

# Collected Data on the State of the Knoxville-Knox County Food System



NOVEMBER  
2019



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# Introduction

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The Knoxville-Knox County Food Policy Council (FPC), established by resolution in 1981, is an advisory committee to the City of Knoxville and Knox County. It was created to review policies that would promote the availability of nutritious food for all residents. The FPC is supported by representation from both private and public interests, and, as necessary, advises on policies that affect the City and County broader food system.

This document is a report of the Knoxville/Knox County food system based on available data. It is comprised of key statistics identified by both appointed FPC members, FPC associate members, and broader community stakeholder input from annual retreats in 2017 and 2018. Previous analyses and assessments of the area food system were published as part of the FPC's Community Research Findings and Recommendations document in 2013. The FPC's 2013 guiding document looked at the food system through two primary lenses:

- Food Access (Insecurity)
- Farm to Fork (Economics and growing)

While there are a number of factors that play into the broader health of a food system, this report focuses on the available data to establish the context for discussions rather than creating a set of recommendations. The above two categories serve broadly to provide consistent context for the metrics included in this document. They served as the framework for discussing our food system whether it be growing, selling or eating.

For perspectives on the intersection of health and diet, the FPC refers to the Knox County Health Department's Community Health Assessment. This document provides context and identifies priority health issues for Knox County. It can be found on the Knox County Health Department website (<https://knoxcounty.org/health/cha.php>)





# Growing

The feedback from the 2013 community research identified a discrepancy between affordable and healthy food options between various sections of Knox County. Two of the key questions posed in the 2013 Community Research Findings and Recommendations were:

1. How can we significantly grow the demand for local, healthier food?
2. How do we significantly grow the capacity of the local farming economy?

The subsequent sections identify various performance indicators of a local agricultural performance. Per the community discussions in 2012 and 2013, it makes comparisons of the local food system based off availability of space to grow and general performance of farming activities.

### Agricultural Activity

Based on the 2017 USDA National Agricultural Statistic Service (USDA-NASS), number of farms, land in farms, and average farm size have not changed significantly since FPC last looked at impacts to the food system <sup>1</sup>. Compared to 2012 assessments, the total number of farms rose by 125 to a total 1,037 in 2017. Similarly total acreage of land in farms rose by 2,036 acres to a total of 67,383; however the average size of farms went down by approximately 7 acres <sup>2</sup>. The reduction in average farm size reduction follows a similar trend at the state level which saw a reduction in average farm size of 5 acres. That trend is reflected when comparing distributions in farm size between 2012 and 2017 <sup>3</sup>.

<sup>1</sup> [https://www.nass.usda.gov/Publications/Todays\\_Reports/reports/fnlo0419.pdf](https://www.nass.usda.gov/Publications/Todays_Reports/reports/fnlo0419.pdf)

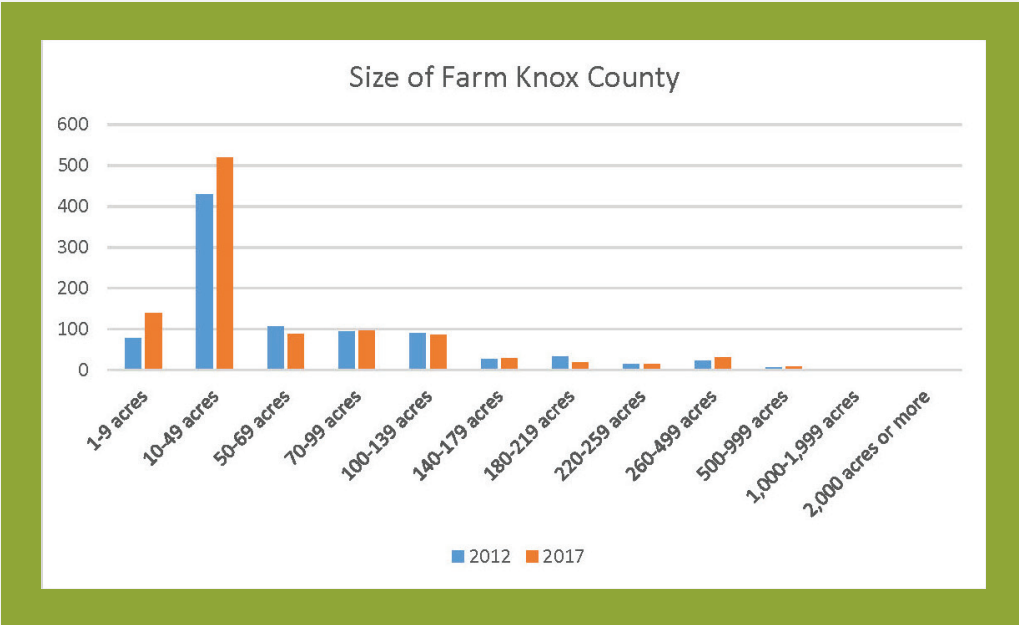
<sup>2</sup> [https://www.nass.usda.gov/Publications/AgCensus/2017/Full\\_Report/Volume\\_1\\_Chapter\\_2\\_County\\_Level/Tennessee/st47\\_2\\_0008\\_0008.pdf](https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1_Chapter_2_County_Level/Tennessee/st47_2_0008_0008.pdf)

<sup>3</sup> [https://www.nass.usda.gov/Publications/AgCensus/2017/Full\\_Report/Volume\\_1\\_Chapter\\_2\\_County\\_Level/Tennessee/tnv1.pdf](https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1_Chapter_2_County_Level/Tennessee/tnv1.pdf)



	Knox	TN
<b>Farms 2012</b>	912	68,050
<b>Farms 2017</b>	1,037	69,983
<b>Avg Size 2012</b>	72	160
<b>Avg Size 2017</b>	65	155
<b>Land in Farms 2012</b>	65,347	10,867,812
<b>Land in Farms 2017</b>	67,383	10,874,238

# Growing



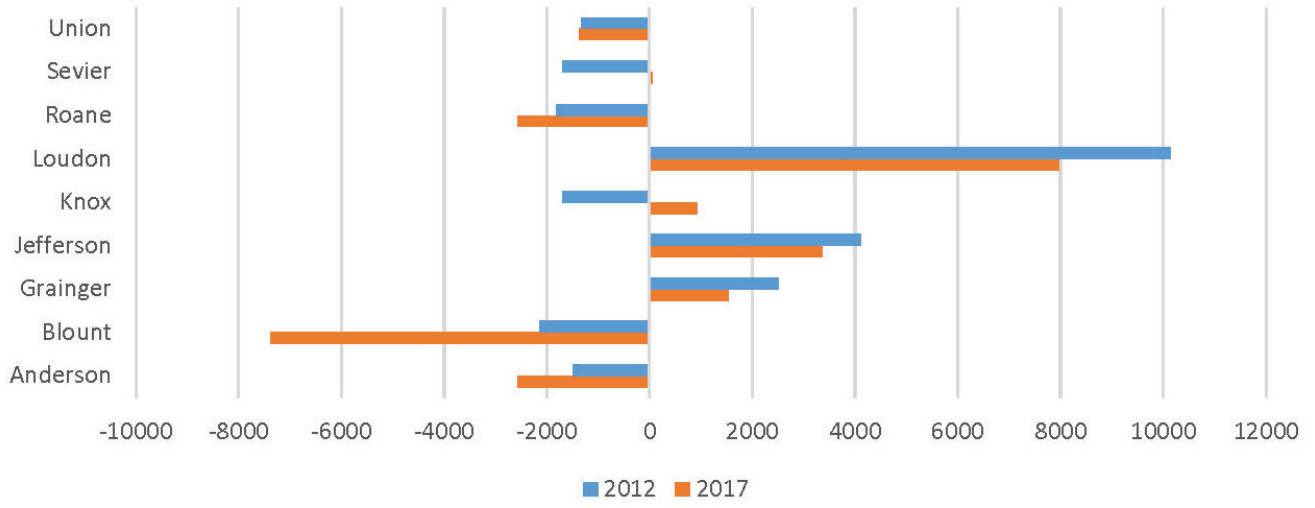
The last assessment came on the tail end of The Great Recession and reported larger reductions in land in farms from previous censuses. While all lost acreage and farms have not returned, the agricultural economy in Knox County does show signs of economic recovery. The net cash incomes of Knox County farms estimated at \$923,000 in 2017 compared to the losses of -\$1,689,000 reported in 2012<sup>4</sup>. Economically, Knox and Sevier Counties were the only two in the nine-county area that reported increases in net farm income in 2017. Of the eight surrounding counties, half reported annual losses<sup>5</sup>.



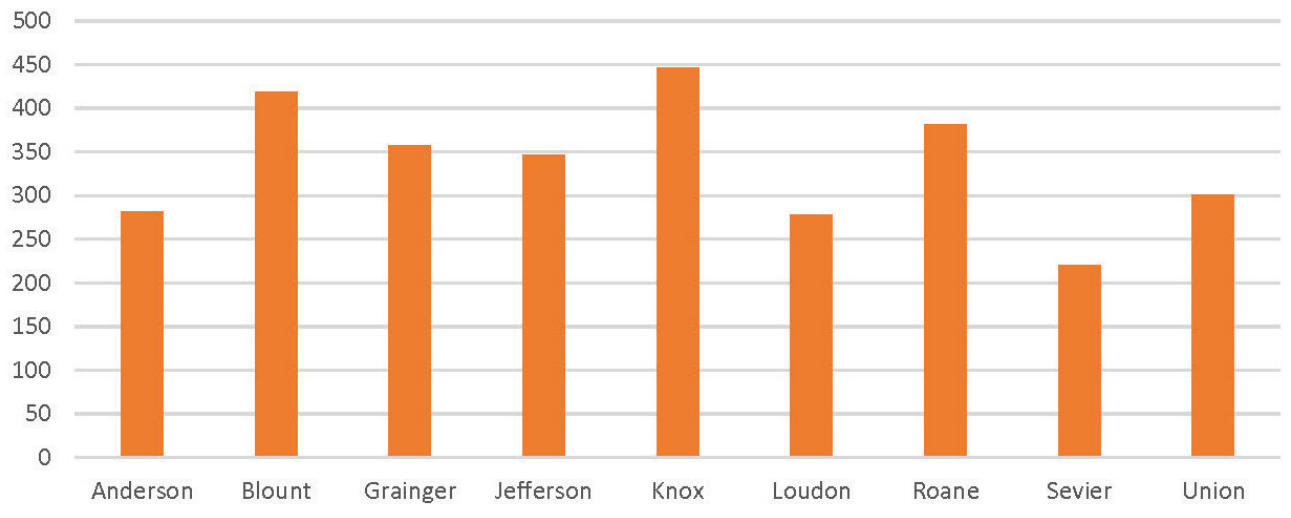
<sup>4</sup>[https://www.nass.usda.gov/Publications/AgCensus/2017/Full\\_Report/Volume\\_1,\\_Chapter\\_2\\_County\\_Level/Tennessee/st47\\_2\\_0004\\_0004.pdf](https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_2_County_Level/Tennessee/st47_2_0004_0004.pdf)

<sup>5</sup>[https://www.nass.usda.gov/Publications/AgCensus/2017/Full\\_Report/Volume\\_1,\\_Chapter\\_2\\_County\\_Level/Tennessee/st47\\_2\\_0057\\_0057.pdf](https://www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_2_County_Level/Tennessee/st47_2_0057_0057.pdf)

### Net Income (\$1,000)



### New or Beginning Producers 2017



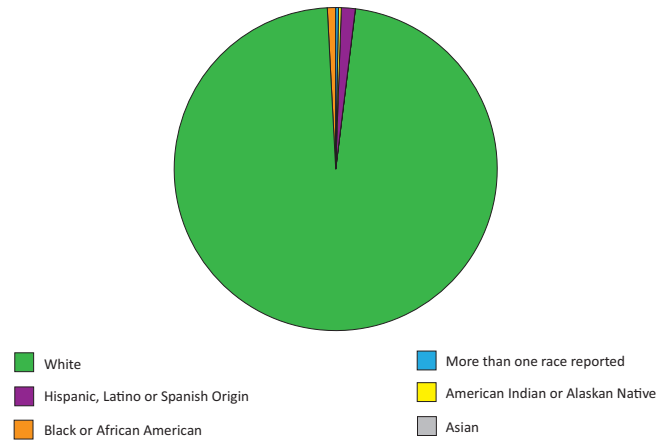


# Growing

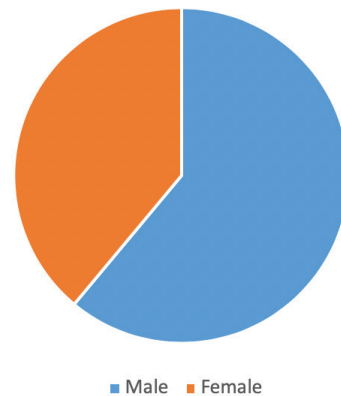
Demographics of Knox County producers closely follow trends at the state level. Per the 2017 agriculture census, 97% of farms (n=1030) had a white producer. Of minority groups represented, those with a Hispanic, Latino, or Spanish Origin were represented in approximately 1.1% (n=12) of Knox County farms, followed by a Black or African American producers represented at 0.7% (n=7). Similarly, distribution of male and female producers in Knox County also mirrors trends across the state. Farms with a female producer make up approximately 38% of the total in Knox County (n=598), and farms with a primary female producer is slightly lower at 32% (n=938).



### Race by Farm (Knox County)



### Producer Gender (by farm)



## Accessible Growing

One of the key themes from the community feedback of 2013 was that people living in Knoxville and Knox County should have ample opportunities to grow their own food. From that feedback, the City of Knoxville drafted and led a series of policy changes to enable “urban agriculture” uses throughout the City’s zoning ordinance. Those policy recommendations, adopted in 2015, created a consistent framework for individuals to start their own community gardens or for-profit market gardens.

The City does not require a permit for individuals wanting to start a garden; however, it has undertaken a voluntary community garden listing. Thanks in large part of the Tennessee Master Gardeners program and the Knoxville-Knox County Community Action Committee, Knox County is home to more than 26 community gardens. The number of gardening plots vary by size and interest year-over-year, but more than 100 gardeners participate in these programs located in parks, churches, and private property each year. Community growing spaces are essential to increasing personal growing options for low-income residents.



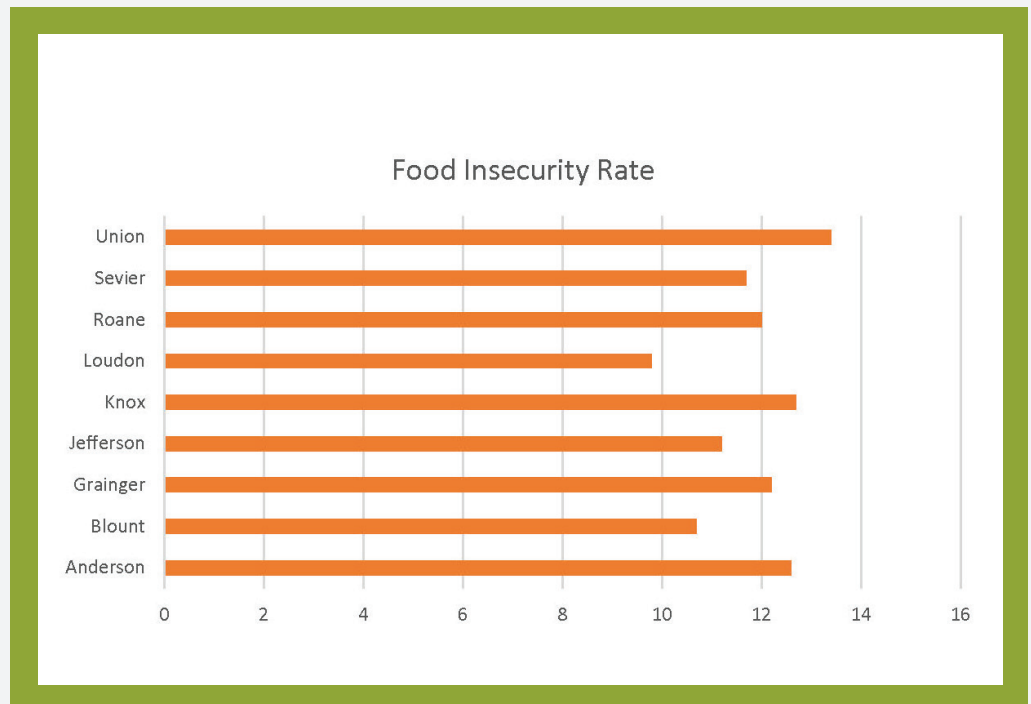


# Eating

The 2013 report focused primarily on providing food accessibility but did not dive deeply into the statistics of food hardship. During the community input process in 2012 and 2013, the Food Research and Action Center (FRAC) rated Knoxville as 17 among the top 100 metropolitan areas for food hardship. Per their 2018 report, FRAC lists Knoxville as 55th. The broader community input from the 2017 and 2018 retreats identified a need for more in-depth knowledge of food insecurity in Knox County. The subsections below are meant to provide more nuance to the question of “What is food insecurity in Knox County?”

## Food Insecurity Rates

Ensuring that food insecurity is a marginal concern is one a core goal of the FPC. According to data retrieved from Feeding America, Knox County’s food insecurity rate was 12.7% in 2017. While this is below the state-wide rate of 13.9%, it is the second highest of the adjacent eight counties <sup>6</sup>. That translates to an estimated 57,220 food-insecure persons of the 452,286 population for that reporting period, and is an affected population higher than the other eight counties aggregated food insecure estimates (n=46,920). Knox County (and the eight county area) are very close to the national average of 12.3% <sup>7</sup>.



<sup>6</sup> [https://public.tableau.com/profile/feeding.america.research#!/vizhome/2017StateWorkbook-Public\\_15568266651950/CountyDetailDataPublic](https://public.tableau.com/profile/feeding.america.research#!/vizhome/2017StateWorkbook-Public_15568266651950/CountyDetailDataPublic)

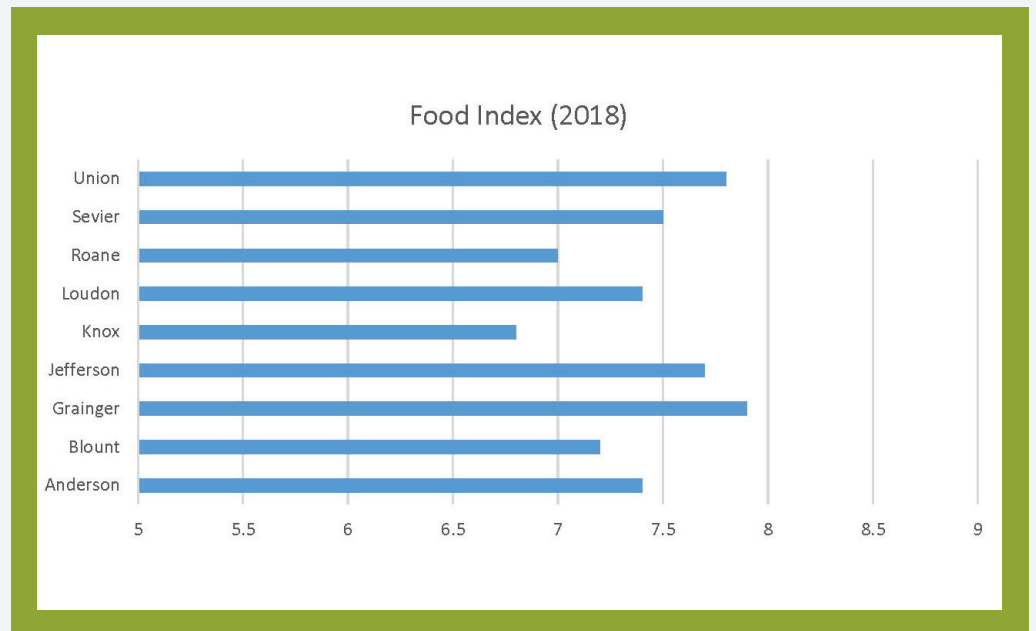
<sup>7</sup> <https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/key-statistics-graphics.aspx#foodsecure>

# Eating

The FPC has long been supportive of senior feeding programs in Knox County and has had representation from the Knoxville-Knox County CAC's Mobile Meals program for more than 25 years. Senior nutrition continues to be an area of need for Knox County. The Tennessee Commission on Aging and Disability (TCAD) uses the Food Environment Index (FEI) as a key indicator of senior nutrition. The FEI estimates the percentage of a population that is low



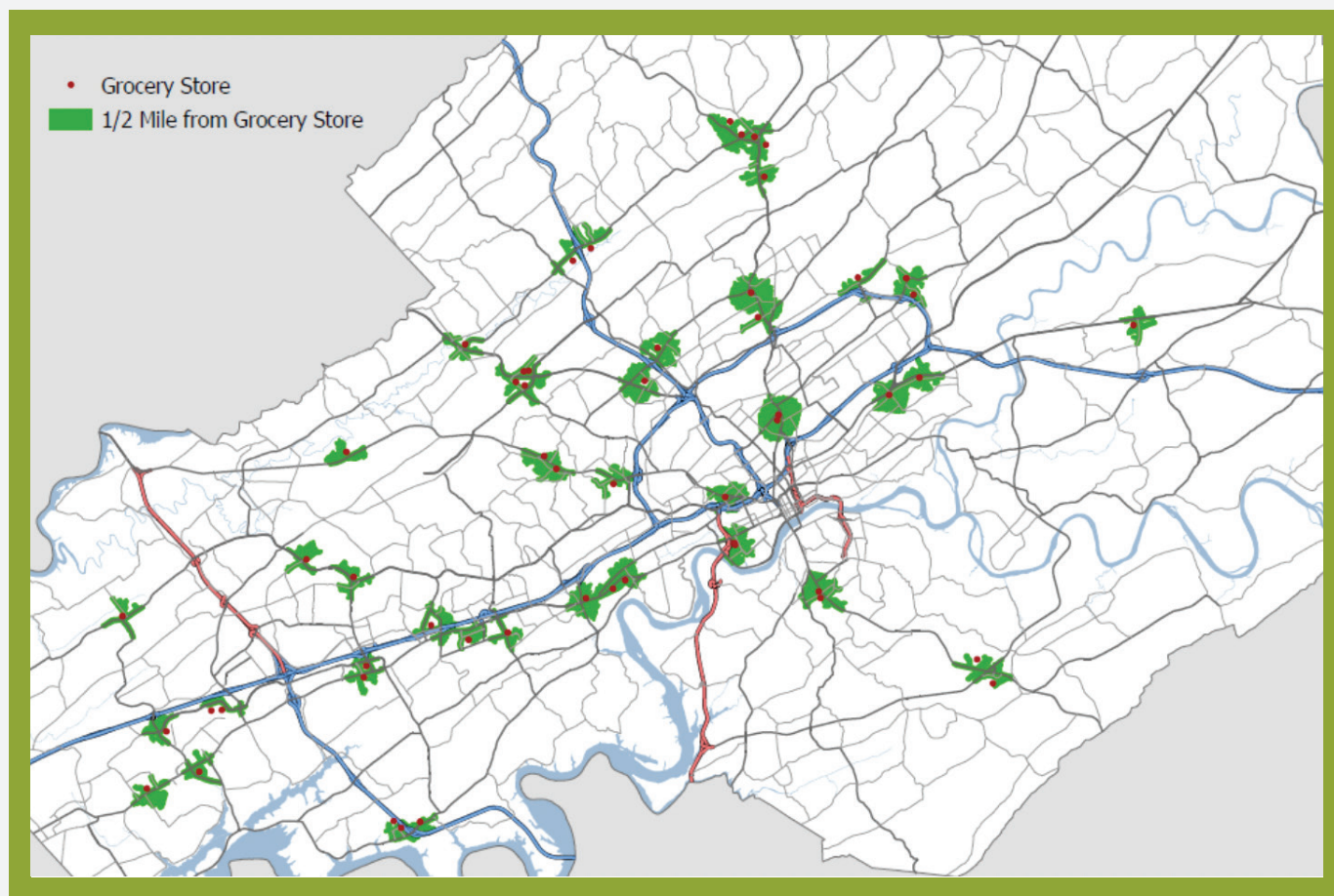
income and does not live close to a grocery store and is modeling using information from the Community Population Survey, Bureau of Labor Statistics, and American Community Survey. The scale ranks communities from 0 (worst) to 10 (best). Knox County received a Food Index rating of 6.8 in 2018. It was the lowest of all surrounding counties, and the only county that received a score below 7<sup>8</sup>.



<sup>8</sup><https://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-model/health-factors/health-behaviors/diet-exercise/food-environment-index>

### Fresh Food Availability

Community members and FPC appointees frequently discuss the availability and accessibility of healthy food in our community, especially in low-income neighborhoods. While the term “food desert” applies to several area neighborhoods—too many residents live too far from affordable fresh food--small-scale, community-based solutions are unlikely to succeed at removing that designation. Assembled from data gathered from Knoxville-Knox County Planning, the map below shows availability of grocery stores and an approximate half-mile footprint by road.



# Eating

## Emergency Food

Calculating the exact amount of emergency food distributed throughout the community is difficult in part of how it is distributed to people in need.



Second Harvest of East Tennessee is the region's largest distributor of emergency food. Through their programming and partnerships, Second Harvest served more than 203,000 unique individuals in an 18-county region that includes Knoxville, in 2017.

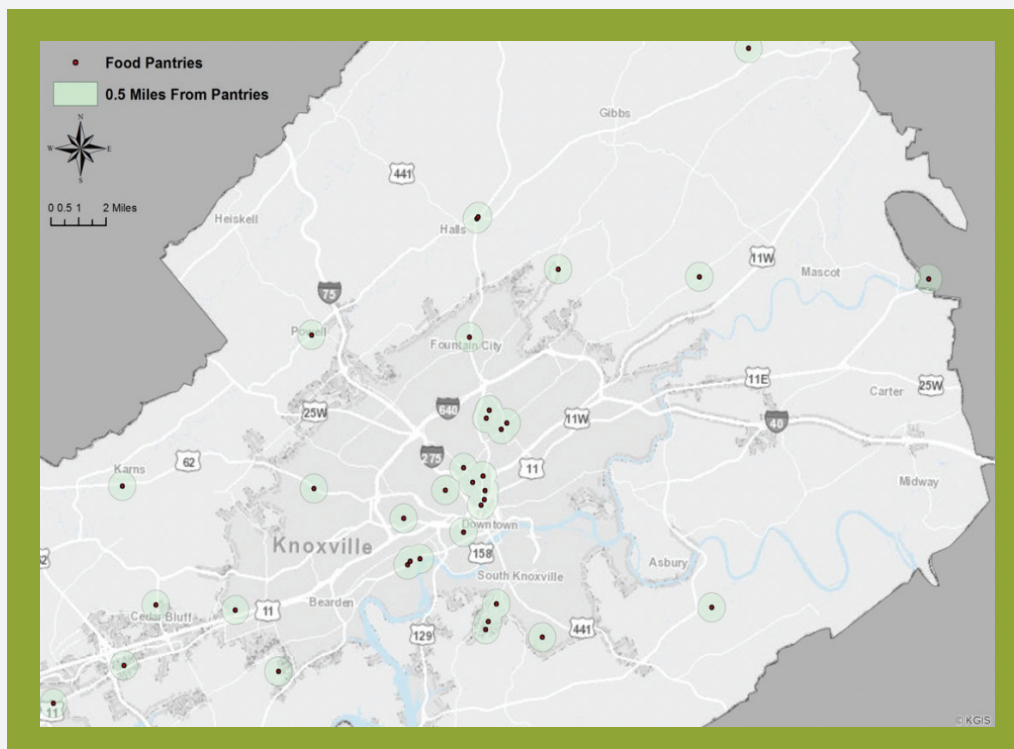
While Second Harvest provides an excellent product to food pantries, not all active pantries participate in their programs and are therefore not measured among Second Harvest's served population.



The Knoxville-Knox County Community Action Committee's (CAC) Emergency Food Helpers program manages, as a source for referrals, a list of small and large food pantries including approximately 60 different groups in Knoxville, primarily churches and non-profits agencies.

Not all of these entities participate in Second Harvest food programming due to their desire to serve a smaller population, like a congregation.

Emergency food is also distributed through Knoxville County Mobile Meals, operated by CAC's Office on Aging. They have reported a consistent need for meal delivery to homebound individuals since the FPC 2012 report. Mobile Meals participation has risen 27% since 2014. They served 1,717 individuals with 363,000 meals in FY2018.



# Eating

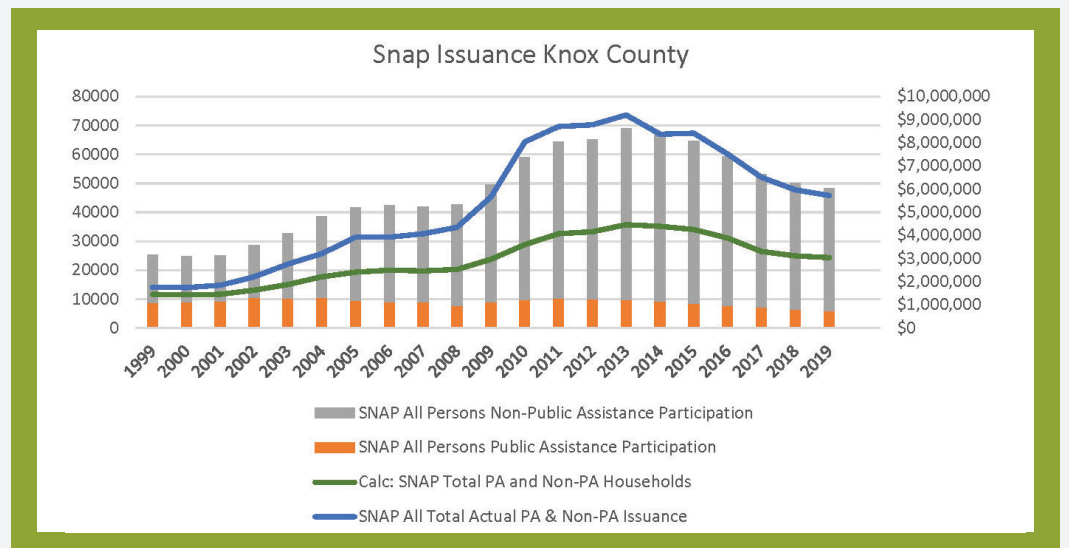


## SNAP Impacts

Rates of resident participation in the federal Supplemental Nutrition Assistance Program (SNAP) is often used to estimate an area’s food need. Tennessee has relatively high participation in SNAP; the state is ranked in the top 15 for household participation, persons served and benefit distribution. SNAP participation has steadily increased over time across the nation, operating in cycles where large spikes of enrollments are followed by gradual reductions. The average monthly benefit to participating households in Tennessee is about \$250—only about \$5 below the national average. Per the most recent reports made in April 2019, Tennessee participation rates in SNAP are down approximately 7% with approximately 428,677 Tennessee households enrolled in the program 9.

The local participation rate for Non-Public Assistance (NPA) spiked during the Great Recession and began to taper off in 2013. Overall participation is lower today than in January 2012 and has steadily declined since 2013. In 2018 and 2019, more individuals are participation in Non-Public Assistance (e.g. Temporary Assistance to Needy Families/TANF) than in Public Assistance (e.g. SSI income) programs. The number of households has gone down by approximately 11,000 since 2012 (n=24,316), and are more comparable to levels from 2009 (n=23,742).

Since 2012, local programs have increased SNAP recipients’ spending power for fresh fruits and vegetables. From 2016 to 2018, local farmers’ markets and stores participated in a SNAP doubling program through the AARP Foundation’s Fresh Savings program. This program distributed more than \$25,500 in “doubled” dollars to SNAP recipients to be used to purchase fresh fruits and vegetables. When AARP’s program concluded, the doubling of SNAP dollars continued thanks to a partnership between Nourish Knoxville and the Fair Food Network with funding from the State of Tennessee and local sponsors called the Double Up Food Bucks program.





# Eating

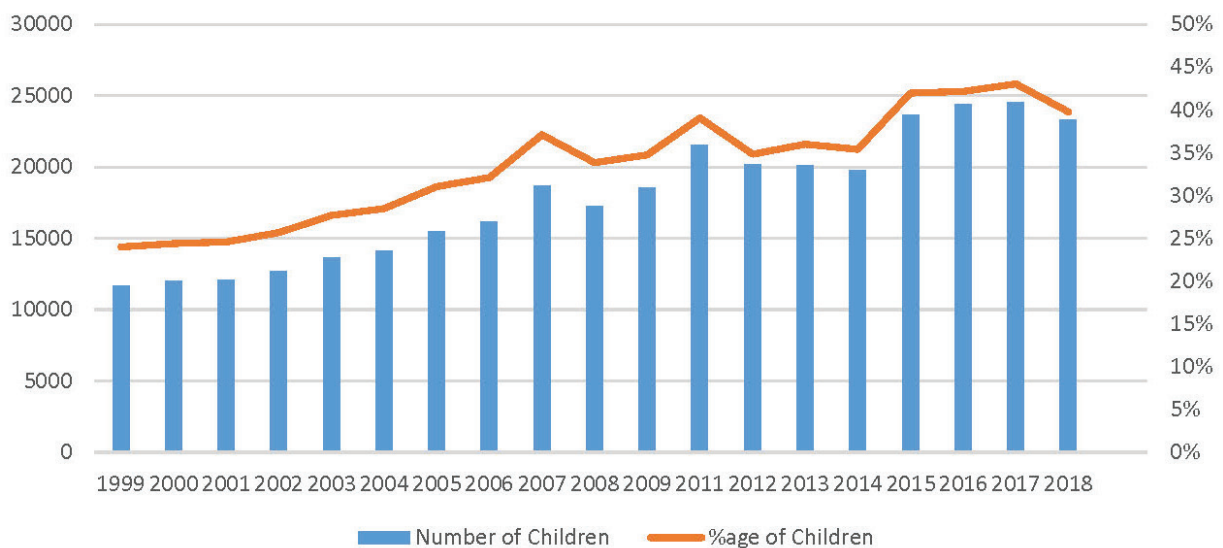
## Child Food Insecurity

The FPC has long been a proponent of addressing child food insecurity, including support for a Nutrition Education Specialist for Knox County Schools in 1993. Well-funded free and reduced-price lunch programs can do a lot of help with child hunger issues, and their participation rates are an indicator of the size of need in our community. The Healthy, Hunger-Free Kids Act of 2010 allowed the USDA to significantly overhaul school lunch and breakfast programs. Community Eligibility Provisions (CEP) eliminated individual school meal applications for participating schools in low-income areas. Fifty-four percent of Knox County Schools are CEP schools and provide free meals to all students.

Using resources from the Annie E. Casey Kids Count Data Center, participation rates in free and reduced price lunch programs were examined for the county and state. Knox County has a participation rate of 39.8% (n=23,322 individuals) and is 7 points below the state participation rate of 46.6%<sup>10</sup>. Participation in free and reduced lunch programs have steadily risen locally but have not shown any large spikes from year-over-year as seen in SNAP. When looking at total participation, Knox County students make up only 5% of the total program's enrollees. When comparing participation numbers with Knox County Schools, some explanations behind apparent recent declines in program participation may be attributed to methodology and impacts of reduced meal counts as a result of school closures related to illness and weather.



Participation in Free/Reduced Lunches



<sup>10</sup><https://datacenter.kidscount.org/data/tables/2979-free-reduced-price-school-lunch-participation?loc=44&oct=5#detailed/5/6420-6514/false/37,871,870,573,869,36,868,867,133,38/any/13216,10109>

## Eating

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Using the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) as a key indicator of need for families with children up to the age of 5, there has been a decline in participation and number of children in the program. WIC participation in Tennessee was at its peak during the last FPC evaluation in the year range of 2010-12. During that time, between 167,000 and 178,000 infant or children were certified to receive benefits. Since then, that number has continued to drop annually, and was 124,488 in 2018. This decline tracks more closely with trends seen in SNAP participation<sup>11</sup>.

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<sup>11</sup> <https://datacenter.kidscount.org/data/tables/2999-infants-and-children-receiving-wic-benefit?loc=44&loct=2#detailed/2/any/false/37,871,870,573,869,36,868,867,133,38/any/13222,10115>