

Riley County Food System Assessment

April 2022

This report offers a glimpse of the local food system in Riley County, Kansas, and provides an update to the 2017 Community Food System Assessment.

The data presented in this assessment includes both secondary data collected by the Census, USDA, etc. alongside primary data collected through a citizen survey conducted in 2021 that was taken by over 2,000 residents.

These findings will be used to inform the **Food System Master Plan: Riley County and the City of Manhattan, Kansas**—a roadmap for local actions and policy changes to promote a healthy, vibrant local food system.



Prepared for the Food and Farm Council of Riley County and Manhattan, Kansas.

With funding from Blue Cross Blue Shield of Kansas, Pathways to a Healthy Kansas Initiative.

Prepared by New Venture Advisors.



Population in 2019

71,959

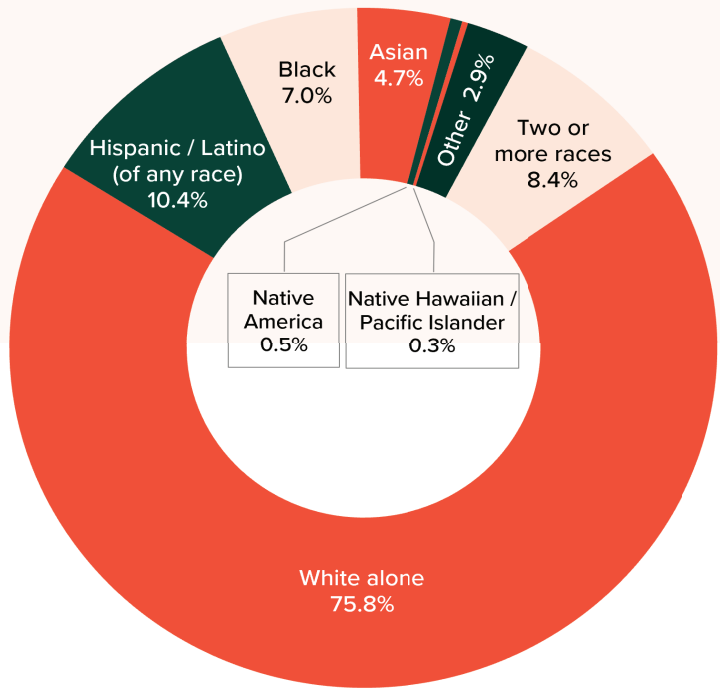


up 4.4%
since 2010

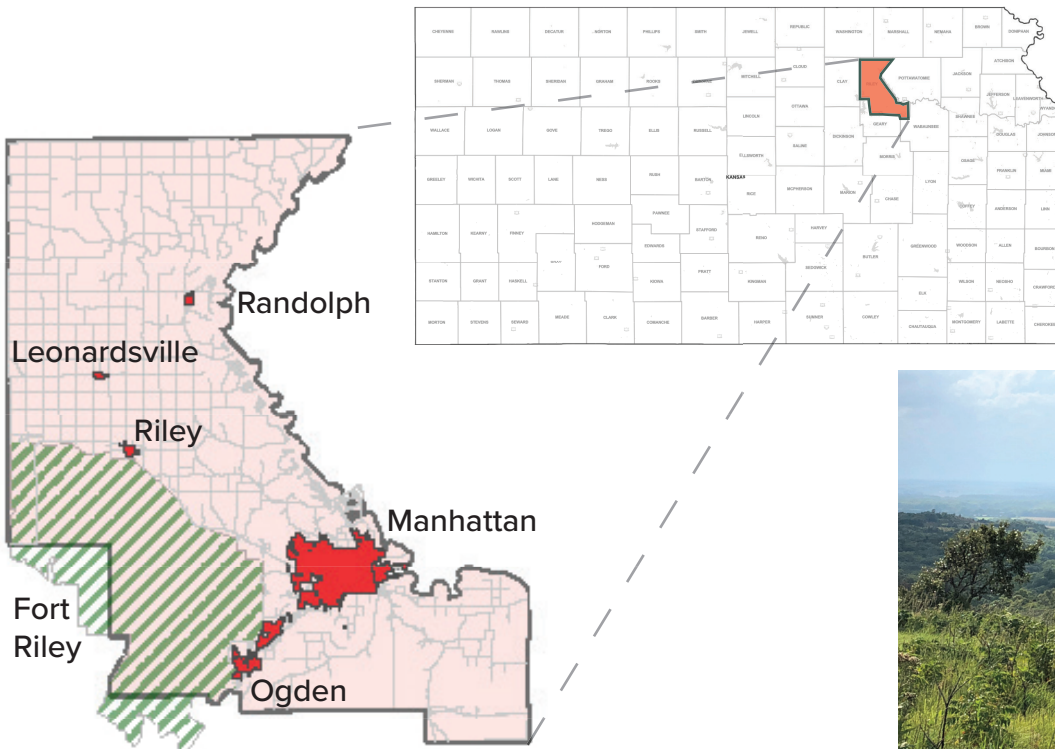
Local Region

Riley County is located in northeast Kansas, and is home to Kansas State University and includes a portion of Fort Riley, a U.S. Army base. These two institutions exert strong influence on the demographics, culture, and economics of the region.¹

racial
distribution



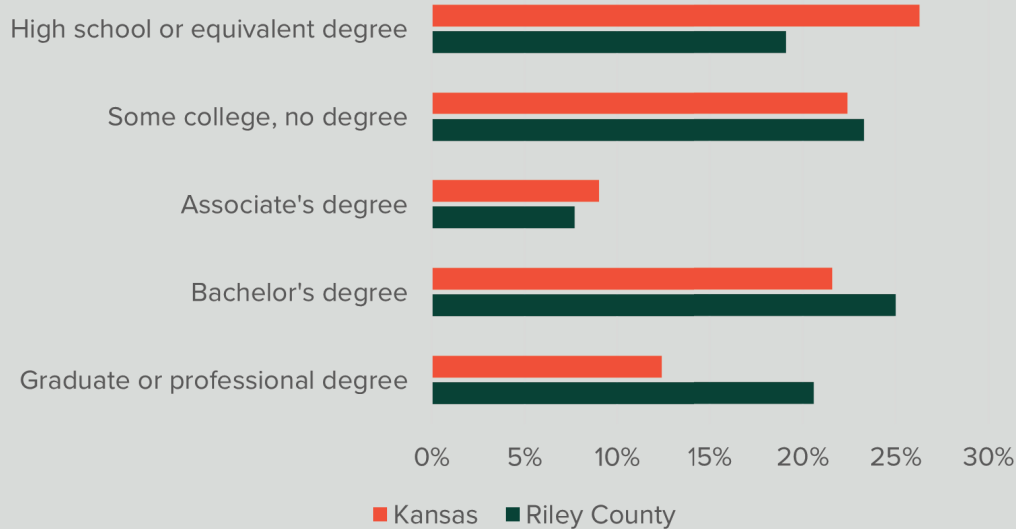
Metric	Riley Co.	Kansas
Median age	25.1	37.2
Employment rate	57.6%	63.5%
Unemployment rate	2.9%	3.9%
Median household income	\$50,920	\$62,087
Overall poverty rate	23.4%	11.4%
Language other than English spoken at home	11.2%	11.9%



Map and photo provided by Manhattan Community Development



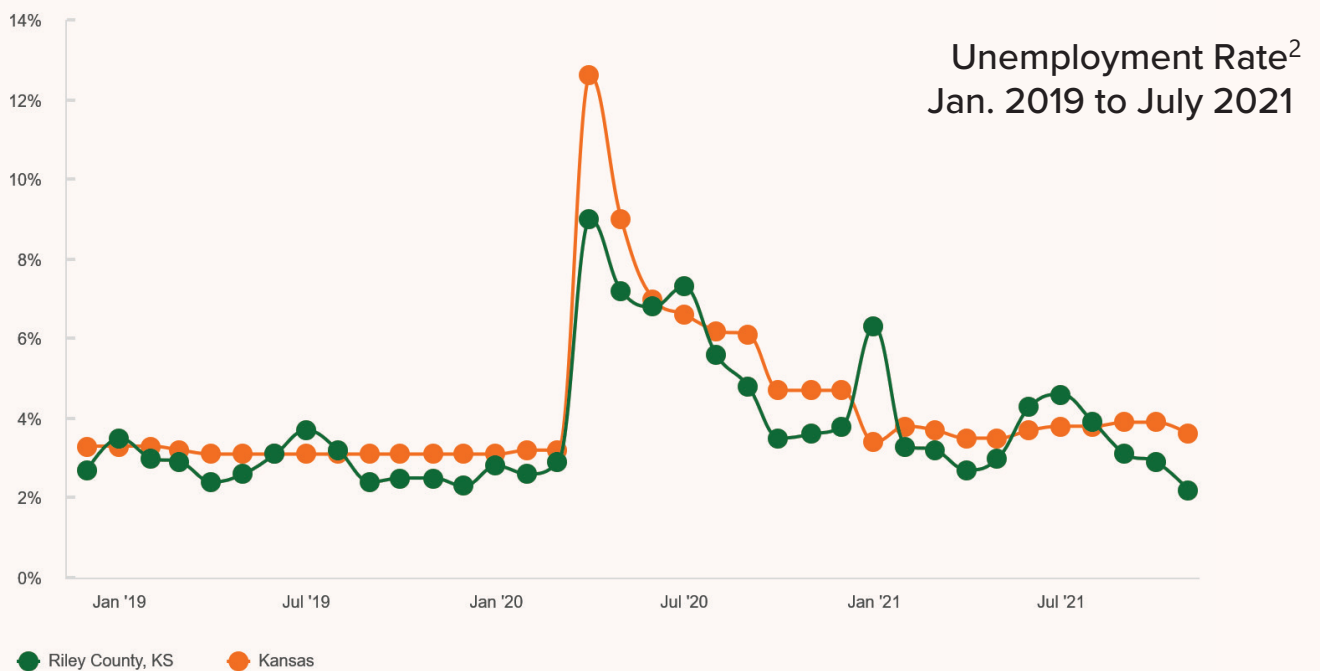
Education Attainment



Key Findings

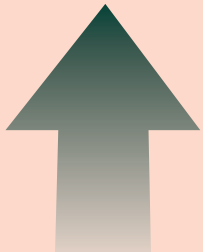
- Riley County is growing. The population is estimated to grow to 78,741 by 2027.
- Residents of Riley County are younger than the rest of Kansas, primarily due to the influx of students and active duty military into the community.
- Riley County’s poverty rate is significantly higher than the state average, and median household incomes are lower than the state average.
- Riley County residents have higher educational attainment than the state average, with a high proportion of residents with bachelor’s degrees and graduate or professional degrees.

Unemployment Rate



No. of Farm Operations in 2017

504



up 2% since 2012

Agricultural Landscape

Farms and farmers are the backbone of our local food system; they are the producers that grow and raise the food we eat. Riley County boasts a rich agriculture sector, with significant production of grain crops, hay, and beef cattle. The vast majority of these producers sell to global markets, and only seven percent of producers are selling directly to consumers within the local region.³

Livestock Operations	No. of Operations
Cattle	211
Pork	10
Sheep	16
Egg Production	57

Produce Operations	No. of Operations	Acres in Production
Vegetable Farms	12	348
Fruit / Orchard Operations	7	6

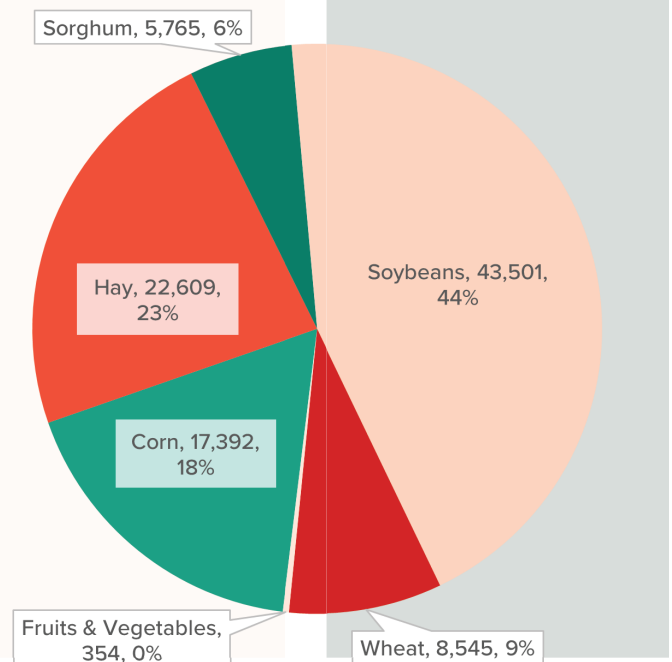
Metrics Snapshot

Acres in production	214,311
Average farm size (ac.)	425
Median farm size (ac.)	123
Price per acre	\$3,022
Total farm sales in 2017	\$51,171,000
Livestock	\$18,631,000
Vegetables / Fruit	\$1,606,000

Total number of producers	836
No. of new and beginning farmers	213
No. practicing rotational grazing	82
No. of BIPOC* farmers	15
Average age of producers	55.9
Percent farming organically	1%
Percent selling directly to consumers	7%
Average income per operation	\$21,039

*Black, Indigenous, People of Color

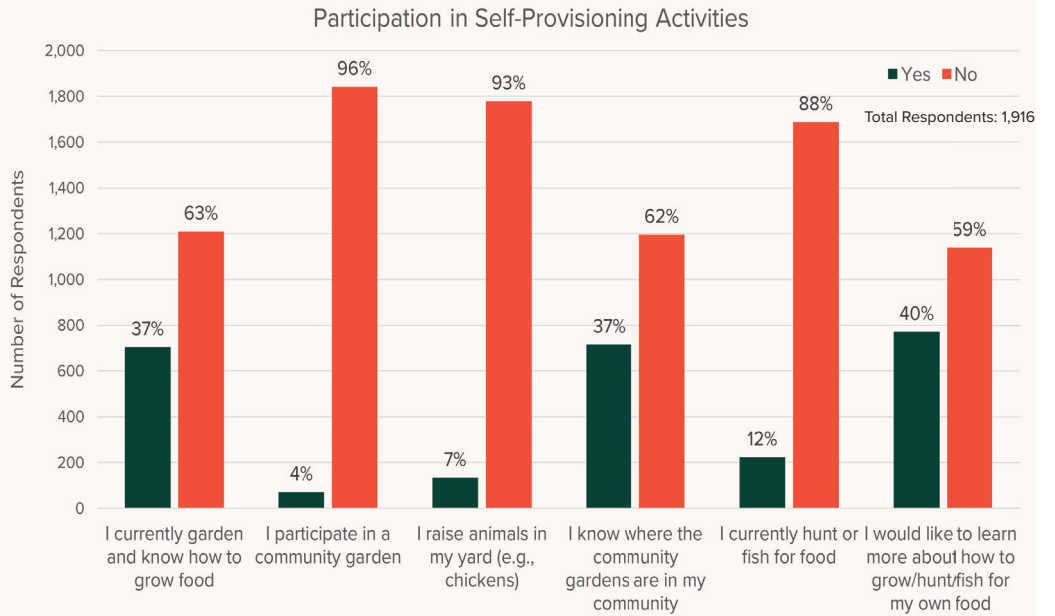
Acres of Crops Harvested
Riley County, 2017



**Food Plan Survey
Highlight: Growing Food**

A total of 2,030 individuals from six cities in Riley County and 12 other surrounding counties took the Master Food Plan survey between July and September 2021. The survey asked respondents about their experiences in the food environment—from growing to eating to disposing of food.

Respondents were asked a series of questions about their participation in growing, hunting, or raising their own food and their interest in learning more about these activities. Full survey results can be accessed at nourishtogether.org



Estimates for unmet demand for locally produced food in Riley County

The New Venture Advisors MarketSizer tool can be used to determine how much local demand for food could be met with the current local supply if routed through robust local food markets.⁴

	Dairy	Meat	Poultry & Eggs	Fruits & Veggies
Local Quotient	0%	172%	0%	14%
Local Food Demand <i>(in millions)</i>	\$ 6.2	\$ 5.7	\$ 2.0	\$ 16.0
Unmet Market for Local Food <i>(in millions)</i>	\$ 6.2	*	\$ 2.0	\$ 13.0

[see table key at lower right]

Key Findings

- Most farm operations in the county produce commodities for global markets.
- There are 12 farms in the county engaged in vegetable production, and 7 fruit/orchard operations. Together they generate \$1.6 million in sales.
- Some sustainable agriculture techniques (i.e. rotational grazing) are in use, but only 1% of farms are certified organic.
- Farmers are aging (average = 55 years), but 213 producers in the county are new or beginning farmers.
- Local demand for all categories of food far outstrips supply, except in the case of meat production. However, most meat produced in the county is sold out-of-state and not through local channels.

Local Quotient is the percentage of category food sales produced within the area. A result greater than 100% indicates that local demand could be met entirely with local production if it were directed to these markets through a local food system.

Local Food Demand is the approximate value of category wholesale sales which could come from local sources if supply were available.

Unmet Market for Local Food is the difference between the value of local food demand and area production (supply).



Photo by Anna Ivanova from Noun Project

Food Access

Access to healthy food options is essential to healthy eating habits which are, in turn, essential to good health. Food access considers a consumer’s ability to physically get to places where healthy foods are available for purchase, the affordability of healthy food options; and the availability of assistance to ensure consumers have the means to purchase healthy food. The Covid-19 pandemic impacted food access throughout Riley County and the nation, causing food insecurity to rise.

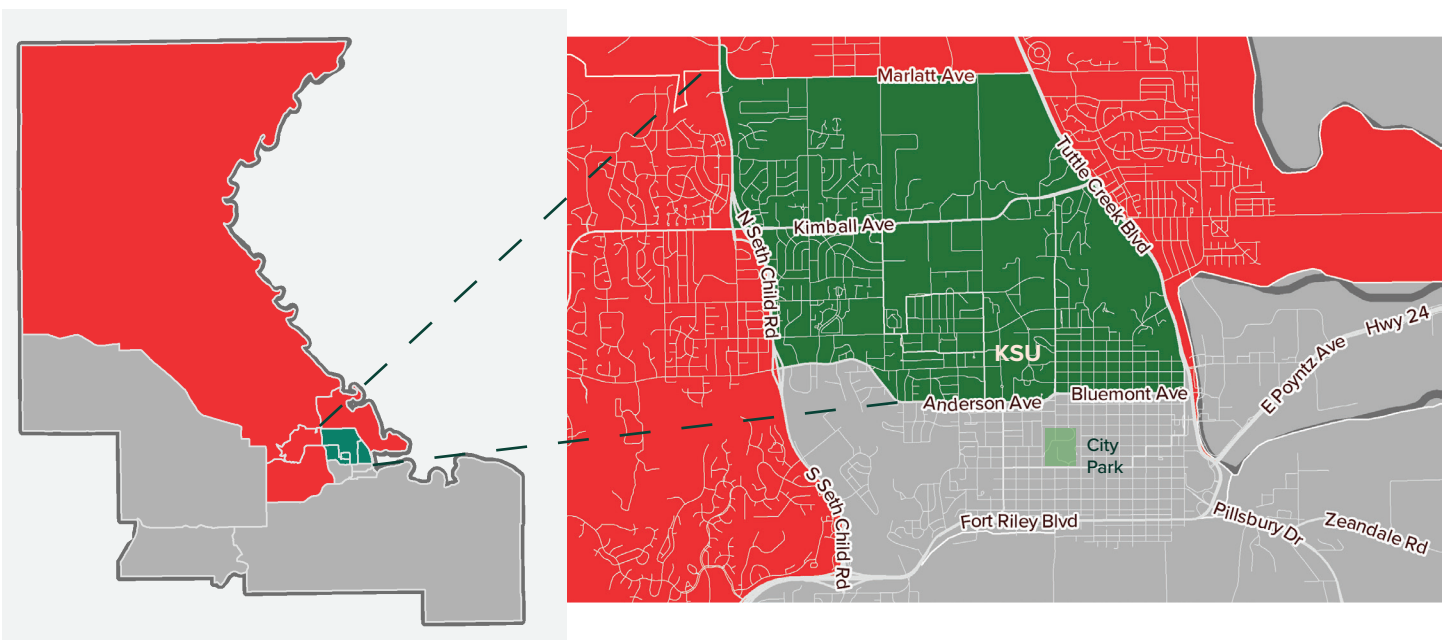
The Need⁵

Overall food insecurity rate, 2019	13.5%
Projected overall food insecurity rate, 2021	14.8%
Childhood food insecurity, 2019	16.4%
Projected childhood food insecurity, 2021	18.3%

Two Snapshots of Low Access

On the left is Riley County broken into Census tracts. The orange tracts indicate **low access** to food. “Low access” is defined as tracts in which at least 500 people or 33% of the population lives farther than 1 mile (urban) or 10 miles (rural) from the nearest supermarket.

On the right is a zoom-in to the City of Manhattan. The four green tracts indicate both **low-access** and **low-income** tracts.



Source: Economic Research Service (ERS), U.S. Department of Agriculture (USDA), Food Access Research Atlas, <https://www.ers.usda.gov/data-products/food-access-research-atlas/v>

Housing Units w/o complete kitchen facilities	626
Housing Units w/o complete plumbing	655

Low Access to Stores by Group

Children	10.2%
People	40.1%
Low-income people	18.7%
Households w/o a car and low access to store	2.1%

Low Access by Race

American Indian / Alaska Native	0.3%
Black or African American	3.21%
Native Hawaiian / Pacific Islander	0.1%
White	34.8%
Multiracial	2.3%
Asian	1.7% ⁶



Photo provided by Food and Farm Council of Riley County and the City of Manhattan, Kansas

The SNAP “Gap” (Supplemental Nutrition Assistance Program) is the gap between eligible residents and actual SNAP participants. The gap is 16,396 individuals.⁷

Note: SNAP eligibility depends on income (130 percent federal poverty level) and household size as well as other conditions; however, not all data are available for the estimate. Instead, individuals living in households at or below 125 percent of the federal poverty level (FPL) was used to best approximate SNAP eligibility.



Local Food Access Programs



Photo provided by Common Table



Photo provided by Konza Student Table



Photo provided by Ogden Community Meal

- The Flint Hills Breadbasket Food Pantry in Manhattan distributed more than 1,013,322 pounds of food in 2020 and served approximately 22,394 individuals.
- Harvesters—The Community Food Network services a mobile food pantry eight times a month in various sites around Riley County plus monthly at the Kansas State campus (during academic semesters).
- Three new food pantries opened in Manhattan during the summer of 2021 with a client choice model of food selection.
- Common Table is a community coalition of churches that offers hot evening meals and sack lunches seven days a week at various sites around Manhattan. Common Table is open to all without restrictions.
- Ogden Community meal is offered once/month. This meal is open to all without restrictions.
- Konza Student Table is a community collaborative of partners serving noncontact delivery drive through or walk up hot meals and a brown bag breakfast to-go. Konza Student Table is offered once a week to all KSU students, faculty and staff who need a meal. Since Sept 2020, Konza Student Table has served over 28,000 meals.
- Cats' Cupboard, a KSU food pantry, provides perishable and non-perishable food, hygiene products, and gently used kitchen supplies to currently enrolled students, staff, faculty, and visiting scholars. The Purple Pantry is their satellite food pantry housed in the College of Veterinary Medicine.
- The Community Food Basket is a food pantry serving area residents from the western boundary of Manhattan to the northern part of the county. Community Food Basket is available to low-income community members that provide proof of address.
- Ogden Friendship House is a food pantry, thrift store, and emergency financial aid.

Local Food Access Programs (continued)

Kansas Senior Farmers Market Nutrition Program (KSFMNP)

provides a once annual benefit to low-income seniors to purchase fresh fruits and vegetables, herbs and honey from certified farmers at Farmers Markets in Kansas

- Four markets/farm stands participated in Riley County in 2021.
- Nine approved vendors accept SFMNP coupons.
 - 207 seniors participated in Riley County.
 - At \$35 worth of coupons, that would have been \$7,245 spent with Riley County farmers in 2020.

Double Up Food Bucks (Supplemental Nutrition Assistance Program (SNAP) tokens are doubled up to \$25 to redeem on locally grown produce. Double Up is also available at select grocery stores and farm stands)

- The Downtown Farmers Market of Manhattan participates in the Double Up Food Bucks Program, offered at both the Saturday and Wednesday markets.
- In 2020:
 - \$14,168 in SNAP benefits were utilized at the market.
 - \$8,903 in DUFB tokens were utilized at the market.
 - Total = \$23,071 spent by low-income households at the Manhattan Farmers Market.

Additionally...

- 21 Blessing Boxes throughout the county provide nonperishable foods in a small outdoor pantry setting.
- Two community gardens in Manhattan.



Photo provided by Downtown Farmers Market of Manhattan



Photo provided by the Food and Farm Council of Riley County and Manhattan, Kansas

Key Findings

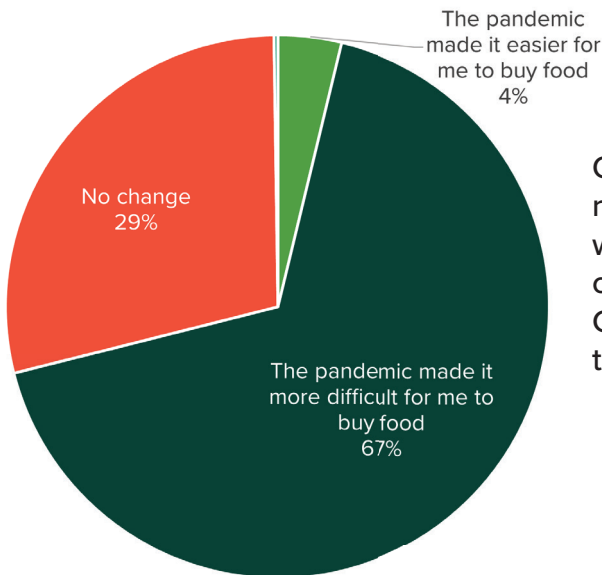
- Food insecurity jumped as a result of the Covid-19 pandemic.
- Four census tracts (all within Manhattan) qualify as “Low Income” and “Low Access”, which means that 21,239 residents may struggle to access food.
- Rural areas of the county also qualify as “Low Access”, as residents may have to drive 10+ miles to the nearest grocery store.
- Multiple community efforts exist to support community members’ access to food, including local pantries and federal assistance programs.

Food Plan Survey Highlight: Access to Food

A total of 2,030 individuals from six cities in Riley County and 12 other surrounding counties took the Master Food Plan survey between July and September 2021. The survey asked respondents about their experiences in the food environment—from growing to eating to disposing of food. Full survey results can be accessed at nourishstogether.org.

Non-white residents of Riley County reported a higher likelihood of worrying about food running out or having food run out than their white counterparts. The Covid-19 pandemic has made it harder for all residents to buy the food they like, but white respondents reported the lowest challenges to buying food.

Respondents shared their experiences of food insecurity, and the barriers that make it more difficult for them to access the food they want to eat:

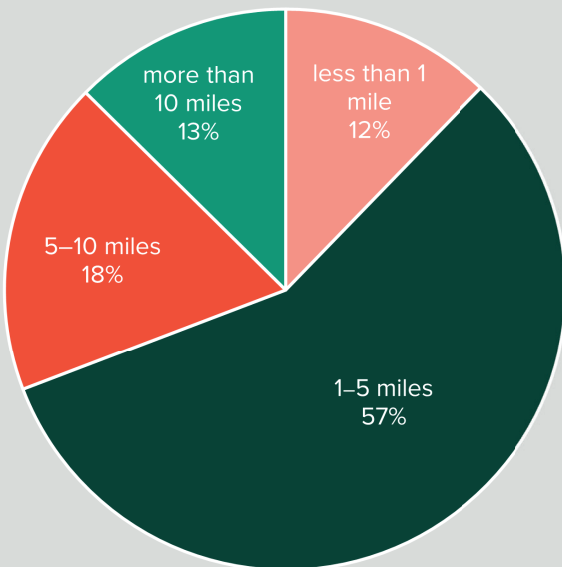


Of those respondents who reported “often” or “sometimes” worrying about food running out, they were asked how the Covid-19 pandemic impacted their ability to buy food

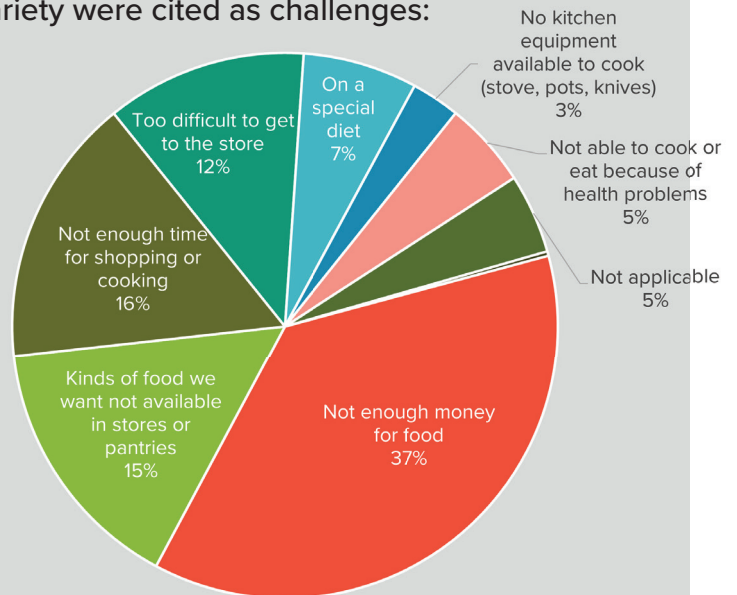
31% of respondents were “often” or “sometimes” worried that food would run out before they had money to buy more

And within the past 12 months, **19%** of respondents actually did run out of food and didn’t have money to buy more

91% of survey respondents utilize a personal vehicle to access food resources, and travel various distances to access the grocery store:



Respondents’ reasons for not being able to access the food they want varied, but the cost of food, lack of time, lack of transportation, and food variety were cited as challenges:





Food Business and Consumption

Consumption is closely linked to the types of retail options available. Understanding the food retail landscape informs how consumer dollars are spent on food. The existing landscape of food infrastructure and retail outlets can signal the maturity of the local food system. Understanding what exists can help identify gaps in the system, and show where there are potential market opportunities for local producers.⁸

There are
2
meat processors
(USDA certified)
meat processing, meat slaughter, poultry processing

There is
1 year-round farmers market
held in Manhattan

There is
1
flour mill
Kansas State Grain Science Center
Hal Ross Flour Mill

There are
2 CSAs
(Community-Supported Agriculture) businesses

There are
5
operations with value-added products*

There are
3
on-farm markets

Local food infrastructure



*"value-added" means a change in the physical state or form of the product (such as milling wheat into flour or making strawberries into jam).

Food retail landscape



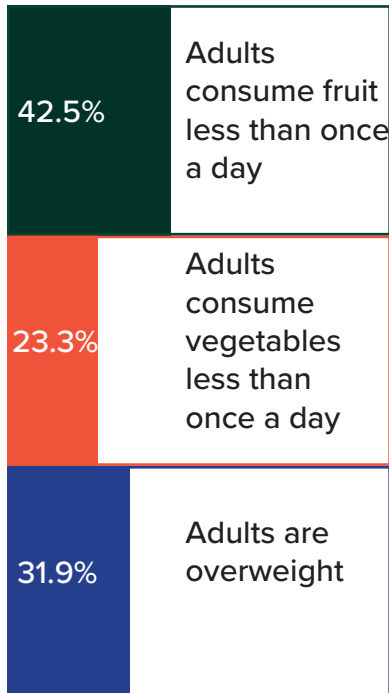
8 grocery stores
and
2 specialty food stores

12–15
food trucks

49
fast food restaurants

44
full-service restaurants

Consumption & Health⁹



Key Findings

- Like the rest of the nation, Riley County is experiencing the obesity epidemic, and residents struggle to eat the amount of fruits and vegetables recommended to maintain a healthy diet.
- The region lacks the infrastructure needed to build a strong local food system. The current farmers market, CSAs, and farm stands have limited hours, which limits access to local foods. There are 162 registered farmers market vendors with about a hundred of those offering food/beverage at the market. The landscape indicates we have primary local vendors serving our area outside the county borders.
- All of the grocery stores are large chains with limited capacity for purchasing locally from farmers.
- 65 of the restaurants, caterers, and food trucks in Riley County are locally owned. Many participate in the Restaurant Champion Program (an initiative of the Food & Farm Council), which presents an opportunity to increase local food purchasing.



Photo provided by Downtown Farmers Market of Manhattan



Photo provided by Harvesters – The Community Food Network



Photo provided by the Food and Farm Council of Riley County and Manhattan, Kansas

Food Plan Survey Highlight: Healthy Food Consumption

Respondents shared their food purchasing habits, and their perceptions of the health and nutrition of these food sources.

The majority of respondents strongly agreed or agreed that they eat healthy foods and have access to fresh fruits and vegetables, but fewer respondents agreed that the community provides sufficient options for healthy eating. Respondents aged 40–59 were the largest group to report not eating healthily or not being able to find healthy foods in their community. Black/African American, Hispanic, and Asian/Pacific Islander groups reported less availability of fresh fruits and vegetables in their community than their White counterparts.

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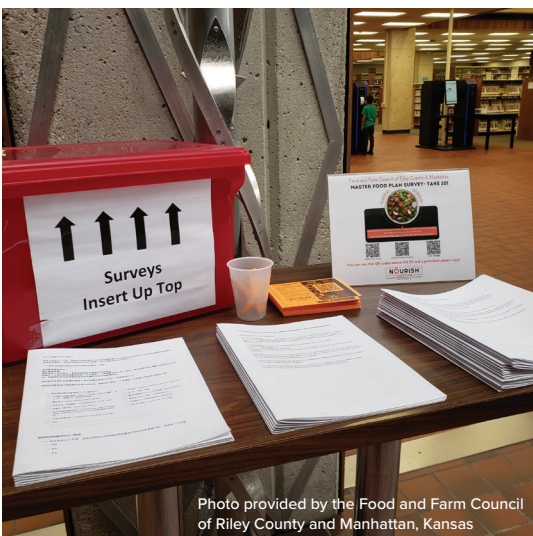
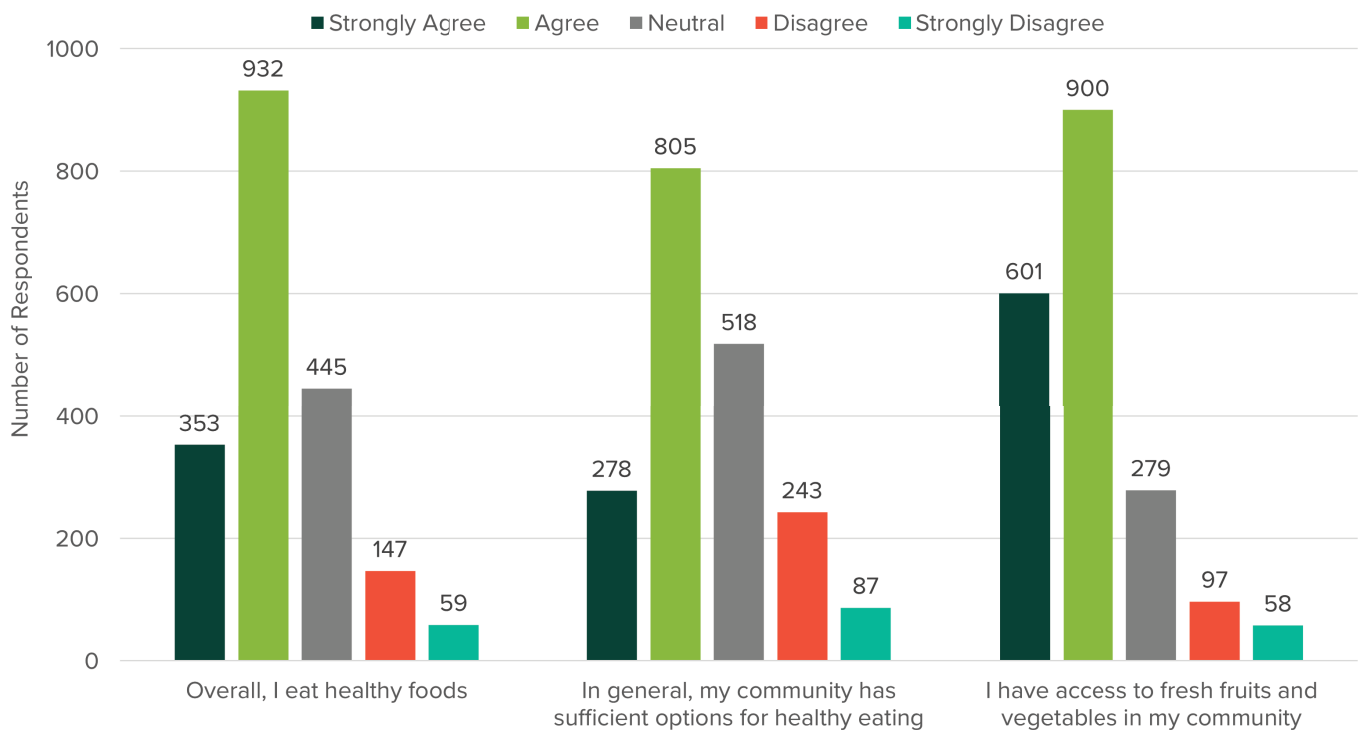


Photo provided by the Food and Farm Council of Riley County and Manhattan, Kansas

Top food sources utilized by respondents:

- Grocery store
- Restaurant or diner
- Fast food restaurants
- Farmers' market, farm stand, Community Supported Agriculture (CSA) program
- Cafeteria or dining service

Food Waste

National studies suggest that up to 40% of all food produced is wasted. Loss occurs at each step in the food system. The amount of waste varies by the type of product, ease of transportation, and how long it stays good on the shelf or in the refrigerator.

Farmers may leave a crop in the field if they lack labor to harvest or a market to profitably sell their products. While approximately 40% of food waste occurs from the industrial sector, the largest volumes of food waste occur at the consumer or household level. Environmental, social, and economic costs arise when the food we produce ends up in landfills.¹⁰



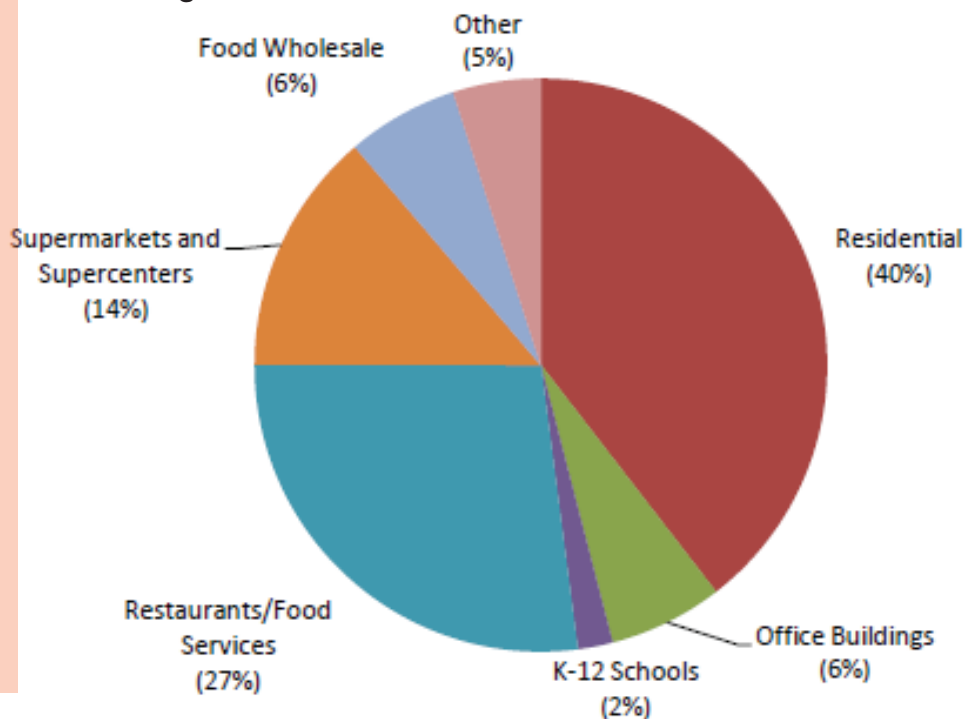
Key Trends

- The average household wastes 338 pounds of food per year.
- Although local-level measurements of food waste were not available, extending national per capita waste estimates to local population numbers suggest that annual food waste in Riley County might be in the neighborhood of 21 million pounds, with a value of \$27.8 million.
- Consumer confusion about “date labeling” on packaged foods, such as “use by” or “best by,” contributes to food waste
- Improper storage can make perishable foods spoil more quickly
- Composting is one way to redirect food waste. In Riley County there is one facility that composts yard waste and manure but none that compost food waste.



Photo source: <https://www.usda.gov/media/blog/2021/10/28/usda-roundtable-highlighted-food-waste-reduction-success-stories>

Percentage distribution of wasted food generation, excluding the industrial sector¹¹



Food Plan Survey Highlight: Food Waste

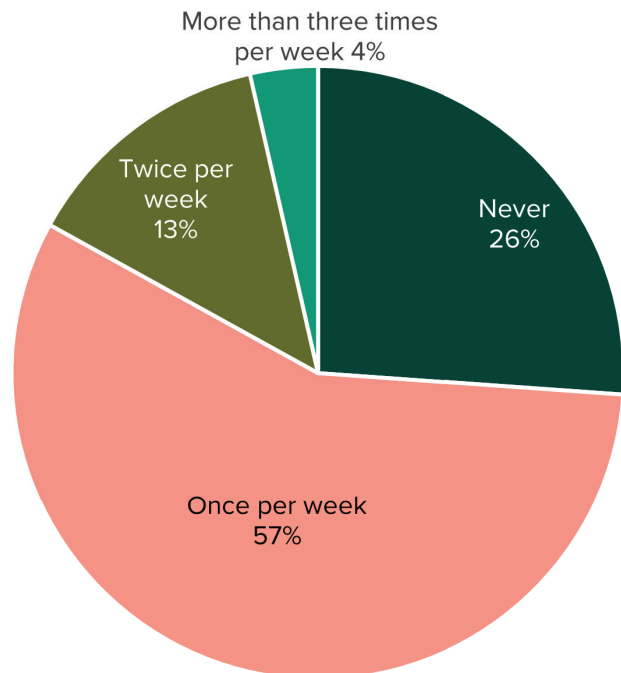
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Respondents shared their food waste frequency, reasons for wasting food, and barriers to food waste composting and food packaging recycling.

Top reasons for wasting food

- I bought too much food and couldn't eat it before it spoiled.
- It was past the "best if used by" date and I threw it away.
- The food quality was questionable (i.e. the fruit was bruised).
- Our schedule changed and we didn't get meals made as planned.
- Restaurant portions were too big and I couldn't eat it all.

Frequency of food waste generation



Top barriers to recycling

1. I don't know where in the community to go to recycle.
2. I can't afford the cost to recycle.
3. I'm unsure of what can be recycled.
4. It's not a priority for me and my family.

58% of respondents currently recycle, while 42% do not recycle

21% of respondents currently compost, while 79% do not compost at all.

If a composting pickup program were offered, respondents were generally unwilling to pay much for such a program:

Less than \$10/month	570	31%
\$10-\$20/month	114	6%
\$20-\$35/month	10	1%
I would not pay for this service	1,173	62%

Total respondents: 1,867

Notes:

1. Data in the Local Region section of this report was gathered from the U.S. Census Bureau (census.gov). Profiles for Riley County, Kansas, can be found at <https://data.census.gov/cedsci/profile?g=0500000US20161> (accessed March 9, 2022) and <https://www.census.gov/quickfacts/riley-countykansas> (accessed March 9, 2022).
2. Unemployment rate data was gathered from the U.S. Bureau of Labor Statistics (<https://www.bls.gov/lau/tables.htm>).
3. Data in the Agricultural Landscape section of this report was gathered from the USDA National Agricultural Statistics Service 2017 Census of Agriculture (www.nass.usda.gov/Publications/AgCensus/2017/). A profile of Riley County, Kansas, can be found at www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/County_Profiles/Kansas/cp20161.pdf (accessed March 9, 2022), and “County Summary Highlights” for Kansas can be found at www.nass.usda.gov/Publications/AgCensus/2017/Full_Report/Volume_1,_Chapter_2_County_Level/Kansas/st20_2_0001_0001.pdf (accessed March 9, 2022).
4. The MarketSizer tool can be accessed at www.newventureadvisors.net/tools/.
5. Feeding America, “State-by-State Resource: The Impact of Coronavirus on Food Insecurity,” accessed March 9, 2022, feedingamericaaction.org/resources/state-by-state-resource-the-impact-of-coronavirus-on-food-insecurity/.
6. Economic Research Service (ERS), U.S. Department of Agriculture (USDA), Food Environment Atlas, last updated December 18, 2020, <https://www.ers.usda.gov/data-products/food-environment-atlas/>.
7. Kansas Health Institute’s analysis of the U.S. Census Bureau’s American Community Survey 2019 (2015–19) 5-Year Estimates (<https://www.census.gov/programs-surveys/acs>), email message to New Venture Advisors, [January 25, 2022].
8. Data for local food infrastructure was gathered from Kansas Department of Agriculture, “Kansas Farm Facts,” accessed March 9, 2022, agriculture.ks.gov/docs/default-source/ag-marketing/kansas-farm-facts-2019.pdf?sfvrsn=32b689c1_4 and USDA Agricultural Marketing Services, “Local Food Directories | Agricultural Marketing Service,” Agricultural Marketing Service, 2021, <https://www.ams.usda.gov/services/local-regional/food-directories-listings>, accessed September 7, 2021. Data for food retail landscape was gathered from USDA Economic Research Service, Food Environment Atlas, last updated on December 18, 2020, <https://www.ers.usda.gov/data-products/food-environment-atlas/>.
9. Kansas Health Matters, County Dashboard, Riley County, Kansas, accessed March 9, 2022, www.kansashealthmatters.org/index.php?module=indicators&controller=index&action=dashboard&id=83319366815456082&card=0&localeId=1020.
10. Data in the Food Waste section of this report was gathered from U.S. Environmental Protection Agency, “2018 Wasted Food Report,” November 2020, https://www.epa.gov/sites/default/files/2020-11/documents/2018_wasted_food_report-11-9-20_final_.pdf.
11. Ibid., 16.