



Community Food Assessment

Barton County, Kansas

March 2017



This report was prepared by Barbara LaClair, of LaClair Consulting Services, under contractual agreement with the Barton County Health Department.



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 Barton 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 - Barton County is a rural county located in central Kansas, with a total population of approximately 27,500 people. The population is slightly older than Kansas as a whole. Although the population is predominantly White, there is a sizable Hispanic population living in the County. Approximately 17.8 percent of county residents live in poverty.

Farming and Food Production - Barton County is predominantly rural, and agriculture dominates the county. In 2012, there were 694 farms in the County, occupying about 566,000 acres. Barton County farms produce mostly grains, hay and beef cattle for sale on the commodity market; only a small number of farmers in the County produce foods for direct sale to local consumers or retail markets.

Food Processing, Manufacturing and Distribution Infrastructure - There are few food processing and manufacturing businesses operating in Barton County. Current businesses include one meat processor, a local brewery, a winery and a commercial kitchen that produces jams jellies and salsas.

The Retail Food Environment - There are seven grocery stores serving Barton County. In addition, there are two farmers' markets (both in the city of Great Bend) and numerous restaurants including twenty-one fast food outlets.

Access to Healthy Foods - Consumers' access to healthy food options may be limited by either of two factors - 1) challenges getting to a retail location that sells healthy foods, or 2) not having enough money to be able to purchase healthy foods. Both types of access limitations exist in Barton County. Based upon 2015 data, USDA has identified one large census tract in the south central part of Barton County that meets the definition of a "food desert," defined as a location where a significant portion of residents are low-income and must travel 1 mile or more to a grocery store if they live in an urban area, or more than 10 miles in a rural area. Approximately 5,975 people live in that census tract.

Significant numbers of Barton County residents also have limited access to healthy food options because they cannot afford to purchase the food. This condition is often referred to as "food insecurity." In, 2014, an estimated 12.9% of Barton County residents experienced food insecurity at some time during the year. More than one in five (21.6%) of children lived in a household that experienced food insecurity. Many Barton County residents rely upon Federally-sponsored food assistance programs to help meet their nutritional needs. About 2,750 K-12 students in Barton County were eligible to receive either free or reduced-priced school meals during the 2015-2016 school term. About 2,900 Barton County residents received assistance through the SNAP program in 2015.

Consumer Eating Behaviors - Nationally and in Kansas, we know that most consumers' diets are poorly-aligned with dietary recommendations. Most Americans tend to eat more meats and grains than needed, but don't eat enough fruits, vegetables or dairy products. In Barton County, 41 percent of adults ate fruits less often than one time per day in 2015, and 18 percent ate vegetables less than once per day. These numbers are more positive than statewide rates, and show improvements since 2013. Barton County residents spend approximately \$73 million per year on food purchases.

Food Waste - National statistics indicate that approximately 40 percent of all food produced in the United States is wasted. While local data on food waste is not available, estimates can be derived by multiplying local population numbers by national per-capita waste estimates. Using that method, an estimated 7.9 million pounds of food is wasted in Barton County each year, with a value of approximately \$10.2 million.

Economics - Agriculture and food are important economic drivers in Barton County. The Kansas Department of Agriculture estimates that Agriculture and food-sector businesses employ about 700 people in the County, and contribute about \$116 million annually to the local economy. Sales of products from Barton County farms were valued at \$279 million in 2012. Barton County residents spend approximately \$73 million per year on food purchases.

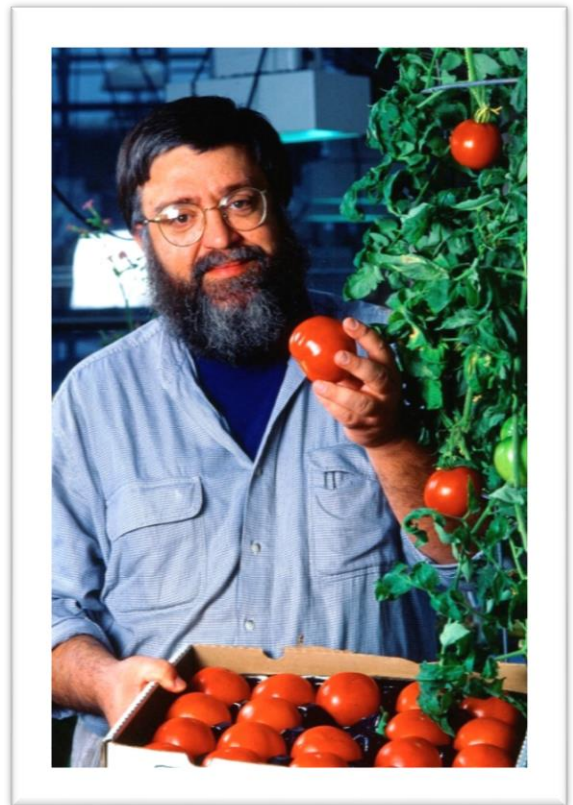
Community Member Perspectives - Through a series of community engagement forums and a Community Survey, Barton County residents and community stakeholders were invited to share their perspectives and thoughts about current assets, gaps and priorities in the Barton County food system. They responded generously, turning out for the 4 community forums and about 100 individuals completing the survey, and they provided valuable input. The results suggest that Barton County consumers are engaged and interested in seeing positive changes in their community's food system. Although current levels of satisfaction with the local food system are reasonably high, many suggestions for change were offered. Concern about food prices was a recurrent theme throughout the survey results and community forums. The cultural diversity of the community population was also evidenced by the range of responses to questions about foods that are currently hard to find in the community and changes that community members would like to see. Interest in both community gardening and food-related learning opportunities was strong.

Conclusion

The results and findings from this community food assessment provide many data points that help to describe the community food system in Barton County, and begin to identify current assets and gaps within that food system. In addition to the substantial amounts of data and information pulled together from multiple secondary data sources, engaged community members have shared their thoughts and perspectives on what is currently working well and what they would like to see changed. The challenge for the Be Well Barton County coalition will be to study and digest all of this information, and then use it to establish priorities and formulate action plans that lead to a stronger community food system that serves the needs of all members of the community.

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 policy 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 food policy councils or food and nutrition 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 food system assessment conducted in Barton County.

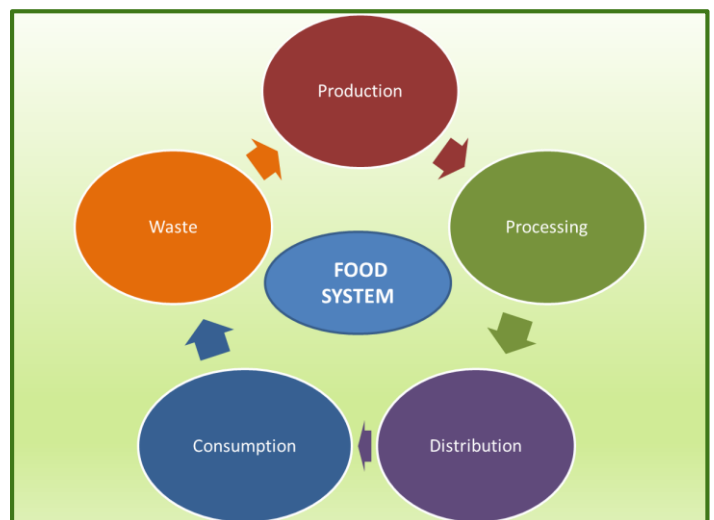
HISTORY AND PURPOSE OF THE FOOD ASSESSMENT

This food assessment was commissioned by the Be Well Coalition of Barton County. Formed in 2012, Be Well Barton County is part of the Central Kansas Partnership, a prevention coalition of parents, professionals and concerned citizens from Barton, Pawnee, Rice, Stafford, and Rush Counties. Be Well is made up of volunteers from all over Barton County. The Be Well coalition has received funding through the Kansas Health Foundation's Healthy Communities Initiative, and has used that funding support to create changes within the community that will support and encourage healthy eating choices and active lifestyles among community members.

In August of 2016 the Barton County Health Department, on behalf of the Be Well Barton County coalition, contracted with Barbara LaClair of LaClair Consulting Services for assistance in completing their first Community Food Systems Assessment. The results of this assessment will be utilized in identifying community food systems gaps and prioritizing next steps toward building a stronger local food system.

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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FOOD ASSESSMENT METHODOLOGY

This community food system assessment was conducted using three approaches: 1) secondary analysis of existing, publicly available data that describe or measure various characteristics of the current food system in Barton County, 2) primary data collection through a survey of community residents, and 3) primary data collection through a series of community forums. 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. Results from the community survey and forum events are summarized in subsequent sections of the report.

The community survey questionnaire was developed by representatives working in conjunction with the paid consultant. The final set of survey questions were programmed into an online survey platform, and paper versions of the survey were also made available. Community members were invited to participate using multiple dissemination strategies, which included promotion through contacts of Central Kansas Partnership members, distribution at the county health clinic and WIC clinic and distribution through various community groups. In total, 119 community members participated in the survey. In addition to the survey, perspectives from community members were solicited through a series of four community forums.

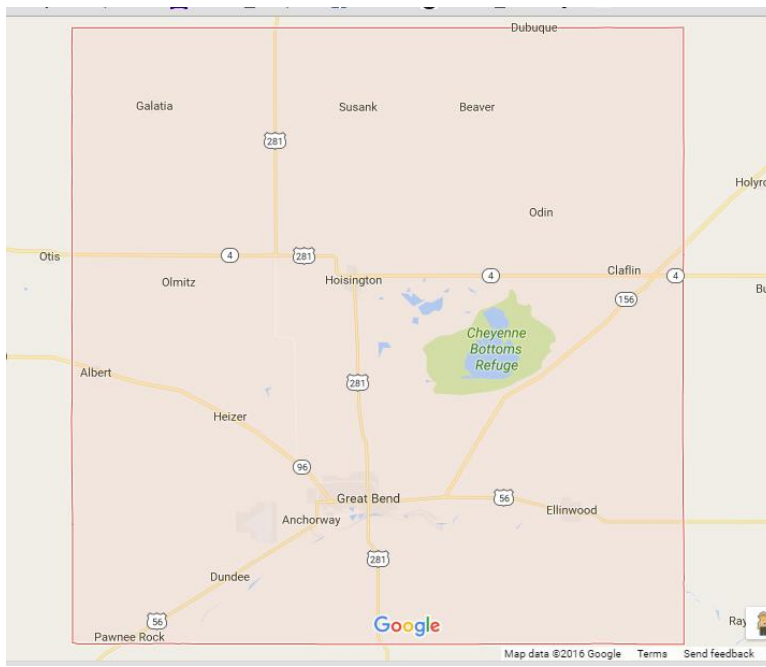


The Barton County Farmers' Market

Information from Secondary Data

BARTON COUNTY DEMOGRAPHICS

Barton County is located in central Kansas. The county is largely rural, with a total population of 20,674 in 2010. Great Bend is the largest city within Barton County, and the County Seat. Several additional smaller towns and communities exist within the county borders, as well.



Population

According to U.S. Census Bureau American Community Survey 2010-14 5-year estimates, a total of 27,566 people live within the 895.4 square mile area of Barton County. The county's population density is estimated at 30.74 persons per square mile. Between the 2000 and 2010 decennial census enumerations, the Barton County shrank by about 531 individuals, or approximately 2 percent.

Geographic Area	Total Population	Total Land Area (Square Miles)	Population Density (Per Square Mile)
Barton County	27,566	895.4	30.74
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. Source geography: Tract

Geographic Area	Total Population, 2000 Census	Total Population, 2010 Census	Total Population Change, 2000-2010	Percent Population Change, 2000-2010
Barton County	28,205	27,674	-531	-1.88%
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. Source geography: Tract

Race/Ethnicity of the Population

The overall population of Barton County is predominantly white, non-Hispanic, although there is a significant Hispanic/ Latino population within the county. Nearly 14 percent of county residents self-identified as Hispanic or Latino ethnicity between 2010 and 2014, a proportion that is higher than the statewide average. Although individuals who identify as Hispanic or Latino ethnicity may be of any race, the majority in Kansas would usually be White. Geographically, the Hispanic population is concentrated in the South Central portion of the county.

Total Population by Race Alone, Percent

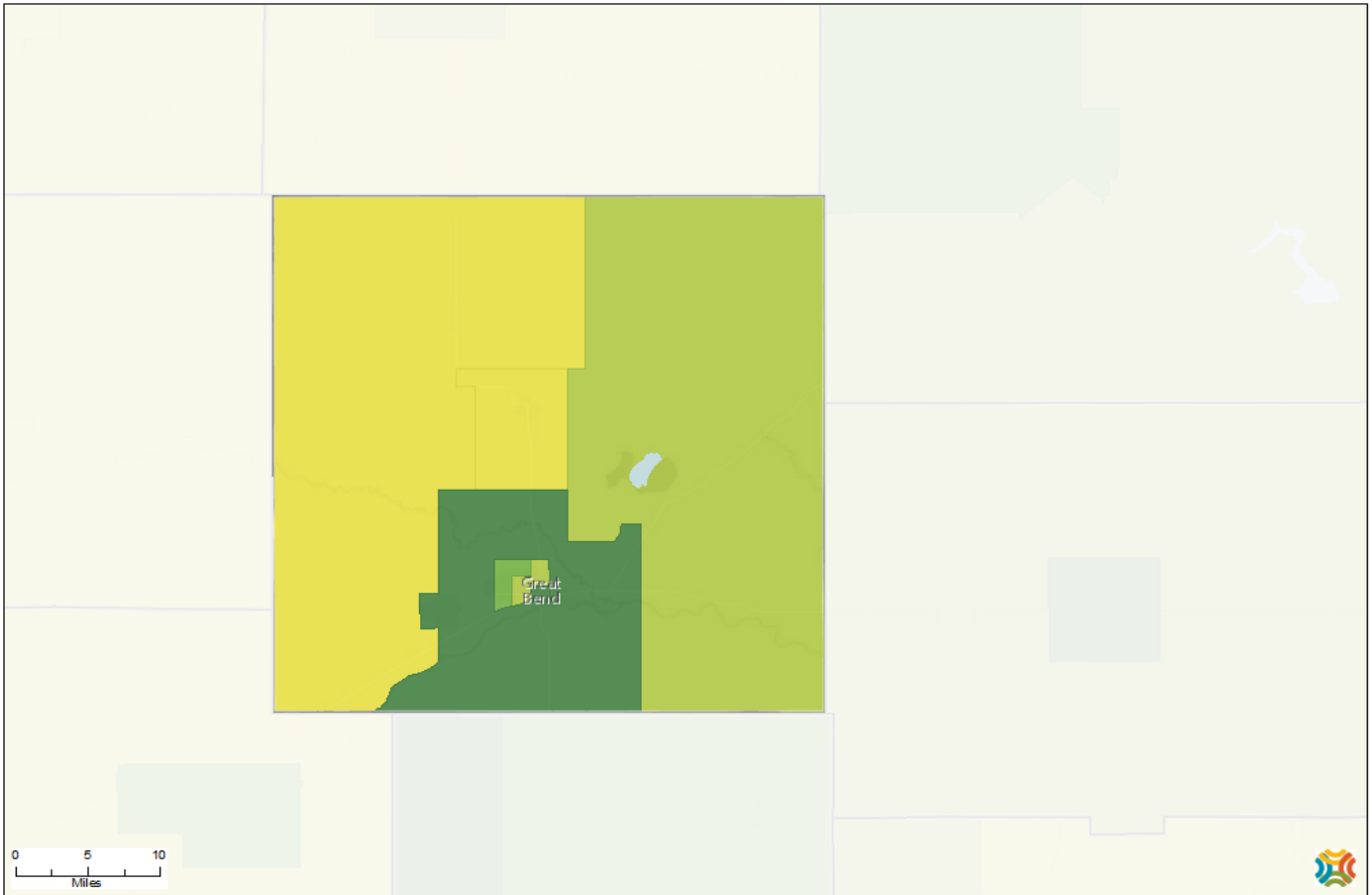
Geographic Area	White	Black	Asian	Native American/ Alaska Native	Native Hawaiian/ Pacific Islander	Other Race	Multiple Races
Barton County	91.24%	1.91%	0.17%	0.26%	0.03%	4.24%	2.15%
Kansas	85.25%	5.8%	2.52%	0.82%	0.06%	2.25%	3.3%
United States	73.81%	12.6%	5%	0.82%	0.17%	4.7%	2.91%

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
Barton County	27,566	3,815	13.84%	23,751	86.16%
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. Source geography: Tract

Barton County, Hispanic Population



Map Legend

Population, Hispanic or Latino, Percent by Tract, ACS 2010-14

- Over 10.0%
- 5.1 - 10.0%
- 2.1 - 5.0%
- Under 2.1%
- No Hispanic Population Reported
- No Data or Data Suppressed

Community Commons, 8/26/2016

Map generated using the Community Commons data system.

Age of the Population

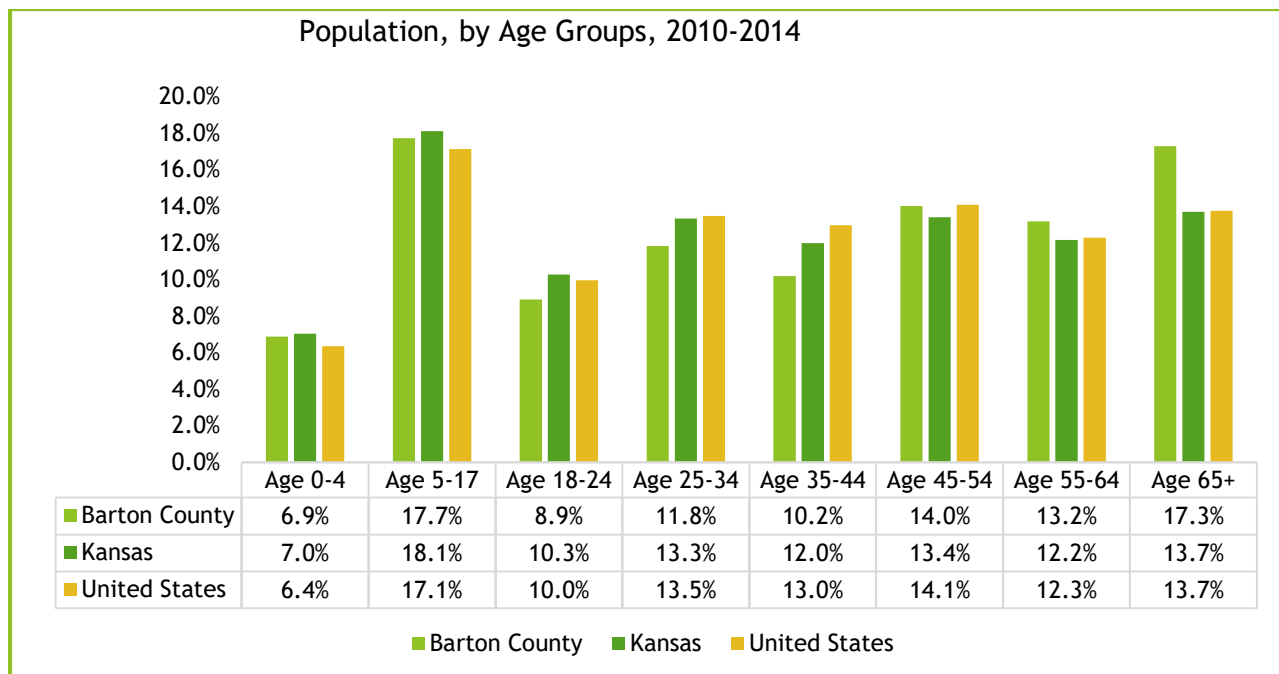
The population of Barton County is slightly older than that of Kansas, or the United States. Between 2010 and 2014, the median age of Barton County residents was 39.8 years, compared to 36.0 years for all Kansans. Seventeen percent of Barton County residents were 65 years or older, compared to 13.7 percent of all Kansans.

Geographic Area	Total Population	Median Age
Barton Co.	27,566	39.8
Kansas	2,882,946	36.0
United States	314,107,072	37.4

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

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+
Barton County	1,897	4,886	2,457	3,259	2,807	3,862	3,633	4,765
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



Households with Children

According to 2010-2014 American Community Survey estimates, 30.5% of all occupied households in Barton County were family households with one or more child(ren) under the age of 18. This is slightly lower than the statewide proportion of 32.5 percent, reflecting the somewhat older age of the Barton County population.

Geographic Area	Total Households	Total Family Households*	Families with Children (Under Age 18)	Families with Children (Under Age 18), Percent of Total Households
Barton County	11,480	7,464	3,504	30.52%
Kansas	1,112,3355	730,983	361,834	32.53%
United States	116,211,088	76,958,06	37,554,34	32.32%

- *Family households are defined as households where at least one member is related to the householder by birth, marriage or adoption
- Data Source: US Census Bureau, [American Community Survey](#). 2010-14.

Geographic Mobility

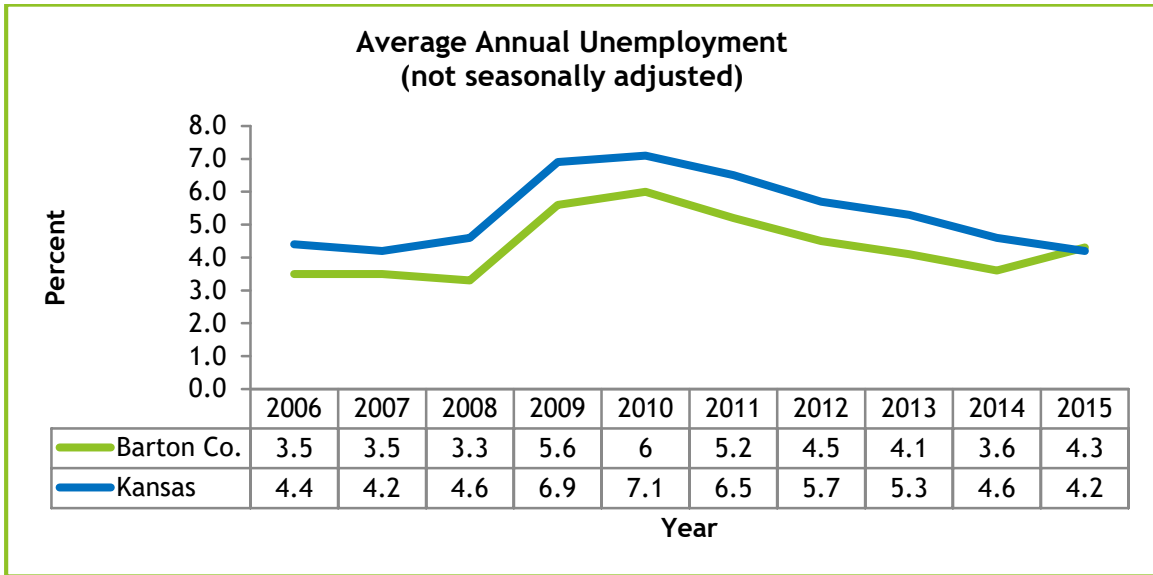
The Barton County population is somewhat less mobile than Kansans as a whole. According to the 2010-2014 American Community Survey, 6.8 percent of the Barton County population had relocated to the area from outside of the county during the previous year. (Residents who moved to different households within the county are not included in this measures.)

Geographic Area	Total Population	Population In-Migration	Percent Population In-Migration
Barton County	27,188	1,859	6.84%
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 Barton County was 4.3 percent, compared to 4.2 percent statewide. Although rates of unemployment in Barton County were lower than statewide rates between 2006 and 2014, they increased during 2015, and were nearly the same as the statewide rate. 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 Barton County were estimated at 17.8% 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, 22.0 percent of children in Barton County lived in poor households, compared to 17.6 percent statewide. The median income of Barton County residents was \$46,942 in 2014, approximately \$6,700 less than the median income for all Kansans during the same timeframe.

	Percent in Poverty, all ages	Percent in Poverty, age 0 to 17	Median Income
Barton County	17.8%	22.0%	\$46,942
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.

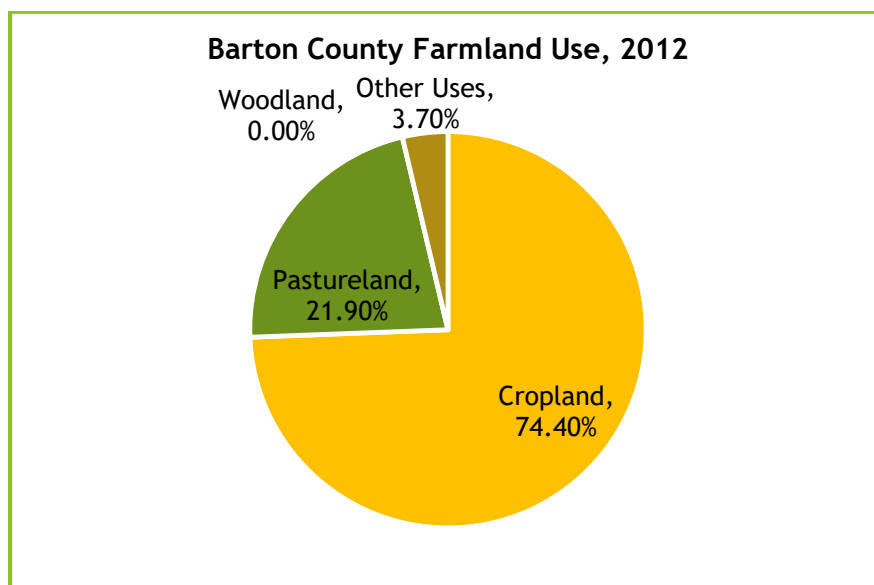
Land Availability and Use

Farming dominates the landscape in Barton County. The county boundaries enclose an area approximately equal to 404 square miles, with 573,057 acres of land. Of that land, 566,088 acres (98.8 percent) was in use for farming in 2012. Nearly three-quarters of farmland was in use as cropland in 2012.

Barton 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
421,276	317,667	613	456	33,999	42,027	5,942	23,172

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

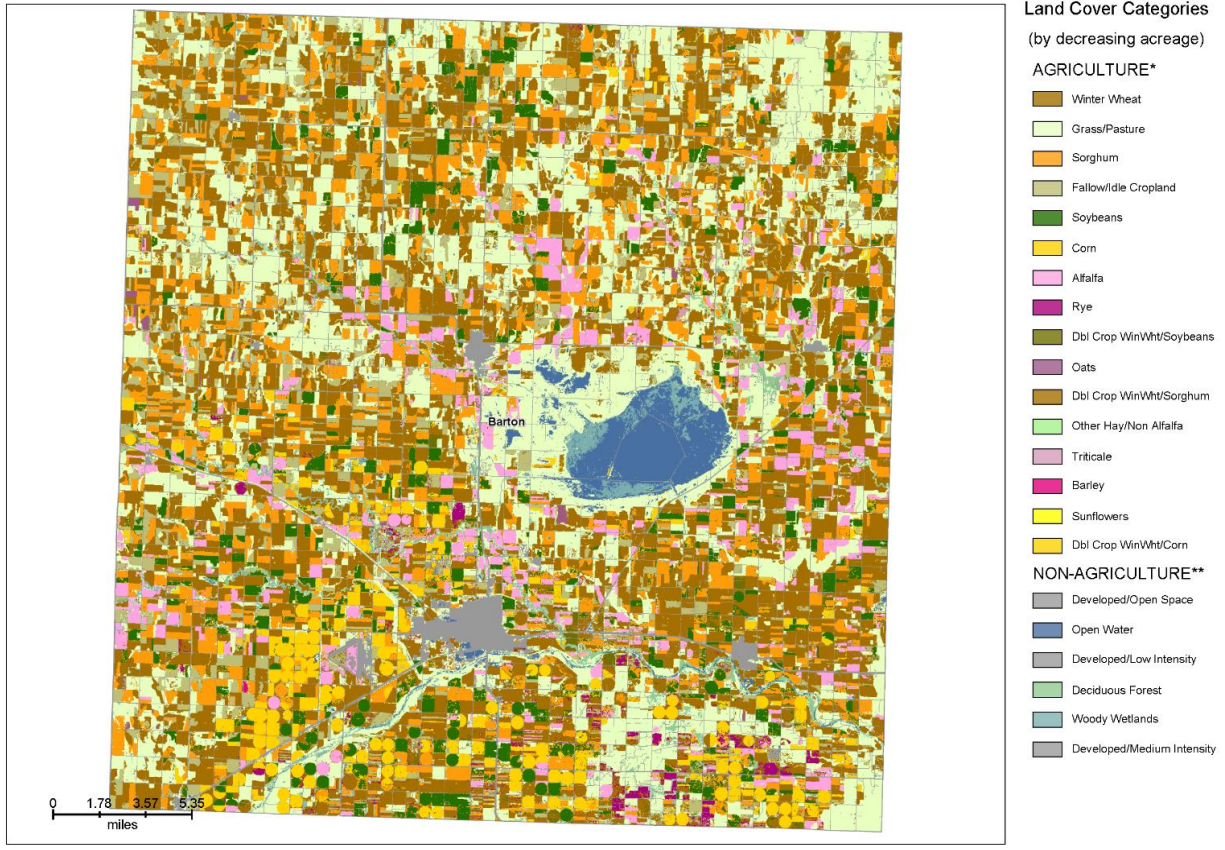


Data Source: U.S. Census of Agriculture, 2012

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



2015 CDL, Barton County, Kansas



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

Top 16 agriculture categories / Top 6 non-agriculture categories listed

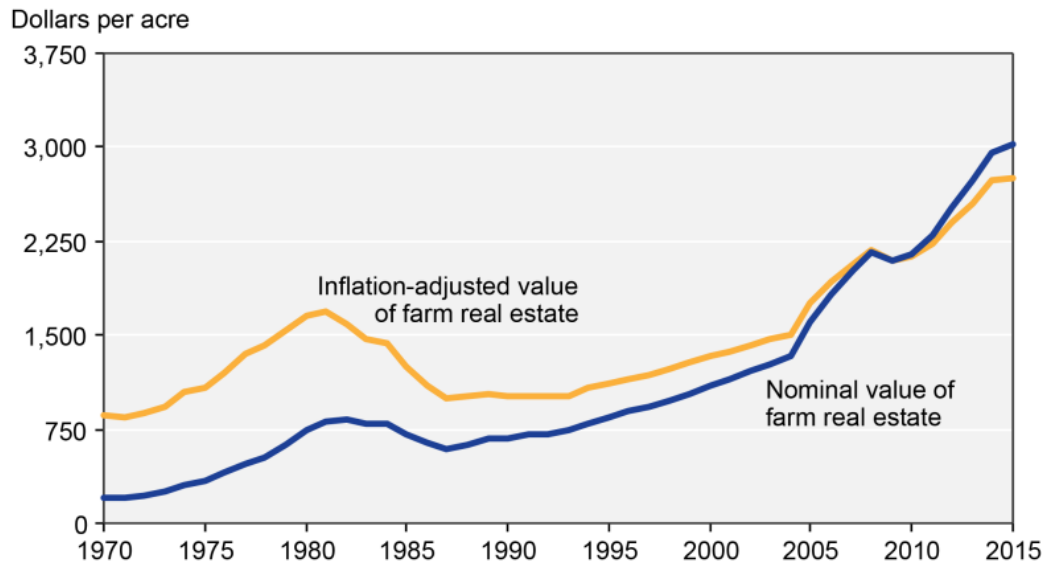
Source: USDA CropScape - <http://nassgeodata.gmu.edu/CropScape>

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.

Average U.S. farm real estate value, nominal and real (inflation adjusted), 1970-2015



Note: Farm real estate includes land and buildings. Data reflect values as of June 1 of each year. Excludes Alaska and Hawaii. The GDP chain-type price index is used to convert NASS current-dollar statistics to 2009=100 equivalents (Bureau of Economic Analysis, Department of Commerce).
 Source: USDA, Economic Research Service using data from USDA, National Agricultural Statistics Service (NASS).

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

	Non-irrigated Cropland	Irrigated Cropland	Pasture
Kansas	\$2,990	\$5,195	\$1,802
Barton County	\$2,766	----	\$1,668

*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
Barton County	\$40.00	\$125.00	\$14.00

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

Water

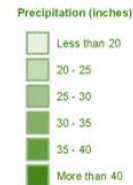
In addition to quality soils, water is the other primary resource necessary to support crop and livestock production. In Western Kansas, where rainfall is less abundant and much of the water used in agriculture is obtained from aquifers, declining aquifer levels has become a significant concern. Eastern Kansas

counties typically experience higher annual precipitation levels, and are less dependent upon irrigation and surface or groundwater reservoirs for agricultural needs. During 2012, 112 of the 694 farms in Barton County reported that they irrigated their farmlands.

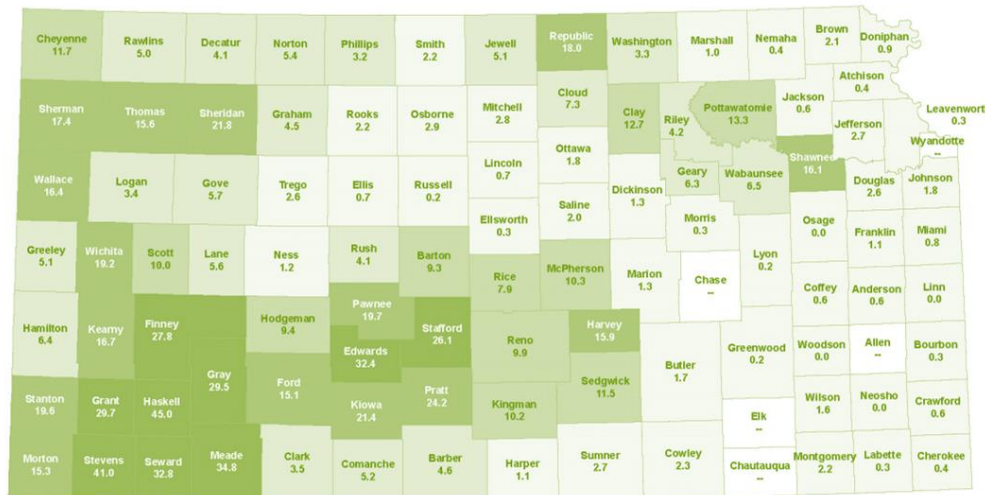
Average Precipitation in Kansas, 1981- 2010



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

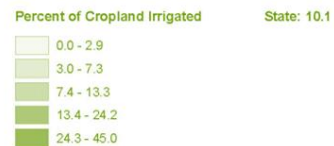


Percent of Cropland Irrigated in Kansas, by County, 2012



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 Barton County

In 2012, only a minority (16 percent) of Barton County farms used irrigation. Between 2007 and 2012, the number of irrigated farm acres increased by 43,400 acres, approximately a 23 percent increase.

	2007	2012
Farms	92	112
Land in irrigated farms	191,341	234,781

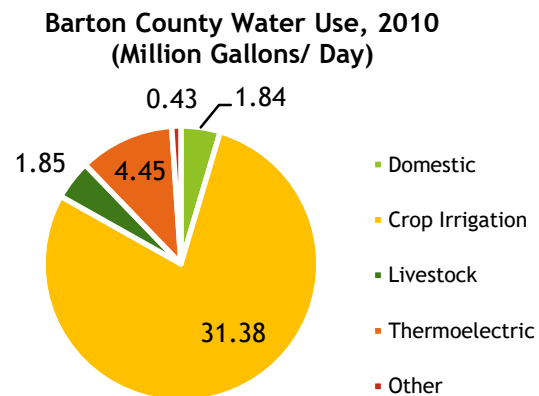
Data Source: U.S. Census of Agriculture

Water use

Although only a small share of Barton County farms irrigate their cropland, irrigation accounts for 85 percent of all water use in the county.

Water Use, Barton County, 2010

Type of Use	Million Gallons/day
Municipal/ domestic	1.84
Crop Irrigation	31.38
Livestock	1.85
Industrial	0.10
Mining	0.33
Thermoelectric	4.45
Total withdrawals	36.75



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

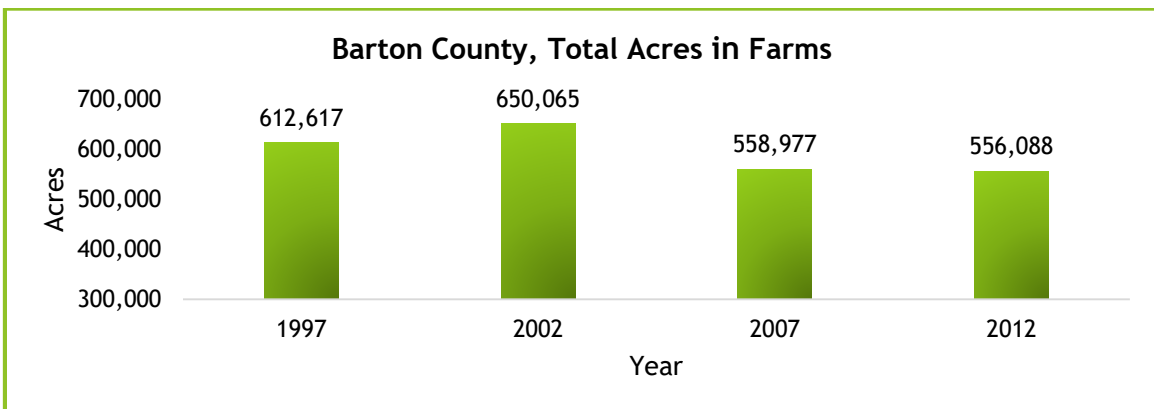
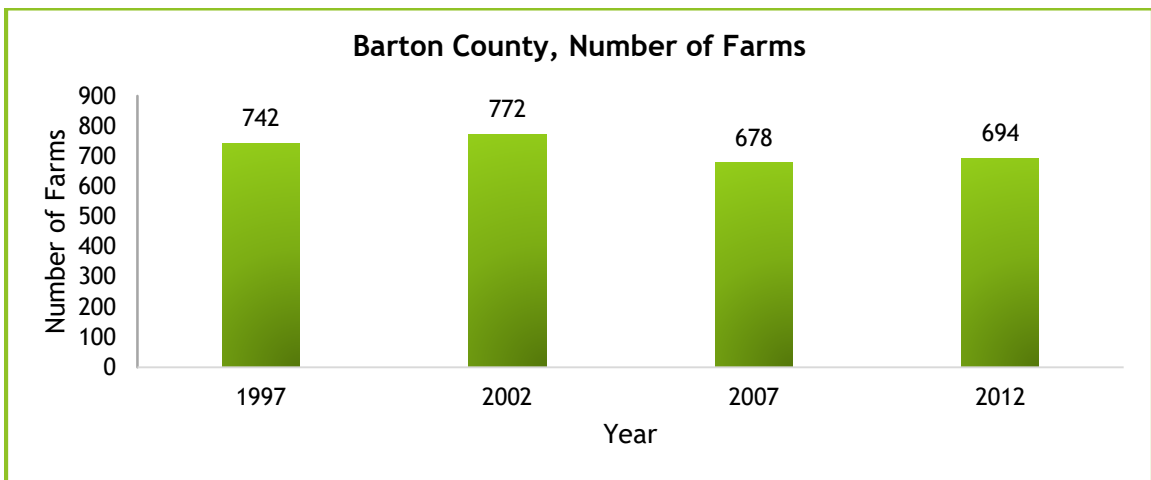
FARMING AND FOOD PRODUCTION

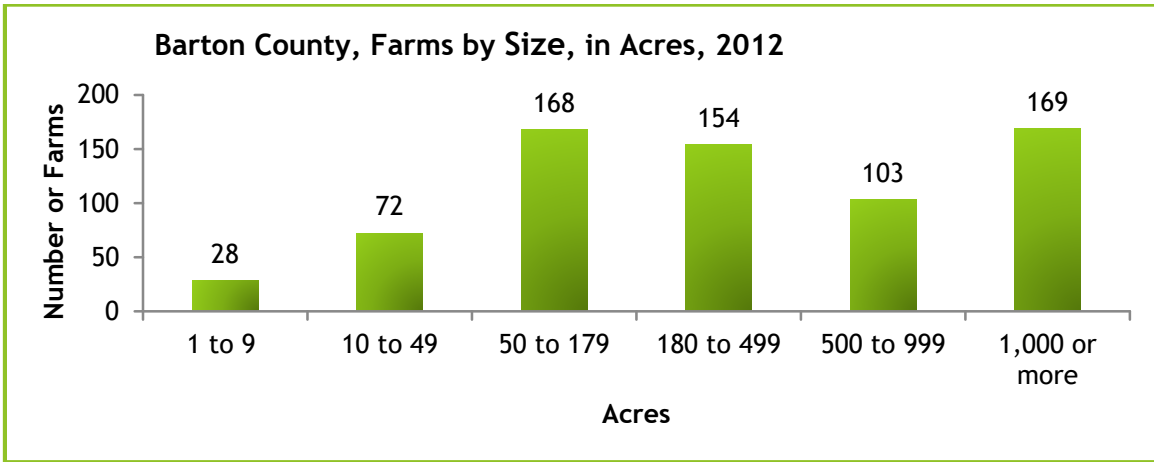
Farms

In 2012, there were 694 farms in Barton County that were enumerated in the USDA Agricultural Census, occupying a total of 566,088 acres of land. The average farm size was 816 acres. Both national and state trends have shown reductions in the numbers of farms and increases in average farm size in recent years - in Barton County the number of farms has fluctuated, but remained relatively stable between 1997 and 2012.

Year	Farms	Land in Farms (acres)*	Avg. Farm Size (acres)	Total Cropland (acres)	Harvested Cropland (Acres)
1997	742	612,617	826	488,283	318,983
2002	772	650,065	842	486,510	343,096
2007	678	558,977	824	406,192	310,717
2012	694	566,088	816	421,276	317,667

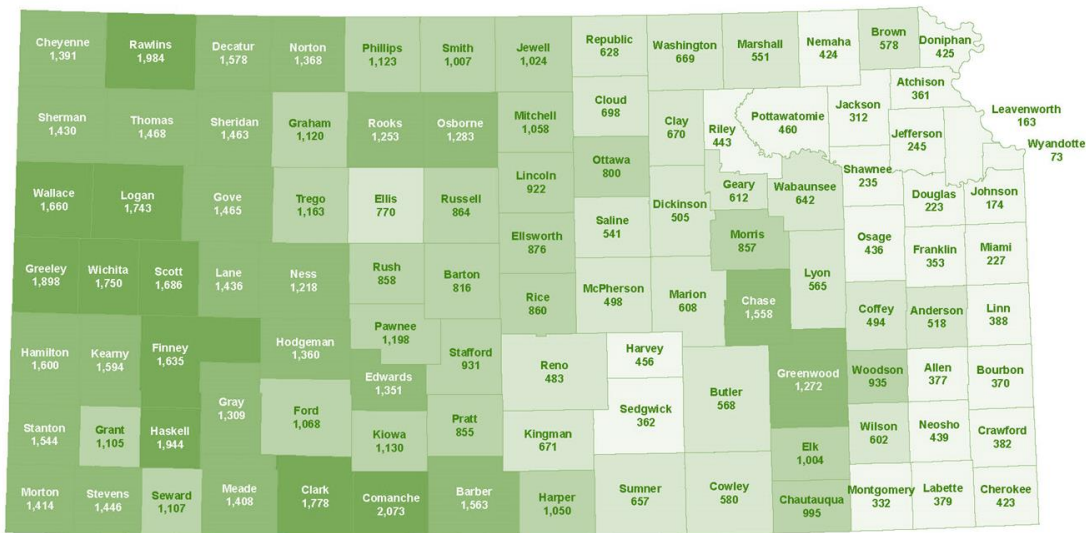
- * The Land in Farms may exceed the total land area of the county because some farm operations have land in two or more counties and all acres are tabulated in the principal county of operation
- Data source: U.S. Census of Agriculture





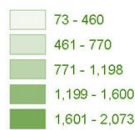
Data Source: U.S. Census of Agriculture

Average Size of Farm 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.

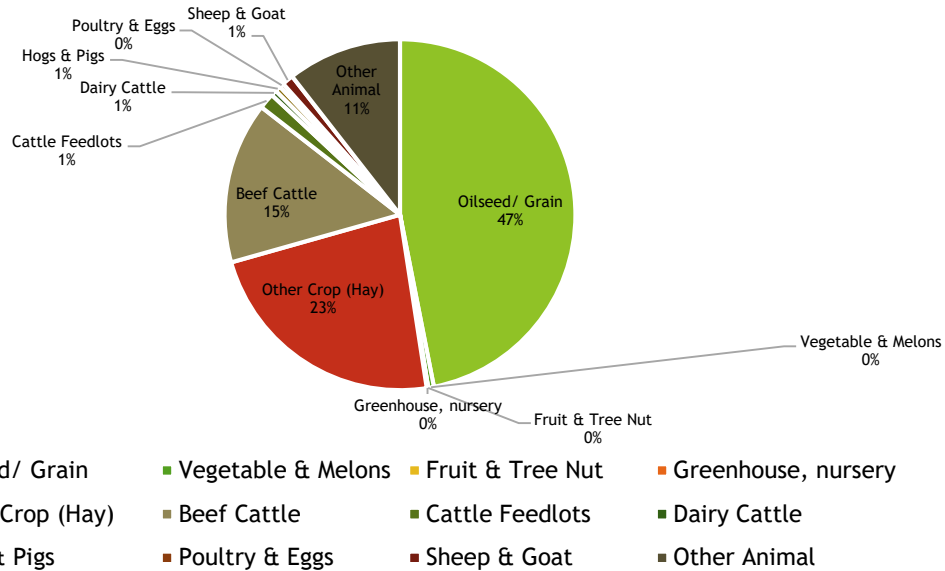
Number of Acres



State: 747

Source: Kansas Statistical Abstract, 2014

Barton County Farms, by Primary Activity, 2012



Data Source: 2012 U.S. Census of Agriculture

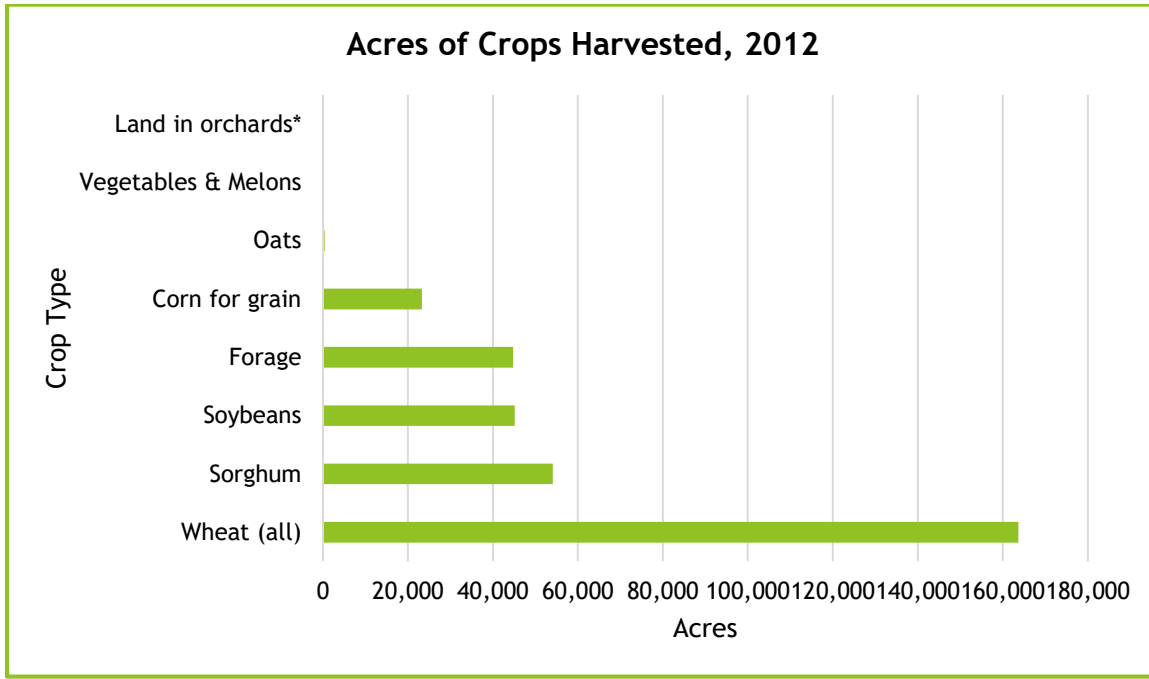
Farm Production

Barton County Farm Production, 2012

	Quantity	State Rank
Top Crop Items (acres)		
Wheat for grain, all	163,706	13
Winter wheat for grain	163,706	13
Sorghum for grain	54,094	6
Soybeans for beans	45,158	39
Forage – hay, silage and greenchop	44,726	11
Top Livestock Inventory (number)		
Cattle and Calves	114,771	12
Hogs and Pigs	(D)	35
Layers	837	37
Pullets for laying flock replacement	(D)	7
Horses and ponies	305	71

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

(D) = data suppressed to avoid disclosing information about individual farms



Data Source: 2012 U.S. Census of Agriculture *Data suppressed to prevent disclosure of information for individual farms

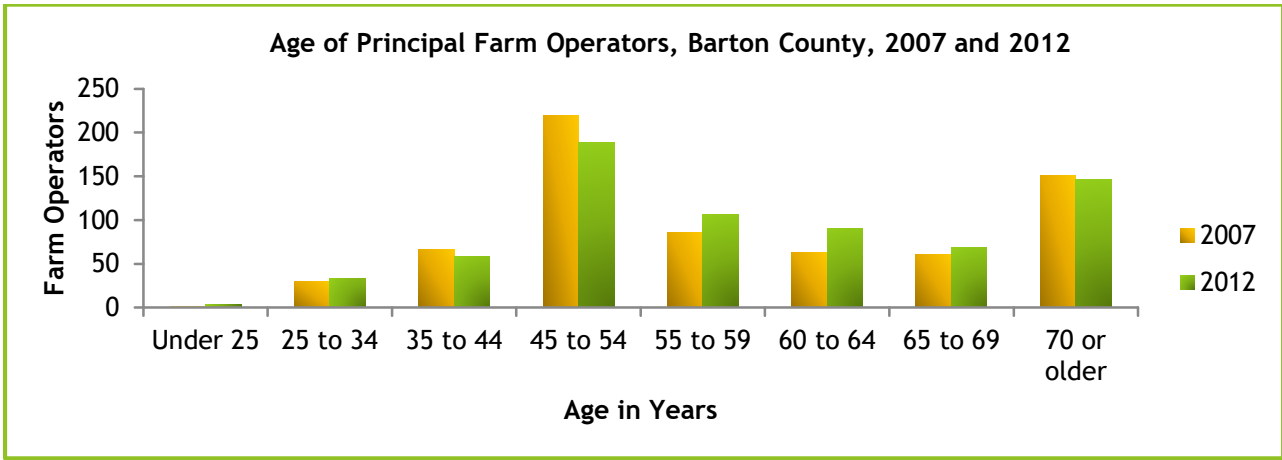
Fruit and Vegetable production

Commodity crops (corn, soybeans, and wheat) dominates overall crop production in Kansas, and the same is true in Barton County. During 2012, a total of *six Barton County farms* reported harvesting vegetables for sale. Those farms harvested a total of *seven acres* of vegetables. Just one farm reported having land in orchards; data on the number of acres harvested was not available. Fruit and vegetable production accounted for only *0.002 percent* of all cropland harvested in Barton County in 2012.

Farm Operators

Age of Farm Operators

Across Kansas, the average age of farmers has been increasing for many years. The average age of Barton County Farm Operators in 2012 was 58.3 years, compared to 57.5 years in 2007. The average age of all Kansas principal farm operators in 2012 was 58.2 years. The graph below illustrates the aging of Barton County farm operators between 2007 and 2012. More than one in five (21 percent) of Barton County farmers was age 70 or older in 2012.

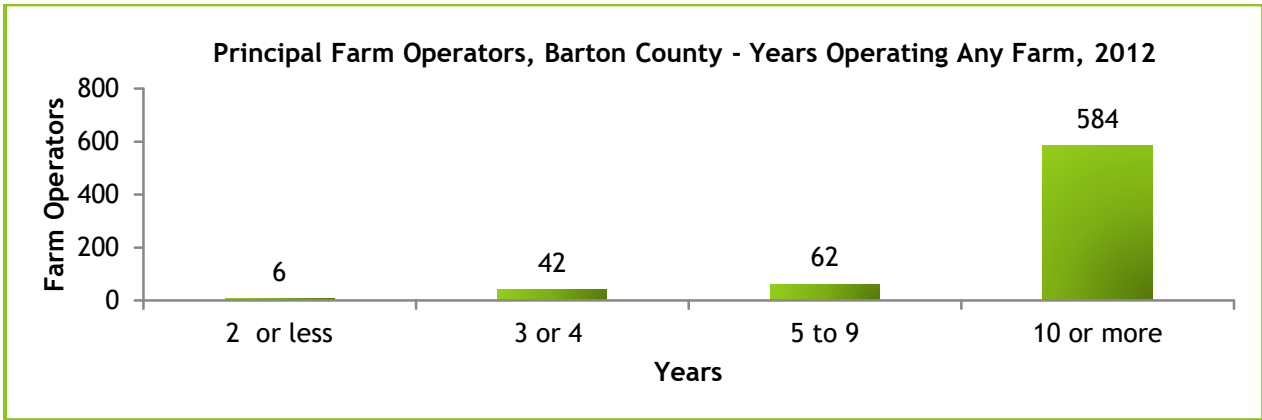


Data Source: U.S. Census of Agriculture

Farm Operator Experience

Across Kansas, and in Barton 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 profession 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.

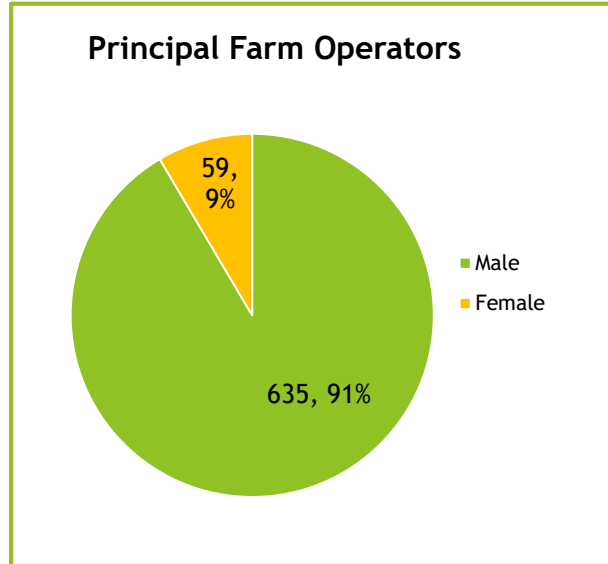
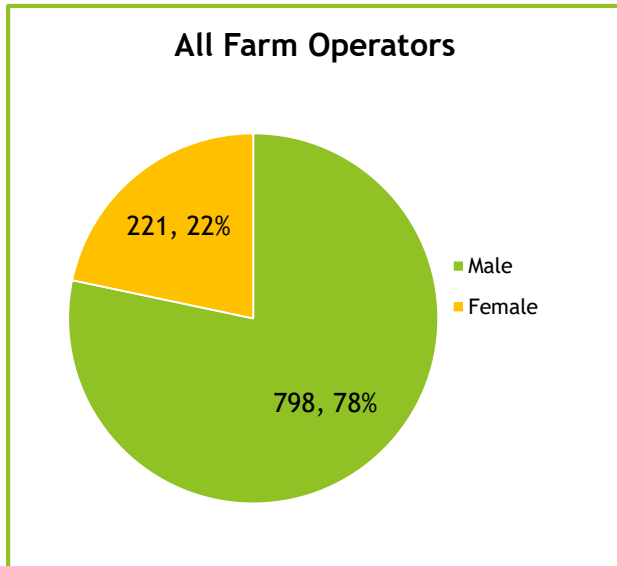
In 2012, Kansas farmers reported an average of 27.1 years of farm operator experience; Barton County farmers averaged 27.5 years.



Data Source: U.S. Census of Agriculture

Gender of Principal Farm Operators

Across Kansas, and in Barton County, a significant majority of principal farm operators are male. In 2012, there were 59 female principal farm operators in Barton County, accounting for 8.5 percent of all farms.



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 Barton County. In 2012, 689 principal farm operators in Barton County self-identified as White; only 9 identified themselves as Hispanic or Latino, and none as Black, Asian or American Indian/Alaskan Native.

Off-Farm Employment

The majority of farm operators find it necessary to supplement income from farming operations with other sources of income. In 2012, more than half (54.3 percent) of principal farm operators in Barton County reported that their primary occupation was something other than farming. More than half (59.8 percent) worked at least some days off the farm. Nearly half of principal farm operators (45.7 percent) worked off the farm for 200 days or more during 2012.

Farm Sales

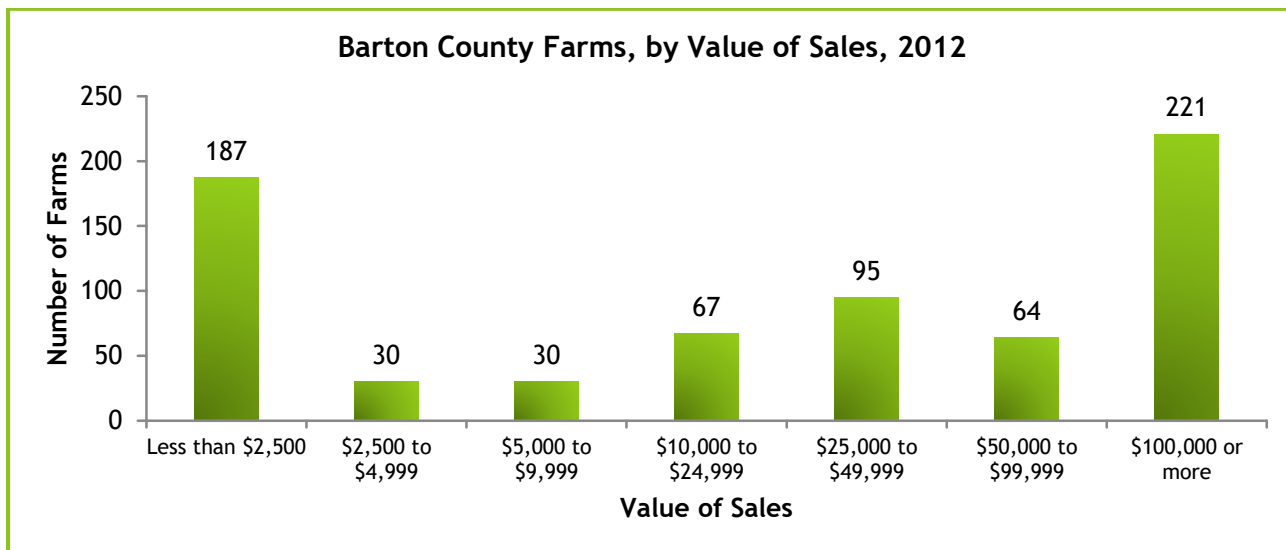
During 2012, Barton County farms reported total sales of farm products valued at nearly \$279 million. Approximately two-thirds of those sales were livestock. The per farm average market value of farm products sold by Barton County farms was \$401,964 in 2012.

Year	Farms	Market Value of Products Sold			
		Total Sales	Crop Sales	Livestock Sales	Average per farm
1997	742	\$185,656,000	\$52,883,000	\$132,773,000	\$250,210
2002	772	\$171,158,000	\$44,956,000	\$126,203,000	\$221,708
2007	678	\$282,786,000	\$65,249,000	\$217,537,000	\$417,089
2012	694	\$278,963,000	\$96,206,000	\$182,757,000	\$401,964

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-quarter (26.9 percent) of Barton County farms were operating on a very limited scale, having sales valued at less than \$2,500 in 2012. At the opposite end of the scale, 31.8 percent of Barton County farms had sales that exceeded \$100,000 in value in 2012. The numbers of farms in the mid-range groupings in terms of value of sales were significantly smaller.



Data Source: U.S. Census of Agriculture

Sales through Alternative Market Channels

Although traditional commodity farming dominates the Kansas farm scene, small numbers of farms are attempting to market their products through alternative marketing channels. In Barton County, 19 farms reported sales directly to individuals for human consumption.

Market Approach, 2012	Kansas		Barton County	
	Farms	\$ Value	Farms	\$ Value
Direct sales to individuals, for human consumption	2,044	\$8,957,000	19	\$58,000
Sales directly to retail outlets	406	No data	1	No data
Sales of value-added commodities	1,615	No data	15	No data
Sales through Community-Supported Agriculture program	144	No data	5	No data
Agritourism Services	1,000	\$8,271,000	10	\$17,000

Data Source: 2012 U.S. Census of Agriculture

(D) = Data suppressed to avoid disclosing information about individual farms

Net Farm Income

On average, net incomes (after expenses) from farming in Kansas are modest. In 2012, net farm income in Barton County averaged \$81,126, significantly higher than the state average. By comparison, 2012 net farm income for all farms in Kansas averaged \$50,903.

Barton County Farm Income			
	2012	2007	2002
Net cash farm income (total)	\$56,302,000	\$49,977,000	\$12,644,000
Average per farm	\$81,126	\$73,712	\$16,314
Percent of farms that reported net losses	27.5%	29.6%	28.9%

Data Source: U.S. Census of Agriculture

Local Food Producers

Several small-scale farmers and producers are growing foods in Barton 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 likely additional “local” food producers who offer their products for sale in Barton County venues, but are not included here because their farms are located outside of the Barton County borders.

The Swobee Honey Farm began as a college project for Bruce Swob back in 1978. The 'hobby' has grown to the point that they now manage approximately 100 bee hives in Ellis, Rush and Barton Counties. All processing is done at their Kansas-licensed food processing facility at Albert, Ks.

The Swobee Honey Farm is an active member of the Kansas Honey Producers Association and American Bee Federation. They also offer beginning bee keeping training, live package and nucleus bees for sale in the spring for sale along with locally produced honey which is for sale year-round.



Heartland Farm is a ministry of the Dominican Sisters of Peace, designed to introduce visitors to the peace and abundance of country life. Visitors can explore the straw bale buildings, an acoustically perfect silo, and learn about organic gardening and other sustainable practices, hike the labyrinth, have a picnic, or watch for birds.



Since the beginning of Heartland Farm, the land has been managed organically and the Farm’s gardens have been central to the operation. The gardens provide wholesome food for the residents and guests as well as produce that is offered at local farmers’ markets. With the addition of expanded garden facilities and a high tunnel, the Sisters hope to increase their production and their ability to impact local food systems. As a regular part of the Farm’s tours and programming, they offer visitors and volunteers hands-on opportunities to learn about organic gardening.

Rosewood Services Greenhouse and Gardens are part of the Rosewood Services Operation, which provides a variety of social, life-skills and vocational support opportunities to clients with developmental disabilities. Rosewood clients have the opportunity to participate in operation of the farm and ranch, including tending and harvesting grapes in the vineyard, fruits from the orchard and tomatoes and other vegetables in the greenhouse operation. Tomatoes and jalapeños are grown year-round at Rosewood's Greenhouse and Gardens. Produce is used at Rosewood's Industrial Kitchen and sold to restaurants and the public.



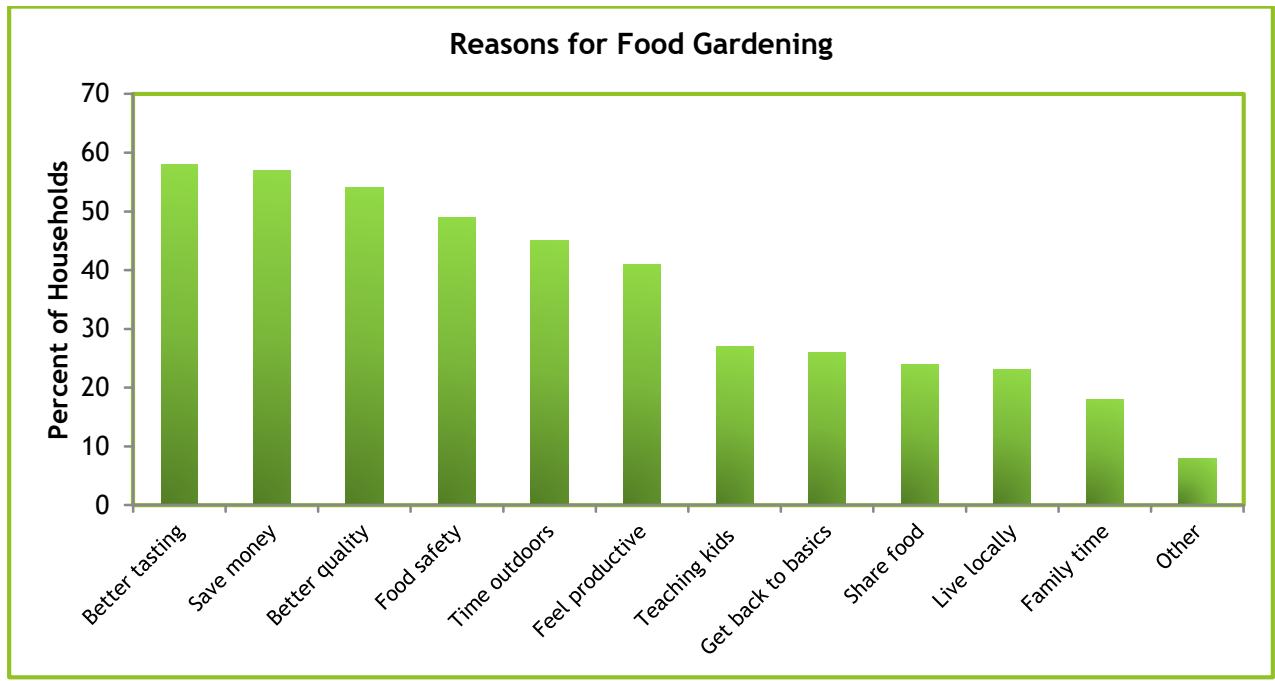
Other Local Food Production

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, 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.

There are currently at least two Community Gardens active in Great Bend.

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. As part of the Kansas Hunters Feeding the Hungry program, venison is sometimes donated to local food assistance agencies for distribution to families in need.

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 in Northeast Kansas under the name Fresh Farm HQ, has begun. A second, "virtual" food hub called the High Plains Food Coop

serves producers and purchasers in northwest Kansas and northeastern Colorado. Tentative discussions have begun to assess the feasibility of establishing a food hub to serve a multi-county region in north central Kansas, as well.

In Barton County, food processing and distribution businesses operating within the county are limited, but there are some. Current operations include:

The **Ellinwood Packing Plant**, in Ellinwood is a custom butchering and processing business. They process and sell locally-grown beef and pork.

The Rosewood Winery at Pawnee Rock is a part of Rosewood Services. Using grapes harvested from the Rosewood vineyard, clients help to produce more than 20 varieties of sweet and dry wine. Rosewood is the only Winery dedicated to providing employment opportunities to people with developmental disabilities in the United States. Their wine distributed across central Kansas and sold at Rosewood retail store.



The Beaver Brewery at Mo's Place Grill and BrewPub, located in Claflin, operates a local brewery and restaurant. The operation creates several varieties of beer, brewed in-house. Local beef and hand-cut fries are a featured in their restaurant offerings.



Rosewood Services also operates a commercial kitchen in which staff and program clients make jellies, salsa, candy, bread and crackers. Jams, jellies and salsa recipes incorporate fruits and vegetables grown on the Rosewood Services farm. The products are sold to the public at Rosewood's retail store.



THE RETAIL FOOD ENVIRONMENT

The food that is available in our environment, and the ways in which it is presented to us, exert strong influences on our 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 can 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 of food in the community
- 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.

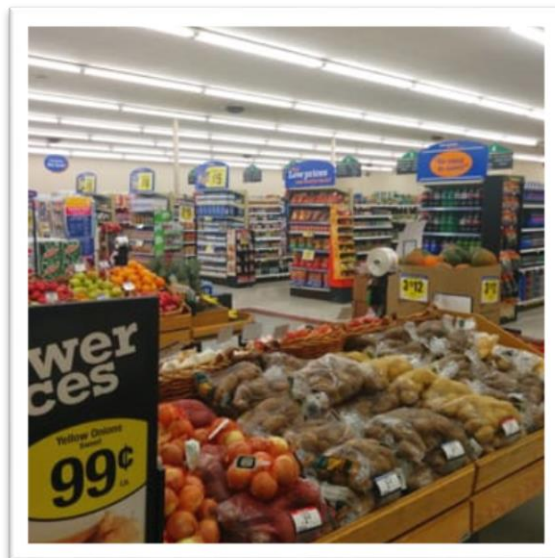
Grocery Stores

Traditionally, most families have purchased most 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.

Grocery store choices in Barton County reflect the cultural diversity of the community, with both traditional and specialty offerings. Currently, there are seven grocery stores operating within Barton County:

- Walmart Supercenter, 3503 10th St, Great Bend
- Dillon’s, 1811 Main, Great Bend
- Dillon’s, 4107 10th, Great Bend
- Town & Country Supermarket, 818 N. Elm, Hoisington
- Ellinwood Family Foods, Ellinwood
- Organic Cupboard, 3122 10th, Great Bend
- Baily’s Food Bin, 101 Main St., Claflin

For more discussion of geographic locations of grocery stores in Barton 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.

The **Great Bend Summer Street Stroll Farmers Market** is a downtown open-air evening market in Jack Kilby Square around the Barton County Courthouse on Thursdays throughout the summer. Special events such as the City Band Concerts and Movies in the Park are held at the historic band shell along with the market on Thursday evenings during the summer and downtown stores have later hours to accommodate area shoppers visiting the market and events. Fresh fruits and vegetables, honey, art and handmade crafts are the focus of the Summer Street Stroll Farmers Market and local vendors are encouraged to participate for the entire summer. This market serves as the designated market for the Kansas Senior Farmers Market Nutrition Program for Barton County where seniors may redeem checks for locally grown fresh vegetables, fruit, herbs, and honey. Currently, the market is not able to accept SNAP electronic benefit cards.

There is also a second farmers' market in Great Bend, open on Saturday mornings in the Library parking lot at 1409 Williams.

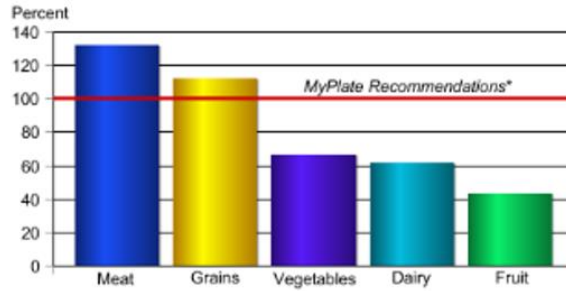


CONSUMER EATING BEHAVIORS AND FOOD PURCHASES

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 8 out of 10 Barton County adults (81.4 percent) reported eating less than the recommended 5 daily servings of fruits and vegetables. In 2013, 4 out of 10 (41.7 percent) of Barton County adults said that they ate fruits less often than once a day, and about 2 in 10 (22.9 percent) said that they ate vegetables less than once per day. While these numbers may be surprising, they are similar to results for Kansans statewide. Local BRFSS results for 2015 have recently been released, and they suggest that there has been some improvement in the dietary habits of Barton County residents. Between 2013 and 2015 the estimated proportion of Barton County adults that reported eating vegetables less than once per day decreased from 31.4% to 18.1%, and those eating fruits less than once per day decreased from 52.1% to 41.1%.

Fruit and Vegetable Consumption

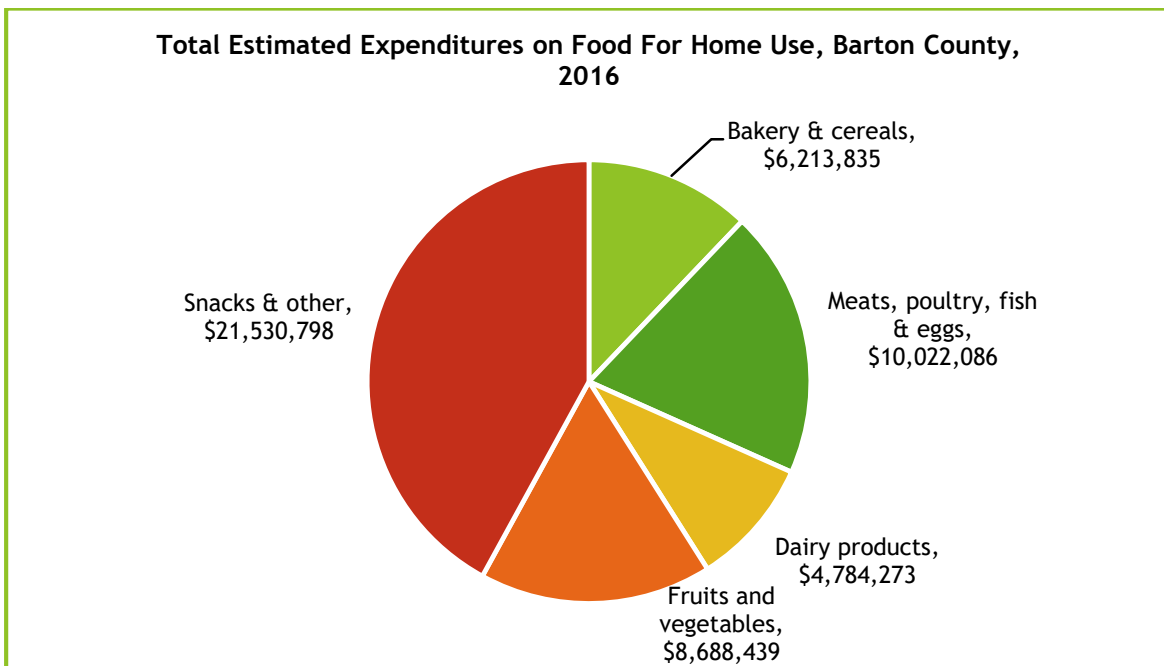
Measure	Kansas	Barton County
% of Adults consuming fruits & vegetables less than 5 times/ day (2009)	81.4%	77.8%
% of Adults consuming vegetables less than one time/ day (2013)	22.9%	31.4%
% of Adults consuming fruits less than one time/ day (2013)	41.7%	52.1%
% of Adults consuming vegetables less than one time/ day (2015)	22.3%	18.1%
% of Adults consuming fruits less than one time/ day (2015)	43.7%	41.1%

Data source: Kansas Behavioral Risk Factor Surveillance Survey, 2013 & 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 charts below, Barton County residents spend an estimated \$73 million annually on food purchases. Approximately \$27.5 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 87 cents per person per day spent on fruits and vegetables. (*It should be noted that these data reflect the actual dollars spent by Barton County residents - the purchases may have taken place outside of Barton County borders.*)

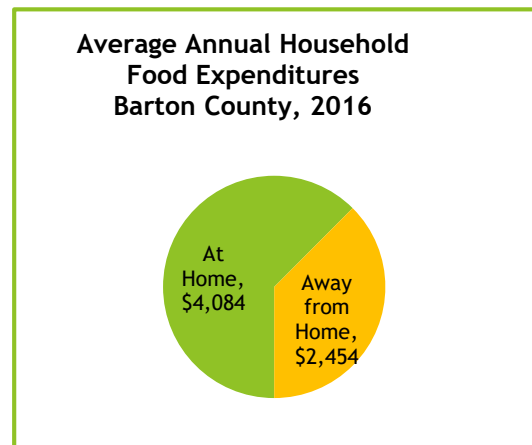
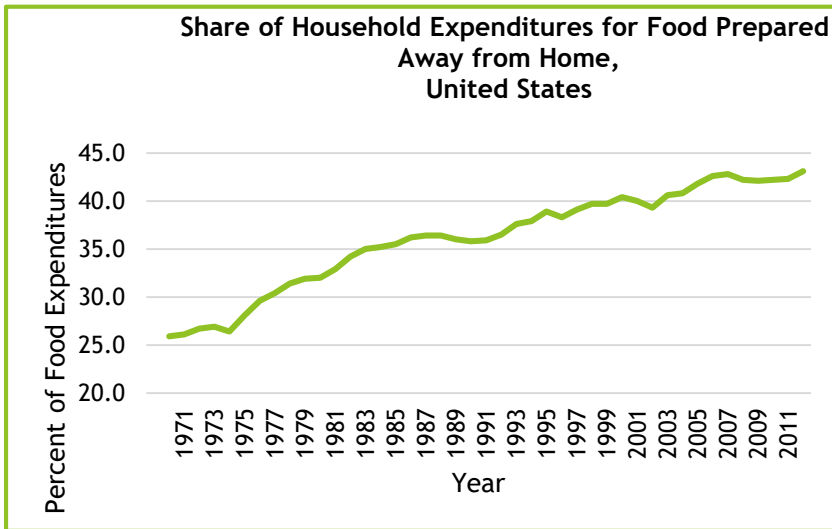


Estimated Food Expenditures, Barton County, 2016	
Barton County Population, 2015	27,508
Total Barton County Food Spending, 2016	\$73,331,477
Total Annual food spending per capita	\$2,666
Total Daily food spending per capita	\$7.30
Total spending on fruits and vegetables (at home)	\$8,688,439
Total annual fruit and vegetable spending per capita	\$315.85
Daily per capita spending on fruits and vegetables	\$0.87

Data source- Expenditure estimates from Business Decision data system

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

Results from the National Consumer Expenditure Survey estimate that Barton County residents spend approximately 38 percent of their food budgets on food prepared away from home (\$2,455/household/year). That totals to approximately \$27,530,798 in annual spending for foods prepared away from home.

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 difficult.



In 2013, there were twenty-one fast-food outlets located within the borders of Barton County. On a per person basis, the density of fast food outlets in Barton County is slightly higher than the Kansas and U.S. averages.

Geographic Area	Total Population	Number of Establishments	Establishments, Rate per 100,000 Population
Barton County	27,674	21	75.88
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](#). 2013.

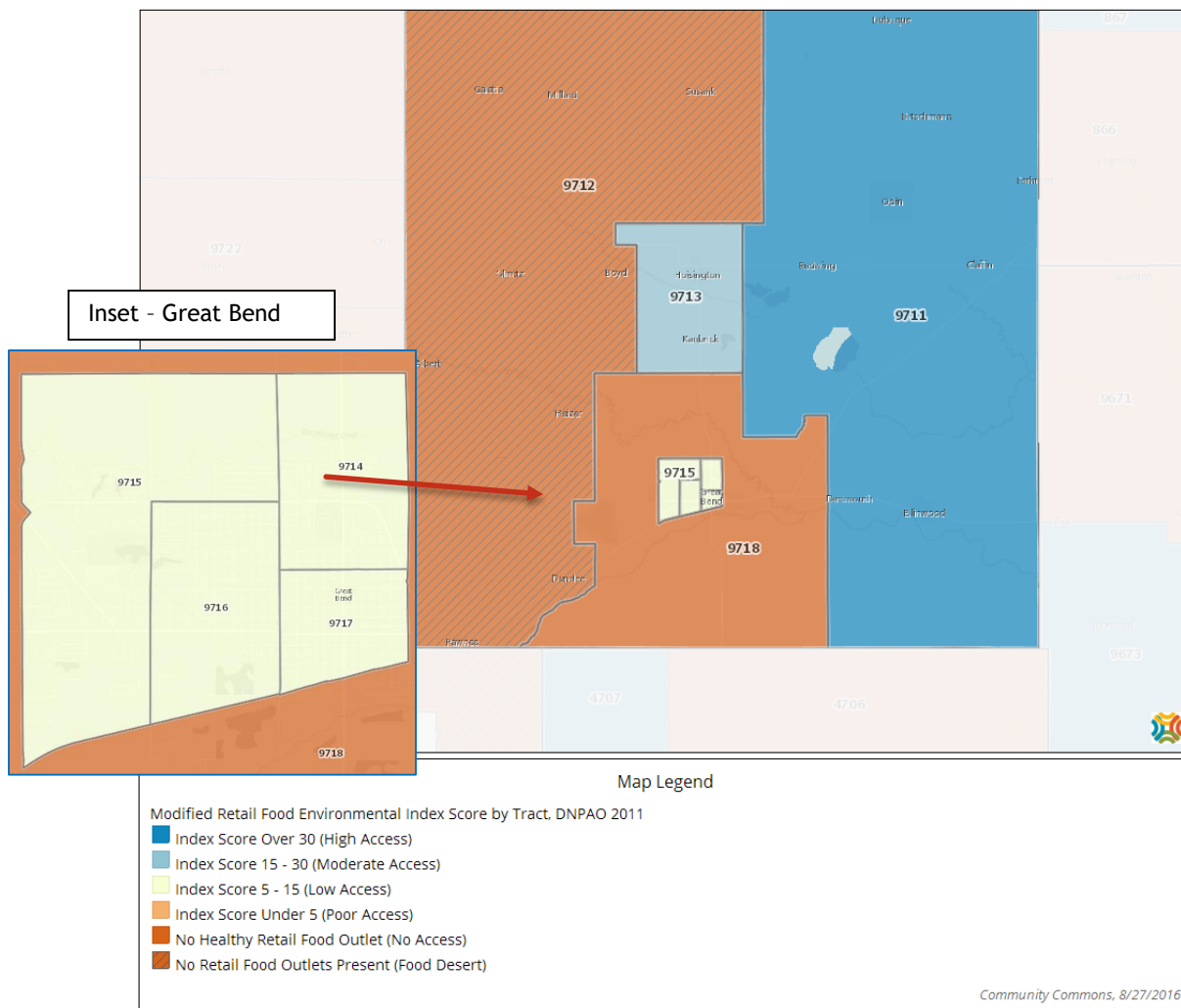
The Modified Retail Food Environment Score

In 2011, researchers at the U.S. Centers for Disease Control and Prevention (CDC) developed a measure called “The Modified Retail Food Environment Index (mRFEI)” as a way to assign an overall score that indicates the healthfulness of retail food offerings within a census tract. To calculate the score, all food retailers within the location were categorized as either “healthy” or “less healthy.” Supermarkets, larger grocery stores, supercenters, and produce stores or markets were considered to be healthy, while fast food restaurants, smaller grocery stores, and convenience stores were considered less healthy. The mRFEI score represents the percentage of all retail food outlets that are healthy (U.S. Centers for Disease Control and Prevention, 2011).

As shown in the map below, about half of Barton County including the Great Bend area, had low Modified Retail Food Environment Index scores. The eastern portion of Barton County had somewhat better mRFEI scores, but still only achieved a score of 33. The entire western portion of the county scored zero because there were no healthy food outlets located within those tracts. Tract 9781, in south-central Barton County is of concern, because it encompasses much of the county’s Hispanic community. In total, nearly two-thirds (63.4 percent) of the Barton County population lived in census tracts with mRFEI scores less than 10. Actual scores for each census tract, and the population living within the tract are shown in the table below.

Tract Number on Map	Population (2010-2014 ACS)	mRFEI score
9711	4,126	33.33
9712	1,765	0.00 (no healthy outlets)
9713	3,095	25.00
9714 (Great Bend)	2,856	14.29
9715 (Great Bend)	3,639	6.67
9716 (Great Bend)	3,870	5.56
9717 (Great Bend)	3,453	6.25
9718	4,753	0.00 (no healthy outlets)

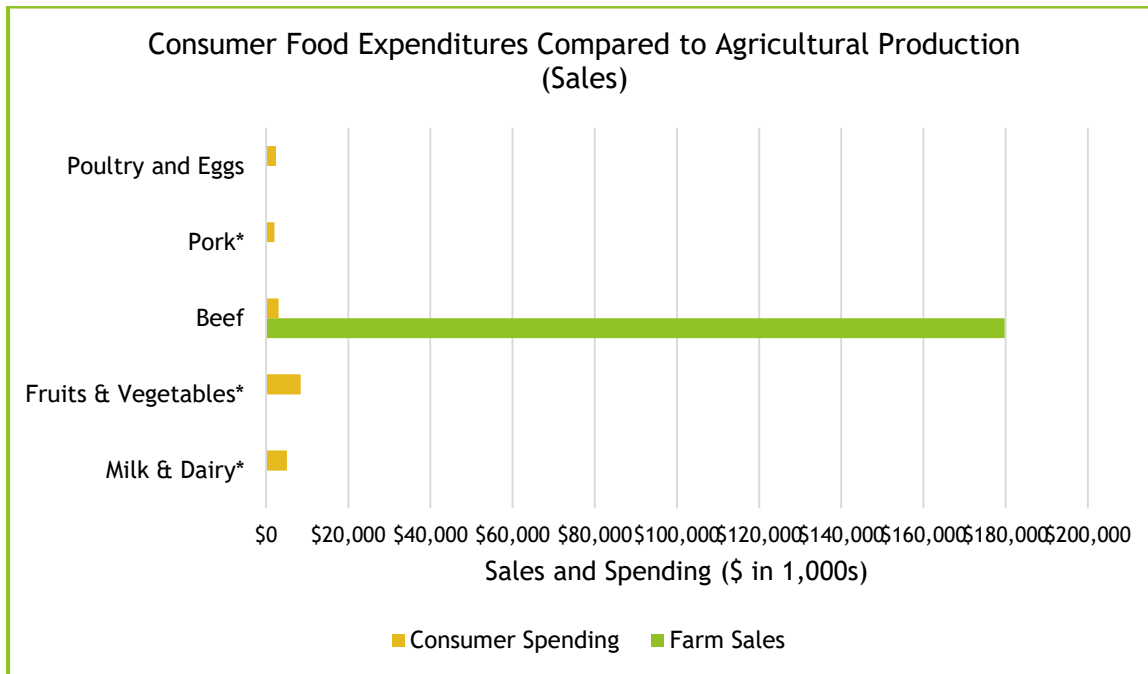
Barton Co. Modified Retail Food Environment, 2011



Source: Map generated using the Community Commons data system

COMPARISON OF AGRICULTURAL PRODUCTION TO CONSUMER SPENDING

The vast majority of food consumed by Barton County residents is produced outside of the County. Although the market value of cattle and cows sold by Barton County farmers far exceeded the consumer demand for beef in the county, it is likely that little of those farm products were sold to local consumers, and that most of the beef consumed by Barton County residents was not produced locally. In total, only \$56,000 of food products were sold by Barton County farmers directly to consumers in 2012. That amounts to only 0.02 percent of all farm sales and 0.08 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. * County-level farm sales data for Pork, Fruits & Vegetables and Milk & Dairy categories were not available - data were suppressed to avoid disclosure of information for individual farms

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, 28.7 percent of Barton 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); an additional 36.6 percent of Barton County adults reported height and weights that would classify them as obese (BMI > 30). Local results for 2015 have recently been released, and they suggest that rates of overweight and obesity have increased among Barton County adults, to nearly three-quarters (74 percent) being either overweight or obese.

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
Barton County, 2013	28.7%	36.6%	65.3%
Barton County, 2015	32.0%	42.0%	74.0%
Kansas, 2013	35.3%	30.0%	65.3%
Kansas, 2015	33.8%	34.2%	68.0%

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	Barton County	Kansas
% of Adults Diagnosed with Diabetes, 2013	7.8%	9.6%
% of Adults Tested and Diagnosed with High Cholesterol, 2013	39.8%	38.1%
% of Adults Diagnosed with Hypertension, 2013	34.8%	34.8%
% of Adults who had Angina or Coronary Heart Disease, 2011-2012	6.0%	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

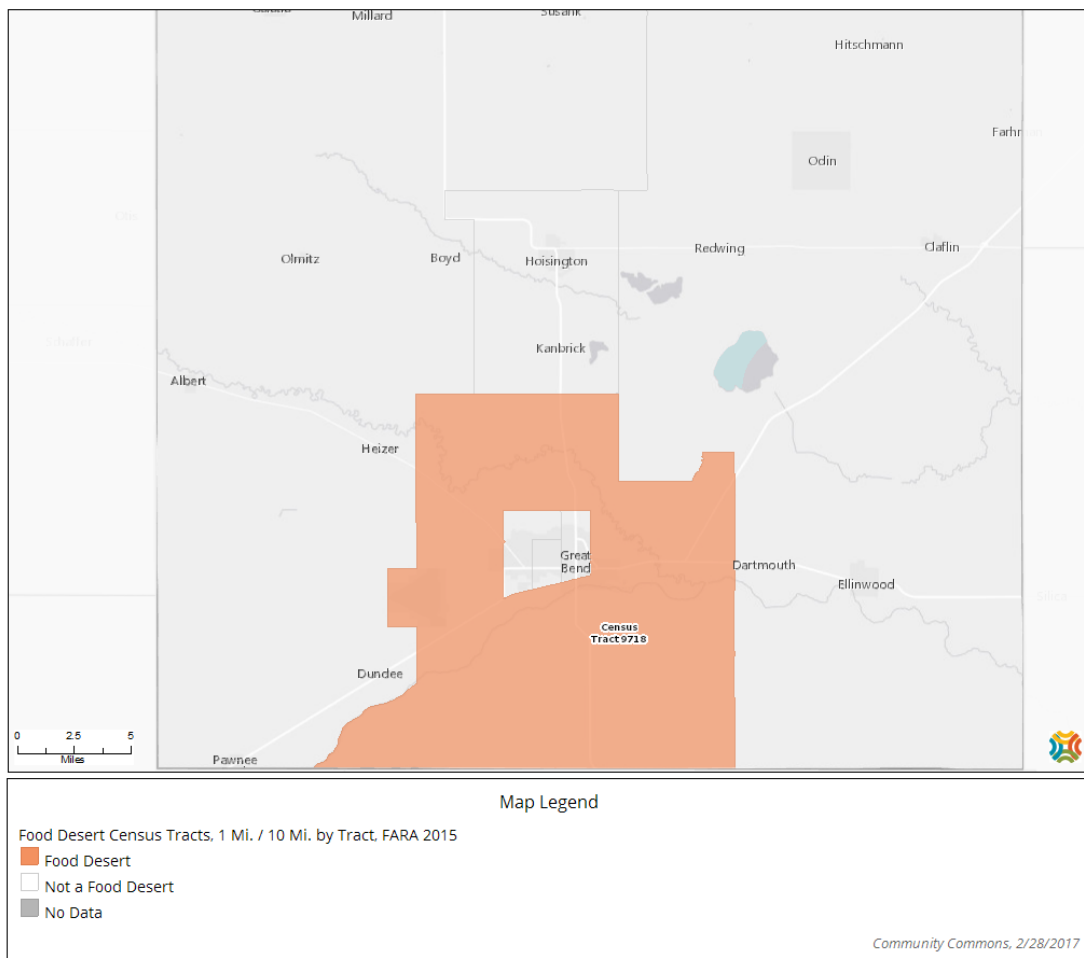
Based upon data from 2015, the U.S. Department of Agriculture determined that one census tract located within Barton County met the definition of a food desert (low income and low access at a distance of 1 mile in urban areas or 10 miles in rural areas). That tract, shown on the map below, was located in the south-central portion of the county. The total population in residing in the census tract was 5,795 in 2015 (21.7 percent of the county population). Of those residents, 2,424 met both criteria of having low incomes and living more than one mile from the nearest grocery store.

Tract #	Population Living in the Census Tract, 2010	Housing Units	Low-access population, 1 mile	Low-income and Low-access population, 1 mile
9718	5,795	2,124	5,473	2,424

Data Source: USDA Food Access Research Atlas

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

Food Desert Census Tracts, Barton County, 2015

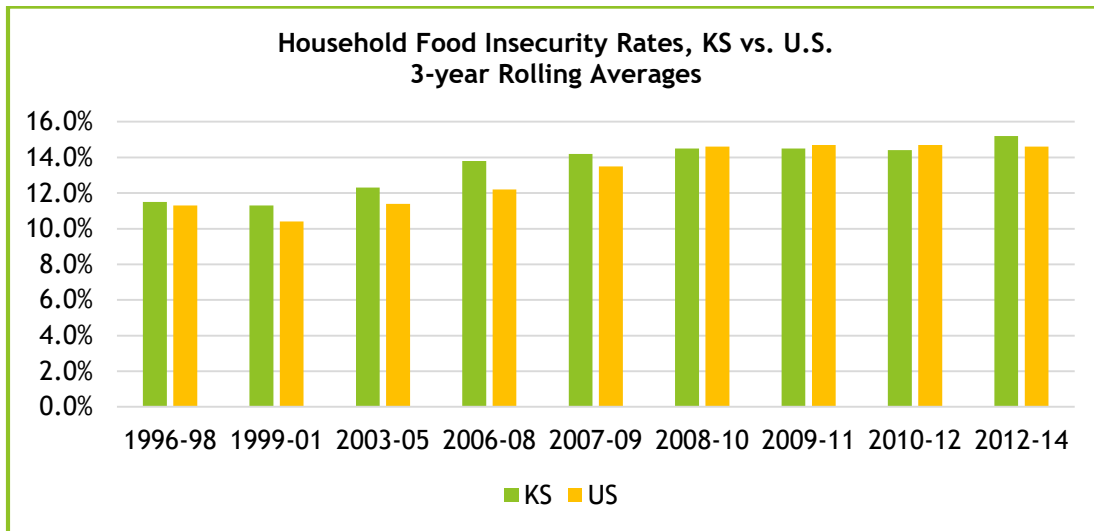


Source: Map generated using Community Commons data system

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 of Kansas appear to be increasing.



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 13 percent of Barton County residents (3,540 individuals) were food-insecure. More than one in five children (21.6 percent, or 1,470 children) in Barton 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 nearly one-third (32 percent) of food-insecure households in Barton 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 (32 percent) of food-insecure children in Barton 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, 2014

Geographic Area	Food Insecure Individuals, Total	Overall Food Insecurity Rate
Barton County, KS	3,540	12.9%
Kansas	413,560	14.2%
United States	48,135,000	15.4%

Food-Insecurity among Children, 2014

Geographic Area	Food Insecure Children, Total	Child Food Insecurity Rate
Barton County, KS	1,470	21.6%
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

This indicator reports the estimated percentage of the total population and the population under age 18 that experienced food insecurity at some point during the report year, but are ineligible for State or Federal nutrition 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
Barton County, KS	3,540	23%	1,470	26%
Kansas	413,560	37%	153,940	34%
United States	48,135,000	26%	15,323,000	21%

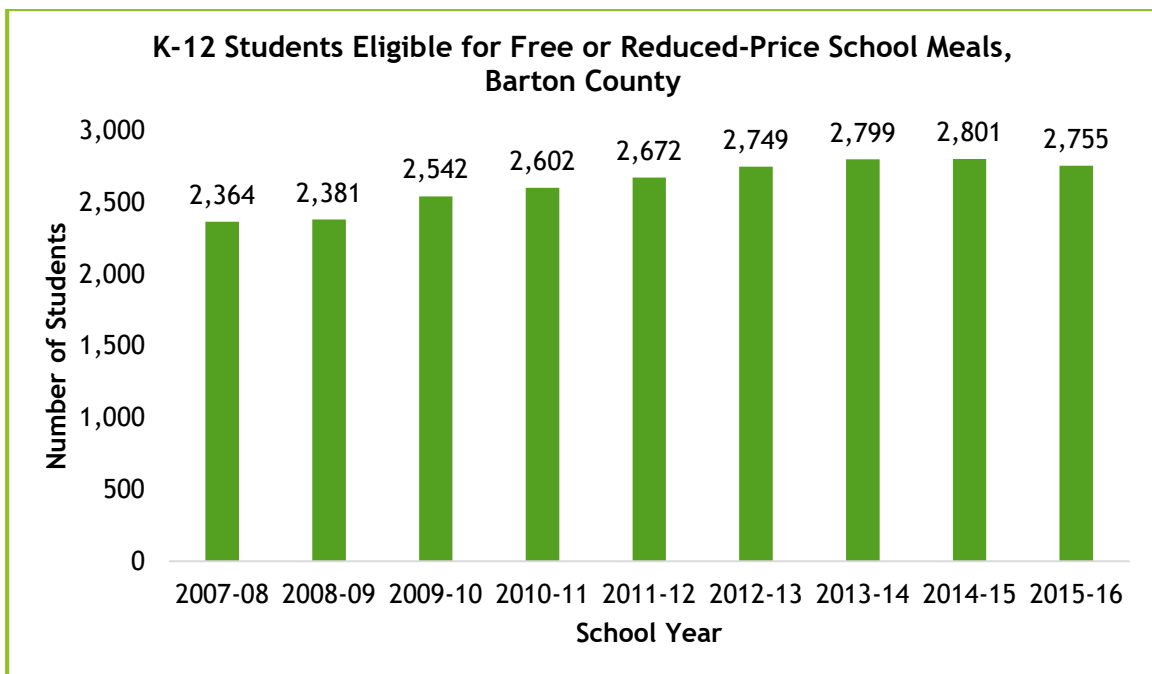
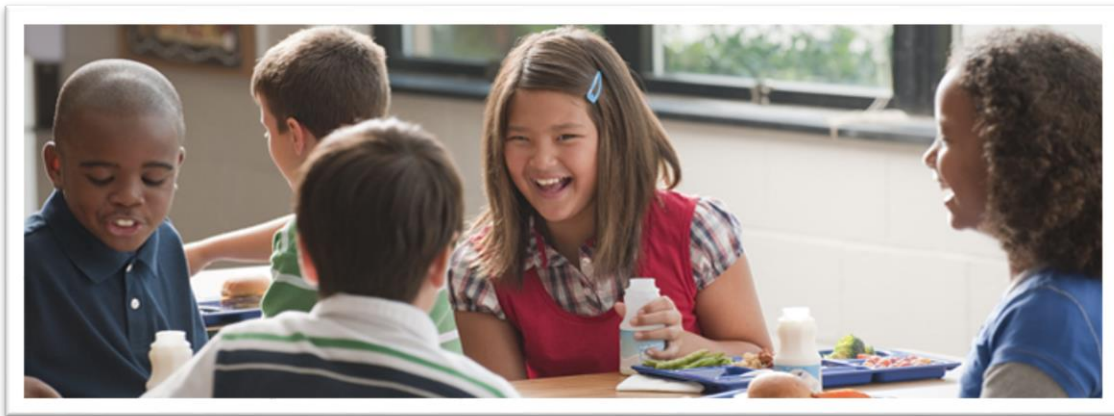
Data Source: Feeding America, Map the Meal Gap 2013

Food Assistance Programs

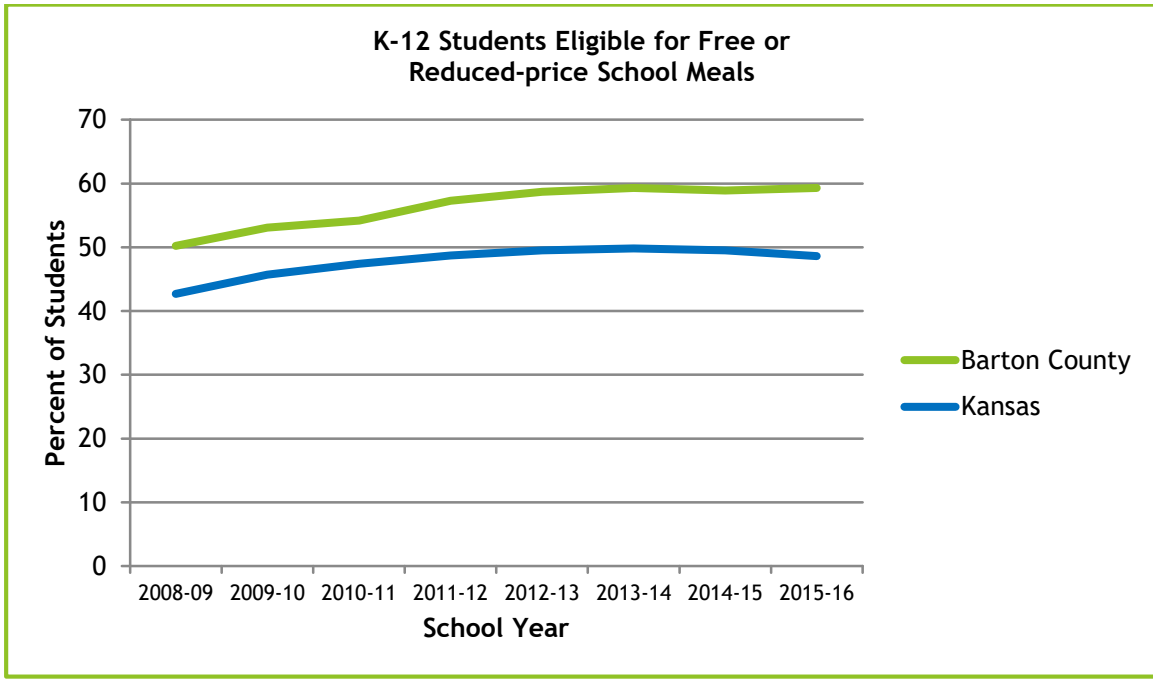
In the United States, and in Kansas, a patchwork quilt of public and private-sector programs and agencies provide food assistance to low-income families in need. Aid is provided through a variety of mechanisms, including prepared meals at schools, prepared hot meals distributed through programs such as Meals on Wheels or Hungry Heart Kitchen, 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 Barton County public schools, 59.3 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.



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



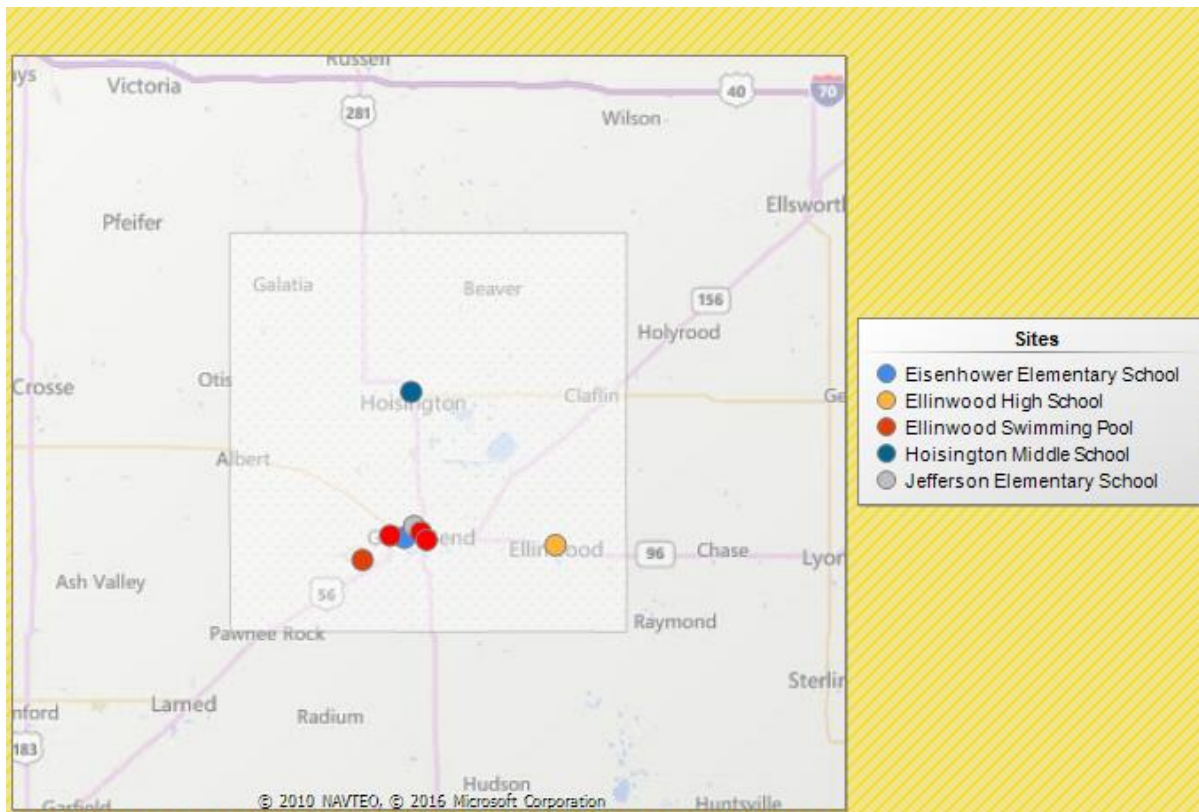
Data Source: Kansas State Department of Education, K-12 Statistics

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 eight locations in Barton County:

- Eisenhower Elementary School, 1212 Garfield, Great Bend
- Jefferson Elementary School, 2716 24th St., Great Bend
- Lincoln Elementary School, 5630 Broadway, Great Bend
- Park Elementary School, 1801 Williams, Great Bend
- Riley Elementary School, 1515 10th St., Great Bend
- Ellinwood High School, 300 N. Schiller, Ellinwood
- Ellinwood Swimming Pool, 512 W 6th, Ellinwood
- Hoisington Middle School, 165 W. 3rd, Hoisington

Summer Food Service Meal Sites in Barton County, 2016

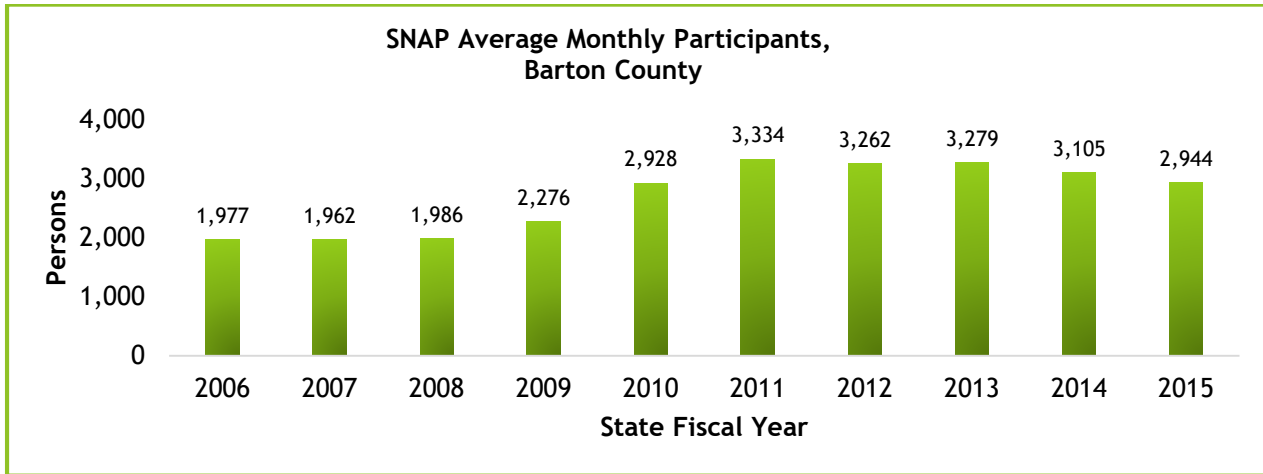


Source: Map and 2016 Meal Site Detail from the Kansas Department of Education, Child Nutrition and Wellness, Summer Food Service Program.

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.

During state fiscal year 2015 (July 2014 to June 2015), an average of 2,944 Barton County residents received SNAP benefits each month. The number of SNAP participants in Barton 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 per month during Fiscal Year 2015; the SNAP program provided \$3,690,728 in food purchasing dollars to low-income families in Barton 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 twenty-five (25) SNAP retailers operating in Barton County—seventeen in Great Bend, four in Ellinwood, three in Hoisington, and one in Claflin.

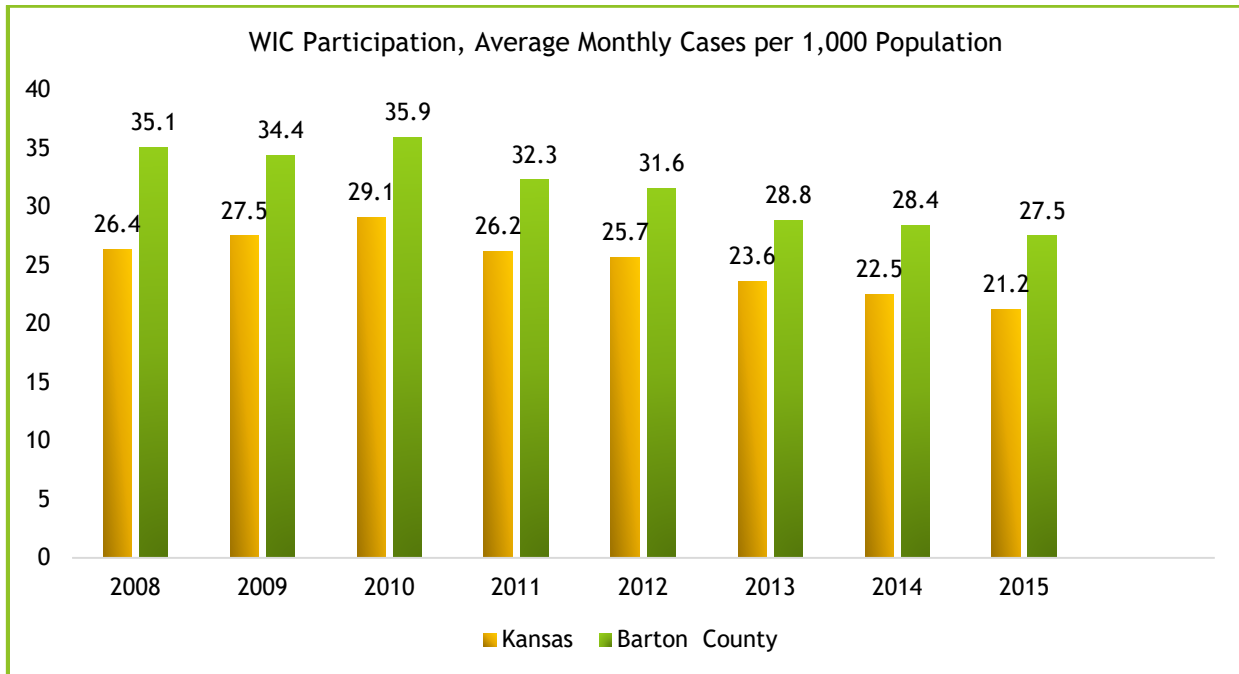
The Special Supplemental Nutrition Program for Women, Infants and Children (WIC)

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 Barton County, approximately 300 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 higher in Barton County than for the state overall. The average monthly number of participants in the WIC program in Barton County has decreased in recent years; this trend is similar to those at the state and national levels. There are six retail grocery vendors in Barton County where WIC participants may use their vouchers to obtain food: the Town & Country Supermarket in Hoisington, Bailey’s Food Bin in Claflin, Ellinwood Family Foods in Ellinwood, and Wal-Mart Supercenter and two Dillon’s stores in Great Bend (Kansas Department of Health and Environment, 2015).



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

The Emergency Food Assistance Program

The Emergency Food Assistance Program (TEFAP) 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 in Barton County: the Great Bend Housing Authority office in Great Bend, the Kansas Department of Children and Families office in Great Bend, and the United Church of Christ in Ellinwood.

Senior Farmers' Market Nutrition Program

The Senior Farmers' Market Nutrition Program offers low-income seniors in participating locations (including Barton 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.

Photo Credit: USDA Photo Gallery

A Senior Shopping at Farmer's Market



Private-sector food assistance

Food-insecure households that are not qualified 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 Barton County, five local organizations offer food assistance to community members. The Barton County organizations that offer charitable food assistance are shown in the table below.

In addition to these programs that provide free food, the non-profit Prairie Land Food program offers monthly food boxes for purchase at significantly reduced prices, with a distribution location in Great Bend. This program is open to anyone, without income or other eligibility criteria. Food packages are sold on a pre-order basis. The basic monthly box includes a variety of frozen meats and fresh fruits and vegetables. Other meat-only boxes or seasonal specialty boxes are also offered for sale.

The Great Bend Food Pantry

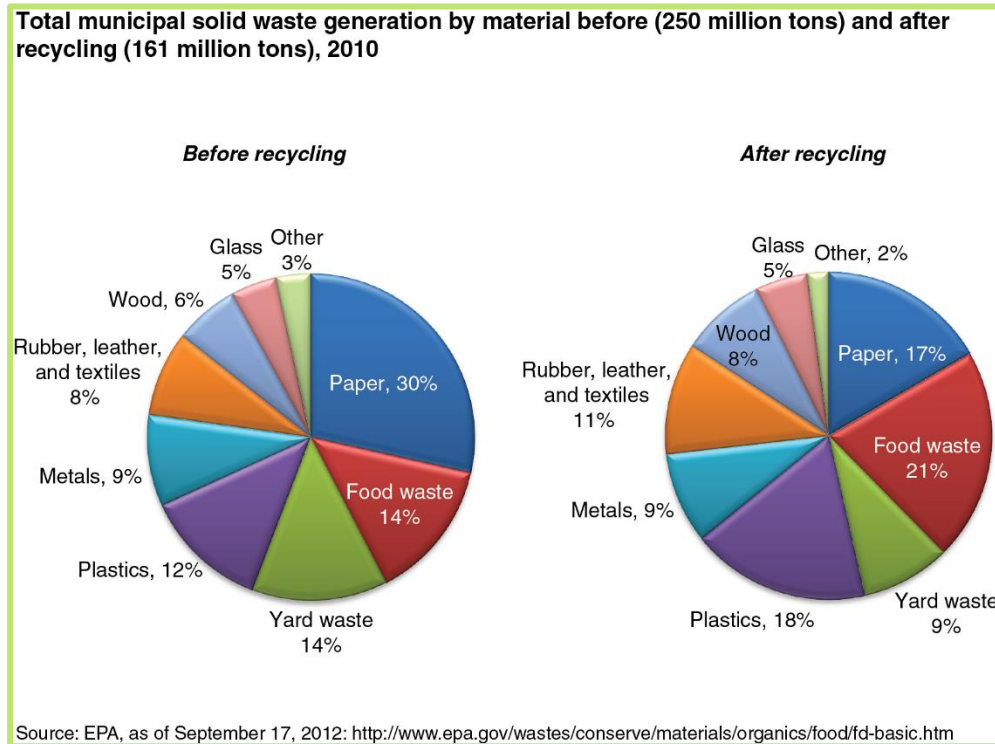


Organization	Location	Services, Days & Times
Food Bank of Barton County	3007 10 th Street, Great Bend	Mon, Wed, Fri – 1-3pm Limit 3 times/year
The Hungry Heart Soup Kitchen	1515 Williams, Great Bend	Free lunches Mon-Fri, 11:45am-12:45pm Groceries as needed Usually can help 1 time/month
Kansas Food 4 Life	4 NW 25 Road, Great Bend	Food boxes, 1 time/ month
The Salvation Army	2545 10 th Street, Great Bend	
Ellinwood Food Bank	701 N Fritz, Ellinwood	Mon, Wed, Fri – 1-2:30pm
Hoisington Community Food Bank	467 W 3 rd , Hoisington	Serves northern Barton Co residents Emergency food Limit 6 times/year

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.

Food 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

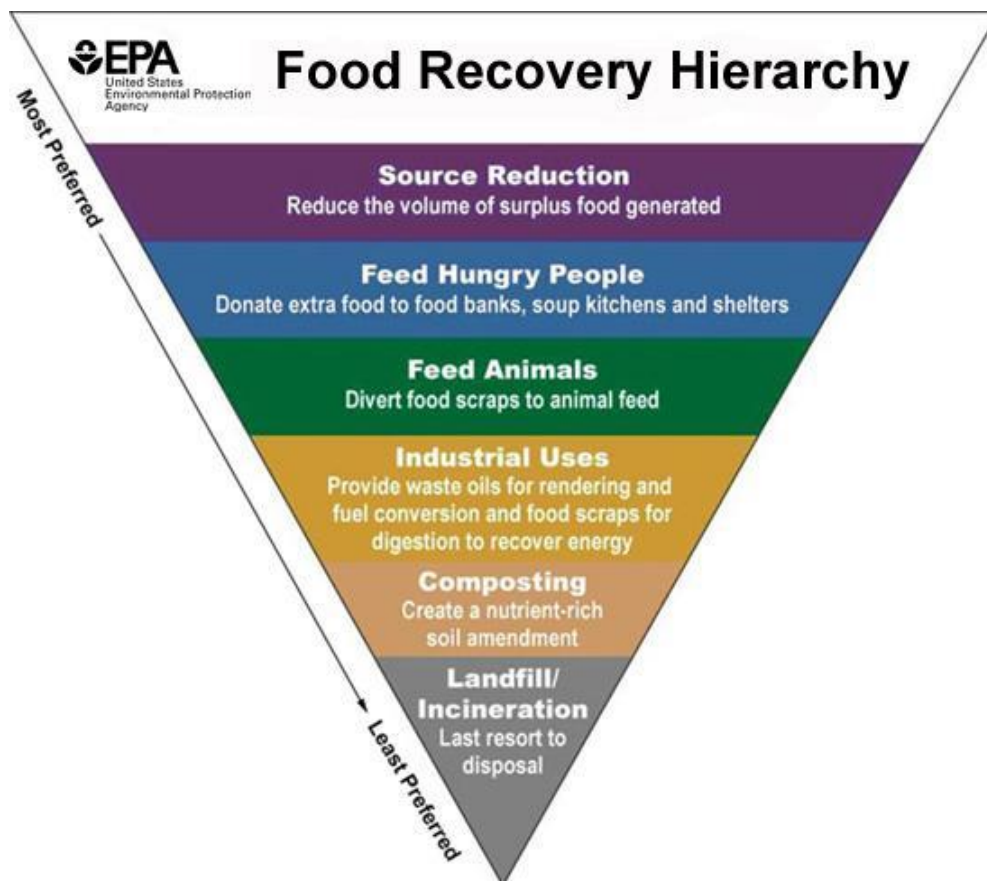
- Dented cans, damaged packaging
- Unpurchased seasonal food items
- Spillage, breakage, bruising, inadequate storage, equipment malfunctions
- Culling of blemished or imperfect foods to meet consumer demand
- Overstocking or overpreparing

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

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 nearly 8 million pounds of food would be wasted annually in Barton County, with an estimated value of \$10.2 million.

Estimated level of consumer-level food waste in the United States and in Barton County			
	Pounds (annually)	Pounds (daily)	Value (annually)
Per-person basis (national)*	290	0.8	\$371
Barton County Total estimate**	7,977,320	220,006	\$10,205,468

*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 = 27,508)

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 Barton County employ more than 700 people and contribute an estimated \$116 million to the county's economy each year. Data illustrating various economic measures related to the Barton County food system are included in this section.



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

Farm sales

During 2012, Barton County farms reported total sales of farm products valued at nearly \$279 million. Crop sales accounted for approximately two-thirds (65.5 percent) of the total market value of products sold. Between 2002 and 2007, the average sales per farm nearly doubled, and remained high in 2012. The per farm average market value of farm products sold by Barton County farms was \$401,964.

Year	Farms	Market Value of Products Sold			
		Total Sales	Crop Sales	Livestock Sales	Average per farm
1997	742	\$185,656,000	\$52,883,000	\$132,773,000	\$250,210
2002	772	\$171,158,000	\$44,956,000	\$126,203,000	\$221,708
2007	427	\$282,786,000	\$65,249,000	\$217,537,000	\$417,089
2012	694	\$278,963,000	\$96,206,000	\$182,757,000	\$401,964

Government farm payments

In addition to income from the sale of farm products, many farms receive payments from various federal government programs. In 2012, 561 Barton County farms reported receiving federal government payments that totaled \$5,572,000. The average payment was \$9,932 per farm.

Consumer expenditures on food

Expenditure Type	Total Annual Spending	Average Annual Spending Per Household
Food (all)	\$73,331,477	\$6,538
Food at home		
Bakery & Cereals	\$6,213,835	\$554
Meats, Poultry, Fish & Egg	\$10,022,086	\$894
Dairy Products	\$4,784,273	\$427
Fruits & Veg	\$8,688,439	\$775
Snacks and other food at home	\$21,664,823	\$1,932
Non-alcoholic beverages	\$4,898,889	\$398
Food away from home	\$27,530,708	\$2,454

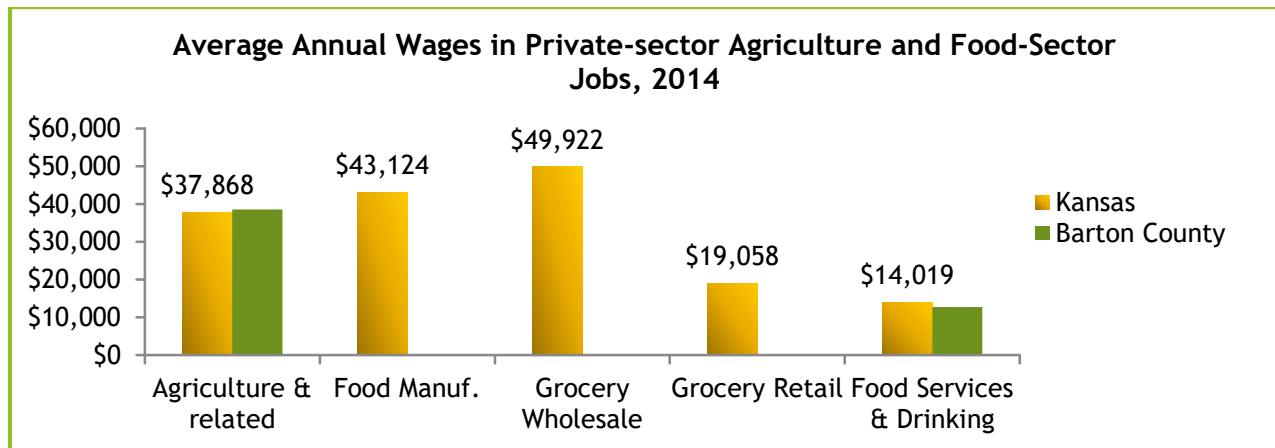
Data Source: Business Decision data system, estimates derived from the Consumer Expenditure Survey, Bureau of Labor Statistics, 2012.

Food-sector employment

Barton 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	998	39	3	1	4	51
Employees	13,566	260	(D)	(D)	(D)	849
Total Wages (in thousands)	\$511,052	\$10,551	(D)	(D)	(D)	\$10,987
Avg. Weekly Wage	\$724	\$717	(D)	(D)	(D)	\$235
Avg. Annual Pay	\$37,673	\$38,590	(D)	(D)	(D)	\$12,704

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



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

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. USDA economists estimate that each \$5 in SNAP benefits generates \$9 in economic activity.

Food Assistance Program	\$\$\$\$
SNAP benefits disbursed to Barton Co. participants, SFY 2015	\$3,690,728
Total SNAP redemptions in Barton Co., 2012	\$5,018,161
Total WIC redemptions in Barton Co., 2012	\$653,510

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.

Meal Type	Reimbursement Rate* (per meal), 2016-2017	Number of eligible Barton County Students, 2015-2016
Lunches - Free	\$3.16 - \$3.24	2,240
Lunches – Reduced Price	\$2.76 - \$2.84	458
Breakfasts - Free	\$1.71 - \$2.04	2,240
Breakfasts – Reduced Price	\$1.41 - \$1.74	458

*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 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, will 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 Engagement Forums

A series of four Community Connections forums were held in Barton County during September, October and November of 2016. The forums included two general community meetings held in Great Bend and Hoisington, and targeted discussions with the Migrant Parents Advisory Council and a group of Barton County Growers, Farmers and Farmers' Market Vendors. Key community stakeholders were invited to the forums, where panels of four to five representatives of various sectors in the community food system talked briefly about the services they provide and the needs that they have observed in their communities. The panel presentations were followed by group brainstorming where all attendees were asked to consider current successes, challenges and opportunities related to food in the community. Highlights from the panelist presentations and results from the brainstorming exercises forums are summarized below.

Panelist Presentations

Bev Frizell, WIC Department, Barton County

WIC is a federal nutrition education and supplemental food program for women, infants, and children with nutritional risks. Clients must have a nutritional risk and meet the income guidelines. Barton County WIC serves 750-800 clients, with another 10-15% of caseload who don't pick up the checks they qualified for. Checks are issued to the clients for named foods in the food package for them, they take them to local grocery stores and spend them for the foods listed. All grocery stores in Barton County are full-line grocery stores and are able to accept the checks in payment. Bev does vendor training for the store personnel and monitors compliance with the program on a routine basis. By 2018, the Kansas WIC program is supposed to transition from paper checks to Electronic Benefits Transfer cards, similar to Vision Cards for food stamps. Food packages vary depending on the age of the infant or child, pregnancy or post-partum status of the mother, and nutritional needs specific to each client—from infant formula, specialty formulas, to food packages for pregnant and breastfeeding women and post-partum women for 6 months. Clients are seen by appointment to assess nutritional risks, dietary needs, and receive education through interactive educational displays, nutrition classes, and sometimes through online participation in classes.

Karl Sprague, USD 428 Food Service Director, Great Bend

Great Bend's School Food Service serves about 3000 children per day, with about 2500 students served "full lunch" and the others selecting options for the daily meal. In addition the district operates a breakfast program that serves about 800 children daily. Since 1995 when Karl began working as director, the percentage of children receiving free or reduced lunch (meeting federal guidelines) has increased from 45% to about 65% district wide with some schools having a higher individual percentage. Program changes from the federal law enacted in 2010 have resulted in new guidelines for the amounts of fresh fruits and vegetables offered, an increase in the amount of foods that must be whole-grain to qualify for reimbursement, and emphasizing low-sugar and low-fat foods. In addition, USD 428 began the Summer Lunch Program in 1996 that provides a free lunch for children age 18 and younger. The program has grown from 200 children/day at 4 school locations, to 500/day at 5 school locations. They also serve about 220 free breakfasts per day. In past years they have been open during June and this year they stayed open throughout July at Park School. The number of children coming for lunch dropped off dramatically, but here were still 50-60 per day, so keeping that many children from going hungry. They also do an after school snack program for children who stay for homework help or special activities. Right now the Kansas Reading Roadmap program has involved about 250 kids at the 5 schools who are participating and then receive a snack. Kristi Alvord, USD 428 Wellness Team, talked about the Fruits and Vegetables Program that she does to help introduce children to new fresh fruits and vegetables—

something beyond green beans and corn. She talked about introducing ugly or unusual fruits to kids as well as vegetables such as radishes. A Back-Pack program also operates to supply children with food for the weekend.

Derinda Bussman, Retired FACS Extension Agent, Treasurer for Community Food Bank of Barton County. The local food bank is affiliated with the Kansas Food Bank and is open 3 days per week from 1-3pm. In 2015 the food bank was able to help 7,289 families. From January to September 2016 they have helped 4,886 families. Current eligibility requirements have been reduced for clients and now they need to produce a photo ID, and proof of local residency through a piece of mail or a bill, but don't have to show proof of income. Clients can receive Food Bank assistance up to 4 times per year and fill out a registration form that includes the number of people in the household, current address, phone number, etc. They fill out an order form for food after registration. The order is filled by volunteers from food purchased, food donated through food drives, food donated from Dillon's & Wal-Mart, and food donations received from local growers and churches. The food given is usually designed to feed the family for about 2 weeks. Some donated foods are placed on tables for clients to take as much as wanted, like bakery goods/bread products that have a short shelf life. Client numbers usually increase mid-month to end of the month. Wal-Mart and Dillon's often donate milk, eggs, meat, bread products, and vegetables nearing an expiration date. An office manager assists clients with needs and about 50 volunteers per month work to help operate the food bank. One special food bank outreach is the Cedar Park Place program. Some elderly have no transportation and are unable to come to the food bank but are in need of food. Food Bank volunteers visit the location, pick up food orders, and deliver them to Cedar Park Place for the residents. Group members had questions about food box programs—like Bob Boxes, Bountiful Boxes, and other food resources when food bank help has been used up. Derinda emphasized that if someone truly needs food help they will be given food even if they are past the 4 times per year. It depends on the circumstances.

Jan Morgenstern, Hoisington Food Bank, Hoisington, KS

The Hoisington Food Bank has been existence for 30 years. They have served 102 households so far in 2016, and served a total of 132 households in 2015. Their service area is all of northern Barton County to Barton Hills housing area. Families can access the food bank up to 6 times per year. If a family continues to have needs for food beyond that, the Ministerial Alliance visits with them and determines how best to help them with their continuing needs. The food bank is open 2 times per month, but board members will serve clients anytime they are needed. Clients should make contact with the church secretary at First United Methodist Church, Hoisington, who will contact them about a family in need. They also have a nurse available to assist them with health care needs and making connections to health care providers in the community. Their food bank package is designed to provide 5 days of food as a temporary food resource. Clients can choose from extra fresh produce donated and milk. They also love personal care items - soap, deodorant, etc. Town & Country Supermarket works with the food bank to provide vouchers for fresh food. At Christmas the food bank provides generous food boxes, through donations from churches & community members, to their list of families.

Jan mentioned that clients need help learning to cook -preparing, storing, freezing fresh vegetables and presentations on cooking healthy, and using bulk items like rice or beans. Bev said that they now are offering canned beans in the WIC package because many clients don't know how to cook dried beans. Janel mentioned Catholic Charities non-food pantry as a resource for personal care items, baby formula, etc.

Group members had questions about food box programs—like Bob Boxes, Bountiful Boxes, and other food resources when food bank help has been used up. Bob Boxes (free food for needy senior citizens) have not been expanded into Barton County, but are available in Pawnee County and Rush County. Other food box programs where clients purchase boxes of set group of foods are available in Barton County. Some require hours of community service in order to participate. Commodities are also available in Barton County and are distributed at three locations—two in Great Bend, one in Ellinwood.

Brian Dolezal, Clara Barton Hospital Food Service, Hoisington

Brian highlighted CBH's award from the Kansas Hospital Association for changes that Clara Barton Hospital has adopted to make it healthier for staff and for patients. They achieved a Kansas Healthy Hospital designation for policies to reduce sugary drinks offered, healthy food options promoted, and for their innovative work with Clara's Corner Café as a community restaurant, and collaboration with Town & Country Supermarket. They added healthy & tasty options for meals offered, like wraps, sandwiches, and entrees, as well as removed sugary beverages from food options offered in food service. Instead they offer free fruit-infused water for all staff, patients (as needed), and visitors. They have calorie counts/nutrition information for all Clara's menu items and are working on calorie counts for the foods offered on the tray line. Salads are offered every day as a lunch/dinner option. He said "It's all about the options" -if healthy tasty foods are available, people will choose them. He also talked about the possibility of catering food orders for some of the school groups, like for teachers meetings, etc. Karla said that they only have 26 minutes for a lunch time. Brian also said that he now has people coming in at breakfast time for healthy breakfast foods offered. He talked about working to get a new refrigerated vending machine that has healthy options like hummus & vegetables, and wraps so that night employees and visitors also have healthy options available besides the traditional vending machine foods. As part of their healthier hospital initiatives, they have replaced Styrofoam containers with bio friendly packaging, and recyclable materials.

Pathway team members also added that their Pathways grant work is in infant stages now, but they have community perception surveys being done now, a Cardinal Pride tailgate planned with healthy foods, and plans for Healthy Menu options being offered at the concession stand at the football game that night.

Karla Reisner, USD 431 Wellness Team

Karla talked more about the plans for the Healthy Menu options being offered at the concession stand for an upcoming home game, some of the food storage issues for refrigerated foods at the football field. They have 2 new people on the district wellness team and the school nurse, Stacy Dolechek, school nurse, and Krisa Schneider from Lincoln School are leaders of the group. The FCCLA at high school offers a grab & go healthy snack like peanut butter & banana sandwich with whole wheat bread, at second period as a fundraiser. Healthy Grab & Go snacks are also offered at the middle school. They must have no more than 4 g fat, 200 Calories, 9 g sugar to qualify as healthy snack. School breakfast is offered at 7:15 & 7:45 am, and USD Wellness team helped start water fill stations in their schools (\$3000). Students are allowed to have water bottles with them at all times and can fill them at the water stations.

Virginia Lang also shared that Central KS dream Center provides some breakfast foods about 10am and hot meals at lunch Monday through Friday. They also can provide boxes of food that clients can take with them to help provide food over the weekends. Virginia said that they usually serve 50-75 people per day and that their largest meal was at Thanksgiving with 129 people participating. People they serve may not have a permanent home, living in abandoned buildings, houses without utilities, with friends, or in tents under the bridge or make-shift shelters. Many of these people need foods that can be eaten with little or no cooking. They don't have refrigerators for safely storing most perishable foods. They need more food access especially on weekends. She also mentioned that they saw more children accompanying adults this summer when the summer food program was done for the season.

Additional discussion followed about teaching people how to prepare foods, importance of educating community members in cooking and parenting. Migrant Parent program provides classes and has a good turnout, but there may be more need in the community that hasn't been addressed.

Group Brainstorming

Successes - *Things that we are doing well and want to highlight or ensure we keep going*

- ❖ National School Lunch Program—Intro to Fruits & Veggies
- ❖ Grab & Go Breakfast at School

- ❖ Feeding Kids (2)
- ❖ Summer Meals in July
- ❖ Great School Lunch Program
- ❖ Healthy Snacks for Kids
- ❖ Water Stations at schools
- ❖ Walking School Bus program in Hoisington
- ❖ Concessions pilot project (healthy options at high school football game)
- ❖ Senior Farmers Market Nutrition Program (Fruits & vegetables) (5)
- ❖ Sr. Center Meals and Meals on Wheels
- ❖ Hungry Heart Meals for Community Members in Need
- ❖ Food Boxes from Hungry Heart Soup Kitchen
- ❖ Food Bank providing for the community (3)
- ❖ Farmers' Market—great selection of produce, growing (2)
- ❖ We have a Farmers' Market so people can be introduced to Healthy Farming
- ❖ Good vibe among vendors; great organization by Health Department Strong Extension program
- ❖ Parenting and Cooking Classes at Migrant Parents
- ❖ More educational programs that make people aware of healthy choices
- ❖ Clara's Corner Café
- ❖ Hospital Internal Wellness Changes
- ❖ No Styrofoam containers for food in the hospital
- ❖ Strong Health Department
- ❖ Wellness Program
- ❖ Town & Country (supermarket) - great community partner
- ❖ Stores with good foods that everyone needs
- ❖ City Bus Service - wonderful people, helpful and kind, front door service, reasonable prices
- ❖ Good quality products
- ❖ Vegetables to harvest to eat healthy
- ❖ Younger generation is more health conscious
- ❖ Partnerships across sectors
- ❖ Committees excited about combining efforts
- ❖ Planning for future improvements now, not later

Challenges - *Things within our food system that could or should be addressed*

- ❖ **Education**
 - Education—Cooking & Budgeting—maybe using food boxes/gift cards as incentives to attending the training
 - Not enough education
 - Menu ideas
 - Recipes for healthy meals
 - Young people do not know their veggies (i.e., eggplant)
 - Benefits of fresh vs. canned or frozen
 - Food bank clients need help in how to prepare fresh foods. (Commercial kitchen for use & classes?)
 - Distribute recipes with new foods
 - Training to grow, pick vegetables, and a greater variety of vegetables
- ❖ **Farmers Markets**
 - Switching to EBT at Farmers Markets (to allow acceptance of SNAP benefits)
 - Finding more farmers for farmers market
 - More growers needed
 - Growing and selling produce for the Latino market

- More age groups and ethnicities at market
- Unifying market efforts in Great Bend
- More markets in Barton County? GB & possibly Ellinwood only Farmers' Markets in 2016
- What about 3 other seasons?
- Farmers' Market in Hoisington to provide fresh fruits & vegetables for Senior Farmers Market Nutrition Program

❖ **Food Assistance Agencies & Programs**

- Promote Food Programs more
- More need than can be served at the Food Bank
- WIC program integrity
- Make sure food pantry keeps well-stocked
- Weekend drop-off for food items at food bank
- More local support with donations
- Food Bank: more/improved hours, someone who speaks Spanish at the Food Bank, better service

❖ **The Food Culture**

- Local support of healthier options
- Getting families to accept healthier options
- Motivation to eat healthier
- Culture needs to change. People do not cook at home.
- Fast food more convenient for people on the go.
- Getting people to change habits
- Time needed to cook "from scratch" meals
- Few cook from scratch
- Time (2)
- Lots of Fast Food/Unhealthy options

❖ **Affordability of Healthy Food**

- Increased cost of fresh fruits & veggies
- Fruits & Vegetables too expensive
- Affordable food and another food store in SE Great Bend (3) with better prices
- Aldi's and SAMS Club stores in our community, or a store with more affordable process (3)
- Money/Funding (2)
- Healthy foods cost more, families go the cheaper route which is usually unhealthy.

❖ **Availability of Healthy Food**

- More vegetables and fruits for the community
- More Fruits & Veggies available
- More Local Growers
- More stores in Little Mexico
- Need a Community Garden for Hispanic Community neighborhood
- Keeping produce fresh and competing with Walmart/ Dillon's
- Seasons of growing
- Enough healthy food for all
- Availability of fresh produce year-round at affordable cost
- A place to pick fresh vegetables (pick your own)

❖ **Transportation and Physical Access Issues**

- Transportation issues (4) - public transportation on a set loop, with set stops; scheduled times at each stop
- Food choices can be limited for walking-challenged people. Many meal choices limited to places with drive-thru window. Need more restaurants with services - curbside delivery.

- Physical access for handicapped people. Big Dillon's and Walmart have electric carts, but few other places do. These two don't have enough carts.
- Physical access - more employees willing to help carry packages out to vehicle, able to call and have business bring purchases out to car.
- Better store access - have paid extra money get bread and milk so I can physically get in and out of store
- Walk/bike access to healthy food outlets

❖ **Miscellaneous Challenges**

- Better dog control in neighborhoods to prevent vegetable gardens being harmed
- Volunteers for Community Garden
- Working to incorporate more locally sourced products in local restaurants
- Communication in the Hispanic Community among residents and between agencies & community

Opportunities - *Ways to enhance our food system*

- ❖ WIC and Food Bank work together
- ❖ Better utilization of SNAP benefits (food stamps) and commodities
- ❖ WIC "credit cards"
- ❖ Double Up SNAP benefits
- ❖ Getting EBT at Farmers Market
- ❖ Expand Senior Farmers' Market Nutrition Program to cover more residents who meet criteria
- ❖ Healthy options at Concession Stands
- ❖ Healthy Concessions
- ❖ Healthy Concession options at all times, city/league/school events & games
- ❖ Farm to School (vendor policies?)
- ❖ Encourage school gardens
- ❖ Fruit & Veggies program in schools
- ❖ Nutrition courses at K-12 level
- ❖ Kids Ag Day
- ❖ Opening the Soup Kitchen for 2 meals per day
- ❖ Advertise more (Give more people in community opportunity to see)
- ❖ Support for farmers to bring increased fruits and vegetables to local markets
- ❖ More local produce in hospitals and work sites
- ❖ City and county healthy food policy
- ❖ Catering policies at workplaces (healthy meetings policy?)
- ❖ Healthy food policies at work sites
- ❖ More produce growers around Northern Barton County
- ❖ Networking
- ❖ Master Gardeners (working with them)
- ❖ Healthy cooking classes
- ❖ Challenge people to try different foods
- ❖ Have tasting opportunities introducing new foods
- ❖ Start community gardens in needed areas of Great Bend, and in Claflin
- ❖ Keep small-town groceries supplied with local veggies
- ❖ Urban Garden Farming
- ❖ Connect with civic organizations (Optimists, Rotary, Chamber, Young Professionals)

- ❖ Have more food concession stands at Farmers' market (to increase food traffic and access to market veggies/ products)
- ❖ Have better variety of produce for sale at Farmers' market
- ❖ Farmers' markets at other cities - Albert, Hoisington
- ❖ Open new Farmers' Market in South Great Bend to serve SFMNP and all residents
- ❖ Having a community garden in Southeast Great Bend
- ❖ Training to grow and harvest vegetables
- ❖ Better communication - use El Mercadito de Great Bend and MPAC Facebook - talk with Rosalia; Newsletter on Facebook or Great Bend Buy, Sell, Trade
- ❖ Opportunity for a new market with reasonable prices
- ❖ Opportunity for someone to develop more public transportation
- ❖ Work-job opportunities; people are willing to work
- ❖ Walgreens is wonderful, but needs electric carts
- ❖ Thanks for the many opportunities for everyone and all the information
- ❖ "There are many opportunities for success for these ideas. The Hispanic community needs to take these ideas and opportunities and make them work." (Gentleman who spoke to the whole group)

Shared Vision

- ❖ Everyone can access healthy food. Safe transportation available to reach healthy food markets—bike, walking and public transportation.
- ❖ Removal of stigma to accessing food / school lunch program
- ❖ Access to safely store food or can access food when they can't store
- ❖ Accessibility of food on weekends, everything closes and no public transit
- ❖ Food stand/mobile market to go to people without transportation
- ❖ Producers as part of the solutions to the food system (issues)
- ❖ Kids eat more fresh fruits & vegetables. (2)
- ❖ Every person can access healthy, affordable food. Access = Transportation (multimodal) (2)
- ❖ Kids & Adults more engaged in food production. (community gardens?) (2)
- ❖ Healthy fast food options
- ❖ Parents & kids more aware of fresh food options. (Healthier concession items, healthy option awareness) (2)
- ❖ Kids eat more fresh fruits and vegetables

Big Ideas

- ❖ Healthy Free Food—Food Bank and Soup Kitchen
- ❖ Summer Lunch Program
- ❖ Community Farming
- ❖ Mobile Market
- ❖ More Meals at Soup Kitchen
- ❖ Commercial Kitchen Rental
- ❖ Healthy Vending
- ❖ Healthy Concessions
- ❖ Engage more partners like restaurants, fast food, and all types of farmers
- ❖ Bountiful Baskets or similar food box program

- ❖ Hike & Bike Trail to new Cheyenne Bottoms Overlook (K-4)
- ❖ Engage Master Gardeners and other gardening mentors for community/other (school or home) gardens to teach both kids & adults/parents
- ❖ Training for people who want to learn to grow their own food
- ❖ Farmers' Market Downtown Hoisington
- ❖ Another Farmers' Market location and day in Great Bend
- ❖ A Community Garden in SE Great Bend
- ❖ Opportunity for another store in Great Bend with affordable prices (Aldi's ??)
- ❖ Improved, more accessible public transportation
- ❖ Improved access to healthy food for people with physical disabilities, at stores and restaurants
- ❖ Bi-lingual services in the community
- ❖ Community members taking the opportunity to improve access to food themselves
- ❖ Education:
 - Quick Video Ideas on how to cook with Food Bank foods & for kids
 - Free Cooking Classes (2)
 - Start Early with kids before Habits are built
 - Engage Partners—United Way (Extension too)
 - Teach kids about “ugly food”
 - Encourage schools or business to provide health education
 - Inspire awareness about bad foods
 - Offer courses on farming, free of cost
- ❖ Do a Health Survey and improve on key outcomes --- People's Pie
- ❖ Environment - build more green spaces and fitness parks
- ❖ Better communication - advertising, community announcements, use of Facebook, available and new newsletters about food available and food resources

Emerging Themes

Nutrition and access to healthy food for people with a variety of needs—addicts, mental health, diabetes, mothers with children, persons with physical disabilities

Coordination of Community Assets, community collaboration

Need for better, more effective communication with community members

Community support for positive changes, interest in educational opportunities

VISION Summarized

Great Bend, 9/29/2016

Everyone can access healthy, safe food, regardless of method of transportation, and without a fear of stigma.

Hoisington, 9/29/2016

Education and engagement of youth early, to build healthy habits, eating and gardening. Engage United Way and all of their partners.

Community Food Survey

To gather perspectives and input from a broader cross-section of Barton County residents, members of the Be Well Barton County coalition opted to conduct a community survey. The survey asked participants a variety of questions related to their food acquisition and eating habits. The community survey questionnaire was developed by Be Well representatives working in conjunction with the paid consultant. The final set of survey questions were programmed into an online survey platform, and paper versions of the survey were also made available. Community members were invited to participate using multiple dissemination strategies, which included promotion through contacts of Central Kansas Partnership members, distribution at the county health clinic and WIC clinic and distribution through various community groups. In total, 119 community members participated in the survey. Of those, 103 completed the entire survey, and 7 completed part of the survey. Nine responses were completely blank, and were excluded from the analysis, leaving 100 survey responses in the analytic dataset.

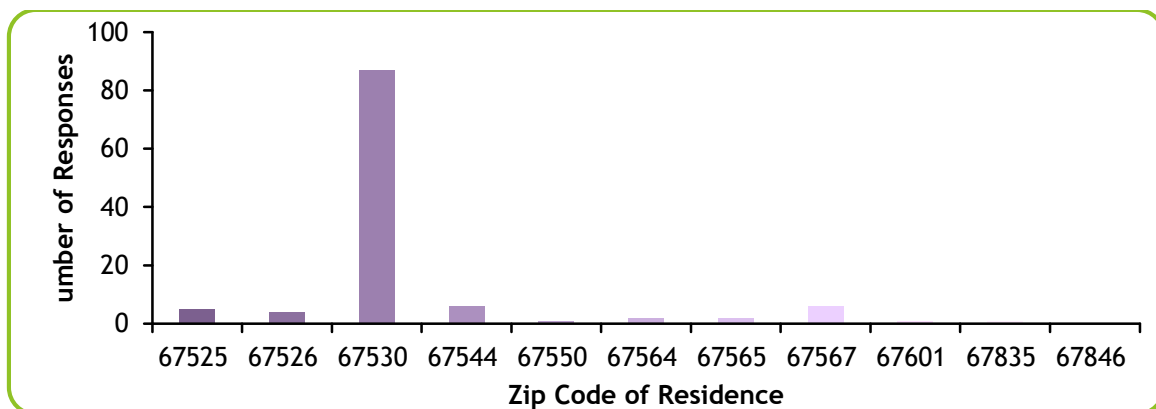
Because the survey employed a non-random, convenience sampling approach, the results of the survey may not be representative of the county population as a whole. Nevertheless, the results represent an important cross-section of community member perspectives and voices, and contribute to an overall understanding of the food environment and community member needs in Barton County. Survey participants have provided many comments which provide valuable insights regarding their satisfaction with the current Barton County food environment, and where they would like to see changes.

Response Statistics

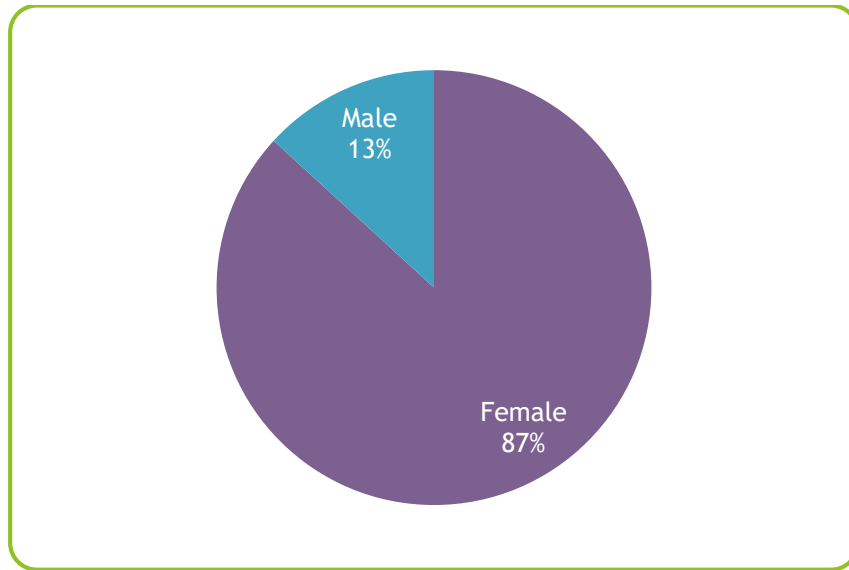
Response Category	Count
Complete	103
Partial	7
Disqualified (no data)	9
Total	119

Respondent Characteristics

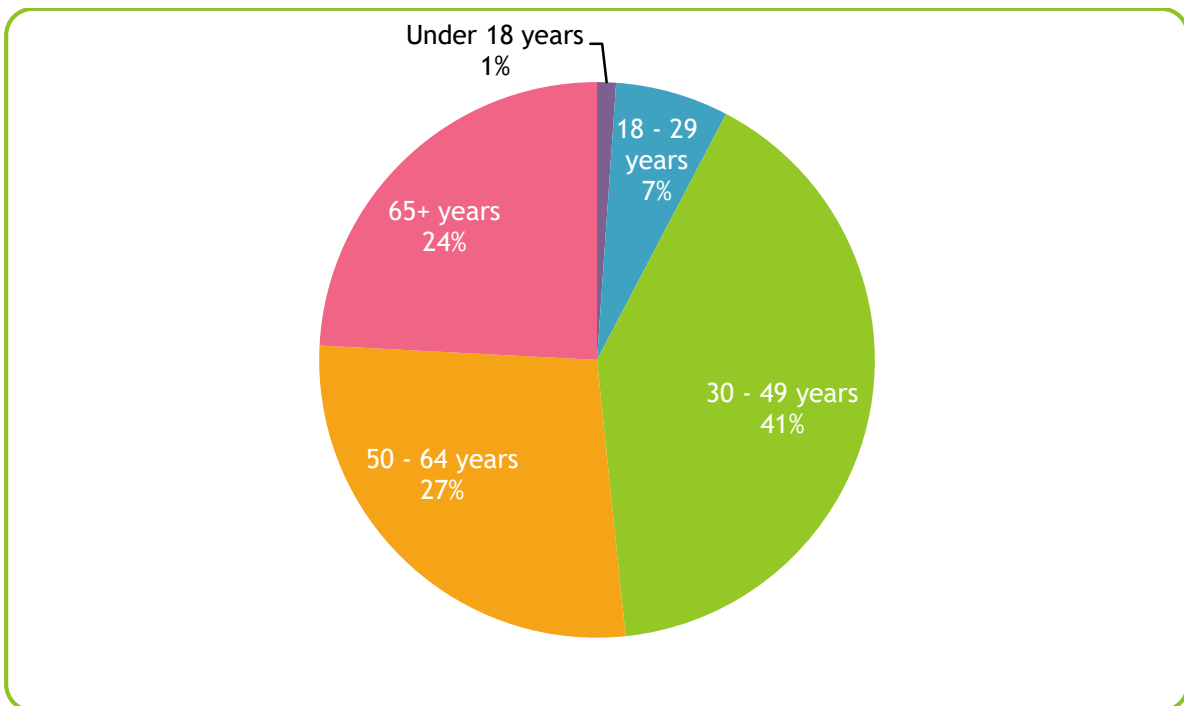
What is the 5-digit zip code where you live?



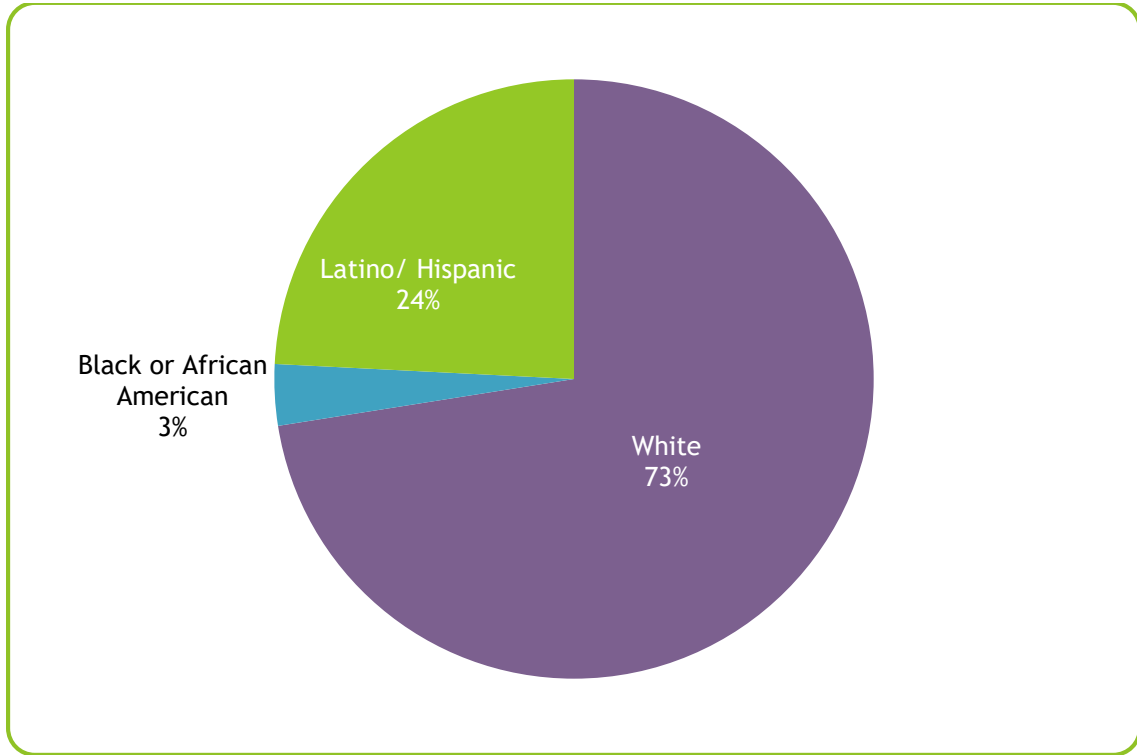
Respondent Gender



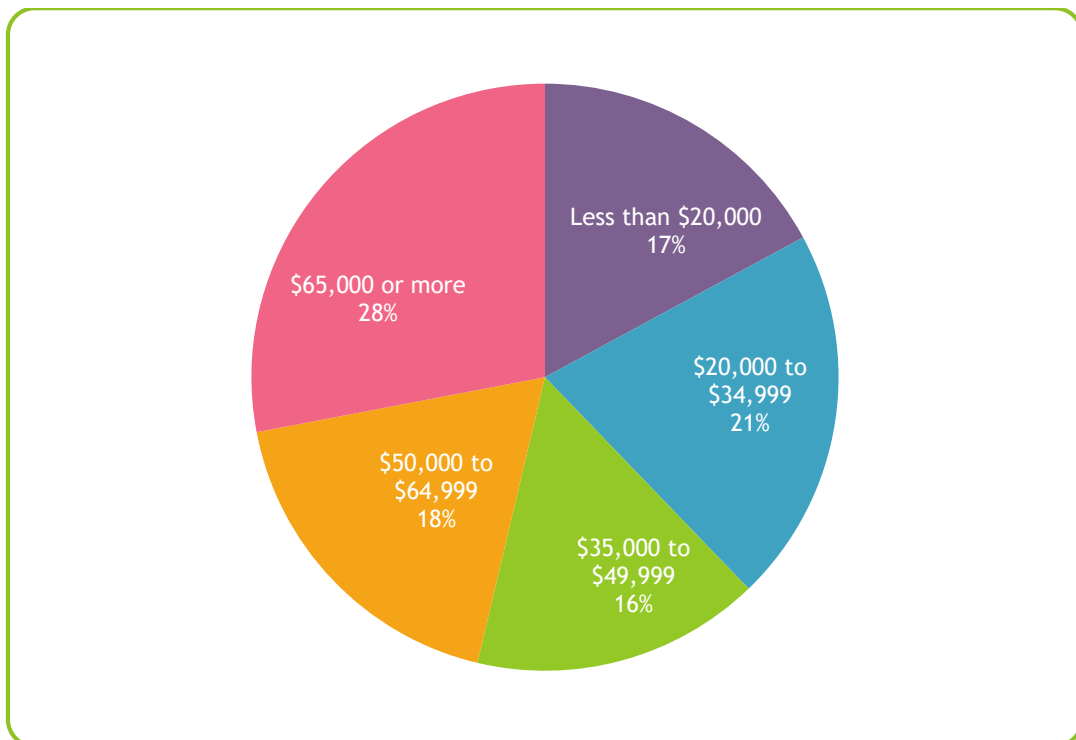
Respondent Age



What race/ethnicity do you most closely identify with?



Approximately how much is your yearly household income before taxes (not including public assistance or SNAP benefits)?

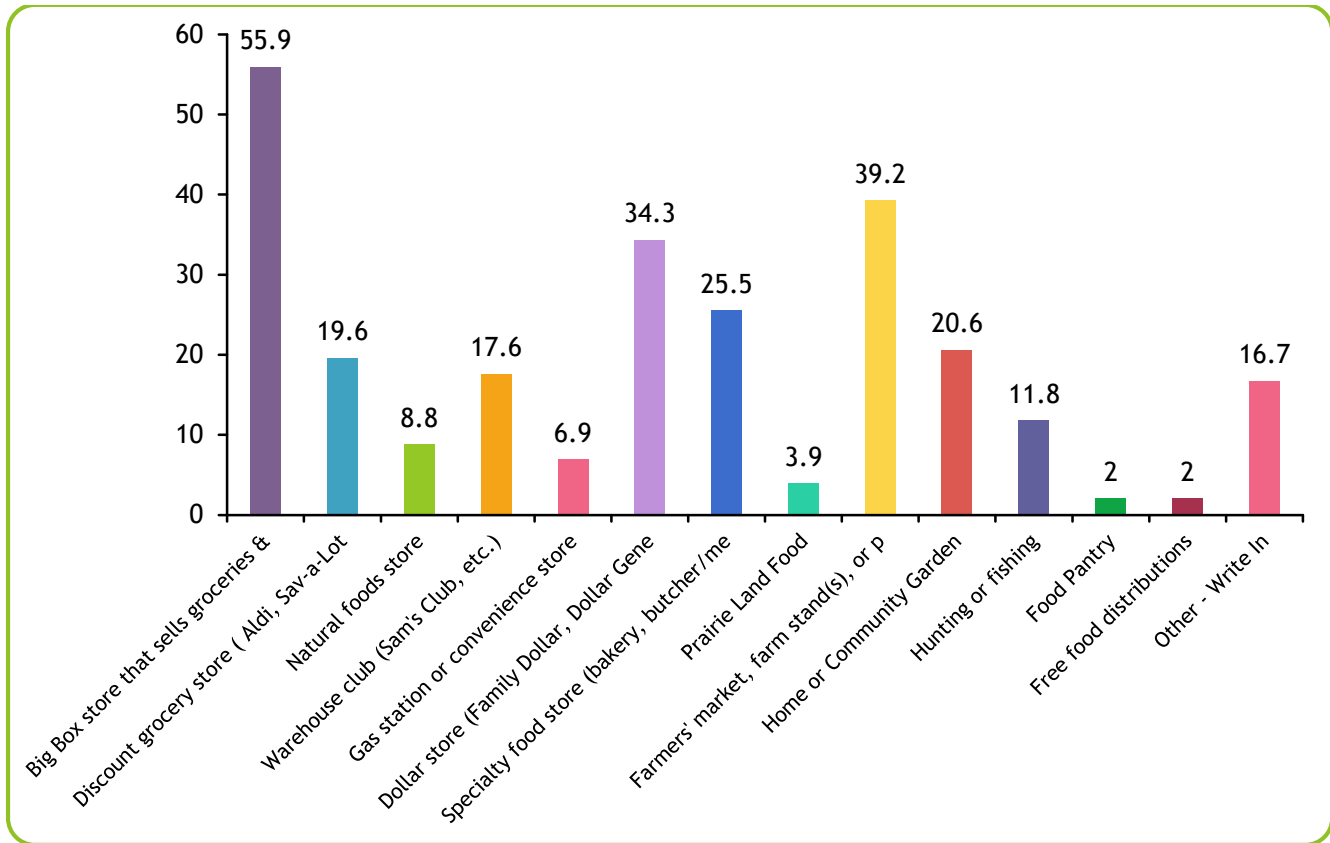


Food Purchasing

Please give the name and location of the store where you most often purchase groceries.

Count	Response
35	Dillon's
17	Walmart
22	Walmart & Dillon's
2	Dillon's in Great Bend (both stores)
2	Ellinwood Family Foods
1	Big Dillon's
6	Dillon's, West 10th Street, Great Bend, KS
1	Dillon's Great Bend
1	Dillon's Great Bend, KS
1	Dillon's Larned and Great Bend, Walmart Great Bend
1	Dillon's Main St.
1	Dillon's, Walmart, Dollar General
1	Dillon's in Great Bend
1	Dillon's on Main St., Great Bend
1	Dillon's, 10th St, GT Bend
1	Dillon's, Walmart & my garden
1	Gardens & High Tunnel, Dillon's, meat(Troy Schroeder) Eggs(our chickens)
2	Klema Apple Market, Russell Ks
2	Online-Homechef, Walmart & Dillon's
1	Town & Country
1	Town & Country, Hoisington
1	Wal Mart 10 th st, Dillon's main st, Dillon's 10 st, La Pasadita 10th, Los Compadres Mexican Store
4	Wal Mart, Great bend, KS
1	Walmart - 10th Street

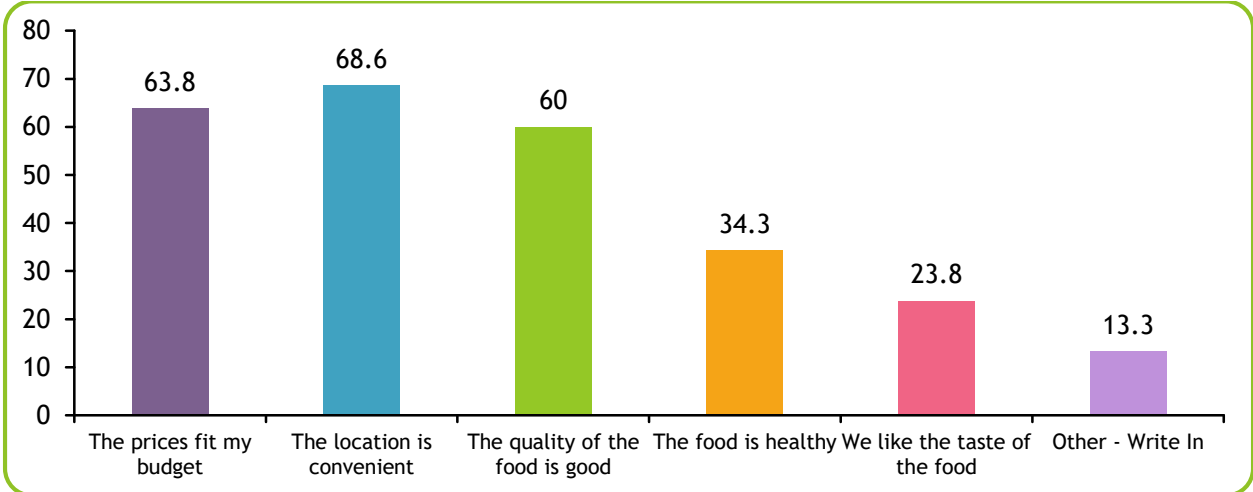
Besides your regular grocery store, where else to you regularly get food? (check all that apply)



Response	Percent	Count
Big Box store that sells groceries	55.9%	57
Discount grocery store (Aldi, Sav-a-Lot)	19.6%	20
Natural foods store	8.8%	9
Warehouse club (Sam's Club, etc.)	17.6%	18
Gas station or convenience store	6.9%	7
Dollar store (Family Dollar, Dollar General)	34.3%	35
Specialty food store (bakery, butcher/meat market, etc)	25.5%	26
Prairie Land Food	3.9%	4
Farmers' market, farm stand(s), or produce stands	39.2%	40
Home or Community Garden	20.6%	21
Hunting or fishing	11.8%	12
Food Pantry	2.0%	2
Free food distributions	2.0%	2
Other - Write In	16.7%	17

Other - Write In (Other Places Where Regularly Get Food)	Count
Dillon's	2
Walmart	2
Garden	2
Online	2
Braum's grocery section	1
Braum's & Freddy's	1
Commodities	1
Dillon's in Great Bend and Town and Country in Hoisington	1
Ellinwood Family Foods-local store	1
Farm	1
Home Chef	1
Mexican Stores	1
NONE	1
Total	17

What are the main reasons that you get your food from these sources? (check all that apply)



Response	Percent	Count
The prices fit my budget	63.8%	67
The location is convenient	68.6%	72
The quality of the food is good	60.0%	63
The food is healthy	34.3%	36
We like the taste of the food	23.8%	25
Other - Write In	13.3%	14

Other - Write In - Main Reasons for Purchasing Food at these Locations

Aldi

Different meal ideas

Have things that big stores don't have

It's closer to home

Location/Availability

There's no more stores here

There's nothing cheaper

They have sales and coupons

Want to keep a local store

We don't have more options

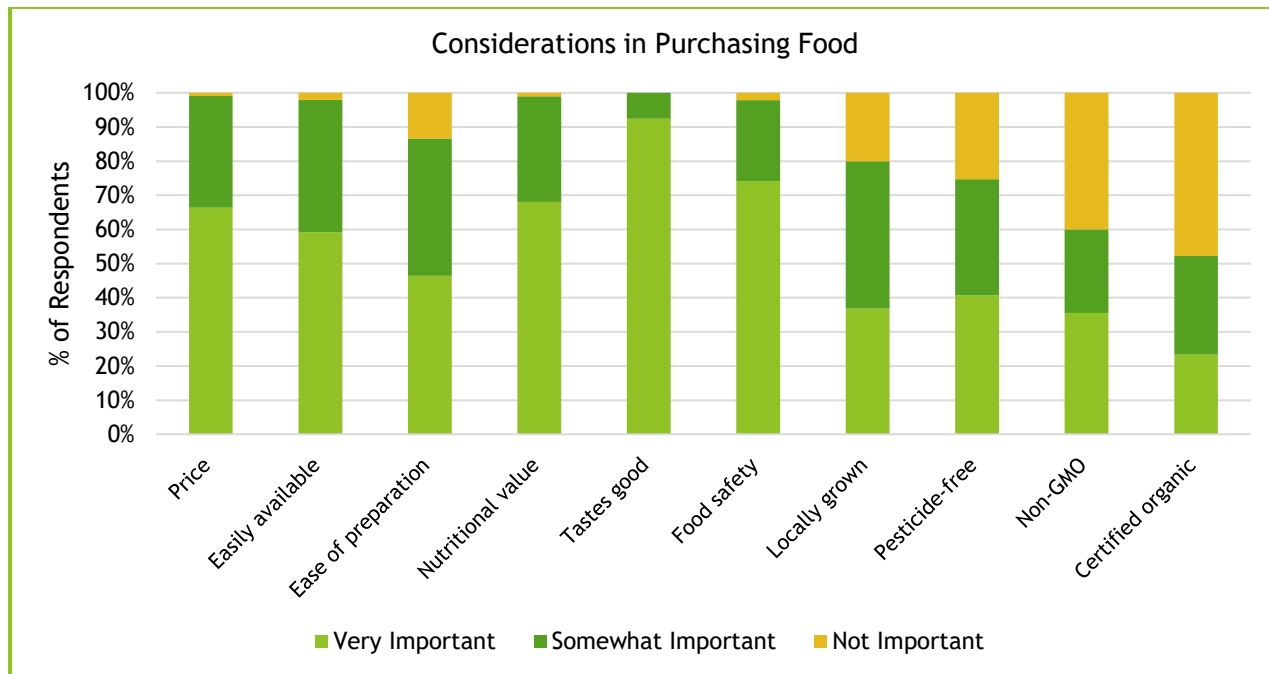
Have no other place but Walmart(and won't shop there)

I do not grow some of the foods eq: milk and bananas

Not available elsewhere

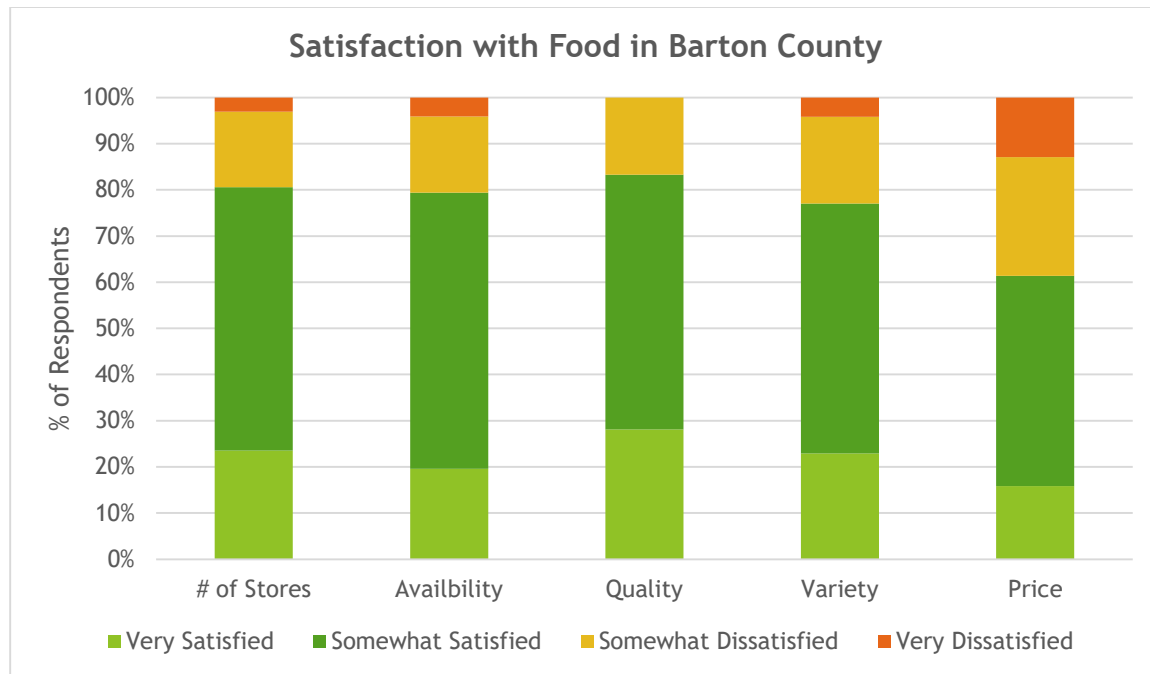
Our farm but stop at the store for last minute items

When you buy food, how important are each of the following considerations?



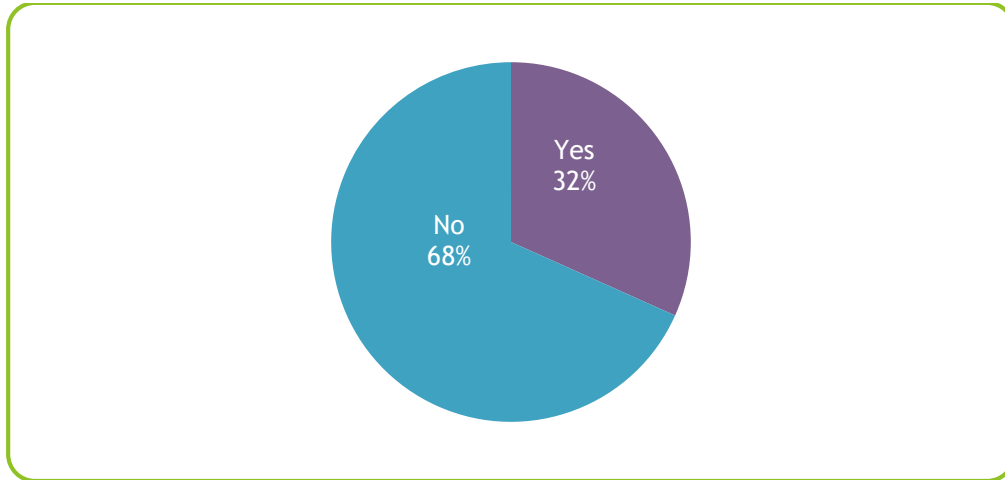
	Very important	Somewhat important	Not important
	Count	Count	Count
Price	69	34	1
Easily available	58	38	2
Ease of preparation	45	39	13
Nutritional value	66	30	1
Tastes good	86	7	0
Food safety	69	22	2
Locally grown	35	41	19
Pesticide-free	37	31	23
Non-GMO	32	22	36
Certified organic	21	26	43

How satisfied are you with the food that is currently available in Barton County?



	Very satisfied	Somewhat satisfied	Somewhat dissatisfied	Very dissatisfied
	Percent, Count	Percent, Count	Percent, Count	Percent, Count
Number of food stores	23.5% 23	57.1% 56	16.3% 16	3.1% 3
Availability of healthy food	19.6% 19	59.8% 58	16.5% 16	4.1% 4
Quality of healthy food available	28.1% 27	55.2% 53	16.7% 16	0.0% 0
Variety of healthy food available	22.9% 22	54.2% 52	18.8% 18	4.2% 4
Price of healthy food	15.8% 16	45.5% 46	25.7% 26	12.9% 13

Are there some foods that you need that are difficult to get in your community?



Response	Percent	Count
Yes	31.7%	32
No	68.3%	69
	Total	101

What foods are they?

Response – What Foods are Difficult to Get?

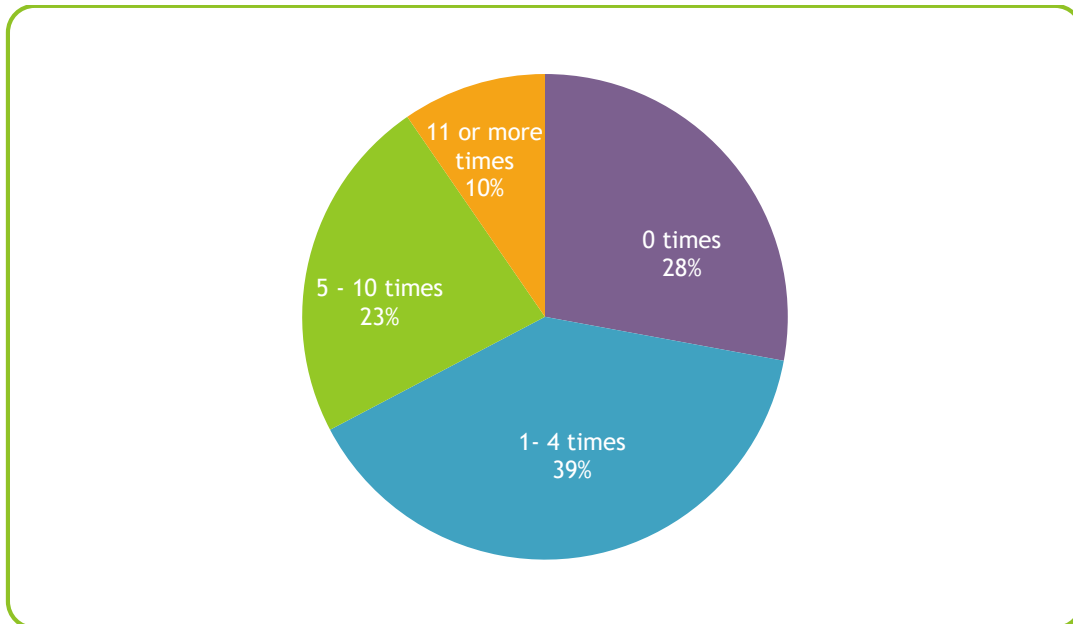
Bulk quantities of grains like Organic brown rice
Different ethnic foods
Fresh Vegetables and fruits
Fresh and some stores don't price match any more and some WIC items are hard to find at stores, and Mexican produce
Fruits and vegetables, cheaper meat
Latino
Low cost- Aldi's
Mexican or Hispanic
More fresh Fruit
Organic foods or most accessible price
Organic milk
Sheep meat
Variety of Produce and Chicken in large quantities
Bulk-non GMO
Caribbean
Cheese, vegetables, fruit
Fish & fresh veqqies
Fresh fish

Response – What Foods are Difficult to Get?

Fresh fruits and vegetables when not in season that are good quality
Fresh produce
Healthy foods-different variety
International/ Caribbean
More Hispanic products
Safe seafood
Sheep meat and fresh fish
Udon noodles, rhubarb, lavender,
Variety of peppers dried and fresh
Whole foods
Year around fresh fruit

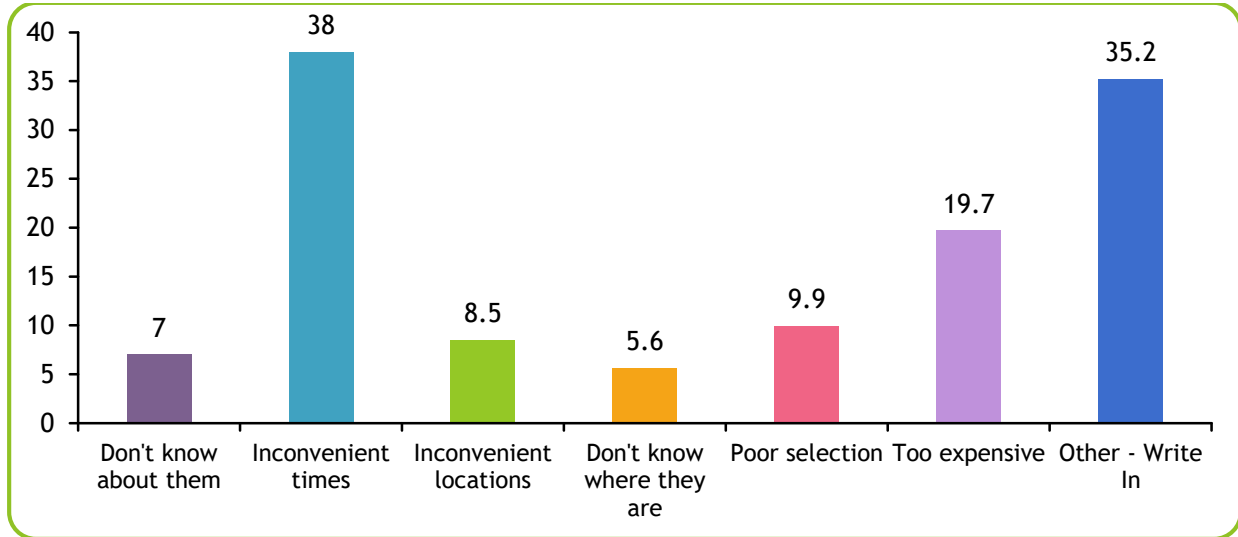
Farmers’ Market

During 2016, how many times did one or more members of your household purchase food at a Farmers' Market in Barton County? (select one choice)



Response	Percent	Count
0 times	27.9%	29
1- 4 times	39.4%	41
5 - 10 times	23.1%	24
11 or more times	9.6%	10
	Total	104

If you don't shop regularly at Farmers' Markets, why not? (check all that apply)



Response	Percent	Count
Don't know about them	7.0%	5
Inconvenient times	38.0%	27
Inconvenient locations	8.5%	6
Don't know where they are	5.6%	4
Poor selection	9.9%	7
Too expensive	19.7%	14
Other - Write In	35.2%	25

Other - Write In
Have our own garden, grow our own (X 10)
I do as much as I can
I don't know their hours
Not important
Seasonal
Sloth, don't think about it at the time available, don't carry cash often
This past year I was physically limited and couldn't walk through the courthouse lawn
Don't always have cash
Forget about it (2)
Live in country
Never go there
Not much variety
Short time available

Please indicate what changes would make you want to attend a local farmers' market more frequently. Please be specific - suggest changes to day(s) of the week, time of day, location, etc.

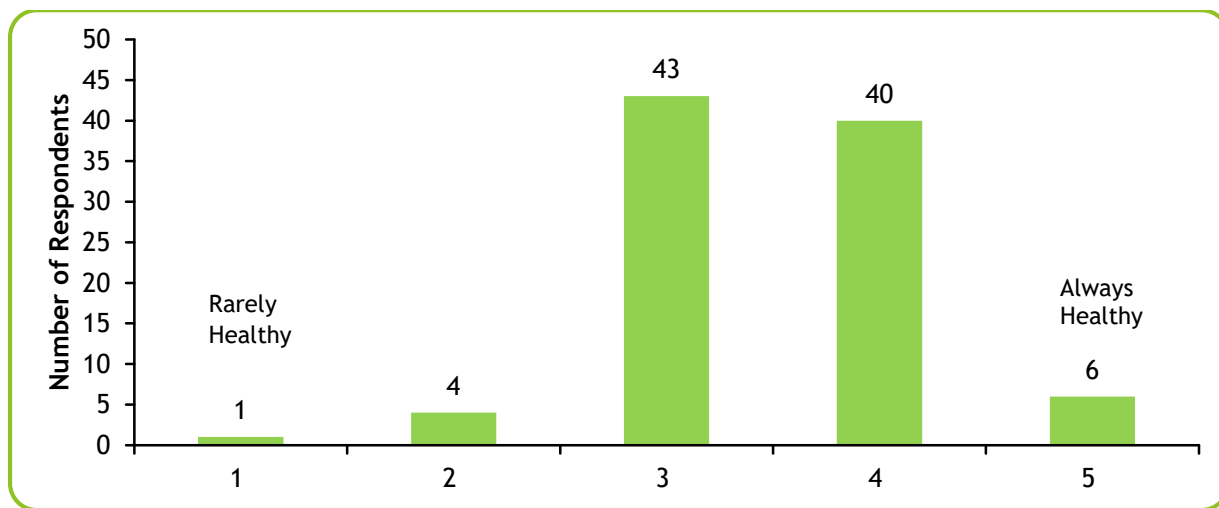
Response - Changes That Would Make You Want to Attend Farmers' Market More Frequently
More variety (X 4)
Cheaper Products
Could flowers and veggie plants be added???
Day of week in GB Buy mostly if there were more variety.
Days of the week and later in the evening
Farmer's Market are expensive, which surprises me, need a better value for our food dollar
Farmer's markets are great--maybe need more people to know about them
Friday, Thursday Monday
I feel if people want to purchase at the Farmer's Market, a Saturday is good for working people. Generally the times and locations are ok for me.
I like Saturdays and we occasionally would go on Thursday nights.
I like how our farmers market is set up and ran. There is plenty of information about it and the timing is reasonable.
I live in Ellinwood, so I typically will not make a special trip to Great Bend just for a farmer's market. I often do not think about the one in Ellinwood. No schedule is perfect, so even if it was on a different day/time, it would not matter to me. I just need to prioritize going there more often.
I would like to see it be available on Fridays and Saturdays, all day if possible or the afternoons, because of paydays, and I do not shop until afternoon, usually
I would want it to stay at 4/7:00 and at the Barton county courthouse as it is
Inside, Climate controlled
Just knowing where they are located.
Like all of the --getting better each year
Location closer to home; extended hours during the week.
Location. Something on the East side of town. Veterans Park on McKinley Street?
More Variety, later in the day
More convenient times and more selections
More days a week, evening hours.
More variation not just vegetables. I would also like organic honey
Offer these more often and differing times
The downtown farmers market this year was wonderful! Good selection. Would be great to have grass-fed meats.
The only one I know of is in Great Bend and I live in Hoisington.
Variety and prices

Response - Changes That Would Make You Want to Attend Farmers' Market More Frequently

- Having it more than once a week in the evening, not just once a week
- Information on food availability long in advance
- More advertising
- More flexible time, less chemicals
- More locations & longer hours
- More locations: more vendors
- My time, need to look into going
- One that is closer and with more variety
- Start early in May & go late in September
- With the market that is at the courthouse, it is picked over before I get off work at 5. The market at the library parking lot I have visited but find that many of the fruits/veg available there I also grow or a family member grows them so I can get them for free. Not interested in buying the baked or canned products.

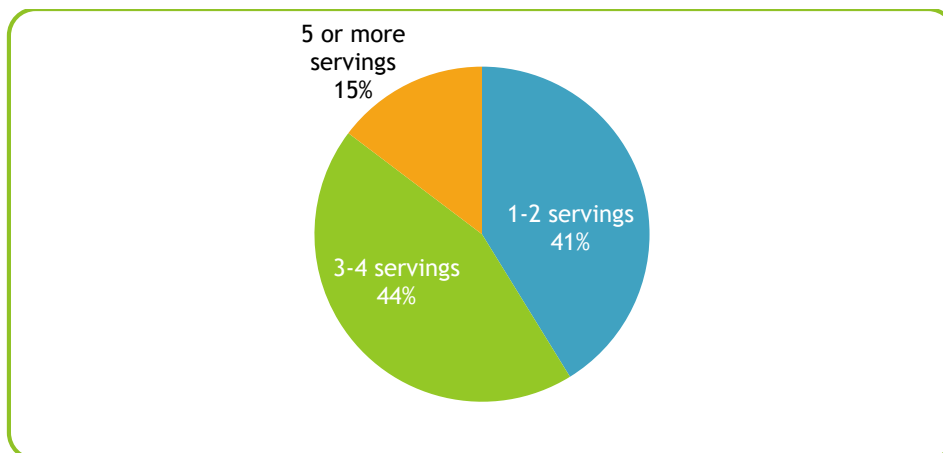
Dietary Behaviors

On a scale of 1 to 5, how would you rate your family's diet, with 1 being "rarely healthy" and 5 being "always healthy"?



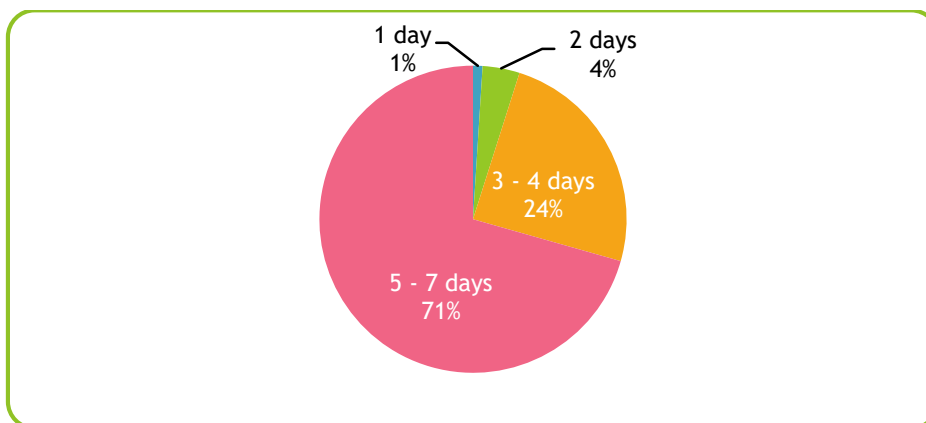
Response	Count	Percent
1 - Rarely Healthy	1	
2	4	
3	43	
4	40	
5 - Always Healthy	6	

On an average day, how many servings of fruits and vegetables (canned, fresh or frozen) do you eat? (A serving is approximately 1/2 cup, or 1 cup of leafy salad)



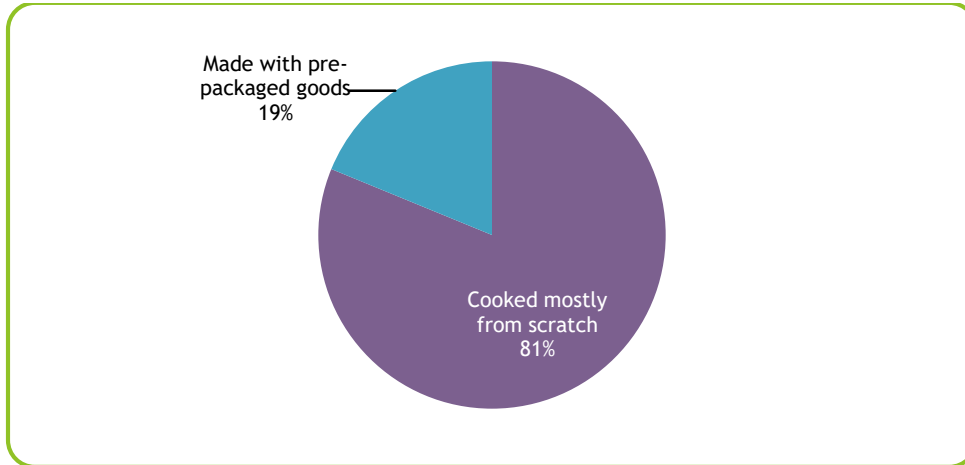
Response	Percent	Count
1-2 servings	41.2%	42
3-4 servings	44.1%	45
5 or more servings	14.7%	15
	Total	102

On average, how many days /week does your family prepare meals at home?



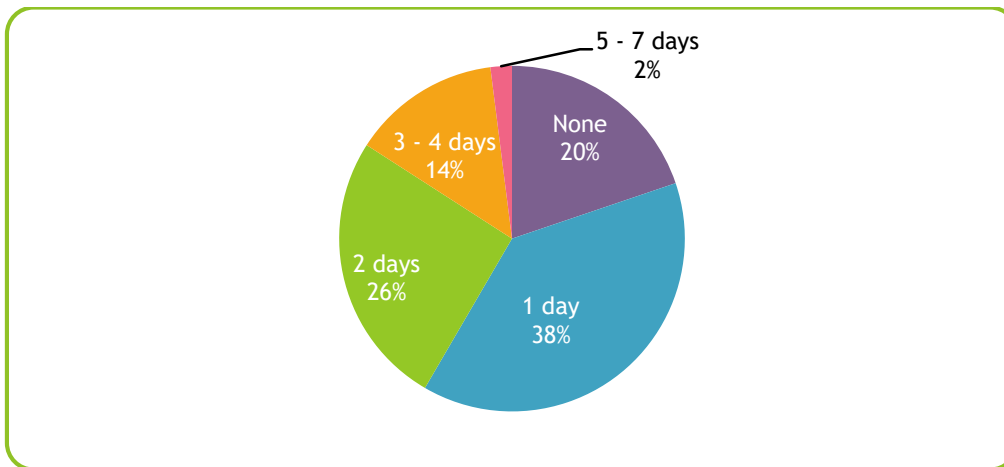
Response	Percent	Count
1 day	1.0%	1
2 days	3.9%	4
3 - 4 days	24.5%	25
5 - 7 days	70.6%	72
	Total	102

When meals are prepared at home, are they:



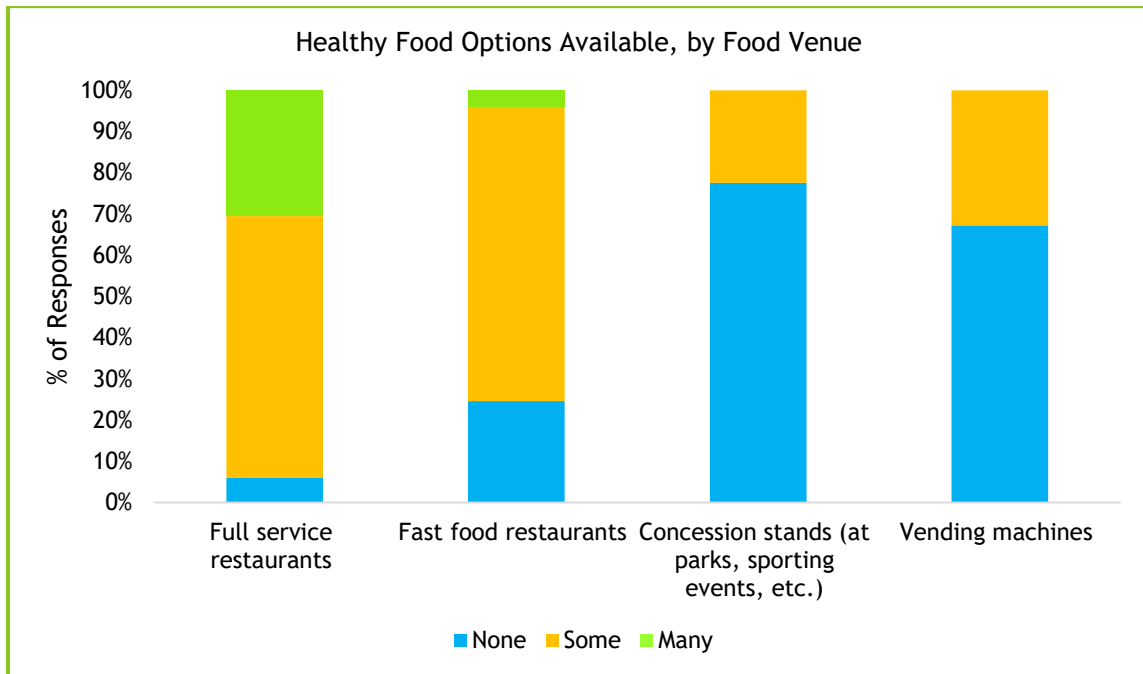
Response	Percent	Count
Cooked mostly from scratch	81.2%	82
Made with pre-packaged goods	18.8%	19
	Total	101

On average, how many days/week does your family eat food from fast food restaurants?



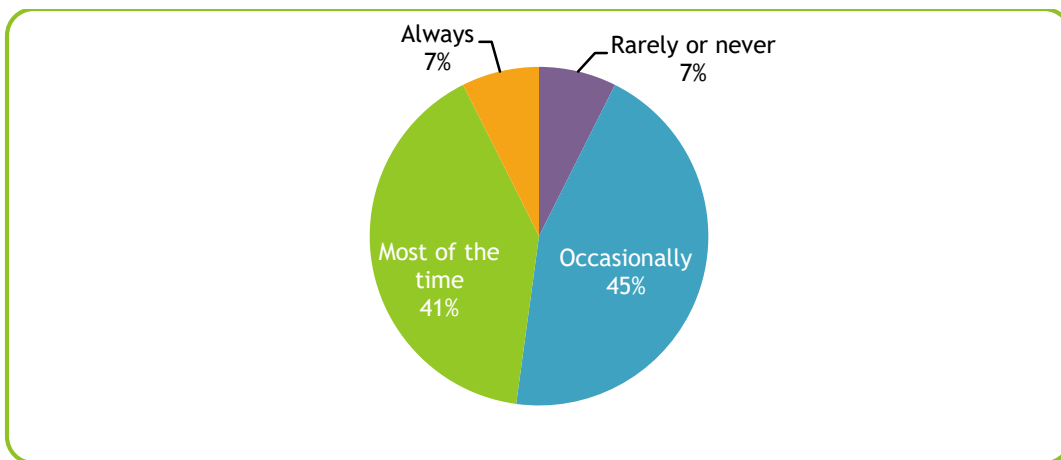
Response	Percent	Count
None	19.8%	20
1 day	38.6%	39
2 days	25.7%	26
3 - 4 days	13.9%	14
5 - 7 days	2.0%	2
	Total	101

Thinking about the times when you eat food that is not prepared at home, how often are healthy food options available in each of the following settings where you get food?



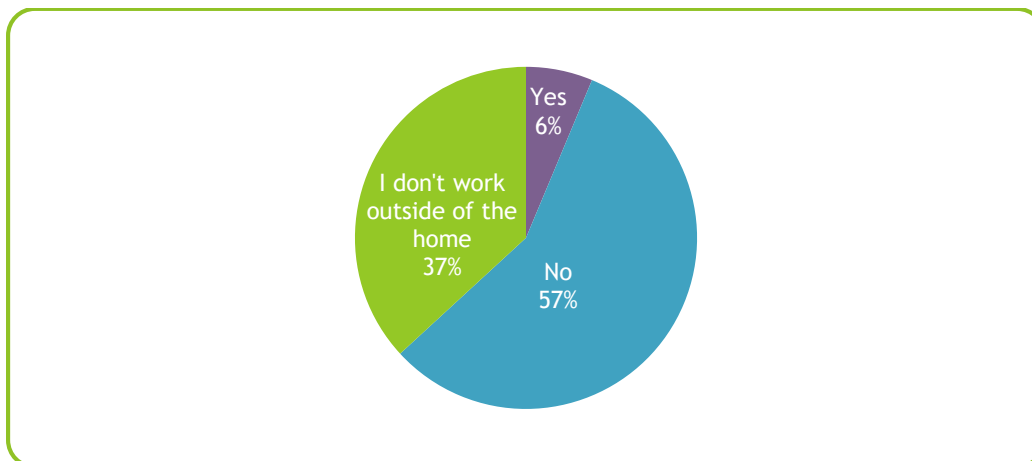
	No healthy options	Some healthy options	Many healthy options	I don't buy food from this source
	Count	Count	Count	Count
Full service restaurants	5	52	25	9
Fast food restaurants	19	55	3	13
Concession stands (at parks, sporting events, etc.)	45	13	0	31
Vending machines	37	18	0	33

When healthier food options are available in these settings, how often would you say that you choose or select a healthy option?



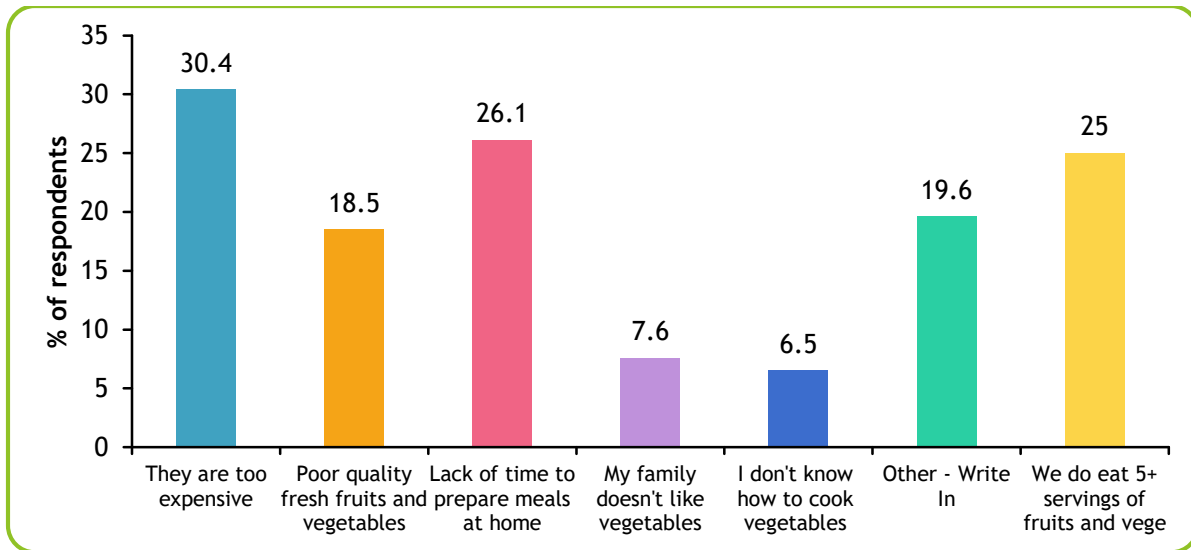
Response	Percent	Count
Rarely or never	7.4%	7
Occasionally	44.7%	42
Most of the time	40.4%	38
Always	7.4%	7
	Total	94

If you work outside of the home, does your employer have a "Healthy Foods" policy?



Response	Percent	Count
Yes	6.3%	6
No	56.8%	54
I don't work outside of the home	36.8%	35
	Total	95

What makes it difficult for your family to eat 5 or more servings of fruits and vegetables each day?
(check all that apply)

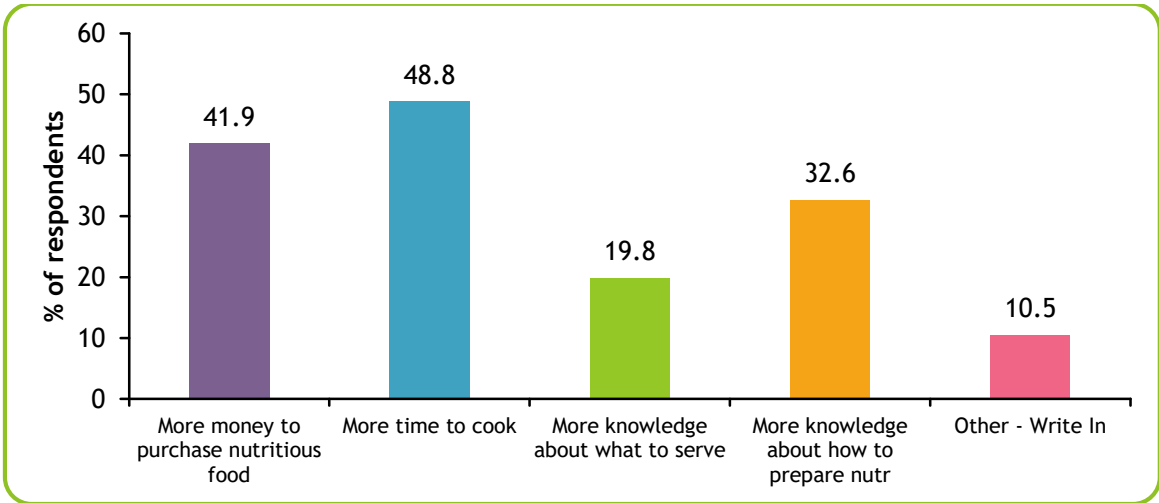


Response	Percent	Count
They are too expensive	30.4%	28
Poor quality fresh fruits and vegetables	18.5%	17
Lack of time to prepare meals at home	26.1%	24
My family doesn't like vegetables	7.6%	7
I don't know how to cook vegetables	6.5%	6
Other - Write In	19.6%	18
We do eat 5+ servings of fruits and vegetables	25.0%	23

Other - Write In – Barriers to Eating 5 Servings of Fruits and Vegetables per Day
Dietary issues of child
Don't always think about it. Not a priority.
Fresh vegetables seem to go bad too quickly before I can use them.
I eat a lot of frozen vegetables
It's difficult to make them eat vegetables
Most items are frozen and need to thaw, no time
Poor habits, choice
Portability
They take time to shop for as they are often perishable
Too much effort

Other - Write In – Barriers to Eating 5 Servings of Fruits and Vegetables per Day
We eat 3 or 4 a day
Graze all day
Just lazy
Lazy
My child doesn't like them
Too lazy or want something else

Which of these options would help your family have a more nutritious diet? (check all that apply)



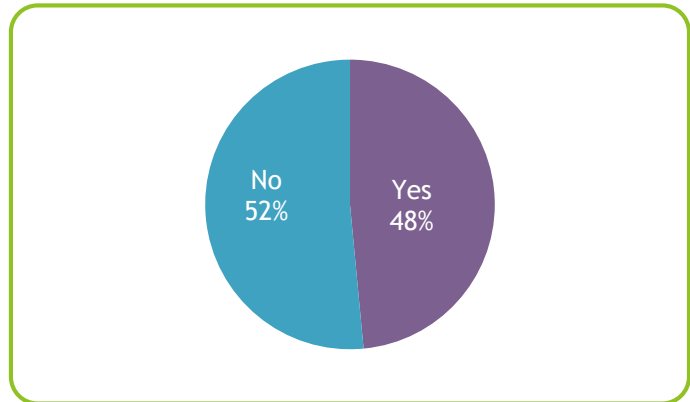
Response	Percent	Count
More money to purchase nutritious food	41.9%	36
More time to cook	48.8%	42
More knowledge about what to serve	19.8%	17
More knowledge about how to prepare nutritious foods	32.6%	28
Other - Write In	10.5%	9

Other - Write In – What Would Help to Have a Healthier Diet
Availability of more nutritious food to cook
Better attitude
Conscious effort
Depending on the mood
With old age & smaller family/ Just too tired to care, just too many leftovers
Easy and Spanish recipes not normal American food and out-dated recipes
Have a sweet tooth
Personal chef

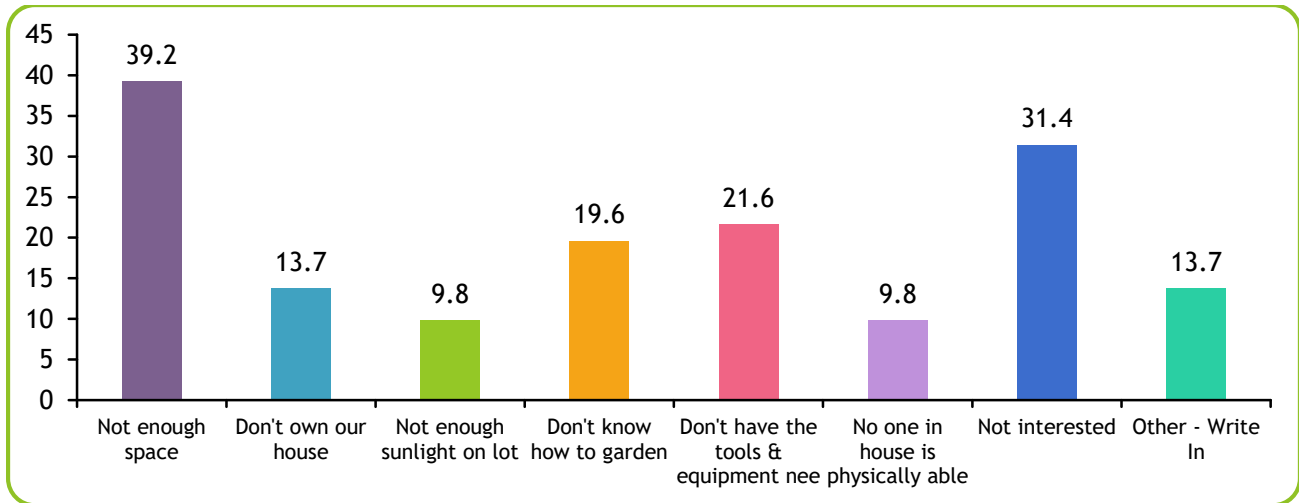
Gardening

Does your household raise a garden in the summer?

Response	Percent	Count
Yes	48.5%	48
No	51.5%	51
	Total	99



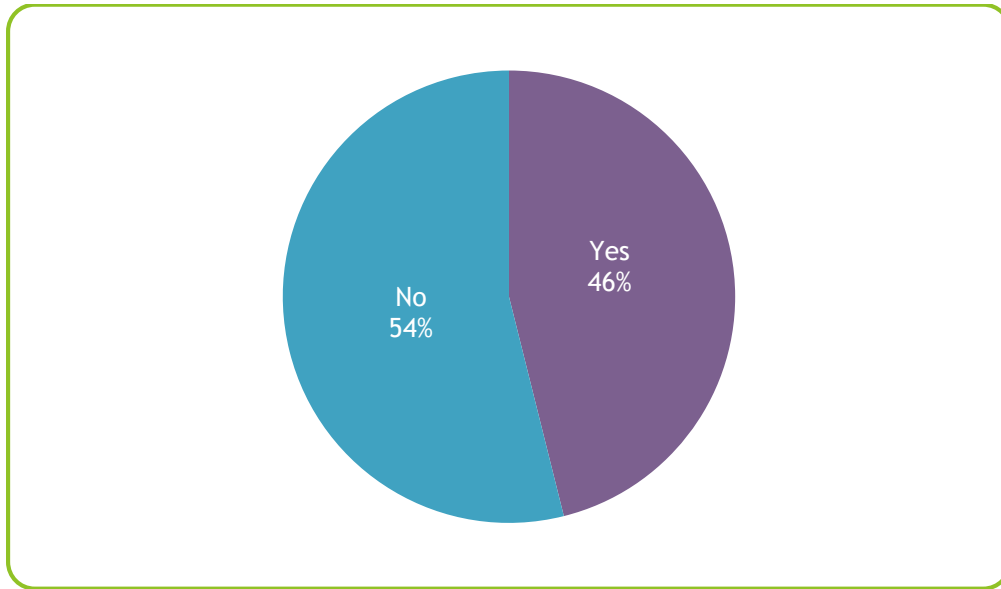
Please check the reason(s) that your household does not have a garden (check all that apply):



Response	Percent	Count
Not enough space	39.2%	20
Don't own our house	13.7%	7
Not enough sunlight on lot	9.8%	5
Don't know how to garden	19.6%	10
Don't have the tools & equipment needed	21.6%	11
No one in house is physically able	9.8%	5
Not interested	31.4%	16
Other - Write In	13.7%	7

Other - Write In Reasons for Not Having a Garden
No time (X 3)
I kill everything
Water is too expensive and there are a lot of dogs
Can't keep up due to work schedule
Costs a lot of money

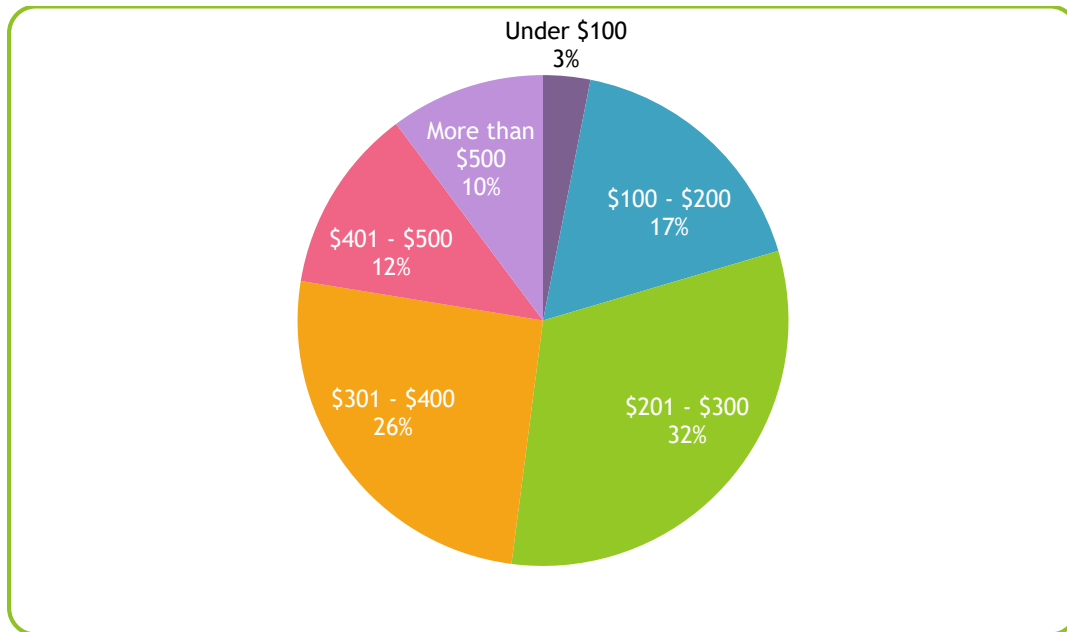
If one were available, would you participate in a Community Garden where you could grow foods?



Response	Percent	Count
Yes	46.1%	41
No	53.9%	48
	Total	89

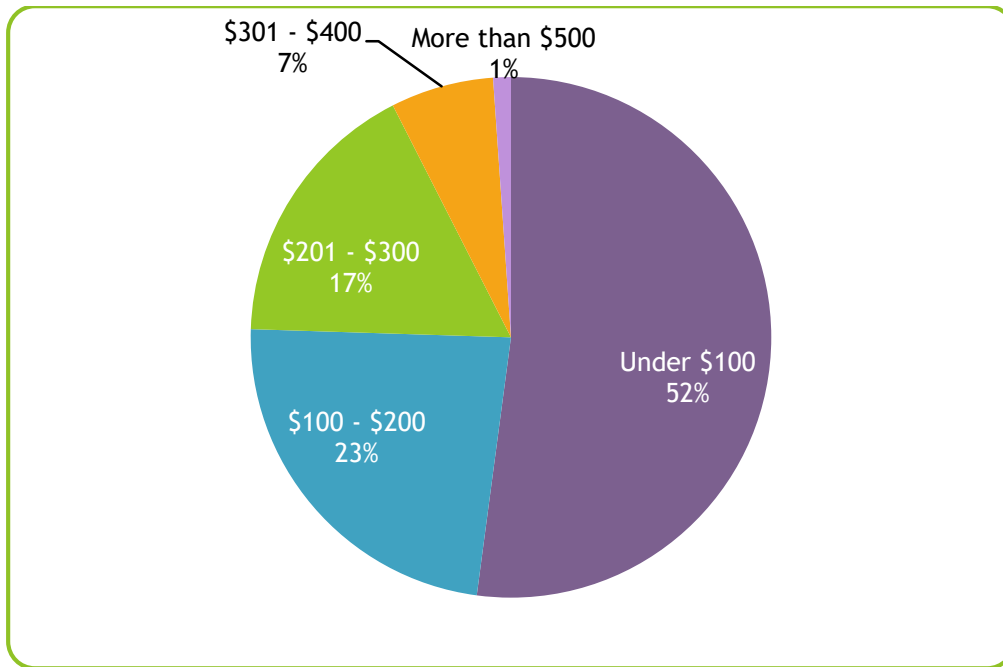
Food Expenditures

In a typical month, how much money does your family spend on groceries or food to be prepared at home? (Include food from grocery stores, convenience stores, etc. Include the amount from SNAP/food stamps and WIC vouchers, if you have them)



Response	Percent	Count
Under \$100	3.1%	3
\$100 - \$200	17.3%	17
\$201 - \$300	31.6%	31
\$301 - \$400	25.5%	25
\$401 - \$500	12.2%	12
More than \$500	10.2%	10
	Total	98

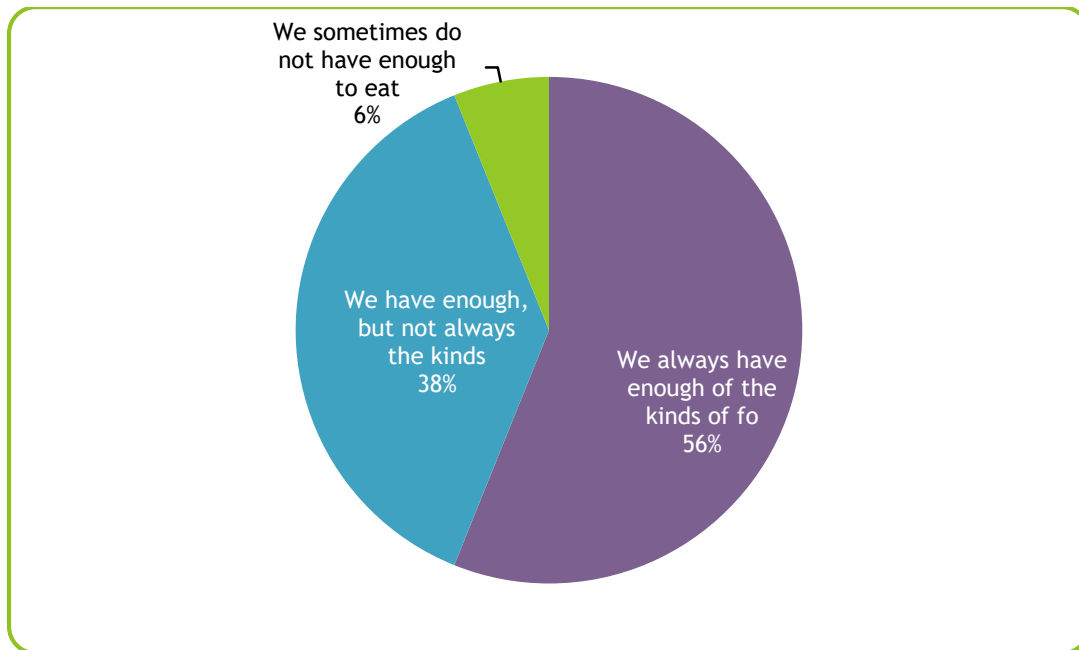
In a typical month, how much money does your family spend on food prepared someplace other than your home? (Include food from restaurants, fast food, school meals, workplace cafeterias, etc.)



Response	Percent	Count
Under \$100	52.1%	49
\$100 - \$200	23.4%	22
\$201 - \$300	17.0%	16
\$301 - \$400	6.4%	6
More than \$500	1.1%	1
	Total	94

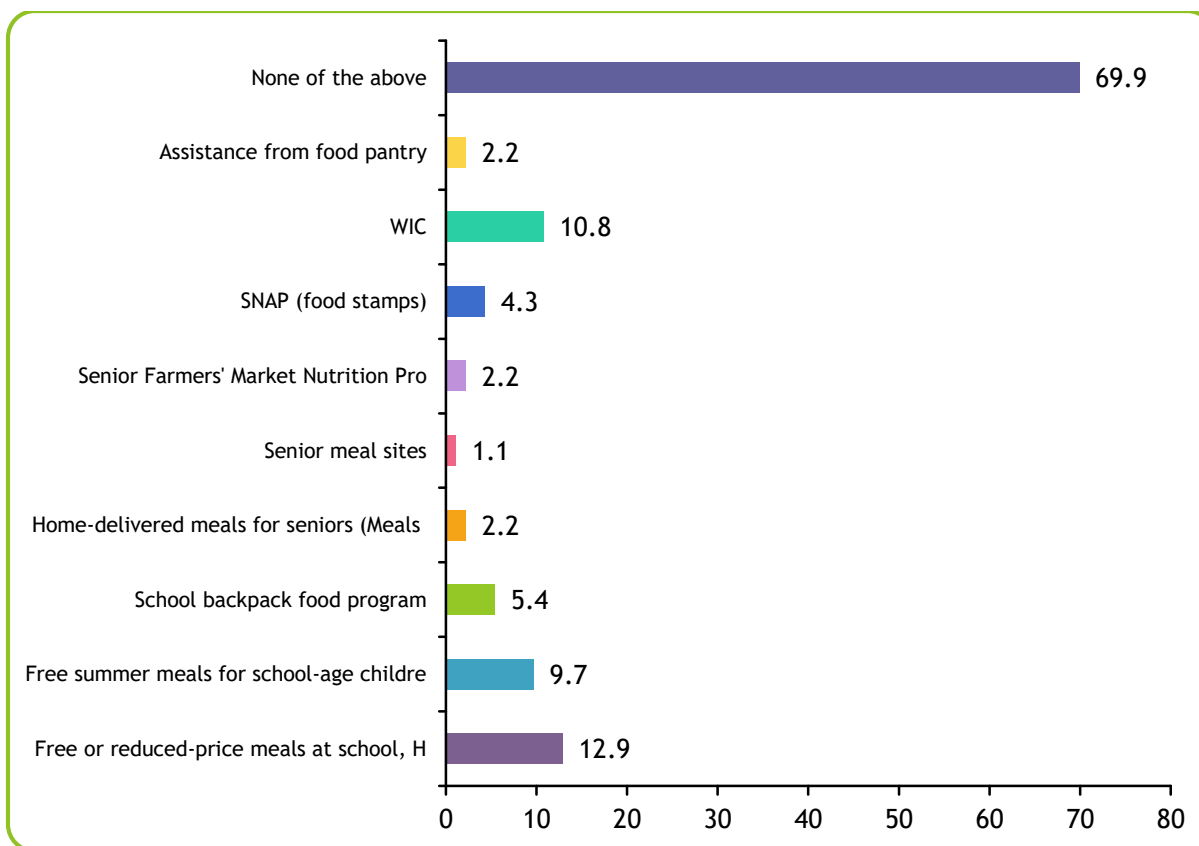
Food Insecurity

Which of these statements best describes the food eaten in your household? (select one answer)



Response	Percent	Count
We always have enough of the kinds of food we want	56.1%	55
We have enough, but not always the kinds of food we want	37.8%	37
We sometimes do not have enough to eat	6.1%	6
Total		98

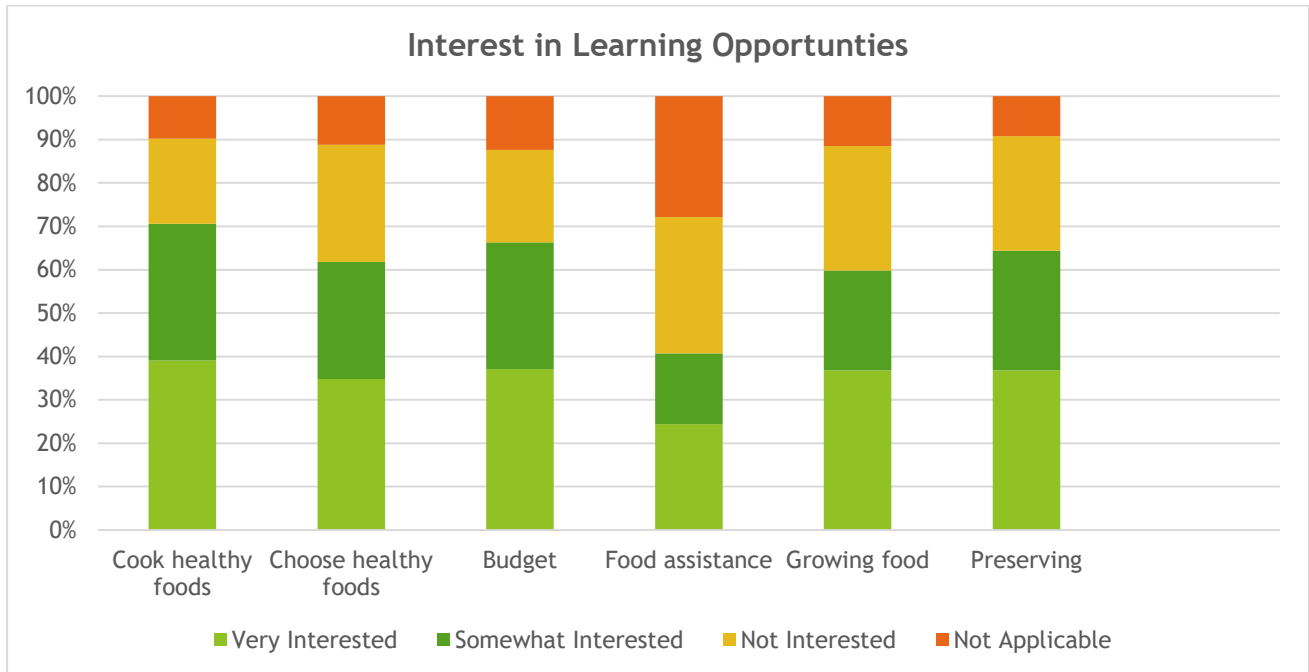
In the past 12 months, has anyone in your household participated in the following programs: (Check all that apply)



Response	Percent	Count
Free or reduced-price meals at school, Head Start or Daycare	12.9%	12
Free summer meals for school-age children	9.7%	9
School backpack food program	5.4%	5
Home-delivered meals for seniors (Meals on Wheels)	2.2%	2
Senior meal sites	1.1%	1
Senior Farmers' Market Nutrition Program	2.2%	2
SNAP (food stamps)	4.3%	4
WIC	10.8%	10
Assistance from food pantry	2.2%	2
None of the above	69.9%	65

Learning Opportunities

How interested would you be in each of the following learning opportunities?



Learning Opportunity	Very interested	Somewhat interested	Not interested	Not applicable
	Percent, Count	Percent, Count	Percent, Count	Percent, Count
Learning more about how to cook healthy meals for your family	39.1% 36	31.5% 29	19.6% 18	9.8% 9
Learning more about how you can choose healthy foods	34.8% 31	27.0% 24	27.0% 24	11.2% 10
Learning how to have a healthy diet on a limited budget	37.1% 33	29.2% 26	21.3% 19	12.4% 11
Learning how to access food assistance programs for yourself or for family/friends	24.4% 21	16.3% 14	31.4% 27	27.9% 24
Learning how to grow some of your own food/ gardening skills	36.8% 32	23.0% 20	28.7% 25	11.5% 10
Learning how to can, freeze and preserve foods	36.8% 32	27.6% 24	26.4% 23	9.2% 8

Desired Changes in the Local Food Environment

What, if anything, would you like to see change about the food available in your community?

Response – Changes would like to see in community food
Cheaper (x 2)
A farmers' market in Hoisington would be nice.
A store where the food would be cheaper because in Great Bend groceries are too expensive
An Aldi's low cost market would be nice. Curbside service like Applebee's would be nice at Perkins, Playa Azul, Mary's, Chosen Wok, Classic Inn more electric carts at Walmart (half the time they are all being used) and especially Walgreens, and any store without a drive thru or Curb side service. A bag of ice is a very hard thing to carry with a walker. Sonic just started selling bag ice this month.
Better pricing
Don't give out-dated recipes, have Spanish lecture available , get more information out not just farmers' market
Everyone always talks about how they want everyone to eat better get healthier but when I can go to Taco Bell and feed my family of 5 cheaper than what I can prepare a health meal that's the break down. The healthier food is to expensive
Fresh vegetables fruits
Fruits and veggies at a cheaper cost
Healthy places to eat quickly.
I do not know what it would be
I would like to see the SNAP program changed to offer less access to unhealthy foods to encourage consumption of healthier choices.
I would love to see more support for non-conventional farmers who raise specialty crops for local sale or grassfed meats. Investing in education on high tunnels and greenhouses can lead to more regionally produced food.
I'm satisfied generally
It seems like the fresh produce available at our local stores is not the quality that is seen in stores in bigger towns, this is frustrating as we pay the same or more prices but get lower quality.
Just keep up with what you can do now.
Local Growers
More drink choices (non-carbonated); more fruit available, for fresh herbs.
More fresh options
More healthy food chooses at restaurants.
More options to shop at
More organic and not too expensive
More produce variety. How to classes to prepare in a unique way. We buy our beef and pork by the side from Ellinwood Packing to fill our freezer, but would like a resource for bulk poultry purchasing
More salvaging of imperfect, sellable healthy food.
More traditional restaurants with healthy choices

Response – Changes would like to see in community food

More variety of affordable healthy meats, fish, poultry and vegetables

Prices

That everyone, especially children have enough healthy food to eat.

Would like more ethnic foods

Year- long options for fresh produce.

Better variety

Cheaper

Community garden expand participants in the Farmers Market (vendors)

Farmer's market available more times during the week in evenings not just once a week

For the food not to have chemicals

Fruit and vegetables with better quality without chemicals or pesticides, more natural!

More fresh meats & vegetables

More healthy foods that fits one's culture and taste

More local growers, education

That they use less chemicals

Any additional comments about food in Barton County that you would like to add?

Response - Additional Comments about food in Barton County

BT county does have access to foods. Some of money spent on healthy foods is spent on cigarettes, pop, etc and healthy foods are thought to be too expensive, when budget is limited

Find money to invest in good food

For the food to be more fresh and more inexpensive

Good work

I am familiar with the coupons for seniors to use at the farmer's markets. I think a similar program for young families who are on a limited income would be a great addition in our community.

I would like to be able to have chickens to be able to have my own eggs

I would like to see more natural food stores

Just to have more option to shop at.

Need info on how to get pesticides off the veggies and fruits.

Outside of great bend and Hoisington, grocery options are minimal now. Hard to find more then bananas or apples for fruit.

Some stores have expire dates on sale made more inspections surprise to store not on an agenda, and ask customers outside of stores if they want any changes

Response - Additional Comments about food in Barton County

Somebody to set up a personal shopper's business. I became physically limited this past year. If it were not for my husband knowing how to shop and how to cook we would have been in a world of hurt. I'm sure there are other families in similar situations. Who need basic help just getting milk and bread and basic foods.
The community tends to support a lot of fast food restaurants and most grocery stores are located along 10th street. Technically they are easily accessible by car for me but not easily accessible by other means. These areas are very difficult to access via on foot or by bike. I would love to have better access by these means.
The community tries to work very hard to ensure there are many safe and healthy choices.
The less fortunate citizens should have access to purchase bulk meats and have a freezer provided to them. The store bought meats are way too expensive.
The stores are often out of sale items before I can purchase them.
Too many fertilizers
Canning classes from the rec comm. would be awesome!!!! Too scared to try it alone. Would want someone to ask questions to.
Good to see Farmer's Market Senior Program
More quality and better prices
More variety

CONCLUSIONS

In most communities in the United States, food systems are multi-faceted and complex with multiple layers of intermediaries standing between the farmer/producer/rancher's fields and the consumer's dinner table. Numerous and varied stakeholders make and implement decisions that best serve their unique business and personal interests and needs, but may or may not be consistent with a goal of optimizing access to healthy food options for all members of the community.

Food policy councils, local food councils and other similar organizations are faced with the challenge of understanding and making sense of the multiple and sometimes conflicting perspectives of food system stakeholders, assessing current assets and gaps in the food system, and coming up with creative solutions that build upon current strengths, fill the gaps, and help to bring diverse stakeholders to the table to identify common goals and solutions that they can support.

A comprehensive assessment of the local food system is an important early step that may provide members of the food council with new information and enhanced understanding of their local food system. It should also help to provide council members with a shared vision from which to begin their work, and it may be useful as a baseline measure from which future progress can be gauged.

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.

Through the community engagement forums and community survey, Barton County residents and community stakeholders have provided valuable input and numerous suggestions about what changes they would like to see in the community food system. The results suggest that Barton County consumers are engaged and interested in seeing positive change, and perhaps ready to engage in helping to plan and implement those changes.

The results and findings from this community food assessment provide many data points that help to describe the community food system in Barton County, and begin to identify current assets and gaps within that food system. In addition to the substantial amounts of data and information pulled together from multiple secondary data sources, engaged community members have shared their thoughts and perspectives on what is currently working well and what they would like to see changed. The challenge for the Be Well Barton County coalition will be to study and digest all of this information, and then use it to establish priorities and formulate action plans that lead to a stronger community food system that serves the needs of all members of the community.

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