

SHAWNEE COUNTY COMMUNITY FOOD SYSTEM ASSESSMENT



March 2017



This report was prepared by Barbara LaClair, of LaClair Consulting Services, under contractual agreement with the Heartland Healthy Neighborhoods coalition of Shawnee County, Kansas.



LaClair Consulting Services

From Data to Information

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EXECUTIVE SUMMARY

Healthy and robust community food systems help to support and sustain healthy communities and strong local economies. The types and amounts of food that are available within a community, and the ways in which that food is presented and made available to members of the community population can exert profound influence on eating behaviors of community members and, in turn, community health outcomes. Food, and the many processes involved in producing it and eventually bringing it to a consumers' table, also generates significant economic activity and jobs within the community.

One of the key steps to understanding a community food systems' current strengths and gaps is to conduct a comprehensive assessment of the food system. This reports summarizes the results of an assessment of the Shawnee County food system. It brings together data and information from numerous secondary data sources with input from community members and stakeholders to create a description of the current food system in the county. Highlights of assessment findings include:

Demographics - Topeka is the capital city of Kansas, and the fifth largest incorporated city in the state. Topeka is located in Shawnee County, in northeastern Kansas, and had an estimated population of 178,792 people in 2015. The population has a median age of 38.6 years, slightly older than the state's median age of 36.0. The Shawnee County population is diverse, with approximately 8% African American and approximately 11% of Hispanic or Latino ethnicity.

Food Production - Outside of the city of Topeka, the remainder of the County is rural in nature, and agriculture has a strong presence. In 2012, there were 826 farms in Shawnee County, occupying a total of 194,000 acres. The number of farms has remained fairly constant between 1997 and 2012, but farmland has decreased by nearly 30,000 acres during the same timeframe. Grain, hay and beef cattle production dominate the Shawnee County farming picture. The average age of Shawnee County farmers in 2012 was 59.8 years. Farmers, both large and small, are finding it difficult to make a living by farming alone. In 2012, more than half (52.8%) of Shawnee County farms reported net losses.

Food Processing and Distribution Infrastructure - There are several large food manufacturing facilities located in the County, including Frito-Lay, Reser's Fine Foods, Bimbo Bakery, and Mars Candy. In addition, U.S. Foods operates a distribution facility located just north of Topeka, and Harvesters and Prairie Land Foods have warehouse facilities located in the County.

The Retail Food Environment - An array of retail establishments sell groceries and prepared foods within the Shawnee County borders. Business databases indicate that there are 18 retail grocery stores, 5 Wal-Mart stores, a Target and a K-Mart store, 11 specialty stores, 66 convenience stores, 18 dollar stores and a number of pharmacies selling grocery items within the County. In addition, there are approximately 140 fast food restaurants operating in the County.

Access to Healthy Foods - Despite the large numbers of businesses selling grocery items, their geographic distribution across the County is not uniform, and substantial numbers of county residents

lack ready access to full-service grocery stores that offer healthy food options. In 2015, nine census tracts within Shawnee County met the definition of a food desert, meaning that a substantial portion of the tract's population was low income and lived more than 1 mile from a grocery store if in an urban area, or more than 10 miles from a store if in a rural area. Approximately 30,000 people live in the nine Food Desert tracts. In addition to access challenges created by distance from a grocery store, a substantial number of Shawnee County residents lack access to healthy food because they cannot afford to buy it. In 2014, an estimated 15% of Shawnee County households struggled just to get enough food for everyone in the home, a condition referred to as 'food insecurity.' More than one in five children (22.6%) lived in households that were food insecure. Approximately 16,000 Shawnee County K-12 students qualify for free or reduced price school meals, and about 24,000 individuals in Shawnee County receive food assistance through the SNAP program each month.

Consumer Eating Behaviors - The diets of most Americans are poorly-aligned with current dietary recommendations, and Shawnee County residents are no exception. We tend to eat more meat and grain foods than we need, and not enough fruits, vegetables or dairy foods. In 2013, about 1 in 4 adults in Shawnee County consumed vegetables less often than one time per day, and about 42% consumed fruits less than once per day. Poor dietary patterns are evidenced by high rates of overweight and obesity among the population (35% obese and an additional 34% overweight), and rates of nutrition-related health conditions such as elevated cholesterol levels and rates of obesity.

Economic Impact - Agriculture and food-related activities have significant impact on the local economy. Shawnee County residents spend an estimated \$492 million each year on food purchases. Estimates from the Kansas Department of Agriculture suggest that agricultural and food sectors employ 7,600 people in Shawnee County and contribute about \$2 billion annually to the county's economy. Food purchases made in Shawnee County with benefits from SNAP and WIC programs (two of the major federally-sponsored food assistance programs) total about \$45 million per year. Government payments to Shawnee County farms total about \$2.3 million annually. And, the 300plus food service and drinking establishments in the County provide employment to approximately 6,400 people.

Food Waste - National studies suggest that as much as 40 percent of all food produced in the United States is wasted. Food waste represents a significant loss of money, and other resources invested in food production. Although local data is not available, projections based upon national per-capita waste figures estimate that about 51million pounds of food are wasted each year in Shawnee County, at a value of about \$65 million.

Promising Practices - The story of food in Shawnee County is not all gloom-and-doom. Throughout the county, there are signs that consumers are increasingly interested eating healthier diets, in knowing what is in their food and where it comes from, and in creating a community food environment that provides all community members with access to healthy food options and is supportive of healthy choices. Businesses and institutions are taking steps toward offering healthier food options for their patrons, and supporting local food producers by purchasing more locally-sourced foods for use in their kitchens. Schools are implementing school gardens, and thinking about how they might incorporate more locally-produced food into school meals. Many positive changes are taking place.

Community Member Perspectives - As part of this assessment, perspectives of approximately fifty community stakeholders were solicited through two 'FEAST' community engagement events. Participants in the events engaged in discussions to identify current assets and gaps in the community food system, and to identify possible next steps. Interest and enthusiasm levels at the two events were high, and numerous ideas and suggestions were generated. Participants expressed support for a local Food and Farm Council, and several individuals indicated willingness to continue their engagement in helping to define and shape the future of the local food system.

Conclusion

The food system that serves Shawnee County is multi-faceted and complex. It has both strengths and weaknesses. Although food is generally abundant in the community, not all food options are healthy and substantial numbers of community members lack access to healthy food options due to either geographic challenges or affordability.

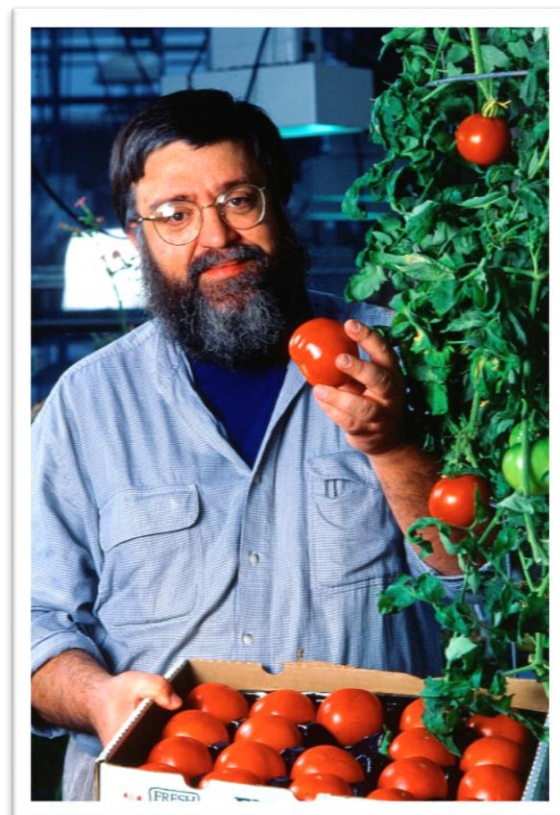
Most of the food consumed by Shawnee County residents is produced in distant locations. The farms that operate within the County produce mostly grains, hay and beef, much of which is sold to distant markets. There are a small number of local farmers/producers selling their farm products to local markets. Some of them would like to expand their operations, but find challenges with access to larger markets and purchasers. Some restaurants, schools and institutional purchasers would like to use more locally-sourced foods in their food service programs but find challenges with identifying prospective suppliers, interacting with multiple small-scale producers, and inconsistent supply streams. The intermediary structure needed to aggregate, coordinate and connect these interests is currently lacking, but a regional food hub that is just getting started in northeast Kansas may help to fill that void.

Multiple measures and data points provide evidence that the diets of most Shawnee County residents are not optimal, and that their health might be improved through healthier eating habits. Results from public health research studies suggest that healthier dietary behaviors can be encouraged by creating "food environments" that make the healthier choices easily identifiable, attractive, available and affordable. This assessment highlights many opportunities for strengthening the Shawnee County food system and creating a food environment that is more supportive of healthy eating opportunities and choices for community residents.

A comprehensive food system assessment such as this one provides a point-in-time snapshot of the community food system that may be useful in establishing a baseline measurement, and in helping local policymakers and advocates understand where community needs exist. The really hard work begins with the next step - establishing priorities and beginning to identify possible solutions that fit the community and are feasible to implement. This is exactly the type of work that a local Food and Farm Council, with diverse cross-sectoral representation is well-suited for. Conversations between participants at the two FEAST events have already begun to identify common interests, and spark collaborations and solutions. A number of local businesses and organizations have begun to implement changes that support local food production and healthier eating for community members. There is a sense of community readiness to embrace change in the local food system. There is no single "Department of Food" or food officer in local government - policies that impact food production and consumers' access to safe and healthy foods are made and enforced across multiple agencies and divisions. A local Food and Farm Council, working in an officially-sanctioned advisory capacity to local policymakers, could fill important roles of continued monitoring and assessment, communication and coordination of efforts, and researching and recommending potential solutions.

INTRODUCTION

Food is a basic human need. Healthy diets that provide appropriate levels of calories and nutrients are essential for good health and active lifestyles. In the United States, there is a plentiful supply of food to meet the nutritional requirements of the population. Despite that plentiful supply, however, many Americans do not eat balanced and healthy diets. Obesity rates have steadily increased over the past several decades. At the same time, a significant segment of the population worries about not having access to enough food. The reasons for this disconnect are complex. Individual eating choices and behaviors are influenced by a variety of factors including cultural backgrounds, taste, food availability and prices, food marketing, food preparation requirements and time constraints, nutritional knowledge and more. In recent years, a growing number of research studies have shown that the food context or environment in which an individual lives can exert profound influence upon that person's eating behaviors. This growing awareness of the importance of community-level food environments, coupled with emerging concerns about food production methods and nutritional quality of available foods, has resulted in growth in the numbers of community-level Food and Farm Councils established for the purpose of building more robust and self-sustaining local food systems that offer access to healthy food choices to all community members.



For many newly-established local food councils or food coalitions, completion of a community food assessment (CFA) is an important early step. A CFA is a process that systematically examines a broad range of community food issues and assets, with the focus usually at a systems level. The purpose of a CFA is to provide an objective basis for developing action plans to build and strengthen the community's food system. A community food assessment can be an important tool to gain a deeper understanding of the community's current food environment. The CFA can help in identifying what is currently working well and where there are gaps or opportunities to strengthen the food system and ensure that all members of the community have access to healthy food options.

The scope and content of a community food assessment may vary from one community to the next depending upon the interests, priorities, and resources of the community stakeholders who commission the process. While some assessments may be comprehensive and include all aspects of a food system, others may be more narrowly focused on specific aspects of the overall food system. This report summarizes findings of the first Shawnee County food system assessment, conducted by the Heartland Healthy Neighborhoods coalition.

HISTORY AND PURPOSE OF HEARTLAND HEALTHY NEIGHBORHOODS

The Heartland Healthy Neighborhoods (HHN) coalition began in March 2008 when five individuals came together to talk about health and wellness issues in Shawnee County. Those individuals, representing five different organizations made the decision to work together to promote a healthier Topeka and Shawnee County. They contacted other community organizations that had an interest in community health and well-being, and the larger group began to meet and organize its activities. From those early roots, the group has grown in size and scope, and has more recently organized into several sub-committees that work to further the goals established in the Community Health Improvement plan. With funding support from the Kansas Health Foundation's Healthy Communities program, one of those subcommittees, the Healthy Eating and Active Eating group initially focused efforts primarily on active living initiatives, including the adoption of a Complete Streets resolution by the City of Topeka. More recently, the group has divided to separate Healthy Eating and Active Living teams, and the Healthy Eating team is working toward the eventual development of a Food and Farm Council in Topeka/ Shawnee County. With funding support from the Kansas Health Foundation, HHN and its Healthy Eating sub-committee developed plans to complete a community food system assessment which would include secondary data and stakeholder input gathered through one or more FEAST events, with the eventual goal of gaining policymaker support for the initiation of a publicly-appointed local Food and Farm Council.

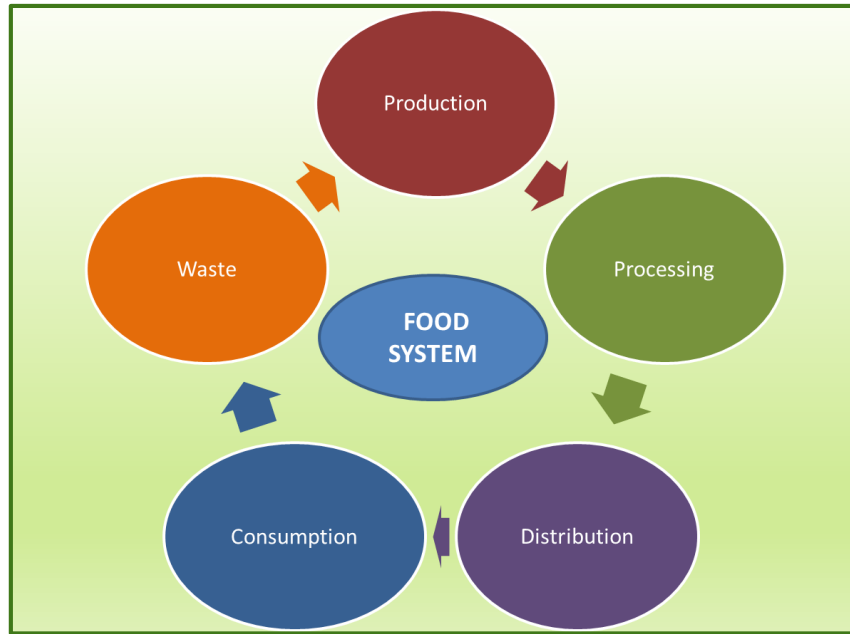
In August of 2016, Heartland Healthy Neighborhoods contracted with Barbara LaClair of LaClair Consulting Services for assistance in completing a Community Food Systems Assessment. This report summarizes the results and findings from the food assessment process.

THE CONCEPT OF A FOOD SYSTEM

Most, if not all, Community Food Assessments are structured around the concept of food systems, taking a systems-level perspective on the ways that food moves and cycles through a community. In the words of the Oregon Food Bank, a food system is “the sum of all activities required to make food available to people.” A food system includes all of the processes and infrastructure that are involved in feeding a population: growing or food production, harvesting, processing and packaging, transportation and distribution, marketing and retail sales, consumption, and disposal of food-related wastes. A simplistic model of a food system is shown in the figure below. While not explicitly depicted in this illustration, a food system would also include all of the inputs needed and outputs generated in each step of the cycle, such as natural resources, human resources and labor, and economic impacts. Considerations such as access to healthy food options within a community, and food justice and equity issues are also frequently included in a Community Food Assessment. A food system operates within the context of its community, and may be influenced by the social, political, and economic environments.

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Simple Model of a Food System



FOOD ASSESSMENT METHODOLOGY

This community food system assessment was conducted using two approaches: 1) secondary analysis of existing, publicly available data that describe or measure various characteristics of the current food system in Shawnee County, and 2) primary data collection using the FEAST model for gathering community input and perspectives. Secondary data sources and measures used in the first portion of the assessment are identified in more detail in the body of the report and in the references section.

FEAST, which stands for Food, Education, Agriculture Solutions Together, is a community organizing process that was developed by staff of the Oregon Food Bank. FEAST events bring together selected community stakeholders to engage in an informed and facilitated discussion about food, education and agriculture in their community and begin to work toward solutions together to help build a healthier, more equitable and more resilient local food system. Heartland Healthy Neighborhoods hosted two community FEAST events to discuss food in Shawnee County on January 29 and February 1, 2017 in Topeka. Results from the FEAST events are summarized in a subsequent section of this report.

Information from Secondary Data

SHAWNEE COUNTY DEMOGRAPHICS

Shawnee County is located in northeastern Kansas. Its largest city, Topeka, has a population of approximately 128,000 people and is both the county seat and the state capital. Several smaller towns and communities are also located in more rural areas of the County. Although the county is home to one of the larger urban areas in Kansas, agriculture still exerts a strong presence in outlying portions of the county and along the Kansas River valley.



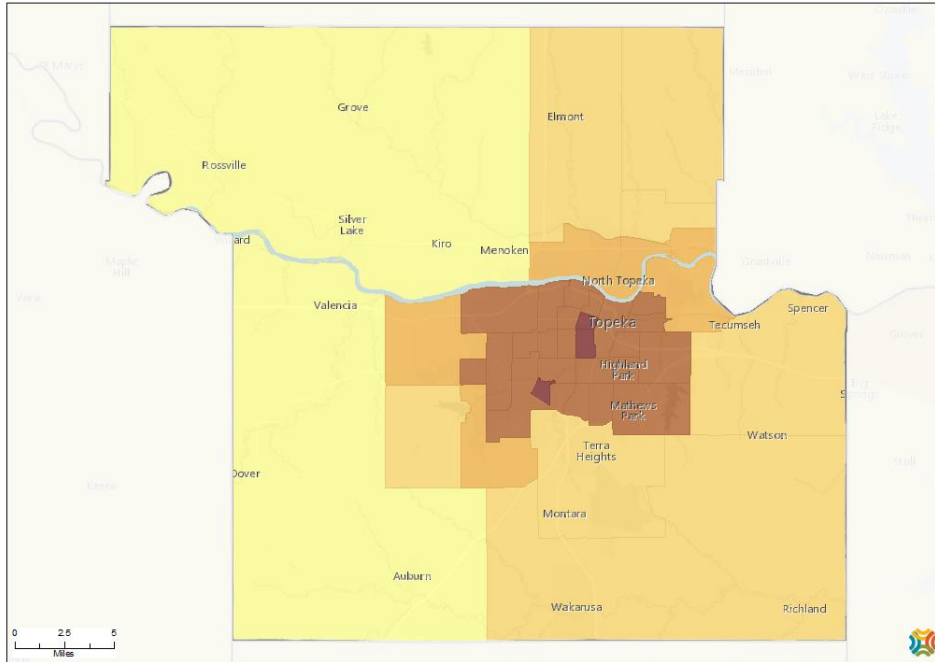
Population

According to U.S. Census Bureau American Community Survey 2010-14 five-year estimates, a total of 178,606 people live within the 544.02 square mile area of Shawnee County. The county's overall population density is 328.3 persons per square mile, with the most densely-populated areas centered in and around the city of Topeka. Between the 2000 and 2010 decennial census enumerations, the Shawnee County population grew by about 8,063 individuals, or approximately 4.7 percent.

Geographic Area	Total Population	Total Land Area (Square Miles)	Population Density (Per Square Mile)
Shawnee County	178,606	544.02	328.3
Kansas	2,882,946	81,758.24	35.26
United States	314,107,083	3,531,932.26	88.93

Data Source: US Census Bureau, American Community Survey. 2010-14.

Shawnee County Population Density



Geographic Area	Total Population, 2000 Census	Total Population, 2010 Census	Total Population Change, 2000-2010	Percent Population Change, 2000-2010
Shawnee County	169,871	177,934	8,063	4.75%
Kansas	2,688,419	2,853,118	164,699	6.13%
United States	280,405,781	307,745,539	27,339,758	9.75%

Data Source: US Census Bureau, [Decennial Census](#). 2000 - 2010.

Race/ Ethnicity of the Population

The population of Shawnee County is racially and ethnically diverse. Nearly one in five (18.1 percent) of county residents self-identify as a non-white race. In addition, more than 11 percent of county residents self-identified as Hispanic or Latino ethnicity between 2010 and 2014¹. In comparison to the state-wide population of Kansas, the Shawnee County population reflects a higher level of overall racial/ethnic diversity, particularly with higher proportions of Black community members. Persons of color live primarily in and around the city of Topeka; rural portions of the county are predominantly White, non-Hispanic.

Total Population by Race Alone, Percent

Geographic Area	White	Black	Asian	Native American / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Races
Shawnee County	81.99%	8.03%	1.14%	0.89%	0.03%	2.71%	5.22%
Kansas	85.25%	5.8%	2.52%	0.82%	0.06%	2.25%	3.3%
United States	73.81%	12.6%	5%	0.82%	0.17%	4.7%	2.91%

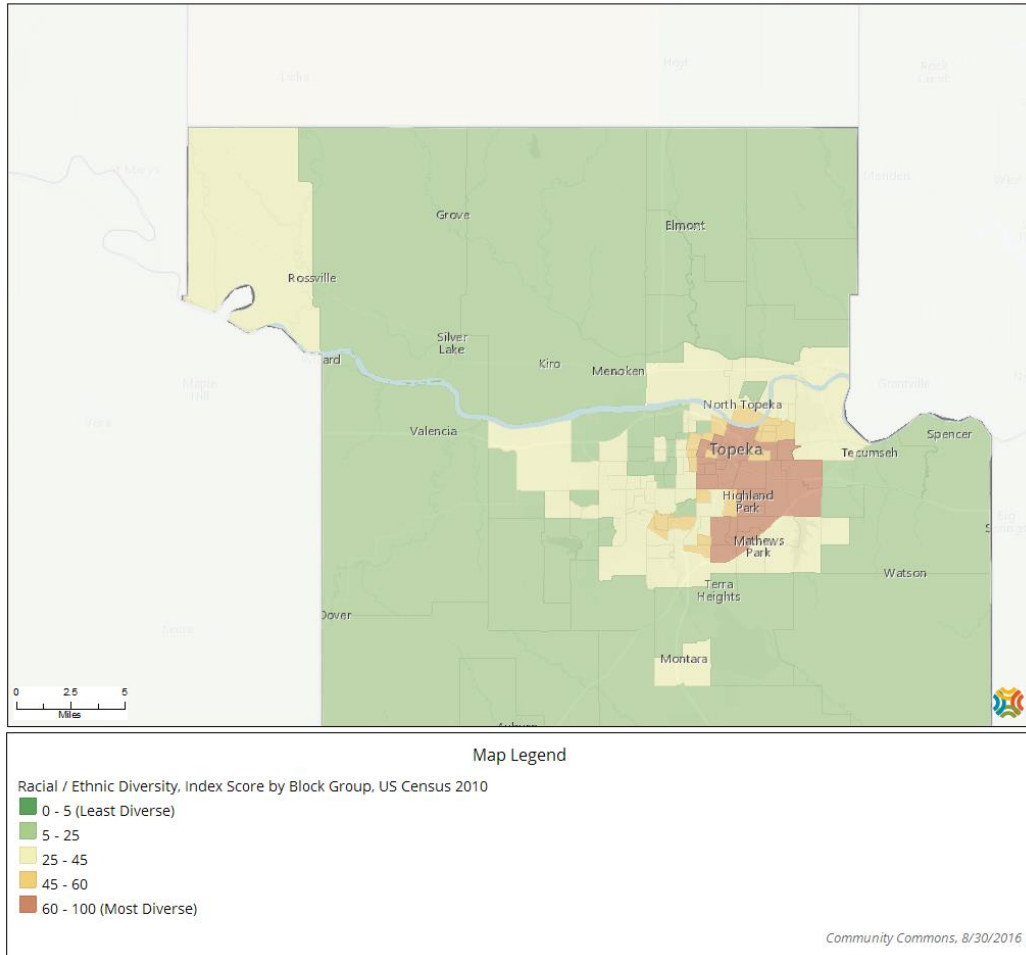
Total Population by Ethnicity Alone

Geographic Area	Total Population	Hispanic or Latino Population	Percent Population Hispanic or Latino	Non-Hispanic Population	Percent Population Non-Hispanic
Shawnee County	178,606	20,123	11.27%	158,477	88.73%
Kansas	2,882,946	316,141	10.97%	2,566,805	89.03%
United States	314,107,072	53,070,096	16.9%	261,036,992	83.1%

Data Source: US Census Bureau, [American Community Survey](#), 2010-14.

¹ Federal policy defines “Hispanic” not as a race, but as an ethnicity, and further states that Hispanics may be of any race (e.g. White Hispanic, Black Hispanic, etc.). In Kansas, most Hispanic individuals would be of White race.

Shawnee County Racial/Ethnic Diversity



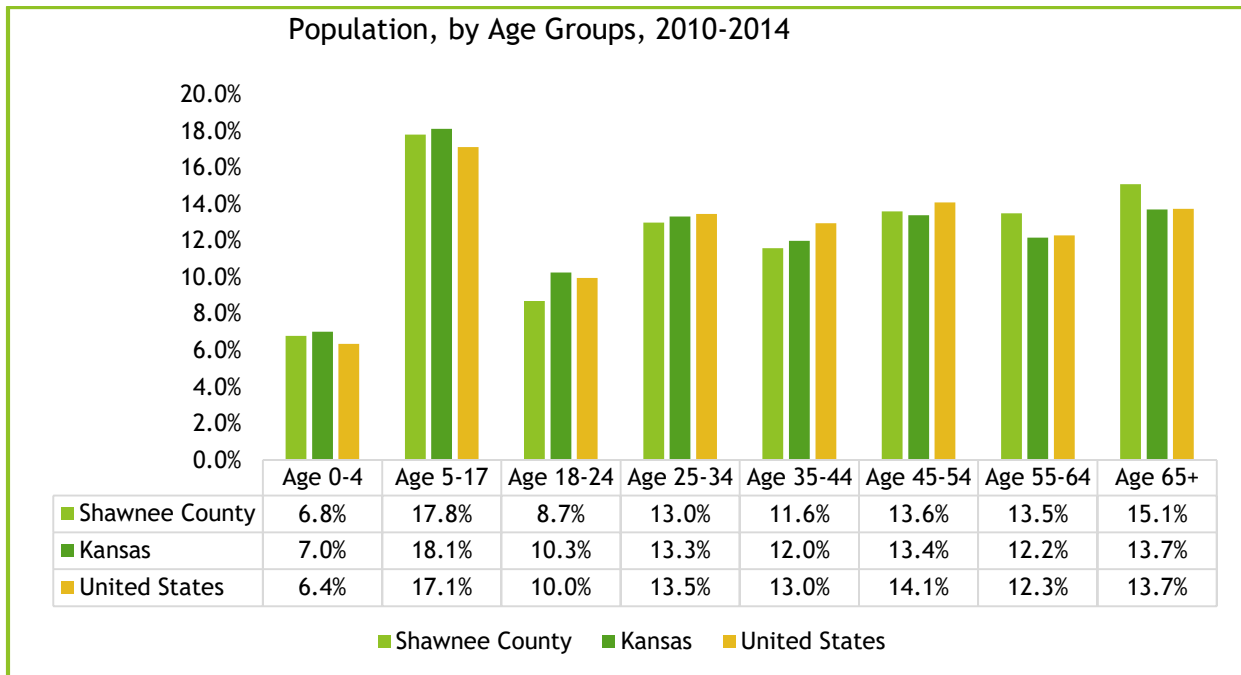
Source: Map generated by the Community Commons system

Age of the Population

The population of Shawnee County is slightly older than that of Kansas, or the United States. Between 2010 and 2014, the median age of Shawnee County residents was 38.6 years, compared to 36.0 years for all Kansans. Forty-six (46.1 percent) of the Shawnee County population was less than 35 years old, compared to 48.7 percent of the Kansas population. Twenty-eight percent (28.6%) of Shawnee County residents were 55 years or older, compared to 25.9 percent of all Kansans.

Total Population by Age Groups

Geographic	Age 0-4	Age 5-17	Age 18-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	Age 65+
Shawnee County	12,159	31,708	15,460	23,283	20,639	24,274	24,060	27,017
Kansas	202,749	522,222	296,081	384,162	345,769	386,309	350,595	395,059
United States	19,973,712	53,803,944	31,273,296	42,310,184	40,723,040	44,248,184	38,596,760	43,177,960



Data Source: U.S. Census Bureau, American Community Survey, 2010-2014

Median Age

Geographic Area	Total Population	Median Age
Shawnee County	176,606	38.6
Kansas	2,882,946	36.0
United States	314,107,072	37.4

Data Source: US Census Bureau, American Community Survey. 2010-14.

Households with Children

According to 2010-2014 American Community Survey estimates, 30.1% of all occupied households in Shawnee County were family households with one or more child(ren) under the age of 18. This is slightly less than the statewide proportion of 32.5 percent, reflecting the older age of the Shawnee County population.

	Total Households	Total Family Households	Families with Children (Under Age 18)	Families with Children (Under Age 18), Percent of Total Households
Shawnee County	72,069	45,501	21,712	30.13%
Kansas	1,112,335	730,983	361,834	32.53%
United States	116,211,088	76,958,064	37,554,348	32.32%

Data Source: US Census Bureau, [American Community Survey](#). 2010-14.

Geographic Mobility

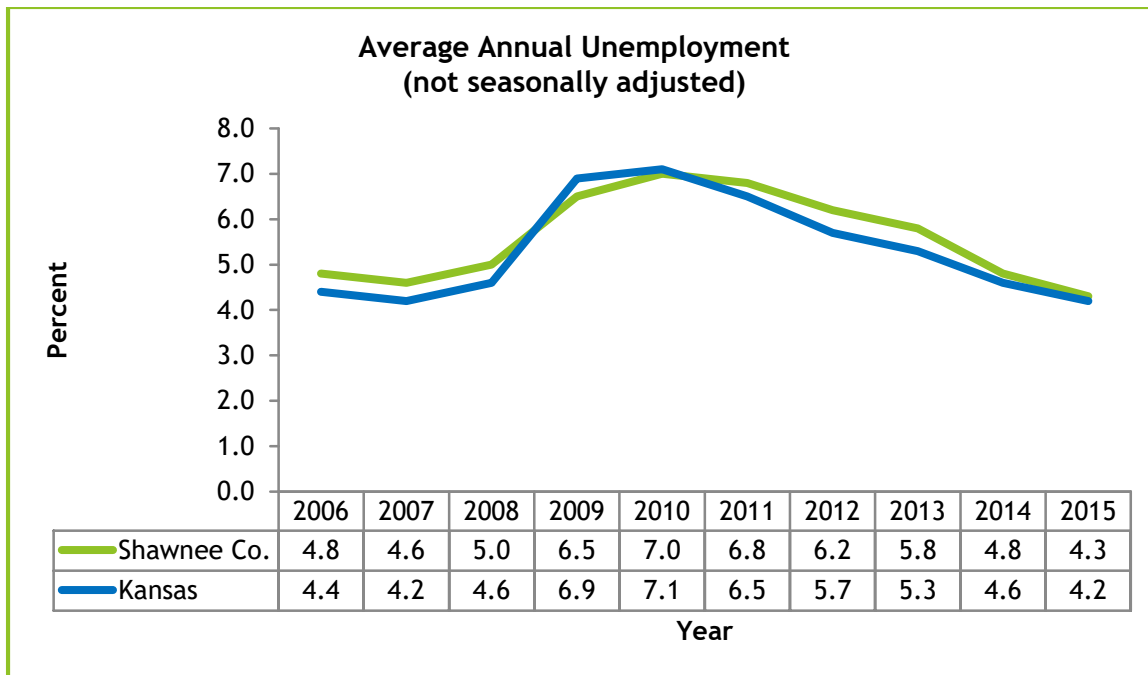
The Shawnee County population is less transient than Kansans as a whole, or the national population. According to the 2010-2014 American Community Survey, 4.8 percent of the Shawnee County population had relocated to the area from outside of the county during the previous year, compared to 7 percent of all Kansans. (Residents who moved to different households within the county are not included in this measures.)

Geographic Area	Total Population	Population In-Migration	Percent Population In-Migration
Shawnee County	176,606	8,466	4.79%
Kansas	2,844,693	201,221	7.07%
United States	310,385,248	18,809,316	6.06%

Data Source: US Census Bureau, [American Community Survey](#), 2010-14.

Unemployment

During 2015, the estimated unemployment rate in Shawnee County was 4.3 percent, compared to 4.2 percent statewide. Since 2006, annual unemployment rates in Shawnee County have closely paralleled statewide rates, with a sharp increase at the onset of the 2008 recession, peaking in 2010, and gradually declining since 2010. Unemployment rates consider only working-age adults who are actively seeking employment; those that are not currently in the workforce or have given up trying to find jobs are not reflected in these statistics.



Data source: U.S. Bureau of Labor Statistics, *Local Area Unemployment*

Poverty

Poverty is a condition defined by household income levels that are insufficient to support a modest standard of living. In the United States, the Census Bureau sets annual poverty level thresholds, based upon household size and income levels. These poverty thresholds are used to monitor poverty conditions in the U.S., and to define eligibility for numerous social welfare programs. In 2015, Federal Poverty Levels were set as shown below:

Household Size	Income
1	\$11,880
2	\$16,020
3	\$20,160
4	\$24,300
5	\$28,440
6	\$32,580
7	\$36,730
8	\$40,890

Overall rates of poverty in Shawnee County were estimated at 15.0% of the population during 2014, a rate that was higher than the statewide rate of 13.5 percent. Among children age 0 to 17 years, 20.8 percent of children in Shawnee County lived in poor households, compared to 17.6 percent statewide. The median household income in Shawnee County was \$52,795, slightly less than the median statewide.

	Percent in Poverty, all ages	Percent in Poverty, age 0 to 17	Median Income
Shawnee County	15.0%	20.8%	\$52,795
Kansas	13.5%	17.6%	\$53,657

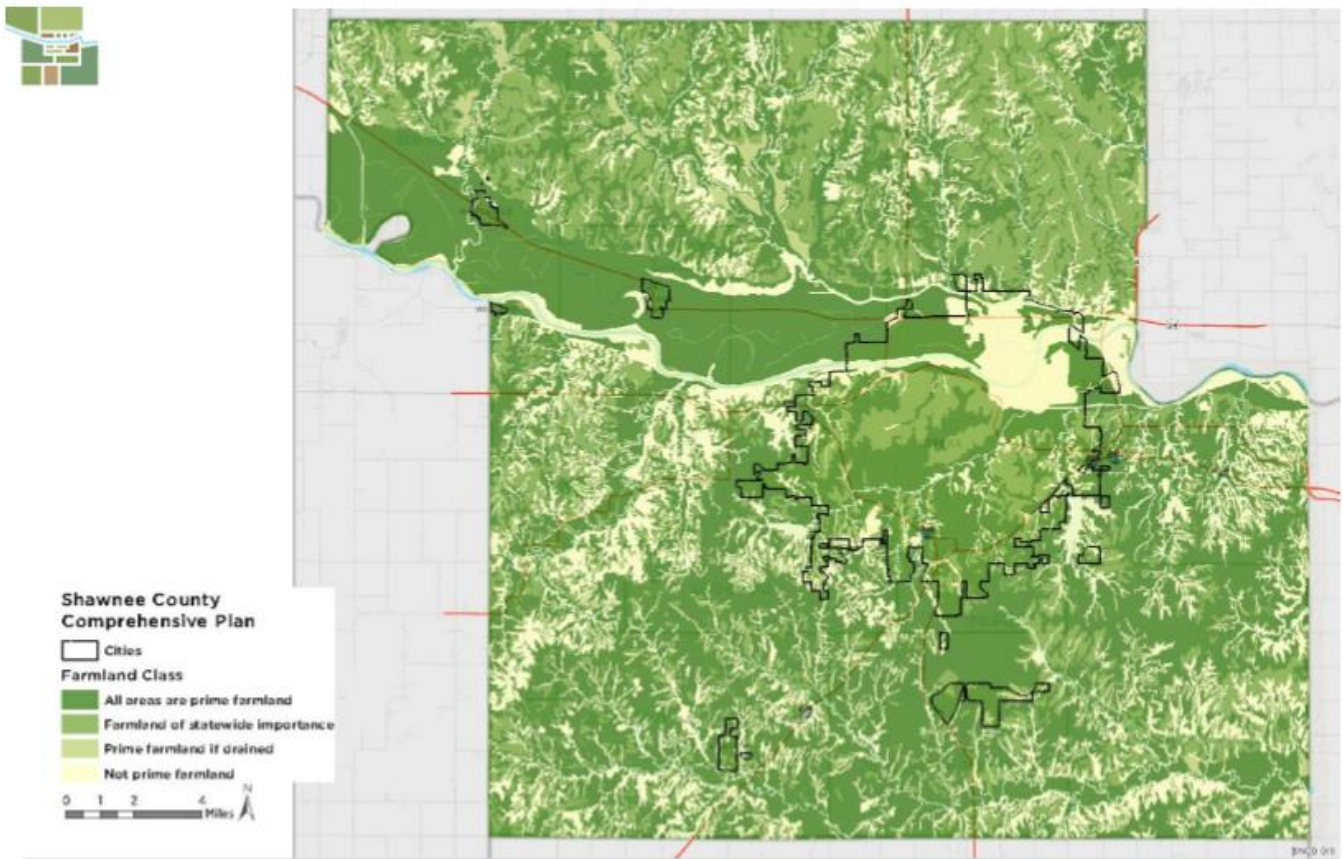
Data Source: U.S. Census Bureau, Small Area Income and Poverty Estimates, 2014

NATURAL RESOURCES

Agriculture and food production are dependent upon having access to sufficient land, high-quality soils, and water to support crop or livestock production. This section examines the availability and use of these natural resources as it relates to food production.

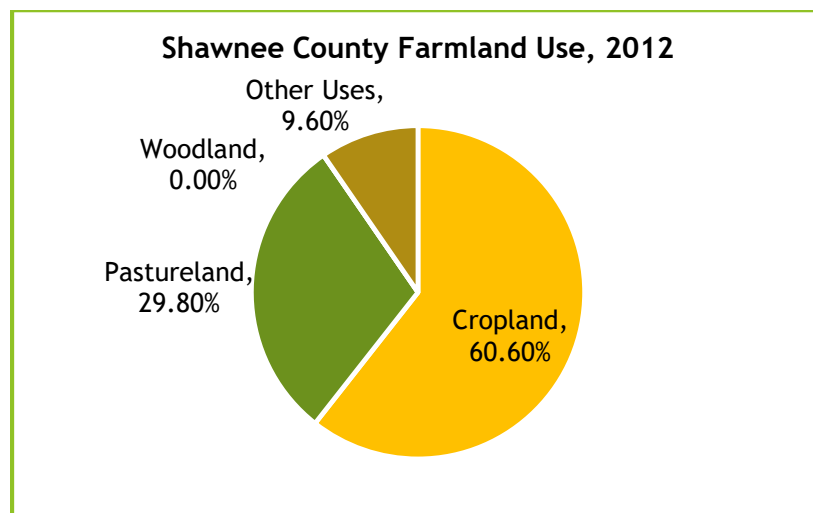
Land Availability and Use

Shawnee County boundaries enclose an area approximately equal to 544 square miles, or 348,160 acres. Of that, 194,274 acres (56 percent) was in use for farming in 2012. The largest areas of prime farmland run adjacent to the Kansas River as it courses through the county. The first map below illustrates the locations of prime farmlands in Shawnee County, regardless of their current use.



Source: Shawnee County Planning Department, Shawnee County Comprehensive Plan, 2016

Farmland in Shawnee County is used primarily for crops (61 percent) and pasture (30 percent). The charts below show how farmland and croplands in the County were being utilized in 2012.

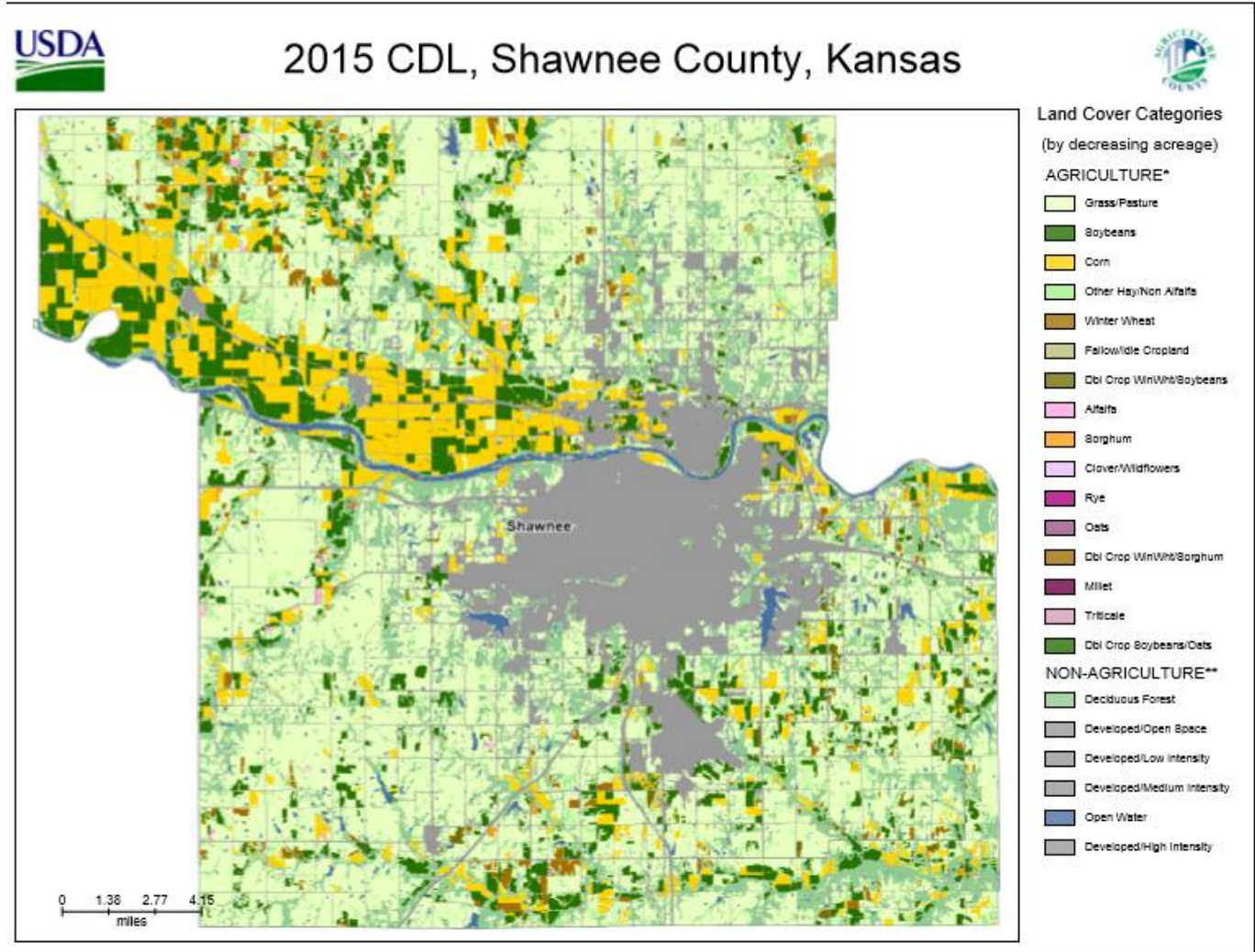


Data Source: U.S. Census of Agriculture, 2012

Shawnee County Cropland Data, 2012

Total Cropland Acres	Total Harvested Cropland	# of Farms with Cropland	# of Farms with Harvested Cropland	Idle Cropland or used for cover crops but not harvested or grazed, in Acres	Cropland – summer fallow in Acres	Other Pasture and Grazing Land that could be used for crops, in Acres	Land enrolled in CRP, WRP, or CREP, in Acres
117,689	107,359	663	580	7,604	89	1,763	7,214

The map below shows the locations where various types of crops were under production during 2015.



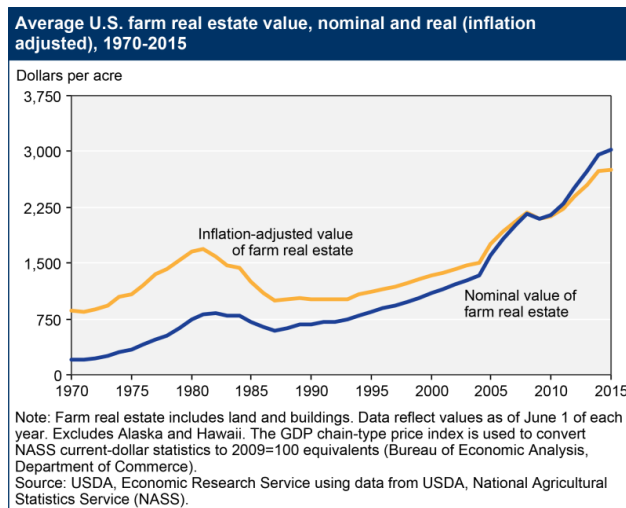
Adapted by CropScape - <http://nassgeodata.gmu.edu/CropScape>

Source: USDA, National Agricultural Statistics Services, Cropscape system, <https://nassgeodata.gmu.edu/CropScape/>

Land Values

Access to land is essential for farming operations, and land holdings represent a significant asset on the farm balance sheet. When land values become too high, however, there may be negative impacts on the local food system. When land values are high and farming incomes are low, farm owners may be tempted to sell off land and essentially ‘cash out’, taking the capital gains from the high land prices. High land prices may also be a barrier for new farmers that lack the capital needed to purchase good farmland. Nationally, farmland values have risen steadily since the mid-1980s. Farmland values vary significantly by location, and may be influenced by factors such as the general economy, local farm economies, policies, and development pressures.

Within the state of Kansas, there is significant variation in farmland values by region and by county. Values are generally higher for cropland than pastureland, with irrigated croplands bringing higher prices than non-irrigate lands. Land prices in Shawnee County are significantly higher than statewide averages.



Kansas Farmland Values (\$/acre), 2014*

	Non-irrigated Cropland	Irrigated Cropland	Pasture
Kansas	\$2,990	\$5,195	\$1,802
Shawnee County	\$4,856	Data not available	\$2,928

*Values shown are for bare land, minimum 40 acres in size. Values are estimated by the Kansas Property Valuations Department

Data Source: (Taylor, 2014)

Farmland Cash Rents Values (\$/acre), 2012

	Non-irrigated Cropland	Irrigated Cropland	Pasture
Kansas	\$52.50	\$119.00	\$16.50
Shawnee County	\$63.00	Data not available	\$17.50

Data Source: (USDA National Agricultural Statistics Service, Kansas Field Office, 2012)

Soil Quality

Not all farmland is suitable for crop production; soil quality is an important consideration. Soils are classified into five groups by their suitability for cultivation (see definitions below). Class I and Class II soils are considered most desirable for crop production. In Shawnee County, approximately 86,000 acres are Class I and Class II soils, which would be suitable for fruit and vegetable production.

Land Capability Classifications:

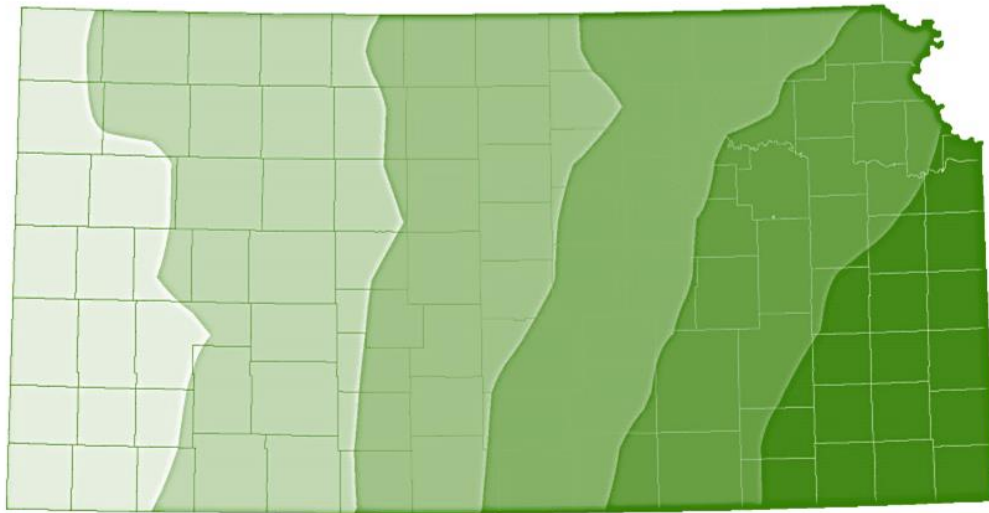
- Class I - few limitations to use. Are suited to a wide range of plants; nearly level, erosion hazard is low, deep, generally well drained, and easily worked. They hold water, are well supplied with plant nutrients and/or responsive to fertility inputs.
- Class II - some limitations, require moderate conservation practices. May be used for cultivated crops.
- Class III and IV - severe and very severe limitations to cropping, restrict choice of plants, and require careful management.
- Class V-VIII - generally not suited to cultivation

	Acres Farmland	Acres Class I	Acres Class II
Shawnee County	194,274	29,518	57,063
		15.2%	29.4%

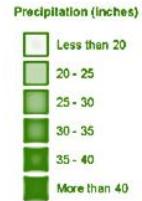
Water

In addition to quality soils, water is another primary resource necessary to support crop and livestock production. In Western Kansas, where rainfall is less abundant and much of the water used in agriculture is obtained from aquifers, declining aquifer levels has become a significant concern. Eastern Kansas counties typically experience higher annual precipitation levels, and are less dependent upon irrigation and surface or groundwater reservoirs for agricultural needs. During 2012, 68 of the 826 farms (8.2%) in Shawnee County reported that they irrigated their farmlands. Although the percentage of Shawnee County farms using irrigation is fairly low, the percentage of total cropland acres being irrigated in Shawnee County is higher than in surrounding counties (see the map and table that follow).

Average Precipitation in Kansas, 1981 - 2010

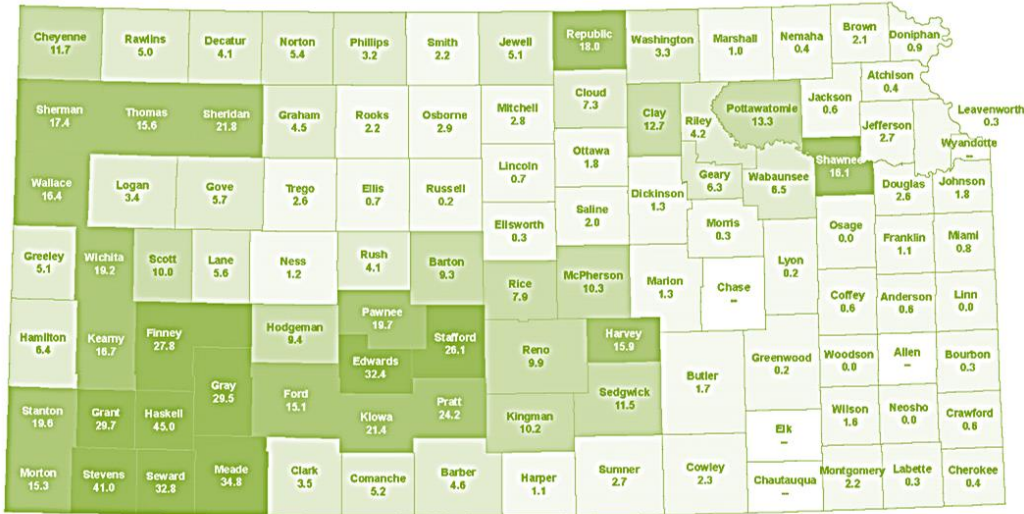


Source: Institute for Policy & Social Research, The University of Kansas; data from National Climatic Data Center.



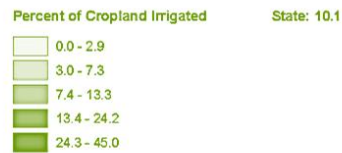
Source: Kansas Statistical Abstract, 2014

Percent of Cropland Irrigated in Kansas, by County, 2012



Source: Institute for Policy & Social Research, The University of Kansas; data from U.S. Department of Agriculture, 2012 Census of Agriculture.

Double dash (-) indicates withheld to avoid disclosing data for individual farms.



Source: Kansas Statistical Abstract, 2014

Irrigated Farmland in Shawnee County

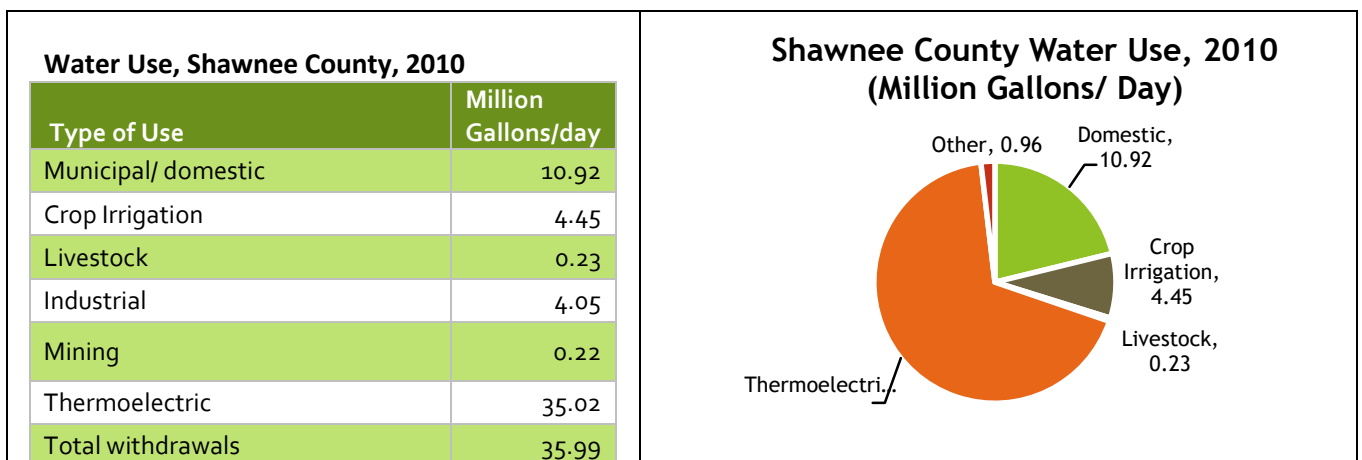
Only a minority of Shawnee County farms use irrigation. Although the number of farms using irrigation decreased between 2007 and 2012, the number of acres irrigated increased by approximately 24 percent.

Shawnee County	2007	2012
Total Number of Farms	885	826
Total Acres of Cropland	125,104	117,689
Farms using Irrigation	78	68
% of Farms using irrigation	8.8%	8.2%
Land in irrigated farms	56,233	69,513
# of Acres Irrigated	18,548	18,954
Irrigated Acres as percent of Total Cropland Acres	14.8%	16.1%

Data Source: U.S. Census of Agriculture

Water use

Water use statistics for Shawnee County reflect the low use of crop irrigation. Total agricultural water use in 2010, for crop irrigation and livestock combined, was less than the amount of water used for municipal and domestic purposes. This is in stark contrast to Western Kansas counties, where the quantities of water used for irrigation far exceed domestic use.



Data Source: U.S. Geologic Survey, Water Data

Definitions of water use categories:

- **Municipal/ domestic** - Household use (indoor or outdoor), and municipal water supply use
- **Irrigation** - Water applied by an irrigation system to support crop and pasture growth, or to maintain vegetation on recreational lands such as parks and golf courses
- **Livestock** - Water used for livestock watering, feedlots, dairy operations, and other on-farm needs
- **Industrial** - Water used for fabrication, processing, washing and cooling
- **Mining** - Water used for the extraction of naturally-occurring minerals (such as coal, sand and gravel), liquids (such as crude petroleum) and gases (such as natural gas)
- **Thermoelectric** - Water used in the process of generating electricity with steam-driven turbine generators

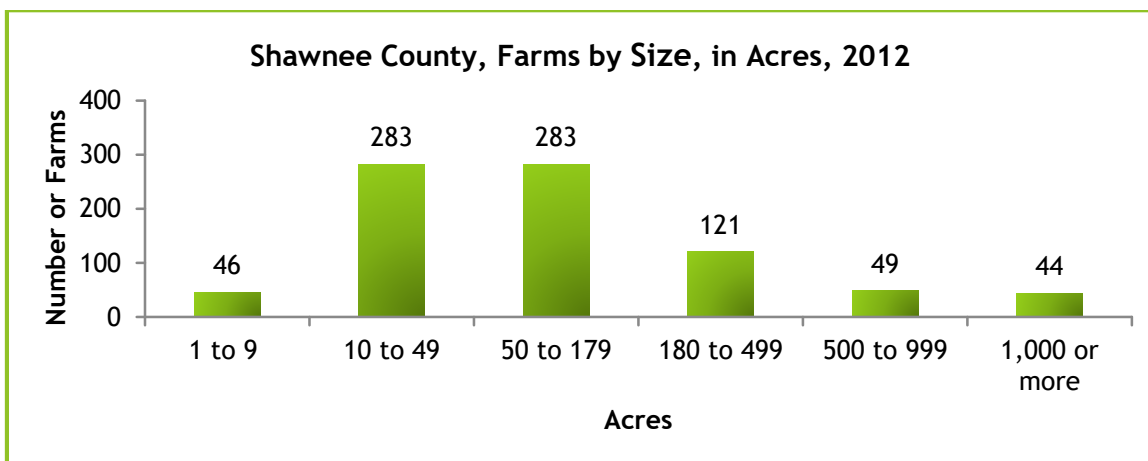
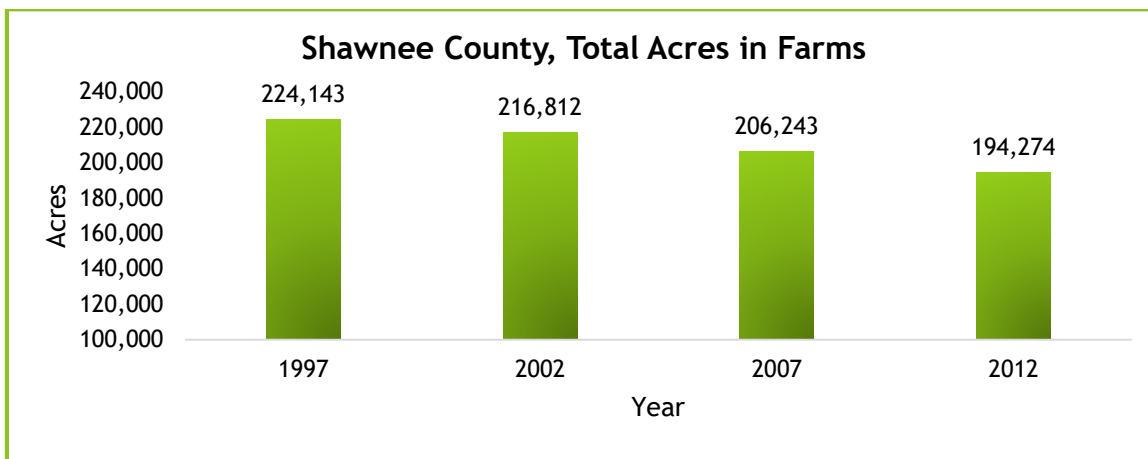
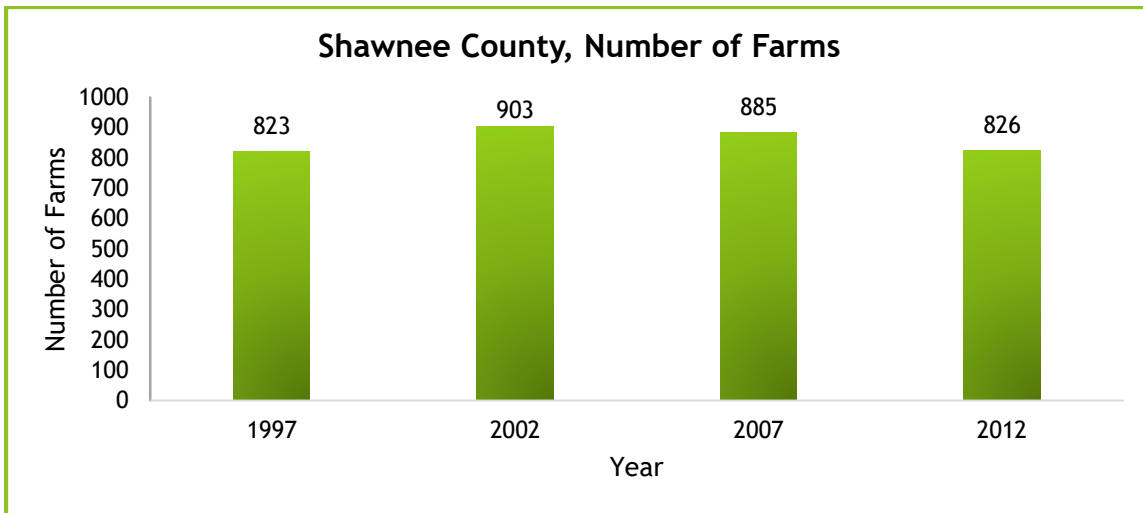
FARMING AND FOOD PRODUCTION

Farms

In 2012, there were 826 farms in Shawnee County that were enumerated in the U.S. Census of Agriculture, occupying a total of 194,274 acres of land. The average farm size was 235 acres. Although both national and state trends have shown reductions in the numbers of farms and increases in average farm size in recent years, the number and size of farms in Shawnee County has remained relatively stable since 1997. The number of acres in farms, however, has steadily decreased.

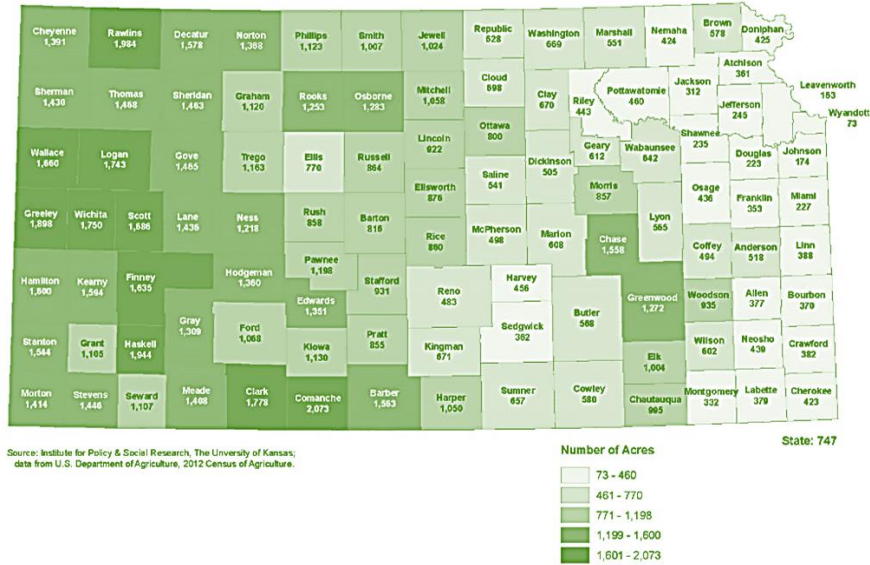
Year	Farms	Land in Farms (acres)	Avg. Farm Size (acres)	Total Cropland (acres)	Harvested Cropland (Acres)
1997	823	224,143	272	148,011	113,643
2002	903	216,812	240	135,766	112,573
2007	885	206,243	233	125,104	113,614
2012	826	194,274	235	117,689	107,359

Data source: U.S. Census of Agriculture, 2012



Data Source: U.S. Census of Agriculture

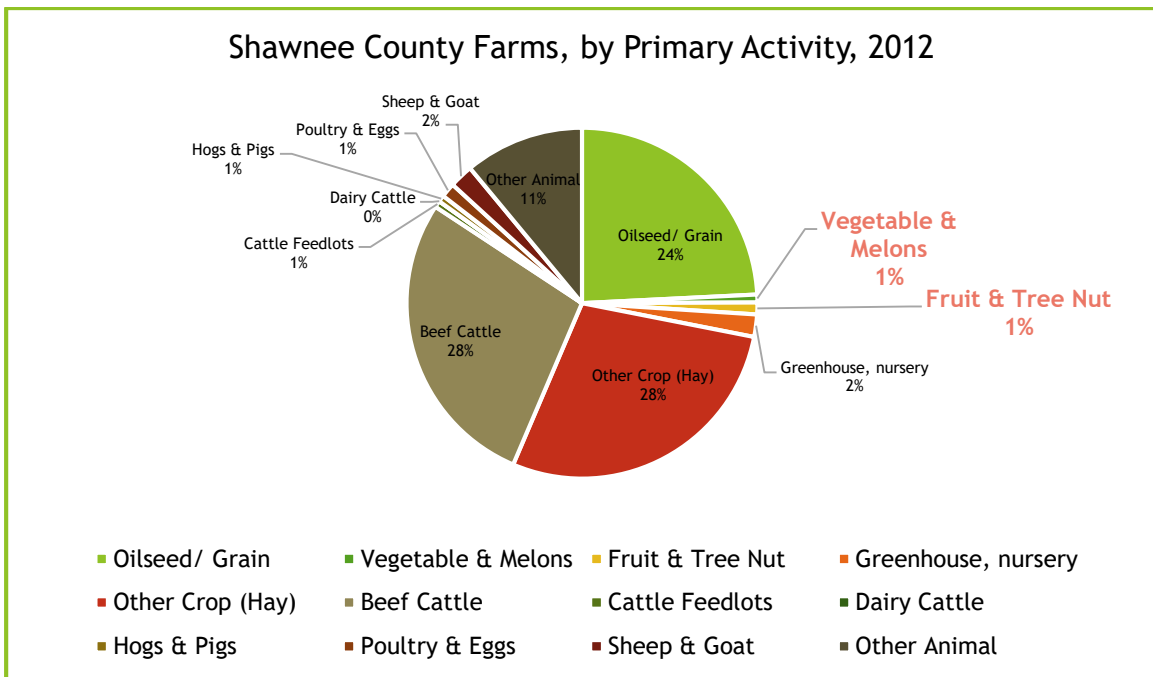
Average Size of Farm in Kansas, by County, 2012



Source: Kansas Statistical Abstract, 2014

Farm Production

Farming in Shawnee County is dominated by grain crops and beef cattle production. Less than 2 percent of all Shawnee County farms reported fruit or vegetable production as their primary activity in 2012.

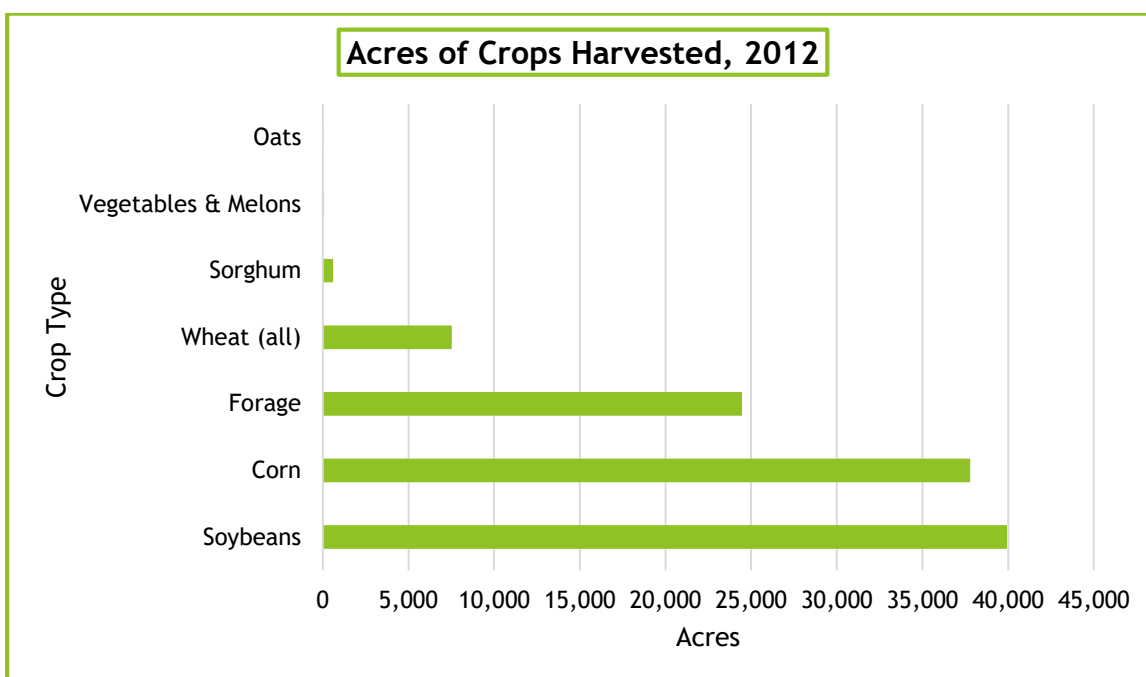


Data Source: 2012 U.S. Census of Agriculture

Quantity	State Rank
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Top Crop Items (acres)		
Soybeans for beans	39,926	46
Corn for grain	37,779	40
Forage-land for hay, silage, greenchop	24,466	40
Wheat for grain, all	7,532	93
Winter wheat for grain	7,532	93
Top Livestock Inventory (number)		
Cattle and Calves	11,441	102
Layers	1,480	20
Horses and ponies	1,276	16
Pigeons or squab	879	2
Goats, all	637	27

Data Source: U.S. Census of Agriculture



Data Source: 2012 U.S. Census of Agriculture

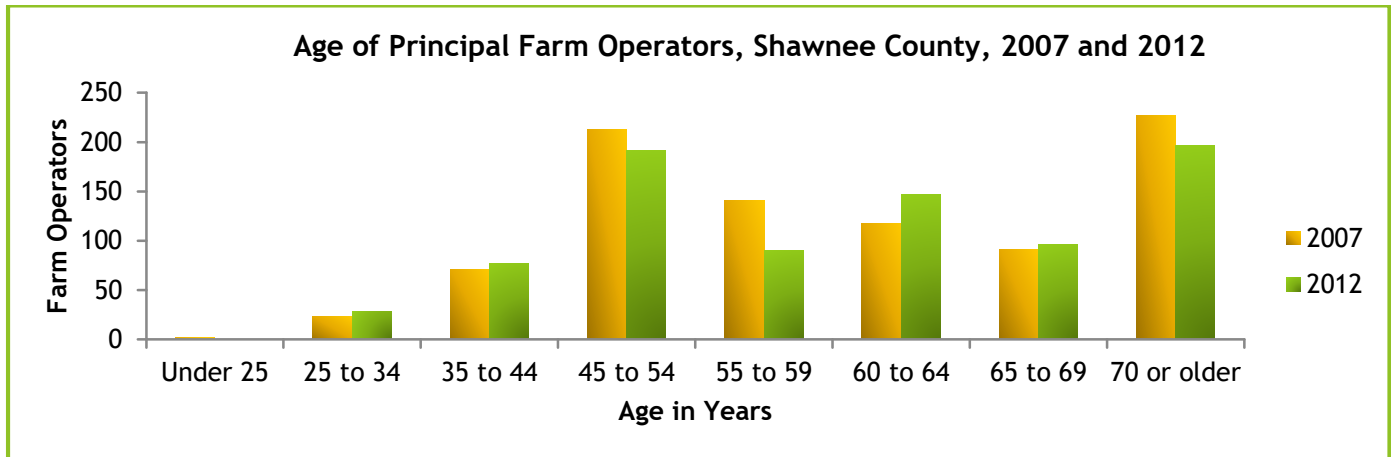
Fruit and Vegetable production

Commodity crops (corn, soybeans, and wheat) dominate overall crop production in Kansas, and the same is true in Shawnee County. During 2012, a total of *ten Shawnee County farms* reported harvesting vegetables for sale. Those farms harvested a total of *fifty-eight acres* of vegetables. Thirteen farms reported having 22 acres in orchards. Fruit and vegetable production accounted for less than *0.07 percent* of all cropland harvested in Shawnee County in 2012.

Farm Operators

Age of Farm Operators

Across Kansas, the average age of farmers has been increasing for many years, and many farmers are approaching retirement age. The average age of Shawnee County Farm Operators in 2012 was 59.8 years, unchanged from what it had been in 2007. The average age of all Kansas principal farm operators in 2012 was 58.2 years. The graph below illustrates the aging of Shawnee County farm operators between 2007 and 2012, with the largest shift being in farmers between 45 and 64 years of age.

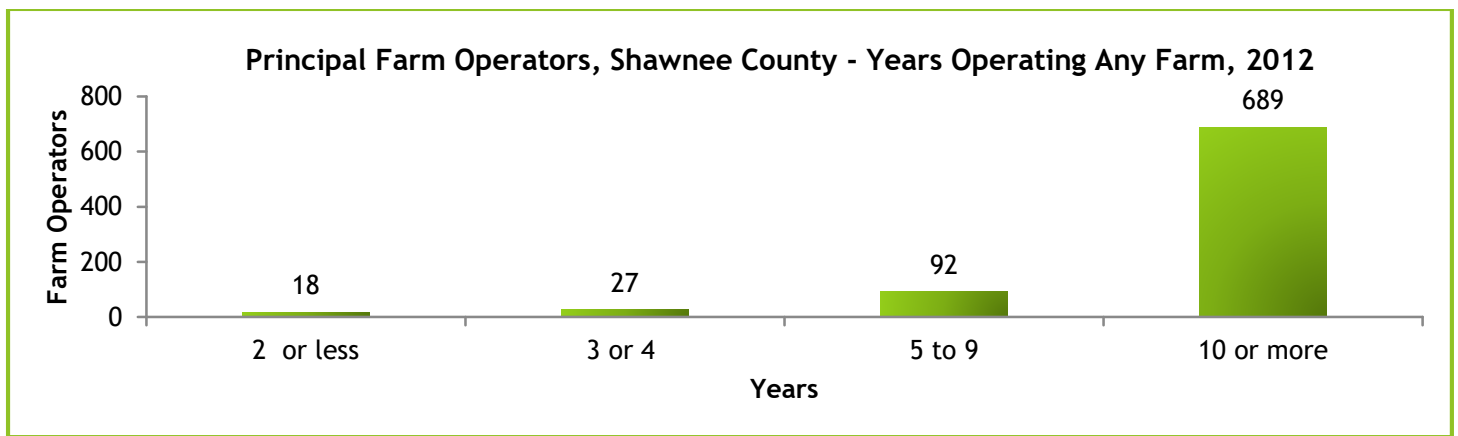


Data Source: U.S. Census of Agriculture

Farm Operator Experience

Across Kansas, and in Shawnee County, the vast majority of principal farm operators have 10 or more years of experience as farm operators. The numbers of new farmers entering the occupation are small. This data, coupled with the data on aging of farm operators is worrisome, as it suggests that many farmers are approaching or reaching retirement age and there may not be sufficient numbers of new farmers coming on board to sustain current farming operations.

In 2012, Kansas farmers reported an average of 27.1 years of farm operator experience; Shawnee County farmers averaged 25.8 years.

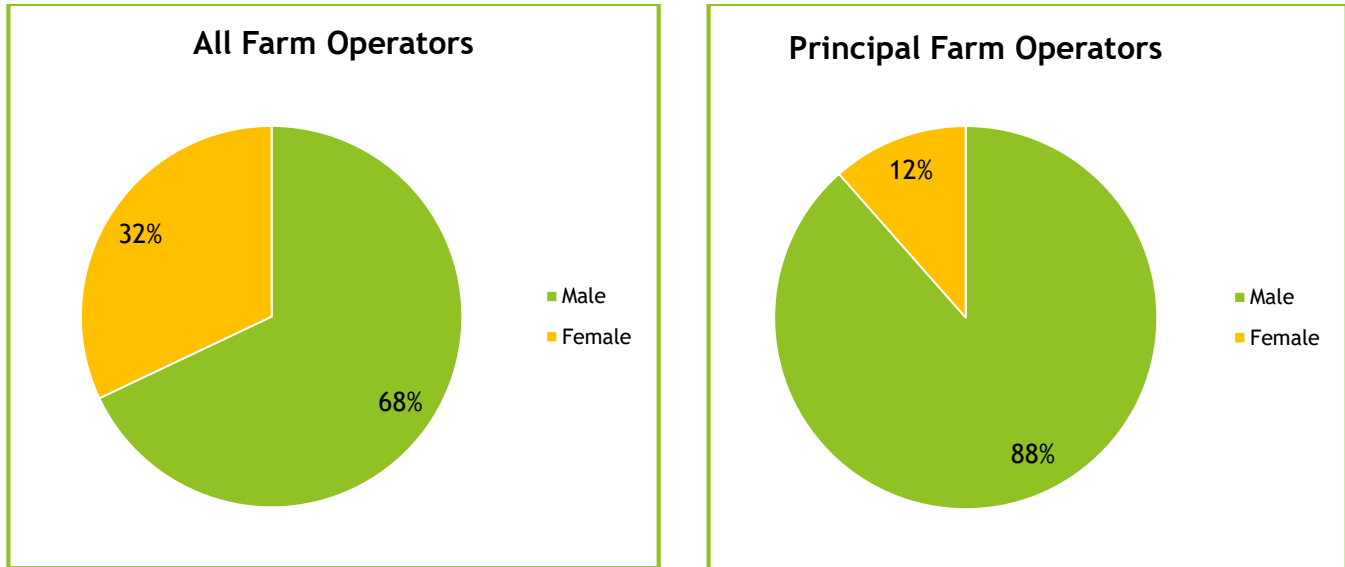


Data Source: U.S. Census of Agriculture, 2012

Gender of Principal Farm Operators

Across Kansas, and in Shawnee County, a significant majority of principal farm operators are male. Although nearly one-third of all Shawnee County farmer operators in 2012 were women, women accounted for only 12 percent of principal farm operators.

Farm Operators by Gender, Shawnee County, 2012



Data Source: U.S. Census of Agriculture, 2012

Principal Farm Operators, by Race and Ethnicity

Only a small percentage of Kansas farms have principal operators that are non-white, or of Hispanic/Latino ethnicity. The same is true in Shawnee County. In 2012, 806 principal farm operators in Shawnee County self-identified as White; only 12 (1.5%) identified themselves as Black, and 21 (2.6%) identified themselves as Hispanic or Latino. None self-identified as Asian or American Indian/ Alaskan Native. These numbers align poorly with the general population of the County, where Blacks constitute about 8% of the population, and Hispanics 11%.

Off-Farm Employment

The majority of farm operators find it necessary to supplement income from farming operations with other sources of income. In 2012, a substantial majority (60.7 percent) of principal farm operators in Shawnee County reported that their primary occupation was something other than farming. Nearly two-thirds (64 percent) worked at least some days off the farm. Nearly half of principal farm operators (41.6 percent) worked off the farm for 200 days or more during 2012.

Farm Sales

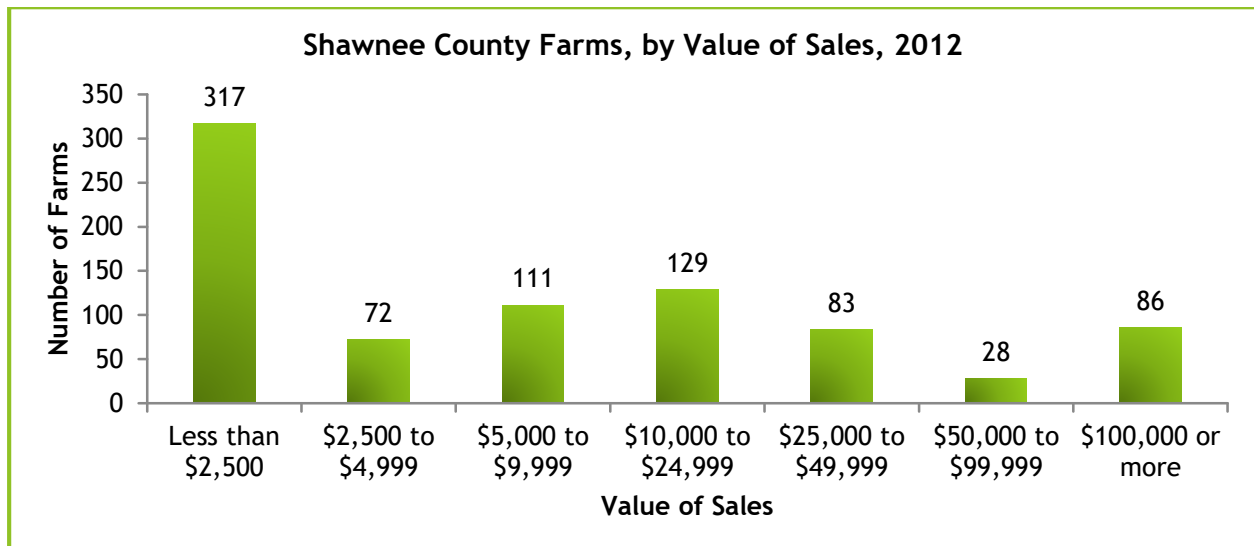
During 2012, Shawnee County farms reported total sales of farm products valued at more than \$50 million. Crop sales accounted for about 83 percent of total sales. The average market value of products sold by Shawnee County farms in 2012 was \$60,843 - a significant increase over previous census-year reports. This increase in value of sales likely represents changes in market values of products as well as changes in production volumes.

Year	Farms	Market Value of Products Sold			
		Total Sales	Crop Sales	Livestock Sales	Average per farm
1997	823	\$29,103,000	\$21,461,000	\$7,642,000	\$35,362
2002	903	\$21,975,000	\$15,306,000	\$6,669,000	\$24,336
2007	885	\$39,673,000	\$32,959,000	\$6,714,000	\$44,828
2012	826	\$50,257,000	\$41,690,000	\$8,567,000	\$60,843

Data Source: U.S. Census of Agriculture

Farms, by value of sales

When farms are grouped by the total value of their sales, an interesting pattern emerges. More than one-third (38.4 percent) of Shawnee County farms were operating on a very limited scale, having sales valued at less than \$2,500 in 2012. Just 13.8 percent had total sales valued at \$50,000 or more.



Data Source: U.S. Census of Agriculture

Sales through Alternative Market Channels

Although traditional commodity farming dominates the Kansas farm scene, a few Shawnee County farms are attempting to market their products through alternative marketing channels.

Market Approach, 2012	Kansas		Shawnee County	
	Farms	\$ Value	Farms	\$ Value
Direct sales to individuals, for human consumption	2,044	\$8,957,000	47	\$176,000
Sales directly to retail outlets	406	No data	11	No data
Sales of value-added commodities	1,615	No data	29	No data
Sales through Community-Supported Agriculture program	144	No data	4	No data
Agritourism Services	1,000	\$8,271,000	3	\$14,000

Data Source: 2012 U.S. Census of Agriculture

Net Farm Income

On average, net incomes (after expenses) from farming in Shawnee County are modest. In 2012, net farm income averaged only \$22,226. By comparison, 2012 net farm income for all farms in Kansas averaged \$50,903. While the 2012 net income to Shawnee County farms is small, it had increased from those reported in previous census years. More than half (52.8%) of Shawnee County farms experienced net operating losses in 2012.

	2012	2007	2002
Net cash farm income (total)	\$18,359,000	\$13,754,000	\$1,141,000
Average per farm	\$22,226	\$15,541	\$1,255
Percent of farms that reported net gains	47.2%	44.7%	33.5%
Average net gain per farm	\$23,236	\$46,514	\$59,929
Percent of farms that reported net losses	52.8%	55.3%	66.5%
Average loss per farm	-\$9,844	-\$11,499	-\$9,541

Data Source: U.S. Census of Agriculture

Local Food Producers

Several small-scale farmers and producers are growing foods in Shawnee County, and offering them for direct sales to local consumers. Some are featured in this section of the report. It is very likely that this list is incomplete, due to the lack of a comprehensive list or data source to draw from. It should also be noted that there are a number of additional “local” food producers who offer their products for sale in Shawnee County market venues, but are not included here because their farms are located outside of the Shawnee County borders.

86th Street Orchard - Topeka

Operated by Kenny and Cathy Hamilton, the 86th Street Orchard grows apples, pears, peaches, blackberries, grapes and blueberries. Customers visit the orchard to pick and purchase the fruit.

CALCan Enterprises -

CALCan Enterprises is a hydroponic greenhouse operation located in Southern Shawnee County, established in 2015 by the parents of three Washburn Rural High School students who have disabilities. The business was started as a means to give the three boys a work opportunity. The CALCan greenhouse produces a variety of lettuces and other greens, which are sold to Hy-Vee and Whole Foods stores in northeast Kansas and neighboring parts of Missouri.



Capital City Poultry - Tecumseh

Capital City Poultry offers fresh chicken and quail eggs, and live chicken, quail and rabbits for butcher. Garden produce such as tomatoes, green beans, cucumbers, zucchini, okra and gourds are offered seasonally. All products are produced on the farm, using natural fertilizer products.

Crook Family Farm - Topeka

Dustin Crook and his wife, Shannon, live in Topeka and operate the Crook Family Farm, a half-acre farm in Oakland. They grow lettuce, kale, carrots, radish turnips, several types of winter squash and peppers, sweet corn, tomatoes, and sweet potatoes. On Saturdays, he sells produce at the Downtown Farmers Market in Topeka.

Dustin Crook, a U.S. Army sergeant who served in combat in Iraq, is a member of Farmer Veteran Coalition, a group that aids veterans seeking careers in agriculture. The group believes veterans have the unique skills and character needed to strengthen rural communities and create sustainable food

systems. Crook is working to engage other veterans in the farming operation - one strategy is to invite veterans and their families out there to help with harvest and let them keep half of what they harvest.

Glaciers Edge Vineyard and Winery - Wakarusa

Glaciers Edge Vineyard, located south of Topeka, cultivates more than 3,000 grape vines and produces a variety of wines from the harvested grapes. The winery has an on-site sales and tasting room.

Insane Paine Produce Farm - Topeka

Father and son team Mark and Luke Paine operate an urban farm on 12 acres in Topeka, with five greenhouses. They grow a variety of fresh vegetables; primary crops include tomatoes, melons and pumpkins.

In recent years, the Paines have sold most of their product to a produce auction in Missouri. In 2017, they are planning to return to local sales with an on-farm sale stand.



M & C Farms (Mark Fink) - Topeka

Mark Fink grows vegetables including onions, lettuce, spinach, beets, carrots, squash, corn, tomatoes, green beans, and sells at the Downtown Topeka Farmers' Market.

Oak Creek Bison - Auburn

Oak Creek Bison raises and sells grassfed American Bison, from animals that have grazed on native prairie grasses. In the winter months, feed is supplemented with native prairie hay and alfalfa cubes. Their bison are not given any growth hormones or drugs. In addition to traditional cuts of meat, Oak Creek Bison also offers a chopped and formed 100% grassfed Bison Jerky, which does not require refrigeration.

Redneck Produce - Silver Lake

Redneck Produce sells homegrown produce, including tomatoes, potatoes, peppers, green beans, onions, beets, squash, sweet corn, cucumbers, okra at the Silver Lake and Downtown Topeka Farmers' Markets.

Salem Farms - Topeka

Salem Farms, located north of Topeka is a Certified Organic micro-farm with about 1 acre and a 13,000 square foot greenhouse. They grow a variety of fruits and vegetables, and sell from an on-farm stand and a location in Topeka on Saturdays. They also offer a CSA (consumer supported agriculture) subscription plan.

Salem Farms is affiliated with the Organization for Sustainable Living, a 501(c)3 non-profit corporation which exists for the purpose of identifying, creating and implementing sustainable capitalism in the industries of agriculture, energy and drinking water. Founded in 2012, the organization operates a farm internship program and provides educational programming to elementary school classrooms in Topeka. In the past, they have also hosted several aquaponic training courses.



T & S Root Farms – Topeka

Ted and Shane Root have been growing vegetables in the Topeka area for over 20 years. They specialize in sweet corn, watermelon and cantaloupe, but also offer other vegetables and strawberries in season. They sell their produce at the Downtown Topeka Farmers' Market.

Vinland de la Cairns - Topeka

Vinland de la Cairns is a three-acre vineyard located in western Shawnee County producing over 20 varieties of grapes that are sold for the making of wine, jellies and juices. Varieties included are Concord, Fredonia, Beta, Cynthiana, Seyval, Catawba, Chambourcin, Canadice, Reliance and several more. Picking starts in late July and ends mid-September.

Wakarusa Valley Vineyard – Wakarusa

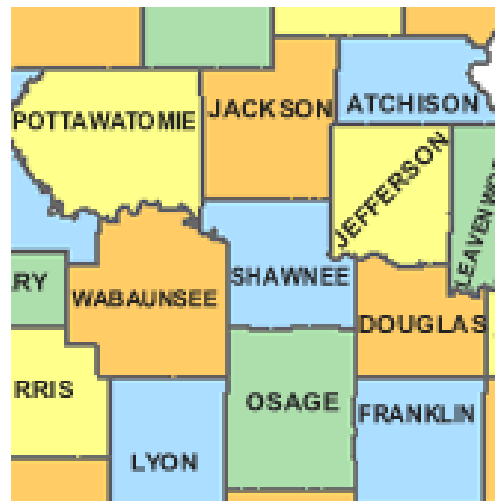
The Burch Farm & Vineyard was established in 2012 and is just now beginning to harvest grapes from their vineyard. The first harvest had been anticipated in 2016, but was limited due to early hail damage. If weather conditions cooperate, 2017 may be the first full harvest year.

Shawnee County has lost at least two long-time local food producers within the past year. Lenny Meier, Jr. and his family had grown fruit and vegetables and operated a produce market on Lower Silver Lake Road in Topeka for many years. When Lenny passed away unexpectedly in 2016, the family came to the difficult decision that they would not be able to continue the farming operation and market. After

several years of financial struggles to stay in business as a small independent dairy, the Iwig Dairy operation in Tecumseh was also forced to stop bottling milk, close their retail store locations and scale back their operation. Currently, the dairy is only selling raw milk and ice cream from the farm.

Regional Farms and Food Production

When examining the “local” food system, it is also important to consider what food production is occurring outside of Shawnee County borders, but within close enough proximity that the food may still be readily available to Shawnee County consumers. A review of vendor listings for farmers’ market located in northeast Kansas shows that vendor/producers regularly sell their products at venues outside of their home counties, and it is equally likely that some consumers travel outside of the county to bordering communities to purchase foods that satisfy their desires and expectations. The table below shows the number of farms in each of several counties surrounding Shawnee that harvested fruits or vegetables in 2012, and sold product directly to individual consumers or retail outlets.



As illustrated in the table, fruit and vegetable production and the value of direct sales were higher in several nearby counties (Douglas, Jefferson, and Leavenworth). Some of the food produced there is likely contributing to local food availability in Shawnee County.

County	Total Farms	Farms Harvesting Vegetables	Acres Vegetables Harvested	Farms with Orchards	Acres in Orchards	Farms selling direct to individuals	Value of Direct Sales	Farms selling direct to retail outlets	Farms producing Value-added products	Farms participating in CSA programs
Atchison	611	7	28	4	(D)	14	\$47,000	3	17	4
Douglas	945	40	187	35	206	86	\$497,000	51	47	12
Franklin	1,024	5	20	13	65	31	\$115,000	11	36	3
Jackson	1,054	2	(D)	0	0	36	\$175,000	10	53	2
Jefferson	996	13	38	23	104	74	\$441,000	21	47	8
Leavenworth	1,133	17	214	27	168	99	\$314,000	20	58	8
Lyon	946	13	24	14	42	43	\$164,000	9	22	8
Osage	1,014	2	(D)	2	(D)	34	\$101,000	4	34	1
Pottawatomie	890	7	41	5	29	34	\$203,000	17	31	5
Shawnee	826	10	58	13	22	47	\$176,000	11	29	4
Wabaunsee	617	3	11	10	10	15	\$36,000	4	25	0

Vegetable statistics include potatoes and melons

(D) = Data suppressed to avoid disclosure on information for individual farms

Data Source: 2012 U.S. Census of Agriculture, USDA

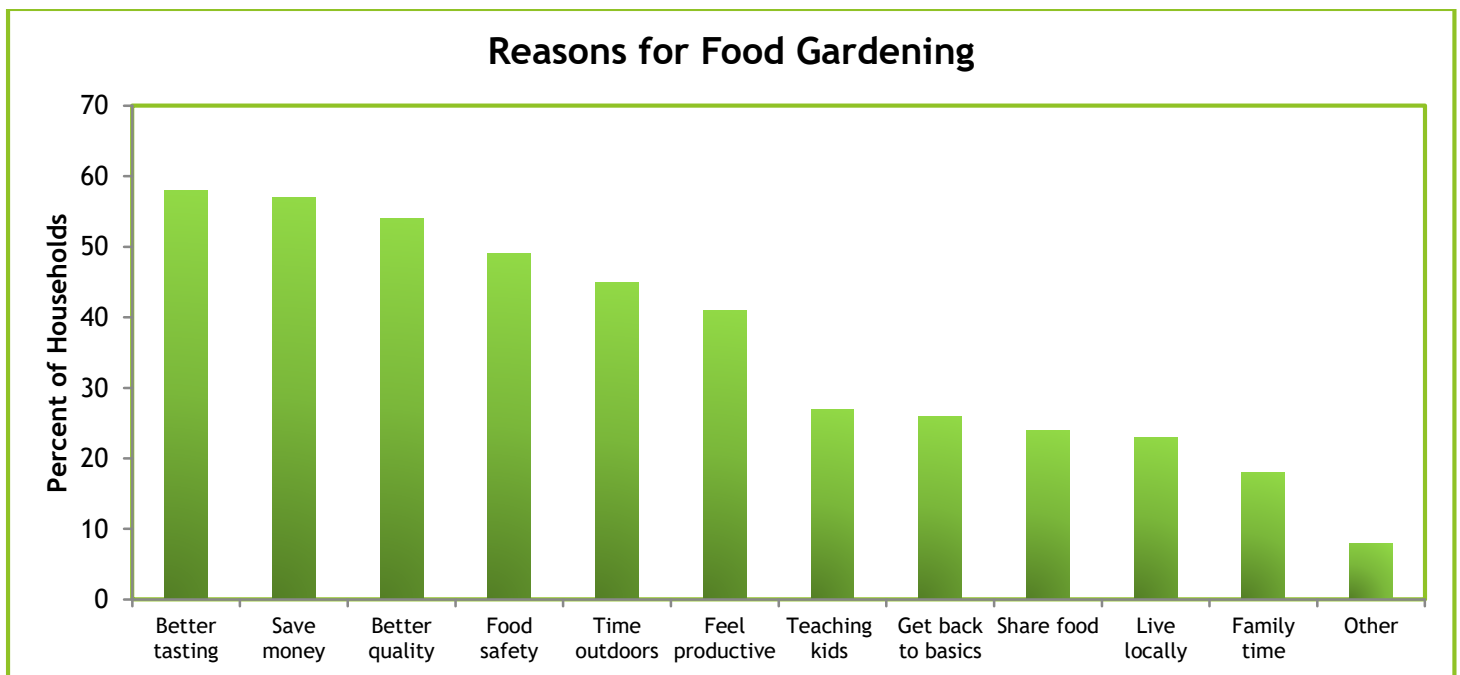
Other Local Food Production

The U.S. Census of Agriculture is helpful in understanding conventional agriculture, but does not capture some smaller-scale specialty food producers or foods grown by individual community members in home or community gardens. Many community residents may supplement their food supply by growing fruits and vegetables for their own use, or by hunting, fishing and foraging activities. Quantitative data documenting the extent of these activities is hard to come by, but some national sources suggest that food gardening is enjoying a resurgence in popularity, and in importance as a part of the local food system.

Home Gardening

Although most communities lack reliable information about the numbers of community residents that grow at least some of their own foods, national studies tell us that interest in home gardening has enjoyed a strong resurgence in recent years. A study published by the National Gardening Association in 2014 (National Gardening Association, 2014) found that more than one-third (35 percent) of U.S. households had grown food for their own use during 2013. That finding indicates the highest overall participation levels seen in the U.S. in a decade, and an increase of 17 percent over five years. The study found that there had been an increased interest in food gardening among millennials (age 18-34 years old), with a 63 percent increase in participation in food gardening among that group between 2008 and 2013. The report also estimated that more than 2 million U.S. households participated in community gardens in 2013, a 200% increase in five years.

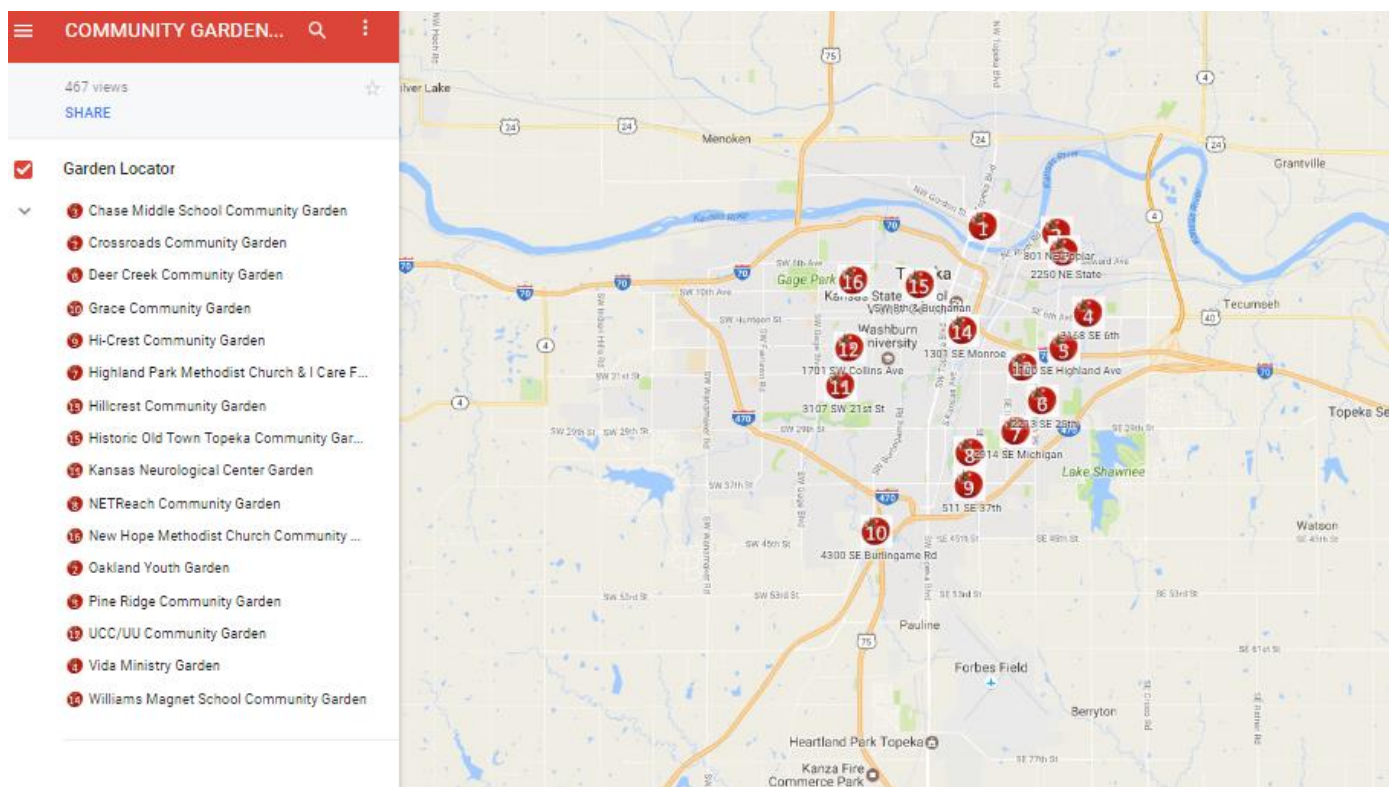
Participants in the same study were asked about the reasons why they participated in food gardening. Their responses may be helpful in understanding what factors are driving the increased interest. Results are shown in the chart below.



Source: National Gardening Association, Special Report. "Garden to Table: A 5-Year Look at Food Gardening in America." 2014

Community Gardens

Community Gardens are also growing in popularity - new gardens are being established in many Kansas Communities. Community Gardens are garden sites that offer growing space to multiple community members. Although rules and policies may vary, garden participants are assigned one or more plots upon which they may grow food plants, herbs or flowers of their choosing. Community Gardens are frequently organized by non-profit organizations or groups of community volunteers. Many gardens offer instruction and educational programming and access to shared tools and equipment. In addition to the obvious benefits of healthy foods and physical activity, community gardens provide social interaction that helps to build community. Because Community Gardens are often established on abandoned lots or other unused space within the community, they may also help to increase the attractiveness of a neighborhood by eliminating eyesores or hazardous conditions.



In Topeka, the non-profit organization *Topeka Common Ground* has been instrumental in founding and coordinating a number of community gardens. Currently, the organization either manages or assists several gardens in partnership with social service and community organizations. Most of the produce grown in the Common Ground gardens is donated to community food assistance agencies or incorporated into meals served by the service organization programs. One of the gardens has a limited number of garden plots available to individuals wishing to grow food for their own use.



Photo: Topeka Common Ground

Interest in Community Gardening has grown in recent years, and both the City of Topeka and Shawnee County Extension have taken steps to support expansion of Community Garden activities in the County. In 2014, the City of Topeka passed a zoning ordinance and standards that allow Community Gardens to be established as a primary use on otherwise vacant parcels of land in the city. Shawnee County Research and Extension has added a staff member who serves as a Community Garden Coordinator as part of her job duties.

Hunting, Fishing, and Food Foraging

In addition to home gardening, households may also supplement their food supply by hunting, fishing or foraging for edible wild plants. Unfortunately, no data are available describing the extent to which these sources are a routine part of the community food supply.

FOOD SYSTEM INFRASTRUCTURE

Most food consumed by humans does not go directly from harvest in the field or livestock operation to a home dinner table. It is far more common to have many intermediate steps in transporting, processing, packaging and distribution before foods reach retail outlet shelves or restaurant kitchens. Once there, most foods undergo additional preparation before being eaten by consumers.

In the conventional food system, most foods are not sold and consumed in the communities where the products originate. Instead, farm products are produced in larger quantities and sold to processors that may be long distances from the farm. Processors, in turn, sell and ship their finished products to distributors and wholesalers, who then sell products to retail stores or restaurants. By the time the food reaches the consumer's plate, it may have traveled thousands of miles and changed hands numerous times.



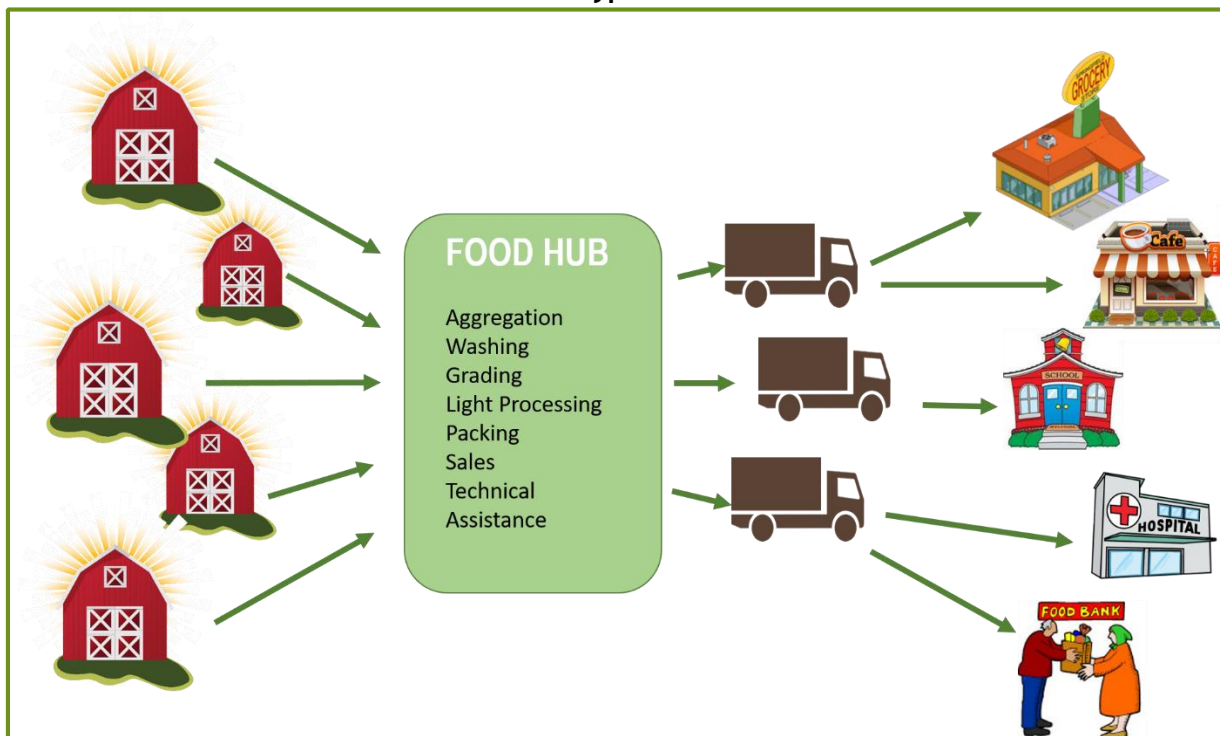
Source: Adapted from Nathan Pachal, South Fraser Blog, <http://sfb.nathanpachal.com/2015/08/kpu-researcher-studying-future-of-food.html>

One of the most frequently-cited barriers to increasing sales of locally-grown foods to businesses and institutions within a community is the challenge of aggregating foods produced in small quantities by small-scale producers and adding the processing and packaging that is needed to transform the raw products into forms and quantities that are better-matched to the needs of those potential purchasers. Many smaller-scale farmers lack on-farm capacity for washing and packaging fruits and vegetables, and few have the food safety certifications that may be required by institutional buyers. Institutional purchasers need the convenience of being able to fill all their needs with purchases from a small number of vendors; procuring products from multiple farms is cumbersome and time consuming. Some institutional food purchasers have become heavily reliant upon pre-processed foods like baby carrots or apple slices, and no longer have access to the staff and equipment that would be necessary to do all processing of raw foods in-house.

To address this gap between small-scale producers and larger-scale potential purchasers, some form of centralized aggregation, processing, order fulfillment and distribution system may be indicated. Many communities have recognized that the market for locally-produced foods will be limited until this infrastructure gap is adequately addressed. Some communities have undertaken feasibility studies to explore options for creating food hubs to meet the needs. In Kansas, two food hub studies have been completed in Northeast Kansas, and development of a regional food hub, operating under the name Fresh Farm HQ, has begun. The organization is structured as a member-owned co-op, and currently has ten

producer/owners. The food hub serves as an intermediary marketing and distribution broker, coordinating aggregation of foods produced by small-scale farms and providing businesses interested in purchasing locally-grown foods with a centralized purchasing system. Additional services provided by the food hub organization include assistance with crop/stock planning, food safety planning, bulk packaging supply, and technical assistance and training. At the time of this report, no Shawnee County producers had joined the food hub as member/owners.

Model of a Typical Food Hub



Food Processing

Meats

The limited number of meat processing facilities in Kansas is frequently cited as a barrier to local meat production by smaller scale or family farms. Under federal law, inspection standards in a state facility must be “equal to” those of federally inspected operations. The main difference between state and federal plants is that, by law, state inspected meats can only be sold within the state. In other words, meat products processed at state plants cannot enter commerce across state lines, which includes online sales, mail orders and other sales methods wherein meats are shipped out of state. Meat products processed at federal plants, on the other hand, may be sold across state lines, on the Internet and via mail order.

Currently, Farview Farms is the only USDA-inspected meat processing facility located within Shawnee County. They offer custom butchering, and also process deer for local hunters. There are no poultry processing facilities in Shawnee County.

Community/ Incubator kitchens

Would-be entrepreneurs who would like to produce and sell value-added food products are often faced with challenges of how to meet food safety regulations and requirements without investing large sums of capital to acquire equipment and an appropriate kitchen workspace. Community kitchens, which offer certified kitchen space and commercial-grade food preparation equipment on a rental basis provide small-scale startup businesses with an affordable option for producing their food products. According to a listing produced by the Kansas Department of Agriculture, there is currently one Incubator kitchen facility located in Shawnee County. The 305 LLC facility, located at 305 SE 17th Street in Topeka, has 500 square feet of kitchen space, a convection over/stove, commercial mixers, two gas burners, and two stainless steel prep tables. The facility rents for \$100 per day. In addition, another Incubator kitchen facility is available in Lawrence, Kansas.

Although counts or lists are not readily available, there are likely a number of other privately-owned commercial-grade kitchen facilities located in churches, schools and community centers in the County. Some of these may be willing to negotiate with individuals seeking kitchen access to allow leased use of kitchen facilities during otherwise idle time periods.

Food Manufacturing

Several large food manufacturing facilities are located within Shawnee County. They include:

- Reser's Fine Foods - potato salad and other cold deli salads, burritos
- Mars Candy - candy, M & Ms
- Bimbo Bakery - breads, baked goods
- Frito-Lay - chips and snack foods
- Pedro Lopez - dried chilies, seasoning blends, spices, chorizo
- Heartland Coffee & Packaging - custom roasted coffee, tea blends
- PT's Coffee Roasting Company
- Blind Tiger Brewery
- Downtown Craft Brewery
- Glaciers Edge Winery
- Pepsi, Coca-Cola, Canada Dry, Dr. Pepper/ Seven Up Bottling plants

Food Distribution, Warehouses, and Wholesale Suppliers:

U.S. Foods is a wholesale supplier to restaurants and other institutional food purchasers. They operate a warehouse and distribution center located at the northern edge of Topeka.

Leonard Meats, located in Topeka, is a wholesale meat supplier which served Topeka restaurants and schools. They have recently opened a retail sales room, also.

Prairie Land Food is a nonprofit organization offers monthly grocery bundles for sale at reduced prices on a pre-order basis to program participants. The program is open to anyone, without eligibility

restrictions. The content of basic monthly bundles varies, but typically includes fresh vegetables and fruits, and frozen meats. Additional specialty boxes of meat only and fruit/vegetable only are also available for purchase. Purchased items are delivered to designated community locations across Kansas on a monthly basis. The program operates out of a warehouse located south of Topeka, and also operates a food pantry from their warehouse location.

Harvesters, the Feeding America Food Bank that serves much of northeastern Kansas including Shawnee County, operates a warehouse facility located in downtown Topeka. Food is distributed to affiliated local food pantry and food assistance programs, and directly to community members in need through Harvesters' mobile food pantry programs.

THE RETAIL FOOD ENVIRONMENT

The food that is available in our environment, and the ways in which it is presented to consumers, exert strong influences on consumer eating choices. No matter how well-intentioned and knowledgeable a person might be, maintaining healthy eating behaviors and supporting a local food system can be difficult if healthy and local food options are not readily available, accessible, convenient or affordable in the community. When we consider the fact that, at times, an abundance of less healthy or non-local food options is more available, easier to find and cheaper to buy, we better understand the challenge individual consumers face when choosing what to buy. Even when consumers are deliberately trying to maintain healthy diets, a barrage of subtle and not-so-subtle cues and messages in the food environment may derail their good intentions. Factors as varied as product placement and pricing, the words used to describe a menu offering, plate sizes, and ambient lighting in the dining environment have all been shown through research to influence eating choices and behaviors (Wansink, 2014).

The term '**food environment**' describes the array of food options and environmental influences within a neighborhood or community. The U.S. Centers for Disease Control and Prevention (U.S. Centers for Disease Control and Prevention, 2016) defines the food environment as:

- The physical presence of food that affects a person's diet,
- A person's proximity to food store locations,
- The distribution of food stores, food service, and any physical entity by which food may be obtained, OR,
- A connected system that allows access to food.

Both the private and public sectors shape our food environment. Businesses seek to locate in neighborhoods where they hope to make a profit. Restaurants and grocery stores remain where they find a reliable customer base. For local government and public agencies, zoning regulations influence where different types of commercial businesses can locate, while purchasing decisions can influence what foods are available in places like schools and city parks.

The factors that shape our food environment range from common to quite subtle factors:

- The physical availability to access food
- Where various stores and food outlets are located
- The pricing of healthy or local food offerings
- Product placement on store shelves
- Plate size in restaurants

- The words used to describe a menu offering

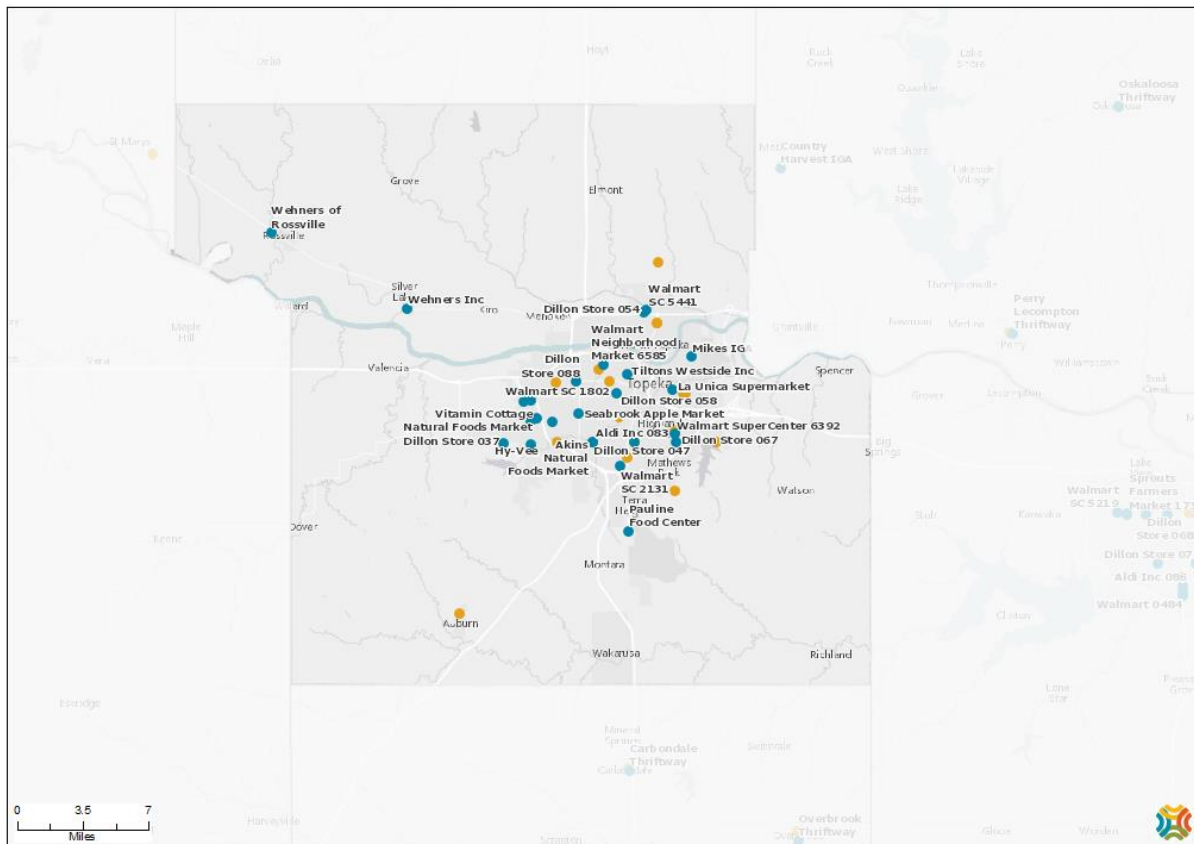
Each of these factors, and many more, come into play as consumers select the food that they eat.

Grocery Stores

Traditionally, most families have purchased the majority of their food for home use at community grocery stores. That tradition is changing, however, as more large-scale ‘big-box’ stores like Walmart and Target devote significant sections of their store floor space to grocery items, and smaller convenience and discount stores also expand their offerings of food items. Currently, there are 18 grocery stores operating within Shawnee County. In addition, grocery items are sold by 11 specialty food markets, 66 convenience stores/gas stations, 18 dollar stores, 12 pharmacies one warehouse club, four Wal-Mart supercenters, a K-Mart and a Target store. All but two of the grocery stores are located within the city of Topeka; the communities of Rossville and Silver Lake each have a grocery store. There is no grocery store located in the southern third of the county.

Shawnee County has lost at least three grocery stores in recent years: the Auburn Apple Market, the Dillon’s Store that served central Topeka, and the Topeka Natural Food Grocery. One new grocery store has opened - a Wal-Mart Neighborhood Store located near 6th and MacVicar in Topeka.

Food Retailers in Shawnee County, 2016



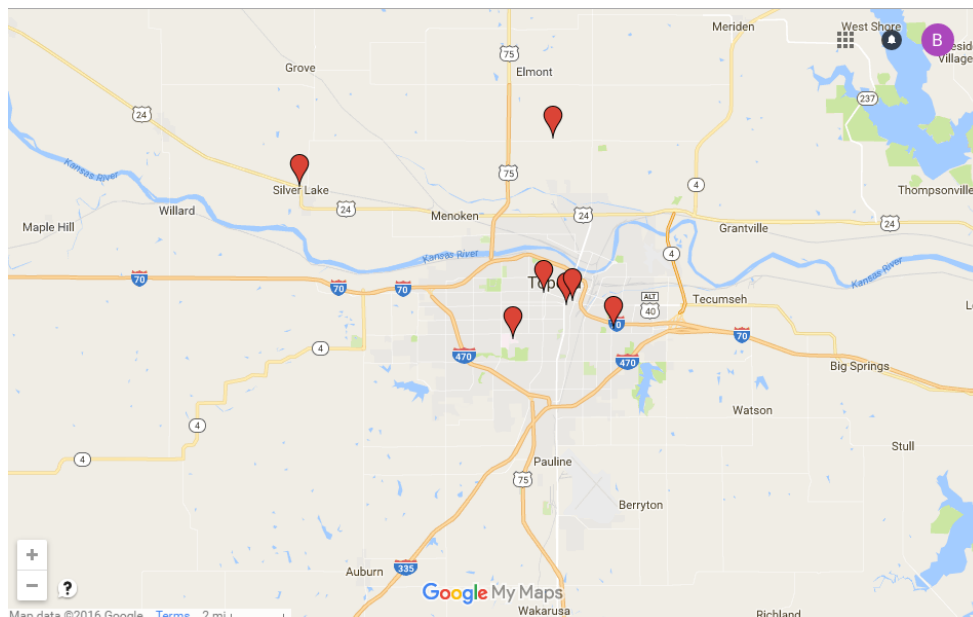
For more discussion of geographic access to grocery stores in Shawnee County, please refer to the Food Access section of this report.

Farmers' Markets

Farmers' markets offer consumers the opportunity to purchase fresh, locally grown foods directly from the farmers that produced them. This direct marketing approach is beneficial to both farmers and consumers in many ways. Farmers may retain more of the sales value for their products than they would if products were marketed through conventional food distribution systems, and farmers' markets provide an ideal outlet for products that are only available in small quantities. Consumers gain access to products that are freshly-harvested, and the opportunity to build relationships with the farmers that grow their food. Interest in farmers' markets has grown in recent years, both nationally and across Kansas.

In Shawnee County, there were seven Farmers' Markets operating during the summer of 2016. All of the markets are seasonal, operating only during the summer and fall growing months. Two of the markets, the Downtown and East Topeka, accept SNAP benefits and participate in the Double Up Food Bucks program which provides matching money for farmers' market purchases made with SNAP benefits. In addition, three vendors who sell products at the Capitol Midweek market accept SNAP benefits.

Market Name	Location	Hours
Capitol Midweek Farmers' Market	10 th and Jackson Streets, Topeka	Wednesdays, 7:30 am – 12:00pm
Downtown Topeka Farmers' Market	12 th and Harrison Streets, Topeka	Saturdays, 7:30 am – 12:00 pm
Friday Farmers' Market @ KNI	3701 SW 21 st St., Topeka	Fridays, 7:30 am – 12:00 pm
Monday Market @ Your Library	1515 SW 10 th Ave., Topeka	Mondays, 8:00 am – 11:30 am
Silver Lake Farmers' Market	203 Railroad St., Silver Lake	Tuesdays, 6:00 pm – 8:00 pm
East Topeka Farmers' Market	2010 SE California, Topeka	Tuesdays, 3:00 pm – 7:00 pm
Mother Teresa's Farmers' Market	2014 NW 46 th St., Topeka	Saturdays, 8:00 am – 11:30 am

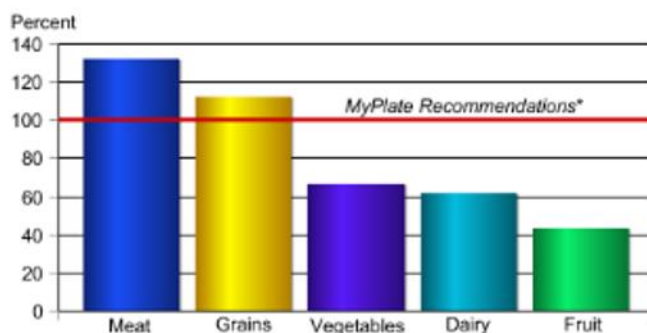


CONSUMER EATING BEHAVIORS AND FOOD PURCHASES

Eating Behaviors

Across the nation, and in Kansas, studies have repeatedly found that consumers' diets are not well-aligned with current dietary recommendations. According to recent information from the *Dietary Guidelines for Americans* (U.S. Department of Health and Human Services, and U.S. Department of Agriculture), about three-quarters of Americans consume too little fruits, vegetables, dairy products and oils, and more than half eat more than the recommended amounts of grains and protein foods.

American diets are out of balance with dietary recommendations
In 2014, Americans consumed more than the recommended share of meat and grains in their diets but less than the recommended share of fruit, dairy, and vegetables



*Data based on a 2,000-calorie-per-day diet.

Note: Rice and durum flour data were discontinued and thus are not included in the grains group. Food availability data serve as proxies for food consumption.

Source: Calculated by ERS, USDA, based on data from various sources (see Loss-Adjusted Food Availability Documentation).

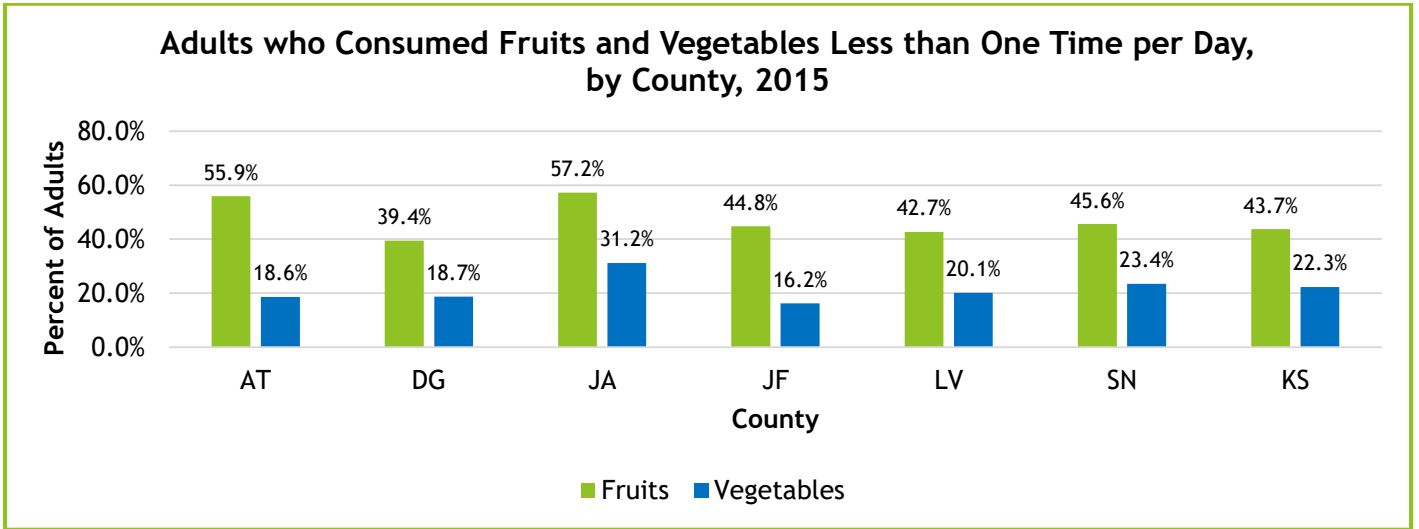
Data as of February 2016.

At the state and county levels, information about consumers' fruit and vegetable consumption are monitored as part of the annual Behavioral Risk Factor Surveillance System (BRFSS) survey. State-level results are available for most years; county-level results are available only in years where the survey sample was enlarged sufficiently to produce reliable estimates for most counties in Kansas. The way in which questions about fruit and vegetable intake were asked and reported was changed between 2009 and 2010, which makes comparisons between pre-2010 and later-year results invalid. Because the questions report two very different measures of fruit and vegetable consumption, both are included below.

In 2009, more than four out of five Shawnee County adults (82.5 percent) reported eating less than the recommended five daily servings of fruits and vegetables. In 2015, nearly half (45.6 percent) of Shawnee County adults said that they ate fruits less often than once a day, and about one-quarter (23.4 percent) said that they ate vegetables less than once per day. While these numbers may be surprising, they are similar to the results for Kansas statewide, and to other counties in Northeast Kansas.

Fruit and Vegetable Consumption

Measure	Kansas	Shawnee County
% of Adults consuming fruits & vegetables less than 5 times/ day (2009)	81.4%	82.5%
% of Adults consuming vegetables less than one time/ day (2015)	22.3%	23.4%
% of Adults consuming fruits less than one time/ day (2015)	43.7%	45.6%

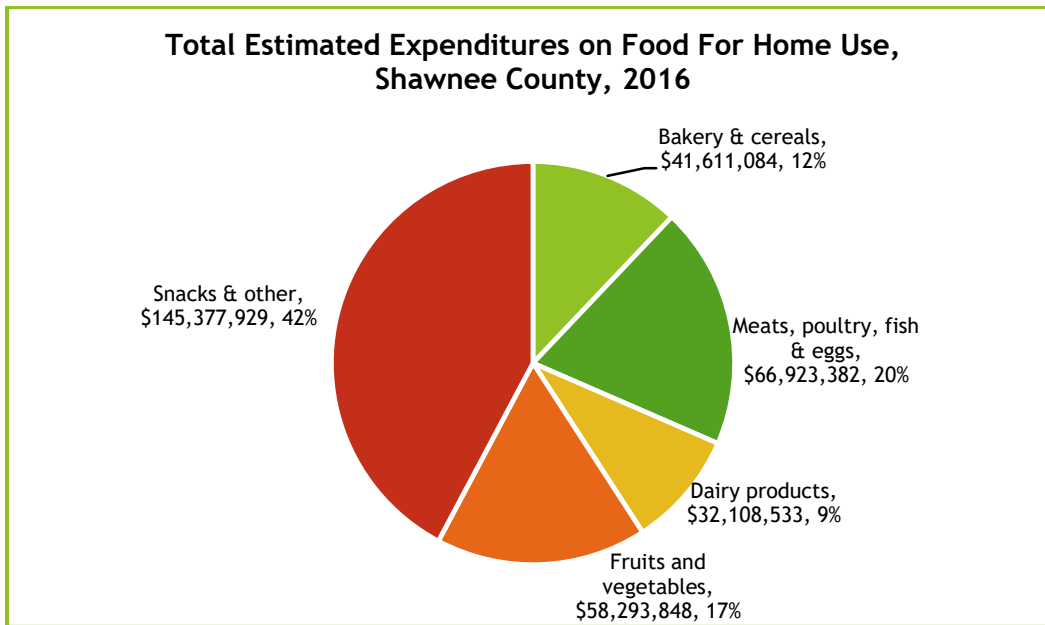


Data source: Kansas Behavioral Risk Factor Surveillance Survey, 2015, Kansas Department of Health and Environment

Food Expenditures

Data from the national Consumer Expenditure Survey provide regional estimates of consumer spending patterns for an array of goods and services. A proprietary company (Synergos Technologies) has combined those regional estimates with local-level demographic data to produce statistical estimates of consumer spending patterns at the county level.

As illustrated in the following charts, Shawnee County residents spend an estimated \$492 million annually on food purchases. Approximately \$185 million of that is spent on foods prepared away from home. Of the foods purchased for home use, more than 40 percent of spending is on snacks and other processed food items; just 17 percent is spent on fruits and vegetables. Broken down, that amount calculates out to 89 cents per person, per day, spent on fruits and vegetables.



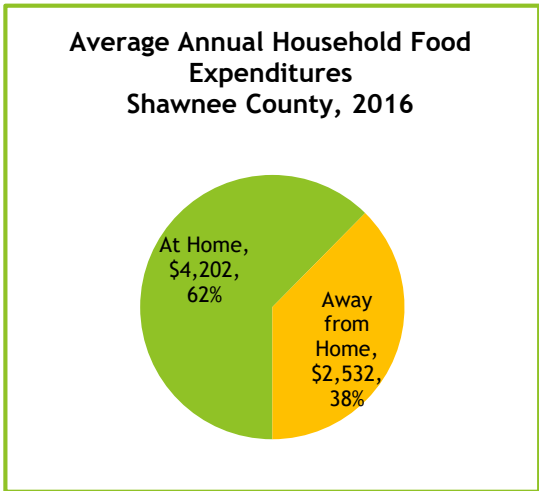
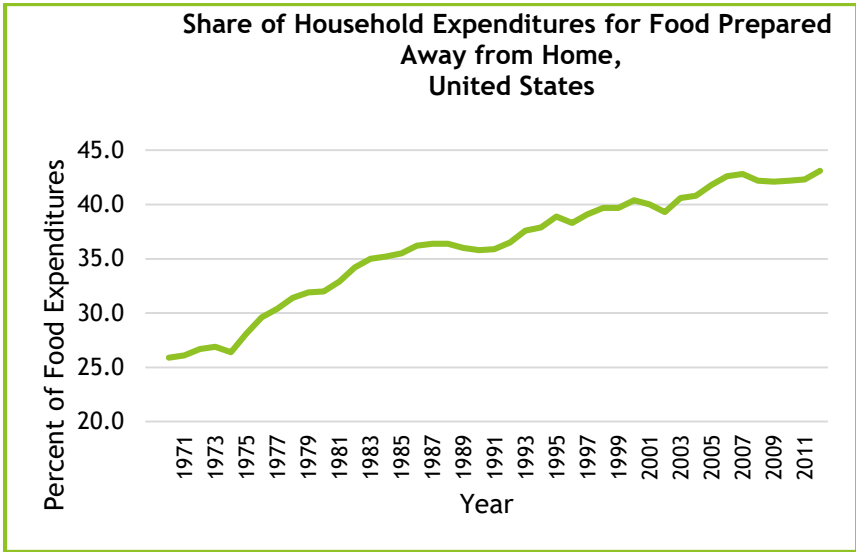
Data Source: Synergos Technologies, Inc. forecasts Business Decision data system, estimates derived from the Consumer Expenditure Survey, Bureau of Labor Statistics, 2012.

Shawnee County Population, 2015	179,125
Total Shawnee County Food Spending 2016	\$492,010,156
Total Annual food spending per capita	\$2,746.74
Total Daily food spending per capita	\$7.53
Total spending on fruits and vegetables (at home)	\$58,293,848
Total annual fruit and vegetable spending per capita	\$325.44
Daily per capita spending on fruits and vegetables	\$0.89

Data source: Expenditure estimates from Business Decision data system, based upon Consumer Expenditure Survey data

Dining Away from Home

Restaurants comprise another important component in most community food systems. The share of total food dollars that U.S. households spend on food prepared away from home has risen steadily since the 1970s. A number of factors have contributed to this trend, including more women employed outside of the home, higher household incomes, and more affordable and convenient fast food outlets (USDA Economic Research Service, 2016). While foods prepared away from home are not necessarily less healthy than home-cooked meals, research conducted by USDA has found that meals and snacks based on food prepared away from home contained more calories per eating occasion than those based on at-home food. Away-from-home food was also higher in nutrients that Americans overconsume (such as fat and saturated fat) and lower in nutrients that Americans underconsume (calcium, fiber, and iron). (USDA Economic Research Service, 2016)



Data Source: USDA Economic Research Service

Residents of Shawnee County have many choices and options when they choose to eat foods prepared away from home, and data suggests that they utilize those options regularly. Results from the National Consumer Expenditure Survey estimate that Shawnee County residents spend approximately 38 percent of their food budgets on food prepared away from home (\$2,532/household/year) for a total of \$185,026,976 in annual spending (Synergos Technologies, Inc.).

Fast food restaurants

Just as a lack of access to healthy food options may influence individual’s eating behaviors, an over-abundance of less healthy food options may also negatively influence eating choices. Menu offerings at fast food restaurants are frequently filled with unhealthy choices that are high in calories, fats and salt levels. (Fast food restaurants are defined as limited-service food establishments where patrons generally order or select items and pay before eating.) Environments in which there are high concentrations of fast food restaurants may tempt consumers toward unhealthy food choices, especially if access to healthier food options is limited or more expensive.



In 2014, there were 96 full-service and 142 fast-food outlets located within the borders of Shawnee County. On a per person basis, the density of fast food outlets in Shawnee County is somewhat higher than the Kansas and U.S. averages.

Geographic Area	Total Population	Number of Establishments	Establishments, Rate per 100,000 Population
Shawnee County	177,934	142	79.80
Kansas	2,853,118	2,062	72.3
United States	312,732,537	227,486	72.7

Data Source Community Commons. Original data from US Census Bureau, [County Business Patterns](#). Additional data analysis by [CARES](#). 2014.

Promising Changes in the Community Food Environment

Throughout Shawnee County, a number of businesses and organizations are working to implement policies and practices that promote healthy eating choices and support local food producers. A few examples are highlighted in this section.

Farm to School Programs

In recent years, many school nutrition programs have begun to try to incorporate more locally-produced foods into school menus. The U.S. Department of Agriculture (USDA) has encouraged these efforts through grants and resources provided by their national Farm to School program. In 2015, USDA conducted a Farm to School survey of all K-12 school districts in the United States. Results for the Shawnee County districts are summarized in the table that follows. At the time of the survey, USD 501 in Topeka was the only district that had actually been purchasing some local food for use in the school meals program in the 2013-2014 school year, although three additional districts indicated intent to do so at a future time. The Shawnee Heights district reported that they had been using some local foods and foods from the school program in their cafeteria. Comments collected as part of the survey illustrate some of the challenges that schools faced in their attempts to implement farm to school programs.

	School District					
	Auburn-Washburn USD 437	Seaman USD 345	Shawnee Heights USD 450	Silver Lake USD 372	Topeka USD 501	Topeka Lutheran
Enrollment 2015-2016	6,275	3,821	3,555	700	14,169	877
# Eligible for free/reduced price meals	2,157	1,397	1,385	149	10,865	149
% Free/Reduced Eligible, 2015-2016	34.4%	36.6%	39.0%	21.3%	76.7%	17.0%
Farm-to-School in 2013-14	No, planned to start in 2014-15	No report	No, planned to start in 2014-15	No, no plans to start	Yes	No, planned to start in 2017
Schools participating	NA	No data	No data	No data	21	No data
'Local food' definition	NA	No data	Same city/county	No data	200 miles	No data
Use of local foods	NA	No data	Serving local foods and foods from school garden in cafeteria	No data	Lunch program	No data
Total food costs (\$)	NA	No data	No data	No data	\$4,000,000	No data
\$ Spent on local foods	NA	No data	No data	No data	\$300	No data
Schools with edible gardens (2013-14)	NA	No data	No data	No data	2	No data
Schools with salad bars (2013-14)	NA	No data	No data	No data	8	No data

Data Source: 2015-2016 enrollment and free/reduced price meals statistics from the Kansas Department of Education; remaining information from the 2015 U.S.D.A. Farm to School Census

Additional Responses to the 2015 Farm to School Census, by participating Shawnee County School Districts:

Are any of the following considered to be problems in procuring local products or reasons why your district does not purchase local products?

- Local producers aren't bidding
- Local items not available from primary vendors

Are any of the following considered to be problems in procuring local products or reasons why your district does not purchase even more local products?

- Local producers aren't bidding
- Hard to find year-round availability of key items
- Hard to coordinate procurement of local with regular procurement
- Local items not available from primary vendors
- Higher prices
- Lack of reliability in delivering ordered items
- Hard to get information about product availability
- Hard to place orders with vendors
- Getting product delivered that meets your quality requirements & other specs (i.e., size)

Hospitals

In addition to meals served to patients, hospitals also make meals and snacks available to hospital staff, medical staff and visitors. With their primary mission in promoting and improving health, and their position as major employers in the community, hospitals have an opportunity to support and promote healthy eating behaviors in the community. By offering healthy food choices in their cafeterias, snack bars, gift shops and vending machines, hospitals can be powerful role models by setting an example for the public and other employers.

To encourage Kansas hospitals to take steps toward creating healthier food environments on their campuses, the Kansas Hospital Education and Research Foundation (KHERF), an affiliate of the Kansas Hospital Association, developed the Healthy Kansas Hospitals program. The program requires participant hospitals to sign a pledge, and to take steps to alter their current policies and practices to improve the healthfulness of the food and beverage options that they offer. In Shawnee County, both Stormont Vail Health and St. Francis Health centers have signed the Healthy Kansas Hospitals pledge, and have made formal policy changes to their food and beverage environments.

In addition, St. Francis Health was awarded the Worksite Health Champion award at the 2016 Kansas State of Wellness Symposium. St. Francis Health has been able to work with its food service vendor, Aramark, to outline a plan and incorporate it as policy to phase healthier options into its cafeteria. This will ensure employees and the community have access to healthy food while in the facility.

Salad Bar with Healthy Choices Identified, St. Francis Health Center, Topeka

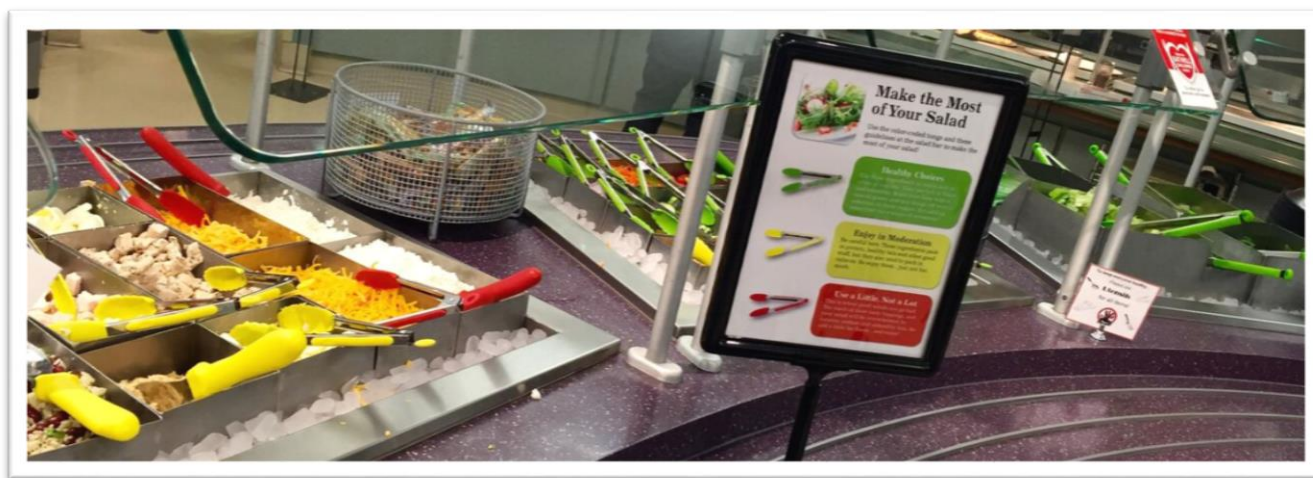


Photo Courtesy of Misty Lechner

Other Businesses or Institutions

A number of other businesses and institutions located in Shawnee County are also working to encourage healthier eating, support local food producers and promote environmentally responsible use of food in their operations. A few examples are highlighted here.

The Bon Appétit Management Company, which is contracted to provide dining services to the **Payless Corporate offices** in Topeka, has had a “**Farm to Fork**” local food procurement policy in place since 1999.

Chefs at Bon Appétit locations strive to source at least 20 percent of their ingredients from small, owner-operated farms, ranches and artisan producers within 150 miles of their kitchens.

Washburn University Dining Services are operated under a contract to Chartwells Dining Services. Chartwells has a “*Buy Local*” sustainability policy which encourages the purchase and use of locally-produced foods in campus dining services. They define “local food” as being produced within 150 miles. Chartwells also has an initiative called “*Project: Clean Plate*” designed to reduce food waste on the Washburn campus.

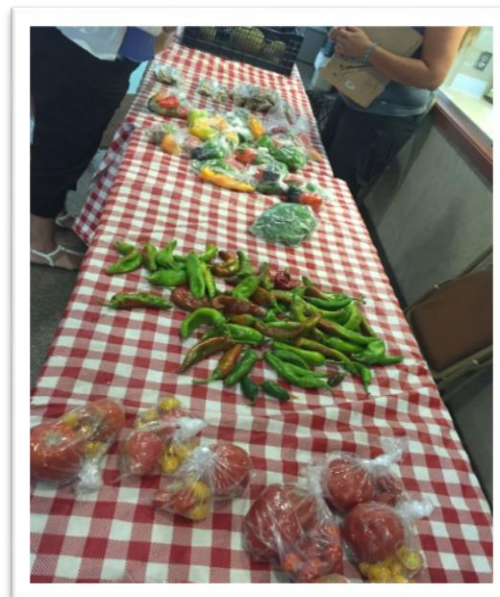


Photo credit: Washburn University Dining Services website

The Topeka offices of **Blue Cross and Blue Shield** host an on-site Community Supported Agriculture (CSA) program for their employees. In this program, a group of local farmers makes a weekly delivery of their harvest to the BCBS office, where participating employees who have purchased a subscription to the program can pick up their weekly “share” of the farm products.

Right: Community Supported Agriculture Program at Blue Cross Blue Shield in Topeka

Photo courtesy of Missty Lechner



Some **Dillon's Grocery Stores** in the Topeka area offer a free piece of fresh fruit to children who accompany store shoppers. As shown in the accompanying photo, a basket located in the produce section of the store offers apples, bananas and oranges to young shoppers.



Photo courtesy of Misty Lechner

Vending and Concessions

Food is also offered for purchase in many other public venues, including concession stands at school athletic events and at various parks and recreational facilities. In recent years, the **Topeka Zoo**, the **Bettis Sports Complex** in Topeka, and USD 501's **Hummer Sports Park** have all begun to implement healthier concession options. The Zoo has launched a creatively named "Eat Like the Animals" program to encourage patrons to select healthier concession options.

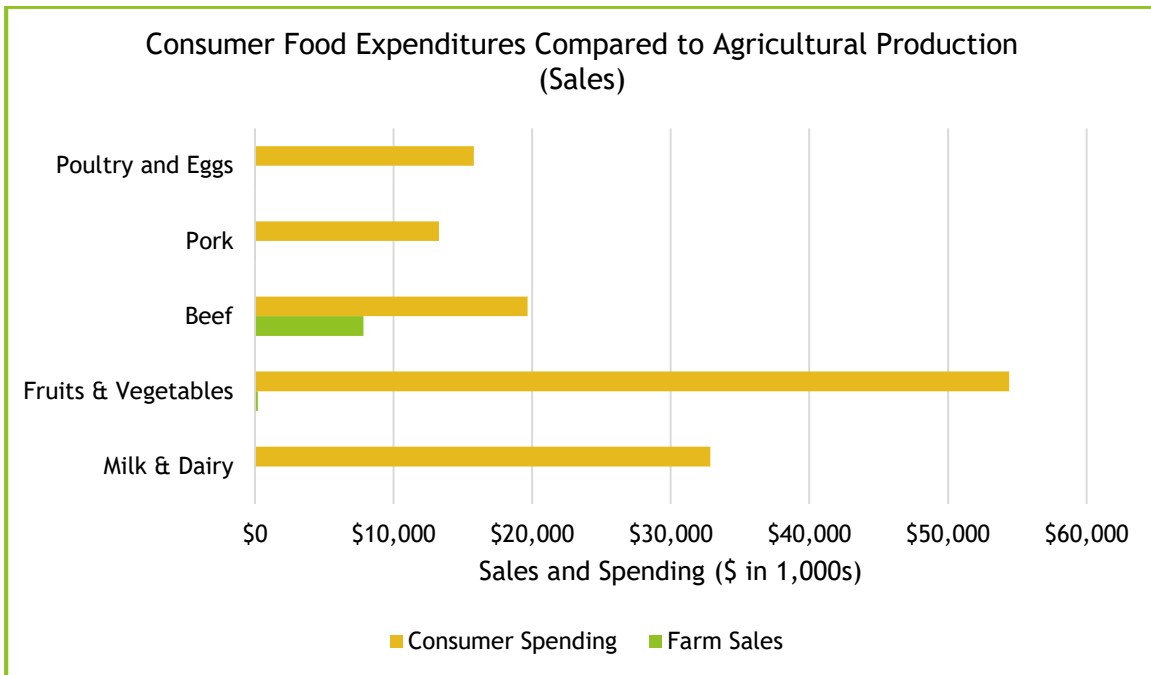
Topeka Zoo Concession Menu



Photo courtesy of Misty Lechner

COMPARISON OF AGRICULTURAL PRODUCTION TO CONSUMER SPENDING

The vast majority of food consumed by Shawnee County residents is produced outside of the County. Only \$176,000 of food products were sold by Shawnee County farmers directly to consumers in 2012. That amounts to only 0.4 percent of all farm sales and 0.1 percent of consumer spending on food for consumption at home.



Data Source: Farm sales from 2012 U.S. Census of Agriculture; Consumer Spending based upon regional expenditure estimates from the Consumer Expenditure Survey.

NUTRITION-RELATED HEALTH CONDITIONS

Overweight and Obesity (Adult)

Maintaining a healthy weight is an important factor in maintaining overall health. Body weight is closely associated with two primary factors --- nutrition and physical activity. Excess body weight, which occurs when caloric intake exceeds the number of calories expended, places individuals at increased risk for many health issues, including heart disease, diabetes, some forms of cancers, and joint problems and physical disability. Obesity has become a widespread problem in the United States, with rates steadily increasing over the last several decades.

Rates of overweight and obesity in the population are routinely measured as part of the national Behavioral Risk Factor Surveillance System coordinated by the U.S. Centers for Disease Control and Prevention (CDC) and state health agencies. In Kansas, the Kansas Department of Health and Environment periodically includes an expanded sample size to make it possible to produce county-level results.

For the measures of overweight and obesity, survey respondents are asked to self-report their height and weight. In 2013, 34.9 percent of Shawnee County adults aged 18 and older self-reported that they had a height and weight that would calculate to a Body Mass Index (BMI) between 25.0 and 30.0 (overweight); 33.7 percent of Shawnee County adults reported height and weights that would classify them as obese (BMI > 30).

Rates of Overweight and Obesity, 2013

Area	% of Adults who are Overweight (BMI between 25.0 and 30.0)	% of Adults who are Obese (BMI >30)	% of Adults who are Overweight or Obese
Shawnee County	34.9%	33.7%	68.6%
Kansas	35.3%	30.0%	65.3%

Data Source: Kansas Department of Health and Environment, Kansas Behavioral Risk Factor Surveillance System

Other Diet-Related Health Conditions

The Behavioral Risk Factor Surveillance Survey also asks survey participants whether or not they have ever been told by a doctor or other health professional that they have any of several health conditions.

Health Condition	Shawnee County	Kansas
% of Adults Diagnosed with Diabetes, 2013	10.7%	9.6%
% of Adults Tested and Diagnosed with High Cholesterol, 2013	40.7%	38.1%
% of Adults Diagnosed with Hypertension, 2013	34.0%	34.8%
% of Adults who had Angina or Coronary Heart Disease, 2011-2012	5.0%	4.5%

Data Source: Kansas Department of Health and Environment, 2013 Kansas Behavioral Risk Factor Surveillance Survey

ACCESS TO HEALTHY FOODS

Access to healthy food options is essential to healthy eating habits which are, in turn, essential to good health. When we talk about access to healthy food options, there are two considerations. First, a consumer must be able to physically get to places where healthy foods are available for purchase. Second, the consumer must be able to afford to buy the healthier food options, or must be able to obtain assistance that enables her/him to do so. These are minimum requirements for food access. In addition, it is desirable that community residents have access to foods that are culturally appropriate, and are able to access food through socially acceptable means that respect and preserve individuals' dignity.

“Community food security is a condition in which all community residents obtain a safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes community self-reliance and social justice.” - Mike Hamm and Anne Bellows, Community Food Security Coalition

Physical Access

Physical access to healthy food options is commonly measured by considering two factors - the distance that the consumer must travel to the nearest retail grocery store and the consumer's access to reliable transportation to travel to that closest store. In urban areas, a distance of one mile or less to the nearest grocery store is commonly considered to be adequate; in rural areas a distance of 10 miles or less is commonly considered adequate. The proportion of low-income household in an area is often used as a proxy indicator of less access to reliable transportation. Geographic areas in which a substantial portion of the population is low income (a poverty rate of 20 percent or higher), and one-third or more of households live further than one mile (in urban areas) or ten miles (in rural areas) from the closest full-service grocery stores are designated as '*food deserts*' to denote challenges with getting to a grocery store that offers a variety of healthy food options.

Population with Limited Food Access

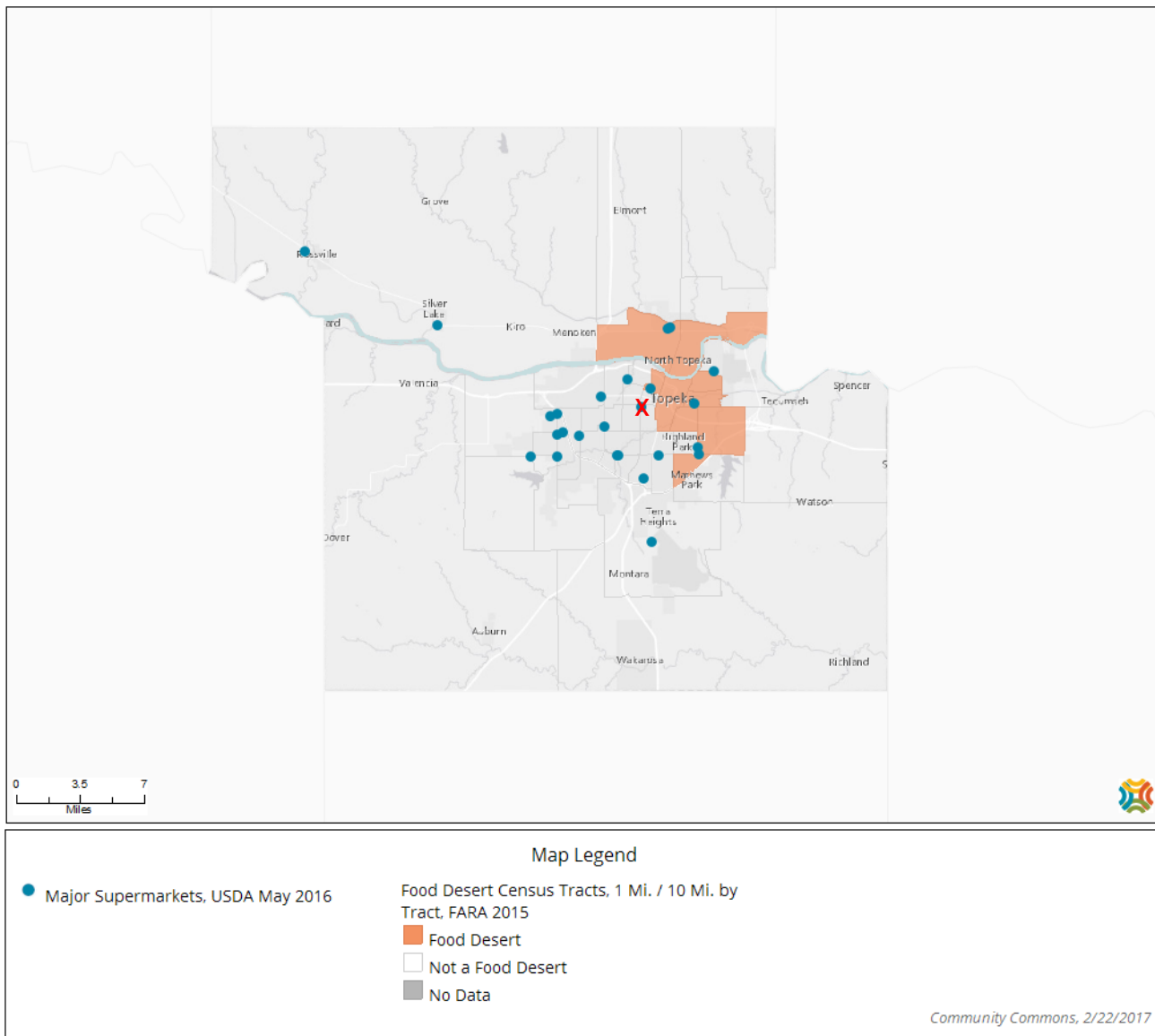
Based upon data from 2015, the U.S. Department of Agriculture determined that nine census tracts located within Shawnee County met the definition of a food desert (low income² and low access at a distance of 1 mile in urban areas or 10 miles in rural area). Those tracts, shown on the map below, were all located in the northern and eastern portions of the Topeka area. The total population in residing in those census tracts was 30,834 in 2015 (17.3 percent of the county population).

Locations of retail grocery stores in 2016 are also shown on the map on the next page. Since 2016, one grocery store has closed - the Dillon's store that was located in central Topeka. That location is marked with a red "X" on the map.

² Low income is used in this calculation as a proxy to identify households that are less likely to have reliable transportation.

Food Deserts, 2015 (Low income and Low access, 1 and 10 miles)

Shawnee County Food Deserts, 2015



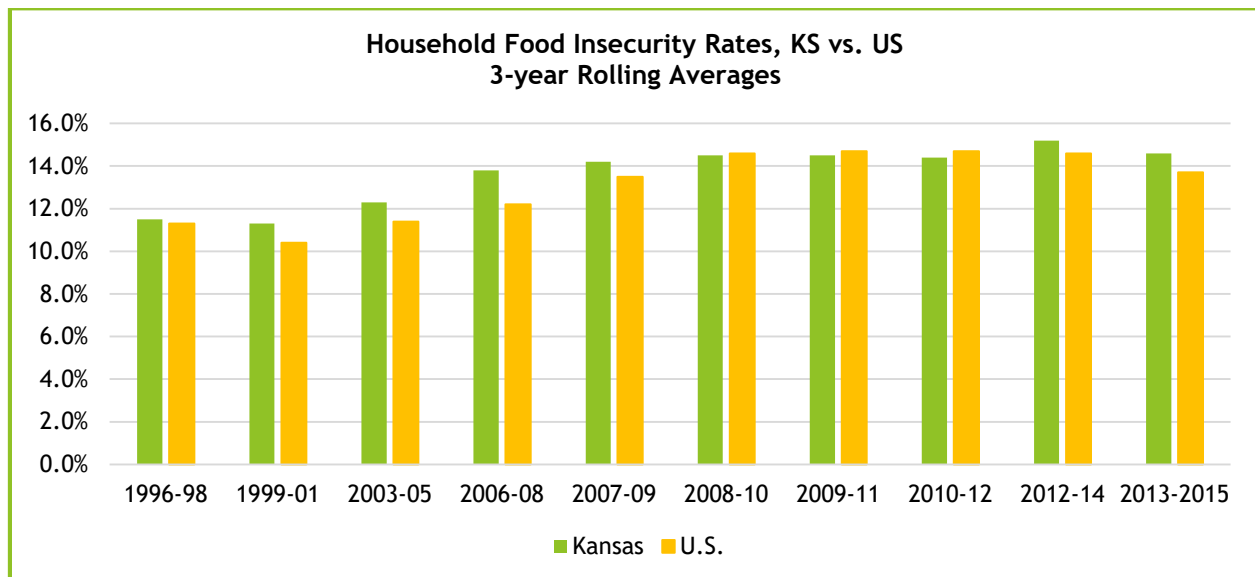
In addition to the distance from home to a grocery store, other community and environmental factors may also create physical access barriers. Important considerations might include:

- The availability of public transportation to get to a store, and policies that allow an individual to carry multiple packages or bags of groceries on public buses,
- Sidewalks to allow individuals to safely walk to a store
- Store designs and transportation services that accommodate individuals with mobility limitations or confined to a wheelchair
- Neighborhood safety and crime rates

Affordability of Healthy Food Options

Affordability is the second component of access to healthy foods. It does little good to have an abundant supply of healthy food options if consumers in the community lack the financial means with which to purchase the food. The term ‘*food insecurity*’ is commonly used in the United States to describe the lack of consistent access to enough food to maintain a healthy lifestyle, because of a lack of resources. Households that express anxiety or uncertainty about their ability to consistently obtain enough food are termed ‘*food-insecure*’. Rates of household food insecurity are measured annually at the national and state level as a component of the Current Population Survey administered by the U.S. Census Bureau.

At the National level, rates of household food insecurity increased sharply with the onset of the economic recession, and have remained elevated since that time. Only since 2012 have the national rates of food insecurity begun to decrease slightly. In Kansas, rates of food insecurity exceeded national rates prior to the onset of the 2008 recession, and increased further with the recession’s onset. Although national food insecurity rates appear to have decreased slightly in recent years, rates in Kansas have been slower to decline.



Data Source: USDA ERS analysis of annual CPS Food Security Surveys

Statistical estimates of county-level food insecurity rates have been produced by the national food assistance organization Feeding America. The most recent estimates, from 2014, show that approximately 15 percent of Shawnee County residents (27,220 individuals) were food-insecure. More than one in five children (22.6 percent, or 9,900 children) in Shawnee County lived in households which were food-insecure.

Although risk for food-insecurity is highest among lower-income households, food insecurity is not always limited to the very poor. Many working families with incomes above the poverty level still struggle to meet basic needs such as food, housing, medical care, transportation and childcare on their earnings. The Feeding America estimates suggest that more than one-third (36 percent) of food-insecure households in Shawnee County have income levels high enough that they would not be eligible for any of the food assistance programs sponsored by the Federal Government. Similarly, about one-third (34

percent) of food-insecure children in Shawnee County live in families where the household income would be too high for them to be eligible for free or reduced-price school meals or for assistance through the Supplemental Nutrition Program for Women, Infants and Children (WIC) program. For these families, when help is needed, it must come from privately-funded assistance programs like Harvesters, or other food assistance or emergency meal programs in the community.

Overall Food Insecurity Rate

Geographic Area	Food Insecure Individuals, Total	Overall Food Insecurity Rate
Shawnee County	27,220	15.2%
Kansas	413,560	14.2%
United States	48,135,000	15.4%

Food-Insecurity among Children

Geographic Area	Food Insecure Children, Total	Child Food Insecurity Rate
Shawnee County	9,900	22.6%
Kansas	153,940	21.3%
United States	15,323,000	20.9%

Data Source: Feeding America, Map the Meal Gap 2014

Food Insecurity - Food Insecure Population Ineligible for Assistance

Assistance eligibility is determined based on household income of the food insecure households relative to the maximum income-to-poverty ratio for assistance programs (SNAP, WIC, school meals, CSFP and TEFAP).

Geographic Area	Food-Insecure Population, Total	Percentage of Food-Insecure Population Ineligible for Assistance	Food-Insecure Children, Total	Percentage of Food-Insecure Children Ineligible for Assistance
Shawnee County	27,220	37%	9,900	34%
Kansas	413,560	37%	153,940	34%
United States	48,135,000	26%	15,323,000	21%

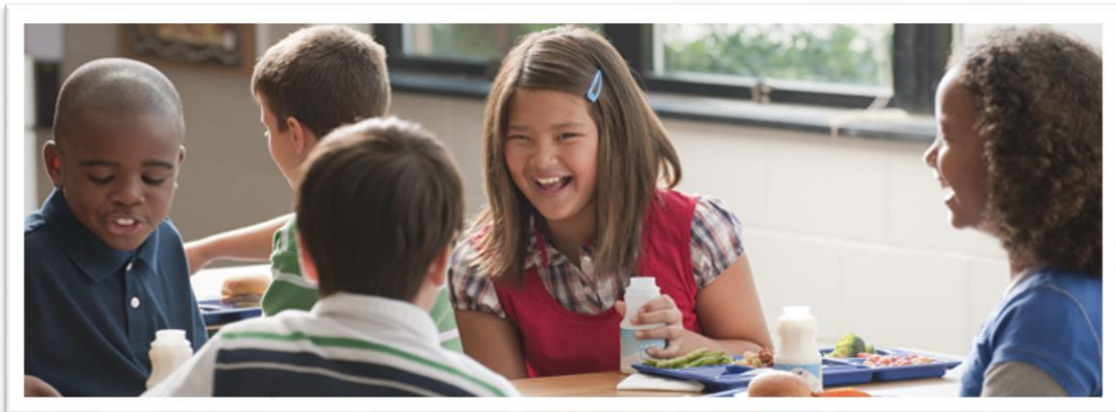
Data Source: Feeding America, Map the Meal Gap 2013

Food Assistance Programs

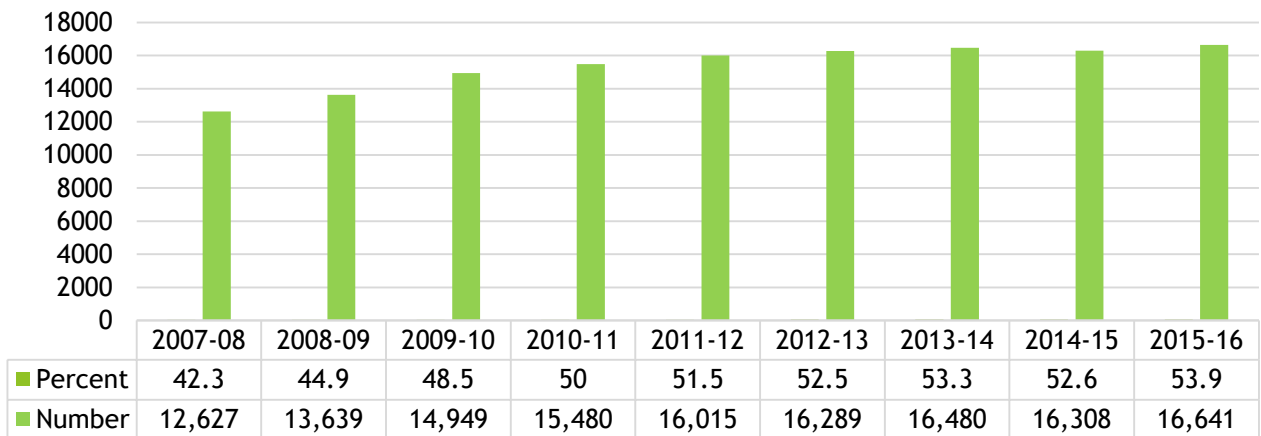
In the United States, and in Kansas, a patchwork quilt of public- and private-sector programs and agencies provide food assistance to low-income families in need. Aid is provided through a variety of mechanisms, including prepared meals at schools, distribution of foods for home preparation, and vouchers or electronic benefits that may be used to purchase grocery items. These programs play a vital role in preventing food insecurity from progressing to full-blown hunger and malnutrition.

Children Eligible for Free/Reduced Price School Meals

For many low-income families, school meals provide an important source of food for children. In addition to lunches, many schools also offer breakfasts and some offer after-school snack or supper programs. Children from households where earnings are less than 130 percent of the Federal Poverty Level are eligible to receive free meals; those from households where income is between 130 and 185 percent of the poverty level qualify to purchase meals at reduced prices. In Shawnee County public schools, 53.9 percent of K-12 students enrolled for the 2015-2016 school term were eligible for either free or reduced-price school meals. In comparison, 48.6 percent of all Kansas K-12 students were eligible for free or reduced-price school meals during the same timeframe.

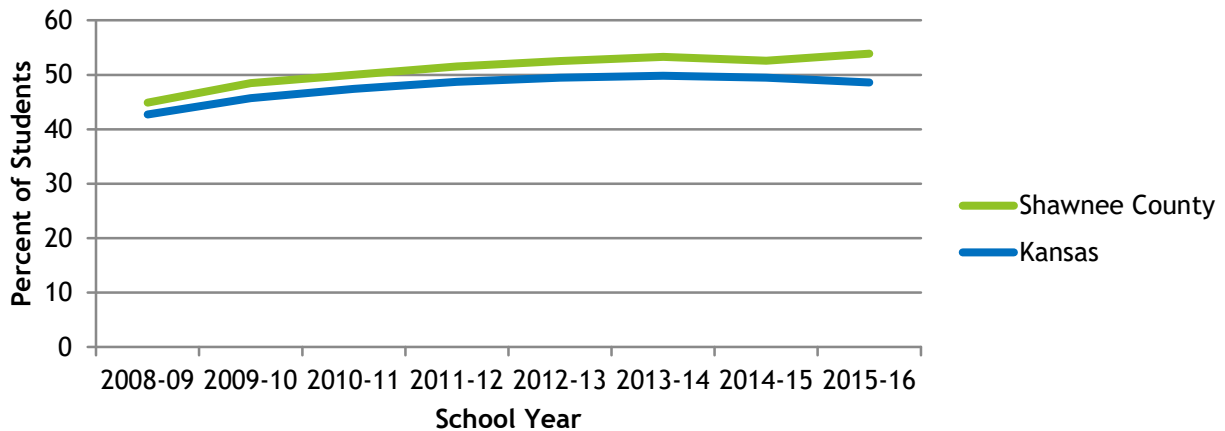


K-12 Students Eligible for Free or Reduced-Price School Meals, Shawnee County



Data Source: Kansas State Department of Education, K-12 Statistics

K-12 Students Eligible for Free or Reduced-price School Meals



Data Source: Kansas State Department of Education, K-12 Statistics

Summer Meals for School Aged Children

For families that rely upon free or reduced-price school meals to help feed their children, summer recess periods may create additional food hardship. The federally-sponsored Summer Food Service Program is designed to help fill that need. Under this program, all children aged 18 years and younger may receive free meals (usually lunches) at participating community sites located in areas where at least half of children qualify for free or reduced-price meals during the school year. During the summer of 2016, Summer Meal programs operated in 39 locations in Shawnee County, including one site in Tecumseh and one in Rossville.

Summer Meal Program Sites in Shawnee County, 2016

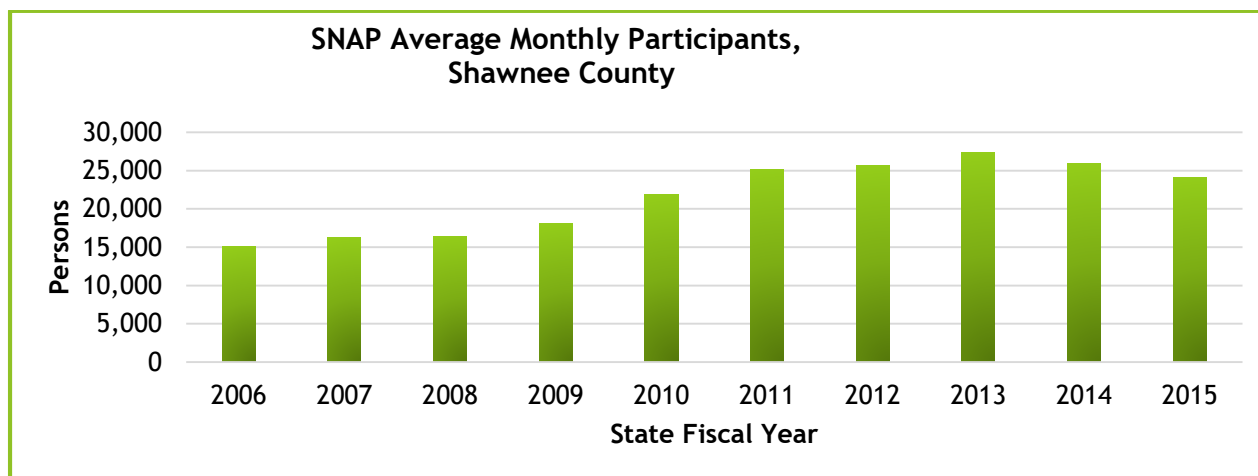
Facility	Address	City
Pauline Central Primary School	6625 SE Westview	Topeka
Boys Girls Club of Topeka	550 SE 27th Street	Topeka
Ebenezer Baptist Church	2535 SE Ohio	Topeka
Boom Comics	2025 SW Gage	Topeka
Gage Park	635 SW Gage	Topeka
Net Reach Hi Crest Avondale East	455 SE Golf Park	Topeka
Oakland Community Center	801 NE Poplar Street	Topeka
THA Deer Creek Community Center	2345 SE 25th Street	Topeka
Topeka & Shawnee County Public Library	1515 SW 10th Street	Topeka
Logan B & G	1124 NW Lyman Rd.	Topeka
Logan Elementary School	1124 NW Lyman Rd.	Topeka
Antioch Family Life Center		Topeka
Asbury Mt. Olive UMC	1196 SW Buchanan	Topeka
Avondale East Elementary School	455 SE Golf Park	Topeka
Central Park Community Center	1534 SW Clay	Topeka
Chase Middle School	2250 NE State Street	Topeka
Countryside UMC	3221 SW Burlingame Rd.	Topeka
Forest Park Retreat Center	3158 SE 10th	Topeka
Grace Episcopal Cathedral	701 SW 8th Street	Topeka
Highland Park High School	2424 SE California	Topeka
Hillcrest Community Center	1800 SE 21st Street	Topeka
Marjorie French Middle School	5257 SW 33rd	Topeka
New Mount Zion Missionary Baptist Church	2801 SE Indiana Ave.	Topeka
Oakland Community Center	801 NE Poplar	Topeka
Poppy Abbot Community Center	1112 SE 10th Street	Topeka
Quincy Elementary School	1500 NE Quincy Ave.	Topeka
Scott Dual Language Magnet School	401 SE Market	Topeka
The Bridge	1023 SW 8th Ave.	Topeka
Topeka High School	800 SW 10th Street	Topeka
Westminster Church	1275 SW Boswell	Topeka
Williams Science and Fine Arts SFSP	1301 SE Monroe Street	Topeka
YMCA	421 Van Buren	Topeka
YMCA Southwest	3635 SW Chelsea Drive	Topeka
MLK Day Camp	809 SW 12th Street	Topeka
Samuel Jackson Spray Park	1220 SE 12th Street	Topeka
Wonderful Works Deliverance Center	815 SW 5th Street	Topeka
WWDC Hillcrest Community Center	1800 SE 21st Street	Topeka
Tecumseh United Methodist Church	334 SE Tecumseh Rd.	Tecumseh
St. Stanislaus Dekota Hall	755 Main Street	Rossville

Supplemental Nutrition Assistance Program (SNAP)

The SNAP program, formerly referred to as ‘food stamps’, is a federally-funded program that provides qualifying low-income families with monthly benefits in the form of a debit card that can be used to purchase foods for home use. Benefits may also be used to purchase seeds or plants to be used for growing food at home. Households must have incomes below 130 percent of the Federal Poverty level (approximately \$31,500 for a family of four) and meet other eligibility guidelines to qualify for benefits.

Many households that would be eligible to receive snap benefits do not apply and participate in the program. There are many reasons, including stigma of participating, burdensome paperwork associated with application, and a lack of understanding of eligibility requirements. Participation rates vary considerably between states, ranging from 51 to 100 percent in 2013. Compared to other states, SNAP participation rates (the number of participants divided by the number of eligible) in Kansas have historically been low. The U.S. Department of Agriculture estimated that in 2013, the SNAP participation rate in Kansas was 71 percent, ranking Kansas 40th among the states (Cunnyham, 2016).

During state fiscal year 2015 (July 2014 to June 2015), an average of 24,123 Shawnee County residents received SNAP benefits each month. The number of SNAP participants in Shawnee County has declined since reaching a high in Fiscal Year 2013 - these declines are similar to what has happened across Kansas in the same time period. Average monthly benefits were approximately \$113 per participant during Fiscal Year 2015; the SNAP program provided \$32,839,949 in food purchasing dollars to low-income families in Shawnee County during 2015.



Data Source: Kansas Department of Children and Families, Annual County Packet Reports

SNAP benefits may only be redeemed at retail locations that have been approved by the USDA as SNAP retail vendors. As of August 2016, there were 117 SNAP retailers operating in Shawnee County— they included five Walmart locations, 25 gas and convenience stores, 18 dollar stores, 10 pharmacies and four take-and-bake pizza business. Two farmers’ markets, the Downtown and East Topeka markets, accept SNAP benefits. SNAP benefits may also be used to purchase food boxes from the Prairie Land Food program, or to purchase foods from Schwan’s home delivery service.

The Special Supplemental Nutrition Program for Women, Infants and Children (WIC)

The Special Supplemental Nutrition Program for Women, Infants, and Children- better known as the WIC Program- is a federally-funded program that serves to safeguard the health of low-income (household incomes up to 185 percent of the Federal Poverty Level) women, infants, and children up to age 5 who are at nutritional risk by providing nutritious foods to supplement their diets, information on healthy eating, and referrals to health care. Program participants are given monthly coupons or vouchers that may be redeemed at participating retail locations for specified foods. The program serves low-income pregnant, post-partum, and breastfeeding mothers as well as infants and children age 0 through 4 years. Foods that may be purchased with WIC vouchers include milk, juice, cereals, cheese, eggs, fruits and vegetables (fresh, canned or frozen), whole-grain bread, canned fish, beans, peanut butter, baby foods, and baby formula.

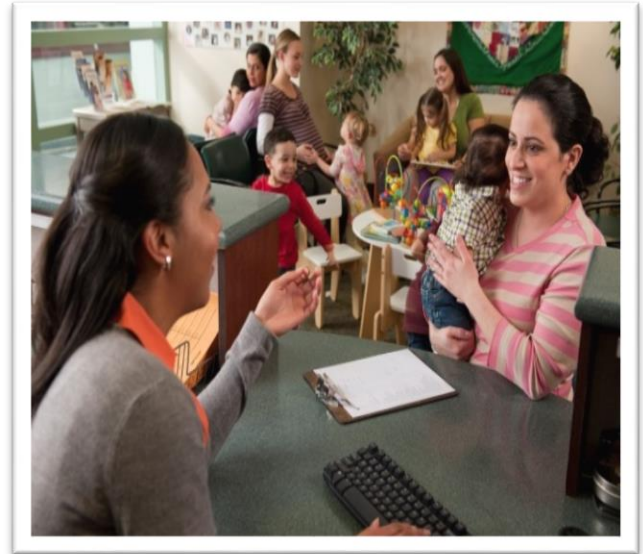
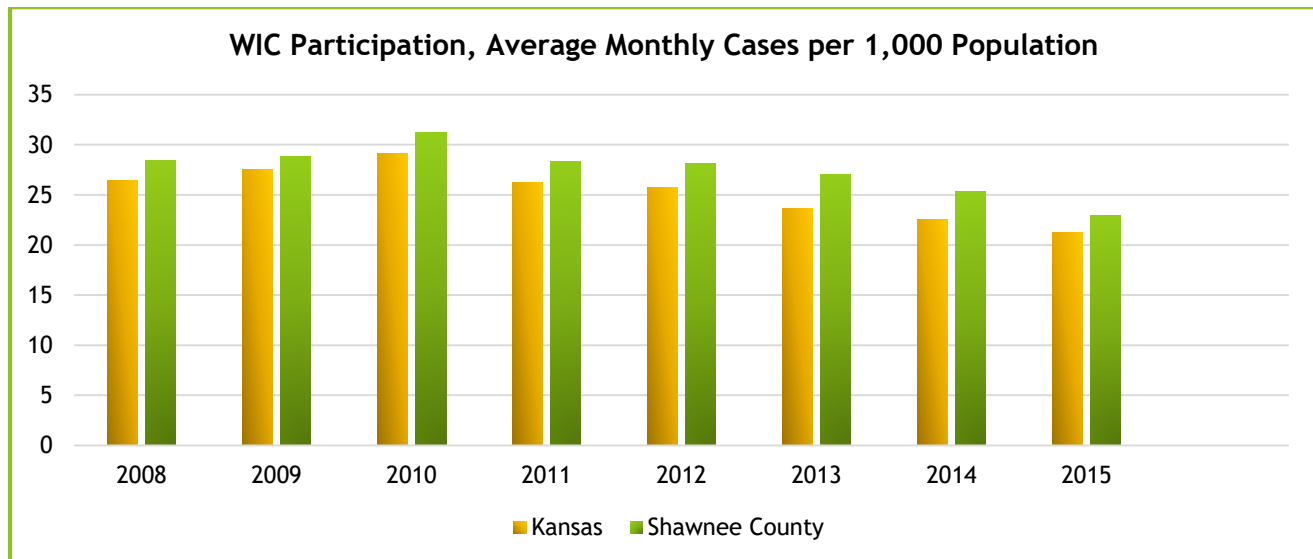


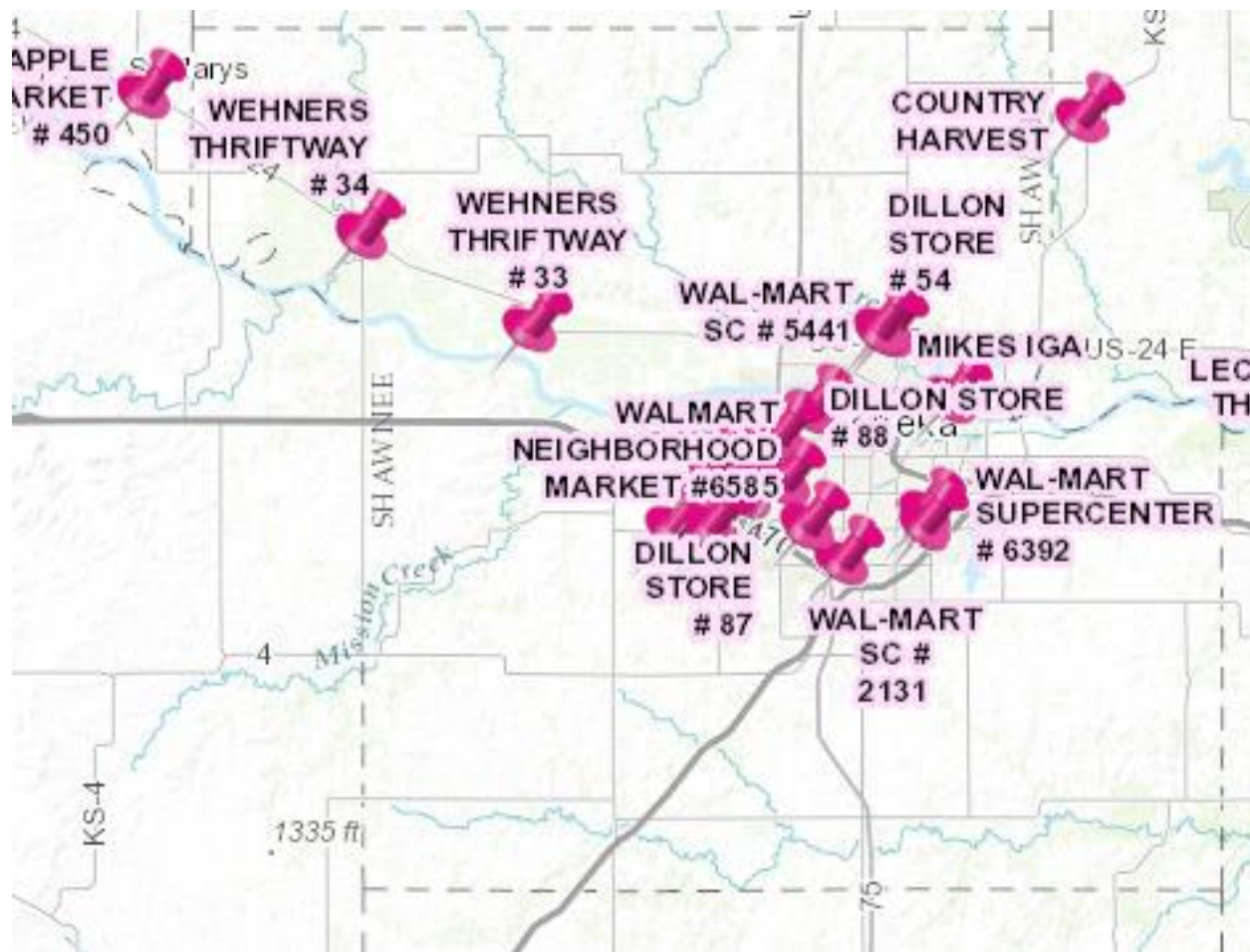
Photo Credit: USDA Photo Gallery

In Shawnee County, approximately 4,100 women and children participated in the WIC program each month during 2015 (Kansas Health Matters, 2015). In terms of WIC participants per 1,000 population, participation rates are slightly higher in Shawnee County than for the state overall. The average monthly number of participants in the WIC program in Shawnee County has decreased in recent years; this trend is similar to those at the state and national levels. There are 16 retail grocery vendors in Shawnee County where WIC participants may use their vouchers to obtain food; fourteen are located in the city of Topeka and the remaining two are in the towns of Rossville and Silver Lake.



Data Source: Kansas Health Matters, www.kansashealthmatters.org

WIC Retail Locations in Shawnee County, 2016



Source: Kansas Department of Health and Environment, WIC Program Information

The Emergency Food Assistance Program

The Emergency Food Assistance Program (TEFAP) is a Federally-sponsored program that provides free foods to low-income households. TEFAP food is shipped five to six times per year to participating organizations for distribution. Participant organizations determine when and how often food is distributed. The foods may include canned vegetables, fruit, juice, meat, cereal, peanut butter, nonfat dry milk, and pasta. Each shipment provides a minimum of four and a maximum of 10 foods per household.

Persons who work but have low income, as well as those who do not work, are eligible for this program. Individuals seeking assistance from the TEFAP program must apply in their home county, provide proof of their amount of income and household size (if asked), and must sign a form stating that they qualify for the program. Participants may pick up food at only one location in their community.

There are three TEFAP distribution locations, all in the city of Topeka: Catholic Charities at 234 S. Kansas Ave., I Care, Inc. at 2914 SE Michigan, and Randel Ministries at 1231 NW Eugene.

Senior Farmers' Market Nutrition Program

The Senior Farmers' Market Nutrition Program offers low-income seniors in participating locations (including Shawnee County) checks or vouchers that can be used to purchase locally-grown fresh fruits and vegetables, honey, or herbs at participating farmers' markets or farm stands. Seniors are eligible to receive checks if their individual income is less than \$1,800/month and their age is 60 years or older. Seniors participating in the Commodity Supplemental Food Program (CSFP) or The Emergency Food Assistance Program (TEFAP) automatically qualify for the Kansas Senior Farmers Market Nutrition Program.

During the summer of 2016, the Kansas Department of Health and Environment issued 463 books of SFMNP checks to the Jayhawk Area Agency on Aging for distribution to seniors in the region. Each book contained coupons that could be redeemed for up to \$30 in purchases.

Photo Credit: USDA Photo Gallery

A Senior Shopping at Farmer's Market



Private-sector food assistance

Food-insecure households that do not qualify for Federally-sponsored food assistance programs such as SNAP or free school meals (because their incomes are too high or they do not meet other eligibility criteria) must rely upon private-sector charitable organizations for help. In addition, many low-income families who do receive government food assistance find that the benefits are not sufficient to meet all of their food needs, and seek to supplement those benefits with aid from charitable organizations.

Federal and state policy changes in recent years have tightened eligibility requirements and reduced benefits for many government-sponsored food assistance programs, resulting in increased numbers of people seeking charitable help to meet their food needs.

In Shawnee County, a network of many local organizations offers food assistance to community members. Most operate on a part-time schedule, and many set their own rules and restrictions related to what clients they serve, and with what frequency. The Shawnee County organizations that offer charitable food assistance are shown in the table on the next page.



A Client Receives Assistance at a Food Pantry

Photo credit: USDA Snap-Ed Photo Gallery

Shawnee County Food Assistance Locations

Organization	Address	Requirements	Hours
Antioch Family Life Center	1921 SE Indiana, Topeka	Photo ID, SSN for each person in home	Mon 10am-noon Thur noon-2pm
Catholic Charities	234 S Kansas Ave., Topeka		M, Tu, Th, Fri 11am – 2pm 2 nd /4 th Wed 3-6pm
Doorstep	1119 SW 10 th , Topeka	SSN for each person in home	Mon-Fri, 9am – 1:45pm
Fellowship & Faith	708 SE Lime, Topeka	Photo ID for applicant, ID for each person in home	Tue-Fri, 9am-noon & 1-3pm
I-Care	2914 SE Michigan, Topeka	SSN for each person in home. SE Topeka only	Mon-Fri, 9-11am
Let's Help	200 S. Kansas Ave., Topeka	Photo ID and SSN for each person in home	Mon-Thu, 8:30-11am & 1-3pm Fri 8:30-11am
Salvation Army	1320 SE 6 th , Topeka	Photo ID and Proof of Address separate of ID	Tues & Wed, 9am-noon, 1-4pm
Topeka North Outreach	Call phone # and leave message	North Topeka & Oakland only	Assistance provided by appointment
Topeka Rescue Mission	401 NW Norris, Topeka	Photo ID, SSN for each person in home	Tue & Thur, 9am – 3pm
Bible Church of God	2633 SE Ohio, Topeka	While supplies last	4 th Sat, 1:30 – 3pm
Community Action	621 SE Swygart, Topeka	None	Thur, 10am – noon or until food runs out
Elwanda's Pantry, New Hope UMC	2915 SW 8 th Ave, Topeka	None	3 rd Thur, noon – 2pm
Family of God – Randel Ministries	12231 NW Eugene, Topeka	Limit 1 visit/ 30 days	Tues & Thur, 10:30am – 2pm
God's Storehouse	2111 SW Chelsea, Topeka		Sat, noon – 3:30pm Bread every day
Hope House, Church of Nazarene	940 SE Michigan, Topeka	None	2 nd & last Saturday
Inward Faith	625 Polk, Topeka	Photo ID, while supplies last	4 th Fri, noon-4pm
Joyful Harvest	1616 NE Seward, Topeka	Photo ID, bag for food Optional \$1-\$5 donation	Fri, 6:30 – 11am
Let There Be Light Ministries	1013 SW 6 th , Topeka		June 9, 1-7pm June 23, 1 – until food runs out
New Hope Baptist	404 SW Polk, Topeka	Photo ID or DL, SSN for each person in home	1 st & 3 rd Sat; 2 nd & 4 th Mon, 9am - noon
Open Arms	1812 SW Van Buren, Topeka		4 th Sat, 11am – 3pm
Oakland United Methodist	801 NE Chester, Topeka		4 th Mon, 11am-3pm
St. Matthews	2800 SE Maryland, Topeka	While supplies last	Wed, 9-11am
Temple of Deliverance	520 SE Norwood, Topeka		3 rd & 4 th Sat, 10am-noon. (only 4 th Sat in June)
True Holiness Family Church	2020 SE 21 st , Topeka		Mon & Fri, 10am – 2pm
Prairie Land Foods Warehouse	7215 SW Topeka Blvd., Topeka		Monday, noon – 2pm Wednesday, 9 – 11 am

Shawnee County Emergency Meal Program Locations

Organization	Address	Meals Served & Hours
Breakthrough House	1201 SW Van Buren, Topeka	Lunch: Mondays at noon
Topeka Rescue Mission	600 N Kansas, Topeka	Breakfast: Mon-Fri, Sun - 8-8:30am Brunch: Sat, 10:30-11am Lunch: Mon-Fri, 12-12:30pm Dinner: Mon-Fri 6-6:30pm; Sat & Sun, 5-5:30pm
Let's Help	200 S Kansas, Topeka	Lunch: Mon-Fri 11:30am-1pm; Last Sat: 9:30 – 10:30am
Salvation Army	1320 SE 6 th , Topeka	Dinner: Mon-Fri, 4-5pm
Topeka North Outreach	North Topeka Baptist 123 NW Gordon, Topeka	Lunch: Fridays at noon
Corita's Corner Sandwich Ministry	234 S. Kansas	Sack Lunch: Mon-Thu 9am-2pm; Fri 9am – 12:30pm
Hands of Hope	The Moose 1901 N Kansas Ave., Topeka	Dinner: Mondays, 5:30-6:30pm

In addition to agencies that provide food assistance or meals on-site, a number of community organizations partner with Harvesters Community Food Network to host monthly food distributions through mobile food pantry operations:

Harvesters' Mobile Food Pantry Distribution Locations in Shawnee County

Organization	Address	Distribution Days & Times
Oakland United Methodist Church	801 SE Chester, Topeka	1 st Monday, 4:30 – 6:30pm
Town & Country Christian Church	Kansas Neurological Institute, Topeka	1 st Thursday, 9:30am – until food runs out
Central Topeka Turnaround Team	1 Expocenter Drive, Topeka	2 nd Tuesday, 9am – until food runs out
Inward Faith Outreach	625 Polk, Topeka	3 rd Saturday, 9am – until food runs out
Eastside Church of God in Christ	2724 SE 10 th Street, Topeka	3 rd Saturday, 11am – until food runs out
RMI Randel Ministries, Inc.	1231 Northwest Eugene	4 th Tuesday, 9am - until food runs out
Community Action, Inc.	Citizen Potawatomi Nation, 806 Nishnabe Trail, Rossville	4 th Wednesday, 1-2 pm
Community Action, Inc.	Auburn Community Center 121 W. 11 th Street, Auburn	4 th Friday, 12:30 – 2pm
Topeka First Free Methodist Church	3450 SE Indiana, Topeka	4 th Saturday, 9 – 11am Every other month
Antioch Family Life Center	1921 SE Indiana, Topeka	4 th Saturday, 11am – 12pm (no distribution Dec – Feb)

Prairie Land Foods

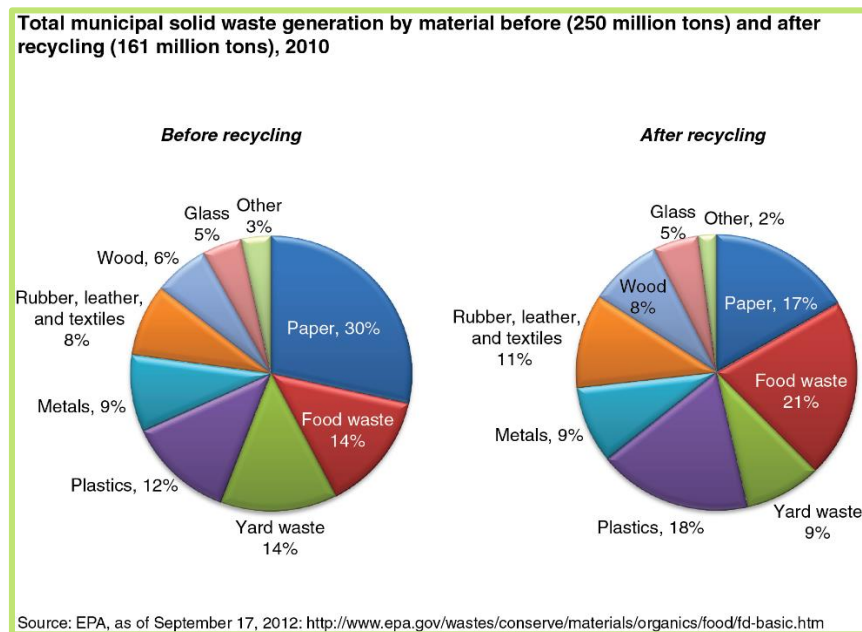
Prairie Land Food is a non-profit 501(c)(3) nonprofit company that was founded in 2006 on the principal of providing the opportunity for individuals and families to be able to have healthy foods available at an affordable cost and to become more aware of what we as individuals and families can do to help others. The business operates from a warehouse that is located at 7215 SW Topeka Blvd. in Topeka, and serves communities in Kansas, Oklahoma and Nebraska.

Prairie Land Food offers monthly deliveries of pre-ordered boxes of grocery items (called Prairie Paks), which are sold for about half of retail prices, to designated locations within communities. The program is open to everyone; there are no income or paperwork requirements to participate. The monthly Prairie Paks include an assortment of frozen meats, and a variety of seasonal fruits and vegetables. Additional packages of meat or other monthly specialty items may also be purchased with the Prairie Paks. Purchases may be paid for with cash, check, debit or credit cards, PayPal, or SNAP benefits. There are currently three delivery site locations in Shawnee County, all in the city of Topeka.

Proceeds from the Prairie Paks, which contain an assortment of frozen meat, groceries and produce items, help to fund the food pantry that is also run by the organization.

FOOD WASTE, RECYCLING AND RECOVERY

Food waste is a significant problem in the United States. USDA estimates that nearly one-third (31 percent) of the available food supply at the retail and consumer levels went to waste in 2010. This equates to 133 billion pounds of wasted food, and does not include on-farm losses, or losses between the farm and the retailer (Buzby, 2014). The U.S. Environmental Protection Agency (EPA) estimated that food waste accounted for 21 percent of municipal solid waste in 2010, with nearly all (97 percent) of that waste going to landfills or incinerators.



Food waste represents significant loss of money and other resources invested in food production (land, water, labor, energy and agricultural chemicals) to produce food that does not end up feeding people. Waste occurs at all steps along the food production cycle, from farm to table. Some of the common causes of food waste are:

Farm Level

- Damage by insects, rodents, birds, or unfavorable weather conditions
- Edible crops left unharvested due to diminishing returns for additional production
- Overplanting due to difficulty estimating customer demand

Farm-to-Retail Level

- Rejection due to food safety standards or regulation
- Outgrading of blemished or imperfect foods
- Spillage and damage, improper storage
- Byproducts from food processing

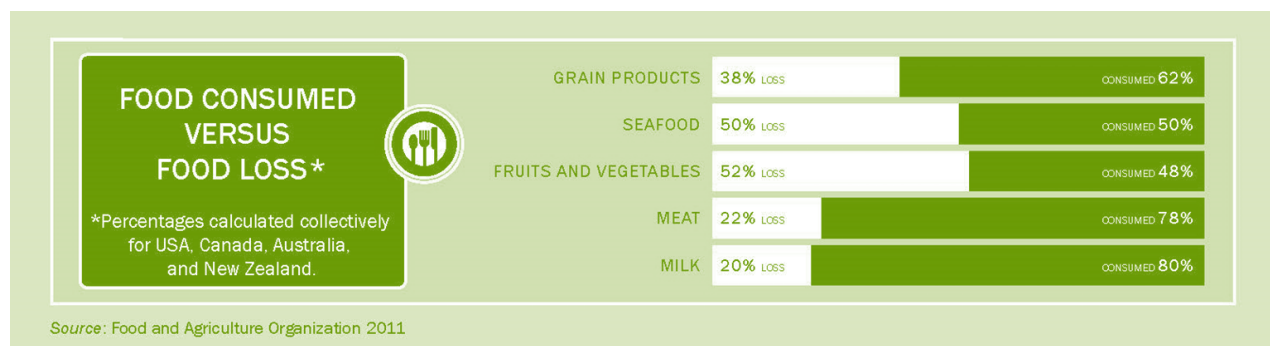
Retail Level

- Dented cans, damaged packaging
- Unpurchased seasonal food items
- Spillage, breakage, bruising, inadequate storage, equipment malfunctions
- Culling of blemished or imperfect foods to meet consumer demand
- Overstocking or overpreparing

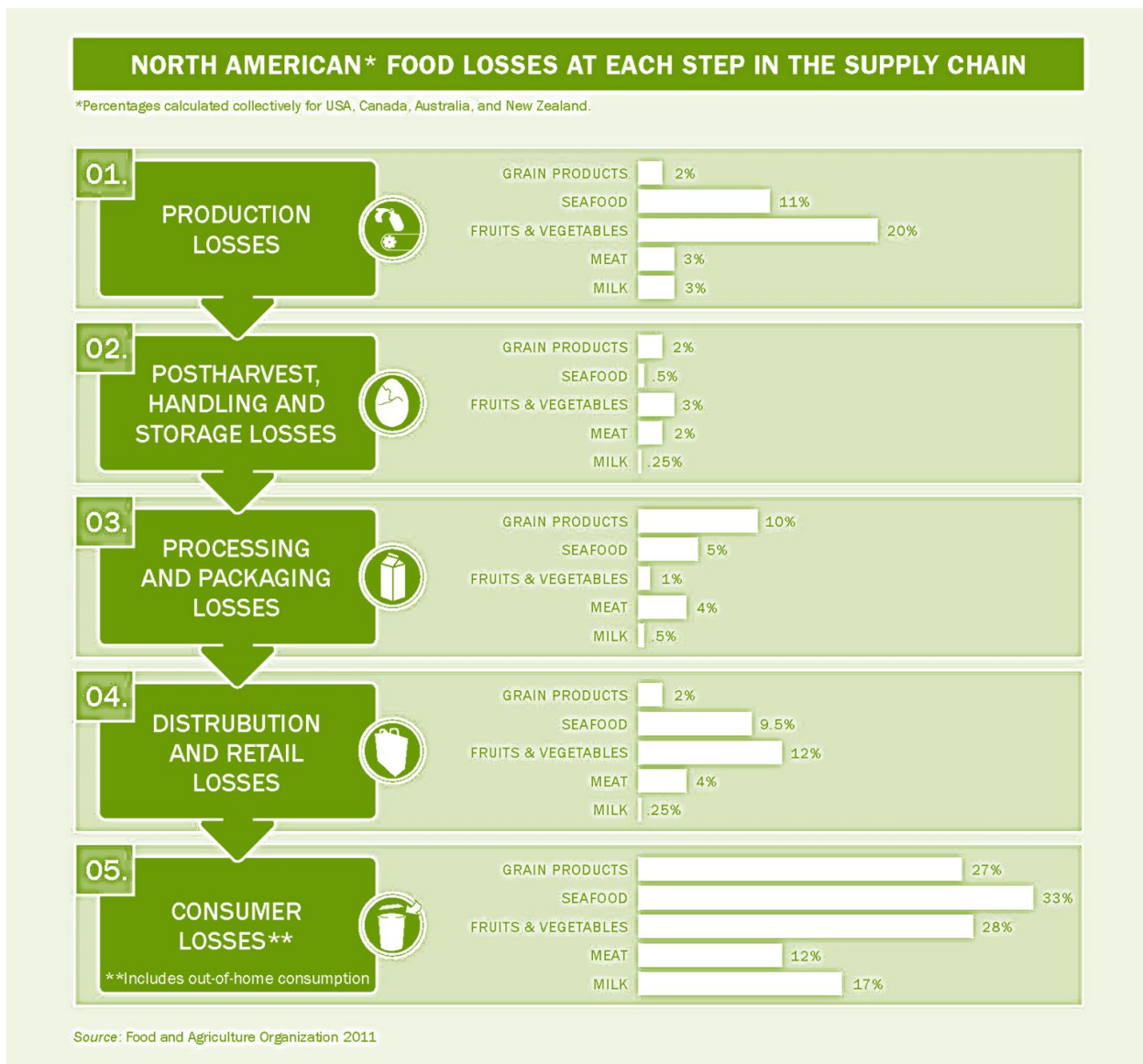
Consumer Level

- Spillage, breakage, inadequate storage
- Confusion about “use-by”, and “best before” dates resulting in food being discarded when still safe to eat
- Consumer demand for high cosmetic standards
- Lack of knowledge about preparation, appropriate portion sizes
- Consumer tastes, attitudes and preferences leading to plate waste

Fruits and vegetables account for a large share of food loss, with more than half of what is grown being lost to waste. Milk and meat products have the lowest loss ratios (Gunders, August 2012).

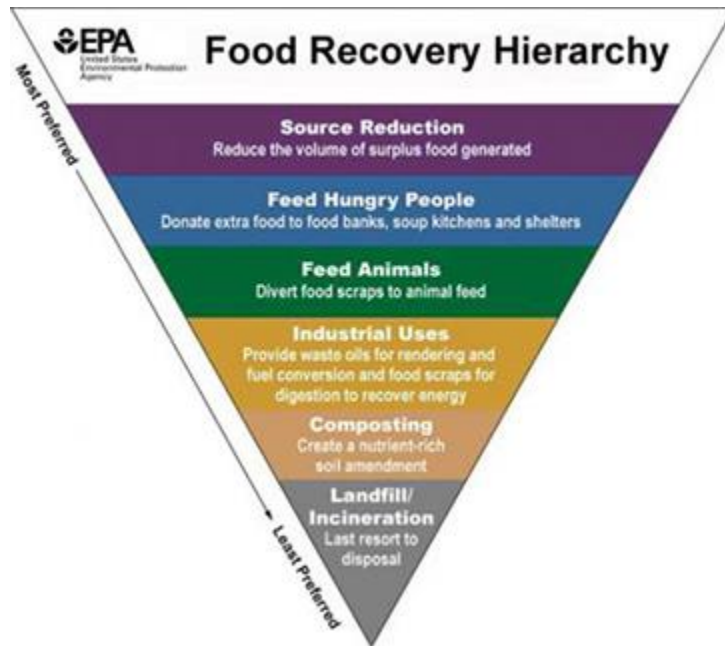


Although food loss occurs at all steps in the food production chain, consumer waste accounts for the largest share. According to a report issued by the Natural Resources Defense Council, Americans throw away about 25 percent of the food they buy. The estimated annual cost of food waste for a family of four is between \$1,350 and \$2,275 (Gunders, August 2012).



Reducing food waste offers many benefits to a community and its residents, including financial savings, preservation of natural resources, reduced demand on waste management systems and landfills, and increased amounts of potentially wasted food diverted to feed individuals at risk for hunger. When foods or food by-products are not safe or appropriate for human consumption, they may still be usable as animal feed. Composting of food scraps and spoiled foods recovers some value from the waste stream by producing a rich soil amendment that can be used in gardens to reduce the need for chemical fertilizers. The EPA has developed a Food Recovery Hierarchy that assigns preferential order to various strategies for reducing food waste (below).

EPA Food Recovery Hierarchy <https://www.epa.gov/sustainable-management-food/food-recovery-hierarchy>



Local estimates of Food Waste

Community-level data on food waste are not generally available. It is, however, still possible to derive an estimate of local food waste by assuming that the local patterns are similar to those at the national level. Multiplying county population numbers by national per capita food waste estimates suggest that more than 51 million pounds of food would be wasted annually in Shawnee County, with an estimated value of \$65.5 million.

Estimated level of consumer-level food waste in the United States and in Shawnee County			
	Pounds (annually)	Pounds (daily)	Value (annually)
Per-person basis (national)*	290	0.8	\$371
Shawnee County Total estimate**	51,215,740	141,285	\$65,520,826

*National figures drawn from USDA, Economic Research Service, 2010 ERS Loss-Adjusted Food Availability and <http://www.ers.usda.gov/amber-waves/2013-june/ers-food-loss-data-help-inform-the-food-waste-discussion.aspx#.VtCoJU32a72>

**County population estimate based upon 2010-2014 American Community Survey (population = 176,606)

Food Waste Reduction

Clearly, the best solution for minimizing the amount of food reaching landfills is to prevent the waste at its origination point. When that is not possible, other approaches such as diverting food that is still nutritious and safe for human consumption to people in need, or feeding food scraps to animals are options that make use of the foods that would otherwise end up in the landfill.

Reducing Household Food Waste

As shown in previous illustration (*North American Food Losses at Each Step in the Supply Chain*), the largest volumes of food waste occur at the consumer/household level. Research suggests that confusion over food dating labels such as “best buy” and “sell by” may be contributing to food being thrown away when it is still safe to eat. Consumer education about food safety, proper food storage, date labeling systems and the importance of reducing food waste could help to reduce household food waste. Both the U.S. Department of Agriculture and the Environmental Protection Agency have developed extensive arrays of resources pertaining to food waste.

U.S. Department of Agriculture - Food Waste Challenge, Food Waste Champions, and additional resources: <https://www.usda.gov/oce/foodwaste/>

Environmental Protection Agency -“Food: Too Good to Waste” Implementation Guide and Toolkit: <https://www.epa.gov/sustainable-management-food/food-too-good-waste-implementation-guide-and-toolkit>

Feeding Hungry People

At the same time that more than 25,000 tons of food are wasted each year in Shawnee County, more than 27,000 Shawnee County residents are struggling to get enough food. Much of the food that is being wasted is nutritious and safe to eat, but discarded because of over-production, or because it is slightly blemished, imperfect or approaching “sell-by” dates. Gleaning and food recovery programs collect those excess or imperfect foods from farms, farmers’ markets, grocers, restaurants and other sources in order to re-direct it to those in need. Gleaning and food recovery programs create a “win-win”, by simultaneously reducing food waste and getting healthy nutritious food to people that need it.

In Shawnee County, there are a number of food assistance organizations that accept donations of unopened non-perishable food items that have not outdated. Many also are happy to receive donations of fresh produce grown in local gardens. Donations of surplus prepared foods are more challenging. Some local chefs have arrangements with the local homeless shelter (the Topeka Rescue Mission) to donate surplus prepared foods, but it is unclear how often this is happening. Anecdotal reports suggest that substantial amounts of food are frequently thrown out after events such as banquets, and that there may be some misunderstanding or misinformation about food donation regulations that are contributing to excess waste. Although there are several online systems designed to match potential donors with surplus food items to agencies who would accept donations (such as AmpleHarvest.org, and Feeding America’s Meal Connect program), none appear to be serving the Shawnee County area currently. The Kansas City based organization *After the Harvest* routinely utilizes crews of volunteers to glean unharvested produce in Kansas and Missouri, but is not very visible in the Shawnee County area.

Food Waste Recycling

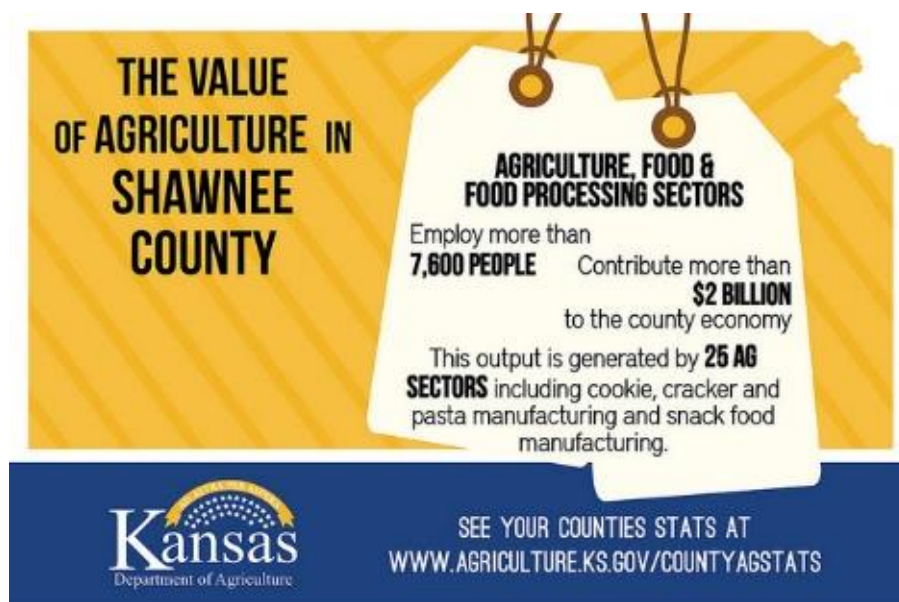
As illustrated in the EPA Hierarchy shown on Page 65, disposing of food waste in a landfill is considered a last-resort choice. Food that cannot be safely diverted to feeding hungry people or animals can still be converted to a useful soil-enriching natural resource through composting.

For residential food waste, home composting has gained in popularity in recent years, and some residents compost their yard and food waste at home. Shawnee County Extension Service and the Master Gardeners program support home composting efforts by offering one free composting bin to households in Shawnee County. To obtain a bin, residents must complete an application form and turn it in at the Extension Service offices.

For larger-scale food waste generators, such as schools, restaurants or grocery stores, specialized businesses exist that will pick up the food waste and repurpose it to be used as livestock or animal feed. The company Excess Tactical Cynergy, LLC operates such a nutrition repurposing division from their location in Topeka.

ECONOMIC IMPACT OF THE FOOD SYSTEM

Food, and food production are big business in Kansas, and have significant impact on the Kansas economy, both at the state and local levels. According to the Kansas Department of Agriculture, the agricultural, food and food processing business sectors in Shawnee County employ more than 7,600 people and contribute an estimated \$2 billion to the county's economy each year. Data illustrating various economic measures related to the Shawnee County food system are included in this section.



Source: <https://www.flickr.com/photos/kansasagriculture/albums/72157650132744038>

Farm sales

During 2012, Shawnee County farms reported total sales of farm products valued at more than \$50 million. Crops accounted for 82 percent of total sales. The per farm average market value of farm products sold by Shawnee County farms was \$60,843 in 2012, an increase of approximately 35 percent over 2007 sales.

Year	Farms	Market Value of Products Sold			
		Total Sales	Crop Sales	Livestock Sales	Average per farm
1997	823	\$29,103,000	\$21,461,000	\$7,642,000	\$35,362
2002	903	\$21,975,000	\$15,306,000	\$6,669,000	\$24,336
2007	885	\$39,673,000	\$32,959,000	\$6,714,000	\$44,828
2012	826	\$50,257,000	\$41,690,000	\$8,567,000	\$60,843

Government farm payments

In addition to income from the sale of farm products, many farms receive payments from various federal government programs. In 2012, 337 Shawnee County farms reported receiving federal government payments that totaled \$2,350,000.

Consumer expenditures on food

Everyone must eat. Most households purchase the majority of their food, and those food purchases represent a significant contribution to the local economy. Shawnee County residents spend an estimated \$492 million annually on food.

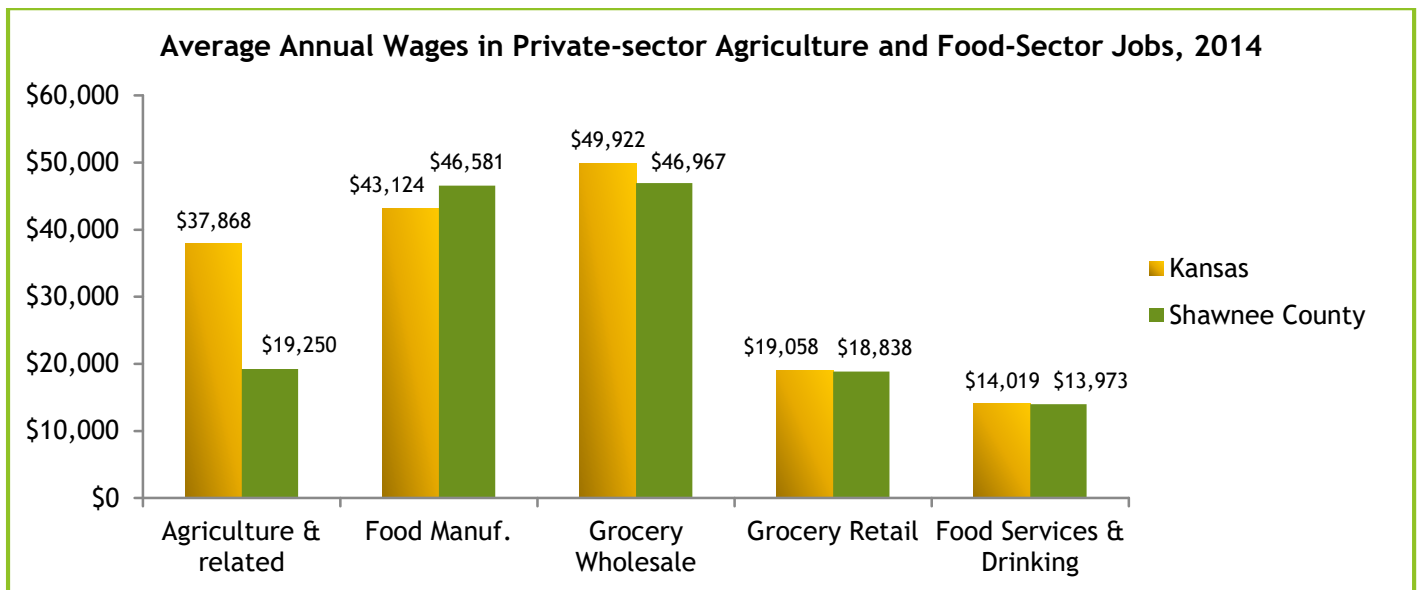
Shawnee County: Annual Consumer Spending on Food, 2016

Expenditure Type	Total Annual Spending	Average Annual Spending Per Household
Food (all)	\$492,010,156	\$6,735
Food at home	\$306,983,169	\$4,202
Bakery & Cereals	\$41,611,084	\$570
Meats, Poultry, Fish & Egg	\$66,923,382	\$916
Dairy Products	\$32,108,533	\$440
Fruits & Veg	\$58,293,848	\$798
Snacks and other food at home	\$145,377,929	\$1,990
Non-alcoholic beverages	\$29,829,682	\$408
Food away from home	\$185,026,976	\$2,533

Data Source: Business Decision data system, estimates derived from the Consumer Expenditure Survey, Bureau of Labor Statistics, 2012.

Food-sector employment

Food production, and food-related businesses also create jobs which employ community members and infuse money into the local economy. Data from the U.S. Bureau of Labor Statistics provide detailed information about the types of businesses operating in a location, the number of individuals employed by those businesses, and their earnings. As illustrated in the graph below, average worker earnings in food-sector jobs vary significantly by the type of work. In Kansas, and in Shawnee County, jobs in food manufacturing and grocery wholesale pay significantly better than jobs in grocery retail or food service businesses. The reasons for the significant difference between average annual wages in the agricultural sector in Shawnee County compared to the state are unclear.



Data Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages

Shawnee County Employment and Wages in Agricultural and Food Sectors, 2014

	Total, All Industries	Agriculture, Forestry, Fishing & Hunting	Food Manufacturing	Grocery & Related Wholesalers	Retail Grocery Stores	Food Services and Drinking Places
Establishments	4,791	11	15	11	28	315
Employees	97,000	60	2775	522	1,525	6,445
Total Wages (in thousands)	\$4,036,874	\$1,157	\$130,047	\$24,517	\$28,736	\$90,062
Avg. Weekly Wage	\$800	\$370	\$901	\$903	\$362	\$269
Avg. Annual Pay	\$41,617	\$19,250	\$46,581	\$46,967	\$18,838	\$13,973

Data Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages

(D) = Data are suppressed to prevent disclosure of information about individual businesses

Government food assistance programs

Government-sponsored food assistance programs also provide a significant infusion of dollars into the local economy. Through either direct reimbursement for the cost of meals served (as in school meals), or providing consumers with additional money to spend on food purchases (SNAP and WIC benefits), those dollars support jobs and increase retail sales within the community.

Food Assistance Program	\$\$\$\$
SNAP benefits disbursed to Shawnee Co. participants, SFY 2015	\$32,839,949
Total SNAP redemptions in Shawnee Co., 2012	\$42,348,915
Total WIC redemptions in Shawnee Co., 2012	\$3,490,374

Data Source: SNAP benefit disbursement from Kansas Department of Children and Families, Annual County Packet Reports. SNAP and WIC redemption data derived from USDA Food Environment Atlas.

During the 2016-2017 school year, schools participating in the National School Meals Program are reimbursed between \$1.41 and \$2.04 for each free or reduced-price breakfast served, and between \$2.76 and \$3.24 for each free or reduced-price lunch. Reimbursement rates and the number of eligible students are shown in the table below. Data on the number of meals actually served in each category were not readily available.

	Reimbursement Rate* (per meal), 2016-2017	Number of eligible Shawnee County Students, 2015-2016
Lunches - Free	\$3.16 - \$3.24	13,849
Lunches – Reduced Price	\$2.76 - \$2.84	2,100
Breakfasts - Free	\$1.71 - \$2.04	13,849
Breakfasts – Reduced Price	\$1.41 - \$1.74	2,100

*Reimbursement rates are higher for schools where higher percentages of students are eligible for free or reduced price meals

Data Source: Reimbursement rates from USDA, Food and Nutrition Service; Student counts from Kansas State Department of Education, Data and Statistics

EQUITY ISSUES IN THE FOOD SYSTEM

Health equity issues have received much attention from public health practitioners and philanthropic organizations in recent years. When closely scrutinized, health outcomes measures identify many situations where some segments of the population suffer poorer health outcomes related to issues of social disadvantage or inequity. Similarly, inequities can be identified in the food system, many of which may contribute to disparities in health outcomes. Aspects of the food system where equity issues are frequently identified are outlined briefly in this section. More detail on many of these issues is available in the main body of this report.

Farming and Food Production

- Access to land, capital and financing, especially for young or minority farmers
- Access to water rights
- Farmworker compensation and working conditions, particularly for field hands and immigrant workers

Food System Infrastructure (processing, manufacturing, distribution)

- Hazardous conditions in meat processing or other manufacturing facilities, often employing immigrant or minority workers

Food Retail

- Low wages in retail grocery stores
- Low wages in food and beverage operations

Consumer Access to Healthy Food Options

- Underserved locations, food deserts - in urban areas, usually low-income areas. Rural residents may also be underserved and have challenges accessing healthy food options
- Pricing differentials, higher prices often in underserved communities
- Food insecurity (families that cannot afford to buy enough food, high-quality food) - rates of food insecurity are markedly higher for minority households, single parent households, disabled individuals
- Stigma, loss of dignity for individuals who participate in food assistance programs

These equity issues, and others not included in this list, do not apply equally to every community. Community-level issues will likely vary with the types of agriculture and food production in practice in the location, the types of food processing businesses in the area, and socio-demographic characteristics of the population such as racial/ethnic diversity, poverty rates, and educational attainment. In Kansas, the issues of safe working conditions and fair wages for fieldworkers are less salient because the vast majority of crop production is commodity crops that require less hands-on labor. In some parts of Kansas, however, working conditions and safety concerns at meat packing facilities are cause for concern. Many communities in Kansas have locations where residents lack physical access to retail stores that offer healthy foods, and all Kansas counties have community members who cannot afford to buy enough food to feed themselves and their families. The data included in this report describe some of the more widespread food equity issues in Kansas, including lack of access to grocery retail outlets, food insecurity, and low wages in some sectors of the food system.

COMMUNITY STAKEHOLDER PERCEPTIONS - RESULTS FROM THE FEAST EVENT(S)

Although existing data sources can provide substantial amounts of information about key aspects of a community food system, they do not always provide complete information about the local community environment, and are not helpful in understanding the perspectives and priorities of community members. To fill this gap, members of the Heartland Healthy Neighborhoods coalition opted to supplement existing data with two community FEAST events. FEAST is an acronym for “Food, Education, Agriculture, Solutions, Together,” and is a model for community engagement developed by the Oregon Food Bank. The two half-day events, held on January 28 and February 1, 2017 were attended by 56 community residents representing multiple sectors of the local food system. Participants included public non-profit organizations and food-related programs such as local food producers, grocery store representatives, food assistance agencies, school nutrition programs, healthcare, food manufacturing, a local culinary training program, food manufacturing, community gardening programs, K-State Research and Extension, and individuals who described themselves as food insecure. Participant discussions were facilitated by the Institute for Civic Discourse and Democracy (ICDD) from Kansas State University.

Each event began with a brief panel presentation highlighting facts and perspectives on the local food system. Panel presenters provided a summary of highlights from this community food assessment and local perspectives on food production, food assistance programs, nutrition education programs, community gardens, school nutrition programs and retail grocery stores.

The panel presentations were followed by participation of all attendees. Maps depicting current locations of food retail outlets in the county were displayed, and participants were asked to update them with other community food resources that they were aware of. Small group discussions among participants identified current assets and gaps in the community food system. In addition, participants brainstormed the roles for a potential Food and Farm Council, roles for elected officials, a list of potential partners, and next steps in advancing community food security. Discussions were facilitated by staff from Kansas State University’s Institute for Civic Discourse and Democracy.

Feedback on the FEAST process from the participant survey responses showed high satisfaction with the format and content of the FEAST events and included testimonials in support of further work to coordinate efforts addressing a well-documented need for healthy food access. Many participants indicated appreciation for the information that was shared, and that they had gained understanding of the local food system from the presentations and conversations. Discussions among participants were lively and engaged, and many participants began to form new relationships with others and identify potential collaborations. Some of the new partnerships have the potential to have immediate impact on the community, on issues such as reducing food waste and enhancing farm-to-school efforts.

Detailed notes from the participant discussions are presented below.

NOTE: (X____) indicates the number of tables that expressed the same /similar response.

ASSETS

Participants were asked “What are the ‘positives’ or assets of the Shawnee County food system?”

- 712 Innovations
- 842 farms in Shawnee County

- *Antioch Family Life Center*
- *Berryton Elementary School garden club*
- Capitol city
- *CHAMPS grant* (city of Topeka applied) (X2)
- *Children's Palace and Youth Center (Topeka Rescue Mission)*
- City ordinances supporting gardens
- Commercial kitchens used for farmers
- Commitment of people to getting food out
- Topeka Common Ground is a great resource for community and school garden, community gardens are getting started (X4)
- *Community Eligibility Provision (CIP) in schools* (X3)
- *Community health needs assessment (CHNA) and health improvement plan (CHIP) - Shawnee county*
- Coming together across sectors
- Corporate engagement (X3)
- CSA's (community supported agriculture programs)
- Data (reliable, accessible)
- *Double up Heartland bucks* (X2)
- EBT (electronic benefit transfer) SNAP acceptance at farmers markets
- Economic development
- Elected officials interest
- Emergency food assistance
- Ethnic markets
- *Farm Bureau*
- Farm land (rich)
- Farmers markets (X5) 5 days/week; East Topeka focus on low income
- Food pantries
- Food system assessment data
- Free community programs
- Free transportation for children to summer feeding sites
- *Go Topeka* (First Opportunity loan)
- Grocers' openness to local produce
- Grocery stores in area
- *Harvesters*
- Healthy Heartland Neighborhoods health coalition
- Homeless access to food sites
- Information available (good)
- *Kansas Action for Children*
- Kansas river valley - capacity to grow food
- *Let's Help Inc.* (X3)
- *Meals on Wheels of Shawnee and Jefferson Counties, Inc.* (X2)
- *Midland Care*
- Mobile food pantry (X4)
- *My Plate* education in schools
- *Natural Grocers Topeka*
- *New Hope Food Pantry*
- NGO's - Non-governmental organizations
- Nutrition education programs

- Online/video training programs
- Partnerships
- Passionate investors
- People of Topeka (X2)
- *Pine Ridge Manor - Topeka Housing Authority*
- Population density
- *Reser's Fine Foods Inc., Topeka (X2)*
- Restaurants (X2) some freeze food and donate to rescue mission
- School nutrition programs - more healthy options
- SNAP - Supplemental Nutrition Assistance Program
- SFMNP - Senior Farmers' Market Nutrition Program (X2)
- *Shawnee County Extension (X2)*
- *Silverbackks, Inc.*
- Size of city (X2) means more resources/suppliers
- Social service organizations
- Storage
- Strong history
- Summer meals (X2)
- *Sunshine Connection of Topeka Inc.*
- Teaching kids
- *Topeka Common Ground*
- *Topeka LULAC Senior Center*
- *Topeka Metro*
- *Topeka Rescue Mission (X2)*
- *Topeka Shawnee County Library (X2)*
- *U.S. Foods*
- *USD 437 - kitchen possibilities*
- *USD 501 - community eligibility site (2)*
- USDA farm to school/ farm to table money
- Waste disposal, self-service
- Weekend food for kids programs (Backsnack)
- *YMCA of Topeka*
- Young adults, engaged

GAPS

Participants were asked, "What are the 'negatives' or gaps in the Shawnee County food system?"

- 41% of kids who don't qualify for free & reduced lunch
- Affordability of healthy food (X5)
- After-school dinner sites
- Better understanding of supply/demand needs
- Change of rules/culture to allow distribution of "waste"
- Commuter population - Few people who work here also live here
- Computer system (Mac-Link?): names get put into a system and they cannot pick up food again for another month. Also, multiple organizations are on this system so these individuals can't go to the next organization.

- Connections between producers and retail
- Cooperatives
- Cost of land (X2)
- CSA publicity and participation (X2)
- Cultural shift toward healthy choices
- Culturally relevant food
- Demand for local, good food
- Difficult to start up food stores
- EBT equipment for farmers' market vendors to accept SNAP
- Education, consumers
- Education, farmer
- Education about available resources (X2)
- Education about food/cooking (X2)
- Farmers' aging population - younger population's ability to afford entry into production
- Farmers' knowledge of potential markets
- Farmers' market board structures
- Farmers' trust
- Food deserts (X8) specifically: Auburn, East Topeka, Downtown Topeka
- Food diversity
- Food doesn't always meet needs
- Food insecurity rate among children
- Food safety
- Food waste - coordination, re-purposing system (X2)
- GAP (good agricultural practices) certification (X2)
- Giving people a voice
- Government support
- Healthy food choices (X2)
- Healthy food distributed to seniors
- Homegrown/ small businesses
- Indoor farmers markets (X2)
- Information promotion/dissemination
- Infrastructure - e.g., sidewalks to grocers (X2)
- Investment focused on big business
- Licensing by Kansas Department of Agriculture - requirements, expense
- Links between producers and buyers
- Local restaurants that are farm-to-fork, not franchises (X3)
- Local specialty crop (loss of production, incentives)
- Mental health support
- Neighborhood markets loss
- Nutrition education for general population
- Policies that don't align with needs - # of touches repeated (?)
- Population living in crisis - too focused on surviving financially (X2)
- Production (insufficient supply for local demand) (X5)
- Quantity of locally produced fresh food for large institutions
- Seasonal shortages of food to pantries from Harvesters (Oct - Jan)
- School breakfasts
- SFMNP underfunded
- SNAP participation low

- Space for local produce in stores
- Summer feeding sites
- Support gardens
- Time -- for producers, for consumers
- Topeka culture
- Transportation availability and sensitivity to shoppers, non-operating hours (X7)
- Transportation for outlying areas
- Understanding of “local” definitions (X2)
- Unsold local produce - means of handling/distribution
- Vending of healthy food
- Volunteers (over-reliance on volunteerism)
- WIC (Women, Infants & Children) participation low
- Workers (not enough)
- Zoning / license to monitor fast food growth

NEEDS (NOTE: Some groups attempted to prioritize, but not all)

Participants were asked to identify the most important needs, or opportunities, for improving the food system in Shawnee County.

- #1 Transportation; #1 Food waste system plan (X2)
- #2 Information; #2 Mobile markets w/ SNAP/SFMNP
- #3 Younger farmers; #3 Incentives (tax, zoning) for grocers
- #4 Increase capacity for farmers
- Access to community gardens
- Access to food services
- Access to reasonably priced food in food deserts (X2)
- Advocacy for local producers
- Bicycle sharing
- Bike routes
- Bus transportation
- Buying produce at Aldi’s and re-selling to farmers markets [need?]
- Capitalize on Capitol city as an opportunity
- Centralized collection of donated food
- Commercial kitchens for processing
- Common ground on what constitutes healthy food for kids
- Communication between farmers and wholesalers
- Communication with and among farmers
- Community engagement
- Composting
- Coordination of food systems
- Customizable distribution
- Demand for local produce
- Develop a Food and Farm (III)
- Discussions [like this one]
- Distribution centers (more of them, open more days)
- Distribution policies

- Distribution to stores by volume
- Education about the current system
- Education on how to grow food, even on a small scale
- Farmers market boards - better management by farmers
- Farmers market for low-income consumers
- Farmers markets managed by farmers, for farmers (e.g., “Land of Kansas” members)
- Food bank pick at end of [Saturday?]
- Food options for each population (choice)
- Food we have socialized is unhealthy
- Grant writers
- Group in the middle of poverty and wealth
- Healthy families and parenting
- Healthy food items for snack bags
- Incentives for local producers to target food deserts
- Increase summer feeding sites
- Legislation supporting local food sources for USDs
- Local delivery services
- Local government incentives for producers
- Local political support
- No state food tax
- Non-barrier, free meals
- Nutrition education in your own home (label education, expiration/best used by)
- Nutrition education programs (children) (X2)
- Partner with surrounding area food councils
- Policy review (zoning, planning, licensing)
- Production companies
- Public transport promotion
- Safety net to cover the gap for those who don’t normally qualify for assistance (situational hunger or working poor)
- School buses for summer feeding
- Social services funded by taxes, not private charity
- State production data to define, incentivize, and encourage “local” production
- Stigma, eligibility requirements for food assistance
- Strengthen farm-to-table attitudes
- Summer produce distribution
- Support social justice work: we need help to change the system
- Surplus production pickup system from producers (Lawrence model)
- Understanding of food safety guidelines
- Variety of produce crops
- Waste outlet- a network where restaurants/grocery stores/ farmers have a place to donate food rather than trashing it
- Waste - talking about it, recognizing it

VISION: (NOTE: not all tables formulated a vision statement)

Barriers will be removed to access, transportation, choice, and information so that everyone has the ability to get healthy food.

Increase food security and access through advocacy and community collaboration.

Create social justice for the future.

COUNCIL CONTRIBUTIONS (roles, charges or deliverables):

Participants were asked to name individuals, or groups of individuals who should be represented on a local Food and Farm Council, and what contributions of knowledge, information or expertise might be expected from members of each sector.

- Act as a sounding board
- Advocacy for food system (X5)
- Assess and monitor
- Break down barriers to healthy food access
- Buffer community complaints/concerns
- Combat stigma of food insecurity
- Data analysis - Ag census, etc.
- Education: model practices, mentoring programs
- Explore all components of the food system
- Forego the idea of making community gardens 501(c)(3) because it's cost-prohibitive
- Gather community feedback needed to create a vision for a food system that supports local farmers, offers health food access to all, maximizes benefit to community
- Get funding or grants from City/County, if City/County appoints members to council
- Grant writing
- Healthy Heartland Neighborhoods as existing group could get things started, make community aware, and help organize.
- Identify goals
- Identify needs and recommend actions
- Incentivize waste reduction for businesses
- Information: promotion, dissemination
- Initiative/ mandate/resolution that states that any unused food has to be donated, not thrown away
- Leverage existing organizations to prevent burnout
- Living wage mandate
- Management of vacant lots
- Network among partners
- Partnership building
- Policy review/development (X2)
- Promotion of SVCS
- Reduce the duplication of efforts
- Represent food system (X2)
- Represent youth

- Research possible solutions
- Resource allocation
- Review collected FEAST input
- Subsidize growing fruits/veggies
- Transportation issues
- United vision
- Use existing neighborhood associations to distribute meals, food, information
- Voice in local and state government action

ELECTED OFFICIALS' ROLES

Participants were asked what they thought elected officials could do to strengthen the local food system.

- Advocacy for federal legislation
- Advocacy for healthy guidelines
 - worksites (public -> private)
 - children
 - vending
 - cafeteria
 - food waste guidance
 - conferences, training
- Eligibility for food assistance
- Food tax issue
- Low-cost loans for producers
- Tax incentives
- Zoning to incentivize for meat production

NEXT STEPS

Participants were asked what they thought the “next steps” should be.

- Communication/ coordination and advertise who is targeted and who needs help
- Conversation on building our case
- Create an executive summary
- Finalize report
- Grant writing for USDA grants
- Groceries to people, not people to groceries
- Grow current food access programs
- Hire/ fund a health planner position
- Information directory (X2)
- Prepare a resolution
- Present to elected officials
- Sidewalk infrastructure
- Talk with DG Co.
- Transportation - grocery bag/ wheeled bag or stroller/ policy for busses

POSSIBLE PARTNERS:

Participants were asked who should be involved in the work of shaping and strengthening the local food system. NOTE: These named groups are occasionally duplicated from the Assets list, but were specifically solicited as partners in support for a food and farm council and its mission.

- Businesses
 - Advisors Excel
 - Major employers
 - Security Benefit
 - Café Barnabas, Topeka
 - Waste management companies
- Charities (ICare, Doorstep, Circles, Rescue Mission, Salvation Army) (X3)
 - Harvesters
 - Let's Help Inc.
 - Topeka Rescue Mission - Barry Feaker
- Churches
 - Interfaith of Topeka
 - Nuns
- Community Development
 - Chambers of Commerce
 - Forge (formerly Fast Forward, a young professionals organization affiliate of Chamber of Commerce)
 - GO Topeka
 - Heartland Visioning
- Community members
 - Consumer groups (X2)
 - Ethnically diverse representation Moms
 - Low-income/disabled stakeholders - all social levels
 - Neighborhood Improvement Associations, Topeka (X3)
 - Residents from food deserts
 - Veterans
- Educators (nutrition, gardening, hands-on, culinary, greenhouse technology)
 - Master Gardeners Shawnee Extension (X2)
- Elder care organizations
 - AAA (X2)
 - Meals on Wheels of Shawnee and Jefferson Counties, Inc.
 - Topeka LULAC Senior Center (X2)
- Farm organizations (X2)
 - Farm Bureau (X2)
 - Farmer co-op magazine
- Farmers market boards, staff (X2)

- Farmers & producers of all sizes, all ages (X7)
 - Salem Farms (certified organic, Topeka)
 - CALCan Enterprises LLC, Topeka
- Food Businesses
 - Bimbo Bakeries (X2)
 - Corporate food services
 - Distributors
 - Grocery stores (X2)
 - Mars Chocolate North America, Topeka
 - RowHouse Restaurant, Topeka
 - Sysco Food Service
 - U.S. Foods (X2)
- Funders
 - Sunflower Foundation
 - Topeka Gives (Topeka Community Foundation) (X2)
 - United Way of Greater Topeka
- Greek organizations
- Healthcare providers, hospitals (x6)
 - Blue Cross and Blue Shield of Kansas (X3)
 - Marian [dental?] Clinic
 - V.A. Eastern Kansas Health Care System (X2)
- Media (X2)
- National Guard stations in Topeka
- Non-profits & Community Service Organizations
 - Kansas Appleseed (X2)
 - NetReach Topeka (X2)
 - Parents as Teachers - Topeka Pubic Schools
 - Safe Streets, Topeka - Kristi Pankratz
 - Silverbackks, Inc.
 - Topeka Shawnee County Library (X2)
 - Vida Ministries Inc., Topeka
- Policy makers, Government
 - Commissioners/ elected officials (Shelly Buhler)
 - Shawnee County Commission (X4)
 - Topeka City Council (X3)
 - State representatives
 - County planners
 - Kansas Department for Children and Families
 - Kansas Department of Health and Environment (X3) - Bureau of waste management
 - Kansas State Department of Education
 - Department of Agriculture - Kansas, U.S.
 - Emergency management services and fire departments
 - Shawnee County Parks & Recreation
 - Topeka Law Enforcement Center
 - Transportation authorities
 - Topeka Metro (X3)
 - Topeka Sustainability Advisory Board

- United States Department of Health and Human Services (HHS)
- U.S. Department of Agriculture

- Schools / Colleges / Universities
 - Bods Feeding Bods (Washburn University)
 - Kansas State University (X2) - College of Agriculture
 - School board, districts
 - School nutritionists
 - Washburn Institute of Technology (“Washburn Tech”) (X4) - Health programs, Culinary training
 - Washburn University (X2) - Health programs, Small Business Development Center
- Shawnee County Extension (X6)
-
- Trash Mountain Project, Topeka
- WIC - Women, Infants and Children (X2)
- Youth organizations (X2)
 - 4H (X3)
 - Boy Scouts (Jayhawk Area Council)
 - Boys and Girls Club of Topeka
 - Future Farmers of America (X2)
 - High school youth leadership
 - Junior Achievement, Topeka
 - Scouts- community service
 - YE -- Young Entrepreneurs
- MPTO (?)
- NABS (?)
- U.S.O (?)

A word-count of vocabulary generated by the discussion of gaps, needs, roles of elected officials, council contributions and next steps revealed common themes. Based upon words occurring more than six times, participants emphasized the need for:

- ❖ A local-minded approach to development,
- ❖ Farmers,
- ❖ A system-wide approach to healthy food,
- ❖ The development and implementation of educational programs, and
- ❖ Increased [agricultural] production.

Moreover, participants stressed that improved community transportation and dispersion of healthy foods would better link the community to producers. Words occurring more than once offer a thematic profile that is better explained by the phrase and sentence ideas of participants in the attached facilitation notes.

CONCLUSIONS

The food system that serves Shawnee County is multi-faceted and complex. It has both strengths and weaknesses. Although food is generally abundant in the community, not all food options are healthy and substantial numbers of community members lack access to healthy food options due to either geographic challenges or affordability.

Most of the food consumed by Shawnee County residents is produced in distant locations. The farms that operate within the County produce mostly grains, hay and beef, much of which is sold to distant markets. There are a small number of local farmers/producers selling their farm products to local markets. Some of them would like to expand their operations, but find challenges with access to larger markets and purchasers. Some restaurants, schools and institutional purchasers would like to use more locally-sourced foods in their food service programs but find challenges with identifying prospective suppliers, interacting with multiple small-scale producers, and inconsistent supply streams. The intermediary structure needed to aggregate, coordinate and connect these interests is currently lacking, but a regional food hub that is just getting started in northeast Kansas may help to fill that void.

Multiple measures and data points provide evidence that the diets of most Shawnee County residents are not optimal, and that their health might be improved through healthier eating habits. Results from public health research studies suggest that healthier dietary behaviors can be encouraged by creating “food environments” that make the healthier choices easily identifiable, attractive, available and affordable. This assessment highlights many opportunities for strengthening the Shawnee County food system and creating a food environment that is more supportive of healthy eating opportunities and choices for community residents.

A comprehensive food system assessment such as this one provides a point-in-time snapshot of the community food system that may be useful in establishing a baseline measurement, and in helping local policymakers and advocates understand where community needs exist. The really hard work begins with the next step - establishing priorities and beginning to identify possible solutions that fit the community and are feasible to implement. This is exactly the type of work that a local Food and Farm Council, with diverse cross-sectoral representation is well-suited for. Conversations between participants at the two FEAST events have already begun to identify common interests, and spark collaborations and solutions. A number of local businesses and organizations have begun to implement changes that support local food production and healthier eating for community members. There is a sense of community readiness to embrace change in the local food system. There is no single “Department of Food” or food officer in local government - policies that impact food production and consumers’ access to safe and healthy foods are made and enforced across multiple agencies and divisions. A local Food and Farm Council, working in an officially-sanctioned advisory capacity to local policymakers, could fill important roles of continued monitoring and assessment, communication and coordination of efforts, and researching and recommending potential solutions.

While this report does not address or include every possible measure related to the local food system, it has been structured to provide a systems-level description that touches upon each of the major sectors within the food system, using data that are either readily available or could be collected with reasonable effort within the community setting. Because of that breadth of scope, the depth of information on any one subject is necessarily limited to prevent the assessment and report from becoming totally unmanageable. It is likely that there will be some areas where the information included will generate interest or raise additional questions that are not answered by the brief topical summaries included in the report - those questions may identify areas where the HHN Coalition or the future Food and Farm Council wish to conduct further exploration in the future.

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