinic distributes fresh fruits and vegetables through a weekly mini-market where patients come to shop for donated food.

Not all pantries were surveyed for this assessment, and work remains to better understand how emergency food partners collaborate to more effectively address food insecurity across the county. Some common challenges identified by stakeholders include:

- Donations received by pantries do not always match the needs or wants of the clients;
- Pantries are limited in how much perishable food they can accept by the amount of cold storage space they have available;
- It can be challenging to distribute fresh produce, especially if it is an uncommon ingredient or seen as difficult to prepare (many pantry clients opt not to take these foods when they are offered); and
- Many pantries see repeat clients and would like to better position themselves to help move clients toward self-reliance.



PROVIDED COURTESY OF
PROJECT HOST

In addition to food pantries, there are several soup kitchens and meal sites that provide free meals to food insecure individuals throughout the county. This includes physical sites (see Appendix B) and mobile efforts to address a lack of access to transportation options. For example, the Hostmobile, Project Host’s mobile soup kitchen travels to food insecure neighborhoods to distribute free meals, no questions asked.

POVERTY AND FOOD INSECURITY

According to the Urban Institute, “tackling food insecurity at its roots requires weaving strategies for bolstering family food resources into broader efforts to address the causes and consequences of financial instability and economic hardship.”⁷⁷

For example, a household earning less than \$25,000 annually will struggle to afford the county’s median rent (\$787/month). This applies to approximately one in four of the county’s families.⁷⁸ These families are housing-cost burdened, which means that they may be forced to borrow from already limited food budgets to cover their rent or mortgage. Acknowledging that housing, transportation, access to healthcare, and wages are inextricably linked with food insecurity, multiple stakeholders emphasized the need to address poverty collaboratively and across sectors.

CASE STUDY – FOODSHARE GREENVILLE

FoodShare Greenville, a branch of FoodShare South Carolina is a fresh food box delivery program operated by Mill Village Farms. FoodShare Greenville delivered over 2,000 boxes to community partners in 2018, with nearly 62% being purchased with SNAP/EBT benefits. The program continues to grow with fresh food boxes delivered to partner sites including medical clinics, churches, community centers, and schools. Boxes have historically been delivered bi-weekly and come with a variety of seasonal, regionally grown fruits and veggies. Recipe cards are included with each order to introduce simple and easy ways to use the produce in each box. Boxes are packed by a team of volunteers and delivered to partner sites by a Loaves and Fishes van and driver.

The retail value of each box is between \$20 and \$30 on average, however, the cost per box is either \$15 cash or \$5 SNAP. The program utilizes the SC Healthy Bucks program to subsidize the cost of the box for SNAP participants.

During the COVID-19 crisis, the program adapted to meet significantly increased demand, reducing the fee for the box to \$5 regardless of payment method. With the support of community partners, including the United Way of Greenville County and Swamp Rabbit Café and Grocery, donated warehouse space and a large, refrigerated tractor trailer, the program distributed more than 2,000 boxes in the month of April 2020 alone.



PROVIDED COURTESY OF MILL VILLAGE FARMS



SECTION FIVE: MANAGING FOOD WASTE

Food waste in the U.S. is estimated to be between 30 – 40% of the nation’s food supply.⁷⁹ That 80 billion pounds of food – equivalent to 1,000 Empire State Buildings – equates to more than \$161 billion lost.⁸⁰ Food waste is the single largest product sent to landfills, accounting for 21% of the nation’s waste in 2013,⁸¹ yet 37 million people across the country are food insecure.⁸²

South Carolina alone produced approximately 630,000 tons of food waste in 2018 despite the fact that over 700,000 South Carolinians are experiencing food insecurity.⁸³

One of the biggest reasons people throw out food is real or perceived food spoilage, with more than 80% of Americans discarding food because they misunderstand expiration labels.⁸⁴ Other food, especially fruits and vegetables, are lost somewhere between farm and fork as a result of production, postharvest, processing, distribution, or retail losses.⁸⁵ This wasted food carries heavy environmental consequences: food waste is responsible for 8% of the world’s greenhouse gas emissions in addition to the energy and water resources required for food production.⁸⁶

In South Carolina, DHEC, the Department of Commerce, and the Department of Education work together to coordinate a “Don’t Waste Food SC” campaign encouraging households, restaurants, food retailers, food manufacturers, schools, and universities to “take action by preventing, composting or donating surplus food.” Their goal is to reduce food waste in the state by 50% by 2030.⁸⁷

KEY STAKEHOLDER FEEDBACK

- Greenville County and its food system participants should take a more comprehensive approach toward managing private and commercial food waste
- County residents and visitors would benefit from sustained education about the sources of food waste and ways to reduce it



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ATLAS ORGANICS

FOOD RECOVERY

The loss of food occurs at every stage in the food system, including on farms, in restaurants and grocery stores, and in homes. Most food loss, however, occurs when food is left in the field, often because the cost of farm labor exceeds the price farmers can fetch at market or because they can only sell unblemished, uniform food. Some gleaning organizations harvest these “ugly” products and redistribute them.

In the Upstate, Loaves and Fishes in Greenville County and Ruth’s Gleanings in Spartanburg focus on reclaiming excess fresh and healthy food, including produce, prepared meals, and perishable items that otherwise would be discarded. In 2019 alone, Loaves and Fishes rescued 2.1 million pounds of food that would have otherwise ended up in the landfill.



PROVIDED COURTESY OF
ATLAS ORGANICS

COMPOSTING FOOD

Greenville County partners with local company Atlas Organics (Atlas) in operating the Upstate’s first commercial food waste composting facility. Atlas collects food waste from residential and commercial clients and transports the material to the Twin Chimneys Landfill in Honea Path to be processed. At the end of the processing – or “windrow” – period (approximately 45 days), the resulting compost is screened and sold as a soil amendment. Farms and gardens, including Reedy River Farms and the Nicholtown Community Garden, reported using Atlas compost in their operations.

Through its Compost House program, Atlas offers a community composting collection service to more than 450 participating households. Atlas offers curbside pickup as well as a centralized drop-off and exchange program, wherein participants can trade their buckets of food waste for finished compost to use in their gardens and yards. Swamp Rabbit Café and Grocery currently serves as the drop-off and exchange site in Greenville County.

Opportunities exist to involve major food waste generators, including grocery stores, in the composting program. However, sending large quantities of food waste to landfills is inexpensive in South Carolina and makes it difficult for complete organics recycling program like Atlas to compete. Many cities and states across the country have passed laws that restrict the amount of food waste that goes to landfills; for example, Vermont banned the disposal of common recyclables including food scraps. Others have leveraged the power of public-private partnerships to catalyze the reduction of food waste.

IMPACT OF COVID-19

At the time of this report's publication, the impacts of the COVID-19 pandemic can be felt in every facet of daily life. In South Carolina, nearly 8,189 people have tested positive and 371 have died.⁹² As of April 23, 2020, the South Carolina Department of Employment and Work Force had paid more than \$351 million in combined state and federal unemployment benefits, with 341,730 initial claims received.⁹³ South Carolina may see a \$49.3 billion reduction in economic activity due to the ongoing pandemic, according to the state's Revenue and Fiscal Affairs Office.⁹⁴

Nationally, farmers relying on local and regional direct markets are projected to lose more than \$1 billion in 2020.⁹⁵

Farmers, restaurants, service industry workers, and consumers have all been negatively affected by the pandemic and resulting closures. Most local farmers interviewed for this assessment reported an uptick in direct-to-consumer sales in March and April due to low stock in grocery stores. The Greenville News echoed this, reporting that local operations like Greenbrier Farms have “adapted by increasing what [they sell] directly to consumers.” Several interviewees cited to this adaptability of small and medium-sized farms as an advantage over larger operations. Many interviewees nonetheless expressed concern about future farmers market and restaurant revenue – two markets responsible for the bulk of many local farmers’ annual sales.

Restaurants and their employees have reportedly taken an incredible financial hit; of the 701,000 jobs lost nationally in March 2020, restaurant and bar losses accounted for 60%.⁹⁶ According to the National Restaurant Association, the industry is expected to lose \$80 billion in sales by the end of April 2020.⁹⁷ Locally, many restaurants, including several farm-to-table champions, pivoted to a takeout and/or delivery model in an effort to keep their doors open.⁹⁸ Nonetheless, the local restaurant landscape will likely look different post-COVID as some establishments close for good.

The pandemic has revealed the essential nature of many food system jobs, especially those on the frontlines like farmworkers, restaurant staff, and grocery store clerks. As a result, many food system workers have been disproportionately vulnerable to the virus and its impacts.⁹⁹ Food system jobs tend to be low-wage and lack benefits including health insurance and paid sick leave, making it difficult to seek medical attention or miss work due to illness.¹⁰⁰



PHOTO BY ANNIE SPRATT ON UNSPLASH

Many people who have lost employment or had their hours reduced have resorted to emergency food providers and applied for SNAP benefits. At the time of publication, DSS reported that SNAP applications remain nearly double their pre-COVID numbers (between April 20 and April 27, DSS averaged 1,429 SNAP applications per day).¹⁰¹ Locally, service providers shared the following numbers and data for the period of early March 2020 through publication of this assessment:

- Greenville County Schools distributed over 1,500,000 meals at its 80 meal sites across the county;
- Mill Village Communities' FoodShare program distributed 3,923 boxes of produce and staples (beginning April 8, 2020), totaling 54,000 pounds of food;
- Harvest Hope – the county's largest food pantry – averaged over 400 households at each food distribution from the start of the pandemic; and
- United Way of Greenville County reported that the number one request of callers to its 211 emergency line was access to emergency food (just behind housing and rental assistance).

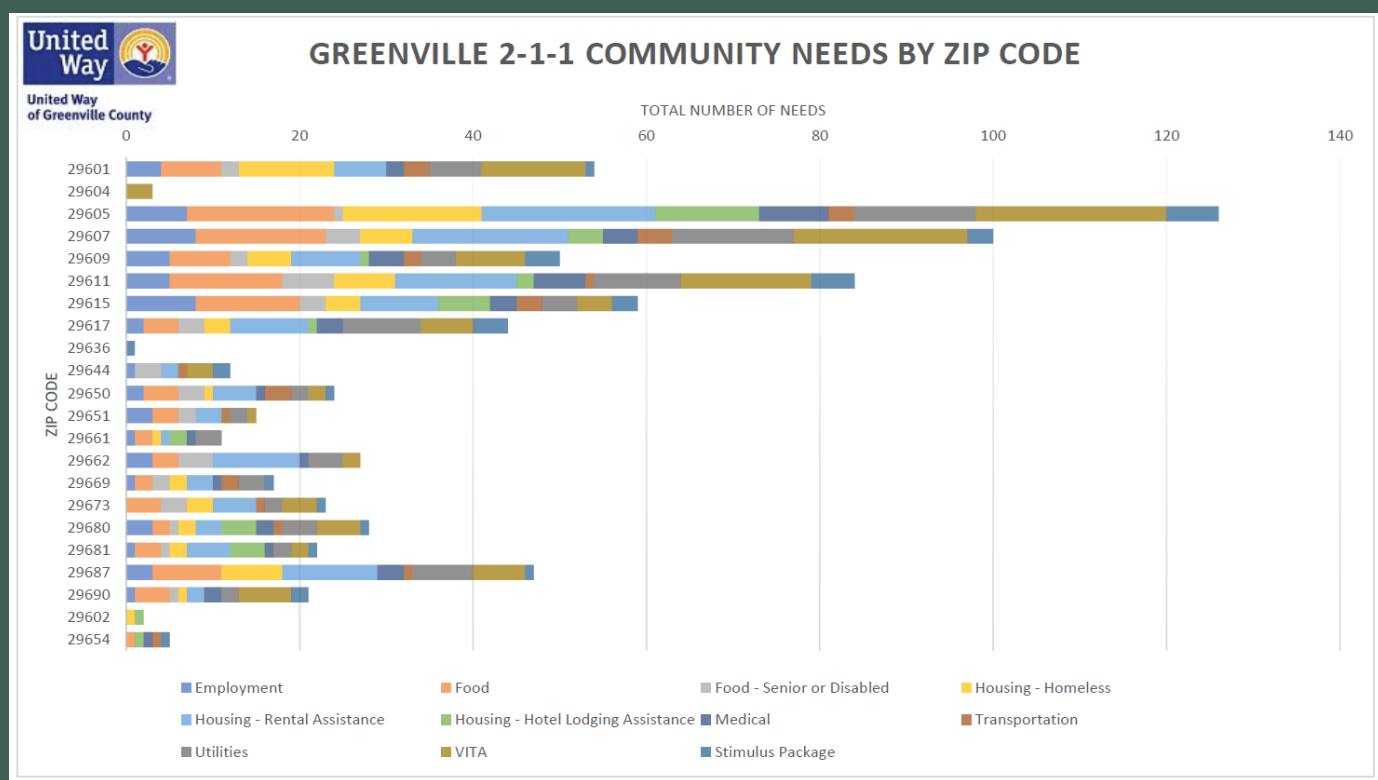


FIGURE 4. SOURCE: United Way of Greenville County (2017)

Much has already been written about the need to rethink the food system in light of the pandemic, especially as many consumers have turned to local farmers, restaurants, and emergency food providers to fill the void created by the outbreak. Strengthening Greenville County's local food system and supply should be a critical component of any coronavirus recovery strategy.

RECOMMENDATIONS

As a result of the stakeholder feedback collected through listening sessions, surveys, and interviews and the supplementary reports, research, and data outlined in this assessment, the following are recommendations for next steps.

1. ADVOCATE FOR IMPLEMENTATION OF THE 2019 GREENVILLE COUNTY COMPREHENSIVE PLAN.

The 2019 Comprehensive Plan, “Plan Greenville County,” set forth a number of agriculture and food security goals and objectives in its “Bloom” section. Additionally, the plan outlines 29 different strategies for achieving the overarching goal to “protect farmland for local food production and ensure access to healthy foods for all citizens” and includes suggested partners and timeframes.

Food system stakeholders should review the plan and advocate for the use of any strategies they deem appropriate and capable of improving local food security and access. The Comprehensive Plan is not a legally binding document. The strategies, objectives, and the goals contained therein exist only as prescriptions; however, food system stakeholder advocacy and accountability can move policymakers to act upon them.

2. INVEST IN LOCAL PROCESSING AND DISTRIBUTION INFRASTRUCTURE.

The 2019 Comprehensive Plan, “Plan Greenville County,” set forth a number of agriculture and food security goals and objectives in its “Bloom” section. Additionally, the plan outlines 29 different strategies for achieving the overarching goal to “protect farmland for local food production and ensure access to healthy foods for all citizens” and includes suggested partners and timeframes.

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PROVIDED COURTESY OF HORSESHOE FARM

3. CONNECT FARMERS TO NEW MARKETS AND CONTINUE TO GROW DEMAND FOR LOCAL FOOD.

Demand for locally-produced food is seemingly high in Greenville County given the number of farm-to-table restaurants, farmers markets, and CSA subscribers, though perceptions of local supply and demand differed considerably from one producer to the next. Nearly all stakeholders agreed, however, that untapped markets still exist and could be accessed with some combination of technical assistance, facilitated buyer-seller connections, and consumer education and engagement.

Future economic development strategies in the county, whether led by policymakers or the various economic development agencies, should also incorporate local food. COVID-19 has demonstrated just how critical the local food system is to the region's economic success. An analysis of the local food sector's impact on Greenville County's economy could remedy the existing dearth of quantitative data.

4. EMPLOY A CROSS-SECTOR APPROACH TO IMPROVING HEALTHY FOOD ACCESS.

Despite the county's relative wealth, a large percentage of its population still struggles to access healthy food. It is challenging for small and medium-scale local farmers to sell their product at a price point that is affordable to the county's most food insecure residents. Opportunities exist, in the form of subsidies or programming, to connect locally-grown food with communities that need it most.

Additionally, any efforts to improve healthy food access in Greenville County should incorporate anti-poverty strategies and a racial equity lens, as food insecurity is not disconnected from issues of affordable housing, public transportation, health care, and income and wealth inequality. Poverty and systemic racism sit at the intersection of these spaces, and individuals and organizations doing the work should coordinate and strategize across sectors to address it.

5. ESTABLISH A LOCAL FOOD POLICY COUNCIL TO COORDINATE FOOD SYSTEM WORK.

In the 2012 Greenville Area Food System Assessment, the recommended next step was to "create a complete plan that defines a scope, objectives, and tasks for responsible parties that address food system challenges within certain periods of time." No such plan materialized, likely because no entity or collaboration was tasked with or assumed responsibility for overseeing its creation and implementation.

According to Community Food Strategies, food policy councils are community-based coalitions, consisting of multiple organizations and individuals working across sectors, to promote more resilient food systems. A local council could coordinate research, planning, advocacy, and accountability efforts in the county; however, the creation of a council requires significant community buy-in. A feeling of disaffection and wariness already exists among local food system stakeholders, which makes it important that any collaborative effort have broad, diverse support.

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- ⁹⁸ Callum-Penso, L. 2020. "Coronavirus Will Change Greenville's Restaurants Scene, But What It Will Be Depends on Aid." Greenville News, April 11. Accessed May 2020, <https://www.greenvilleonline.com/story/news/local/greenville/downtown/2020/04/11/coronavirus-change-greenvilles-downtown-restaurants-landscape-covid-19-sc/5127758002/>.
- ⁹⁹ Masters, W. 2020. "COVID-19 Impacts on Agriculture, Food, and Nutrition." Econofact, April 20. Accessed May 2020, <https://econofact.org/covid-19-impacts-on-agriculture-food-and-nutrition>.
- ¹⁰⁰ Cain Miller, C.; Kliff, S.; Sanger-Katz, M. "Avoiding Coronavirus May Be a Luxury Some Workers Can't Afford." New York Times, March 1. Accessed May 2020, <https://www.nytimes.com/2020/03/01/upshot/coronavirus-sick-days-service-workers.html>.
- ¹⁰¹ Mayo, N. 2020. "Even as South Carolina's Economy Reopens, Applications for Food Assistance Remain High." Greenville News, May 5. Accessed May 2020, <https://www.greenvilleonline.com/story/news/local/south-carolina/2020/05/05/food-stamp-applications-double-even-south-carolina-eases-coronavirus-shutdowns/3055685001/>.

APPENDIX A

The following feedback was gathered between spring 2018 and spring 2020 through a combination of public listening sessions, surveys, and interviews. Approximately 70 individuals participated in the listening sessions, 15 food pantries and meal sites completed surveys, and over 50 one-on-one interviews with stakeholders, including farmers, value-added producers, food hub operators, chefs, grocers, distributors, educators, elected officials, service providers, nonprofits, and consumers, were conducted.

GROWING FOOD

SUCCESSES

- Many established farms with a steady supply of product
- Good community of small-scale farmers who are easy to work with*
- Market is not oversaturated with small farmers – room for growth
- Community gardens, including Sterling Pride Farms, Nicholtown Community Garden, Annie's House (Sustaining Way), Mill Village Farms, and Greenville County Rec gardens throughout the county

GAPS

- Shortage of farmers
- Lack of advocacy efforts on behalf of farmers
- Animosity between conventional and organic/sustainable growers*
- Failure to view agriculture and local food as economic drivers
- Loss of farmland*
- Viability of farm operations*
- Need for product transportation and storage
- Need for protocols and transparency in production and marketing*
- Lacking local organized farming supplies store (bigger than hobby gardening, smaller than large wholesale farms)
- Older farmers in larger/conventional farms aging out, millennial farmers prefer small-to-medium scale farm
- USDA notes a nutrition decline in produce (depleted topsoil, chemical infertility, seeds bred only for production)
- Community gardens aren't sustainable because they lack investment
- The cost of labor can be prohibitive and many producers struggle to find consistent help
- A need for more medium or mid-size farms in the area

RECOMMENDED ACTION

- Stop subsidizing corn/soy/junk food
- Farmers teaching farmers
- Product control
- Assistance with grant writing/funding opportunities/connect farmers to funding opportunities*
- Cooperative growing
- Local food "police"/rating system
- Partner with the Chamber of Commerce in an attempt to get their support for farmers and local food businesses
- Work with public schools to increase 4H clubs and increase Agricultural Engineering associate and bachelor degree programs

PROCESSING AND DISTRIBUTING FOOD

SUCSESSES

- Swamp Rabbit Food Hub
- Marvin's and Taylor Boys buy from some local, GAP-certified growers
- Some farms and venues share their DHEC-inspected processing facilities with value-added producers and food entrepreneurs at low-cost

GAPS

- Distribution problem (how food gets from farmers to consumers)
- Lack of investment in local food infrastructure*
- Lack of access to poultry and livestock processing continues to be a huge barrier for farmers
- The regulatory scheme creates barriers to entry, especially for minority and women-owned businesses
- Value-added production often requires significant personal investment upfront due to lack of affordable and/or shared, publicly-accessible DHEC-inspected facilities
- Distribution, specifically personally moving product to retail, often consumes the majority of small producers' (including value-added producers) time and eats into margins

RECOMMENDED ACTION

- Invest in an aggregation entity or infrastructure
- Conduct a feasibility study for the addition of USDA-meat processing capacity in the Upstate
- Create communities of practice to provide technical assistance, mutual learning opportunities, mentoring (for farmers, value-added producers, and food entrepreneurs)

SELLING FOOD

SUCSESSES

- Many places to sell local products*
- Growing interest in sustainability, local food, healthy eating*
- Expanding consumer base for local product*
- Many healthy options including farmers markets and grocery stores*
- Large variety of restaurants and grocery stores in certain parts of the city*
- Some high-end restaurants use local ingredients
- CSA model has been successful for some farmers
- Many good farmers markets*
- Prisma starting to use more fresh local produce in food
- One thing Greenville does well is support local farms and entrepreneurs, local food scene. Has been especially obvious during COVID-19

GAPS

- Need better matching of supply and demand*
- Lack of transparency (nonprofits, growers, buyers, etc.)*
- More grocers modeled after Swamp Rabbit Café and Grocery needed in other parts of the county
- Continuing to build local demand for local food is critical and requires concerted effort across sectors
- Huge barriers to entry for anyone wanting to sell to institutions
- Consumers demand convenience (e.g., delivery, ready-to-cook food, online ordering) and the local food system has to adapt to meet that demand

RECOMMENDED ACTION

- Make farmers markets more approachable for all people; train vendors on how to make EBT shopping experience easier
- Simplification of filing process needed by vendors to accept SNAP/EBT
- Healthier options at dollar stores
- “Buy local” campaign
- Community-owned ventures/cooperatives*
- Remove barriers to entry for institutional food sources (hospitals, schools, etc.)*
- Coordination between farmers and restaurants*
- Education exchange between chefs and farmers
- Improving communication between producers and buyers
- Improve food at hospitals and government institutions
- Grow Swamp Rabbit Café and Grocery or an additional location or similar concept elsewhere*
- More farmers markets in underserved communities

ACCESSING FOOD

SUCCESSSES

- Many food pantries*
- Rescue of breads and some other foods for distribution to those in need
- Many churches and schools do food drives
- Most people get enough calories, just not nutritious calories
- Meals offered to children via summer camps
- Greenville farmers market has been working to increase SNAP usage
- Mill Village FoodShare program
- Free Clinic has a mini farmers market
- Greenville County Schools provides healthy meals during school year and in summer*
- Lots of dialogue/discussions about food access/food insecurity
- There is a focus on food in every neighborhood county plan

GAPS

- More accessible grocery stores; many neighborhood grocery stores have closed*
- Need for better public transportation, especially for seniors*
- Farmers markets not accessible to underserved communities
- Too many gas stations and dollar stores with no healthy food options, yet that is where people have to shop in their neighborhoods*
- Low nutritional quality of rescued food/food available in pantries
- Cost of healthy food is prohibitive*
- Homogenous community doing food systems work (need to hear from people in all communities)
- Food pantries not always getting the products that they need
- Vouchers and SNAP incentives often go unused
- Unsure whether backpack programs are effective
- Income inequality and racial equity are the bigger systemic issues*
- Lack of affordable housing is a root problem
- Not enough support for SNAP/EBT

RECOMMENDED ACTION

- Collaboration across all sectors (public, private, nonprofit) to provide incentives for food retail development
- Farm stands in low-income neighborhoods
- Provide free breakfast and lunch to all students in Greenville County Schools
- Focus on seniors
- Amplify leaders in low-income communities
- Focus on transit-oriented solutions
- Advocate for continued funding of SNAP/SC Thrive programs at state level
- More (and healthier) summer feeding programs in more locations
- Mobile market that goes to low-income communities*
- Attend public meetings where transportation and affordable housing are being discussed
- Implement a summer feeding program like the one sponsored by Atrium Health in Charlotte - free breakfast and lunch for kids under 18, M-F, no registration needed, served in the cafeteria
- Adding a bus stop at the entrance of Wal-Mart on White Horse Road, where a large percentage of residents shop for groceries.
- Designated funds for community garden and garden education
- Health insurance that pays for healthy food
- Collect end of day meals from restaurants to serve to families in need
- Feed kids at libraries and hospitals
- Developer incentives to provide acreage for community gardens
- Ensure that applying for Healthy Bucks, WIC/senior vouchers is easy and accessible
- Expand CSA programs that accept SNAP
- Change the attitude about food accessibility: a community problem rather than a household problem
- Need for more food resources at north and south ends of county and White Horse Road area
- Ensuring that housing is located near transit lines (especially for \$25k/year income or below)
- Educate people about food pantries that exist in the county

MANAGING FOOD WASTE

SUCSESSES

- Food waste is a big problem but we are moving in the right direction with Atlas Organics

GAPS

- Food waste is high*
- More stakeholders need to be part of the solution; can't depend on a single organization to solve food waste in our community

RECOMMENDED ACTION

- Collect food waste at grocery stores, farmers markets
- Food scraps could be picked up alongside yard waste by the county. Would be especially easy since Atlas Organics composts right on-site at the landfill

MISCELLANEOUS

GAPS

- Need more community education about food system*
- Need more nutrition education*
- Food system participants need to be more collaborative*
- Less people interested in cooking

ACTION

- Local/state/federal advocacy
- Sustaining a food policy council
- Facilitate discussions between key players
- Create a clearinghouse of local resources
- Staff at Greenville County or the various municipalities dedicated to food systems and sustainability work

* Indicates high-frequency feedback

OVERALL THEMES FROM FOOD PANTRY & MEAL SITE SURVEY RESPONSES

- 50% did not know how many unduplicated clients they served each year
- Top providers who donate fresh produce: Loaves and Fishes, Harvest Hope, Publix, Partner Churches, Wal-Mart, C&S, local farmers, local home growers, Lowe's foods
- Main obstacles for distributing fresh produce: lack of donations, lack of storage/refrigeration at food pantry
- If more fresh produce were made available, all would potentially be interested in including it in their offerings; 50% said only if more storage were made available
- 54% provide some sort of nutrition education to clients
- 27% have policies related to the nutrition of their distributed food (including one that does not distribute bread or pastries)
- Biggest barriers to providing clients with healthy food: affordability of fresh produce, lack of transportation
- If more fresh proteins were made available, all would be potentially interested in including it in their offerings; 66% said only if more storage were made available
- Top providers who donate fresh proteins: Wal-Mart, Publix, USDA, community food drives, church congregation donations, Hunters for the Hungry, Harvest Hope, Loaves and Fishes, Vaughn's Meat, Satterfield Farms
- Only two of the pantries compost food waste; 73% are not interested in doing so, 27% are maybe interested
- 92% have enough food to meet client needs
- 58% have more than 25 volunteers working for the pantry
- 60% employ one staff person, 30% employ 2-5 (Note: there was not an option to answer 0 so it is possible that some have no employees)
- Long-term needs and wants: choice in what is given out; providing more resources for employment/housing; more fresh fruit; more fresh produce; more cold storage space; more healthy donations; commercial freezer; truck to transport food; refrigerated truck; community garden; more square footage; increase summer program with children
- Support needed to improve healthy food for clients: nutritionist/dietitian; transportation; more donations; more storage space; additional volunteers and system to activate volunteers as needed; additional staff to procure donations/financial support; support of local farmers
- Ideas for increasing access to healthy food: transportation services need to take into consideration terrain of stores and parking lots (bus service once allowed passengers to load at the front door of Wal-Mart but now riders must walk across parking lot and up a hill which is difficult for elderly/disabled)
- For meal sites, lunch is the main time when meals are served; very few serve dinner

APPENDIX B

Emergency Food Resources in Greenville County

Last Updated 4/14/2020

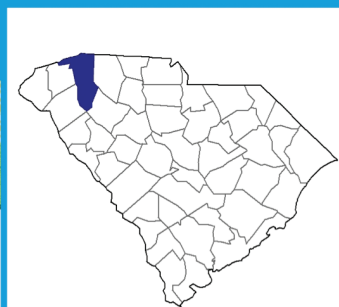
Call the UNITED WAY 2-1-1 hotline, 24/7 for information regarding where to find food, shelter, access to healthcare and transportation. Simply dial 2-1-1 to get connected.

Catagory	Organization	Hours of Operation	Location	Contact Info
	Mountain View Baptist Church	First and third Monday, 12-2	111 Cagle Street Greenville, SC 29601	864-233-1923
	United Ministries	Monday-Friday, 8-11	606 Pendleton Street Greenville, SC 29601	dbryant@united-ministries.org 864-232-6463
	Our Lady of The Rosary St. Vincent	1st, 2nd, 3rd, 4th Saturday, 9-10	2 James Drive Greenville, SC 29605	864-412-7101
	Samaritan House of Greenville	Saturday, 9-12	3018 Augusta St Greenville, SC 29605	samhouse105@yahoo.com 864-299-5898
	Sunbelt Mobile Home Park LLC	Monday, 3-5, Thursday, 12-2	400 Centre Blvd Greenville, SC 29605	mbrakels@rivstone.com 864-277-5872
	Downtown Outreach Ministry	By appointment only	2320 E North Street Suite J Greenville, SC 29607	864-313-7151
	From God to You Ministry, United Ministries	Monday, Tuesday, Thursday, Friday, 8-12, Wednesday, 8-11	725 Keith Drive Greenville, SC 29607	twimmer@miraclehill.org 864-242-2911
	L.A.M.P. Mobile Food Pantry	Wednesday, 12-2	316 Spartanburg St Greenville, SC 29607	864-232-5152
	Redemption World Outreach-Operation Go! Outreach Ministry	Sunday, 12-2, Monday – Wednesday, 10-2	80 Byrdland Dr Greenville, SC 29607	susanr@ourelementlesschurch.com 864-281-1520
	Relentless Church	Sunday, 12-2, Monday-Wednesday, 10-2	635 Haywood Road Greenville, SC 29607	reach@ourelementlesschurch.com
	Laurel Creek United Methodist Church	2nd and 4th Wednesday, 9:30 - 11:30	3598 Laurens Road Mauldin, SC 29607	paulineroubaud@att.net 864-297-8463
	Triune Mercy Center	Saturday and Sunday, 9-12 (meal), Monday, 9-12 (snack) Wednesday, 9-12 (bag of groceries)	222 Rutherford St Greenville, SC 29609	Pat Parker, pat@triunemercy.org 864-233-8020
	Calvary First Baptist Church	2nd Tuesday of each month	11 Tampa St Greenville, SC 29609	tinamccoy25@yahoo.com 864-271-4080
	Catholic Charities of SC (Our Lady's Pantry)	Tuesday and Thursday, 12-3	2300 Old Buncombe Rd Greenville, SC 29609	gortiz@charlestondiocese.org 864.331.2626
	CrossPoint Assembly	Monday-Friday, 11:30-1	3304 New Easley Hwy Greenville, SC 29611	(864) 380-2694
	Emmanuel Pentacostal Church	Monday, 12pm	1 Charles St. Greenville, SC 29611	lashae.posey@yahoo.com 864-906-7675
	First Christian Fellowship Outreach	Tuesday and Thursday, 10-12	110 Montana St. Greenville, SC 29611	fcfoutreach@gmail.com 864-233-5333
	Harvest Hope Emergency Food Pantry	Monday, Wednesday and Friday, 9-1	2818 White Horse Road Greenville, SC 29611	abell@harvesthope.org 864-281-3995
	St. Anthony of Padua Catholic Church-Gallivan Center	Monday-Thursday, 9-4	307 Gower St Greenville, SC 29611	Susan Cinquemani: sjcinq@charter.net 864-233-7717
	Berea First Baptist Church	Every other Tuesday, 9:30-11:30	529 Farns Bridge Rd Greenville, SC 29611	temory@bereafbc.org 864-246-1921
Food Pantries	Bible Way	Tuesday, 3:30-4:40	825 Woodside Ave Greenville, SC 29611	ladyelaine60@gmail.com 864-553-4277
	Jesus el Rey	Thursdays and Fridays starting at 1:30	2499 E North St Greenville, SC 29615	jesuselrevag2017@gmail.com 864-451-7744
	James Monroe House, Trinity UMC	Monday, 9am-1pm	403 S Weston Street Fountain Inn, SC 29644	jamesmonroeemissionhouse@yahoo.com, https://fitumc.org/james_monroe_mission_house, (864) 862-4561
	Mt. Zion Baptist Church	Friday, 9-11	103 Mt Zion Dr. Fountain Inn, SC 29644	esullivanf@aol.com (864) 561-2010
	Greer Community Ministries	Monday-Friday, 9-12	738 South Line Street Ext. Greer, SC 29651	mbryan@gcmnc.org 864-877-1937
	Greer Community Outreach Ministries	Tuesday, 3-4, every other Thursday, 1:30-2:30	108 Morgan St Greer, SC 29651	miller2watson@gmail.com 864-879-7687
	Greer Relief	Monday, Friday, 9-11	J. Veme Smith Center 202 Victoria Street Greer, SC 29651	info@greerrelief.org 864-848-5355
	Sharon United Methodist	Every 1st and 3rd Monday, 4-6	1421 Reidville Sharon Rd Greer, SC 29651	Sharoncommunitycupboard@outlook.com 864-979-7179
	Messiah Lutheran Joy Center	Monday and Thursday, 8:45-11:45	1100 Long Shoals Road Mauldin, SC 29662	864-963-4549

	Woodmont United Care	Tuesday and Thursday 10:00am-11:45pm, other days by appointment	8512 Augusta Rd Pelzer, SC 29669	birx@bellsouth.net (864) 979-4065
	Piedmont Emergency Relief Center	Monday, 4-6	3 Main Street Piedmont, SC 29673	piedmont7372@att.net
	Center for Community Services	Wednesday, 1 - 3:30 p.m. Thursday, Fri 9-11:30	1102 Howard Dr Simpsonville, SC 29681	kerri@centercs.com 864-688-2215
	Kingdom Life Church	1st and 3rd Saturday, 9-11	416 Holland Rd Simpsonville, SC 29681	
	Bethlehem Baptist Church	Friday, 9 - 11	4 Harrison Bridge Road Simpsonville, SC 29681	eharris@bbc1867.org 864-963-3527
	First Presbyterian Church	Tuesday, 9:30-11:30 and 4:00-5:00 Thursday, 5:30-6:30	501 E. Curtis Street Simpsonville, SC 29681	864-963-4441
	St. Mary Magdalene Catholic Church-Society of St. Vincent de Paul	1st and 3rd Monday, 9:30-11:30	2252 Woodruff Rd Simpsonville, SC 29681	864-288-4884
	Cedar Grove Baptist Church	Times vary, call ahead	206 Moore Street Simpsonville, SC 29681	mil.doyle1217@gmail.com 864-963-6935
	Calvary Christian Fellowship	Saturday, 9-12	2455 Locust Hill Road Taylors, SC 29687	a_huff@rocketmail.com 864-848-0160
	Highland Food Mission	Monday, 4-6	3270 Hwy 414 Taylors, SC 29687	864-895-5270
	Living Branch Ministries	Sunday, 11-1	4007 Locust Hill Rd Taylors, SC 29687	dondadonnie@yahoo.com 864-895-8484
	Prince of Peace Catholic Church-Society of St Vincent De Paul	Monday, 1-12:30	1209 Brushy Creek Road Taylors, SC 29687	864-331-3937
	Living Faith Ministries		37 Renfrew Ave Travelers Rest, SC 29690	livingfaithministries29673@gmail.com 864-395-5352
	North Greenville Food Crisis Ministry	Tuesday and Wednesday, 9:30-11:30	864 N Highway 25 Bypass Travelers Rest, SC 29690	ngfcmistry@gmail.com 864-834-7342
	Renfrew Baptist Church	1st and 3rd Sunday, 12-2	951 Geer Hwy Travelers Rest, SC 29690	renfrewchurch951@gmail.com (864)834-4200
	Foothills Family Resources	Monday-Thursday, 8:15-12, 1-4:30	3 Main Street Slater, SC 29683	marilyn@foothillsfamilyresources.org 864.836.1100
FoodShare (Fresh Food Box)	United Way of Greenville County	Pick up preordered box Wednesday, 11-4	105 Edinburgh Court Greenville, SC 29607	Order online or by phone with credit card, debit card or SNAP EBT: https://www.millvillagefarms.org/foodshare 888-Food-GVL (888-366-3485)
	Unity Health on Main	Pickup preordered box on Wednesdays	505C North Main St Greenville, SC 29601	Call for more info: 864-232-2735
	Greer Relief	Pickup preordered box on Wednesdays	J. Veme Smith Center 202 Victoria Street Greer, SC 29651	Call for more info: 864-848-5355
Free Meal	Project Host	Sunday-Friday, 11-12	525 South Academy Street Greenville, SC 29601	info@projecthost.org 864-235-3403
	Saint Andrews Episcopal Church	Saturday, 7:30-8:30	1002 South Main St Greenville, SC 29601	office@standrewsgreenville.org (864) 235-5884
	Upstate Food Not Bombs	Monday, 12:30-4pm	2805 Old Buncombe Rd. Greenville, SC 29601	upstatefoodnotbombs@protonmail.com
	Sunbelt Mobile Home Park	Wednesdays 11-12pm	400 Centre Blvd Greenville, SC 29605	email or call to find out how if you qualify and sign up for meals: info@senioraction.org 864-467-3660
	Nicholtown Community Center	Thursday, 12:30-1:30	112 Rebecca St Greenville, SC 29607	info@projecthost.org 864-235-3403
	David Hellams Community Center	Tuesday, 11-12pm	111 Spartanburg St Greenville, SC 29607	info@projecthost.org 864-235-3403
	Salvation Army	Tuesday, Thursday 11:30-12	417 Rutherford St Greenville, SC 29609	864-235-4803
	Sans Souci Church	Thursday, 11-12pm	3100 Old Buncombe Road Greenville, SC 29609	info@projecthost.org 864-235-3403
	Triune Mercy Center	Saturday and Sunday, 9-12 (meal) Monday, 9-12 (snack) Wednesday, 9-12 (bag of groceries)	222 Rutherford St Greenville, SC 29609	Pat Parker, pat@triumeracy.org 864-233-8020
	Street Church Ministries	Monday-Friday, 11-1	Judson YMCA Community Center 2 8th St Greenville, SC 29611	streetchurchhope@aol.com
	Daily Bread Ministries - Greer Soup Kitchen	Monday-Sunday, 11:30 until food runs out	521 East Poinsett Street Greer, SC 29651	mlbenett1116@gmail.com 864-968-0323
Meals for Seniors	Meals On Wheels of Greenville County	Monday, Wednesday and Friday	Meals delivered throughout Greenville County	email or call to refer a friend or family member: referral@mowgvl.com , 864-233-6565
	Greer Community Ministries	Monday-Friday	Meals delivered throughout Greer	email or call to refer a friend or family member: okroughton@gcmnc.org 864-877-1937
	Senior Action-Pleasant Valley Connection	Monday, Wednesday and Friday 11:30-12	510 Old Augusta Road Greenville, SC 29605	email or call to find out how if you qualify and sign up for meals: info@senioraction.org 864-467-3660
	Senior Action-Orchard Park	Monday, Wednesday and Friday 11:30-12	50 Directors Drive Greenville, SC 29615	email or call to find out how if you qualify and sign up for meals: info@senioraction.org 864-467-3660
	Senior Action-Berea Community Center	Monday, Wednesday and Friday 11:30-12	6 Hunts Bridge Road Greenville, SC 29617	email or call to find out how if you qualify and sign up for meals: info@senioraction.org 864-467-3660
	Senior Action-Needmore Center	Monday, Wednesday and Friday 11:30-12	203 Canteen Ave Greer, SC 29650	info@senioraction.org 864-467-3660
	Senior Action-Slater-Marietta Community Center	Monday, Wednesday and Friday 11:30-12	5 Whitney St Slater, SC 29683	info@senioraction.org 864-467-3660
	Emergency Senior Nutrition Program-Beech Springs Church	Tuesday, 10:30-12	125 Cooley Bridge Road Pelzer, SC 29699	Click here for info about eligibility.
	Emergency Senior Nutrition Program-Center for Community Services	Thursday, 10:30-12	1102 Howard Drive Simpsonville, SC 29681	Click here for info about eligibility.
	Emergency Senior Nutrition Program-Berea Friendship United Methodist Church	Saturday, 10:30-12	8001 White Horse Road Greenville, SC 29617	Click here for info about eligibility.

APPENDIX C

2017 CENSUS OF AGRICULTURE County Profile



Greenville County South Carolina

Total and Per Farm Overview, 2017 and change since 2012

	2017	% change since 2012
Number of farms	1,036	-6
Land in farms (acres)	59,382	-19
Average size of farm (acres)	57	-13
Total	(\$)	
Market value of products sold	13,324,000	-20
Government payments	290,000	+61
Farm-related income	3,464,000	+65
Total farm production expenses	21,789,000	+7
Net cash farm income	-4,711,000	-227
Per farm average	(\$)	
Market value of products sold	12,861	-15
Government payments (average per farm receiving)	4,200	+36
Farm-related income	17,675	+102
Total farm production expenses	21,032	+14
Net cash farm income	-4,548	-248

(Z) Percent of state agriculture sales

Share of Sales by Type (%)

Crops	76
Livestock, poultry, and products	24

Land in Farms by Use (%) ^a

Cropland	29
Pastureland	29
Woodland	36
Other	6

Acres irrigated: 1,510

3% of land in farms

Land Use Practices (% of farms)

No till	6
Reduced till	2
Intensive till	7
Cover crop	8

Farms by Value of Sales

	Number	Percent of Total ^a
Less than \$2,500	631	61
\$2,500 to \$4,999	153	15
\$5,000 to \$9,999	108	10
\$10,000 to \$24,999	91	9
\$25,000 to \$49,999	31	3
\$50,000 to \$99,999	12	1
\$100,000 or more	10	1

Farms by Size

	Number	Percent of Total ^a
1 to 9 acres	224	22
10 to 49 acres	496	48
50 to 179 acres	255	25
180 to 499 acres	50	5
500 to 999 acres	8	1
1,000 + acres	3	(Z)



United States Department of Agriculture
National Agricultural Statistics Service

www.nass.usda.gov/AgCensus

Market Value of Agricultural Products Sold

	Sales (\$1,000)	Rank in State ^b	Counties Producing Item	Rank in U.S. ^b	Counties Producing Item
Total	13,324	39	46	2,558	3,077
Crops	10,072	30	46	2,038	3,073
Grains, oilseeds, dry beans, dry peas	(D)	40	46	(D)	2,916
Tobacco	-	-	13	-	323
Cotton and cottonseed	-	-	31	-	647
Vegetables, melons, potatoes, sweet potatoes	696	24	46	857	2,821
Fruits, tree nuts, berries	2,341	6	45	301	2,748
Nursery, greenhouse, floriculture, sod	5,792	10	41	351	2,601
Cultivated Christmas trees, short rotation woody crops	(D)	(D)	31	(D)	1,384
Other crops and hay	849	34	46	2,022	3,040
Livestock, poultry, and products	3,252	37	46	2,605	3,073
Poultry and eggs	128	37	45	984	3,007
Cattle and calves	1,539	22	46	2,269	3,055
Milk from cows	(D)	12	26	(D)	1,892
Hogs and pigs	(D)	13	44	(D)	2,856
Sheep, goats, wool, mohair, milk	70	13	46	1,504	2,984
Horses, ponies, mules, burros, donkeys	322	9	46	670	2,970
Aquaculture	-	-	22	-	1,251
Other animals and animal products	187	4	45	546	2,878

Total Producers ^c	1,689	Percent of farms that:	Top Crops in Acres ^d		
Sex					
Male	1,027	Have internet access	Forage (hay/haylage), all	9,375	
Female	662		Nursery stock crops	1,116	
			Soybeans for beans	471	
			Peaches, all	419	
			Corn for grain	334	
Age					
<35	131	Farm organically			
35 – 64	876				
65 and older	682				
Race					
American Indian/Alaska Native	3	Sell directly to consumers	Livestock Inventory (Dec 31, 2017)		
Asian	5				
Black or African American	47			Broilers and other meat-type chickens	3,527
Native Hawaiian/Pacific Islander	8			Cattle and calves	7,042
White	1,613	Hire farm labor		Goats	1,471
More than one race	13			Hogs and pigs	1,309
				Horses and ponies	1,835
				Layers	7,108
				Pullets	592
				Sheep and lambs	333
			Turkeys	423	
Other characteristics					
Hispanic, Latino, Spanish origin	22	Are family farms			
With military service	245				
New and beginning farmers	560				

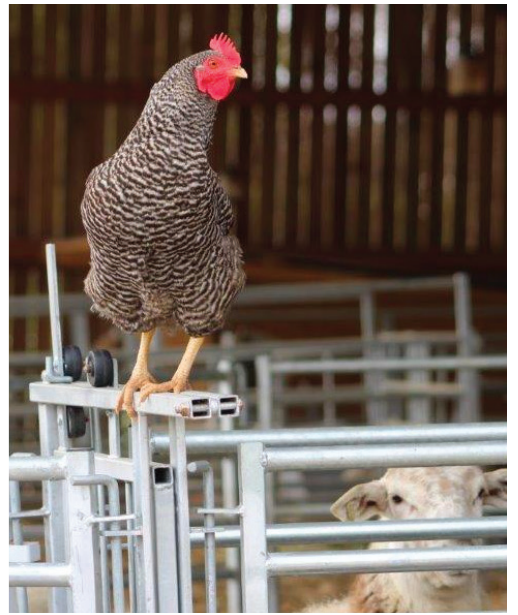
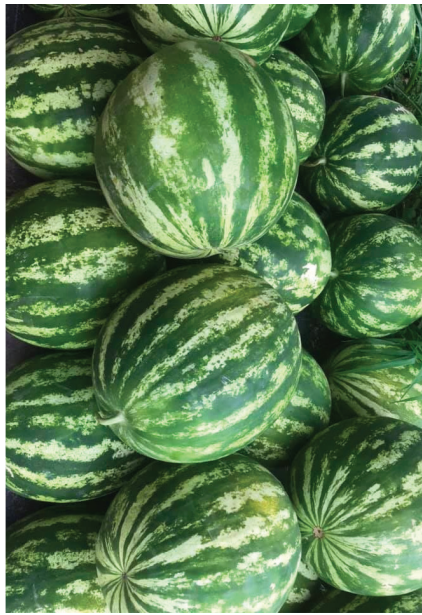
See 2017 Census of Agriculture, U.S. Summary and State Data, for complete footnotes, explanations, definitions, commodity descriptions, and methodology.

^a May not add to 100% due to rounding. ^b Among counties whose rank can be displayed. ^c Data collected for a maximum of four producers per farm.

^d Crop commodity names may be shortened; see full names at www.nass.usda.gov/go/cropnames.pdf. ^e Position below the line does not indicate rank.

(D) Withheld to avoid disclosing data for individual operations. (NA) Not available. (Z) Less than half of the unit shown. (-) Represents zero.

USDA is an equal opportunity provider, employer, and lender.



SPARTANBURG COUNTY FOOD SYSTEM ASSESSMENT AND PLAN

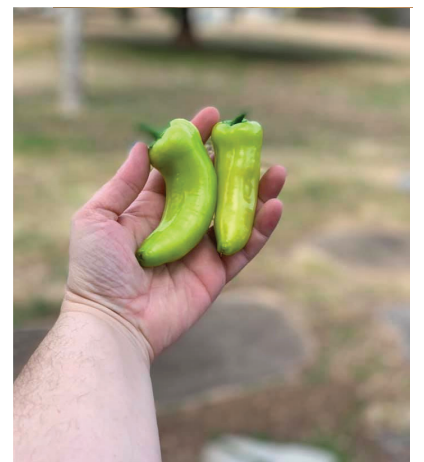
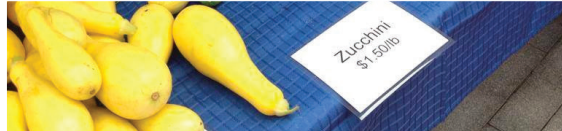


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SPARTANBURG COUNTY FOOD SYSTEM ASSESSMENT AND PLAN

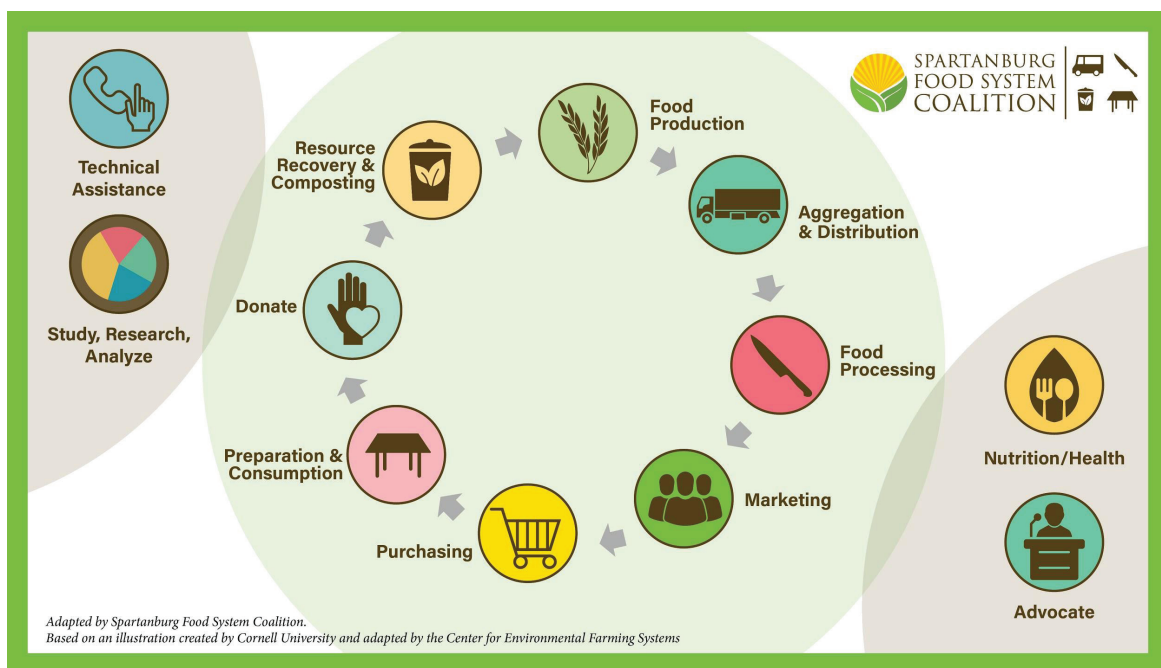
Introduction

Food is not only a basic human necessity but also inextricably linked to our quality of life. The culture of food binds families and society, and the cost of food is a major household expense. Growing, processing, marketing, distributing, and preparing food are major sectors of the economy and sources of employment. The type and amount of food we eat is one of the most important determinants of our level of health. This Assessment and Plan examines the current state of the Spartanburg food system to determine how our local food system can become a strong, healthy, and resilient sector of our county's economy and how we can create better access to healthful food for all of our community members.

What is a food system?

Food systems include all the activities and resources that are part of producing, transforming, distributing, and consuming food (The Complexity of Food Systems: Defining Relevant Attributes and Indicators for the Evaluation of Food Supply Chains in Spain). A food system is a chain of processes that brings food from the farm to the table, and it also includes outside influences like technical assistance and research. A systems approach to studying food focuses attention on the interrelationships between and among the system components, rather than on individual parts, to more fully understand the ways in which relationships create desirable and undesirable effects, feedback loops, and consequences (Introduction to the US Food System: Public Health, Environment, and Equity). Figure 2 illustrates a simplified way of thinking about the food system. Farmers produce our food, then it is transported and distributed, processed, marketed, sent to market, purchased, prepared, consumed, and excess or waste is (ideally) recovered through redistributing and composting.

Figure 2. Food System Processes



Source: Spartanburg Food System Coalition (largely based on an illustration created by Cornell University and adapted by the Center for Environmental Farming Systems)

There are many different activities that happen within each of these processes or elements. Each of these activities presents us with an opportunity to improve our food system. In addition, there are opportunities to study, research, and educate about all parts of this system.

Why is this Assessment and Plan important?

Our current system is not working for us. The poor status of our health, our food system's lack of resiliency, food insecurity, the way we undervalue our food system workers, and missed economic opportunities are all testaments to this. We will discuss each of these ideas throughout the report.

Prior to the 1940s, most regions of the US produced their own food. Beginning with the New Deal, agricultural support programs, tax policies, and agricultural labor policies have been linked to total productivity (by volume) of the farm enterprise. The larger the farm, the more federal support it receives. These farm policies have led to the well-documented decline of the small family farm in favor of large-scale industrial agriculture. Huge monocrop farms are concentrated in regions conducive to the growing of specific crops. Transportation and distribution networks designed to bring these crops to distant markets have replaced the traditional local and regional farm-to-market and market-to-table systems in which the majority of local food demand was met by nearby farms. These new transportation and distribution networks are a good match for the modern factory food industry that produces highly processed, "instant" meals and for the fast-food industry designed to meet the fast-paced lifestyle of a 24-hour society. Processed factory foods are prepared with preservatives, emulsifiers, flavor and color enhancers, and stabilizers. And monocrops are specifically cultivated not for flavor and nutritional value but to endure the rigors of multiple handlings over long distances and to achieve a uniform desired appearance. Neither option has proven healthful, and we the public are demanding better. There is an increasing demand for locally grown, fresh, flavorful, and nutritious food.

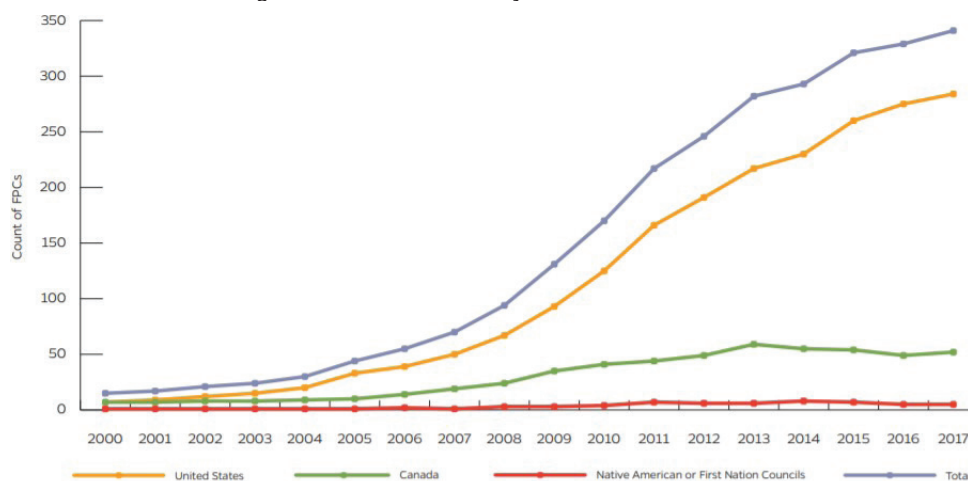
It begins with our farmers who are growing our food. We want a strong local food system to complement the global food system. In an ideal situation, a good portion of the food consumed in Spartanburg County would be grown in Spartanburg County or very close by. But that is not currently the case. [Making Small Farms into Big Business: A plan for infrastructure investments to connect small farms in South Carolina to local markets](#) reports that over 90% of the food purchased by South Carolinians is sourced out-of-state. Furthermore, in 2007, only 5% of the state's farms sold products directly to consumers. The *Making Small Farms into Big Business* report concludes that the demand for locally grown food far exceeds the supply. The implication is that the local market structures are not responsive enough to the demand. Spartanburg does not have a central location or system from which to aggregate and distribute local food. Our neighbors in Greenville do, and we are utilizing that system to a very small extent. But local food can also be cost prohibitive. The report provides the following goals that infrastructure investments must accomplish:

- New infrastructure needs to be built that (a) favors careful and safe handling of perishable products for local markets, (b) creates local efficiencies in trade, (c) builds loyalty among state consumers to local farmers, (d) builds market power for farmers as they trade with larger systems; and (e) effectively supports farmers who shoulder risks of climate, weather, and uncertain markets.
- Farmers and local food businesses may not make adequate income until supportive infrastructure has been created that fosters local food trade. Creating and scaling business concepts may require a subsidy until such infrastructure is pervasive.

What is happening in other places?

Communities nationwide are recognizing the positive impacts fresh, whole food can have on their health, their environment, and their economies. Communities are examining the current global food system and looking for opportunities to support and strengthen local, fresh, and healthy food systems. This interest in the food system is resulting in several local and state food policy councils, food system assessments, and food system improvements. Johns Hopkins Center for a Livable Future conducts an annual assessment of food policy councils across the nation. In 2018 there were 238 active food policy councils in the US. The number of councils has been growing every year since the first one began in 2000.

Figure 3. Active Food Policy Councils Since 2000



Source: Johns Hopkins Center for a Livable Future's Food Policy Council Report 2018

In South Carolina we have a state food policy council that has existed since 2006. Additionally, there are four local and regional food policy councils, including the Spartanburg Food System Coalition, and six developing councils. We are fortunate to have North Carolina as our neighbor because it is second only to California in the number of local food policy councils in the nation. North Carolina has a helpful technical assistance organization called Community Food Strategies that commonly offers support to SC councils.

Local readiness

The information in this section is adapted from the "Farm to School Feasibility Study for Spartanburg Area Conservancy." The need for programs that bridge the gap between farmers and institutions such as schools, as well as the need for realignment of the current food system to meet the increasing demand for local food, has been growing in Spartanburg, the state, and in the nation in recent years. The following facts provide evidence that a cultural shift is taking place in Spartanburg County and in South Carolina and that our community is ready to take the next steps to strengthen our local food system:

- The growth of the Hub City Farmers Market to over 35 vendors in the summer and a budget that grew almost threefold between 2010 and 2013
- The growth of the Healthy Eating | Active Living community and initiatives that are present in the Mary Black Foundation's Conference Center and Eat Smart Move More Spartanburg County meetings each time the groups meet
- Several hundreds of thousands of dollars granted by the Mary Black Foundation from 2011–2019 for healthy eating projects and programs, including projects related to local food
- The initiative of Spartanburg County School District 6 to provide healthy, local, organic food in its schools beginning in 2014
- Local restaurants' efforts to provide local food in their dishes. The Kennedy and The Farmer's Table advertise their use of local food, for instance.
- In Spartanburg County, from 2007–2012, the value of agricultural products sold at farm stands, farmers markets, and you-pick operations grew nearly 1000% from \$337,000 to \$3,330,000
- The establishment of which was the first local food hub established in SC. It opened in Charleston in 2011. According to its website, GrowFood Carolina provides "local farmers the sales, marketing, logistics, warehousing and distribution functions they need and that previously have been available only to large-scale industrial farms."
- The emergence of several local food policy councils in SC in the past few years
- The emergence of the SC Farm to School Program in 2011
- The emergence of substantial farm-to-school programs in SC, notably those in Lexington–Richland School District 5 and Dorchester County

The fact that Spartanburg County School District 6, which provided 1.4 million meals during the 2014–2015 school year, is still finding procurement of local food very challenging is reason enough to build capacity in the local food system infrastructure in Spartanburg County. When the Spartanburg County School District Superintendents were asked how interested they were in utilizing local food in their schools (if they did not already do so), five of the five respondents said they were very interested.

The Spartanburg Food System Coalition

The Spartanburg Food System Coalition (SFSC) was born out of a need to address our food system holistically rather than in a piecemeal, fragmented manner. We currently have many food system activities occurring in Spartanburg and throughout the state, but they have not been coordinated or addressed in a comprehensive manner. The Coalition aims to bring together many diverse stakeholders in our local food system so that we can all know what is happening in one another's part of the system and so that we can work together to create better access to healthy food and a stronger local food system.

Throughout the process of developing this Assessment and Plan, the Spartanburg Food System Coalition strengthened and evolved in several ways. In the beginning, it was a small independent (informal) entity with volunteer staff and many individuals interested in its success. At the end of the process, the Coalition had more than one source of funding, part-time staff, an organizational home in Partners for Active Living, regular meetings, and funded and implemented projects. The Coalition gained passionate individuals who represent organizations that are now collectively impacting our food system in a coordinated manner.

The Spartanburg Food System Coalition website spartanburgfoodsystem.org will be where this Plan "lives," and the Coalition members will be its champions. Some members will be implementing recommendations in this Plan through their own organizations.

The Coalition will continue to communicate regularly with food system actors in Greenville and the rest of the state and region. When COVID-19 ("the coronavirus") hit, our already frequent communications increased to multiple times each week. Although the coronavirus is wreaking havoc on our world in so many ways, it has highlighted the importance of the local food system more than ever and has given us the opportunity to create stronger communication channels and quicker solutions. It is our hope that the interest in local food will continue beyond this pandemic. If we continue the momentum, we can be prepared for the next dire situation and reap the benefits of the local food system in the meantime.

What can this Assessment and Plan be used for?

This Plan is intended for the Spartanburg Food System Coalition as a roadmap for strengthening our local food system and providing more healthy food to our community members. Policymakers and leaders can also refer to this Plan for guidance on food-related issues in Spartanburg and throughout the state. This report does not purport to represent every perspective of each of Spartanburg County's diverse food system stakeholders. Rather, the Assessment provides a snapshot of a complex and evolving system and should be viewed as a starting point for future research and development.

Intended audience

The main purpose of this Plan is to understand and prioritize where our focus should be in strengthening the local food system and to increase access to healthy food in Spartanburg County. The result is recommendations that involve many different stakeholders in our local food system, and thus those stakeholders are the audience for this report. These stakeholders may include, but are not limited to, the following:

- Farmers
- Restaurants
- Public health officials working in obesity and obesity-related diseases
- Food and nutrition directors
- Government officials
- Nonprofits involved in food system work
- Food processors
- Food distributors
- Grocery stores
- Emergency food providers
- Foundations and other funders of food system work

Implementation Plan

This Plan contains recommendations for the next 10 years. It should be reviewed every year in May and revised and updated in five years (May 2025). A completely new plan is needed in May 2030. The lead partner will be the first partner listed in Figure 4. If not the lead, it is assumed that the Spartanburg Food System Coalition (SFSC) will play at least a supporting role in every recommendation. Listing partners does not guarantee their participation.

Timeframes: 2020-2023= Years 0-3 2024-2027= Years 4-7 2028-2030= Years 8-10

Timeframes listed indicate the years in which the activity will be a primary focus. This does not mean that it will not be acted upon or discussed in other years, but it may not be a primary focus during that time and may not have multiple resources brought to bear on it at that time.

Implementation can change based on funding and other resources available as well as the level of interest expressed by partners.

Figure 4. 10-Year Plan Recommendations for Spartanburg County

Focus Area	Recommendation	Partners	Time-frame	Possible Funding Source
Schools	Implement gardens, along with appropriate curriculum like the <u>curriculum offered by Clemson</u> . The use of the garden food at schools should be encouraged and supported.	Spartanburg County School Districts, Clemson Extension, Partners for Active Living (PAL)	Years 0-3	Funding Farm to School Factsheet, USDA Farm to School Grant Program
Schools	Develop a plan together with schools and other partners to improve food at Spartanburg County and/or SC K-12 schools. This may involve advocacy, technical assistance, and programming.	PAL, Spartanburg Food System Coalition (SFSC), Spartanburg County School Districts	Years 4-7	Mary Black Foundation (MBF), Healthy People, Healthy Carolinas (HPHC), USDA Local Food Promotion Program (LFPP), Sisters of Charity, SC Office of Rural Health (SCORH), SC Hospital Association (SCHA)
Schools	Support District 6 as much as possible to get healthy local food to their students and to their community.	PAL, SFSC, Spartanburg County School District 6	Years 0-3	MBF, HPHC, LFPP, Sisters of Charity, SCORH, SCHA, SC Association for Community Economic Development (SCACED)
Schools	Encourage and support other districts to implement the model of District 6.	PAL, SFSC, Spartanburg County Superintendents	Years 8-10	MBF, HPHC, LFPP, Sisters of Charity, SCORH, SCHA, SCACED

Schools	Partners for Active Living (PAL) and the Mary Black Foundation (MBF) should continue to work with schools, taking into account successes and room for improvement in the program and building those into future iterations.	PAL, MBF	Years 0-10	MBF, United Way (UW), USDA Farm to School Grant Program
Equity	Develop a plan specific to inequities in the food system, with a focus on racial inequities. This could be based on the University of Michigan's <i>Measuring Racial Equity in the Food System: Established and Suggested Metrics</i> .	SFSC, Hispanic Alliance, Speaking Down Barriers	Years 0-3	MBF, UW, Sisters of Charity, HPHC
Health	FoodShare Spartanburg should be supported to get the word out and support out to as many healthcare providers as possible in regard to their program and what results they are seeing with their customers.	FoodShare Spartanburg, SFSC, Eat Smart Move More Spartanburg County (ESMMS)	Years 0-3	MBF, HPHC, Sisters of Charity, UW, SCHA, Spartanburg Regional Healthcare System (SRHS), Palmetto Proactive, Robert Wood Johnson Foundation's (RWJF) Aligning Systems for Health
Equity	Given the rapid growth, popularity, and initial successes with FoodShare Spartanburg, this program should be supported in its expansion and robustness of program offerings.	FoodShare Spartanburg, SFSC, ESMMS	Years 0-3	MBF, HPHC, Women Giving, UW, SRHS
Equity	Work with Emergency Food Providers to make sure that the most vulnerable are able to access healthy food and not just any food.	SFSC, ESMMS,	Years 0-3	Sisters of Charity, MBF, HPHC, SCORH, SCHA
Cooking & Nutrition	Cooking, nutrition, and meal planning and preparation classes need to be implemented across Spartanburg County to teach people how to cook healthy foods. Transportation, income level, age, and food culture need to be taken into account when programming these classes.	, SFSC, SRHS, Spartanburg County Library System, Parks and Rec Depts, Neighborhood Associations	Years 0-3	LFPP, HPHC, Sisters of Charity, Palmetto Proactive, SRHS
Policy & Advocacy	Advocate for living wages for food system workers.	SFSC, ESMMS, Food Chain Workers Alliance, SC Food Policy Council	Years 4-7	Sisters of Charity, MBF
Policy & Advocacy	Advocate for increased federal benefits for food system workers.	SFSC, ESMMS, Food Chain Workers Alliance, <u>SC Food Policy Council</u>	Years 4-7	Sisters of Charity, MBF
Policy & Advocacy	Publish a policy platform and update it yearly.	SFSC	Years 0-3	HPHC, Sisters of Charity

Food Access	There are a few options for providing access to healthy food in the Southside (all should be discussed and considered with community members): a grocery store, affordable delivery from one or more existing stores, and/or transportation vouchers.	SFSC, Southside Neighborhood Associations, City of Spartanburg	Years 0-3	HPHC; Sisters of Charity, MBF, United Way
Food Access	Hold various community listening sessions following the City of Columbia Food Policy Committee's model to identify and implement a suite of solutions to food access barriers on a neighborhood basis.	SFSC, Wofford College, City of Spartanburg, municipalities, Spartanburg County	Years 4-7	MBF; Sisters of Charity; HPHC; UW
Cultural Richness	Promote understanding about the health benefits of culinary traditions in immigrant communities within the broader community of Spartanburg. Highlight and celebrate the nutritional, cultural, and historical dimensions of popular healthful dishes and foods of diverse groups.	SFSC, Hispanic Alliance, others as identified over time	Years 4-7	MBF, Chapman Cultural Center, HPHC, RWJF's Healthy Eating Research
Cultural Richness	Communities with low access to healthy, culturally appropriate food should have allies or ambassadors, potentially in the form of Community Health Workers, to champion healthy food within the community. These ambassadors should not only focus on the traditional foods of newly immigrated populations but also on those of more established cultural groups, such as those from Africa. The idea is to instill pride in the food of one's own culture, celebrate and promote healthy foods from other cultures, and support and introduce people to options other than the Standard American Diet.	SFSC, Hispanic Alliance, Spartanburg Community Health Workers, others as identified over time	Years 4-7	MBF, Chapman Cultural Center, HPHC, RWJF's Healthy Eating Research
Cultural Richness	Adult and older adult generations raised in rural areas or areas connected to rural areas, as well as those with urban gardening traditions, have knowledge that can benefit local efforts for healthy eating and living. Explore with immigrant communities (faith, business, school, etc.) ways to bring immigrant residents into dialogue and collaborative leadership with those in food system-related work, from growers, to extension services, to nonprofits.	Hispanic Alliance, SFSC, HCFM, Carolina Farm Stewardship Association (CFSA), Clemson Extension, other partners as identified over time	Years 4-7	SCORH, LFPP, MBF
Cultural Richness	Latinx immigrants have signaled in two different studies that they value quality over price alone. Make sure that promoted products are not only healthy but of high quality in terms of taste and freshness, and emphasize taste and freshness in messaging around the promotion of these products.	SFSC, Hispanic Alliance, HCFM, Clemson Extension, CFSA, Spartanburg County Farm Bureau	Years 4-7	

Cultural Richness	Many immigrant parents and grandparents value the transmission of culinary traditions across generations. Adult caregivers in immigrant families have indicated in two different studies that there is a tension between their desire for intergenerational knowledge transmission and the desire of children to “Americanize” and blend in with nonimmigrant peers once they begin school. Emphasize intergenerational connection and celebrate the variety of traditions in our community in ways that are visible to children, adults, and older adults of all backgrounds. Schools and other institutions with which children and families have frequent interaction can play an important role in affirming the value of diverse, healthful culinary traditions.	SFSC, Hispanic Alliance, Spartanburg County School Districts	Years 0-3	RWJF’s Healthy Eating Research
Cultural Richness	Identify the fresh fruit and vegetable products immigrant communities prefer that can be grown in our region, and promote their experimental cultivation (e.g., in school or urban gardens); their sale at places where immigrants shop; and their incorporation into FoodShare efforts and food pantries frequented by immigrants. Some crops that can be cultivated in our area include varieties in these categories: chiles/peppers; squashes; root vegetables like radishes and daikon; eggplants and tomatoes; herbs like basil, mint, and oregano; and onions and garlics.	SFSC, Hispanic Alliance, HCFM, Clemson Extension, CFSA, Spartanburg County Farm Bureau, FoodShare, Spartanburg County School Districts, Emergency Food Providers	Years 0-3	
Cultural Richness	Mexican, Central American, Caribbean, Colombian, and Ecuadorian cuisines, as well as cuisines from Southeast Asia, share many healthful primary ingredients in common, including a wide variety of tropical fruits and vegetables, lean proteins like seafood, and a wide variety of unprocessed whole grains and legumes. Significant numbers of immigrants in Spartanburg County come from these regions of the world. Many primary ingredients valued in these culinary traditions cannot be locally sourced because they are tropical crops and do not grow in temperate zones like Upstate South Carolina. Promote locally grown foods while signaling the importance and value of nonlocally sourced, nutritious foods, including those carried by small, ethnic groceries and stands at the flea market. Explore with small vendors incentive systems for the purchase of healthy items by consumers at their stores.	SFSC, Small vendors	Years 4-7	MBF, RWJF’s Healthy Eating Research

Food Access	Continue convening Emergency Food Providers (EFPs) for as long as is needed	SFSC, UW, EFPs	Years 0-10	HPHC, Sisters of Charity, LFPP
Food Access	Continue purchasing healthy food from local businesses for Emergency Food Provider programs	SFSC, Ruth's Gleanings, Hub City Farmers Market, EFPs	Years 0-3	HPHC, Sisters of Charity
Food Access	Provide cooking and nutrition information to Emergency Food Providers and their clients	SFSC, SRHS, Ruth's Gleanings, EFPs	Years 0-10	HPHC, Sisters of Charity, LFPP, SRHS, Palmetto Proactive
Food Access, Farmer Support	Advocate for Emergency Food Providers' needs as they relate to healthy or local food	SFSC, UW, Sisters of Charity, SC Food Policy Council	Years 4-7	HPHC, Sisters of Charity, Palmetto Proactive
Food Access	Develop a unified portal for all Emergency Food Providers' information (e.g., hours, needs, items available, and contact information) to be kept current and shared with the public	SFSC, UW, EFPs	Years 0-3	HPHC, Sisters of Charity, Spartanburg County
Food Access, Farmer Support	Support Emergency Food Providers as needed, especially in promoting their procurement of healthy local food	SFSC, local food businesses and farmers, Ruth's Gleanings	Years 0-3	HPHC, Sisters of Charity, LFPP
Resiliency	Share models with local businesses of other businesses shifting to capture local markets (this effort began during the coronavirus).	SFSC, SC Restaurant and Lodging Association, municipalities, Spartanburg County, Blue Moon Specialty Foods	Years 0-3	HPHC, LFPP
Resiliency	The use of subsidies is something that should be explored further in Spartanburg County. This could be helpful in understanding potential ways of helping farmers diversify their income so as not to be harmed too much from any one uncontrollable event.	SFSC, Spartanburg County Farm Bureau, CFSA	Years 8-10	LFPP
Farmer Support	Support farmers and our farming economy by teaching farmers how to implement agritourism on their farms and helping them find funding to do so.	Clemson Extension Agribusiness Team	Years 4-7	Clemson Extension

Farmer and Institution Support	Hub City Farmers Market should host farmer-buyer meetups again to build relationships between farmers and buyers.	Hub City Farmers Market, CFSA, Clemson Extension, Spartanburg County Farm Bureau, SC Restaurant and Lodging Association, wholesale consumers, others as identified	Years 0-3	LFPP, MBF
Farmer and Institution Support	Support and grow educational and technical assistance programs for producers and institutions, such as Good Agricultural Practices (GAP) certification, wholesale training, and farm-to-institution trainings (where sometimes both sides come together to get to know and understand one another's needs).	SFSC, HCFM, Clemson Extension, CFSA, Spartanburg County Farm Bureau, Feed & Seed	Years 0-3	LFPP, Clemson Extension, SC Department of Agriculture, SCORH
Aggregation & Distribution	Look into creating an online food hub like <u>MarketMaker</u> or <u>Catawba Fresh Market</u> . Consider whether it makes sense to tie this into the SC Food Hub Network.	SFSC, SC Food Hub Network, HCFM, FoodShare	Years 0-3	
Policy & Advocacy	Work with Spartanburg County to advocate for preservation of farmland and farms before all of our farmland is lost.	SFSC, Spartanburg County, Upstate Forever, Greenville County, SC Food Policy Council	Years 0-3	LFPP
Local Food Economy	Create a commercial kitchen that can be shared and rented to food businesses.	SFSC, SC Restaurant and Lodging Association, Trish Tripp (food safety specialist)	Years 0-3	LFPP, City of Spartanburg, Spartanburg County
Local Food Economy	The Spartanburg Food System Coalition should coordinate an awareness campaign to let wholesale consumers know about the SC Food Hub Network and in particular about <u>Swamp Rabbit Café & Grocery</u> , the closest food hub to Spartanburg.	SFSC, SC Food Hub Network, SC Restaurant and Lodging Association	Years 0-3	LFPP, SCACED
Food Waste & Recovery	Partner with DHEC's Don't Waste Food SC campaign to educate people on food waste and encourage new habits.	SFSC, Atlas Organics, DHEC, Spartanburg County	Years 4-7	LFPP, Spartanburg County
Food Waste & Recovery	Work with Spartanburg County government and municipal governments to divert food waste from landfills.	SFSC, Atlas Organics, DHEC, Spartanburg County	Years 4-7	LFPP, Spartanburg County

General	Develop a Community Food Center.	PAL, SFSC, Upstate Forever, Hub City Farmers Market, Ruth's Gleanings, other partners as necessary	Years 0-7	LFPP, RWJF's Interdisciplinary Research Leaders, City of Spartanburg, Spartanburg County, private donors
General	Support existing food system projects as much as possible through partnerships, connections, networking, technical assistance, grant writing, and funding as it is available.	SFSC	Years 0-10	LFPP, RWJF, Local Foods Local Places Toolkit , Funding Section

Community Food Center

For efficiency and effectiveness, several of the recommendations detailed in Figure 4 could be implemented at a centralized location that houses several different activities. In other places in the country this has been called a Community Food Center. A commercial kitchen base could serve several purposes: teaching kitchen, processing facility, and a food business incubator. It could also include uses like aggregation and distribution, a retail space, and a training and education space. The Center should be centrally located so as to maximize the accessibility for all residents of the county. It should also be highly visible to the community so that it is kept at the top of peoples' minds. Similar models can be found around the state in Walterboro and Greenville. Past experience in food ventures in Spartanburg tells us that we need to be very intentional about the way that this project is developed. Starting small, being diversified, and being responsive could help protect against failure.

Process and Methodology

Overall process and timeline

Hub City Farmers Market, in partnership with the Spartanburg Food System Coalition, received a United States Department of Agriculture Local Foods Promotion Program grant in the fall of 2018 and completed the project in May of 2020. The grant was for a Greenville-Spartanburg Food System Assessment and Plan. We readily understood that Greenville and Spartanburg Counties have very different local food systems and different existing data and information, so the resulting processes and plans are very different. We gathered information in multiple ways for the Spartanburg Plan, and those iterative processes and methods are discussed in the following sections.

Figure 5. Assessment and Plan Process



Research

Gathered Existing Conditions

Based on several food system assessments and plans from across the nation, we gathered indicators and existing conditions from various sources (such as the USDA, Policy Map, the US Census Bureau, and the Centers for Disease Control) to document baselines and trends. From this information we determined where our gaps are and what we need to work on.

Review of Existing Plans

- 2009 Spartanburg County Community Food Assessment
- 2012 Greenville Area Food System Assessment
- 2013 Growing Food & Opportunities in SC
- 2013 Making Small Farms into Big Business
- 2013 Upstate Region Food Hub Feasibility Study
- 2014 Feasibility Study: A Case for an Upstate Food Hub
- 2016 Farm-to-School Feasibility Study for Spartanburg Area Conservancy
- 2017 Household food security and use of community food sources and food assistance programs among food shoppers in neighborhoods of low income and low food access
- 2019 Comprehensive Plan for Spartanburg County
- 2019 Growing Local SC: Recommendations for South Carolina's Local Food System 2020–2022
- 2019 Local Food System Vitality in Upstate SC—Department of Agricultural Economics, University of Kentucky
- 2020 Healthy eating & active living in childhood in Latino households in Spartanburg, SC: A community-engaged qualitative research study on assets and challenges—Laura Barbas Rhoden, Wofford College

Interviews

Based on a previously published study out of the Midlands in South Carolina performed by Clemson University, we conducted interviews with key wholesale consumers. We also conducted one-on-one interviews with key stakeholders throughout the process.

Surveys

The Assessment Team developed and distributed surveys to producers, and we developed a food access survey meant for anyone, but focused on communities we knew did not have good access to healthy food. Originally we developed and attempted distributing surveys to emergency food providers including food pantries and meal sites. This proved to be a challenge. We expected to distribute the majority of the surveys at our Emergency Food Providers meeting, but then coronavirus hit and we did not want the attendees of at meeting to spend their time on the surveys.

Producer Survey

Data was collected from farmers in Spartanburg County and the Upstate of South Carolina during January–February 2020. To expand the diversity of responses, a variety of methods were used to distribute the Producer Survey among farmer groups, including the following: (1) emailing a survey link via the Carolina Farm Stewardship email list; (2) emailing a survey link and distributing paper copies via the Spartanburg County Farm Bureau; (3) distributing paper surveys to farmers at the Hub City Farmers Market; (4) distributing paper surveys at the Annual Clemson Extension Agent Peach Producer Meeting; (5) and calling and mailing farmers from the Clemson Extension Agents contact list.

In total, 14 Producer Surveys were completed. Twelve of the respondents had farms in South Carolina: seven had farms located in Spartanburg County, two had farms in both Spartanburg and Cherokee Counties, two had farms in York County, and one had a farm in Greenville County. Two respondents were from North Carolina: one from Polk County and one had farms in Gaston, SC, and Lincoln, NC. The mean age of respondents was 48 (SD=16.2). Ten identified farming as their primary occupation, and six stated that 75%–100% of their total personal income was derived from farm revenue. A majority had completed a bachelor's degree (n=8) or more (n=2), and a majority identified as male (male=12, female=2). Half of the respondents have been farming for more than 10 years. In-line with our team's past experience, we found it very challenging to collect Producer Survey responses.

Food Access Survey

Our team designed a Food Access Survey to characterize food access in Spartanburg County, SC. Thematic sections included questions on household characteristics, food shopping behaviors, neighborhood food access, food preparation practices, food security, and sociodemographic characteristics. An online and a paper version

of the survey were utilized, and both versions were available in English and Spanish. Data collection occurred between November 2019 and January 2020.

The study aimed to assess and characterize food access for vulnerable communities in Spartanburg County; therefore, a purposive sampling strategy was employed. Surveys were distributed through community ties to organizations that specialize in healthcare for low-income uninsured individuals and through neighborhood associations in the City of Spartanburg. The total sample (n=181) was completed in English by 136 respondents (75%) and in Spanish by 45 respondents (25%). Just under half (47%) were completed online.

Respondent Characteristics

A majority of respondents were female (84%) and were the primary food shoppers for the household (87%). Most respondents (46%) were between the age of 40 and 60, 24% were over 61 years, and 23% were between 25 and 39 years. Forty-three percent of respondents identified as Caucasian/white, 24% as African American/black, 25% as Hispanic/Latino, 2% as mixed race, and 6% preferred not to answer. Thirteen percent of respondents reported household incomes of less than \$10,000, while 30% had incomes ranging from \$10,000–\$39,999 and 50% had incomes greater than \$40,000. Seven percent preferred not to answer.

Respondents resided in over 21 different zip codes. The most common were 29316 (21%), 29301 (18%), 29303 (12%), 29307 (8%), 29306 (7%), and 29336 (5%).

Community meetings

Southside Community Meetings

In 2019, a Save A Lot grocery store in a historically African American community on the Southside of Spartanburg closed unexpectedly. The Food System Coalition attended Southside neighborhood association meetings and a state representative's Town Hall meeting to talk about potential short-term solutions. We also shared with the neighborhoods about the Food Access Survey and the Food System Assessment and Plan and solicited their input on food access.

Emergency Food Provider Meeting

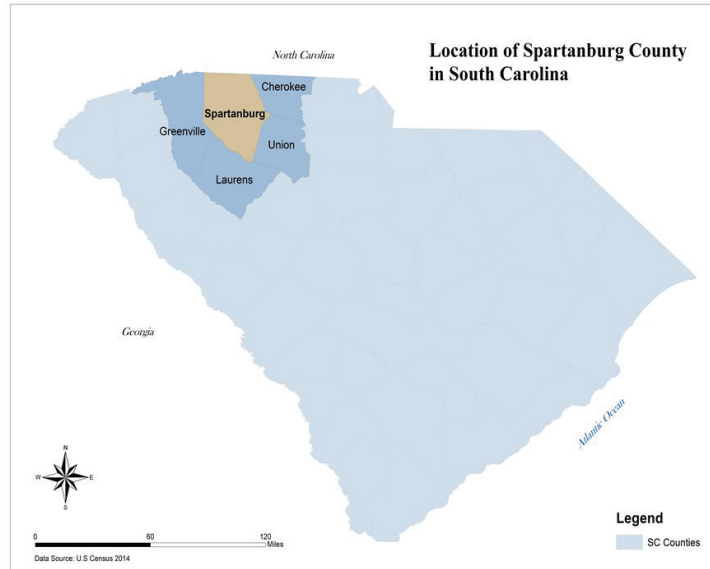
We hosted a community meeting geared toward Emergency Food Providers. Emergency Food Providers include organizations like food pantries, soup kitchens, backpack programs, and meals sites.

Background: The Context of Spartanburg's Food System

Spartanburg County was founded in 1785 and is known as "Hub City" because of many railroads coming together in the center of town. The county has grown from what used to be a frontier trading post, to a textile mill, to what is now considered a more diversified manufacturing center and host to large global companies like BMW, Michelin, and Milliken. It is situated in the Upstate of South Carolina at the crossroads of two major interstate highways, I-85 and I-26, and is home to the Greenville–Spartanburg International Airport and the Inland Port of Greer.

Being within proximity of the Port of Charleston, Spartanburg County is an ideal location for production, trade, transportation logistics, business, and personal relocation. The county includes 14 municipalities: Campobello, Central Pacolet, Chesnee, Cowpens, Duncan, Greer, Inman, Landrum, Lyman, Pacolet, Reidville, Spartanburg, Wellford, and Woodruff. The county had a total estimated population density (people/square mile) of 279.7 as reported in the 2017 Census. The county seat and the most populous municipality in the county, the City of Spartanburg is located in the center of the county and is home to about 38,000 people (census.gov.) Spartanburg faces the same challenge many of our counties in the nation face—getting healthy local food to urban communities and rural communities— but different locations and communities require different solutions.

Figure 6. Map of Spartanburg County in South Carolina



Demographics

In the 2014–2018 Census, Spartanburg County had a total population of 302,195 with the average age being 38.2 years old. For individuals reporting one race alone in Spartanburg County, 73.4% were white, 20.4% were black or African American, 6.7% were Hispanic, 2.2% were Asian, 0.2% were American Indian and Alaska Native, and 1.6% were some other race.

In 2013–2017, there were 126,296 households in Spartanburg County, and the average household size was approximately 2.56 persons. Whites and African Americans make up the majority of the population. The population increased by nearly 11% between the years of 2010 and 2018.

In the following chart, ACS refers to "American Community Survey," which is performed by the Census Bureau to provide crucial data for allocating state and federal funds.

Figure 7. Spartanburg County Demographics

Demographics		
Total Population	Spartanburg	South Carolina
Population, 2013–2017 ACS Five-Year Estimate	297,732	4,893,444
% Population Change, 2010–2018	10.40%	9.90%
Number of Households, 2013–2017 Five-Year Estimate	126,296	1,871,307
Persons Per Household, 2013–2017	2.56	2.54
Population Density (People/Square Mile)	279.7	115.8
% Non-Hispanic, 2013–2017 ACS Five-Year Estimate	93.51%	94.54%
% White Alone	73.32%	67.29%
% Black or African American Alone	20.51%	27.22%
% Asian Alone	2.25%	1.47%
% Hispanic (any race), 2013–2017 ACS Five-Year Estimate	6.49%	5.46%

Sources: <https://www.census.gov/acs/www/data/data-tables-and-tools/data-profiles/2017/> and <https://www.census.gov/quickfacts/fact/table/spartanburgcountysouthcarolina,SC#>

Employment

In Spartanburg County, 57.9% of the population 16 and older are currently employed, of which 83.8% are private wage and salary workers; 11.5% are federal, state, or local government workers; and 4.5% are self-employed. The 2018 Census reports that 38.5% of the population in Spartanburg County was unemployed. Unemployment changed dramatically during the coronavirus pandemic and is discussed throughout the paper.

In 2018, the median household income was approximately \$50,179, with 6.9% of the population having a median household income below \$10,000 and 3.2% over \$200,000. The median earnings for full-time employees was \$39,777 in 2018.

In 2019, the agriculture, forestry, fishing, and hunting industry employed 311 people, ranking the third lowest industry in jobs provided.

Figure 8. Industries in Spartanburg County in 2019

ALL INDUSTRIES, SPARTANBURG COUNTY					
Rank	Description	2014 Jobs	2019 Jobs	2014 - 2019 Change	2014 - 2019 % Change
1	Manufacturing	26279	33189	6910	26.3%
2	Government	21193	22326	1133	5.3%
3	Retail Trade	15846	16345	499	3.1%
4	Accommodation and Food Services	10855	12519	1664	15.3%
5	Administrative and Support and Waste Management and Remediation Services	9430	12048	2618	27.8%
6	Health Care and Social Assistance	9854	11955	2101	21.3%
7	Construction	7078	8267	1189	16.8%
8	Transportation and Warehousing	6293	8247	1954	31.1%
9	Other Services (except Public Administration)	6440	7096	656	10.2%
10	Wholesale Trade	6821	6679	-142	-2.1%
11	Professional, Scientific, and Technical Services	4229	5305	1076	25.4%
12	Finance and Insurance	3674	3331	-343	-9.3%
13	Educational Services	2631	2921	290	11.0%
14	Management of Companies and Enterprises	1927	1834	-93	-4.8%
15	Real Estate and Rental and Leasing	1226	1667	441	36.0%
16	Arts, Entertainment, and Recreation	1272	1371	99	7.8%
17	Information	1082	838	-244	-22.6%
18	Agriculture, Forestry, Fishing and Hunting	270	311	41	15.2%
19	Utilities	181	265	84	46.4%
20	Mining, Quarrying, and Oil and Gas Extraction	130	149	19	14.6%

Source: EMSI 2019 Data

Existing Conditions, Trends, and Opportunities for Improvement

Our health and our food system are vulnerable, and they are inextricably linked to one another. As our food system has become more industrialized, more globalized, and more focused on profits rather than nutrition, our overweight and obesity rates have skyrocketed. At the same time, monocropping, climate change, a volatile political climate, a pandemic, and high energy prices have made it apparent that our food supplies and our farmers are vulnerable. Subsidies on some commodities have given rise to adding cheap, refined carbohydrates into as many foods as possible.

In essence, we are shifting our nation's fiscal burden from the food system to the healthcare system. Healthcare treatments are much more expensive than eating healthy food, and our healthcare costs are growing to be the largest part of our nation's budget. If we can shift at least some of these dollars to shortening the market chain and strengthening our local farmers and food systems that grow foods for flavor—and that are consumed much closer to their harvest date, thus yielding more nutritional value—then we can save on our healthcare costs.

This section will explore the existing conditions and trends related to our community's food system and will identify where we can make improvements.

Organizations, programs, and projects

Food system work is prevalent in Spartanburg County. There are organizations that have anchored this work and have been operating here for over 75 years, such as the Spartanburg Farm Bureau; there are also new programs, such as Spartanburg Community College's Sustainable Agriculture Program established in 2017. The following are many of the existing projects, programs, plans, organizations, and initiatives that are at work in the food system. Some are local (within the county), some are regional (just beyond Spartanburg County), and some are statewide.

4-H (local) is a national program implemented in Spartanburg County by Clemson Extension. The program focuses on youth development and leadership through hands-on projects on subjects like agriculture, gardening, livestock, and ecology.

American Heart Association's Upstate chapter connects regional food system stakeholders and provides resources to local organizations to support healthy eating efforts.

Atlas Organics is a Spartanburg-based company that offers composting solutions for businesses and households.

Butterfly Foundation offers free 15-week culinary training programs to unemployed, underemployed, formerly incarcerated, and homeless individuals. These programs take a holistic approach, offering soft skills (people skills) training as well.

Carolina Farm Stewardship Association (CFSA) (regional) provides various types of support for farmers, including technical, advocacy, and educational programs. Their mission is to help people in the Carolinas grow and eat local, organic food.

Clemson Cooperative Extension (local) provides expertise in agribusiness, agronomy, food safety and nutrition, horticulture, livestock and forages, forestry and wildlife resources, water resources, and 4-H and youth development.

Clemson University (regional) is a land-grant university with various programs throughout the state related to agriculture. These programs include agribusiness, sustainable agriculture, livestock-poultry health, agricultural services, research, and agricultural education. The University partners on projects statewide.

Community Food Strategies (regional) is an organization made up of representatives from various food system organizations in North Carolina. Community Food Strategies provides resources and support for food policy councils in NC and SC.

FoodShare Spartanburg is a program that sells boxes of fresh, partially local produce at various sites for \$15 cash or \$5 SNAP. The boxes contain \$20–\$30 worth of food. Boxes come with supplemental information like recipes.

Francis Produce (regional) is a wholesale produce distributor in Greenville that also sells local produce. It has a processing facility that meets Hazard Analysis Critical Control Point (HACCP) and USDA specifications.

Future Farmers of America (local) is a "student organization for those interested in agriculture and leadership" with chapters in Spartanburg County.

Healthy People, Healthy Carolinas is an initiative of **The Duke Endowment** that supports healthy eating interventions.

The mission of **Hub City Farmers Market (HCFM) (local)** is to increase the supply, demand, and access to healthy, local food in Spartanburg County. HCFM does this through several activities and programs, including its Farmers Market, Mobile Market, Urban Teaching Farm, and training and networking opportunities related to the local food system, and advocating for access to local food.

There are a few **Local Markets** in the county that focus on selling locally produced foods, such as Belue Farms Natural Market, Bellews Market, Harp and Shamrock Croft, LLC (through a Facebook group), and Skyland Farms.

Making Small Farms into Big Business: A plan for infrastructure investments to connect small farms in South Carolina to local markets is a report that was commissioned by the SC Department of Agriculture in 2013.

Marvin's Produce is a wholesale produce distributor in Greenville that prioritizes local food and sells food and spices from across the nation and the world.

Mary Black Foundation's Healthy Eating | Active Living (HEAL) focus area provides grants and community learning and networking opportunities regarding Spartanburg County's local food system.

Partners for Active Living houses the **Spartanburg Food System Coalition** and **Eat Smart Move More Spartanburg County**, which are coalitions that are focused on healthy eating, active living, and strengthening the local food system.

RD Anderson Technology Center in Spartanburg County School District 6 offers agriculture courses for high school students.

There are some **Restaurants** in Spartanburg that serve locally grown food (list gathered from Swamp Rabbit Café & Grocery and Fresh on the Menu):

- The Farmer's Table
- The Kennedy
- Blue Moon Specialty Foods
- Hub City Farmacy
- Milliken and Co Guest House
- City Range Steakhouse Grill
- Converse Deli
- Southside Smokehouse and Grill
- Cribb's Kitchen on Main

Ruth's Gleanings picks up extra food from events, stores, farms, and restaurants and redistributes it to shelters and Emergency Food Providers.

SC Community Loan Fund offers technical and financial assistance for communities wishing to increase access to healthy food.

SC Department of Agriculture supports and promotes the agricultural industry in SC through various programs, such as Certified SC Grown, Fresh on the Menu, and Farm to Institution.

SC Department of Education's Office of Nutrition and Health houses the SC Farm to School Program that focuses on connecting farms to schools and increasing the amount of local, healthy food in schools.

SC Farm-to-School Evaluation Report is the result of a collaboration between SC Department of Health and Environmental Control, SC Department of Agriculture, SC Department of Education, and Clemson University. Regarding the 2011/2012 and 2012/2013 school years, the report provides information on how K-12 schools in SC are increasing the use of local food.

SC Farm to School Program is a state version of the national Farm to School Program and is focused on connecting schools with local agriculture.

SC Food Hub Network is a network of four SC food hubs that source and ship local food among one another to meet the demand of consumers for local food.

SC Food Policy Council has existed for about 11 years. The Council is currently focused on strengthening and developing local food policy councils and mapping the food system statewide.

SC Office of Rural Health houses the **SC Rural Health Action Plan**, which contains recommendations that strengthen access to local and healthy food.

Slow Food Upstate seeks to educate people about food and share local food culture. It is based in Greenville and covers the 10-county Upstate region. Slow Food Upstate is one of five South Carolina Chapters of the national Slow Food USA organization.

Spartanburg Community College Sustainable Agriculture Program is a three-semester certificate program that prepares farmers for sustainable small-scale farming.

Spartanburg County Farm Bureau, a division of SC Farm Bureau, “is a grassroots, non-profit organization celebrating and supporting family farmers, locally grown food, and our rural lands through legislative advocacy, education, and community outreach.”

Spartanburg County School District 6 is invested in providing students healthy meals that are produced with as many local ingredients as possible. In 2013, the District discontinued the use of its food service provider and began preparing meals in house. It started its own farm for educational purposes and to supply some food to the schools and also offers agriculture and animal husbandry classes. Most recently, the District reworked a cafeteria in one of its closed elementary schools to function as a processing facility.

Spartanburg Medical Center’s Heart Resource Center has an outreach team that educates the community on healthy eating.

Taylor Boys’ Produce is a wholesale produce distributor in Greenville that sells local produce when it is in season and other produce when local produce is not available.

Upstate Region Local Food Hub Feasibility Study makes the case for why a food hub is needed and contains information pertinent to the Upstate food system.

US Department of Agriculture offers various resources, from grants to research, and programs directed at supporting and promoting local agriculture and local food systems.

Several of **Wofford College’s** departments (including the Department of Environmental Studies, Department of Sociology and Anthropology, and Department of Modern Languages) perform food systems research and engage in community projects, and the College’s dining facilities utilize local food.

Spotlight on an Organization: Spartanburg County School District 6

Spartanburg County School District 6 is a champion and leader of food systems change in Spartanburg, the state, and the nation. Knowing that many of their students receive their only meals at school, District 6 leaders wanted to ensure their students receive the most nutritious, organic, local food they could provide. They made their food service in house and retrained their kitchen staff to cook whole foods from scratch, but they discovered local food was not easy to obtain—the infrastructure just did not exist. Consequently, they started a farm, and it recently became Certified Organic.

District 6 uses food from the farm in the schools, holds farmers markets, and distributes through a food truck. Most recently, District 6 leaders built a second greenhouse and created a processing facility in a cafeteria in one of their recently shuttered schools, repurposing it for several different uses. Food safety is a priority in these projects.

District leaders are working toward using as much locally grown organic food as possible in their schools. They order produce from two local distributors that provide as much local food as possible and supplement with other food. They request bids from local farmers for products, but sometimes no one replies. The District thinks the farmers have several reasons for not replying: the District requires GAP certification, needs large volumes of food, and can only pay so much. Another potential barrier for the farmers is the timing of the bid process. The District puts bid requests for the following school year out in March, a time when farmers are out in their fields and may not see the requests.

The District utilizes its farm-to-school program as much as possible and looks for ways to make even more use of it. The schools do taste tests with students to get their buy-in on products, use the farm for lessons, give tours to interested parties, and make their own tomato sauce.

Families now want their kids to attend schools in District 6 because of the healthy food. This is an ambitious district that realizes its vision and is constantly striving to do more for the health of the students and community. In a 2016 survey of Spartanburg County superintendents, the seven superintendents were asked, “If you do not use local food in your schools, how interested are you in utilizing local food in your schools?” Five of the five respondents replied that they were the most interested on a scale of 1 to 5.

Schools and Nutrition

The issue of school food and nutrition is a very important topic nationwide. It is our responsibility to ensure that we are feeding children the best food we possibly can when they are in the care of our institutions. Some of our county's children eat their only meals at school. Almost 47% of students in Spartanburg County in 2014 were eligible for free lunch, and about 8% were eligible for reduced-price lunch through the National School Lunch Program (NSLP) (USDA Food Environment Atlas).

The school nutrition requirements used by the NSLP are not supporting health, and they create food waste. For example, for a school to be reimbursed for a meal, a child must take milk with their meal. However, many children are lactose intolerant: either the milk makes them sick, or it gets thrown in the trash. Schools also offer fruit juice, which counts as a fruit a child is required to take. Dieticians do not recommend drinking juice instead of eating whole fruit for most people.

Another issue with school food is that many cafeterias are only equipped with items like steamers to prepare food, and so they cannot prepare whole food from scratch. "All NSLP lunches must meet Federal requirements, though decisions about the specific foods to serve and the methods of preparation are made by local school food authorities" (<https://www.fns.usda.gov/nslp>).

A positive aspect of the National School Lunch Program, in terms of local food systems, is that it uses only American-grown food in the products it provides to schools.

A relatively simple step that schools can take toward getting local healthy food into their schools is to grow a garden. Many schools in Spartanburg County do grow school gardens, but they are unsure as to whether they are allowed to consume this food at school. The *SC Farm-to-School Implementation Handbook* says that they can.

- The implementation of gardens, along with appropriate curriculum like the curriculum offered by Clemson, and the use of the garden food at schools should be encouraged.

The following are recommendations for improving the food system for Spartanburg schools and students:

- The Food System Coalition should develop a plan together with schools and other partners to improve food in Spartanburg County and/or SC K-12 schools. This may involve advocacy, technical assistance, and programming.
- The Food System Coalition should support District 6 as much as possible to get healthy local food to their students and to their community.
- The Food System Coalition should encourage and support other districts to implement the model of District 6. This could be a challenge in that five of the seven districts use a food service company in their schools—but so did District 6.

Spotlight on an Organization: Hub City Farmers Market

Hub City Farmers Market (HCFM) is a nonprofit organization located in the City of Spartanburg. Its mission is to increase the supply, access, and demand of healthy, local food through its programs: Saturday Farmers Market, Mobile Market, and Urban Teaching Farm. The Saturday Farmers Market is the longest running market in the Upstate, operating every Saturday, April-December, and one Saturday in January, February, and March. There are an average of 25 local farmers and specialty crop producers that sell at the market, enabling HCFM to serve over 30,000 people every year. HCFM doubles SNAP benefits up to \$40 each week, allowing many Spartanburg residents to afford the local produce offered at the market. HCFM accepts and matches over \$36,000 every year in SNAP benefits.

HCFM's Mobile Market is a truck-and-trailer system that purchases product from their local farmers and producers and resells it in low-income/low-access neighborhoods, community centers, companies interested in hosting the mobile market for their employees, and schools in Spartanburg. The Mobile Market brings healthy, local food to the community where they live, work, and play to make shopping local more convenient. In 2019, the Mobile Market made 500 stops, served 4,000 people, and saw a 57% increase in sales (compared to 2018), which proves the increasing desire to support local and the desperate need for better food access in Spartanburg.

The Local Food Economy

Local Food in the United States

With an economic impact of \$41.7 billion annually, agribusiness is South Carolina's number one industry (SC Department of Commerce). According to the 2015 USDA report *Trends in U.S. Local and Regional Food Systems: A Report to Congress*, the demand for local foods is growing. Local food sales in the US totaled an estimated \$6.1 billion in 2012 and \$8.7 billion in 2015. *Making Small Farms into Big Business* reports that the number of SC farms selling direct to individual consumers increased 13% from 2002 to 2007. Nationally, US Census of Agriculture statistics show direct sales of edible farm products for human consumption increased nearly threefold from \$404 million annually in 1992 to \$1.2 billion by 2007. And, by 2012, this sales value reached \$1.3 billion per year. According to the 2017 report *Harvesting Opportunity: The Power of Regional Food System Investments to Transform Communities* by the Federal Reserve Bank of St. Louis, there was a 223% increase in growth in local food demand over a 20-year span that far outpaced the average rate of sales growth in the US agricultural sector.

The *Harvesting Opportunity* report also states that the focus on tracking direct sales as an indicator of local food demand underestimates the actual volume of locally grown food in the US marketplace. The report states: "In fact, recent analysis by economists with the U.S. Department of Agriculture's Economic Research Service (ERS) suggests that the majority of local food sales in 2012 (54.8 percent) were generated by farms that marketed all of their local production through intermediaries, compared to fewer than 20 percent that used direct-to-consumer channels exclusively. By encompassing all forms of intermediated, hybrid and direct-to-consumer transactions in its analysis, ERS estimates that U.S. local food sales in 2012 exceeded \$6.1 billion, with nearly 8 percent of U.S. farms participating in the local food trade. The share of participating farms in local food markets trended even higher in parts of the country where smaller-scale and produce farmers predominated." The USDA estimates that local food will be a \$20 billion industry in the US in 2020.

Local Food in South Carolina and Spartanburg

A locavore is "one who eats foods grown locally whenever possible" (Merriam-Webster online dictionary). The Locavore Index ranks the 50 states, Puerto Rico, and D.C. according to their commitment to healthy local food. Indices include farmers markets per capita, Community Supported Agriculture (CSA) organizations per capita, farm-to-school participation, food hubs per capita, USDA food grants per capita, and hospitals serving local food. In 2016 and 2017, South Carolina ranked 27th, ahead of California, New York, North Carolina, and Georgia.

According to Carolina Farm Stewardship Association (CFSA) findings, there is a growing consumer demand for fresh, local produce in the Carolinas. CFSA reports that between 2008 and 2014 there were 57% more organic farms, 134% more organic acres, and a \$69 million value of organic crops in the Carolinas. However, much of the established agribusiness in Spartanburg County remains centered on row crop production for large markets. Despite a bright outlook for local food systems, the Spartanburg County food processing, distribution, and marketing system is not developed to a degree that would allow existing farmers to easily convert from row crop to fresh food production. Aspiring new farmers face these same challenges along with affordable land access barriers. It is the aim of this Assessment to identify the means to overcome these challenges.

Leakage in Food Purchasing

Information presented in this section was gathered from *Making Small Farms into Big Business*.

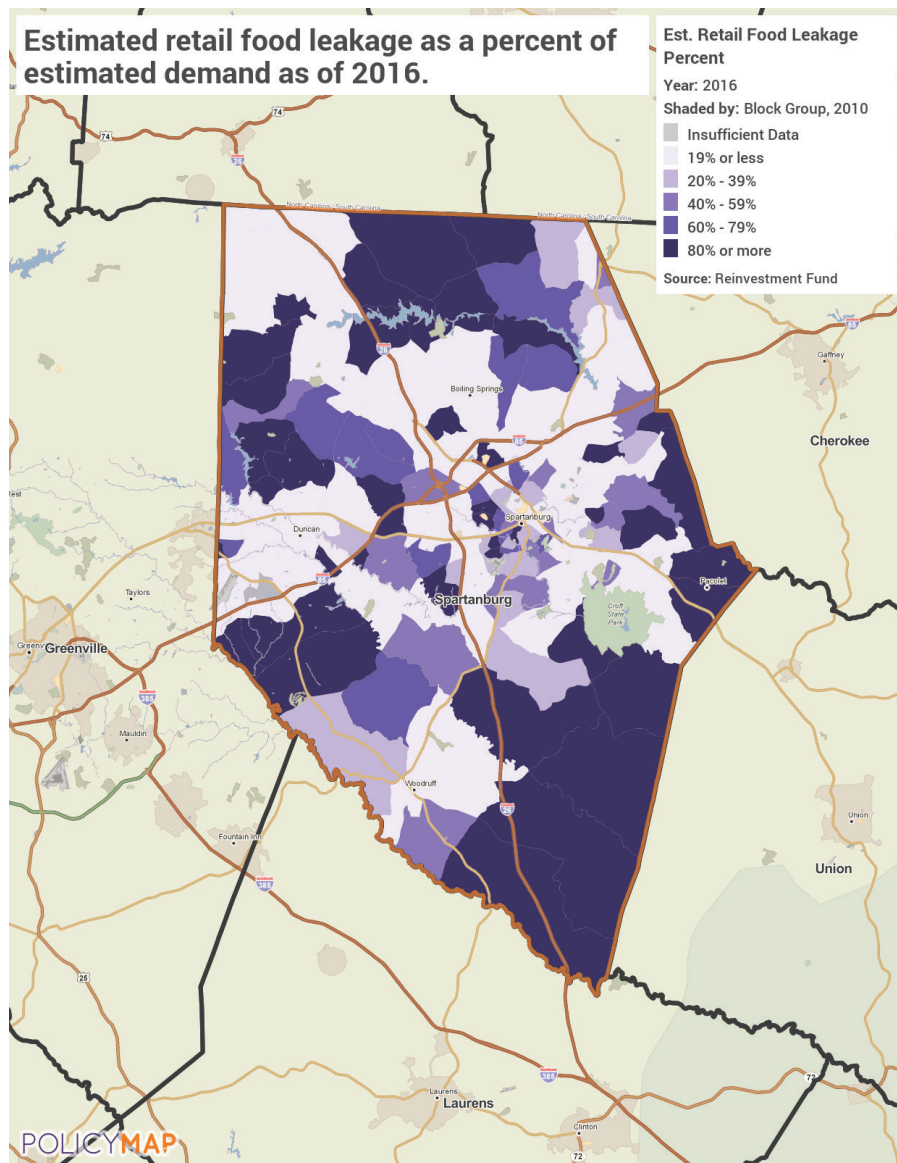
Most of the food produced in South Carolina, a prime food source for the Eastern Seaboard, is exported. Bureau of Labor 2011 statistics show that SC residents purchase \$11 billion in food each year. Yet, despite the growing demand for local foods, over 90% of the food purchased by South Carolinians is sourced out of state. This data indicates a huge leakage in food purchases to out-of-region sources, while demand indicates a potential for retaining much of the food chain dollars within the regional economy. According to Utah State University Extension, when you purchase more of your food locally, more of your money remains in the local community. On average, it is estimated that buying local keeps approximately 65% of your dollar within the community, whereas shopping at large chain stores keeps only 40%.

Local farmers converting crops to high demand commodities can also reduce the leakage. Statewide, consumers purchase at retail about a billion dollars annually in fruits and vegetables. Growing awareness of the health benefits of consuming more fruits and vegetables will likely increase this amount. However, the 2017 Agriculture

Census reports that the market value of SC-produced vegetables was only \$153 million and for fruits and nuts, \$41.6 million. In Spartanburg County the market value for vegetables was \$1.5 million and \$7 million for fruits and nuts. The total market value of Spartanburg County crops was \$30.5 million. Moreover, much of these products were exported to other states. Of equal significance, the state's production capacity of meats is about equal to consumer purchases, yet primary meat sales are to external markets.

Creating new linkages in the local food chain would build the regional economy and increase the multiplier effect of each food dollar spent purchasing from local farms. Figure 9 gives the 2016 estimated retail food leakage as a percent of estimated demand in Spartanburg County. For a significant portion of the county, this percentage was 80% or more.

Figure 9. 2016 Retail Food Leakage in Spartanburg County

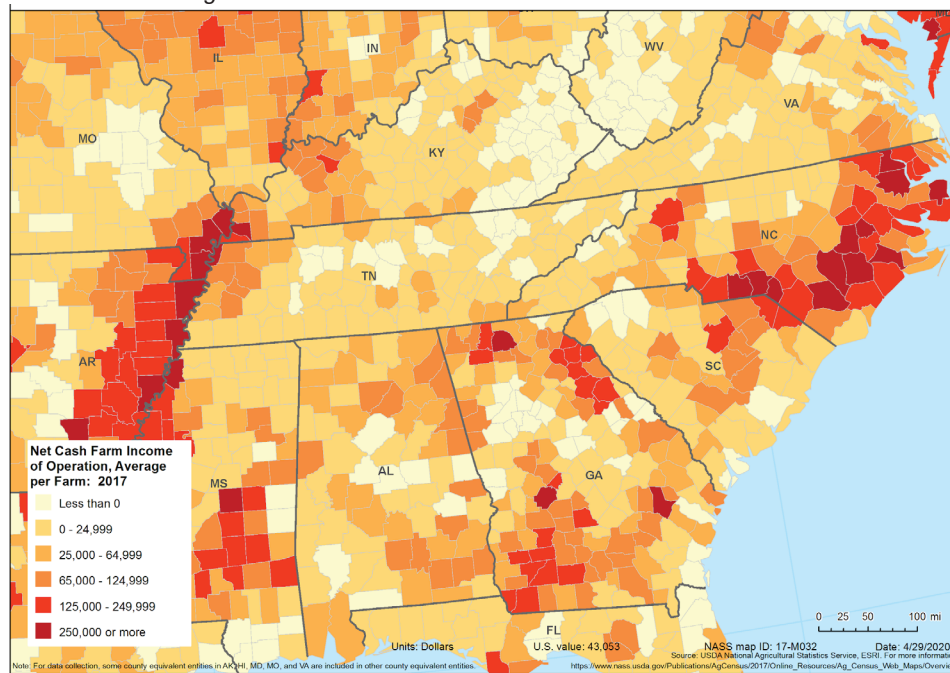


Source: policymap.com

Farming as a Job

Under our current food system, Spartanburg County farmers are losing money from their farms. And farming is a risky business. Farmers often have to pay for their inputs up front before getting any money back for their products. Any number of misfortunes can happen in the interim between their cash outlay and sales. In 2017, the average dollars per farm after deductions and expenses in Spartanburg County was less than zero (see Figure 10). Low-to-nonexistent net cash income is not unusual and explains why many farmers have second jobs. Our neighbors in Greenville and Anderson found themselves in the same situation, as did many other counties in the state and the nation. This does not bode well for the sustainability of our current food system. If farmers cannot make a living farming, why would they continue to farm, especially when developers come knocking on their doors offering cash for their farmland?

Figure 10. 2017 Net Cash Income for Southeastern Farmers



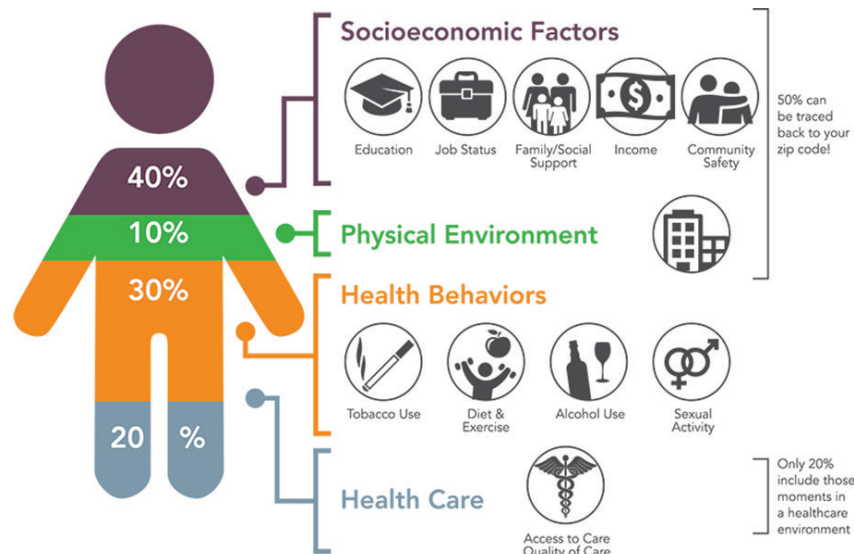
Source: https://www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/Ag_Census_Web_Maps/index.php

Food and Health

Food plays a large role in our health outcomes: it is woven into all of the social determinants of health. The most obvious places food plays a role in these determinants are in the physical environment (where and what food is provided in the community) and in health behaviors (food choices). Healthcare also impacts social determinants and outcomes; the healthcare system has the opportunity to connect patients with nutrition education and healthy food resources. Finally, socioeconomic factors figure into how easily one can access healthy food.

In Spartanburg County, as in the rest of the nation, chronic diseases like heart disease and cancer are the leading causes of death, yet these diseases are preventable and are linked to diet (Department of Environmental Health and Control, Harvard T.H. Chan School of Public Health, and Centers for Disease Control). If we want to create healthful people and communities, we have to change the way that food is produced, distributed, processed, accessed, and consumed. The current system is not working and it is not supportive of our health.

Figure 11. Factors Impacting Health Outcomes



Source: Institute for Clinical Systems Improvement, *Going Beyond Clinical Walls: Solving Complex Problems* (October 2014)

Spartanburg County is suffering from the obesity epidemic along with the rest of our nation—31.5% of adults in Spartanburg are obese (Live Healthy SC). Obesity is a serious condition and carries with it increased risk factors for diseases like certain cancers, diabetes, heart disease, and stroke (CDC). Heart disease and cancer are the leading causes of death in Spartanburg as well as in the United States (Spartanburg County Road to Better Health, CDC). Poor nutrition contributes to heart disease and some cancers (CDC).

Figure 12. Leading Causes of Death in Spartanburg and the United States



Source: Community Health Assessment: County Snapshot: Moving Toward a Healthier Spartanburg County

Health Inequities and Disparities

Health cannot be meaningfully discussed without acknowledging the inequities and disparities that exist in the health of our nation. Health largely depends on one's wealth and the ability to pay for services; people with fewer resources and wealth generally have poorer health outcomes. Historic systemic racism, created from hundreds of years of prejudiced policies based on skin color, has resulted in unequal wealth accumulation and thus racial inequities in access to the resources necessary to create and maintain good health. The results of these policies are pervasive throughout our community, and they contribute to a cycle of persistent health inequities. "In the US, people of color, and especially black Americans, have significantly worse outcomes than white Americans on every indicator of well-being and justice"(Racial Equity Institute). This finding bears true in Spartanburg County data (Spartanburg Racial Equity Index: A Review of Predictors and Outcomes).

Half of our diet should consist of fruits and vegetables (Healthy Eating Plate, Harvard T.H. Chan School of Public Health). However, many adults in Spartanburg do not eat even one fruit or vegetable a day (refer to Figure 13). The difference in race is significant as can be seen in the following number regarding Spartanburg County adults. Between 18.3%–22.9% of whites did not eat any vegetables throughout their day, while between 37.4%–48.3%

of blacks did not eat any vegetables throughout their day. Between 36.8%–42.9% of blacks did not eat fruit throughout their day, while between 45.9–46.2% of whites did not eat fruit throughout their day. The positive piece in this data, though, is that vegetable and fruit intake increased in both races during this timeframe.

Figure 13. Daily Fruit and Vegetable Intake in Spartanburg County Adults

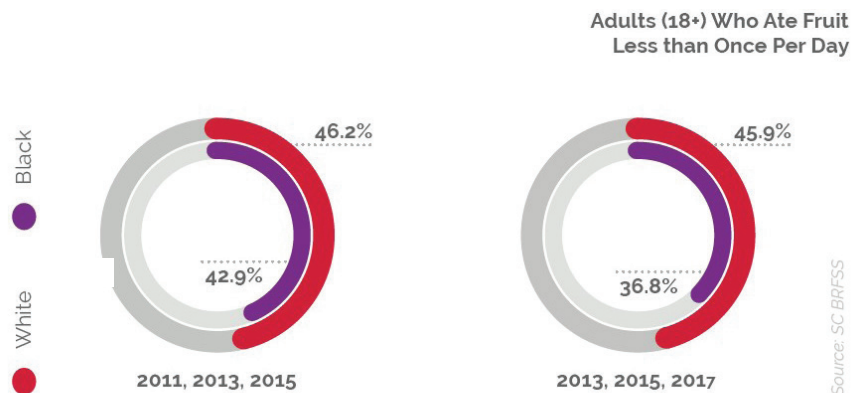
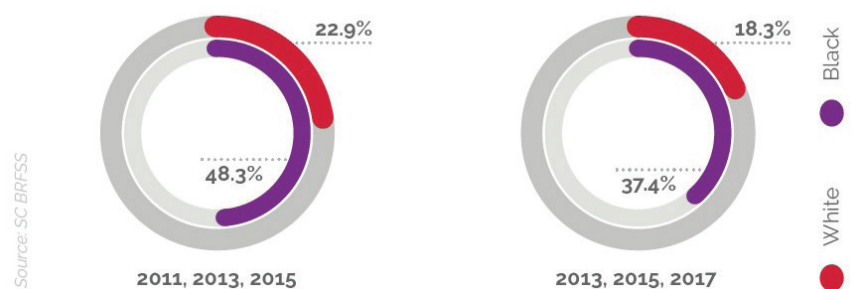


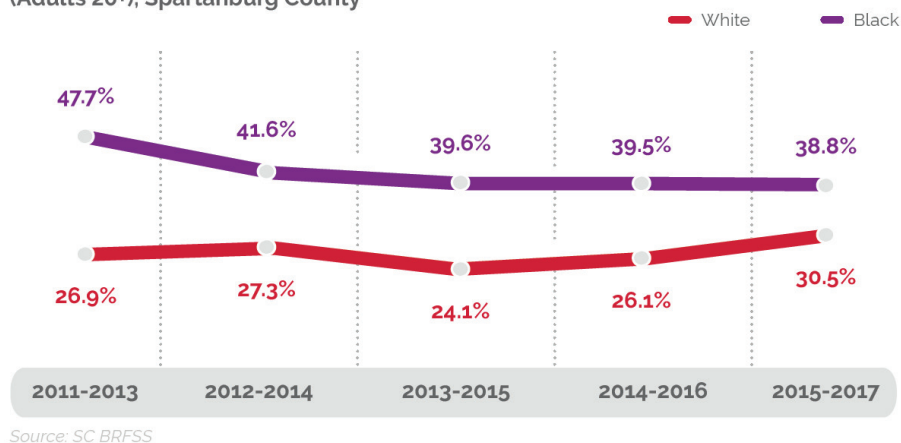
FIGURE 7.8
Adults (18+) Who Ate Vegetables Less Than Once A Day



Source: 2019 Spartanburg County Community Health Needs Assessment

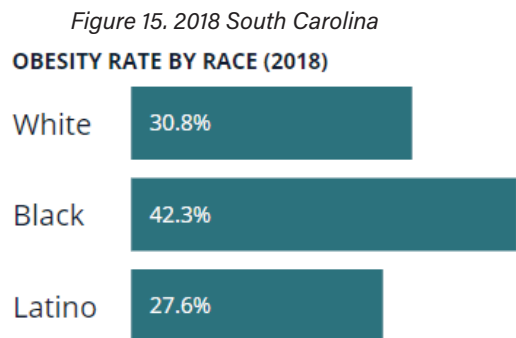
Overweight and obesity begin at a young age, and racial inequities in our culture can be seen in the rates of people who are overweight and obese. The disparities are carried into adulthood (see Figure 14 and Figure 15).

Figure 14. 2011–2017 Obese Adults in Spartanburg County
Percent of the Population Who are Obese (Adults 20+), Spartanburg County



Source: 2019 Spartanburg County Community Health Needs Assessment

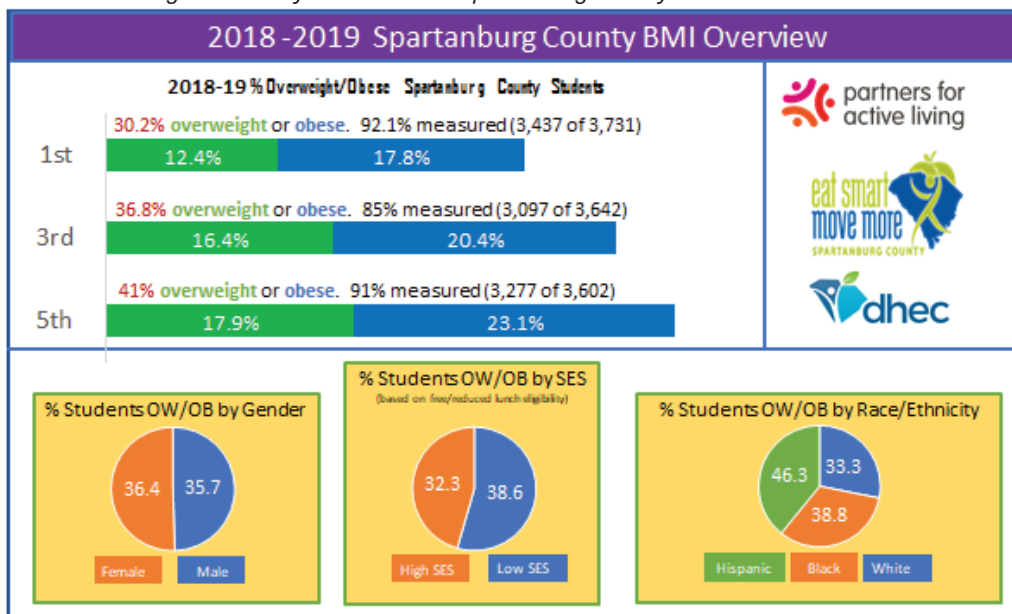
The positive news in the obesity trends for blacks is that the percentages are declining, but for whites, they are increasing.

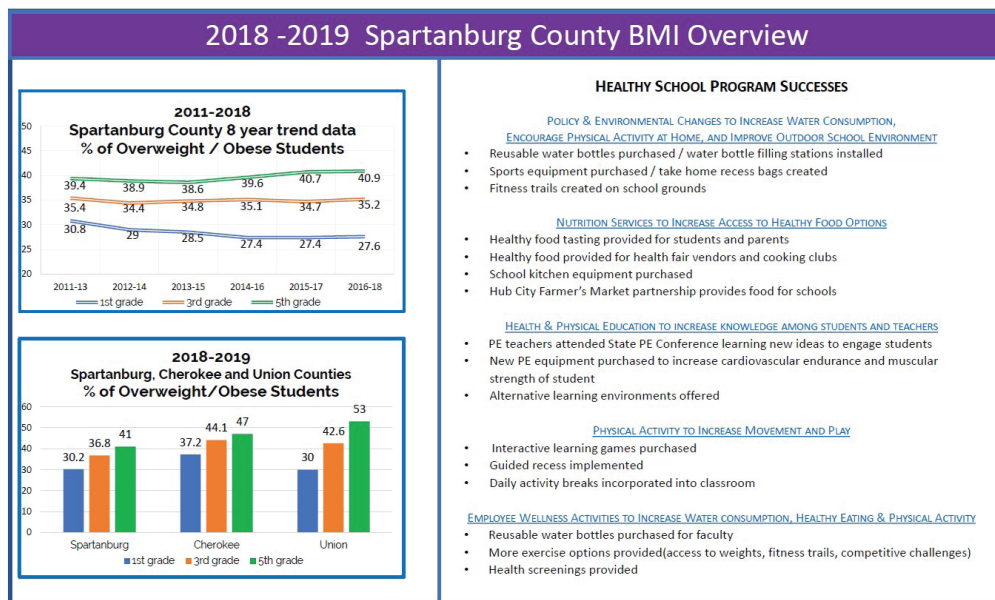


Source: State of Childhood Obesity

Several years ago, Partners for Active Living (PAL), the backbone organization for Eat Smart Move More Spartanburg County, in partnership with SC Department of Health and Environmental Control (DHEC), began tracking the Body Mass Index (BMI) of children in Spartanburg County. The team, then known as the Childhood Obesity Taskforce, knew that there was a growing overweight and obesity problem among children, but no one was tracking it. They began working with schools and measuring every first, third, and fifth grader each year. They also implemented different interventions among the Coalition members to reduce childhood obesity rates. The rates have gone up and down year to year, but the trend since 2013 is essentially flat. Since child obesity rates nationally have increased, a flat trend in Spartanburg is remarkable.

Figure 16. Body Mass Index in Spartanburg County Students 2018-2019





Source: Partners for Active Living

The Mary Black Foundation (MBF), in partnership with PAL, provides grant funding and technical assistance to schools in the areas of healthy eating and active living. The goal is to lower the rate of overweight or obese children in Spartanburg County. During the 2018–2019 school year, the schools that PAL and MBF supported using the Alliance for a Healthier Generation framework had an 8% lower rate overall of overweight and obese first, third, and fifth graders than schools that did not participate in the program. Unfortunately, disparities in outcomes among races remained. Because of the results of the program, we have made the following recommendation:

- Partners for Active Living and the Mary Black Foundation should continue to provide assistance to schools, taking into account successes and room for improvement in the schools program and building those into future iterations.

To be successful in addressing the food system in any capacity, we have to measure and address the inequities in our food system.

- The Spartanburg Food System Coalition should develop a plan specific to inequities in the food system, with a focus on racial inequities. The plan could be based on the University of Michigan's *Measuring Racial Equity in the Food System: Established and Suggested Metrics*.

The Healthcare System and FoodShare Spartanburg

There is a growing realization among healthcare providers of the importance of diet and exercise in not simply maintaining basic health but also in the prevention of many diseases and illnesses that are so prevalent in American society. Despite this realization, the economics of the healthcare industry are still very much grounded in the treatment and cure of these diseases and illnesses, rather than in their prevention. This is evident in the way resources are allocated across the entire industry from research, to pharmaceuticals, to hospital care. The COVID-19 pandemic has exposed the repercussions of the healthcare industry's lack of focus on prevention just as it has exposed the production and distribution flaws in the consolidated food system. A renewed focus on diet and fresh, nutritious food is the link that can unite new healthcare and food system paradigms.

In Spartanburg County, several healthcare organizations are acting as distribution sites for FoodShare Spartanburg boxes, and they encourage their patients to order these boxes. FoodShare boxes contain \$20–\$30 of produce, 50% sourced locally, and cost \$15 cash or \$5 for SNAP users. Recipes using the produce inside are included, and cooking demonstrations often take place at the main distribution site as customers come to pick up their boxes. Anecdotally, we are hearing stories of improved diabetes indicators like lower A1c test (blood glucose) levels, losing weight, and improved quality of life.

There is a sea change for healthcare in Spartanburg County.

- FoodShare Spartanburg should be supported to get the word out and support out to as many healthcare providers as possible in regard to its program and what results it is seeing with its customers.

But healthcare is not the only place having success with FoodShare boxes. The program began in January 2019 with 12 boxes and has since grown to almost 300 boxes every other week, distributed through around 10 different partner sites (e.g., Northside FoodShare Hub, Epiphany Episcopal Church in the Southside, Nurse-Family Partnership, and Housing Authority sites). All of the distribution sites offer boxes to under-resourced communities.

FoodShare Spartanburg is undergoing evaluation through the University of South Carolina's Arnold School of Public Health's SNAP-Ed team so that it can be fine-tuned. There is a learning community of other FoodShares around South Carolina that support one another.

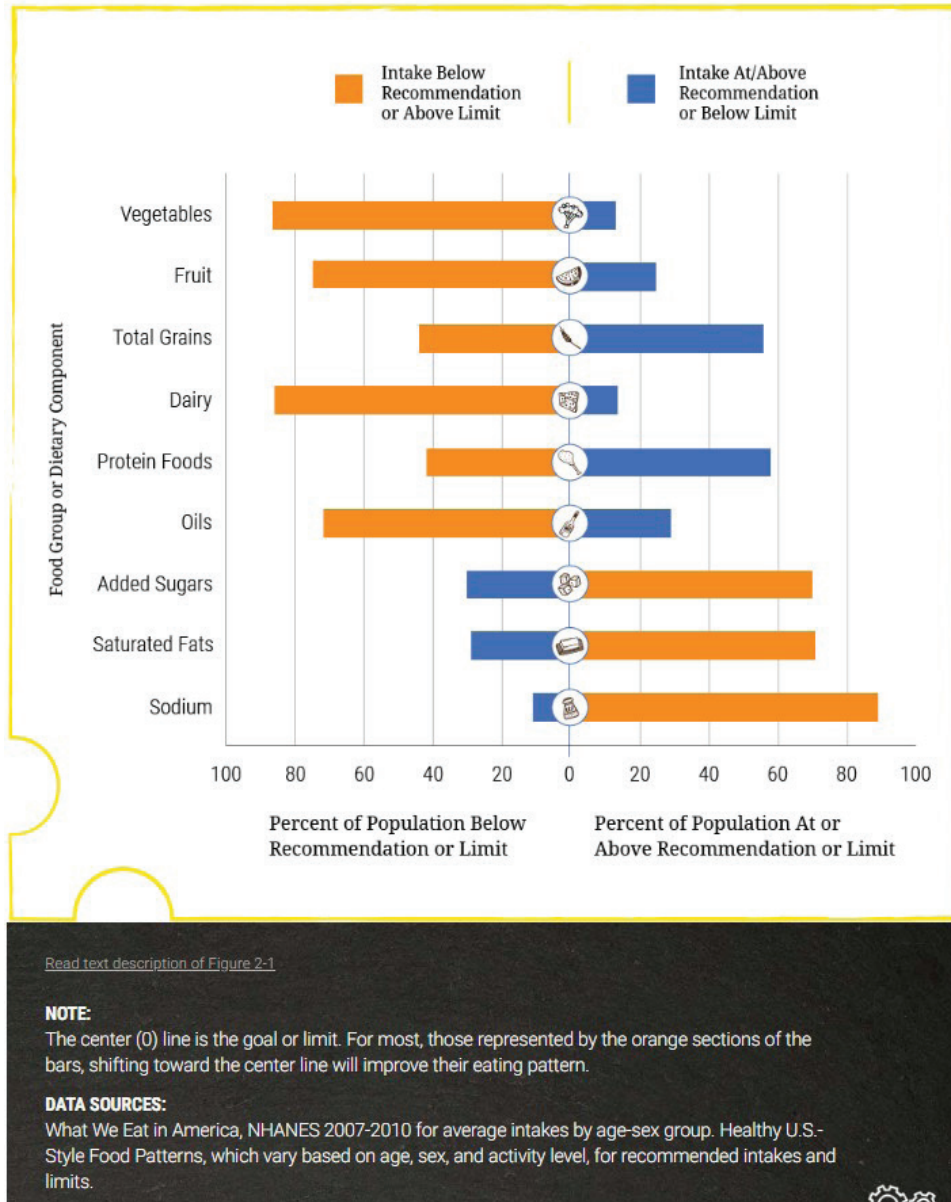
- Given the rapid growth, popularity, and initial successes of FoodShare Spartanburg, this program should be supported in its expansion and robustness of program offerings.

Food Access, Food Security, and Food Justice

Food access, food security, and food justice are very closely intertwined topics, and it is difficult to discuss one without tugging on the string of another. Without food security we are not ensured food access, and food justice is being sought as a result of low food access and low food security. Because large corporations control much of our market with highly processed convenience foods, and because our culture limits our time and skills for cooking, the majority of people living in America face challenges in accessing healthy food. Thus around 70% of Americans are either overweight or obese and deal with chronic health issues as a result. But some are more vulnerable than others to these issues.

Fruit and vegetable consumption by the vast majority of people in the US is below what is recommended, while the vast majority of people are consuming too many added sugars, saturated fats, and sodium.

Figure 17. Dietary Intakes Compared to Recommendations: Percent of the US Population Age 1 Year and Older Who Are Below, At, or Above Each Dietary Goal or Limit



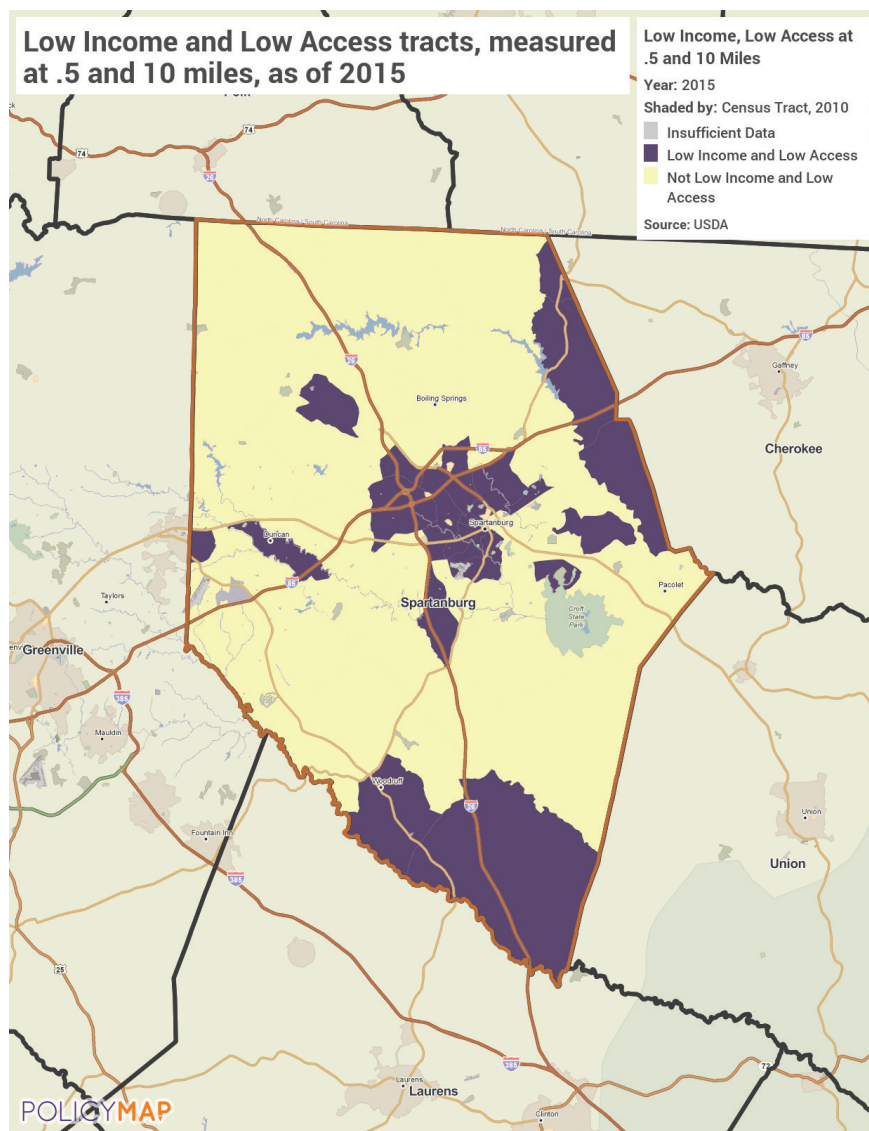
Source: DHHS Dietary Guidelines 2015–2020, Current Eating Patterns in the United States

The United States Department of Agriculture (USDA) defines food deserts as “urban neighborhoods and rural towns without ready access to fresh, healthy, and affordable food. Instead of supermarkets and grocery stores, these communities may have no food access or are served only by fast food restaurants and convenience stores that offer few healthy, affordable food options. The lack of access contributes to a poor diet and can lead to higher levels of obesity and other diet-related diseases, such as diabetes and heart disease.”

Access to healthy food does not merely involve the distance to the nearest supermarket: it is a socioeconomic issue disproportionately affecting low-income people (in particular, the young and people of color) who are likely to have lack of transportation. The USDA uses census tracts with a substantial share of residents who live in low-income areas that have low levels of access to a grocery store or healthy, affordable retail food outlets to identify food deserts. According to this data, 41,439 Spartanburg County citizens live in food deserts, of which 63.2% (26,205) have low access to a supermarket or large grocery store. Spartanburg’s food deserts are not only a health issue but also an economic development issue. The SC Food Access Taskforce reports that statewide, residents

in food deserts spend \$311 million annually on groceries outside of their local community and that untapped local markets could support approximately 529,000 square feet of grocery retail. Tapping local markets could bring job creation, savings in transportation costs, increased tax revenue, and most importantly improved access to healthy food.

Figure 18. Spartanburg Tracts with Low Income and Low Access, 2015



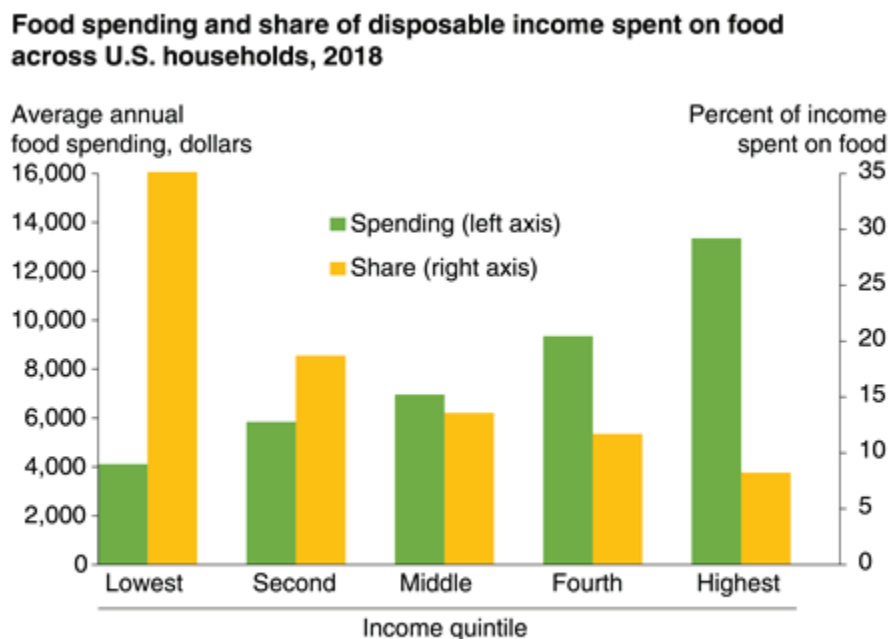
Source: policymap.com

During the coronavirus pandemic, many people lost their jobs and even more people cannot afford the food they need to thrive.

- It is incumbent on us to work with Emergency Food Providers to ensure the most vulnerable are able to access healthy food and not just any food.

Figure 19 shows that in 2018 the poorest households in the United States spent more than one third of their disposable income on food, while the richest spent less than ten percent. "As their incomes rise, households spend more money on food, but it represents a smaller overall budget share." (USDA Economic Research Service).

Figure 19. 2018 Food Spending and Share of Disposable Income in the United States



Source: USDA, Economic Research Service using data from U.S. Bureau of Labor Statistics, Consumer Expenditure Survey, 2018.

Source: www.ers.usda.gov

Cooking and Nutrition

Again, accessing healthy food is not just about proximity or income. Part of one's ability to eat healthy food is contingent on knowledge of cooking food from scratch. Cooking from scratch means that the food will not require the preservatives that processed food contains, and it also allows the cook to control salt, fat, and sugar. Besides lack of cooking knowledge and skill, some may lack the time, energy, or equipment to cook. During the coronavirus shut downs, restaurants were considered essential services. Key informants in the 2019 Spartanburg County Community Health Needs Assessment said they think not knowing how to cook healthily was a top reason that kept people from being healthy.

When asked in our Food Access Survey how often they prepared meals at home, 41% of respondents indicated that they prepare meals at home every day, while 20% prepare meals 5–7 times per week, 16% 3–5 times per week and 21% 1–3 times per week. When asked what factors inhibit their ability to prepare meals at home, respondents most commonly indicated time (40%) or that nothing stopped them (35%). Money to purchase healthy ingredients (24%) and a lack of variety and quality of healthy ingredients at their neighborhood store (17%) were also common responses. When respondents were asked what would increase their ability to prepare healthy meals, time was the most common response (54%), followed by cooking skills/knowledge (37%), and money to purchase healthy ingredients (32%).

People are confused about what "healthy" means. Messaging from the media is all over the place, and what is generally good for most people is not good for everyone. Registered dietitians and others certified in nutrition need to be more ubiquitous, and doctors, not trained in nutrition themselves, should regularly refer patients to these healthcare professionals. Given that around 70% of our population is overweight or obese, most patients could benefit from nutrition services. Of course cooking and nutrition go hand in hand, so it would be beneficial to have a resource where people can learn about both.

There are some cooking classes already underway in Spartanburg through Clemson SNAP-Ed and Spartanburg Regional Healthcare System, but the need cannot be met with current capacity. The need for culturally relevant classes has also been mentioned to the Food System Coalition.

- Cooking, nutrition, and meal planning and preparation classes need to be implemented across Spartanburg County to teach people how to cook healthily. Transportation, income levels, ages, and different food cultures need to be taken into account when programming these classes.

Cooking classes can be a challenge to coordinate when borrowing space from other organizations, especially if it is done in a series of classes, but it can be done. Potential partners could include the library system, community centers, healthcare settings, and Emergency Food Providers, all of which have hosted cooking classes in the past in Spartanburg County. Food Access Survey data, the Spartanburg County Community Health Assessment, and anecdotes show that healthy cooking is still a challenge for Spartanburg residents. Therefore, a vigorous effort to support existing classes and to establish new classes should be made.

Food Shopping Behaviors

We also studied local consumption at the household level through the Food Access Surveys. A majority of respondents to the survey (51%) shop for food for 2–3 people, and 23% of survey respondents shop for 4–5 individuals. Most respondents either shop once per week (45%) or 2–3 times per week (32%). Given the frequency that people shop, it is feasible that many shoppers could purchase local, minimally processed food often. Most (46%) travel 3–10 miles to purchase food, and 35% travel 1–3 miles. Almost all (95%) use a personal vehicle to purchase food. A few (4%) get a ride, and others take a bus (1.5%), walk (1.5%), or have food delivered (.7%). The most common place to purchase the food that respondents prepare at home is from chain grocery stores (78%). This indicates that for retailers or wholesale consumers to sell a larger quantity of local food in our food system, either the food would have to be sold to a chain grocery store or consumers would need to change their shopping habits.

Approximately 9% of respondents indicated that they do not make food at home, and 4% stated that they purchase a majority from corner or convenience stores. Because the offerings at restaurants, fast food outlets, corner stores, and convenience stores are typically limited to unhealthy and highly processed food, and are not likely to include minimally processed, nutritious whole foods, these respondents are likely to be nutritionally deficient. It is imperative to get healthy options to people with limited food access.

When asked what motivated them to shop at their respective food outlets, respondents most commonly said low prices (60%), proximity to home (58%), good selection (50%), and good quality (48%). These responses suggest that price is not always the most important factor in where people shop, and there may be flexibility in offering local foods that sometimes cost more in grocery stores. Because proximity to home also is not always the most important reason why people shop where they do, there is a possibility that people might purchase their food elsewhere, like at a store that only focuses on selling local food. Sixteen percent stated that they shopped where they did because it was on their way to or from somewhere, and 5% stated they were motivated to shop at a store because SNAP, WIC, senior vouchers, and other food benefits were accepted. It is imperative that a store selling only local food must accept as many food assistance benefits as possible so as to provide healthy food options to these benefit recipients.

Food Security and Food Justice

The following is from *A report from the Food Equity Subcommittee of the City of Columbia Food Policy Committee*, which was updated March 2020. Reference notations have been removed.

“Corporate consolidation in the food system, in which a small number of firms control large portions of food system-related markets (i.e., farm inputs, distribution, retail), can create and perpetuate inequities within the food system as a whole. For example, consolidation in the agrichemical/seed industry, in which four corporations now control over 60% of the global seed market, leaves farmers with fewer choices than ever before regarding what food they grow and how they grow it.

The retail sector is experiencing similar consolidation, with four firms controlling over 51% of the US grocery market. Due to tax breaks, lower rent, white flight, etc., many supermarkets have relocated from urban to suburban areas over the decades, contributing to inequities in food access that disproportionately affect low-income communities of color. In addition, highly processed, less nutritious foods such as candy, chips, and soda are often more affordable and available in low-income communities than healthier alternatives such as fresh fruits and vegetables.

The food system is the largest employment sector in the US with more than 1 of every 7 workers (21.5 million) helping food get to our tables. Most food chain workers are in non-managerial, low-wage positions and are predominantly people of color, immigrants, and women. These workers are at high risk of experiencing food insecurity, wage theft, lack of access to health care, harassment and intimidation, and workplace injury and illness. In fact, food chain workers make the lowest hourly median wage, at \$10 per hour, and are more than twice as likely to be on food stamps than any other US worker.

These racial and class inequities are mirrored for food producers of color. African American farmers are among those most heavily impacted. In 1920, 1 in 7 farms was Black-owned; by 1982 this number was only 1 in 67 and African American farm owners made up only 1% of America's farms. Based on the 2012 US Census, African American farmers are 94% more likely to make less than other minority farmers, with 79% making less than \$10,000 annually in farm sales.

Hunger is often an issue that we distance from in the US, however 1 in 8 American adults (and 1 in 5 children) experience difficulty accessing safe and nutritious food. While hunger refers to an uncomfortable physical sensation, food insecurity refers to a lack of consistent access to safe, nutritious, culturally appropriate food within a household.

Often experienced simultaneously, issues such as affordable housing, social isolation, education level, unemployment or underemployment, and food insecurity have proven to deteriorate health and quality of life. As more affordable foods are often packed with preservative chemicals, cooked in a fryer, or agriculturally mass produced, food insecurity has been shown to lead to a multitude of serious and lifelong health problems including heart disease, high blood pressure, diabetes, obesity, poorer general health, increased health-care utilization, and depression, with heart disease being the leading cause of death in America."

Three questions were used to assess household food insecurity in the Food Access Survey. When asked how often they were not able to purchase food, 24% of respondents indicated that they were out of money and/or food assistance at least one time per month, 13% indicated that this occurred twice per month, and 2% indicated that it occurred more than twice per month. When asked how often they worried whether their food would run out before they got more money to buy more, 20% of respondents stated that this occurred 1–3 months of the year, while a majority (67%) indicated that this never occurred. When asked what types of assistance were used by the household in the last year, respondents cited food stamps (14%), WIC (4%), SSI (3%), food banks (7%), and school breakfast or lunch programs (7%).

Poverty and SNAP

According to the US Census, the average household size in SC is 2.54 persons. A study by MIT says that the annual living wage for one adult and one child in SC should be \$48,179 and that food should cost \$4,446 annually, or \$370.50/month (Living Wage Calculation for South Carolina). The study also says that, in our area, "Food Preparation and Serving Related" jobs pay \$19,628 annually and "Farming, Fishing, and Forestry" jobs pay \$32,548 annually. These are all essential services in our food system, but according to MIT, workers in these jobs are not earning a living wage for the average household.

There was a bill introduced in the SC House in 2019, which is currently in the House Labor Committee, to raise the minimum wage to \$12/hour over three years. If a person worked 40 hours a week, 52 weeks a year (no vacation), they would earn \$24,960 at this rate. For 2020, the Federal Poverty Guidelines that determine eligibility for certain federal programs like SNAP (Supplemental Nutrition Assistance Program, also known as food stamps) and WIC (Women, Infants and Children) were \$17,240 for a household of two (DHHS Poverty Guidelines).

Figure 20. Federal Poverty Guidelines for 2020

2020 Federal Poverty Guidelines	
Persons in Family/Household	Poverty Guideline
<i>For families/households with more than 8 persons, add \$4,480 for each additional person.</i>	
1	\$ 12,760
2	\$ 17,240
3	\$ 21,720
4	\$ 26,200
5	\$ 30,680
6	\$ 35,160
7	\$ 39,640
8	\$ 44,120

Source: DHHS Poverty Guidelines

In Spartanburg County in 2016, approximately 15.4% of the population were SNAP participants. This was a 2.9% decrease from 2012, when 18.42% of the population were SNAP recipients (USDA Food Environment Atlas). The decline was likely due to recovery after the Great Recession. While 54.3% of households receiving SNAP had children under the age of 18, 39% were households with single mothers (no husband present). The maximum benefit allowed for a household of two is \$355, and this is for people earning no more than \$1,832 per month, or \$21,984 per year (Freshebt.com). It is also important to note that there were approximately 5.5% of children under the age of 19 with no health insurance.

There is a large gap between what workers in the food system earn versus the amount of money it takes to thrive. The people that feed us are essential and they should be treated and paid accordingly. To accomplish this

- the Spartanburg Food System Coalition should advocate for living wages for food system workers, and
- the Coalition should advocate for increased federal benefits for food system workers.

Figure 21. Food Access Factors in Spartanburg County

Economic Factors		
Household Characteristics	Spartanburg	South Carolina
Median Household Income, 2013–2017 ACS Five-Year Estimate	\$ 47,575	\$ 48,781
Self-Sufficiency Standard (2 Adults, 2 School-Age Children, 2012)	\$43,248	--
% Individuals Below 185% of Federal Poverty Level, 2013–2017 ACS Five-Year Estimate, Household of 4	33.71%	33.29%
% Individuals Below 200% of Federal Poverty Level, 2013–2017 ACS Five-Year Estimate, Household of 4	36.94%	36.35%
% Unemployment, 2013–2017 ACS Five-Year Estimate	4.00%	4.30%
% Household without Vehicle, 2013–2017 ACS Five-Year Estimate	2.55%	2.50%
Children In Single Parent Households	38%	39%

Sources: US Census 2012–2017 ACS 5-Year Data Profile and County Health Rankings and Roadmaps

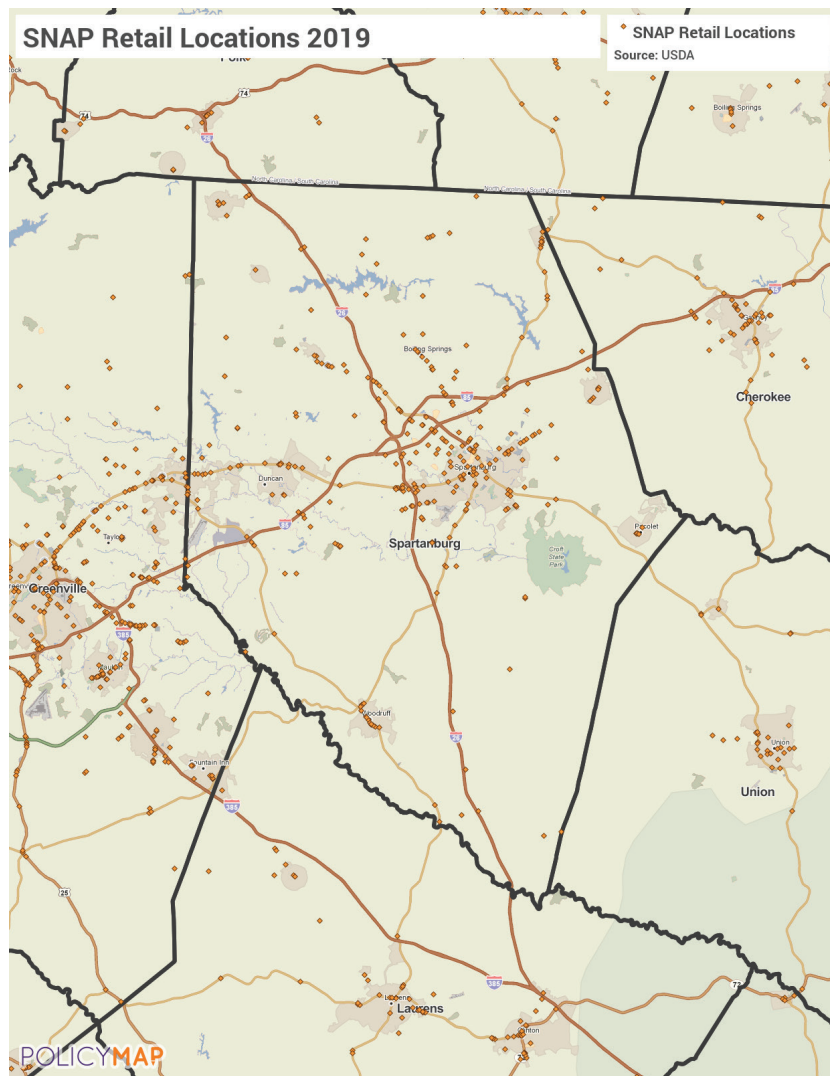
Of the direct-to-consumer markets in Spartanburg, less than half accept WIC or SNAP. There are more than twice as many restaurants and other places to eat than there are grocery stores and markets. And there are 55 food and other emergency relief services.

Figure 22. Food Program Assistance Availability

Food Availability		
Direct Markets	Spartanburg	South Carolina
Number of Farmers Markets	5	150
Number of Roadside Markets	10	195
Number of Markets Accepting WIC	7	158
Number of Markets Accepting SNAP	7	163
Number of Markets Accepting Healthy Bucks	1	23
Number of South Carolina Certified Roadside Markets	6	147
Number of Community Supported Agriculture (CSA)	0	24
WIC Offices	2	73
Food Accessibility	Spartanburg	South Carolina
Food and Beverage Stores	114	2,005
Grocery Stores	70	1,305
Specialty Food Stores	20	274
Restaurants and Other Eating Places	462	8,313
Other Support	Spartanburg	South Carolina
Community Food and Housing; Emergency and Other Relief Services	13	195
Special Food Services	42	525

Sources: DHEC's SC Farmers' Markets and Roadside Markets Map, SCDA Certified Roadside Market Program, and US Census 2016 CBP and NES Combined Report

Figure 23. SNAP Retail Locations in Spartanburg County



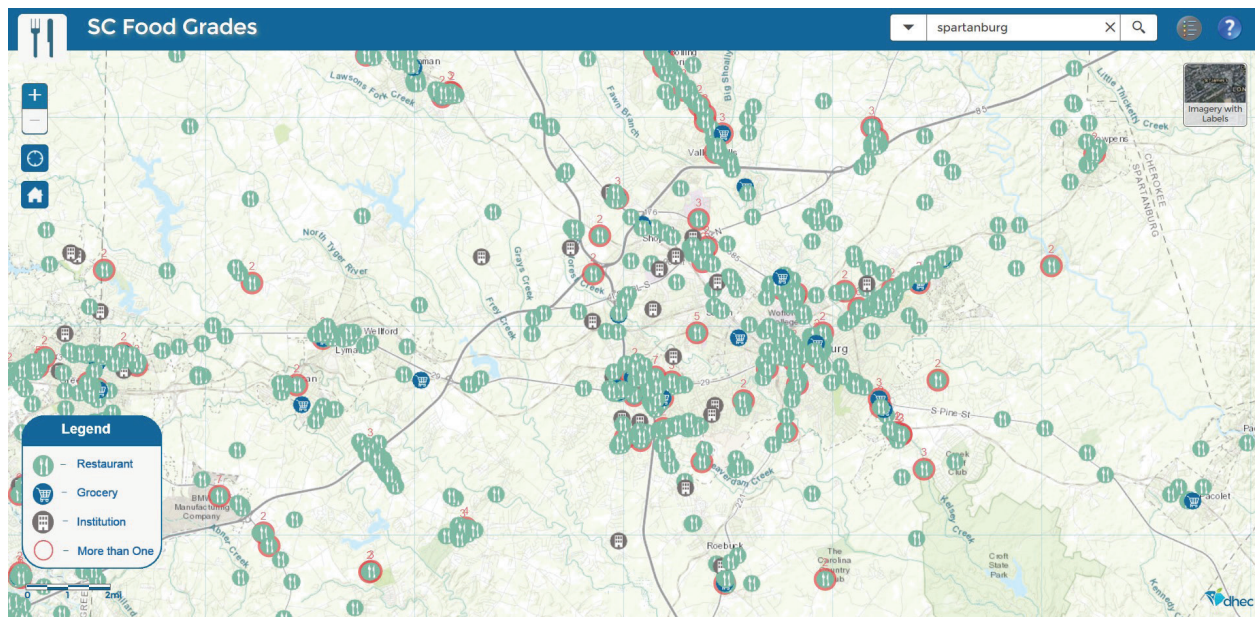
Source: policymap.com

While it appears that there are a decent amount of SNAP-authorized stores in Spartanburg County, there are still local pockets where these stores are needed. For instance, in the Southside where a grocery store recently closed, a convenience store attempted to become authorized but was having trouble with the bureaucratic nature of the process.

WIC participants face many barriers in using their benefits, and WIC-authorized stores declined between 2009 and 2012. WIC participants experience stigma at stores during checkout and also deal with clerks that are not properly informed about WIC. For instance, a clerk may refuse a pregnant mother's WIC benefits not knowing that pregnant mothers, in addition to mothers with children, can use WIC. Public ignorance about WIC discourages people from using their benefits. The wait to apply for WIC can take weeks. And some commonly used stores, like Dollar General, do not accept WIC, despite offering WIC-approved foods.

Figure 24 gives a snapshot of the center of the county, showing the concentration of restaurants versus grocery stores. Limitations of the website did not allow a countywide snapshot.

Figure 24. Food Outlets in Spartanburg County



Source: DHEC, SC Food Grades

While SNAP-authorized stores increased between 2012 and 2016 from 306 to 347, WIC-authorized stores declined from 37 in 2008 to 33 in 2012 (USDA Economic Research Service Food Environment Atlas).

The Closing of the Save A Lot in the Southside of Spartanburg

During the process for this project, a large chain grocery store, Save A Lot, closed in one of our historically African American communities in the Southside of Spartanburg. This happened at the same time the Save A Lot in Columbia, SC, closed. These closings prompted us to focus on food access in the neighborhoods of Southside.

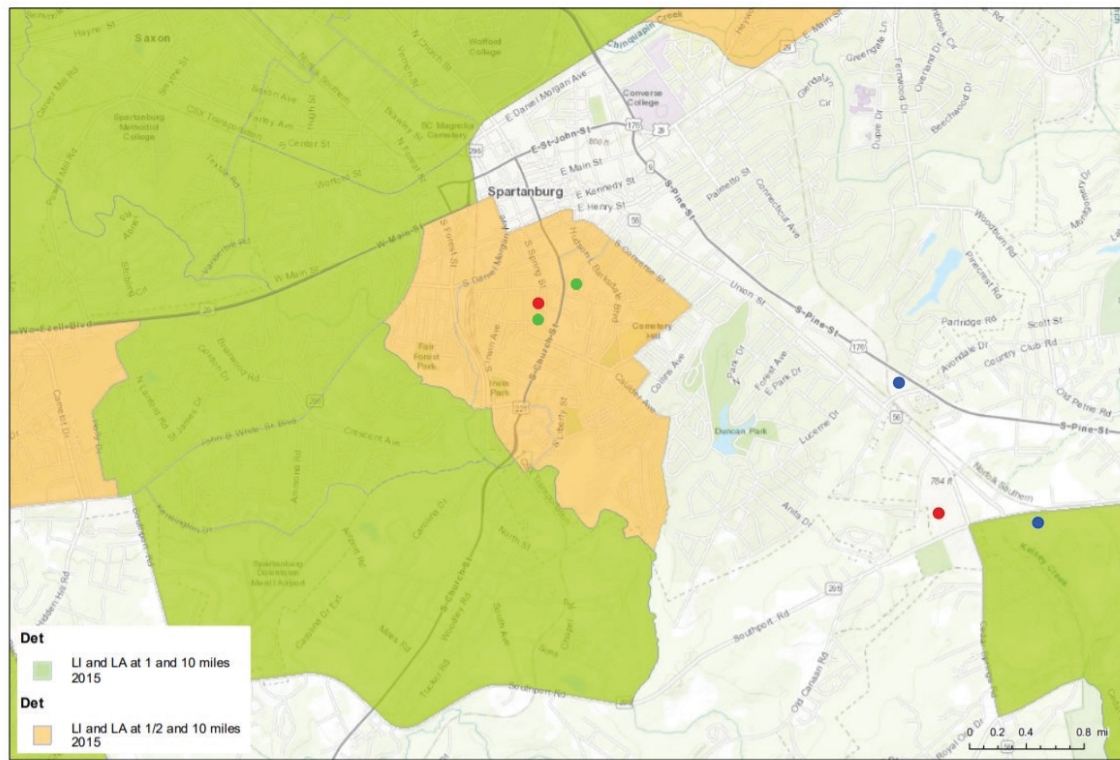
At the City of Spartanburg's suggestion, in November and December 2019, the Spartanburg Food System Coalition attended four Southside neighborhood association meetings and a Town Hall meeting hosted by our local state representative. The neighborhood association meetings we attended were in Liberty Heights (an emerging neighborhood association), Highlands, South Converse, and Hampton Heights. The Forest Park meeting coincided with the Grocery Store Town Hall meeting concerning Save A Lot, so we did not attend—the Forest Park Neighborhood Association attended the Town Hall instead. Our goals at those meetings were to let residents know of the Coalition's existence and about the planning process for this Assessment and Plan, to invite them to join us, to share short-term solutions for healthy food offered through our Coalition partners, to listen and build relationships with the communities, and to distribute Food Access Surveys. As of April 2020, despite the City of Spartanburg's diligent efforts to secure a store, no grocery store has opened where the old one closed.

FoodShare Spartanburg began distributing produce boxes in the Southside during this time. Also, Hub City Farmers Market hosted pop-up markets in the Southside specifically to help with food access since the store closed. Both organizations recognized that their programs could not meet all the needs that a grocery store could fill, but they did what they could. Both programs accepted SNAP (Supplemental Nutrition Assistance Program, also known as food stamps). Hub City Farmers Market will have Mobile Market stops in the Southside once farmers have enough product to supply the Mobile Market.

Residents of the Southside were very upset that the store closed and nothing similar replaced it shortly thereafter. However, many expressed dissatisfaction with the store in the first place. They felt that shortly after it opened, the quality of the products, the appearance, and the cleanliness of the store declined. Residents felt this showed a lack of respect for the community in which the store was located.

This blow comes after a lack of investment in the historically African American community. A once vibrant community filled with black-owned businesses, Southside now has very few thriving businesses at all.

Figure 25. Southside Food Access, Fresh Food, and Grocery Stores Map



Southside Food Access

Date: 3/9/2020 Source: USDA Economic Research Service, ESRI. For more information: <https://www.ers.usda.gov/data-products/food-access-research-atlas/documentation>

Data and Map Sources: USDA, ESRI (Environmental Systems Research Institute), and Spartanburg Food System Coalition

The green area in Figure 25 indicates “low-income census tracts where a significant number or share of residents is more than 1 mile (urban) or 10 miles (rural) from the nearest supermarket.” The orange area indicates “low-income census tracts where a significant number or share of residents is more than ½ mile (urban) or 10 miles (rural) from the nearest supermarket.” Blue dots indicate existing grocery stores, red dots indicate recently closed grocery stores, and green dots indicate FoodShare Spartanburg or Hub City Farmers Market sites. With the recent closures, more of this map, below and in between the two red dots, would be shaded orange and green. With the grocery store furthest east now gone, less of the area in that store’s vicinity would be shaded now.

- There are a few options for providing access to healthy food in the Southside (a grocery store, affordable delivery from one or more existing stores, and/or transportation vouchers) and all should be discussed and considered with community members before pursuing further

A new grocery store could be located in the Southside. Since grocery retail is changing, a different model, like a small independent or nonprofit store, needs to be considered. Ideally, the leader or owner of the solution would be from the community. For its survival, five elements must be included in this model—a welcoming appearance, integrated technology, affordability, competitive prices, and grocery delivery (McKinsey&Company, Reviving grocery retail: Six imperatives).

This issue of food access is not unique to the Southside or the closing of the Save A Lot. There are several low-food-access communities throughout the county. The City of Columbia Food Policy Committee hosted several community listening sessions resulting in a menu of recommendations that could be applied at various levels to create better access to healthy food in a variety of communities (*A report from the Food Equity Subcommittee of the City of Columbia Food Policy Committee*).

- Hold various community listening sessions following the City of Columbia Food Policy Committee's model to identify and implement a suite of solutions to food access barriers on a neighborhood basis. For instance, one neighborhood may need vouchers for transit while another needs vouchers for free delivery of groceries.

Neighborhood Food Access

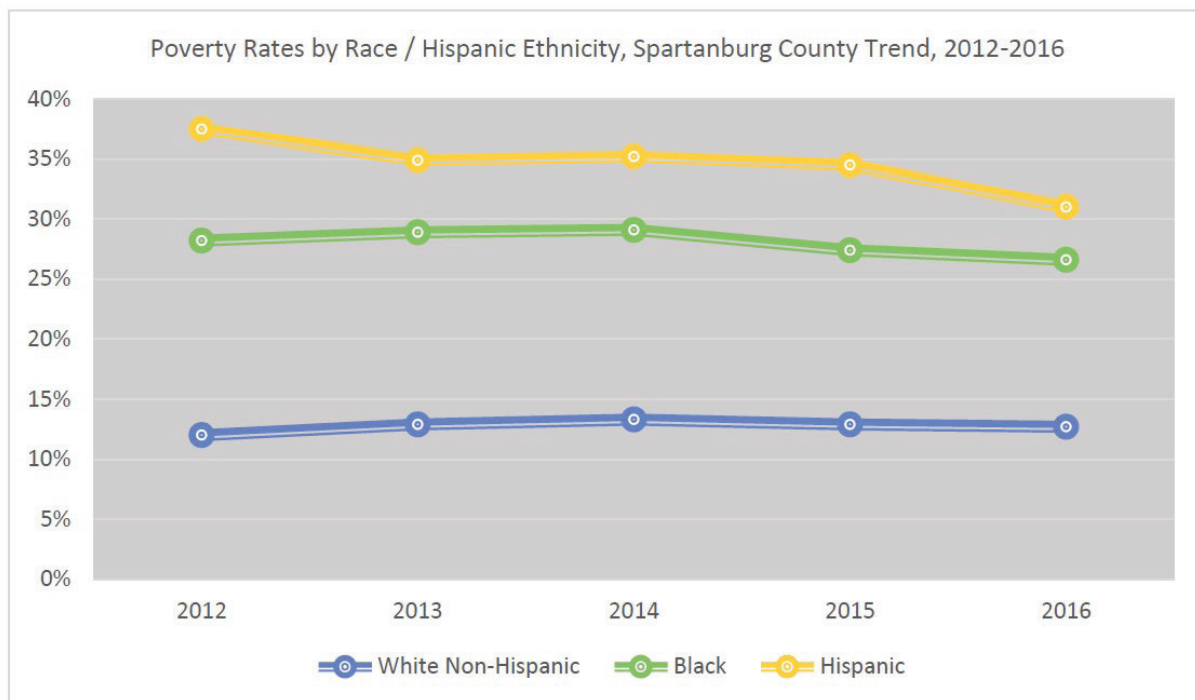
Many respondents to the Food Access Survey (71%) felt that it was very easy to get to the store where they typically buy food. Four percent indicated that it was somewhat difficult and 1% found it very difficult to get to the store where they typically buy food. Respondents were asked to rank their level of satisfaction with neighborhood food stores as very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied across six dimensions. In terms of the number of food stores in their neighborhood, a majority of respondents were very satisfied (29%) or somewhat satisfied (39%). A majority were very satisfied (33%, 29%, 27%) or somewhat satisfied (37%, 39%, 38%) with the availability, quality, and variety of healthy food. Fewer respondents were very satisfied (17%, 17%) with the price of healthy food or availability of local food. Fifty-nine percent of respondents stated that there were certain foods they would like to find at their neighborhood store. The most common unavailable food items include local vegetables (51%), local fruit (48%), ethnic foods (44%), local meat (43%), fresh fruit (38%), fresh vegetables (38%), and fresh meat (38%). When asked whether purchasing from local farmers was important, 91% said yes.

Latinx Communities

We employ the gender-neutral spelling *Latinx* in this report to respect both Latino and Latina members of the Latinx community.

We are fortunate to have the Spartanburg Hispanic Alliance as allies of our Latinx community. This Assessment and Plan includes recommendations from members of the Alliance. The Latinx community in Spartanburg County is growing rapidly. It increased 214% between 2000 and 2018—from 7,081 to 22,250 people—and in 2018 this community comprised about 7.1% of our total population. The Latinx population has the highest rate of poverty in Spartanburg as well as the largest proportion of overweight and obese children in the first, third, and fifth grades.

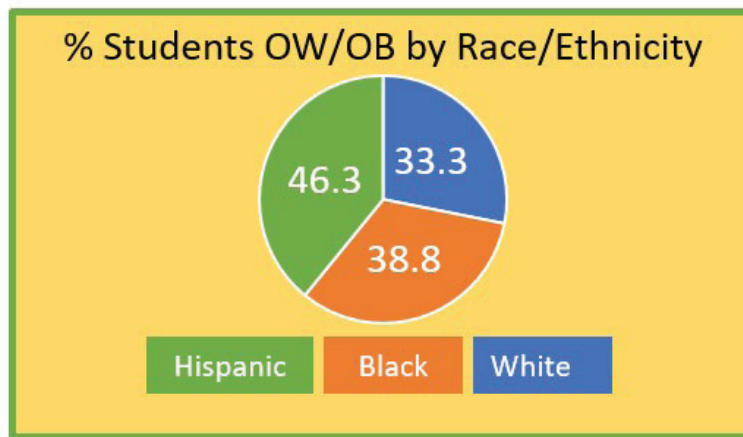
Figure 26. Poverty Rates by Race/Hispanic Ethnicity, Spartanburg County Trend 2012–2016



Source: US Census

Source: Spartanburg Racial Equity Index

Figure 27. Percent of Overweight or Obese Students by Race/Ethnicity



Source: 2018–2019 Spartanburg County BMI of 1st, 3rd, and 5th Graders

The Coalition has a relationship with allies of the Latinx community. To provide context for the statistics about racial disparities in overweight and obesity rates in the Latinx community, we incorporated a study by Wofford College's Center for Community-Based Learning (published January 2020) that looks at healthy eating in Latinx children. The study, "Healthy eating & active living in childhood in Latinx households in Spartanburg, SC: A community-engaged qualitative research study on assets and challenges," points out the following:

"When immigrants arrive in the United States, they bring knowledge and skills developed in other contexts, and experience at least some degree of disruption in social networks and organizational environments, as well as daily life. Their health has been shaped positively elsewhere in ways that they become aware of, to a greater or lesser extent depending upon the individual, when they relocate to the United States. The observations the participants in the focus groups made, particularly about the way context shapes health and what they value from other contexts, indicate that immigrants like those who participated in this study bring assets for shaping change for a healthier future in receiving communities like Spartanburg, South Carolina, if their knowledge and voices can be heard and engaged in civic life."

—Dr. Laura Barbas Rhoden, Wofford College

Wofford's study offers two food-related recommendations: "(1) [increase] vegetable consumption by children, a desire for which there is strong parental support, (2) [educate] parents and children about the sugar content of yogurts and fruit-derived drinks, for the purposes of decreasing consumption of sugar-sweetened beverages and foods."

Furthermore, allies of the Latinx community made the following recommendations:

- "Promote understanding of the health benefits of culinary traditions of members of immigrant communities to the broader community in Spartanburg. Highlight and celebrate the nutritional, cultural, and historical dimensions of popular healthful dishes and foods for diverse groups.
- Mexican, Central American, Caribbean, Colombian, and Ecuadorian cuisines, as well as cuisines from Southeast Asian countries, share many healthful primary ingredients in common, including a wide variety of tropical fruits and vegetables, lean proteins like seafood, and a wide variety of unprocessed whole grains and legumes. Significant numbers of immigrants in Spartanburg County come from these regions of the world. Many primary ingredients valued in these culinary traditions cannot be locally sourced because they are tropical crops and do not grow in temperate zones like Upstate South Carolina. In addition to promoting locally grown foods, signal the importance and value of non-locally sourced, nutritious foods, including those carried by small, ethnic

groceries and stands at the flea market. Explore with small vendors incentive systems for the purchase of healthy items by consumers at their stores.

- Identify the fresh fruit and vegetable products immigrant communities prefer which can be grown in our region; promote their experimental cultivation (for example, in school or urban gardens); their sale at places where immigrants shop; and their incorporation into FoodShare efforts and food pantries frequented by immigrants. Some crops that can be cultivated in our area include varieties in these categories: chiles/peppers; squashes; root vegetables like radishes and daikon; eggplants and tomatoes; herbs like basil, mint, oregano; onions and garlics.
- Many immigrant parents and grandparents value the transmission of culinary traditions across generations. Adult caregivers in immigrant families have indicated in two different studies that there is a tension between their desire for intergenerational knowledge transmission and the desire of children to “Americanize” and blend in with non-immigrant peers once they begin school. Emphasize intergenerational connection and celebrate the variety of traditions in our community in ways that are visible to children, adults, and older adults of all backgrounds. Schools and other institutional settings with which children and families have frequent interaction can play an important role in affirming the value of diverse, healthful culinary traditions.
- Latinx immigrants have signaled in two different studies that they value quality over price alone. Make sure that healthy products promoted are of high quality in terms of taste and freshness, and emphasize taste and freshness in messaging around the promotion of these products.
- Adult and older adult generations who have grown up in rural areas, connected to rural areas, or with urban gardening traditions have a great deal of knowledge that can be of benefit to efforts for healthy eating and living locally. Explore with immigrant communities (faith, business, school, etc.) ways to bring immigrant residents into dialogue and collaborative leadership with those in food system related work, from growers to extension services to nonprofits.”

To support these recommendations, we recommend the following:

- Communities with low access to healthy, culturally appropriate food should have allies or ambassadors, potentially in the form of Community Health Workers, to champion healthy food within the community. Ambassadors should not only focus on newly immigrated populations but also on traditional foods from other cultures, such as African cultures. The idea is to instill pride in the food of one’s own culture and to celebrate and promote healthy foods from other cultures to support and introduce people to options other than the Standard American Diet.

Emergency Food Providers

Emergency Food Providers (e.g., food pantries, meal sites, soup kitchens, backpack programs, gleaners) provide food at no cost as a social service to individuals who cannot afford to buy food. In an ideal food system, everyone would be able to easily access culturally appropriate, healthy, and nutritious food for themselves without assistance. It would require multiple policy changes at multiple levels of government to bring this ideal food system to reality. As we work toward policy change, we must support those in immediate need.

The Spartanburg Food System Coalition brought Emergency Food Providers together at the Providers’ request following an initial Providers meeting in 2019, facilitated by the United Way VISTAs. Providers also requested an online forum in which to communicate in between meetings, and the Coalition provided this as well. The Coalition brought together Providers with several goals in mind:

- Build trust among Providers
- Build trust between Providers and the Coalition
- Provide opportunity for Providers to coordinate and learn from one another

- Obtain Providers' input on future agenda items for regular meetings
- Eventually include more healthy and local food in the Providers' offerings to clients

The meeting had been scheduled over a month in advance for March 19, 2020. Then COVID-19 hit and the Coalition changed the focus of the meeting to COVID-19 response and held the meeting online. There have been several related meetings since the initial meeting on March 19 and we are all working together and evolving rapidly to meet our new challenges. United Way has taken an active role again in convening and supporting Providers.

In Spartanburg County, several of our Providers get their food from food banks or grocery stores. Many focus on getting any food, as opposed to the most nutritious food, into their clients' hands. This is understandable given our country's culture of fast and processed food. However, some Providers do focus on getting healthy food to their clients; for example, Total Ministries now buys FoodShare Spartanburg boxes, which contain only produce.

Due to COVID-19, the Spartanburg Food System Coalition started a program buying healthy food from local businesses and taking it to Providers. This program has several goals:

- Get healthy food to the most vulnerable, who are also vulnerable to COVID-19
- Connect Providers to new channels of food
- Encourage Providers to continue to utilize these new channels of food and different kinds of food
- Build trust between the Coalition and Providers
- Support local food businesses

There are opportunities remaining to support Emergency Food Providers that can be carried out as a partnership between organizations already involved in this work locally (Spartanburg Food System Coalition, United Way, and the American Heart Association):

- Continue convening Emergency Food Providers for as long as is needed
- Continue purchasing healthy food from local businesses for Provider programs
- Provide cooking and nutrition information to Emergency Food Providers and their clients
- Advocate for Emergency Food Providers' needs as they relate to healthy or local food
- Develop a unified portal for all Providers' information (e.g., hours, needs, items available, and contact information) to be kept current and shared with the public
- Support Providers as needed, especially in promoting their procurement of healthy local food

Resiliency and the Local Food System

Resilient is defined as "capable of withstanding shock without permanent deformation or rupture" or "tending to recover from or adjust easily to misfortune or change" (Merriam-Webster online dictionary). In recent years, our food system has been shocked by drought, floods, trade wars, and the coronavirus. Of all of these disasters, the system has been most affected by the coronavirus. Grocery store shelves are bare and Emergency Food Providers cannot get what they normally would be able to from their suppliers in a timely manner. A resilient system requires multiple and redundant pathways for food to get from the farms to our tables.

To become more resilient, farmers will have to adapt to the changing climate. A 2013 South Carolina Department of Natural Resources (DNR) report, *Climate Change Impacts to Natural Resources in South Carolina*, said that changes in climate are expected to impact habitat, wildlife, water supply and quality, agriculture, invasive species, precipitation, flooding, drought, and tourism. DNR is working to determine and track the effects of changes in climate on natural resources in South Carolina. Spartanburg County's climate is changing with an increase in average temperature of 1.25 degrees from 1970–2014 and a decrease of about 6.3 inches of annual precipitation in the same time period (2019 Comprehensive Plan for Spartanburg County).

More recent studies conclude that climate change is occurring at a far more accelerated rate than was previously thought. The impacts of climate change are no longer something that might happen in the nebulous future; we are living in the midst of these impacts. The arctic ice shelves are melting and sea levels are rising. Charleston is already experiencing periodic flooding.

The global agricultural system of vast regional monocropping and the transportation and distribution networks to deliver agricultural products to far flung markets are not sustainable. This entire system is dependent on oil. Oil also supplies the energy for the giant farm equipment and the immense air, sea, and land distribution systems.

At some point, the world's supply of oil will be expended. Some projections suggest that production from the world's proven reserves is at or near peak and will start a continued decline toward depletion and the age of oil will have ended by the mid-21st century. Climate change will profoundly affect the productivity of the regions that are currently supplying so much of the foods on the average American's table. Dry regions will become drier and wet regions wetter. Storms, hurricanes, and tornadoes will become less frequent, but stronger, bringing catastrophic damage to crops. High elevation snow and glaciers are currently in reduction, and this will continue into the future. Therefore, spring melt, so vital to the replenishment of our rivers and aquifers, will be significantly less in the future. This will profoundly impact those agriculture regions that are heavily dependent on irrigation.

Additionally, trade wars and the pandemic have profound impacts on large swaths of our global food system, such as farms and distribution. In 2019 and 2020, we have seen these impacts in commodity crops like soybeans during the trade war with China and with bare shelves in grocery stores during the coronavirus.

Clearly, the global food system is not sustainable. Therefore, it is vital that a robust local food system is established now. Local food production has inherent resiliency and can more nimbly adapt to changing conditions through a return to millennia-old practices—regenerating the soil and retaining moisture by composting, crop rotation, fallow seasons, and altering crop types and varieties and planting times according to climate conditions. Local food processing and distribution systems are far less energy intensive than the global systems upon which we now depend. Smaller local food businesses can respond to rapidly shifting markets by changing from restaurant to grocer, for example, or from direct-to-consumer truckload sales to wholesalers. This is not to discount the positives of a nationwide and globalized food system, such as economies of scale and trading food that cannot be grown locally. The two systems should complement one another and provide whatever redundancy they can for one another.

In 2020 as the coronavirus pandemic swept the world and our nation, around 350,000 people in South Carolina filed for unemployment in the weeks beginning in March through May 2nd. More than 25,000 people in Spartanburg County are included in that number (SC Department of Employment and Workforce). "During the heart of the 2008–2009 Great Recession, laid-off employees were filing an average of 10,000 new claims per week. While the number of new claims we reported today [May 7, 2020] is a great improvement over the numbers three weeks ago, it is still well over four times higher than the number of initial weekly claims being filed during the Great Recession," said Dan Ellzey, Executive Director of the SC Department of Employment and Workforce (South Carolina Initial Unemployment Insurance Claims Data). We do not know what the coronavirus pandemic holds for the future of our food system, but we know that it will have to be resilient, because we have to eat.

Many farmers have a second job apart from the farm. It is possible that farmers could have lost their second job during this pandemic and filed for unemployment. Many farms, however, might be considered a small business and would have to go through the Paycheck Protection Program (PPP). As of the drafting of this report, it is uncertain whether farmers qualify for that program; disqualification would put our food production and farmers' livelihoods at risk. Also, the initial round of PPP payouts rapidly depleted the available funds, and not everyone that needed a loan received one.

Farmers are indisputably suffering from the coronavirus pandemic. They cannot make their normal sales to restaurants and institutions, and they may be having trouble obtaining loans to keep their farms going. The rapid growth of local food system academic literature, new national and regional agricultural programs focused on local food, local farmers markets, and grassroots local food systems work in the past 10–20 years is further evidence that there is a need for systemic change and that the change must accelerate if we expect to feed ourselves in the coming sea of change.

To this end,

- share models with local businesses of other businesses shifting to capture local markets,
- support farmers in any way possible to keep them afloat, and
- support farmers in growing and selling more specialty crops to local markets.

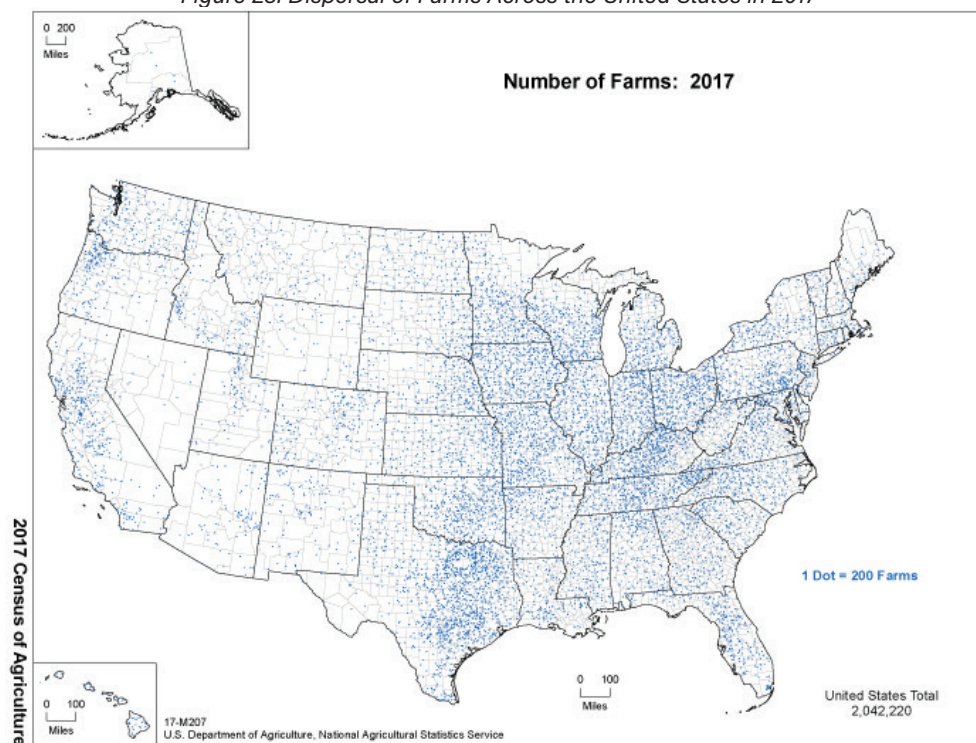
Agriculture

Spartanburg County has some good farmland, and farmers are producing a variety of crops. The county is situated in an area of the country with many farms. Although the county's producers account for less than 1% of Spartanburg's population and are aging (with an average age of 56.6 years old), the products produced and sold in Spartanburg County have a total market value of \$30,511,000. In 2017, the total number of farms in Spartanburg County was 1,433, and the total percentage of these farms that sold directly to consumers (e.g., at farmers markets, roadside stands, and CSAs) was 9%. This small percentage could be explained by the majority of farmers in the county being hobby farmers or farmers who only produce their own household consumption, because nearly 62% of farms in Spartanburg County had less than \$2,500 in their farm by value of sales.

Upstate farms do not currently have enough volume to supply Upstate institutions, as stated in *Feasibility Study—a case for an Upstate SC Food Hub* and in *Making Small Farms into Big Business*, but we are developing the infrastructure and processes to facilitate these transactions. Farmers will likely need to either increase production of specialty crops for local markets and/or redirect their sales from outside markets to local markets. The Farm Bill, federal legislation that directs federal funding for a large proportion of our food system through USDA programs, defines specialty crops as "fruits and vegetables, tree nuts, dried fruits, and horticulture and nursery crops (including floriculture)." This process of growing and selling more specialty crops locally requires relationship building with local institutions so that trust is established between the farmers and the institutions and purchasing processes are clearly communicated.

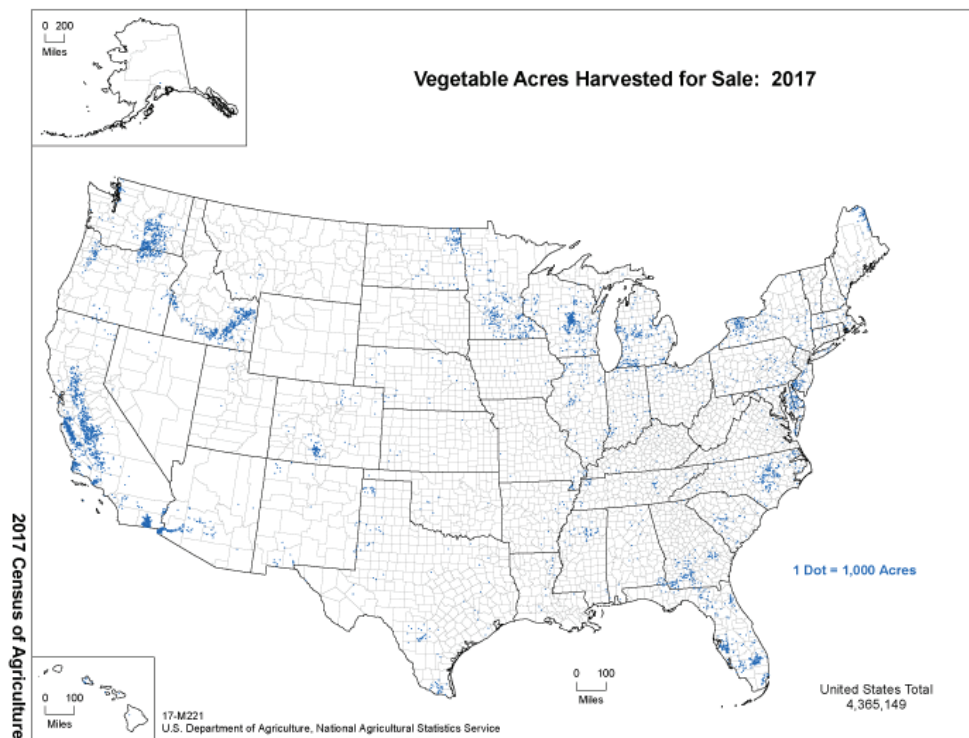
Spartanburg County is located in an area of the country with dense farming operations, and the county itself has a substantial amount of good soil for growing crops. The opportunity exists to grow and trade locally and regionally. But with only around 800 acres (less than 1% of total farmland) harvested for fruits and vegetables in Spartanburg County, there is a great potential for planting and harvesting much more acreage for fruits and vegetables. The same can be said for the rest of the country: compared to farmland available, the amount of acres harvested for fruit and vegetables leaves opportunity for more fruits and vegetables to be grown. Figure 28 and Figure 29 below illustrate this point. Considering we do not eat enough fruits and vegetables in this country, it makes sense to grow and consume more of them.

Figure 28. Dispersal of Farms Across the United States in 2017



Source: USDA 2017 Census Ag Atlas Maps

Figure 29. Vegetable Acres Harvested for Sale in the US in 2017



Source: USDA 2017 Census Ag Atlas Maps

"Most farm households earn all of their income from nonfarm sources and even those operating larger farms often have substantial nonfarm income" (<https://www.ers.usda.gov/publications/pub-details/?pubid=43792>). This is a disturbing statement. Farming is a labor-intensive, exhausting job; it seems counterintuitive that farmers are not able to sustain themselves by growing food to sustain everyone else. It would be interesting to learn whether food systems can become profitable if they are more localized. Anecdotally, there have been farmers that have focused on supplying food for human consumption locally and have made more money doing this on less land than farmers growing commodities on much more land. It would be significant to know if this bears out on a larger scale.

During the coronavirus pandemic, migrant labor became an issue because people were not able to get into the country to harvest crops, and 344 farms in Spartanburg County utilized migrant labor in 2017. At the time of this writing, it is unclear how this issue is affecting Spartanburg farms.

Agritourism, "the practice of touring agricultural areas to see farms and often to participate in farm activities" (Merriam-Webster online dictionary), is something that farmers are interested in diversifying into. Agritourism was one of the most popular marketing diversification choices of farmers in the Producer Survey we distributed. Given that only 14 farms in Spartanburg County were involved in agritourism in 2017, there is potential for growth in this area. There are currently two events during the year that SC farms participate in that are coordinated agritourism efforts. One is Clemson Extension's SC Ag + Art Tour, where artists create and sell their artwork at participating farms during a specific timeframe so that people can visit several farms on the same day. The other is Carolina Farm Stewardship Association's Farm Tours.

- Support farmers and our farming economy by teaching farmers how to implement agritourism on their farms and helping them find funding to do so. Partner with Clemson Extension's Agribusiness Team to do this.

Figure 30. Spartanburg County Farm and Farmers Characteristics

Agriculture		
General Characteristics	Spartanburg	South Carolina
Total Number of Farms, 2017	1,433	24,791
Acres of Land in Farms, 2017	95,806	4,744,913
Average Farm Size (Acres), 2017	67	191
Acres of Cropland Harvested, 2017	776	1,599,887
Acres Irrigated	1,830	923,351
Operators and Labor	Spartanburg	South Carolina
Average Age of Primary Farm Operator, 2017	56.6	58.2
% Female Primary Operator, 2017	34.72%	28.89%
% Farming	31.64%	36.14%
% Other	68.36%	62.94%
Total Number of Hired Workers (Excludes Contract Labor), 2017	969	20,938
% Of Farms That Hire Farm Labor	16%	21%
Total Number of Farms with Migrant Labor, 2017	344	4,693
Local Food	Spartanburg	South Carolina
Agritourism and recreational services - Number of Farms, 2017	14	505
Agritourism and recreational services - Market Value, 2017	\$ 81,000	\$ 6,219,000
% of Farms That Farm Organically	0%	-
% of Farms That Sell Directly to Consumers	9%	6%
% of Farms That Are Family Farms	96%	96%
Sources: USDA National Agricultural Statistics Service SC Farm Operations, USDA National Agricultural Statistics Service Spartanburg County Farm Operations, and 2017 Census of Agriculture County Profile		

Almost 50% of farmers who took our Producer Survey said they are interested in different markets and growing different crops if there is a proven good price for their products. Such a market shift may require interested farmers to build relationships with local buyers and farmers who already sell to local markets. Farmer-buyer networking events have taken place before and were hosted by Hub City Farmers Market. Future events could include a presentation by a farmer who has had success growing and selling locally.

- Hub City Farmers Market (HCFM) should host farmer-buyer meetups again to build relationships between farmers and buyers. The call to farmers should extend beyond HCFM farmers; the event should be advertised to farmer members of Carolina Farm Stewardship Association and Spartanburg County Farm Bureau and to clients of Clemson Extension, USDA Farm Service Agency, and USDA Natural Resources Conservation Service. From the buyer's side, it could be beneficial to advertise the event to the institutes of higher education, K-12 school district food service providers, the SC Restaurant and Lodging Association, the hospital system, hotels, catering companies, and food service companies.

Some institutions require Good Agricultural Practices (GAP) certification of the farms that they buy their food from. Five of 14 respondents to the Producer Survey indicated that they are interested in obtaining GAP certification. The barriers to obtaining GAP certification are the time it takes to get the training and pull the necessary documents together and the cost. By providing technical assistance on the certification process and by shouldering some of the costs, the Spartanburg Food System Coalition could help make GAP certification possible for more farmers.

- The Spartanburg Food System Coalition could facilitate GAP certification for farmers. This would entail asking the Carolina Farm Stewardship Association, Clemson Extension, and/or other organizations to offer trainings. The Coalition would need to find space to host the trainings. Ideally, trainings would be a regular occurrence at the same time and place each year during farmers' downtime. The trainings could be sponsored by various organizations interested in growing the local food system. Remaining costs could be paid for through grants or from the farmers.

What are we growing and how much?

Figure 31. Spartanburg County Farm and Cropland Characteristics 2007-2017

Farmland	2007	2012	2017	Percent Change 2007-2017
Total Farms				
Number	1,242	1,338	1,433	+7.2%
Acres	109,917	101,849	95,806	-12.8%
Average Size in Acres	89	76	67	-24.7%
Median Size in Acres		40	28	
Total Cropland				
Number of Farms	878	885	922	+5.0%
Acres	41,547	37,773	34,338	-17.4%
Harvested Crop- land				
Number of Farms		710	776	
Acres		26,454	26,045	

Source: USDA Census of Agriculture

Figure 32. Characteristics of Local Food in Spartanburg County 2007-2016

CHARACTERISTICS OF LOCAL FOOD IN SPARTANBURG COUNTY 2007-2016							
FARM DATA	2007	2009	2012	2013	2016	PERCENT CHANGE 2007-2012	PERCENT CHANGE 2009-2016
Farms with direct sales	69		131			89.9%	
Percentage of farms with direct sales	5.6%		9.8%				
Vegetable farms	66		64			-3%	
Vegetable acres harvested	296						
Farms with vegetables harvested for fresh market	64		59			-7.8%	
Vegetable acres harvested for fresh market	289		353			22.1%	
Orchard farms	99		92			-7.1%	
Orchard acres	105		260			147.9%	
Berry farms	29		45			55.2%	
Berry farm acres	105		260			147.6%	
Small slaughter facilities	1		0			-100%	
Greenhouse vegetable and fresh fruit farms	1		1			0%	
Food Hubs					0		

Source: USDA Census of Agriculture

The trend for large farms with fewer farmers is reversing. Though the total number of acres in production is decreasing, there are more farmers working smaller farms. According to the 2017 Agriculture Census, 32.8% of Spartanburg County's 2,334 farmers were new and beginning farmers. This is a positive trend for the future vitality of the local food system.

There is much opportunity for redirecting efforts toward healthy food production for human consumption. We are growing relatively small amounts of fruits and vegetables as compared to all of the farmland we have available. Refer to Figure 32, Figure 33, and Figure 34, which show 2017 Agriculture Census data on Spartanburg County farm products and crops. By far, the most crop acres in 2017 were used for growing hay, yet these crops were the fifth most valuable products in the county; hence, more money could be made on fewer acres growing more valuable products.

Cattle and calves were the third most valuable products in the county, but there are issues with meat consumption. One is that Americans are eating an unhealthy level of meat (see Figure 17, Dietary Intakes Compared to Recommendations), and this is probably contributing to our overweight and obesity epidemic. Another is that it takes a lot of land, food, and water to raise cows, and those resources could be used more efficiently growing other food. The resource-intensive process of raising cattle contributes more to climate change than growing other foods. This is not to say that no cattle should be raised or eaten, but it is worth looking into using fewer resources on cattle and more on different, potentially more profitable, products.

Figure 33. Top Ten Farm Products in Spartanburg County, 2017

Top Ten Spartanburg County Farm Products by Market Value 2017		
Farm Product Category	Market Value	State Rank- ing
Nursery, greenhouse, floriculture, sod	\$9,643,000	7
Fruits, nuts, trees, berries	\$6,914,000	1
Cattle, calves	\$3,379,000	10
Grains, seeds, dry beans	\$1,760,000	28
Other crops and hay	\$1,642,000	24
Vegetables, melons, potatoes, sweet potatoes	\$1,502,000	16
Horses, ponies, mules, burros, donkeys	\$450,000	6
Other animals and animal products	\$160,000	5
Sheep, goats, wool, mohair, milk	\$131,000	6
Cultivated Christmas trees, short retention wood chips	\$29,000	15

Figure 34. Top Five Crops in Spartanburg County, 2017

Top Five Spartanburg County Crops in Acres, 2017	
Crop	Acres
Forage (hay/hayage), all	16,731
Soybeans for beans	3,454
Peaches, all	2,069
Wheat for grain	1,375
Nursery crops	1,187

Agritourism (n=9) and adding or increasing specialty crops (n=9) were the two most popular strategies chosen by respondents to the Producer Survey when presented with a list of market diversification choices. Hemp (n=2) and livestock (n=2) were also selected. Ten respondents indicated that they would be willing to grow different crops if there was a documented demand and fair price in the market. One respondent noted that this decision would be based on what the proposed crop was and if it fit into their business model.

The most common obstacles cited when asked about obstacles to diversifying their farms included a lack of on-farm resources (land, labor, equipment, infrastructure) (n=6) and lack of access to capital (n=6). Three indicated that a lack of connections with viable business partners was an obstacle, and three stated that they faced no obstacles.

Subsidies

Farmers are receiving federal subsidies and average out to one million dollars each year. This income can make or break a farm depending on the circumstance. But there is a debate among food system stakeholders about the best way to utilize subsidies.

Figure 35. US Government Subsidies to Spartanburg County Farms

US Government Farm Subsidies to Spartanburg County Farms	
Subsidy Category	Subsidies 1995-2019
Commodity Subsidies	\$3,530,208
Conservation Subsidies	\$1,544,479
Disaster Subsidies	\$6,540,279
Crop Insurance Subsidies	\$14,901,456
Total Subsidies	\$26,516,422

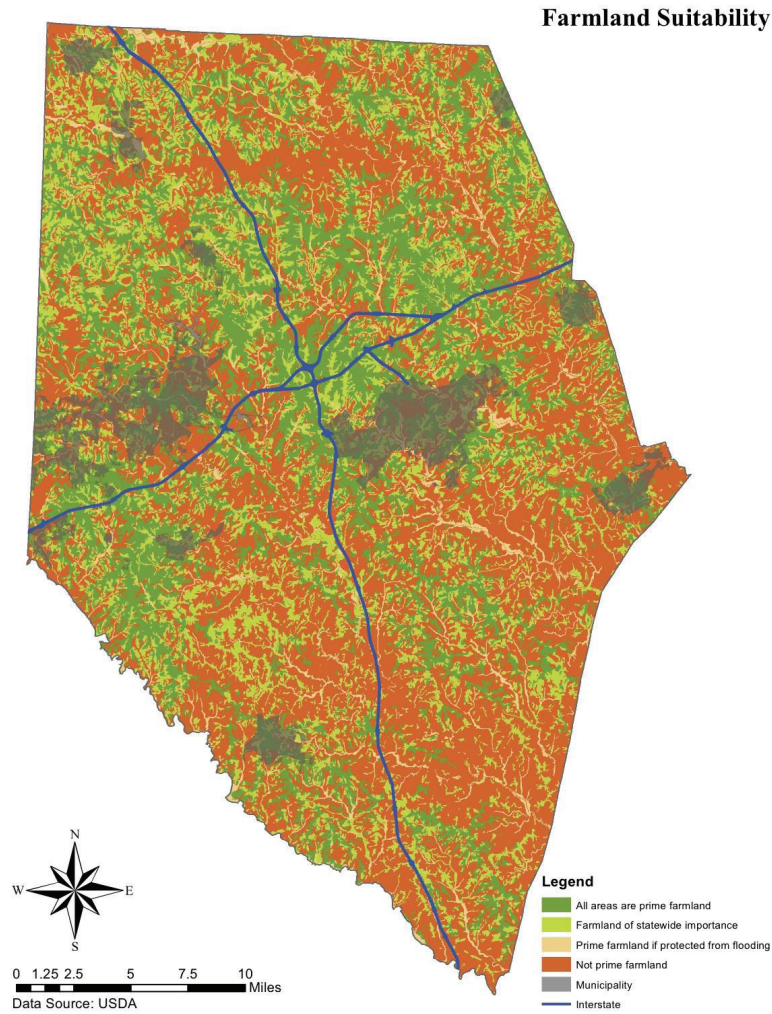
Source: Environmental Working Group (EWG) Farm Subsidies Data Base

- The use of subsidies is something that should be explored further in Spartanburg County. This could be helpful in understanding potential ways of helping farmers diversify their income so as not to be harmed too much from any one uncontrollable event.

Farmland lost to development

About 95,806 acres (or 18.5%) of Spartanburg County's land was farmland in 2017. This is down from 101,917 acres (or 19.7%) in 2007. Although there was a drop between these years, acreage of farmland has fluctuated since 1997 and declined since 2002. Overall, farmland has been lost at a rate of about 755 acres a year in Spartanburg County between 1987 and 2017 (2019 Comprehensive Plan for Spartanburg County). Almost one third of the county was suitable for farming in 2012 in terms of prime farmland, and about one fifth was farmland of statewide importance. However, according to Natural Resource Conservation Service data, less than one fourth of the soils in the county were prime farmland in 2014 (see Figure 36).

Figure 36. Suitability of Land for Farming in Spartanburg County



Source: 2019 Comprehensive Plan for Spartanburg County

Figure 37 Spartanburg County Farmland Characteristics 1987-2017

Farmland	1987	1992	1997	2002	2007	2012	2017
Number of Farms	1,010	1,015	1,067	1,412	1,242	1,138	1,433
Acres in Farmland	118, 451	107,058	106,937	126,377	109,917	101,849	95,806
Average Size of Farm in acres	117	105	100	90	89	78	67
Median Size of Farms in Acres	N/A	N/A	51	48	N/A	40	28

Source: USDA Census of Agriculture

Current land use regulations in the county do not prioritize conservation of farmland, nor do they require sustainable agricultural Best Management Practices (BMPs) to be used in order to sustain healthy farming soils. There is development occurring beyond the municipalities, and development patterns have fragmented land so that there are no longer large tracts of land available to farm that are not already being farmed. This does not preclude farming, but it does make it difficult to acquire land to start a new large-scale farm. Most farms in Spartanburg County in 2012 were 40 acres or less, and there has been a decline in the size of farms in Spartanburg County since at least 1997. Around a third of the farmland was used for crops in 2012.

- It is imperative to work with Spartanburg County to advocate for preservation of farmland and farms before all of our farmland is lost.

Local farmer spotlight: Thicketty Mountain Farms

So much can be gleaned from diving into a personal story. The Spartanburg Food System Coalition is meeting with producers in the Spartanburg County area to discuss the challenges and initiatives that could increase access to healthy food and strengthen our local food system.

Our research team spoke with Sallie Hambright-Belue, who runs Thicketty Mountain Farms with her husband and co-owner, Brent Belue. Due to lack of available farmland, Thicketty Mountain Farms, located in Cowpens, SC, is split over two locations. It is a small-scale family farm that produces grass-fed beef and sustainably grown vegetables that can be found locally at the Swamp Rabbit Café & Grocery, a local supplier that sells to local restaurants, other suppliers, and the general public.



Brent Belue and Sallie Hambright-Belue on their farm on the Cleveland Preserve.
Source: Thicketty Mountain Farms

Sallie and Brent are innovative farmers and leaders in their work. They are engaged with the farming community and enjoy sharing their work and thoughts about farming. Not unlike other farmers, Sallie and Brent have jobs outside working on their farm. Sallie met with us over the phone to discuss the successes and hurdles of producing and selling meat and vegetables in Spartanburg's local market.

Definition of Local Foods: Thicketty Mountain Farms does not restrict its definition of local to a mileage count; Sallie and Brent have a few different ideas of what local actually means. They define local foods as any product produced within the region, the state of South Carolina, and/or within 2–3 hours' drive outside of the state (e.g., Asheville and Charlotte).

A Producer's Key to Success in The Local Market Defined by Thicketty Mountain Farms:

Patience: Farming is a career that takes a lot of patience, and Thicketty Mountain Farms has learned this over the years. It is important that farmers realize there is a long road ahead of them to profitability; with learning over time, patience is the main key to success.

"My advice to new and beginning farmers is to not quit your day job and be prepared to be very patient."

—Sallie Hambright-Belue



Trust: Farmers take pride in the product that they harvest, and building a personal relationship with the buyer is very important. After the farmer and buyer mutually agree on the quantity and price of the product, it is in the buyer's hands. Sallie Hambright-Belue stated, "We have a lot of trust in Swamp Rabbit Café & Grocery because the more money that they get for my product, the more money they make. We trust that they will get the best price, and if they have to cut the price they always make sure to call for approval first."

Challenges:

Weather Predictability: Weather is a critical factor for all farmers, and recently the weather conditions in South Carolina have become increasingly unpredictable. Keeping up with real-time weather forecasts and having more accurate weather predictability can help producers make more informed decisions that affect their yield and income. Thicketty Mountain Farms states that in terms of weather predictability, "our best seasons were spring and fall without a question, but this is a huge issue that we can't control."

Markets: According to Thicketty Mountain Farms, the market for selling product in this area is challenging and needs to be strengthened and grown. The farm currently sells all of its produce directly to the Swamp Rabbit Café & Grocery or the FoodShare Program in Spartanburg and all of its beef on the commodities market (with the exception of 7–8 cows that are sold to the Hub City Farmacy, a local restaurant and meal delivery service).

Sallie Hambright-Belue: "Farmers markets are a good way to make money as a producer, if you have the time to spare and more standardized type products demanded by individual consumers (when compared to chefs who want specialty products). Unfortunately, with other jobs and children the farm faces a large time constraint. As for the beef, we sell a lot on the commodities market, and we have been using LeMaster's [Grain & Cattle Farm]

in Gaffney. We have not had any problems with doing this because when you sell beef you want to sell it by the head and not have to go through paying a processor—waiting to get the product back from them, then trying to sell the product to someone else.”

Thicketty Mountain Farms has chosen to step away from direct-to-consumer marketing and decided that the most profitable marketing strategy is direct-to-supplier. In Sallie’s words, “We like being in the field; that’s what we like to do.”

Costs: “The costs faced by farmers is a cashflow nightmare.” The low prices and rising input costs that are faced by farmers are not sustainable for a profitable business. Farmers have to pay for every single thing before they ever see a dime. Considering the unfavorable weather conditions, low market prices, and high operating expenses, maintaining a successful farming business takes a lot of determination, patience, and sacrifice. Thicketty Mountain Farms successfully learned to manage this cashflow nightmare by deciding what marketing channel was most beneficial (commodities market and trusted suppliers) and by being very patient with timing.

“I am not in a hurry to be in a race to the bottom.” — Sallie Hambright-Belue

Management of Labor: Dedicated, hardworking farmers have a passion for what they do—they would not be doing it if they didn’t. This theory is not the case for all farmworkers. Working on the farm for many people is not the most enjoyable job, typically because most of the work is very strenuous and is oftentimes seasonal. Farmers are not able to pay their workers high wages because they are not making much money as employers. They also must offer time-consuming training even for the more experienced employee.

Other Discussions:

Certifications: Thicketty Mountain Farms has no specific certifications, although its owners are prepared to become GAP certified if necessary. Sallie and Brent have not sought GAP certification because no one has expressed to them that, if the farm became certified, they would buy certain quantities at a certain cost.

Product Variety and Quantity: When they began selling their product to Swamp Rabbit Café & Grocery, Sallie and Brent tried to drop variety and increase quantity. Over time, however, they realized this method was not the best option for the local market demand. They found that the wholesale market in the Spartanburg area has a demand for specialty products, so they increased variety and decreased quantities produced.

Processor Demand: Thicketty Mountain Farms does not do in-house processing, nor is it interested in sending product to a local processor.

Aggregation, Processing, and Distribution

Our local infrastructure

The coronavirus pandemic in 2020 highlighted the weaknesses in our local food infrastructure. People scrambled to adapt. As grocery stores and Emergency Food Providers ran out of food, people turned to local retailers and farmers. At least one market closed their restaurant, continued selling frozen goods, and added groceries. When people connected with local farmers, the farmers could not keep up with the demand. But not everyone connected with local farmers, because they simply did not know how. Similarly, some farmers did not know how to connect with the public. Farmers that were very successful already had communication channels in place with local consumers.

A retail store for local foods and a coordinated system of stores for local foods would have been very helpful during this pandemic. The local supply chain is much shorter and quicker than our ubiquitous global food supply chain. Spartanburg would benefit from further developing its system of local markets as well as tying into the existing SC Food Hub Network. These steps would allow us to get products in from around the state and circulate our own products throughout the state. Anecdotally, people have expressed interest in having access to an online market for local foods.

- Look into creating an online food hub like MarketMaker or Catawba Fresh Market. Consider whether it makes sense to tie this into the SC Food Hub Network.

Developing this local food infrastructure would necessitate a “buy local” marketing campaign, wholesale training for farmers, cold storage, processing, refrigerated trucks, an online market, a food hub, and relationship-building between farmers and consumers as well as among local markets.

During the coronavirus pandemic, people realized they may have difficulty getting food in the future, and they began creating their own hyperlocal food supplies by planting gardens and acquiring chickens. Shipments of chicks were being sold within hours as opposed to days.

Processing and distribution

Processing and distribution come in many forms. In the produce section of the grocery store, for example, fruits and vegetables have been washed, labeled, and bundled. Some of our schools serve fresh fruits and vegetables for snacks, and they are required to be individually packaged. Any meat that is consumed has been processed, even if it is just butchered for sale. These are examples of minimally processed foods.

Highly processed foods, on the other hand, are often created in a factory and have many added ingredients. Generally, the more processing a food goes through, and the more ingredients that are added, the lower nutritional value it has. The opposite is also generally true—the less processed a food is, the more nutritional value it has. So the kinds of foods and processing we would prefer to see in Spartanburg would be minimally processed foods.

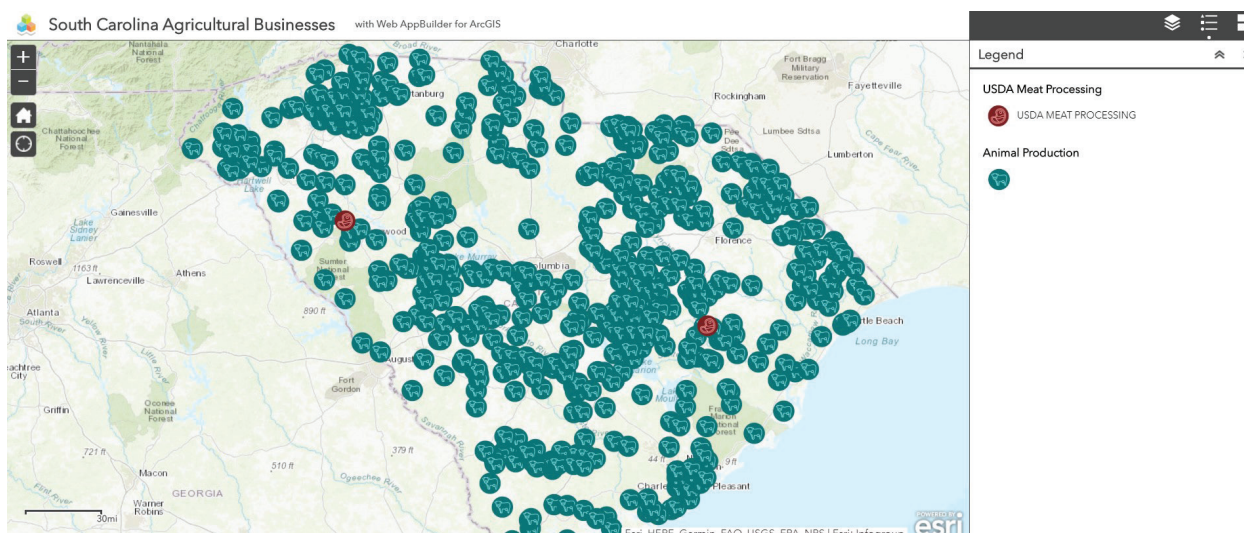
Figure 38. Processing and Distribution Facilities in Spartanburg County

Processing and Distribution		
Employer Establishments, 2016 County Business Patterns	Spartanburg	South Carolina
Farm Product Raw Material Merchant Wholesalers	2	36
Grocery and Related Product Merchant Wholesalers	15	311
Food Manufacturing	15	222
Animal Food Manufacturing	-	11
Sugar and Confectionery Product Manufacturing	-	11
Fruit and Vegetable Preserving and Specialty Food Manufacturing	1	16
Dairy Product Manufacturing	1	10
Animal Slaughtering and Processing	2	51
Bakeries and Tortilla Manufacturing	8	87
Other Food Manufacturing	3	27

Source: US Census Bureau County Business Patterns and US Census Bureau Nonemployer Statistics

Meat producers in the Upstate have shared that they are in need of a reliable and trustworthy meat processing facility. This has been a need for several years, and it was exacerbated when a processor closed down in the fall of 2019, sending farmers scrambling to get their turkeys processed for Thanksgiving orders.

Figure 39. USDA Meat Processing Facilities Versus Animal Production in South Carolina



Source: SC Food Policy Council's SC Local Food System Road Map

Nine of the respondents to the Producer Survey raise proteins, and beef is the most common ($n=7$). Three respondents raise chickens, 2 raise pork, 1 lamb, 1 goat, and 1 aquaculture. Five of the respondents who specialize in beef indicated that they face no barriers when processing their livestock. Two respondents who raise beef, pork, and chicken indicated that the processors nearby are not consistent and are not USDA certified.

There has been discussion of vegetable and fruit processing, as well as a DHEC-certified kitchen for processed products, being needed in the Upstate for years. There are extensive food regulations that make home preparation difficult or impossible. Value-added products require permits to make and most must be prepared in a DHEC- or SC Department of Agriculture (SCDA)-certified kitchen.

According to the University of Maryland Extension, value-added products are defined by the USDA as having:

- "A change in the physical state or form of the product (such as milling wheat into flour or making strawberries into jam).
- The production of a product in a manner that enhances its value (such as organically produced products).
- The physical segregation of an agricultural commodity or product in a manner that results in the enhancement of the value of that commodity or product (such as an identity preserved marketing system)."

Renting certified kitchen space in Spartanburg is a challenge. People are unsure where DHEC-certified kitchens can be found, if and when they are available to rent, and how much they cost to rent. It is possible to work out deals with church kitchens or restaurant owners, but circumstances can change in these situations. We could only locate one potential DHEC-certified kitchen to rent in Spartanburg, but the owners did not return our calls. A couple of locations have said they would consider allowing community use in their facilities, but they are not centrally located and use would need to be coordinated around their schedules. To promote the creation and sale of value-added products in the county,

- we recommend establishing a commercial kitchen that can be shared and rented to food businesses.

Generally, as in processing, the longer the distribution chain is, the less likely food is to hold its nutritional value. Also, the longer and more complicated the distribution chain, the more opportunity for problems in the chain. This became very apparent during the coronavirus pandemic. One example is the distribution chain for milk. According to a *Reuters* news article, if milk was present in the grocery store, it was limited to one gallon per order, while dairy farmers were pouring out their milk. This issue is similar to that of other products in grocery stores with long and complicated distribution chains. As stated in the *Reuters* article: "Mass closures of restaurants and schools have forced a sudden shift from those wholesale food-service markets to retail grocery stores, creating logistical and packaging nightmares for plants processing milk, butter, and cheese. Trucking companies that haul dairy products are scrambling to get enough drivers as some who fear the virus have stopped working. And sales to

major dairy export markets have dried up as the food-service sector largely shuts down globally.” This is why we need to strengthen and scale up our local food system—to shorten processing and supply chains.

Currently, much of the product grown or raised in SC is shipped outside the state, and we import into the state most of the food we eat (*Making Small Farms into Big Business*). Furthermore, much of the food in Spartanburg County is grown for livestock. An ideal situation would be farmers making a good living while growing and distributing their products locally. Extra food would be circulated into the regional and global markets, and our supply would be supplemented by foods grown regionally and globally. However, we need a guaranteed food supply in times when the national and global systems break down.

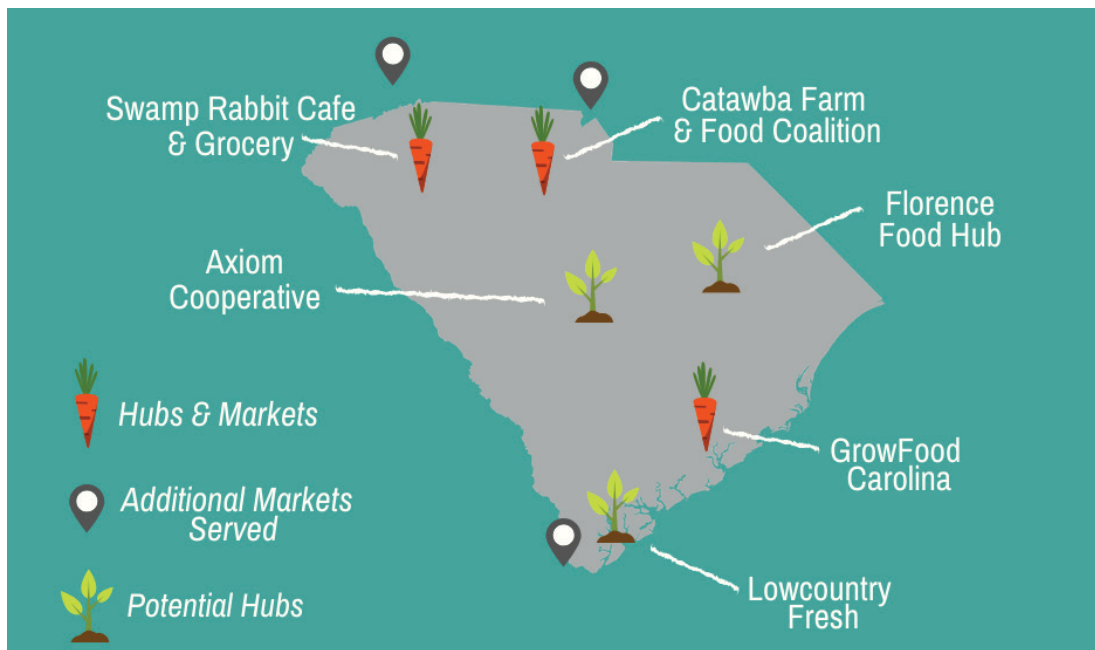
In a 2016 survey of 22 local and regional small farm owners (most from western SC and southwestern NC and 95% of whom have less than 500 acres), 45.5% (10 farmers) said that they would sell their products to a wholesale market. Fifteen farmers (68.2%) said they would sell their products to a facility that would market and distribute for them. Since then, two food hubs have been established in the Upstate, with a network of four hubs across the state. However, wholesale consumers we spoke with who were interested in buying local food did not know that the SC Food Hub Network existed, nor did they know about the two hubs in the Upstate from which they could purchase. Some wholesale consumers require farms to be GAP certified. The existing food distributors in and near Spartanburg County are not focused on marketing local food or strengthening the local food system. Although they distribute some locally grown food, they market what is available at the best price, including food from other parts of the nation and the world.

- The Spartanburg Food System Coalition should coordinate an awareness campaign to wholesale consumers letting them know of the SC Food Hub Network and about Swamp Rabbit Café & Grocery (the closest food hub to Spartanburg).

SC Food Hub Network

In 2011, GrowFood Carolina, the first food hub in South Carolina, was established in Charleston. Its parent organization is the Coastal Conservation League. Over the years, four more hubs emerged in the state. Recently one hub backed out, and there are now a total of four hubs. In 2017 the SC Food Hub Network was created through a USDA Specialty Crop Block Grant.

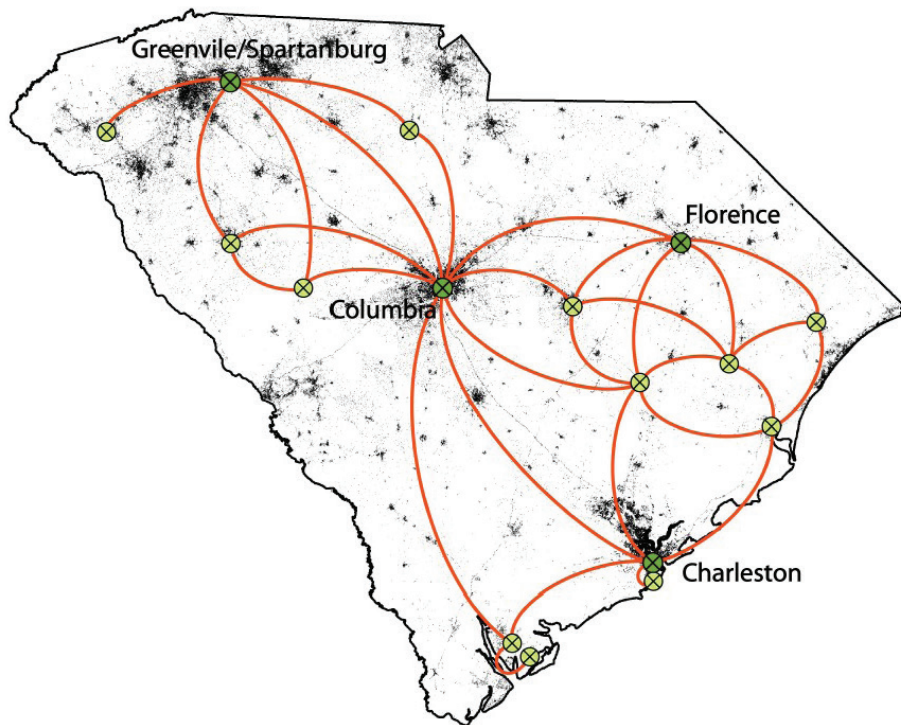
Figure 40. SC Food Hub Network Map



Source: <https://www.scfoodpolicy.org/roadmap>

The purpose of the Food Hub Network is to coordinate aggregation and distribution of local food across the state. As popular crops are determined, production is coordinated. The Network has also begun incorporating crops from North Carolina and Georgia. The food web of “hubs” and “nodes” (as illustrated in Figure 41) is a concept introduced in the *Making Small Farms into Big Business* report.’

Figure 41. Potential Food Hubs and Food Nodes in SC Concept Map



Source: *Making Small Farms into Big Business*

The hubs, illustrated in dark green, in this picture are similar to the established SC Food Hub Network. Before the coronavirus, Swamp Rabbit Café & Grocery made deliveries to three restaurants each week in Spartanburg. FoodShare Spartanburg aggregates local and nonlocal produce for their program, and Taylor Boys' Produce also aggregates and distributes local and nonlocal produce.

Spartanburg has the opportunity to increase the amount of local food being grown and consumed locally. Several institutions in Spartanburg County are interested in utilizing local food, but they just did not know how or that the SC Food Hub Network existed and the Swamp Rabbit could fill this need. One way to increase the local food market is to utilize partnerships with the SC Food Hub Network. Hub City Farmers Market began its 2020 Mobile Market routes in the beginning of April. Hub City supplemented food obtained from market farmers and its Urban Teaching Farm with food supplied by Swamp Rabbit. This is exactly how this network was intended to function: when one part of the state is low on product, other regions of the state can supplement the area with their products.

Ten respondents to the Producer Survey indicated interest in selling products to a facility that marketed and distributed the products for them and that specialized in local products. When asked about the conditions under which they would be willing to sell to a facility that marketed and distributed their goods, a majority of respondents indicated that access to new markets (n=8), similar or better overall profitability (n=6), substantial time savings (n=5), and an opportunity to diversify (n=1) were important. A 2016 Producer Survey of Spartanburg area farmers also indicated farmers' interest in selling food to a wholesaler or to a facility that marketed and sold their product for them (2016 Farm-to-School Feasibility Study for Spartanburg Area Conservancy).

- A value-chain coordinator should provide the coordination for growing, processing, and selling food locally in the Spartanburg community. A value-chain coordinator coordinates the aggregation and distribution of food with or without a physical space to store the food. In other words, in some cases aggregation and distribution can be accomplished through trucking and logistics without a warehouse space.

Food Hub Spotlight: Swamp Rabbit Café & Grocery

Swamp Rabbit Café & Grocery defines itself as the following: a grocery store, a café, an artisan bakery, a pizza restaurant, a butchery, a gathering place, and a food hub. And the business even provides cooking classes. Co-owner Jac Oliver met with our team outside of the pizza restaurant to discuss the successes and hurdles of procuring and selling locally grown products in the area.

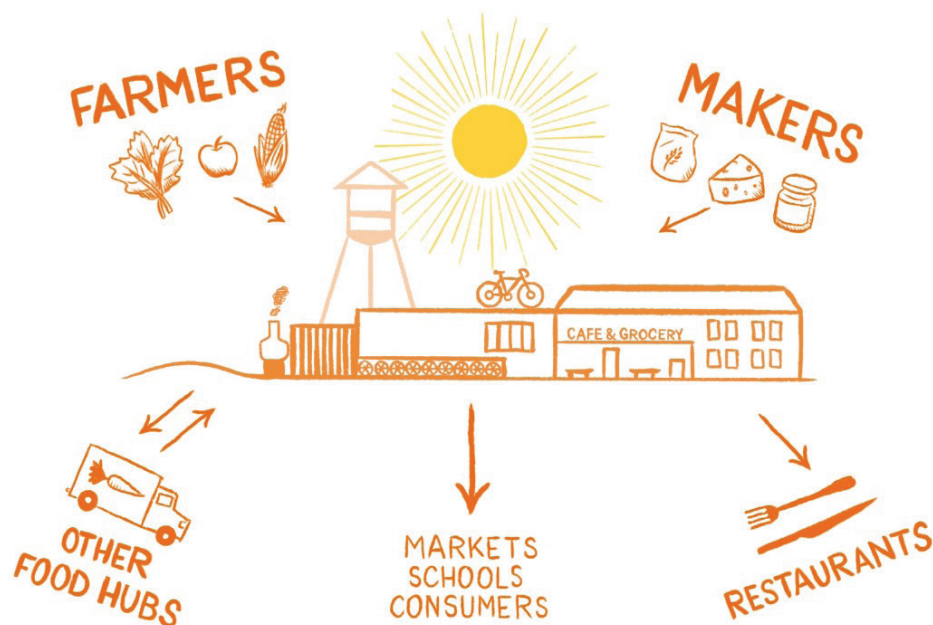


Co-owners Jac Oliver and Mary Walsh in front of Swamp Rabbit
Source: blueridgeoutdoors.com

Definition of Local Foods: Swamp Rabbit Café & Grocery owners Jac Oliver and Mary Walsh find value in knowing where their food comes from and how it was made because this is more than a job to them. When defining local they typically say within a 150-mile radius of their location, but more importantly they want to ensure that the product can be source identified and comes from relationship-based sources (i.e., small sustainable farms in the state).

Sources of Local: Building a personal relationship with farmers is an important part of negotiating the price and quantity that a distributor will buy from the farmers. Swamp Rabbit Café & Grocery currently invoices around 150 farmers and 300 vendors. Oliver and Walsh try to purchase any local products that are readily available to them, not only for the grocery store but also for their restaurant and café ingredients. If they have other nonfood products that are available to them locally, they will pay a premium price for it.

Figure 42. Swamp Rabbit Café & Grocery's Illustration of Its Food Hub



Source: Swamp Rabbit Cafe & Grocery

Product Line Percent Local Breakdown:

(This is an estimated guess from Jac Oliver and doesn't include all products offered.)

Pizza Restaurant:

99% of pizza

Almost 100% of pizza is sourced locally, with the exception of a little yeast and sugar used to make the dough.

Grocery and Café:

100% of meat

100% of eggs

70-80% of produce

20% of dairy

Marketing "Local": The Swamp Rabbit Café & Grocery's motto is "eat local"; local is integrated in the business's brand and is a part of who Oliver and Walsh are.

Oliver and Walsh believe that transparency is very important. Transparency not only enhances the food chain but also strengthens consumer loyalty. The process of tracking the source of an item after it leaves the farm is almost impossible without proper labeling and identification. Therefore, Oliver and Walsh provide their customers with a sign on each product that was produced locally giving the name of the product and the town that it was produced in.

Swamp Rabbit's food hub products must be source identified as well; every box that comes through the door has a label on it saying where the product is coming from. Producer profiles are made available to the general public on the company website. Often customers will reach out to the staff for a more detailed explanation about where their food comes from; therefore, Swamp Rabbit trains employees to provide customers with information on sources. Oliver and Walsh also do a lot of farm visits, write stories on the producers, and post them on their social media pages, helping give the community transparency. Café products are listed with the source in the sales system in case someone asks.

Farm/Agricultural Producer Requirements: Oliver and Walsh ensure that they are transparent with all practices possible; therefore, they require a farm visit before purchasing from a producer. Although they prefer the practice of organic farming, they do not make it a requirement. They have contracts with some farms, and proximity to the store is a priority.

A Retailer/Distributor's Key to Success in the Local Market Defined by Swamp Rabbit Café & Grocery:

Listen to the Community: It is important to have a community-driven mindset that focuses on the needs and wants of the community, and Swamp Rabbit Café & Grocery decided to do just that. By spending 16-hour workdays at the Café, Oliver and Walsh were able to listen to the needs and wants of the community and stock their shelves accordingly. The prices and quantities of the products offered through their food hub have been determined by the needs and wants of local restaurants and chefs. This is how they have grown over time and continue to grow in the community.

Take Action: The employees of Swamp Rabbit Café & Grocery all have an interest in local foods. Feeding the community with fresh, tasty, and wholesome food is no small task, and it takes hard work and dedication from every employee to get the job done.

Trust: Maintaining farmer relationships is another key to success for any wholesale distributor. Therefore, Swamp Rabbit Café makes sure to maintain a personal relationship with producers. A simple price negotiation is not sufficient to maintain a good foundation between the distributor and producer—they must trust each other and build a strong relationship. Producers must be responsible and reliable and must maintain high quality products in order to minimize the chances of shortages or excess supply. The more visibility and communication you provide throughout the food chain process, the more effectively you can manage it. At the café, producers frequently stop by and are greeted by the friendly staff; they may even get a free coffee and scone during their visit. This strong foundation in the food chain decreases the amount of waste and mistrust among producers and suppliers.

Profit: Being for-profit has allowed the Swamp Rabbit Café & Grocery to stay focused on financial sustainability in the long run for funding.

"This year alone we have already spent over \$1,000,000 on local food."

-Jac Oliver, Co-Owner

Challenges:

Weather Predictability: Swamp Rabbit Café & Grocery tries to predict what products are going to be readily available throughout different growing seasons so it can meet customers' wants and needs. The café and restaurant rely on ingredients from local farmers, and the menu has to be changed according to seasonality and availability.

Price: Purchasing local food and knowing where it comes from means the food will typically be fresh and healthy and the local economy will be supported by keeping dollars local. Although, local food comes at a premium price, which retailers and wholesalers must justify for consumers. For example, why should consumers purchase locally produced bacon for \$9.00/lb when they can buy it for \$5.00/lb somewhere else? It is difficult to explain to consumers that while purchasing cheaper alternatives to local food saves them money in the short term, it costs the local economy and the planet in the long term.

Inventory Consistency: Wholesale buyers face many product supply and demand problems throughout each growing season. A large problem that many wholesale buyers face is having acceptable quality, quantity, and price.

Management of Source-Identified Products: One of the most challenging tasks is making sure that a product is source-identified from the farm to the table, reducing the information gap between the producer and consumer. The Swamp Rabbit Café & Grocery has successfully accomplished traceability. The food is labeled upon arrival and then sent to local businesses or shelved with an appropriate sign. When products need to be moved around, what happens if the signs are not moved with them? The Café has found that making sure the source information follows the product is extremely difficult, and the staff would love a more efficient way to provide source-identified products.

Marketing and Sales

Food system marketing means all of the activities involved in getting food from the farm to the table (e.g., advertising and arranging products for sale). Marketing strategies are always shifting because food systems are always shifting. Farm size, consumer wants and needs, specialization, federal policies, and technology all contribute to marketing (USDA, Farm Size and the Organization of U.S. Crop Farming).

Different sized farms generally perform different marketing tasks because they have different consumers. Marketing for large-scale commodity farmers looks very different from marketing for small farmers making direct-to-consumer sales. With the average farm size in Spartanburg in 2017 being 67 acres and the median size being 28 acres, the majority of our farms are likely to be considered small and midsized.

Making Small Farms into Big Business teaches us that food grown in SC is mostly shipped out of SC, and Spartanburg is no exception. The Coalition wants to determine the level of interest Spartanburg County farmers have in shifting markets to more local outlets and what they would need to accomplish that pivot.

A majority of the respondents to the Producer Survey indicated that their primary markets are located in Spartanburg and the surrounding area (Greer, Lyman, the Upstate, and Shelby, NC). Five respondents were willing to travel up to 25 miles, and 5 were willing to travel up to 50 miles to deliver their products to market. Three stated they would travel 100 miles, and one would travel more than 100 miles to deliver products.

The respondents in the survey utilized a variety of sales channels. All respondents utilized direct consumer sales (e.g., farm stand, CSA, or farmers market), with 8 indicating that 50% or more of their sales were direct to consumer. Nine respondents utilized wholesale channels (6 allocating 20% or less of their entire sales to wholesale), five respondents sold direct to restaurants (2 allocating 50% or more of the product to restaurants), and four respondents utilized food hubs (all allocated 20% or less of their sales to the food hub). When asked whether they sold all of their product in an average year, 10 respondents stated they did (yes=10, no=4).

When asked about obstacles they experienced in selling their products, the most common response was time constraints (n=7), followed by short shelf life of product (n=4), post-harvest handling and processing (n=4), lack of consumer willingness to pay (n=4), and lack of consumer knowledge about how to prepare the product (n=4). Cost of marketing and advertising (n=3), competition with larger producers (n=2), out of state competition (n=1), cost of accepting debit/credit cards (n=1), and access to market (n=1) were also mentioned.

A 2016 survey of Spartanburg area farmers showed that 15 out of 22 respondents would sell to a facility that marketed and distributed for them. The same survey showed that 10 out of 22 respondents would sell to wholesale markets (2016 Farm to School Feasibility Study for Spartanburg Area Conservancy).

Food hubs help to mitigate the time constraint barrier in marketing and selling products for farmers, and for farmers willing to sell wholesale, selling to a food hub is a good option. In the Spartanburg area, we are encouraging local growth and consumption of fruits, vegetables, and whole grains, and building the market chain for this could be attempted. It is happening successfully in other areas of SC, such as in the Greenville and Charleston areas as exemplified by Swamp Rabbit Café & Grocery and GrowFood Carolina.

Nine of the respondents stated that their farms are Certified South Carolina Grown. When marketing their products, respondents use the following descriptors: local (n=13), South Carolina Grown (n=8), integrated pest management (n=5), sustainable (n=4), grass fed (n=3), free range (n=3), pasture raised (n=3), raw (n=2), heirloom/heritage (n=2), organic (n=1), and 100% chemical free (n=1).

All respondents indicated that they use social media (Facebook, Twitter, Instagram) to market their products. Ten stated that they have a farm website, six utilize online directories, two provide on-farm tours, and one uses agritourism. Many respondents were interested in obtaining GAP (Good Agricultural Practices) certification (n=5). Four respondents expressed interest in obtaining certification in good handling practices. One respondent was interested in certification for animal welfare and another was interested in certification for organics. The 2016 survey also indicated farmers' interest in obtaining GAP certification (15 out of 22 respondents).

- Because many institutions require products to be GAP certified, and several farmers in the area have expressed interest in becoming GAP certified, support for certification should be offered in Spartanburg County.

Local Food Vitality Index

During the development of this report, the University of Kentucky and Clemson University were developing a related report and measurement of the vitality of local food called the Local Food Vitality Index. The purpose of their report is to establish a method for measuring the vitality of local food in several communities in the country and to measure baselines for those communities' perceptions of the vitality of local food in their communities. The report provides insight about the market-oriented, social, and infrastructural aspects of what makes a vibrant local food system and, since it has been implemented in other communities, helps stakeholders compare perceptions across local food systems in different localities. As a result of Clemson's involvement in both this Assessment and the Local Food Vitality Index, South Carolina's Upstate was included in the Local Food Vitality Index research. In the near future, there will be a Spartanburg County-specific report. The Local Food Vitality Index report will help to target local food marketing strategies.

- We recommend referring to the Spartanburg County report, as well as the entire Upstate report, when developing the "Eat Local" campaign for Spartanburg County.
- If we are to understand the change of perception about local food in Spartanburg County, this study will need to be implemented again every few years. Because the Food System Coalition intends to focus on local food in the coming years, we would expect respondents to perceive a more vibrant local food system the next time the study is implemented.

Wholesale Consumers

This section identifies wholesale consumers' attitudes toward the local food system in Spartanburg County. The Spartanburg Food System Coalition interviewed wholesale consumers in Spartanburg to understand their current practices and identify procurement barriers. Consumers included institutions and retail outlets. After conducting the interviews with key stakeholders interested in harnessing the benefits of a viable local food system, the Coalition synthesized the results to provide information on gaps and barriers that exist in the current local food system. The following wholesale consumers were interviewed:

- Hub City Hospitality
- Spartanburg Regional Hospital
- Spartanburg School District 6
- Swamp Rabbit Café & Grocery
- Taylor Boys' Produce
- Wofford College

What Is a Wholesale Consumer?

A wholesale consumer, or wholesaler, is a merchant middleman who deals in food wholesaling. Food wholesaling is a component of food marketing in which goods are assembled, stored, and transported to customers, including retailers, foodservice operators, other wholesalers, government, and other types of businesses (USDA Economic Research Service). Wholesale consumers who purchase local food products provide access to smaller quantities of products for retailers and the end consumer. Many farmers typically lack the capacity to access retail, institutional, and commercial foodservice markets on their own, and wholesale consumers make it possible for many producers to gain entry into larger-volume markets and provide them with opportunities to increase production quantities (USDA Agricultural Marketing Service). Wholesale consumers are imperative to the local food system because they drive local food producers to scale up the production of high-quality products that are demanded in their local food system. Utilizing a marketing approach that focuses on the consumer's desire to promote social improvement by purchasing local products, many wholesale consumers emphasize social or environmental mission values, such as

- supporting the local economy by creating jobs for local workers from farm to fork;
- protecting resources for future generations (e.g., land preservation, decreasing pollution, and lowering transportation costs);
- increasing the availability of affordable, nutritious, and local food products; and
- recognizing that the people who make your food, farmers, are the backbone of a community food system.

Defining Local and Regional Foods

Some operations define local as food products that are produced and consumed within specific geographic boundaries, a specific mile radius, or within the same geographic region. Wholesale consumers that promote and market local food products buy farm products that originate from producers that are located within their operation's definition of local.

The first interview question asked wholesale consumers to define local or regional foods, and the answer was almost identical across the board. The majority of interviewees defined local and regional foods as being within a specific mile radius from a centralized geographic location. Three of the six interviewees defined local and regional foods as being consumed within a 150-mile radius of the geographic production location, and one defined local as being within a 200-mile radius. One respondent defines local and regional foods by geographic boundaries, saying "local food products" are sourced from farms located in South Carolina, North Carolina, and Georgia. Contrarily, another interviewee first sources fruits and vegetables from a personal organic garden and greenhouses and then from wholesalers if the supply does not meet volume requirements. Due to immediate demand and large quantity requirements, one interviewee cannot be too particular about whether food is sourced locally or not. When she runs out of personal food supply and must source food products from wholesalers, her definition of local conforms to the wholesaler's definition of local.

Sourcing From Local Producers

Local food is becoming increasingly popular as consumers become more concerned about where their food comes from and how it is made. Many wholesale consumers purchase all or the majority of their products specifically from local producers because they value supporting a sustainable food system that allows local farmers to thrive. We found that the majority of wholesale consumers interviewed do source their products from local producers, and the ones who do not said it was due to the food safety regulations of their institution. These interviewees must purchase all food products from a reputable supplier and prefer Good Agricultural Practices (GAP)-certified sources. Most institutions serving at-risk populations, such as hospitals and schools, require many food safety requirements that are difficult to attain for the small-scale local producers in the county. Therefore, it is easiest for institutions to purchase from wholesale consumers who can ensure all necessary requirements are met before the time of distribution.

- Farmers in the Spartanburg area could benefit from support and technical assistance to help them obtain certifications such as GAP or Good Handling Practices.

Marketing Local

When it comes to selling local farm products directly to customers, marketing is imperative. In order to be feasible, farmers must be able to sell bulk quantities of their product to intermediaries, including wholesale consumers, at a high enough price to cover their costs and maintain a profitable operation. Selling to wholesale consumers becomes feasible when the product reaches a certain scale and direct-to-consumer sales are no longer worth the time and effort. It is also important to make local food products more appealing to consumers through marketing techniques that enhance the value of the products for consumers and make consumers more willing to pay a premium price. It currently costs the small and medium-sized farming business more per unit to grow and market local products because they are not growing them at the large scale that farmers in the national and global markets are. This value-added price tacked onto local food items is not to increase the profits of one business, but to support local producers, wholesale buyers, processors, and distributors while at the same time keeping all operations involved in the value-added food chain supply profitable.

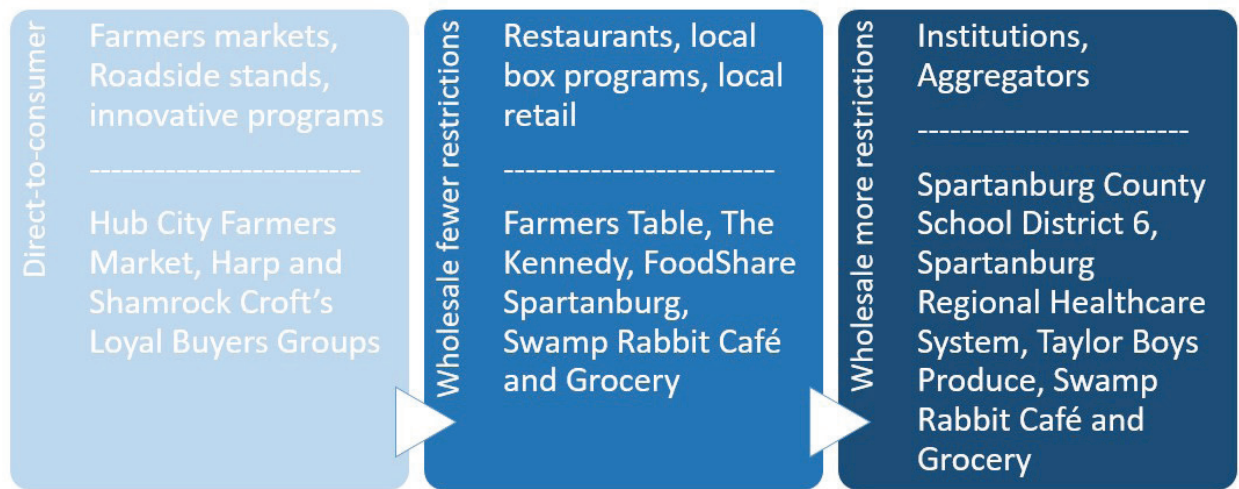
The wholesale consumers that sell local food products direct-to-consumer make sure to highlight the local attributes of these products to make these items more desirable to consumers. Although marketing these value-added products as local can be time intensive, it provides significant rewards if done correctly. Some of the interviewees do not necessarily focus on marketing their products because they are processing and serving the food to their captive consumer groups that do not have choices of products. These institutions mainly focus on compliance with state and federal food safety regulations and inspection requirements.

Producer Requirements

Before wholesale consumers-retailers or institutions- can purchase any product, they must ensure they are meeting all food safety regulations, manufacturing requirements, and labor, packaging, and transportation costs for the market they are serving. Retail stores provide farms with access to different consumer segments and a guaranteed buyer, which in return evens out the income variability often experienced by reliance on direct-marketing channels. Four interviewees revealed that for a producer to become a supplier for their institution, the farm must be GAP-certified and meet specific USDA, volume, and processing requirements. These strict requirements explain why there are limited small-farm suppliers for these operations, restricting access to local products for customers who do not have the means to purchase these products directly through other marketing channels.

Retail outlets, on the other hand, do not have strict requirements for producers to become suppliers for their companies. These interviewees indicated that they do not require GAP certifications; instead they ensure that the producer is fully transparent with all agricultural practices. The differences in requirements between retail and wholesale outlets suggest a marketing continuum along which farmers can learn new skills, obtain training and certification, scale up their operations, and sell to continually different and larger markets. Moving along the marketing continuum and scaling sales can be accomplished through coordinated technical assistance between organizations and programs like Clemson Extension's SC New and Beginning Farmer Program, Spartanburg Community College's Sustainable Agriculture Program that focuses on small-scale farming, Hub City Farmers Market, Carolina Farm Stewardship Association's and Clemson Extension's GAP certification and other trainings, local restaurants, local farming organizations, and local institutions.

Figure 43. Spartanburg Market Continuum Examples



Source: Spartanburg Food System Coalition

Challenges

Throughout the interviews, there were significant differences in the answers between institutions and retailers. However, there were two questions that produced similar responses from all wholesale consumers across the board. When asked, "what are the main challenges you have found in purchasing local food," interviewees reported the following answers:

- Product availability (products are typically grown seasonally and may not be available to purchase easily in the quantities needed by the consumer at any given time)
- Product variability (i.e., large quantities of one product one week and none the next)
- Price (i.e., being able to market and sell products at a premium price)

When asked, "what would help you purchase more local foods," interviewees reported the following answers:

- Local producer contacts and other market resources and information
- Product availability
- Decrease in prices
- Adequate supply volume

Answers to questions regarding the challenges and necessities of purchasing local food products were very similar: all responses mentioned price being the main limitation and decreasing the prices would provide them with more accessibility to purchasing more local food products.

- Issues of product availability, product variability, price, local producer contacts, and other market resources and information could be addressed with a value-chain coordinator who could technical assistance to farmers and institutions to increase production and purchases of local foods. A value-chain coordinator coordinates the aggregation and distribution of food with or without a physical space to store the food.
- Support and grow educational and technical assistance programs (e.g., GAP certification, wholesale training, and farm-to-institution trainings) for producers and institutions that bring both sides together to understand one another's needs.

Food Waste and Recovery

Food recovery refers to food that is not used and is either donated or composted. According to SCDHEC, about 40% of food in the US is never eaten. It is not only food that is being wasted: consider all of the resources it takes to get food from the farm to the fork. Knowing that we are wasting resources and that food, agriculture, and land use are the second highest contributors to greenhouse gases (Project Drawdown), we need to lessen food waste to lower unnecessarily emitted greenhouse gases. In Spartanburg County, there are two businesses (Food

Donation Connection and the nonprofit Ruth's Gleanings) that glean, or make connections to glean, unused food. Gleaning refers to gathering and redistributing unused food. The food is picked up from kitchens, farms, grocery stores, and restaurants and is dropped off at shelters and emergency food organizations.

Atlas Organics is the only composting company in Spartanburg County. It operates pickups of food scraps from large-scale customers like colleges and businesses and services residences with its service called Compost House. Atlas has grown significantly since its inception at Wofford College in Spartanburg in 2015, and it now serves locations in South Carolina, North Carolina, Georgia, and Tennessee. Atlas also works directly in schools, teaching students what goes in the compost bin and what goes in the trash can during lunch. The success of Atlas Organics is a testament to the value that people place in food recovery and composting.

Unlike trash and recycling services, composting is not subsidized and costs the consumer more to implement. However, when our landfill nears or reaches its capacity in 2040, composting may become more mainstream. Austin, Texas, has a robust waste-reduction program, and the city passed an ordinance recently that requires organic waste to be diverted from landfills. The city offers a variety of options for managers and owners to implement the diversion, including donating and composting. This ordinance is something that should be considered for Spartanburg.

To maximize the use of resources in our food system, it is imperative that we educate people on food waste and recovery.

- Partner with DHEC's Don't Waste Food SC campaign to educate people on food waste and encourage new habits.
- Work with Spartanburg County government and municipal governments to divert food waste from landfills.

Figure 44. SWOT Analysis of Spartanburg County's Food System

SWOT Analysis of Spartanburg County's Food System	
Strengths	Weaknesses
<ul style="list-style-type: none"> ▪ Number of local food and healthy food-related projects and organizations shows the interest in food systems work ▪ Growth of FoodShare Spartanburg ▪ Vitality of Hub City Farmers Market ▪ Growth of fruit and vegetable production ▪ Growth of direct-to-consumer sales ▪ Restaurants that utilize local food ▪ Formalizing and coordination of the Spartanburg Food System Coalition 	<ul style="list-style-type: none"> ▪ Federal food-related policies do not support the growth and production of whole foods like fruits and vegetables ▪ Amount of whole foods produced for human consumption in Spartanburg County is inadequate to meet a future increase in demand ▪ Average age (near retirement age) of farmers in the county, with no local plan in place of recruiting & training young farmers & no local plan in place for farm succession ▪ Shrinking acreage of farmland ▪ Lack of coordination and focus on connecting and strengthening the local markets
Opportunities	Threats
<ul style="list-style-type: none"> ▪ Continued coordination of food system stakeholders through Spartanburg Food System Coalition ▪ More funding and focus on local and healthy food than ever before ▪ Coordinated effort to bolster local and healthy food within Spartanburg and in partnership between the Upstate region and the state ▪ Assisting farmers in scaling up their production through the existing markets in Spartanburg 	<ul style="list-style-type: none"> ▪ Changing weather makes production and harvest unpredictable in an already challenging business of farming ▪ Political climate and tariffs add unpredictability to the market ▪ Federal support of commodities used to produce highly processed, unhealthy food ▪ Pandemic leading to a shift in production, distribution, and availability ▪ Farmland lost to development