

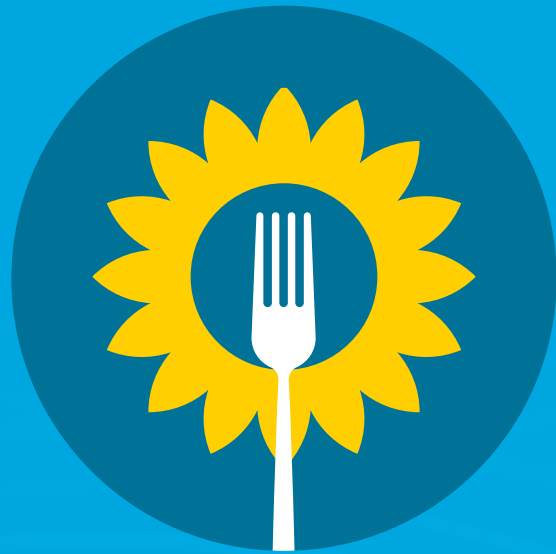


ENVIRONMENTAL SCAN
OF SECONDARY DATA



HUNGER FREE
K A N S A S

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AUTHORS

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ABOUT THIS REPORT

This report includes an executive summary, an introduction, a methodology section, data results across four domains, and a discussion and conclusions section. Additionally, Appendix A, page A-1, includes a list of all findings in this report, Appendix B, page B-1, includes a list of all indicators and their sources within the report and Appendix C, page C-1, includes all report endnotes.

Each data results section begins with a narrative description providing an overview of literature and some equity considerations for indicators within the domain. The key findings in each domain also are summarized in the narrative section to provide a preview of the section. Each indicator in these sections includes key findings, a figure title, a table or chart, and technical notes for that indicator that provide essential information for understanding the data source.

HELPFUL TERMINOLOGY

Below are definitions of terminology used throughout this report, provided to assist readers in understanding the content.

- **Boil Water Advisory (BWA)** – BWAs are issued to inform the public when a risk from exposure to harmful microorganisms may be present in the drinking water.¹
- **Cisgender** – Describes an individual whose gender identity aligns with their sex assigned at birth.²
- **Community Eligibility Provision (CEP)** – A federal program available for schools and school district sites in low-income areas. Sites participating in CEP can provide all enrolled students free breakfast and lunch without requiring students to apply.³
- **Child and Adult Care Food Program (CACFP)** – A federal program that reimburses participating child care, day care home and adult day care center sites for healthy meals and snacks served to children and adults.⁴
- **Food Banks** – Warehouses that collect and distribute food to charities. Also can describe smaller charitable organizations serving clients directly,⁵ that distribute donated and purchased groceries directly to food insecure families.⁶
- **Food Sufficiency** – Having enough food to eat.⁷
- **Food Security** – Having access to enough food to support an active, healthy life.⁸
- **Food Systems** – Food systems are the interconnected network of people, behaviors and goods that take food from farm to table and operate within social, political, economic and environmental contexts.⁹
- **Hunger** – The USDA describes hunger as an “individual-level physiological condition that may result from food insecurity.”¹⁰

- **Intersectionality** – A framework for understanding power and identity through the multiple social, economic and political spaces with which someone identifies.¹¹
- **Kansas Department of Health and Environment District Office Regions** – Six regions across Kansas overseen by the Kansas Department of Health and Environment (KDHE)'s District Offices. District offices are strategically located throughout Kansas to provide services in an efficient, responsive manner and to provide access to residents across the state.¹²
- **Low-Income, Low Access Census Tracts (LILA)** – “Low-income” is defined by the poverty rate and median family income of a tract. “Low-access” means a significant number or portion of the population has limited access to a food store (supermarket, supercenter, or large grocery store) – i.e., they live more than one mile from a food store in urban areas or more than 10 miles in rural areas. LILA tracts are also discussed using a half mile, 20 mile and vehicle access to further assess access.¹³
- **Nutritional Security** – Having equitable and stable access, availability and affordability to eat nutritious foods that support well-being.¹⁴
- **Redlining** – A term referring to the now-outlawed, early 20th century real estate appraisal standards in which federal agents of the Home Owners’ Loan Corporation (HOLC) designated neighborhoods grades ranging from A for “Best” in green to D for “Hazardous” in red. HOLC agents were asked to grade a neighborhood as red (grade D) if they “perceived an infiltration” of people who were Black, were immigrants or had low income. People living in neighborhoods designated grade D were systematically denied access to capital investment for housing and economic opportunity. Redlining was banned in 1968.¹⁵
- **Social Determinants of Health** – The nonmedical factors that influence health outcomes. Social determinants of health are the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping daily life. This includes economic policies and systems, development agendas, social norms, social policies, and political systems.¹⁶
- **Summer Food Service Program** – The Summer Food Service Program (SFSP) provides free, nutritious meals and snacks to help children in low-income areas get the nutrition they need to learn, play and grow throughout the summer months when they are out of school.¹⁷
- **Sundown Towns** – Towns and cities with ordinances that allowed people who are part of a racial or ethnic minority group to work in the city during the day but required them to leave the city limits before nightfall. These ordinances accompanied other policies during the Jim Crow era following the Emancipation Proclamation of 1863.¹⁸
- **Supplemental Nutrition Assistance Program (SNAP)** – SNAP provides food benefits to low-income families to supplement their grocery budget so they can afford nutritious food essential to health and well-being.¹⁹

- **Supplemental Nutrition Assistance Program Online Purchasing** – Originally a pilot program available to only eight states (Alabama, Iowa, Maryland, Nebraska, New Jersey, New York, Oregon and Washington), SNAP online purchasing has expanded to all 50 states and the District of Columbia as of June 2023.²⁰ The program is designed to increase access to food options and increase convenience for SNAP households.²¹
- **Temporary Assistance for Needy Families (TANF) Program** – A program that offers cash assistance for low-income families with children that meet specific income and limited resource requirements.²²
- **Transgender** – Describes a person whose gender identity, gender expression or behavior does not conform to that typically associated with the sex to which they were assigned at birth.²³
- **Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)** – A federal nutrition program that provides nutrition and health education, healthy food and other services to families who qualify.²⁴





EXECUTIVE SUMMARY

THE PURPOSE OF THIS REPORT is to inform stakeholders of the Hunger Free Kansas Initiative.

The initiative seeks to harness the existing and extensive Kansas food system leadership infrastructure and empower communities to address the systemic causes of food insecurity. This initiative involves subject matter experts, leaders and stakeholders across Kansas who are collaboratively designing the initiative. The report looks at data across four domains: 1) demographics, 2) hunger, nutrition and food insecurity, 3) food access infrastructure, and 4) wealth development. This report centers equity in data analysis by describing community members' identities and providing disaggregated data when possible. By focusing on equity in data analysis and describing community members' identities, the report helps in understanding the unique and varied needs of different demographic groups. This nuanced understanding is essential for developing programs and policies that are truly inclusive and effective. The report also explores the concept of hunger through various definitions, including:

Food Sufficiency – Having enough food to eat;

Food Security – Having access to enough food to support an active, healthy life; and

Nutritional Security – Having equitable and stable access, availability and affordability to eat nutritious foods that support well-being.²⁵

These areas are examined by assessing data related to the programs, policies, systems and physical environments in which Kansans live and work, as well as the social determinants of health that contribute to wealth building within a community.

REPORT KEY FINDINGS:

- **Food Insecurity:** More than 1 in 10 (13.4 percent) Kansas children experience food insecurity. Twelve of the 16 counties in the Southeast Region* have food insecurity rates greater than 15.1 percent. The food insecurity rate among Latino or Hispanic Kansans is 15.0 percent. Nearly 1 in 4 (24.0 percent) Black Kansans experience food insecurity. *Source: Feeding America, 2021.*
- **Food Insufficiency:** About 1 in 10 (12.5 percent) Kansas adults with children reported food insufficiency, which means sometimes or often not having enough to eat. Nearly 1 in 3 (29.6 percent) Kansas adults identifying as transgender reported food insufficiency. About 1 in 3 (35.0 percent) Kansas adults who have a lot of difficulty walking or climbing stairs reported food insufficiency. *Source: U.S. Census Bureau, 2023.*
- **Breastfeeding:** Both Kansas (22.2 percent) and the United States (25.4 percent) fall short of the Healthy People 2030 goal of 42.4 percent of infants exclusively breastfed during the first six months. Additionally, the rates for any breastfeeding at 12 months are below the Healthy People 2030 goal of 54.1 percent, with Kansas at 36.4 percent and the United States at 37.6 percent. *Source: Centers for Disease Control and Prevention (CDC), 2020.*
- **Supplemental Nutrition Assistance Program (SNAP) Online Purchasing:** Kansas ranks sixth in the U.S. for percent of SNAP households shopping online (28.8 percent). Of Kansas SNAP redemptions, 7.5 percent use online purchasing. *Source: U.S. Department of Agriculture (USDA), Fiscal Year 2022.*
- **Community Eligibility Provision (CEP) Participation and Eligibility**:** More than half (57.4 percent) of all sites assessed for eligibility in Kansas are eligible or potentially eligible for CEP. However, just 6.9 percent of eligible sites are participating in CEP. *Source: KSDE, 2022–2023.*
- **Low-Income, Low-Access Census Tracts:** Almost 2 in 5 census tracts in the South Central (38.0 percent) and Southeast (39.2 percent) Regions of Kansas are classified as low-income census tracts where a significant number or portion of residents live more than a half mile (urban) or 10 miles (rural) from the nearest supermarket. *Source: USDA, 2019.*
- **Safe Drinking Water Access:** There were 109 boil water advisories in Kansas in 2022. The North Central Region experienced nearly six months (172 cumulative days) in which water distribution systems in one or more counties issued boil water advisories. Water distribution systems in the Northwest Region issued fewer boil water advisories (45 cumulative days) in one or more counties than other regions (80–172 cumulative days). *Source: KDHE, 2022.*
- **Housing Affordability:** About 2 in 5 (43.0 percent) renter-occupied households lack affordable housing in Kansas. *Source: U.S. Census Bureau 2017–2021 5-Year Estimate.*

ABOUT 1 IN 5 (21.7 percent)

Kansas adults who have less than a high school degree reported food insufficiency. Only 5.0 percent of Kansas adults with a bachelor's degree or higher reported food insufficiency. *Source: U.S. Census Bureau, 2023.*

*A map depicting regions can be found on page 27 of this report.

**The Community Eligibility Provision (CEP) is available for schools and school district sites in low-income areas. Sites participating in CEP can provide all enrolled students free breakfast and lunch without requiring students to apply.

INTRODUCTION

The purpose of this report is to provide an overview of data related to food security in Kansas, serving as a resource for stakeholders in the planning of the Hunger Free Kansas initiative. While not a comprehensive analysis, it focuses on the examination of commonly utilized sources in the field. The report also outlines the framing around these sources and provides some context around gaps that exist in publicly available data and equity considerations. This report also applies principles of equity in its examination and presentation of literature pertinent to the four key domains it addresses, along with assessing the accessibility of data.

EQUITY LENS IN THE REPORT

The process for developing the report's focus, analysis and summary of information incorporated an equity lens. Specifically, the equity principles implemented include:

- Engaging stakeholders in suggesting indicators for examination and utilizing reports that recommended indicators to understand inequities.
- Disaggregating data, wherever possible, by race, ethnicity and other socio-demographic factors to help understand potential disparities.
- Providing a high-level context in each section, although not exhaustive, such as a description of policies and systems derived from a literature review. This context should be considered carefully to prevent any potential stigmatization of the populations described in the data.
- Wherever possible, using asset-based terminology and employing first-person language to avoid stigmatizing populations.
- Listing strategies in the report for the initiative to consider in order to advance equity in the future analyses, such as collecting primary data.

For more information about the implementation of these considerations, please refer to the 'Methodology' section of the report. All report findings across all indicators are included in Appendix A, page A-1.

METHODOLOGY

This report includes an overview of secondary data within the four domains of 1) demographics; 2) hunger, nutrition and food insecurity; 3) food access infrastructure; and 4) wealth development as informed by the social determinants of health. Indicator selection within these domains was informed by other reports looking at secondary data related to hunger and food security, project team knowledge of the subject area and KHI's existing data library, as well as conversations with Hunger Free Kansas stakeholders. While the report is structured in these four domains of focus, this analysis is grounded in the framework of social determinants of health and informed from Healthy People 2030's five domains of social determinants of health (Figure 1). Additionally, selection and framing of indicators related to the food system is further informed by the conceptual model of Resilience and Food Security Food Systems by USAID (Figure 2, page 8).

This report includes analysis of 28 indicators. All indicators were extracted through publicly available, secondary data. Analysis approach varied based upon data availability and indicator. In cases where only summarized data were available, KHI reviewed the methodology used and assessed the quality of the indicator analysis. When more detailed data were available, KHI conducted descriptive analysis to provide the estimates in this report. Indicators were calculated and presented at county, regional and statewide levels based on data availability and reader accessibility. All regional estimates were based on Kansas Department of Health and Environment (KDHE) District Office Region Boundaries. For all indicators, priority was given to the most recent data year publicly available and were presented disaggregated by subgroups when possible.

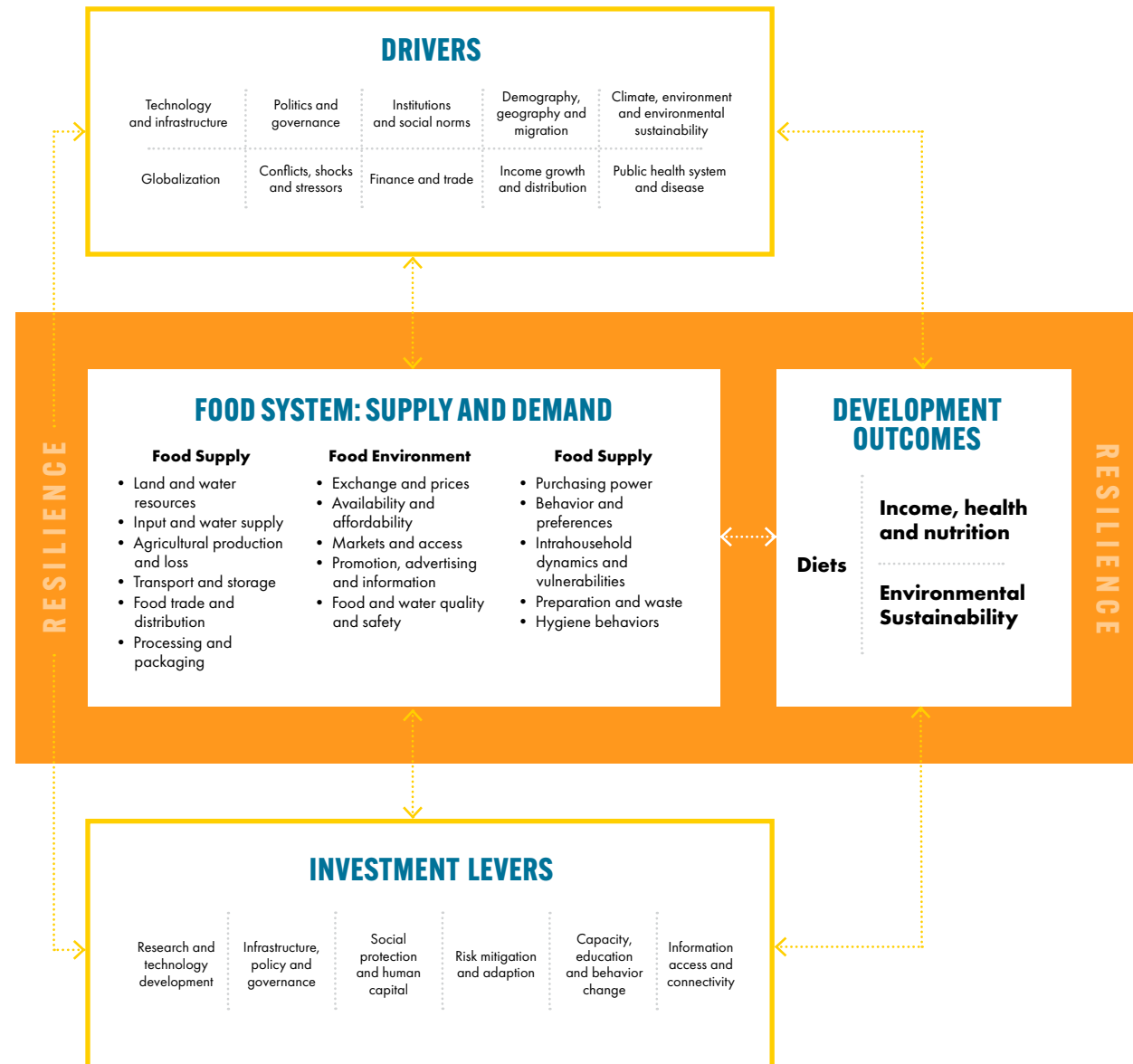
As outlined in the *Equity Lens in the Report* section of this report (page 6), one strategy to implementing equity principles in the report was to use disaggregated data throughout the report. As available and reliable, data were presented by sub-groups (race and ethnicity, age, gender, sex, disability status, etc.) as well as across KDHE District Office Regions. This allows readers to look at indicator outcomes within a specific demographic group and region. Another way that this report incorporates an equity lens is through the narrative framing of each section. Findings from national research, historical context and systematic reviews of the literature are included to provide readers additional context about health disparities and strategies to increase health equity. Additional information about the indicators used in this report can be found in Appendix B, page B-1.

Figure 1. Social Determinants of Health Framework



Source: Healthy People 2030.

Figure 2. USAID Food Systems Conceptual Framework



Source: United States Agency for International Development (USAID) Bureau for Resilience and Food Security (RFS) Food Systems Conceptual Framework, July 2021.

LIMITATIONS

This report is limited to only publicly available secondary data. In public data sources, data may be suppressed due to small sample sizes for privacy purposes. This could particularly affect disaggregated data. As a result, the report might not include disaggregated data for some areas in Kansas. In these cases, the report includes available data for demographic groups and notes excluded groups in the technical note. Another limitation of the small sample sizes for different demographic groups is that confidence intervals for the estimates can increase, resulting in differences in rates that are not statistically significant, where the margin of error overlaps with another estimate.

Additionally, because the data for these indicators come from secondary sources, the analysis is limited to the variables and definitions used and publicly available. A respondent may not see themselves within the provided options for separate questions about their race and ethnicity and may select "other" or an option they feel does not fully align with their identity, or they may choose not to respond to the question at all.²⁶ Additionally, researchers sometimes further categorize responses, and these categorizations may differ from those a participant would select. For example, the U.S. Census Bureau has historically classified all individuals identifying as "Middle Eastern or North African" as White even though this may not align with how these individuals choose to identify.²⁷ Acknowledging these limitations and gaps within the research can aid understanding and help inform opportunities to improve future data collection efforts at local levels.

This report is not comprehensive but rather provides an overview of some of the commonly referenced data related to hunger. As the initiative continues to evolve and through further engagement with community stakeholders, the report can be further expanded to additional indicators or through the collection of primary data which would help to contextualize the data analysis. Primary data collection also allows for increased ability to understand results across the many diverse, intersectional identities of community members. Intersectionality is a framework for understanding power and identity through the multiple social, economic and political spaces with which someone identifies.²⁸ Although not designed for quantitative methodologies, intersectionality has helped researchers understand the complexities of health disparities with specific health outcomes.²⁹



DEMOGRAPHICS

Demographic data play a crucial role in understanding the past, present and future of communities. In addition to describing the community members' identities, demographic data can help inform understandings of intersectionality and inform community planning, policy and decision making.³⁰ Although these data are limited at local levels due to smaller sample sizes, national studies can help provide understanding of food security experiences across demographic groups. In 2022, for example, households with children, single-parent households, Black and Hispanic households, households with income below the Federal Poverty Level (FPL) and households in rural areas were found to have statistically higher food insecurity rates than the national average of 12.8 percent.³¹ Additionally, community members who have come into contact with the criminal justice system experience increased rates of food insecurity.³² Nationally, a study of disparities in food security between 2003–2016 found that adults identifying as lesbian, gay, bisexual and other sexual minorities were more likely to experience moderate-to-severe food insecurity than their heterosexual counterparts.³³

Understanding the diverse demographics within Kansas and engaging with community members can help better inform decisions to address specific community needs.³⁴ Additionally, exploring community historical context, such as the existence of sundown towns, can help community stakeholders understand lasting impacts of structural racism on health.³⁵ Community discussion and collaboration are essential and can help identify opportunities to leverage existing community assets, particularly in more rural communities where additional resource limitations could exist.³⁶

KEY FINDINGS

- **Age:** Three in 10 people living in the Southwest Region are age 0–19 (30.7 percent) and in the Northwest Region are age 60 and older (28.8 percent). In Kansas overall, about 1 in 4 are age 0–19 (26.3 percent) and age 60 and older (23.4 percent). *Source: U.S. Census Bureau, 2022.*
- **Sex:** Across Kansas overall and regionally, the proportion of males and females are approximately half and half. *Source: U.S. Census Bureau, 2022.*
- **Race and Ethnicity:** About 2 in 5 (41.2 percent) people living in the Southwest Region are Hispanic or Latino. About 1 in 10 people are Hispanic or Latino in Kansas overall (13.0 percent) and in other regions (7.8 to 13.9 percent). *Source: U.S. Census Bureau, 2022.*
- **Peer County Group Designation:** Two-thirds (66.7 percent) of the counties in Kansas are designated as frontier (<6.0 persons per square mile, 37 counties) or rural (6.0 to 19.9 persons per square mile, 33 counties). *Source: Kansas Department of Health and Environment (KDHE), 2020.*

AGE

Key Findings: Three in 10 people living in the Southwest Region are age 0–19 (30.7 percent) and in the Northwest Region are age 60 and older (28.8 percent). In Kansas overall, about 1 in 4 are age 0–19 (26.3 percent) and age 60 and older (23.4 percent).

Figure 3. Percent of Population by Age Group in Kansas and KDHE District Office Regions, 2022

AGE GROUP	KANSAS	NORTH CENTRAL	NORTHEAST	NORTHWEST	SOUTH CENTRAL	SOUTHEAST	SOUTHWEST
0–4	6.0%	6.0%	5.8%	5.8%	6.0%	5.8%	7.1%
5–19	20.4%	19.7%	20.0%	19.5%	20.8%	20.3%	23.5%
20–39	26.9%	31.3%	27.0%	24.6%	26.7%	24.6%	25.3%
40–59	23.3%	19.8%	24.5%	21.3%	23.1%	22.6%	22.5%
60–64	6.3%	5.8%	6.1%	7.1%	6.4%	6.9%	6.0%
65+	17.2%	17.4%	16.5%	21.7%	17.0%	19.8%	15.6%

Note: Percent of population by age group is calculated based on Kansas overall and KDHE District Office Regions. Total population for which age is determined: Kansas = 2,937,150; North Central = 286,278; Northeast = 1,359,721; Northwest = 124,199; South Central = 761,072; Southeast = 232,873; and Southwest = 173,007.

Source: Kansas Health Institute Analysis of U.S. Census Bureau's Vintage 2022 Population Estimates: Annual County Resident Population Estimates by Age, Sex, Race and Hispanic Origin.

SEX

Key Findings: Across Kansas overall and regionally, the proportion of males and females are approximately half and half.

Figure 4. Percent of Population by Sex in Kansas and KDHE District Office Regions, 2022

SEX	KANSAS	NORTH CENTRAL	NORTHEAST	NORTHWEST	SOUTH CENTRAL	SOUTHEAST	SOUTHWEST
Male	50.2%	51.5%	49.9%	50.6%	50.0%	50.0%	51.5%
Female	49.8%	48.5%	50.1%	49.4%	50.0%	50.0%	48.5%

Note: Percent of population by sex is calculated based on Kansas overall and KDHE District Office Regions. Total population for which sex is determined: Kansas = 2,937,150; North Central = 286,278; Northeast = 1,359,721; Northwest = 124,199; South Central = 761,072; Southeast = 232,873; and Southwest = 173,007. These results are based on the 2020 decennial census question What is Person #'s sex? Mark ONE box in which respondents were given the option of Male and Female. The United States Census Bureau advised respondents of the 2020 census to select the box for the biological sex the respondent currently identifies with.

Source: Kansas Health Institute Analysis of U.S. Census Bureau's Vintage 2022 Population Estimates: Annual County Resident Population Estimates by Age, Sex, Race and Hispanic Origin.

RACE AND ETHNICITY

Key Findings: About 2 in 5 (41.2 percent) people living in the Southwest Region are Hispanic or Latino. About 1 in 10 people are Hispanic or Latino in Kansas overall (13.0 percent) and in other regions (7.8 to 13.9 percent).

Figure 5. Percent of Population by Race and Ethnicity in Kansas and KDHE District Office Regions, 2022

RACE AND ETHNICITY	KANSAS	NORTH CENTRAL	NORTHEAST	NORTHWEST	SOUTH CENTRAL	SOUTHEAST	SOUTHWEST
Non-Hispanic White	74.3%	80.4%	74.3%	87.2%	71.9%	84.0%	52.7%
Hispanic or Latino Origin	13.0%	8.9%	11.2%	8.5%	13.9%	7.8%	41.2%
Non-Hispanic Black or African American	5.8%	4.8%	6.9%	1.2%	6.7%	2.2%	2.3%
Non-Hispanic Asian, Native Hawaiian and Other Pacific Islander	3.2%	2.5%	4.0%	0.9%	3.5%	1.2%	1.8%
Non-Hispanic Two or More Races	2.8%	2.9%	2.8%	1.7%	3.2%	3.2%	1.4%
Non-Hispanic American Indian and Alaskan Native	0.8%	0.6%	0.7%	0.5%	0.8%	1.6%	0.6%

Note: Percent of population by race and ethnicity is calculated based on Kansas overall and KDHE District Office Regions. Total population for which race and ethnicity is determined: Kansas = 2,937,150; North Central = 286,278; Northeast = 1,359,721; Northwest = 124,199; South Central = 761,072; Southeast = 232,873; and Southwest = 173,007.

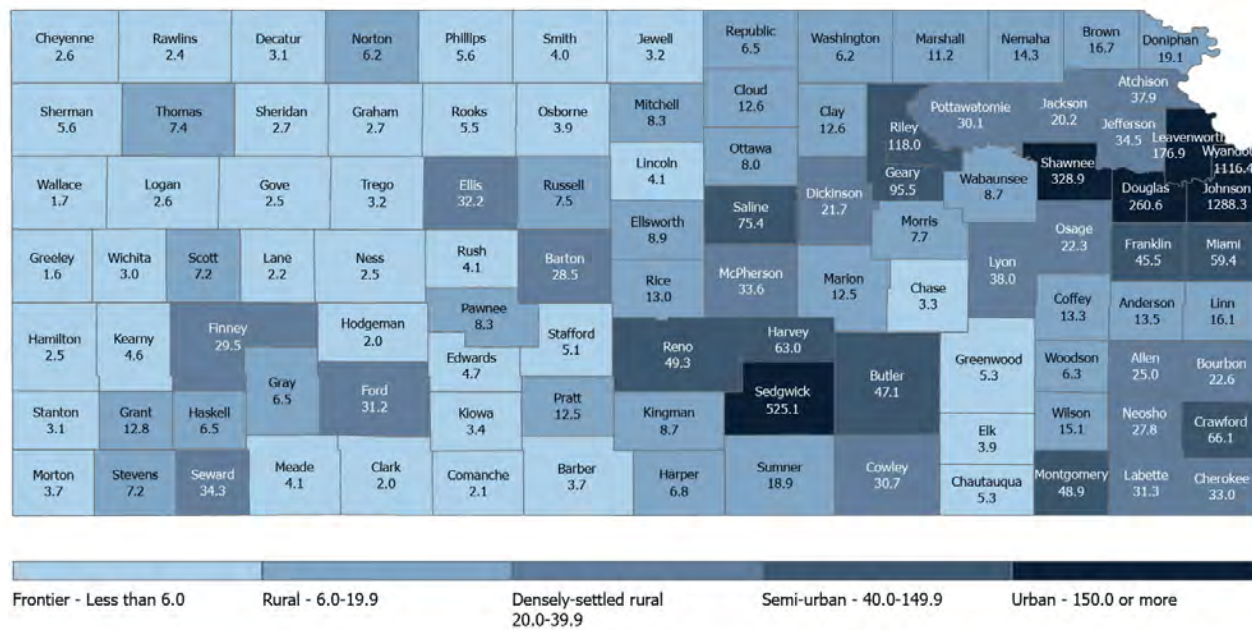
Source: Kansas Health Institute Analysis of U.S. Census Bureau's Vintage 2022 Population Estimates: Annual County Resident Population Estimates by Age, Sex, Race and Hispanic Origin.



PEER COUNTY GROUP DESIGNATION

Key Findings: Two thirds (66.7 percent) of the counties in Kansas are designated as frontier (<6.0 persons per square mile, 37 counties) or rural (6.0 to 19.9 persons per square mile, 33 counties).

Figure 6. POPULATION DENSITY (PERSONS PER SQUARE MILE) BY COUNTY OF RESIDENCE, KANSAS 2020



Note: The KDHE peer county group designations are based on population density (persons per square mile) from the 2020 U.S. Census. Kansas has 105 counties. Using the 2020 designations, the following number of counties are in each peer group; Frontier = 37 counties (35.2 percent), rural = 33 counties (31.4 percent), densely settled rural = 19 counties (18.1 percent), semi-urban = 10 counties (9.5 percent) and urban = 6 counties (5.7 percent).

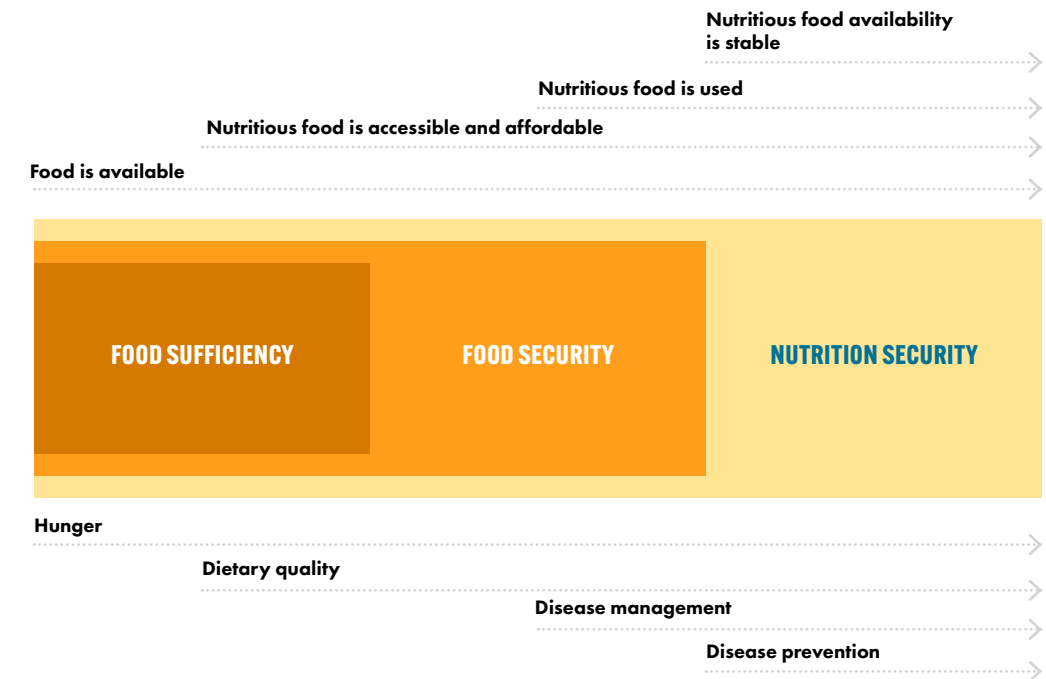
Source: Kansas Department of Health and Environment

KANSAS: 35.9 PERSONS PER SQUARE MILE

HUNGER, NUTRITION AND FOOD INSECURITY

Food sufficiency, food security and nutrition security are overlapping concepts to describe households experiencing hunger (Figure 7).³⁷ Food sufficiency is “the minimum level of energy and nutrient intake necessary to support the basic functions of human life in the immediate time frame” or whether there is food available for consumption.³⁸ Food security, often measured through lack of food security or as “food insecurity” is defined as “access by all members of a household at all times to enough food for an active, healthy life, which, at a minimum, includes availability of nutritionally adequate and safe foods.”³⁹ The USDA describes hunger as an “individual-level physiological condition that may result from food insecurity.”⁴⁰ Nutritional security is defined as “having equitable and stable availability, access, affordability, and utilization of foods and beverages that promote well-being and prevent and treat disease.”⁴¹ Nutritional security is a newer addition to the literature with growing national focus. It is meant to complement, not replace, the study of food security.

Figure 7. Definitions and Outcomes for Food Sufficiency, Food Security and Nutrition Security



Source: Mozaffarian (2023). Measuring and Addressing Nutrition Security to Achieve Health and Health Equity, Health Affairs Health Policy Brief. Adapted from Thorndike, et al. (2022). Strengthening US Food Policies and Programs to Promote Equity in Nutrition Security: A Policy Statement from the American Heart Association, Circulation 145(24).

Strategies addressing hunger across levels of food sufficiency, food security and nutritional security through an intersectional lens are essential to health equity efforts as they focus on tackling the root causes of health disparities rather than just treating symptoms. Food sufficiency is the basic level of a household having food available, while food security and nutrition security are more closely related to availability and stability of food that promotes well-being and prevents disease.⁴² Food insecurity often leads to hunger, a physical state that induces not only psychological and emotional distress but also economic strain. Other challenges that contribute to food insecurity include poverty exacerbated by low wages that do not match the rising costs of housing and other inflation, a shortage of affordable housing, and limited access to and affordability of health care.⁴³ In light of disparities in nutrition and health, prioritizing food and nutrition security is essential for health care systems, government initiatives and community programs.⁴⁴ National trends show that even food-secure households can still experience nutrition insecurity or that it was very hard or hard to regularly get and eat health foods (36 percent) and, conversely, food-insecure households or those with low food security report nutrition security or that it was not very hard or not hard at all to regularly get and eat healthy foods (15 percent).⁴⁵ These rates also vary across population groups. In 2021, food insecurity rates were lower for older adults (7.1 percent) and White, non-Hispanic persons owning or renting a home (7.0 percent) than the national average that year (10.2 percent) but higher in households with any children (12.5 percent), households with children headed by a single male (16.2 percent) or single female (24.3 percent), as well as Black, non-Hispanic persons (19.8 percent) or Hispanic persons (16.2 percent) owning or renting a home.⁴⁶ Using multi-level, multisectoral approaches to address nutrition and food security are essential in closing gaps and making equitable changes.

KEY FINDINGS

- Food Insecurity:**
 - About 1 in 10 (12.5 percent) Kansas adults with children reported food insecurity, which means sometimes or often not having enough to eat. *Source: U.S. Census Bureau, 2023.*
 - More than 1 in 10 (14.4 percent) Kansas adults age 18–24 reported food insecurity. *Source: U.S. Census Bureau, 2023.*
 - Nearly 1 in 3 (29.6 percent) Kansas adults identifying as transgender reported food insecurity. *Source: U.S. Census Bureau, 2023.*
 - About 1 in 10 (13.1 percent) Kansas adults who identify as lesbian, gay, bisexual or transgender reported food insecurity. *Source: U.S. Census Bureau, 2023.*
 - About 1 in 5 Kansas adults who identify as Hispanic or Latino, any race (19.9 percent), Asian, not Hispanic (19.0 percent) and Black, not Hispanic (18.2 percent) reported food insecurity. *Source: U.S. Census Bureau, 2023.*
 - About 1 in 5 (21.7 percent) Kansas adults who have less than a high school degree reported food insecurity. Only 5.0 percent of Kansas adults with a bachelor’s degree or higher reported food insecurity. *Source: U.S. Census Bureau, 2023.*
 - About 1 in 3 (35.0 percent) Kansas adults who have a lot of difficulty walking or climbing stairs reported food insecurity. *Source: U.S. Census Bureau, 2023.*

- About 1 in 4 (26.5 percent) Kansas adults who have a lot of difficulty seeing reported food insufficiency. *Source: U.S. Census Bureau, 2023.*
- About 1 in 4 (26.4 percent) Kansas adults who have a lot of difficulty hearing reported food insufficiency. *Source: U.S. Census Bureau, 2023.*
- Food Insecurity:** More than 1 in 10 (13.4 percent) Kansas children experience food insecurity. Twelve of the 16 counties in the Southeast Region have food insecurity rates greater than 15.1 percent. The food insecurity rate among Latino or Hispanic Kansans is 15.0 percent. Nearly 1 in 4 (24.0 percent) Black Kansans experience food insecurity. *Source: Feeding America, 2021.*
- Fruit and Vegetable Consumption:** The consumption of fruit one or more times per day decreased from 62.2 percent in 2017 to 55.9 percent in 2021. *Source: Centers for Disease Control and Prevention (CDC), 2021.*
- Breastfeeding:** Both Kansas (22.2 percent) and the United States (25.4 percent) fall short of the Healthy People 2030 goal of 42.4 percent of infants exclusively breastfed during the first six months. Additionally, the rates for any breastfeeding at 12 months are below the Healthy People 2030 goal of 54.1 percent, with Kansas at 36.4 percent and the United States at 37.6 percent. *Source: CDC, 2020.*

FOOD INSUFFICIENCY

Key Findings: About 1 in 10 (12.5 percent) Kansas adults with children reported food insufficiency, which means sometimes or often not having enough to eat.

Figure 8. Food Insufficiency for Kansas Adults in the Last Seven Days by Presence of Children in the Household, 2023

POPULATION GROUP	POPULATION ESTIMATION (Age 18+)	SOMETIMES NOT ENOUGH TO EAT	OFTEN NOT ENOUGH TO EAT	SOMETIMES OR OFTEN NOT ENOUGH TO EAT
All Adults, Age 18+	2,171,506	8.4%	3.0%	11.3%
Adults in Households with Children	807,363	11.3%	1.2%	12.5%
Adults in Households Without Children	1,364,143	6.6%	4.0%	10.6%

Note: Respondents were surveyed on the household level and modeling was used to weight population estimates for adult population age 18 or older. On the Household Pulse Survey, respondents were asked, “In the last 7 days, which of these statements best describes the food eaten in your household?” Other response options included, “Enough of the kinds of food wanted”, “Enough food, but not always the kinds wanted” and the option to not provide a response. Participants also were asked to identify, “How many people under 18 years-old currently live in your household?”

Source: Kansas Health Institute analysis of U.S. Census Bureau Household Pulse Survey Data, Sept. 20–Oct. 2, 2023.

Key Finding: More than 1 in 10 (14.4 percent) Kansas adults age 18–24 reported food insufficiency.

Figure 9. Food Insufficiency for Kansas Adults in the Last Seven Days by Age, 2023

AGE	POPULATION ESTIMATION (Age 18+)	SOMETIMES NOT ENOUGH TO EAT	OFTEN NOT ENOUGH TO EAT	SOMETIMES OR OFTEN NOT ENOUGH TO EAT
18-24	204,237	10.1%	4.3%	14.4%
25-39	617,054	7.7%	2.1%	9.7%
40-54	493,049	10.4%	3.0%	13.5%
55-64	362,456	11.7%	1.9%	13.6%
65 and Above	494,709	4.1%	4.2%	8.3%

Note: Respondents were surveyed on the household level and modeling was used to weight population estimates for adult population age 18 or older. On the Household Pulse Survey, respondents were asked, “In the last 7 days, which of these statements best describes the food eaten in your household?” Other response options included, “Enough of the kinds of food wanted,” “Enough food, but not always the kinds wanted” and the option to not provide a response. For age, respondents were asked, “What year were you born?”

Source: Kansas Health Institute analysis of U.S. Census Bureau Household Pulse Survey Data, Sept. 20–Oct. 2, 2023.

Key Finding: Nearly 1 in 3 (29.6 percent) Kansas adults identifying as transgender reported food insufficiency.

Figure 10. Food Insufficiency for Kansas Adults in the Last Seven Days by Sex and Gender Identity, 2023

SEX AND GENDER IDENTITY	POPULATION ESTIMATION (Age 18+)	SOMETIMES NOT ENOUGH TO EAT	OFTEN NOT ENOUGH TO EAT	SOMETIMES OR OFTEN NOT ENOUGH TO EAT
Cisgender Male	997,622	6.8%	2.8%	9.6%
Cisgender Female	1,059,549	9.5%	3.2%	12.7%
Transgender	23,830	29.6%	-	29.6%
None of These	40,404	-	7.4%	7.4%
Did Not Report	50,101	11.4%	-	11.4%

Note: Respondents were surveyed on the household level and modeling was used to weight population estimates for adult population age 18 or older. On the Household Pulse Survey, respondents were asked, “In the last 7 days, which of these statements best describes the food eaten in your household?” Other response options included, “Enough of the kinds of food wanted,” “Enough food, but not always the kinds wanted” and the option to not provide a response. Additionally, respondents are asked two questions, “What sex were you assigned at birth, on your original birth certificate?” and, “Do you currently describe yourself as male, female or transgender?”

Source: Kansas Health Institute analysis of U.S. Census Bureau Household Pulse Survey Data, Sept. 20–Oct. 2, 2023.



Key Finding: About 1 in 10 (13.1 percent) Kansas adults who identify as lesbian, gay, bisexual or transgender reported food insufficiency.

Figure 11. Food Insufficiency for Kansas Adults in the Last Seven Days by Lesbian, Gay, Bisexual, or Transgender Identity, 2023

LESBIAN, GAY, BISEXUAL, OR TRANSGENDER IDENTITY	POPULATION ESTIMATION (Age 18+)	SOMETIMES NOT ENOUGH TO EAT	OFTEN NOT ENOUGH TO EAT	SOMETIMES OR OFTEN NOT ENOUGH TO EAT
Yes	181,811	10.7%	2.4%	13.1%
No	1,843,747	8.1%	3.0%	11.1%
Other	76,767	3.6%	7.0%	10.6%
Did Not Report	69,181	15.0%	-	15.0%

Note: Respondents were surveyed on the household level and modeling was used to weight population estimates for adult population age 18 or older. On the Household Pulse Survey respondents were asked, "In the last 7 days, which of these statements best describes the food eaten in your household?" Other response options included, "Enough of the kinds of food wanted," "Enough food, but not always the kinds wanted" and the option to not provide a response. Additionally, respondents were asked two questions, "Which of the following best represents how you think of yourself?" with response options of "Gay or lesbian," "Straight, that is not gay or lesbian," "Bisexual," "Something else," "I don't know." The second question was "Do you currently describe yourself as male, female or transgender?"

Source: Kansas Health Institute analysis of U.S. Census Bureau Household Pulse Survey Data, Sept. 20–Oct. 2, 2023.

Key Finding: About 1 in 5 Kansas adults who identify as Hispanic or Latino, any race (19.9 percent), Asian, not Hispanic (19.0 percent) and Black, not Hispanic (18.2 percent) reported food insufficiency.

Figure 12. Food Insufficiency for Kansas Adults in the Last Seven Days by Race and Ethnicity, 2023

RACE AND ETHNICITY	POPULATION ESTIMATION (Age 18+)	SOMETIMES NOT ENOUGH TO EAT	OFTEN NOT ENOUGH TO EAT	SOMETIMES OR OFTEN NOT ENOUGH TO EAT
Hispanic or Latino, Any Race	249,921	19.1%	0.9%	19.9%
White, Not Hispanic	1,671,339	6.4%	2.9%	9.3%
Black, Not Hispanic	85,777	16.2%	2.0%	18.2%
Asian, Not Hispanic	65,461	15.8%	3.2%	19.0%
Two or More Races + Other Races, Not Hispanic	99,008	3.5%	9.5%	13.0%

Note: Respondents were surveyed on the household level and modeling was used to weight population estimates for adult population age 18 or older. On the Household Pulse Survey, respondents were asked, "In the last 7 days, which of these statements best describes the food eaten in your household?" Other response options included, "Enough of the kinds of food wanted," "Enough food, but not always the kinds wanted" and the option to not provide a response. Respondents were also asked, "Are you of Hispanic, Latino, or Spanish origin?" and, "What is your race? Please select all that apply."

Source: Kansas Health Institute analysis of U.S. Census Bureau Household Pulse Survey Data, Sept. 20–Oct. 2, 2023.



Key Finding: About 1 in 5 (21.7 percent) Kansas adults who have less than a high school degree reported food insufficiency. Only 5.0 percent of Kansas adults with a bachelor’s degree or higher reported food insufficiency.

Figure 13. Food Insufficiency for Kansas Adults in the Last Seven Days by Educational Attainment, 2023

EDUCATIONAL ATTAINMENT	POPULATION ESTIMATION (Age 18+)	SOMETIMES NOT ENOUGH TO EAT	OFTEN NOT ENOUGH TO EAT	SOMETIMES OR OFTEN NOT ENOUGH TO EAT
Less Than High School Degree	92,523	18.3%	3.4%	21.7%
High School Degree or GED	662,403	11.9%	3.0%	15.0%
Some College/ Associate’s Degree	707,927	8.1%	4.8%	12.9%
Bachelor’s Degree or Higher	708,653	4.1%	0.9%	5.0%

Note: Respondents were surveyed on the household level and modeling was used to weight population estimates for adult population age 18 or older. On the Household Pulse Survey respondents were asked, “In the last 7 days, which of these statements best describes the food eaten in your household?” Other response options included, “Enough of the kinds of food wanted,” “Enough food, but not always the kinds wanted” and the option to not provide a response. Respondents were also asked, “What is the highest degree or level of school you have completed? Select only one answer.”

Source: Kansas Health Institute analysis of U.S. Census Bureau Household Pulse Survey Data, Sept. 20–Oct. 2, 2023.

Key Finding: About 1 in 3 (35.0 percent) Kansas adults who have a lot of difficulty walking or climbing stairs reported food insufficiency.

Figure 14. Food Insufficiency for Kansas Adults in the Last Seven Days by Difficulty Walking or Climbing Stairs, 2023

DIFFICULTY WALKING OR CLIMBING STAIRS	POPULATION ESTIMATION (Age 18+)	SOMETIMES NOT ENOUGH TO EAT	OFTEN NOT ENOUGH TO EAT	SOMETIMES OR OFTEN NOT ENOUGH TO EAT
No Difficulty	1,266,412	7.1%	2.3%	9.4%
Some Difficulty	406,535	11.6%	5.2%	16.8%
A Lot of Difficulty	84,184	22.7%	12.4%	35.0%
Cannot Do at All	11,662	-	5.7%	5.7%
Did Not Report	402,712	6.3%	0.7%	7.0%

Note: Respondents were surveyed on the household level and modeling was used to weight population estimates for adult population age 18 or older. On the Household Pulse Survey respondents were asked, “In the last 7 days, which of these statements best describes the food eaten in your household?” Other response options included, “Enough of the kinds of food wanted,” “Enough food, but not always the kinds wanted” and the option to not provide a response. Respondents were also asked, “Do you have difficulty walking or climbing stairs?”

Source: Kansas Health Institute analysis of U.S. Census Bureau Household Pulse Survey Data, Sept. 20–Oct. 2, 2023.



Key Finding: About 1 in 4 (26.5 percent) Kansas adults who have a lot of difficulty seeing reported food insufficiency.

Figure 15. Food Insufficiency for Kansas Adults in the Last Seven Days by Difficulty Seeing, 2023

DIFFICULTY SEEING	POPULATION ESTIMATION (Age 18+)	SOMETIMES NOT ENOUGH TO EAT	OFTEN NOT ENOUGH TO EAT	SOMETIMES OR OFTEN NOT ENOUGH TO EAT
No Difficulty	1,195,065	6.3%	1.6%	7.9%
Some Difficulty	513,383	12.6%	7.5%	20.1%
A Lot of Difficulty	57,075	20.3%	6.2%	26.5%
Cannot Do at All	-	-	-	-
Did Not Report	405,982	7.6%	0.7%	8.2%

Note: Respondents were surveyed on the household level and modeling was used to weight population estimates for adult population age 18 or older. On the Household Pulse Survey respondents were asked, "In the last 7 days, which of these statements best describes the food eaten in your household?" Other response options included "Enough of the kinds of food wanted," "Enough food, but not always the kinds wanted" and the option to not provide a response. Respondents were also asked, "Do you have difficulty seeing, even when wearing glasses?"

Source: Kansas Health Institute analysis of U.S. Census Bureau Household Pulse Survey Data, Sept. 20–Oct. 2, 2023.

Key Finding: About 1 in 4 (26.4 percent) Kansas adults who have a lot of difficulty hearing reported food insufficiency.

Figure 16. Food Insufficiency for Kansas Adults in the Last Seven Days by Difficulty Hearing, 2023

DIFFICULTY HEARING	POPULATION ESTIMATION (Age 18+)	SOMETIMES NOT ENOUGH TO EAT	OFTEN NOT ENOUGH TO EAT	SOMETIMES OR OFTEN NOT ENOUGH TO EAT
No Difficulty	1,367,337	7.4%	3.2%	10.5%
Some Difficulty	333,115	11.9%	3.1%	15.0%
A Lot of Difficulty	54,306	11.7%	14.7%	26.4%
Cannot Do at All	7,679	14.4%	-	14.4%
Did Not Report	409,068	8.2%	0.7%	8.9%

Note: Respondents were surveyed on the household level and modeling was used to weight population estimates for adult population age 18 or older. On the Household Pulse Survey respondents were asked, "In the last 7 days, which of these statements best describes the food eaten in your household?" Other response options included "Enough of the kinds of food wanted," "Enough food, but not always the kinds wanted" and the option to not provide a response. Respondents were also asked, "Do you have difficulty hearing, even when using a hearing aid?"

Source: Kansas Health Institute analysis of U.S. Census Bureau Household Pulse Survey Data, Sept. 20–Oct. 2, 2023.



FOOD INSECURITY

Key Findings: More than 1 in 10 (13.4 percent) Kansas children experience food insecurity. Twelve of the 16 counties in the Southeast Region have food insecurity rates greater than 15.1 percent. The food insecurity rate among Latino or Hispanic Kansans is 15.0 percent. Nearly 1 in 4 (24.0 percent) Black Kansans experience food insecurity.

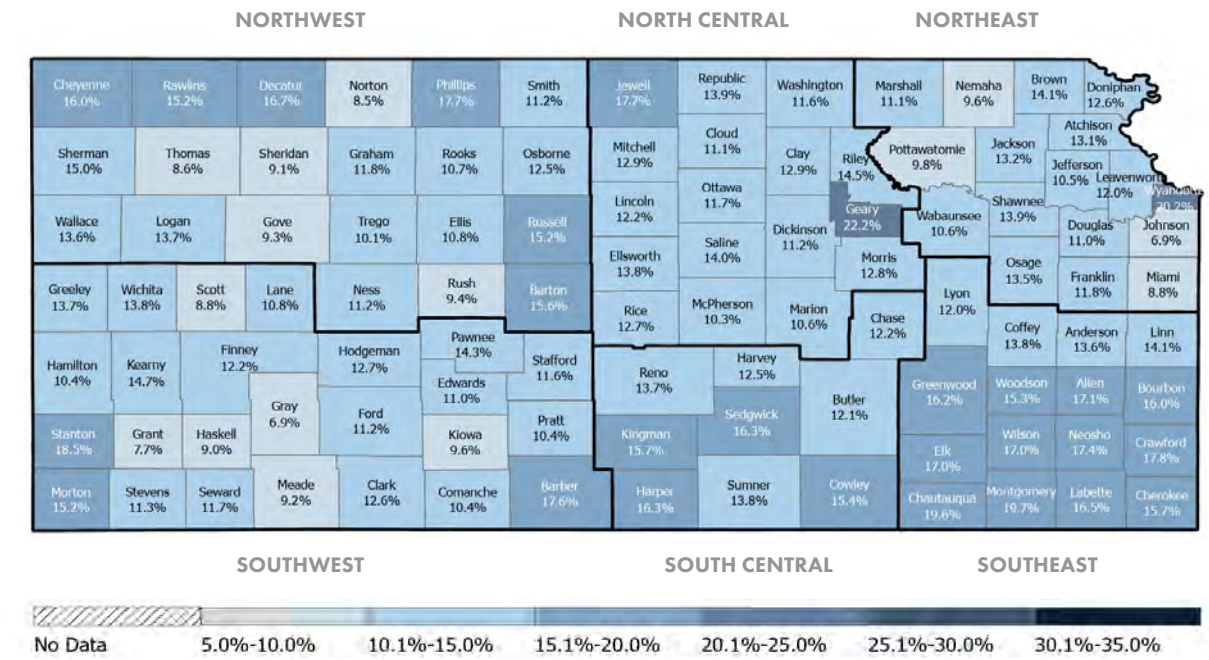
Figure 17. Food Insecurity in Kansas by Age Groups, 2021

AGE GROUP	FOOD INSECURITY RATE IN KANSAS
Overall	9.9%
Child (<18)	13.4%
Older Adult (50-59)	7.9%
Senior (60+)	4.6%

Note: Each age group includes all individuals in the age group regardless of race or ethnicity. Food insecurity is defined by the USDA as the lack of access to enough food for an active healthy life.

Source: Feeding America, 2021.

Figure 18. Food Insecurity Among Children Age <18 in Kansas by County, 2021

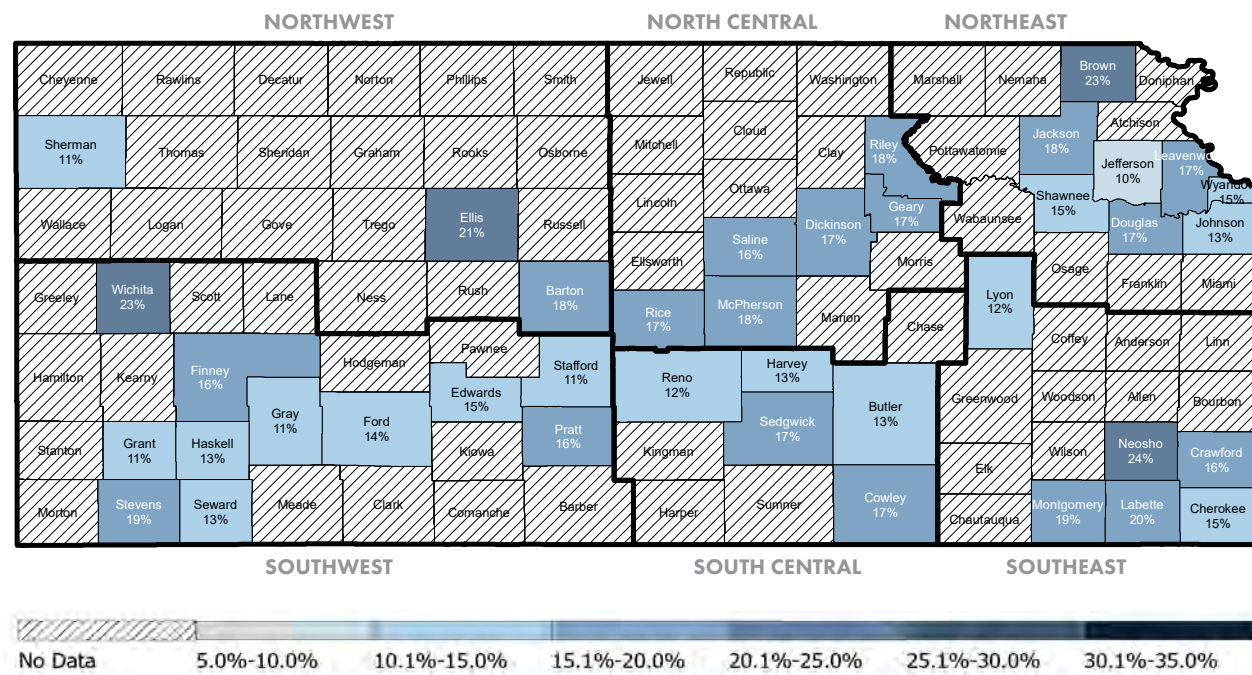


Note: Food insecurity rate for children age <18 in Kansas overall is 13.4 percent. For the legend, bin breaks are determined using equal intervals based on the full range of food insecurity estimates at the county level across child, Latino or Hispanic and Black populations in Kansas.

Source: Feeding America, 2021.



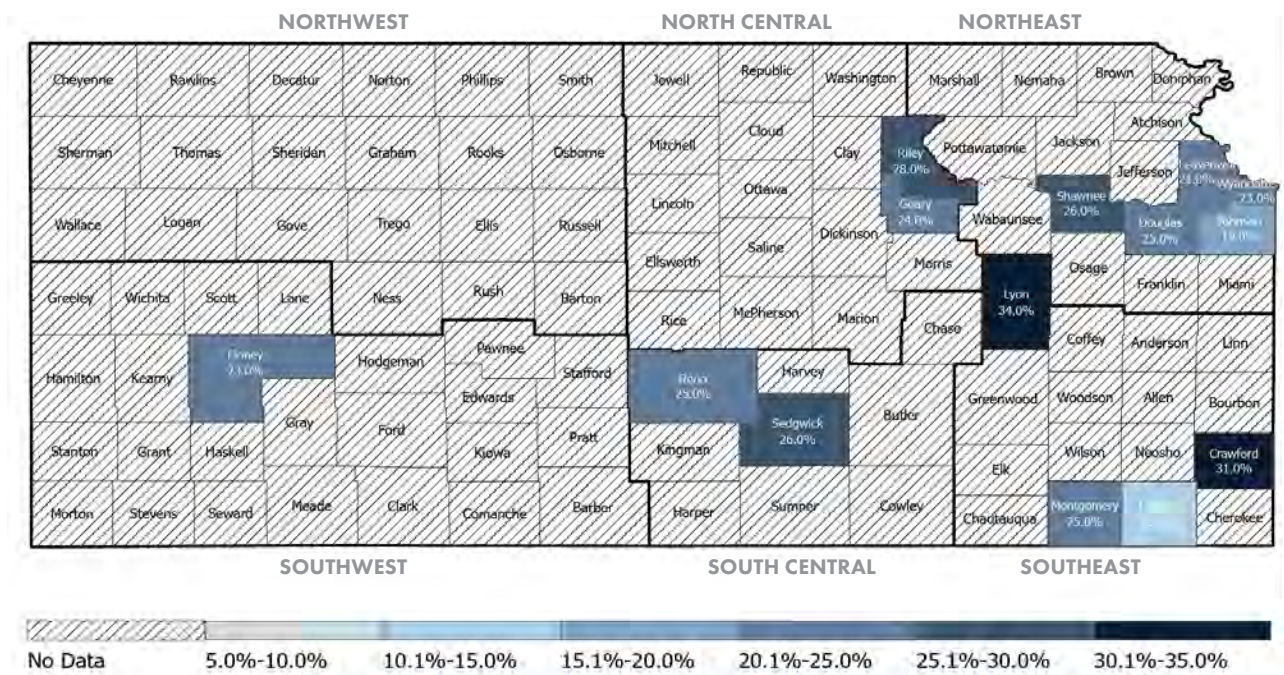
Figure 19. Food Insecurity Among Latino or Hispanic Kansans by County, 2021



Note: Food insecurity rate for Latino or Hispanic population in Kansas overall is 15.0 percent. Estimate includes people of all races who identify as Latino or Hispanic. For the legend, bin breaks are determined using equal intervals based on the full range of food insecurity estimates at the county level across child, Latino or Hispanic and Black populations in Kansas. Estimates are not available for all counties in Kansas due to a small sample size.

Source: Feeding America, 2021.

Figure 20. Food Insecurity Among Black Kansans by County, 2021



Note: Food insecurity rate for Black population in Kansas overall is 24.0 percent. Estimate includes people of all ethnicities who identify as Black. For the legend, bin breaks are determined using equal intervals based on the full range of food insecurity estimates at the county level across children, Latino or Hispanic and Black populations in Kansas. Estimates are not available for all counties in Kansas due to a small sample size.

Source: Feeding America, 2021.



FRUIT AND VEGETABLE CONSUMPTION

Key Findings: The consumption of fruit one or more times per day decreased from 62.2 percent in 2017 to 55.9 percent in 2021.

Figure 21. Age-Adjusted Fruit and Vegetable Consumption per Day in Kansas, 2017-2021

YEAR	VEGETABLE CONSUMPTION		FRUIT CONSUMPTION	
	ONE OR MORE	LESS THAN ONE	ONE OR MORE	LESS THAN ONE
2017	82.6%	17.4%	62.2%	37.8%
2019	79.8%	20.2%	58.2%	41.8%
2021	80.2%	19.8%	55.9%	44.1%

Note: Percentages are age-adjusted prevalence rates. The total sample size response for the vegetable and fruit consumption questions varied by year.

Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. Behavioral Risk Factor Surveillance System (BRFSS) Prevalence and Trends Data.

BREASTFEEDING

Key Findings: Both Kansas (22.2 percent) and the United States (25.4 percent) fall short of the Healthy People 2030 goal of 42.4 percent of infants exclusively breastfed during the first six months. Additionally, the rates for any breastfeeding at 12 months are below the Healthy People 2030 goal of 54.1 percent, with Kansas at 36.4 percent and the United States at 37.6 percent.

Figure 22. Rates of Any and Exclusive Breastfeeding Among Children Born in 2020

CHILDREN BORN IN 2020	ANY BREASTFEEDING			EXCLUSIVE BREASTFEEDING	
	EVER BREASTFED	BREASTFED AT 6 MONTHS	BREASTFED AT 12 MONTHS	EXCLUSIVE BREASTFEEDING THROUGH 3 MONTHS	EXCLUSIVE BREASTFEEDING THROUGH 6 MONTHS
Kansas	86.2%	61.6%	36.4%	46.3%	22.2%
United States	83.1%	58.2%	37.6%	45.3%	25.4%

Note: Although breastfeeding initiation rates are high (86.2 percent in Kansas), many women do not breastfeed exclusively for the first 6 months or continue breastfeeding for the first year as recommended by national guidelines.⁴⁷ Breastfeeding offers health benefits for both infants and mothers.⁴⁸ However, many parents experience barriers to breastfeeding due to individual abilities and desires, medical and social support, and workplace policies and practices.⁴⁹ Exclusive breastfeeding is defined as only breast milk, no solids, no water and no other liquids. Months are defined from birth for children born in 2020. Total number of children included in responses to questions on any breastfeeding = 405 and to question on exclusive breastfeeding = 398 in Kansas. Total number of children included in responses to question on any breastfeeding = 21,069 and question on exclusive breastfeeding = 20,380 in the U.S.

Source: National Immunization Survey-Child, Centers for Disease Control and Prevention, Department of Health and Human Services.



FOOD ACCESS INFRASTRUCTURE

A food system model involves looking at the interconnected networks and interactions that people, systems and industries have with food. Food systems are the interconnected network of people, behaviors and goods that take food from farm to table and operate within social, political, economic and environmental contexts.⁵⁰ For the purposes of this report, data related to the food system focus on the stage in which community members access food. This includes existing safety net programs such as the Supplemental Nutrition Assistance Program (SNAP), the National School Lunch Program (NSLP) and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). Receiving SNAP has been associated with improved health outcomes for children and adults and reduced health care expenditures for adults with low-income over a two-year period.⁵¹ Similar health care expenditure reductions were not statistically significant among children within a two-year period.⁵² However, access to economic resources such as through the SNAP program in utero and early childhood have been found to reduce medical conditions such as high blood pressure, heart disease and diabetes later in life and increase financial security for women, including increased educational attainment, income and decreased use of safety net programs.⁵³

This report also defines the food access infrastructure to include the food environment, such as feeding sites, food purchasing locations and safe drinking water access, and the cost of food. The physical environment of neighborhoods affects the health and well-being of community members.⁵⁴

This report provides a focused analysis on the food system but does not cover several areas that warrant further exploration and community engagement, including the impact of historical policies and systemic inequalities, the various facets of agriculture, and the roles and effectiveness of food banks. For example, understanding a community's historical and current context is essential to inform decision making. Policies and practices in the past, such as redlining and sundown towns, have lasting effects on environments and health disparities.^{55,56} Additionally, agriculture is a key component of the food system. The food system is particularly vulnerable to droughts, soil and air quality, increased pests and changes in weather patterns which can reduce food supply and increase prices.⁵⁷ Changes in practice to address these challenges can also increase contact with herbicides and pesticides for farmers, farm workers and consumers.⁵⁸ Another area that could be further explored is the role of food banks in addressing food security. Food banks are an essential community resource for those experiencing food insecurity and can be a source of nutrient-rich food.⁵⁹ However, when used alone as an intervention, food banks do not eliminate food insecurity.⁶⁰ A multi-faceted, holistic approach is essential to improving the food system.

KEY FINDINGS

- **Supplemental Nutrition Assistance Program (SNAP) Participation and Eligibility:** Based on the best approximation available, about 15.3 percent of Kansans are eligible for SNAP. However, only about 7.1 percent of Kansas households currently participate in SNAP. Nationally, about 16.7 percent of people are eligible for SNAP and about 11.4 percent of United States households currently participate in the program. *Source: U.S. Census Bureau, 2017–2021 5-Year Estimate.*
- **SNAP Online Purchasing:** Kansas ranks sixth in the U.S. for percent of SNAP households shopping online (28.8 percent). Of Kansas SNAP redemptions, 7.5 percent use online purchasing. *Source: U.S. Department of Agriculture (USDA), Fiscal Year 2022.*
- **Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Participation and Eligibility:** Of those eligible for WIC in Kansas, almost half (45.2 percent) were enrolled in 2020. Four in 5 eligible infants (79.6 percent) were enrolled. Only 1 in 3 eligible children (35.6 percent) were enrolled. About one third (35.0 percent) of White, non-Hispanic Kansans eligible for WIC were enrolled. *Source: USDA, 2020.*
- **Free- or Reduced-Price Lunch Program Participation:** Two in 5 (39.7 percent) Kansas students were approved to receive free lunch for the 2022–2023 school year. In the Southwest Region, more than 3 in 5 students (64.2 percent) were approved to participate in free- or reduced-price lunch during the 2022–2023 school year. *Source: Kansas State Department of Education (KSDE), 2018–2023.*
- **Summer Food Service Program Sites:** All counties in the Southeast Region have at least one site participating in the Summer Food Service Program (SFSP). In the Northwest Region, less than half of counties have sites (47.6 percent). *Source: KSDE, 2022–2023.*
- **Community Eligibility Program (CEP) Participation and Eligibility:** More than half (57.4 percent) of all sites assessed for eligibility in Kansas are eligible or potentially eligible for CEP. However, just 6.9 percent of eligible sites are participating in CEP. *Source: KSDE, 2022–2023.*
- **Child and Adult Care Food Program (CACFP) Participation:** Although most Kansas regions have at least three-fourths (75.0 – 100.0 percent) of their counties covered by at least one CACFP site, only about one-third (36.0 percent) of the Southwest Region's counties have a CACFP site in 2023. In 2023, about half of all CACFP sites (53.3 percent) were child care centers. *Source: KSDE, 2019–2023.*
- **Temporary Assistance for Needy Families (TANF) Participation:** The state monthly average TANF enrollment for state fiscal year 2023 was 2,842 households. *Source: Kansas Department for Children and Families, July 2022–September 2023.*
- **Low-Income, Low-Access Census Tracts:** Almost 2 in 5 census tracts in the South Central (38.0 percent) and Southeast (39.2 percent) Regions of Kansas are classified as low-income census tracts where a significant number or portion of residents live more than a half mile (urban) or 10 miles (rural) from the nearest supermarket. *Source: USDA, 2019.*
- **Safe Drinking Water Access:** There were 109 boil water advisories in Kansas in 2022. The North Central Region experienced nearly six months (172 cumulative days) in which water distribution systems in one or more counties issued boil water advisories. Water distribution systems in the Northwest Region issued fewer boil water advisories (45 cumulative days) in one or more counties than other regions (80–172 cumulative days). *Source: KDHE, 2022.*
- **Consumer Cost Index:** Average household spending on food and housing is nearly half (43.8 percent in Kansas and 44.7 percent nationally) of annual household median income. *Source: Claritas Consumer Index Estimates, 2023.*

SUPPLEMENTAL NUTRITION ASSISTANCE PROGRAM (SNAP) PARTICIPATION AND ELIGIBILITY

Key Findings: Based on the best approximation available, about 15.3 percent of Kansans are eligible for SNAP. However, only about 7.1 percent of Kansas households currently participate in SNAP. Nationally, about 16.7 percent of people are eligible for SNAP and about 11.4 percent of United States households currently participate in the program.

Figure 23. Supplemental Nutrition Assistance Program (SNAP) Eligibility and Participation in Kansas, 2017–2021 5-Year Estimate

POPULATION GROUP	PERCENT OF POPULATION ELIGIBLE FOR SNAP	PERCENT OF HOUSEHOLDS PARTICIPATING IN SNAP
Kansas	15.3%	7.1%
United States	16.7%	11.4%

Note: Total Kansas households = 1,139,738. Total Kansas population = 2,850,702. Total Kansas population at or below 125 percent FPL = 437,071. SNAP eligibility depends on income (130 percent FPL) and household size, as well as other conditions; however, not all data are available for the estimate. Instead, SNAP eligibility was approximated based on the number of individuals at or below an annual income of 125 percent or less of the federal poverty level. Total Kansas population at or below 125 percent FPL = 437,071.

Source: Kansas Health Institute analysis of U.S. Census Bureau American Community Survey 2017–2021 5-Year Estimate, Tables S2201 and S1701.

SNAP ONLINE PURCHASING

Key Findings: Kansas ranks 6th in the U.S. for percent of SNAP households shopping online (28.8 percent). Of Kansas SNAP redemptions, 7.5 percent use online purchasing.

Figure 24. Supplemental Nutrition Assistance Program (SNAP) Households Shopping Online, 2022

POPULATION GROUP	PERCENT OF SNAP HOUSEHOLDS PURCHASING ONLINE	PERCENT OF STATE REDEMPTIONS SPENT ONLINE
Kansas	28.8%	7.5%

Note: Total SNAP redemptions in Kansas were \$599,151,541.65. Total number of households in Kansas receiving SNAP during fiscal year 2022 = 96,710. Originally a pilot program available to only eight states (Alabama, Iowa, Maryland, Nebraska, New Jersey, New York, Oregon and Washington), SNAP online purchasing has expanded to all 50 states and the District of Columbia as of June 2023.⁶¹ The program is designed to increase access to food options and increase convenience for SNAP households.⁶² Kansas is ranked sixth in the nation for percentage of SNAP households shopping online. The top five of states and District of Columbia (DC) for SNAP households shopping online include the DC (40.7 percent), Texas (32.2 percent), North Carolina (31.0 percent), Georgia (30.8 percent) and Wisconsin (30.3 percent).

Source: U.S. Department of Agriculture Food and Nutrition Service, Supplemental Nutrition Assistance Program (SNAP) retailer participation, FY 2022, and U.S. Department of Agriculture Food and Nutrition Service, SNAP Monthly Participation and Benefit Summary, FY 2022.



SPECIAL SUPPLEMENTAL NUTRITION PROGRAM FOR WOMEN, INFANTS, AND CHILDREN (WIC) PARTICIPATION AND ELIGIBILITY

Key Findings: Of those eligible for WIC in Kansas, almost half (45.2 percent) were enrolled in 2020. Four in 5 eligible infants (79.6 percent) were enrolled. Only 1 in 3 eligible children (35.6 percent) were enrolled. About one third (35.0 percent) of White, non-Hispanic Kansans eligible for WIC were enrolled.

Figure 25. Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Eligibility and Coverage by Population Group in Kansas, 2020

POPULATION GROUP	NUMBER ELIGIBLE	NUMBER PARTICIPANTS	PERCENT COVERAGE
Kansas	102,669	46,431	45.2%
Infants	14,136	11,255	79.6%
Children	69,936	24,931	35.6%
Women	18,597	10,245	55.1%

Note: WIC eligibility depends on household income below or equal to 185 percent federal poverty level, pregnant/breastfeeding status for maternal coverage and up to age five for child coverage. “Women” includes pregnant, postpartum non-breastfeeding, and postpartum breastfeeding women. “Number eligible” and “number of participants” numbers are rounded to the nearest hundred in the figure.

Source: U.S. Department of Agriculture Food and Nutrition Service National and State Level Estimates of WIC Eligibility and Program Reach in 2020, calculations of 2021 Current Population Survey Annual Social and Economic Supplement (CPS-ASEC), 2020 American Community Survey (ACS), 2019 Puerto Rico Community Survey (PRCS), Census International Database and WIC administrative data.

Figure 26. Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Eligibility and Coverage Rates by Race and Ethnicity in Kansas, 2020

RACE AND ETHNICITY	NUMBER ELIGIBLE	NUMBER PARTICIPANTS	PERCENT COVERAGE
Hispanic/Latino	24,332	15,437	63.4%
Other Than White-Only, Not Hispanic	17,797	9,788	55.0%
White-Only, Not Hispanic	60,540	21,205	35.0%

Note: WIC eligibility depends on household income below or equal to 185 percent FPL, pregnant/breastfeeding status for maternal coverage and up to age five for child coverage. “Other than White-only, not Hispanic” includes all infants, children, and pregnant or postpartum women who are not Hispanic/Latino and who report either multiple races or a race other than White. “Number eligible” and “number of participants” numbers are rounded to the nearest hundred in the figure.

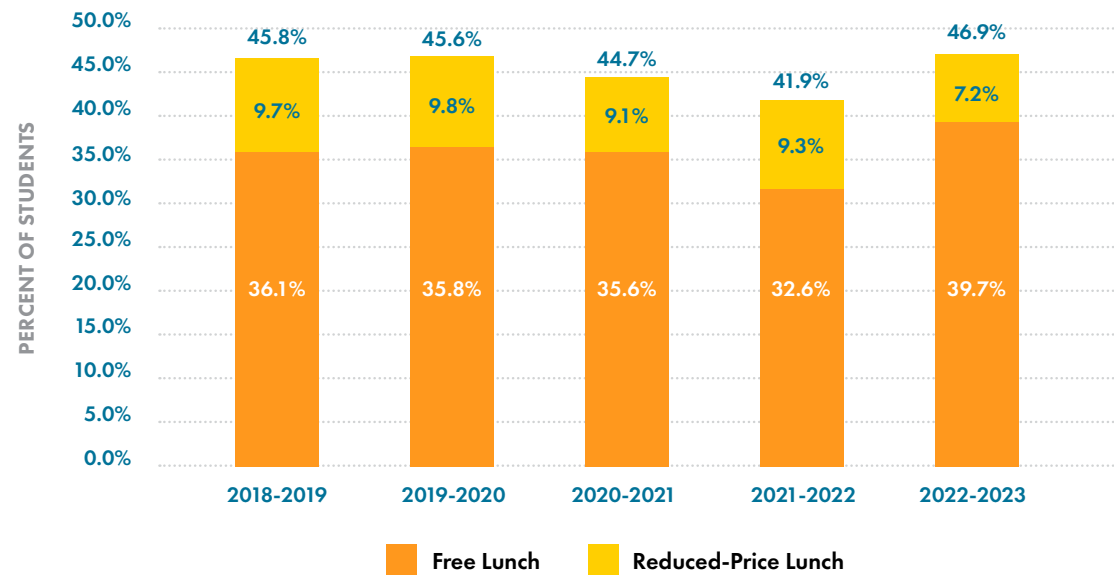
Source: U.S. Department of Agriculture Food and Nutrition Service National and State Level Estimates of WIC Eligibility and Program Reach in 2020, calculations of 2021 Current Population Survey Annual Social and Economic Supplement (CPS-ASEC), 2020 American Community Survey (ACS), 2019 Puerto Rico Community Survey (PRCS), Census International Database, WIC administrative data, and 2020 WIC Participant and Program Characteristics report.



FREE- OR REDUCED-PRICE LUNCH PROGRAM PARTICIPATION

Key Finding: Two in 5 (39.7 percent) Kansas students were approved to receive free lunch for the 2022–2023 school year. In the Southwest Region, more than 3 in 5 students (64.2 percent) were approved to participate in free- or reduced-price lunch during the 2022–2023 school year.

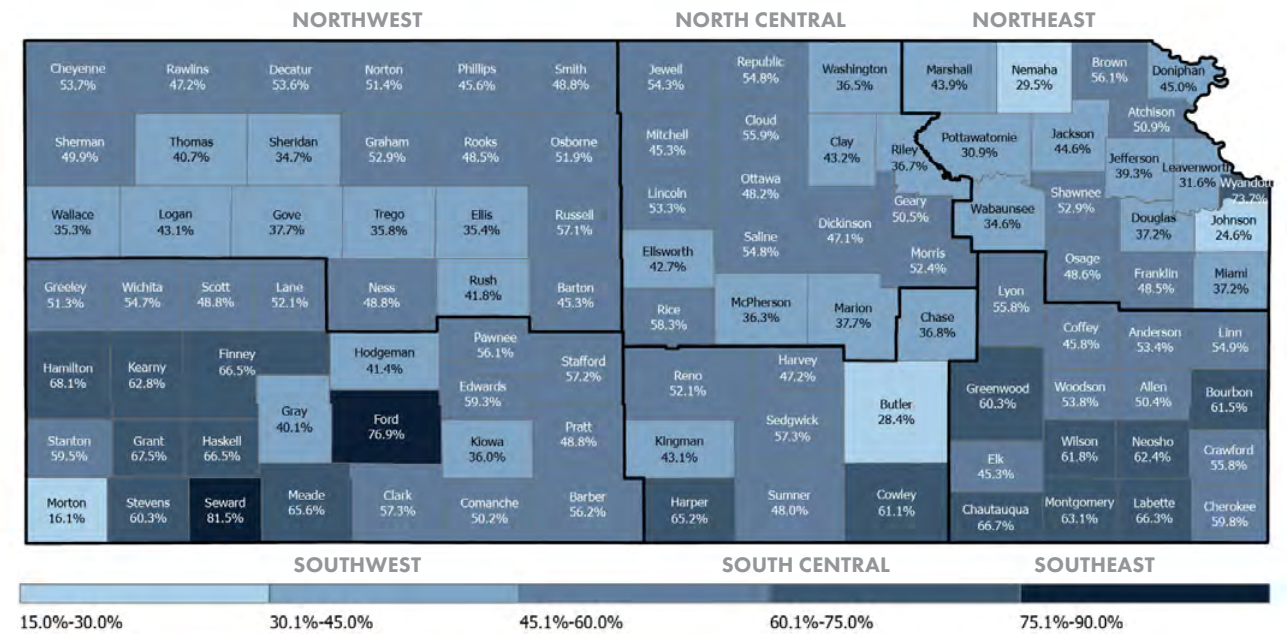
Figure 27. Percent of Kansas Students Approved for Free or Reduced-Price Lunch, 2018–2023 School Years



Note: Data includes students approved for free- or reduced-price lunches using headcount enrollment data across all Kansas schools (public, private and state schools). Number of students in Kansas = 518,836 in 2018–2019, 518,889 in 2019–2020, 502,492 in 2020–2021, 506,371 in 2021–2022, and 510,771 in 2022–2023. Percentages are rounded to the nearest tenth.

Source: Kansas Health Institute analysis of Kansas State Department of Education Students Approved for Free- or Reduced-Price Lunches – Headcount Enrollment, 2018–2023

Figure 28. Students Approved for Free or Reduced-Price Lunch by County and KDHE District Office Regions, 2022–2023



Note: Total number and percent of students approved for Free or Reduced-Price Lunches during 2022–2023 school year: Kansas = 239,427 (46.9 percent); North Central = 21,051 (46.2 percent); Northeast = 88,973 (39.0 percent); Northwest = 9,596 (44.0 percent); South Central = 72,185 (52.5 percent); Southwest = 23,398 (58.3 percent); and Southeast = 24,224 (64.2 percent). For the legend, bin breaks are determined using equal intervals based on the full range of Free or Reduced-Price Lunches at the county level across Kansas.

Source: Kansas Health Institute analysis of Kansas State Department of Education Students Approved for Free- or Reduced-Price Lunches – Headcount Enrollment, 2022–2023.



SUMMER FOOD SERVICE PROGRAM SITES

Key Findings: All counties in the Southeast Region have at least one site participating in the Summer Food Service Program (SFSP). In the Northwest Region, less than half (47.6 percent) of counties have sites.

Figure 29. Summer Food Service Program Operating Days and Sites in Kansas and KDHE District Office Regions, 2022–2023

KDHE REGION	KANSAS	NORTH CENTRAL	NORTHEAST	NORTHWEST	SOUTH CENTRAL	SOUTHEAST	SOUTHWEST
Number of SFSP Operating Days	18,046	2,662	5,343	864	3,388	3,214	2,575
Percent of Counties in Region with a SFSP Site	76.2%	82.4%	94.1%	47.6%	77.8%	100.0%	68.0%
Number of SFSP Sites	580	65	182	23	123	97	90
Average Number of SFSP Service Days	31.1	41.0	29.4	37.6	27.5	33.1	28.6

Note: SFSP operating days and sites were added up by county and KDHE District Office Region. Average number of service days is calculated by dividing the number of operating days by number of sites.

Source: Kansas Health Institute Analysis of Kansas State Department of Education, Child Nutrition & Wellness Reports, Summer Food Service Program: Meals Served, 2022-2023

COMMUNITY ELIGIBILITY PROVISION PARTICIPATION AND ELIGIBILITY

Key Findings: More than half (57.4 percent) of all sites assessed for eligibility in Kansas are eligible or potentially eligible for CEP. However, just 6.9 percent of eligible sites are participating in CEP.

Figure 30. Eligible or Potentially Eligible Sites for Community Eligibility Provision in Kansas, 2022–2023 School Year

SCHOOLS AND SCHOOL DISTRICT SITES	ELIGIBLE FOR CEP	POTENTIALLY ELIGIBLE FOR CEP	ELIGIBLE OR POTENTIALLY ELIGIBLE FOR CEP	TOTAL
Number of Sites Assessed for CEP Eligibility	493	280	773	1,347
Percent of All Sites Assessed for CEP Eligibility	36.6%	20.8%	57.4%	100.0%
Number of Participating CEP Sites	34	0	34	34
Percent Participating Sites of Eligible CEP Sites	6.9%	0.0%	4.4%	2.5%

Note: The Community Eligibility Provision (CEP) is available for schools and school district sites in low-income areas. Sites participating in CEP can provide all enrolled students free breakfast and lunch without requiring students to apply. For all sites for which eligibility is determined during the 2022–2023 school year, eligible = 40.0 percent or more of identified student percentage (ISP) and potentially eligible is 30.0–39.9 percent of ISP. ISP is a formula that calculates student eligibility based on participation in programs such as SNAP and TANF. To participate, applying schools must demonstrate they meet at least 40 percent ISP. As of Oct. 26, 2023, the minimum ISP to participate in CEP was lowered from 40 percent to 25 percent or higher.⁶³ During the 2022–2023 school year, 908 sites (67.4 percent) had an ISP of 25 percent or higher.

Source: Kansas Health Institute analysis of Kansas State Department of Education, Child Nutrition & Wellness Reports, School Nutrition Program: Site Notification of Eligibility for the Community Eligibility Program, 2022–2023.



CHILD AND ADULT CARE FOOD PROGRAM (CACFP) PARTICIPATION

Key Findings: Although most Kansas regions have at least three-fourths (75.0–100.0 percent) of their counties covered by at least one CACFP site, only about one-third (36.0 percent) of the Southwest Region’s counties have a CACFP site in 2023. In 2023, about half of all CACFP sites (53.3 percent) were child care centers.

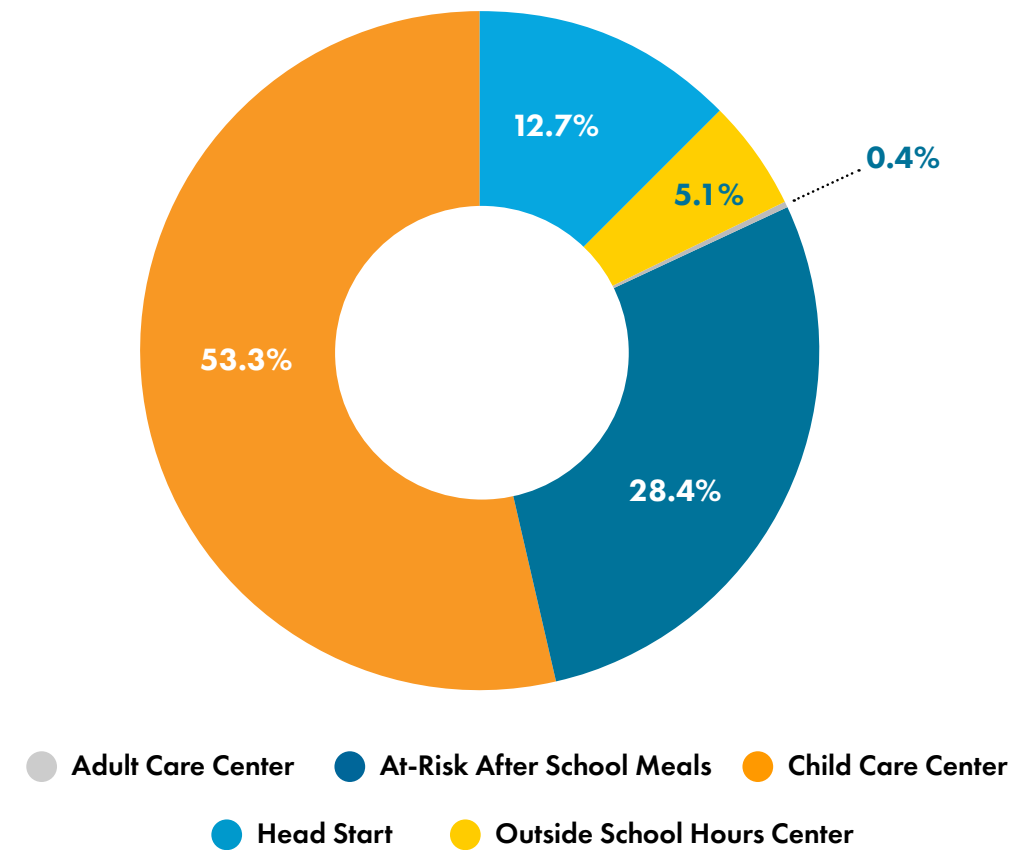
Figure 31. Percent of Counties with a Child and Adult Care Food Program (CACFP) Site in Kansas and KDHE District Office Regions, 2019–2023 Program Years

YEAR	KANSAS	NORTH CENTRAL	NORTHEAST	NORTHWEST	SOUTH CENTRAL	SOUTHEAST	SOUTHWEST
2019	76.2%	88.2%	94.1%	66.7%	88.9%	93.8%	48.0%
2020	77.1%	88.2%	94.1%	71.4%	88.9%	93.8%	48.0%
2021	79.0%	88.2%	94.1%	76.2%	88.9%	93.8%	52.0%
2022	73.3%	88.2%	94.1%	76.2%	88.9%	81.3%	36.0%
2023	73.3%	94.1%	100.0%	76.2%	77.8%	75.0%	36.0%

Note: Program years are designated by end of the year (e.g., program year 2023 is 2022–2023). CACFP is a federal program that reimburses participating child care, day care home and adult day care center sites for healthy meals and snacks served to children and adults.⁶⁴ Percents are calculated using counties with at least one CACFP site and the total number of counties within a geography. The number of counties by geography are: Kansas = 105, North Central = 17, Northeast = 17, Northwest = 21, South Central = 9, Southeast = 16 and Southwest = 25.

Source: Kansas Health Institute analysis of Kansas State Department of Education, Child Nutrition & Wellness Reports, Child & Adult Care Food Program (CACFP) Centers, 2019–2023.

Figure 32. Child and Adult Care Food Program (CACFP) Sites in Kansas by Type, 2023 Program Year



Note: Total number of centers in Kansas for 2023 program year = 668. Program years are designated by the end of the year (e.g., program year 2023 is 2022–2023). CACFP is a federal program that reimburses participating sites for healthy meals and snacks served to children and adults. To participate, sites must be a public entity, tax-exempt or, if a for-profit child care center, must have either 25 percent or more of enrolled participants or of the licensed capacity who are receiving child care subsidies or are low-income children. For-profit adult day care centers are eligible if the center meets the 25 percent rule with Medicaid beneficiaries.

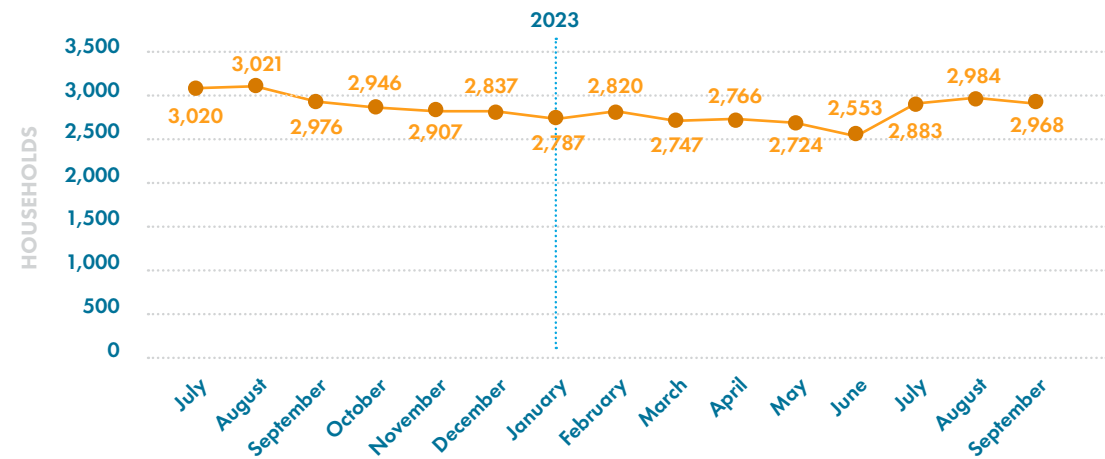
Source: Kansas Health Institute analysis of Kansas State Department of Education, Child Nutrition & Wellness Reports, Child & Adult Care Food Program (CACFP) Centers, 2022–2023.



TEMPORARY ASSISTANCE FOR NEEDY FAMILIES (TANF) PARTICIPATION

Key Findings: The state monthly average TANF enrollment for state fiscal year 2023 was 2,842 households.

Figure 33. Monthly Household Enrollment in Temporary Assistance for Needy Families (TANF), Kansas State Fiscal Year 2023



Note: The state monthly TANF household enrollment average for fiscal year (FY) 2023 was 2,842 households. For context, five years prior (FY 2019) the state monthly average was 4,265 households. The TANF program offers cash assistance for low-income families with children that meet specific income and limited resource requirements. Families can only receive TANF for 24 months in their lifetime and adults in households seeking TANF must actively work, participate in work activities or demonstrate they are seeking employment, unless they are caring for a child under age 2 or a household member with disabilities.

Source: Kansas Health Institute analysis of Kansas Department for Children and Families Family Services Division Economic and Employment Services, Caseload Detail for Selected Assistance Programs FY 2023 and FY 2024 as of Nov. 30, 2023.

LOW-INCOME, LOW-ACCESS CENSUS TRACTS

Key Findings: Almost 2 in 5 census tracts in the South Central (38.0 percent) and Southeast (39.2 percent) Regions of Kansas are classified as low-income census tracts where a significant number or portion of residents live more than a half mile (urban) or 10 miles (rural) from the nearest supermarket.

Figure 34. Percent of Low-Income, Low-Access (LILA) Census Tracts by Distance from the Nearest Supermarket, in Kansas and KDHE District Office Regions, 2019

DISTANCE TO NEAREST SUPERMARKET	KANSAS	NORTH CENTRAL	NORTH-EAST	NORTH-WEST	SOUTH CENTRAL	SOUTH-EAST	SOUTH-WEST
At 1/2 and 10 Miles	31.9%	30.7%	29.1%	23.9%	38.0%	39.2%	25.0%
At 1 and 10 Miles	18.1%	22.7%	15.3%	19.6%	18.5%	24.1%	17.9%
At 1 and 20 Miles	15.0%	12.0%	15.3%	6.5%	17.4%	16.5%	14.3%
Vehicle Access	10.4%	12.0%	9.5%	4.3%	15.8%	10.1%	1.8%

Note: LILA census tracts define low-income areas as “a tract with either a poverty rate of 20 percent or more, or a median family income less than 80 percent of the statewide median family income.” One (urban) or 10 (rural) miles, 1/2 (urban) or 10 (rural) miles, and one (urban) or 20 (rural) miles are defined as, “Low-income census tracts where a significant number or share of residents is more than x mile (urban) or x miles (rural) from the nearest supermarket.” Vehicle access is defined as “low-income census tract where more than 100 housing units do not have a vehicle and are more than 1/2 mile (urban) from the nearest supermarket, or a significant number or share of residents are more than 20 miles (rural) from the nearest supermarket.”

Source: USDA, Economic Research Service, Food Access Research Atlas, 2019.

LOW-INCOME, LOW-ACCESS (LILA) CENSUS TRACTS ARE SOMETIMES REFERRED TO AS “FOOD DESERTS.”



SAFE DRINKING WATER ACCESS

Key Findings: There were 109 boil water advisories in Kansas in 2022. The North Central Region experienced nearly six months (172 cumulative days) in which water distribution systems in one or more counties issued boil water advisories. Water distribution systems in the Northwest Region issued fewer boil water advisories (45 cumulative days) in one or more counties than other regions (80–172 cumulative days).

Figure 35. Number of Days with a Boil Water Advisory in Kansas and KDHE District Office Regions, 2022

BOIL WATER ADVISORY	KANSAS	NORTH CENTRAL	NORTHEAST	NORTHWEST	SOUTH CENTRAL	SOUTHEAST	SOUTHWEST
Number of Days	643	172	117	45	145	84	80

Note: Data reports number of days with boil water advisories (BWAs) in the 2022 calendar year. BWAs are issued to inform the public when a risk from exposure to harmful microorganisms may be present in the drinking water. In 2022, 109 BWAs were reported across Kansas. The most common reason for a BWA is loss of pressure in the water distribution system, sometimes from a line break or power outage. In some instances, multiple water systems within the same county had BWAs at the same time. Although in the same county, these systems serve different residents and could have different end dates. For this reason, each water system’s BWAs were counted individually. Calculations of days are not inclusive of start date. For example, if start date was Jan. 1, 2022, and end date was Jan. 10, 2022, 9 days were counted. This could slightly underestimate total time with BWAs. Four of these reports were excluded from the analysis due to unknown start or end date of the notice or data inaccuracies (end date listed one month before start date or nonexistent date).

Source: Kansas Health Institute analysis of Kansas Department of Health and Environment, Kansas Public Water Supply Program, Annual Compliance Report, Calendar Year 2022.

CONSUMER COST INDEX

Key Findings: Average household spending on food and housing is nearly half (43.8 percent in Kansas and 44.7 percent nationally) of annual household median income.

Figure 36. Percent of All Annual Average Household Spending on Food, Health Care, Transportation and Housing, 2023

POPULATION GROUP	FOOD	HEALTH CARE	TRANSPORTATION	HOUSING
Kansas	12.7%	8.6%	18.1%	31.1%
United States	12.6%	8.0%	17.4%	32.1%

Note: Percentages are average household spending in Kansas within the category divided by median household income in Kansas. All data is from Claritas’ proprietary database, Consumer Spending Dynamix, developed using the Bureau of Labor Statistics Consumer Expenditure Survey. Caution for interpretation is recommended as their exact methodology for the data estimates is not available. Food includes spending on food at home (e.g., groceries) and away from home (e.g., meals at a restaurant). Health care includes spending on health insurance, medical services, medication, vitamins and medical supplies. Transportation includes spending on out-of-town transportation, local transportation and vehicle expenses. Housing includes spending on owned housing, rented housing, other lodging, utilities, fuels, public services and other housing expenses.

Source: Claritas Consumer Index Estimates, 2023, accessed through Kansas Health Matters.



WEALTH DEVELOPMENT

The impact of wealth on health is substantial and multifaceted. Numerous studies have established a correlation between greater wealth and better health outcomes, attributing this connection to the material benefits wealth provides, including improved living conditions and access to health care.⁶⁵ The influence of wealth extends across generations, as parents' economic status significantly shapes their children's opportunities, impacting education, economic prospects and overall social well-being. Despite being one of the world's wealthiest nations, the U.S. exhibits significant economic inequality with a rising percentage of households experiencing zero or negative wealth, possibly contributing to lower overall health compared to similarly situated countries.⁶⁶ Additionally, racial disparities in wealth gaps and homeownership, which are a byproduct of a long history of systemic racism, continue to affect specific populations such as Black and Latino communities.⁶⁷ To promote health equity, addressing these disparities requires comprehensive efforts, including new policies and programs spanning education, housing, child care and employment at both state and national levels.⁶⁸

KEY FINDINGS:

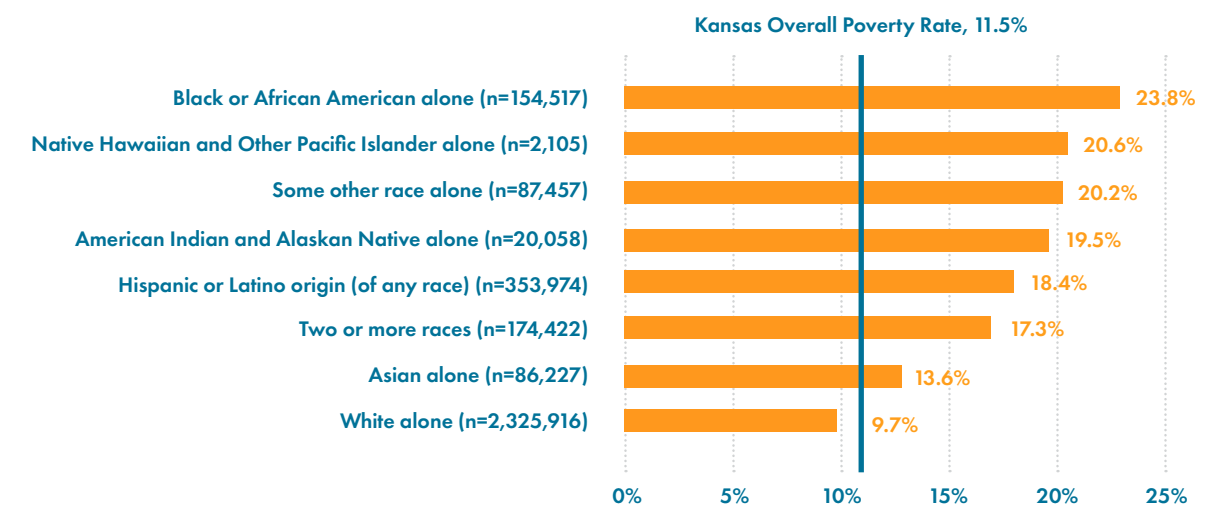
- Poverty:** Black or African American Kansans experience a higher poverty rate (23.8 percent) than all other racial and ethnic demographic groups in the state. The poverty rates for all racial and ethnic groups in Kansas (13.6 – 23.8 percent), besides White (9.7 percent), are higher than the Kansas overall poverty rate (11.5 percent). *Source: U.S. Census Bureau 2017–2021 5-Year Estimate.*
- Child Care Cost Burden:** Households with one child under age 3 spend \$10,843 on average each year on child care, which is 16.8 percent of the median household income in Kansas. *Source: Child Care Aware of Kansas, 2023.*
- Housing Affordability:** About 2 in 5 (43.0 percent) renter-occupied households are without affordable housing in Kansas. *Source: U.S. Census Bureau 2017–2021 5-Year Estimate.*
- Housing Ownership:**
 - In Kansas, 9 in 10 (89.2 percent) owner-occupied households are White. *Source: U.S. Census Bureau 2017–2021 5-Year Estimate.*
 - In Kansas, 3 in 4 (76.5 percent) renter-occupied households are White. *Source: U.S. Census Bureau 2017–2021 5-Year Estimate.*
- Educational Attainment:** In Kansas at least 3 in 5 (60.8–94.9 percent) adults age 25 or older across all racial and ethnic groups have a high school degree or higher. Across all racial and ethnic groups, less than one third of adults age 25 or older in the Southeast Region (5.6–30.9 percent) and Southwest Region (0.0–27.2 percent) have a bachelor's degree or higher. *Source: U.S. Census Bureau 2017–2021 5-Year Estimate.*
- Median Income by Educational Attainment:** In Kansas, adults age 25 and older with less than a high school degree have the lowest median income (\$29,301) across all educational attainment groups. Median income of adults age 25 and older with a high school degree or equivalent is \$33,428. *Source: U.S. Census Bureau 2017–2021 5-Year Estimate.*

- Employment:** Across all KDHE District Office Regions about 3 in 5 (58.9–65.4 percent) individuals age 16 and older are employed. *Source: U.S. Census Bureau 2017–2021 5-Year Estimate.*
- Income Distribution:** About 1 in 5 (18.5 percent) households in Kansas earn between \$50,000 to \$74,999 annually. *Source: U.S. Census Bureau 201–2021 5-Year Estimate.*
- Business Ownership:** More than half of Kansas business owners are male (57.6 percent), non-Hispanic (88.3 percent) and White (86.3 percent). *Source: U.S. Census Bureau Annual Business Survey, 2020.*

POVERTY

Key Findings: Black or African American Kansans experience a higher poverty rate (23.8 percent) than all other racial and ethnic demographic groups in the state. The poverty rates for all racial and ethnic groups in Kansas (13.6–23.8 percent), besides White (9.7 percent), are higher than the Kansas overall poverty rate (11.5 percent).

Figure 37. Poverty Rate by Racial and Ethnic Demographic Group in Kansas, 2017–2021 5-Year Estimate



Note: Total population in Kansas for which poverty is determined = 2,850,702. Total population (denominator) for each demographic group is provided in the labels. Population in Kansas earning less than 100 percent of the 2021 Federal Poverty Level (FPL) or \$26,500 for a family of four in 2021 = 327,209 people. The category of Hispanic or Latino, Any Race, is not mutually exclusive with other categories.

Source: U.S. Census Bureau American Community Survey (2017–2021) 5-Year Estimate, Table S1701.

CHILD CARE COST BURDEN

Key Findings: Households with one child under age 3 spend \$10,843 on average each year on child care, which is 16.8 percent of the median household income in Kansas.

Figure 38. Cost Burden of Child Care in Kansas, 2023

CHILD CARE CAPACITY AND COST BURDEN	KANSAS
Number of Children Under Age 6 With Parents in the Workforce	152,435
Number of Children that Child Care Facilities Are Willing to Accept	67,290
Percent of Children Under Age 6 With Parents in the Workforce Without a Child Care Opening	55.9%
Average Child Care Cost Burden for One Child Under Age 3	\$10,843
Percent of Child Care Cost Burden for One Child Under Age 3 Using Median Household Income	16.8%

Note: Total population in Kansas for children under age 6 is 217,915. Total number of children under age 6 with all parents in family in labor force = 152,435. Median household income in Kansas used in calculating cost burden is \$64,521.

Source: Kansas Health Institute analysis of 2023 data from Childcare Aware of Kansas.

HOUSING AFFORDABILITY

Key Findings: About 2 in 5 (43.0 percent) renter-occupied households lack affordable housing in Kansas.

Figure 39. Percent of Households Without Affordable Housing by Housing Arrangement in Kansas and KDHE District Office Regions, 2017–2021

HOUSING ARRANGEMENT	KANSAS	NORTH CENTRAL	NORTHEAST	NORTHWEST	SOUTH CENTRAL	SOUTHEAST	SOUTHWEST
Overall	25.0%	27.0%	25.3%	23.0%	25.0%	24.5%	21.5%
Renter-Occupied	43.0%	45.9%	43.2%	40.9%	42.5%	44.9%	34.5%
Owner-Occupied (With Mortgage)	20.5%	22.1%	19.9%	22.4%	19.8%	22.4%	23.6%
Owner-Occupied (No Mortgage)	10.9%	10.7%	11.1%	11.5%	10.8%	10.9%	10.3%

Note: In Kansas, households in which cost burden can be calculated include owner-occupied (no mortgage) = 312,314, owner-occupied (with mortgage) = 441,368, and renter-occupied = 354,494. “Without affordable housing” is calculated as the percent of households spending more than 30 percent of their gross income on housing costs (including utilities) by situation.

Source: Kansas Health Institute analysis of U.S. Census Bureau American Community Survey (2017–2021) 5-Year Estimate, Table DP04.



HOUSING OWNERSHIP

Key Findings: In Kansas, 9 in 10 (89.2 percent) owner-occupied households are White.

Figure 40. Percent of Owner-Occupied Households by Race and Ethnicity in Kansas and KDHE District Office Regions, 2017–2021

RACE AND ETHNICITY	KANSAS	NORTH CENTRAL	NORTHEAST	NORTHWEST	SOUTH CENTRAL	SOUTHEAST	SOUTHWEST
White	89.2%	93.2%	88.2%	95.8%	87.9%	92.7%	84.6%
Two or More Races	3.3%	2.5%	3.0%	2.0%	3.5%	3.7%	5.5%
Black or African American	3.0%	2.1%	3.8%	0.6%	3.5%	1.2%	0.6%
Asian	2.2%	1.1%	2.8%	0.4%	2.4%	0.8%	1.6%
Some Other Race	1.9%	0.7%	1.8%	0.9%	2.1%	0.7%	7.1%
American Indian/Alaskan Native	0.5%	0.4%	0.4%	0.2%	0.5%	0.8%	0.6%
Native Hawaiian/Pacific Islander	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%
Hispanic or Latino Origin	7.1%	4.0%	5.9%	2.9%	7.6%	3.6%	27.8%

Note: Race and ethnicity of households are determined by the self-reported demographic information of the householder who responded to the 2022 American Community Survey. Number of owner-occupied housing units: Kansas = 759,042; North Central = 71,677; Northeast = 351,020; Northwest = 36,966; South Central = 190,898; Southeast = 65,067; and Southwest = 43,414.

Source: Kansas Health Institute analysis of U.S. Census Bureau American Community Survey (2017–2021) 5-Year Estimate, Table S2502.

Key Findings: In Kansas, 3 in 4 (76.5 percent) renter-occupied households are White.

Figure 41. Percent of Renter-Occupied Households by Race and Ethnicity in Kansas and KDHE District Office Regions, 2017–2021

RACE AND ETHNICITY	KANSAS	NORTH CENTRAL	NORTHEAST	NORTHWEST	SOUTH CENTRAL	SOUTHEAST	SOUTHWEST
White	76.5%	80.2%	73.4%	90.1%	75.5%	86.0%	77.0%
Black or African American	10.5%	8.4%	13.3%	1.8%	11.0%	3.7%	5.3%
Two or More Races	5.8%	5.4%	5.1%	4.6%	6.2%	7.2%	9.6%
Asian	3.2%	3.5%	4.3%	0.2%	2.5%	1.0%	1.3%
Some Other Race	3.0%	1.6%	2.9%	2.1%	3.6%	1.2%	5.9%
American Indian/Alaskan Native	0.9%	0.5%	0.9%	1.2%	1.1%	1.0%	0.9%
Native Hawaiian/Pacific Islander	0.1%	0.3%	0.0%	0.0%	0.1%	0.1%	0.0%
Hispanic or Latino Origin	11.6%	9.1%	10.5%	9.0%	11.2%	7.9%	36.9%

Note: Race and ethnicity of households are determined by the self-reported demographic information of the householder who responded to the 2022 American Community Survey. Number of renter-occupied housing units: Kansas = 380,696; North Central = 42,094; Northeast = 173,181; Northwest = 15,348; South Central = 101,295; Southeast = 29,113; and Southwest = 19,665.

Source: Kansas Health Institute analysis of U.S. Census Bureau American Community Survey (2017–2021) 5-Year Estimate, Table S2502.



EDUCATIONAL ATTAINMENT

Key Findings: In Kansas at least 3 in 5 (60.8–94.9 percent) adults age 25 or older across all racial and ethnic groups have a high school degree or higher. Across all racial and ethnic groups, less than one third of adults age 25 or older in Southeast Region (5.6–30.9 percent) and Southwest Region (0.0–27.2 percent) have a bachelor’s degree or higher.

Figure 42. Adults Age 25 and Older With Educational Attainment of High School Graduation or Higher by Race and Ethnicity in Kansas and KDHE District Office Regions, 2017–2021

RACE AND ETHNICITY	KANSAS	NORTH CENTRAL	NORTHEAST	NORTHWEST	SOUTH CENTRAL	SOUTHEAST	SOUTHWEST
White Alone	94.9%	94.9%	96.3%	94.0%	94.1%	91.9%	92.2%
Black, Alone	88.0%	91.7%	89.0%	77.8%	86.8%	85.0%	74.5%
Two or More Races	85.5%	88.7%	89.2%	80.3%	84.9%	85.8%	69.6%
American Indian/ Alaskan Native Alone	85.2%	92.6%	89.6%	78.9%	77.8%	89.3%	74.1%
Asian Alone	85.0%	93.5%	89.9%	81.8%	74.4%	82.7%	73.9%
Native Hawaiian/ Pacific Islander Alone	78.2%	94.5%	68.3%	52.5%	86.5%	75.7%	13.9%
Hispanic or Latino Origin	67.9%	82.9%	72.2%	67.1%	68.4%	69.9%	53.0%
Some Other Race Alone	60.8%	84.2%	63.6%	59.1%	60.6%	75.7%	44.2%

Note: Adults age 25 and older: Kansas = 1,921,951; North Central = 180,860; Northeast = 893,026; Northwest = 85,239; South Central = 497,252; Southeast = 155,011; and Southwest = 110,563.

Source: Kansas Health Institute analysis of U.S. Census Bureau American Community Survey (2017–2021) 5-Year Estimate, Table S1501.

Figure 43. Adults Age 25 and Older With Education Attainment of Bachelor’s Degree or Higher by Race and Ethnicity in Kansas and KDHE District Office Regions, 2017–2021

RACE AND ETHNICITY	KANSAS	NORTH CENTRAL	NORTHEAST	NORTHWEST	SOUTH CENTRAL	SOUTHEAST	SOUTHWEST
Asian Alone	51.4%	55.2%	61.2%	54.0%	35.2%	30.9%	22.4%
White Alone	37.1%	31.5%	45.9%	25.7%	32.2%	23.5%	27.2%
Two or More Races	26.8%	19.6%	35.5%	17.6%	25.1%	20.1%	10.4%
Black Alone	22.2%	22.9%	25.0%	10.8%	18.7%	15.3%	8.4%
American Indian/ Alaskan Native Alone	19.5%	11.9%	25.2%	19.5%	14.7%	18.6%	14.3%
Hispanic or Latino Origin	14.8%	17.6%	18.5%	13.5%	15.8%	11.1%	6.1%
Some Other Race Alone	12.0%	15.4%	12.7%	15.7%	13.4%	11.4%	6.0%
Native Hawaiian/ Pacific Islander Alone	9.2%	1.3%	14.1%	33.8%	8.8%	5.6%	0.0%

Note: Adults age 25 and older: Kansas = 1,921,951; North Central = 180,860; Northeast = 893,026; Northwest = 85,239; South Central = 497,252; Southeast = 155,011; and Southwest = 110,563.

Source: Kansas Health Institute analysis of U.S. Census Bureau American Community Survey (2017–2021) 5-Year Estimate, Table S1501.



MEDIAN INCOME BY EDUCATIONAL ATTAINMENT

Key Findings: In Kansas, adults age 25 and older with less than a high school degree have the lowest median income (\$29,301) across all educational attainment groups. Median income of adults age 25 and older with a high school degree or equivalent is \$33,428.

Figure 44. Annual Median Income in the Past 12 Months by Educational Attainment in Kansas and KDHE District Office Regions, 2017–2021

EDUCATIONAL ATTAINMENT	KANSAS	NORTH CENTRAL	NORTH-EAST	NORTH-WEST	SOUTH CENTRAL	SOUTH-EAST	SOUTH-WEST
Adults Age 25 and Older With Earnings	\$43,070	\$36,848	\$42,820	\$37,053	\$37,981	\$35,055	\$38,662
Less Than High School Graduate	\$29,301	\$26,784	\$33,125	\$26,422	\$25,992	\$25,761	\$34,600
High School Graduate (Includes Equivalency)	\$33,428	\$31,611	\$35,401	\$32,339	\$32,694	\$31,117	\$36,164
Some College or Associate's Degree	\$39,037	\$35,850	\$39,775	\$35,923	\$36,894	\$34,414	\$36,053
Bachelor's Degree	\$54,255	\$42,807	\$50,957	\$46,790	\$45,945	\$44,690	\$47,499
Graduate or Professional Degree	\$66,495	\$52,452	\$61,911	\$55,529	\$60,612	\$51,801	\$65,514

Note: Adults age 25 and older: Kansas = 1,921,951; North Central = 180,860; Northeast = 893,02; Northwest = 85,239; South Central = 497,252; Southeast = 155,011; and Southwest = 110,563.

Source: Kansas Health Institute analysis of U.S. Census Bureau American Community Survey (2017–2021) 5-Year Estimate, Table S1501.

EMPLOYMENT

Key Findings: Across all KDHE District Office Regions about 3 in 5 (58.9–65.4 percent) individuals age 16 and older are employed.

Figure 45. Percent of Population Age 16 and Older Who Are Employed in Kansas and KDHE District Office Regions, 2017–2021

POPULATION GROUP	KANSAS	NORTH CENTRAL	NORTHEAST	NORTHWEST	SOUTH CENTRAL	SOUTHEAST	SOUTHWEST
Percent Age 16 and Older Who Are Employed	63.1%	59.8%	65.3%	63.3%	61.1%	58.9%	65.4%

Note: Population age 16 and older: Kansas = 2,299,477; North Central = 232,156; Northeast = 1,058,920; Northwest = 100,852; South Central = 587,542; Southeast = 159,778; and Southwest = 129,725.

Source: Kansas Health Institute analysis of U.S. Census Bureau, American Community Survey (2017–2021) 5-Year Estimate, Table DP03.



INCOME DISTRIBUTION

Key Findings: About 1 in 5 (18.5 percent) households in Kansas earn between \$50,000 to \$74,999 annually.

Figure 46. Distribution of Annual Household Income by Income Bracket in Kansas and KDHE District Office Regions, 2017–2021

ANNUAL HOUSEHOLD INCOME	KANSAS	NORTH CENTRAL	NORTH-EAST	NORTH-WEST	SOUTH CENTRAL	SOUTH-EAST	SOUTH-WEST
Less than \$10,000	5.0%	5.9%	4.4%	5.2%	5.2%	6.2%	4.3%
\$10,000 to \$14,999	3.7%	4.3%	2.8%	4.7%	4.2%	5.9%	3.6%
\$15,000 to \$24,999	8.1%	9.5%	6.6%	11.3%	8.8%	11.5%	8.1%
\$25,000 to \$34,999	8.9%	10.2%	7.5%	9.9%	9.4%	11.8%	10.6%
\$35,000 to \$49,999	13.0%	15.2%	11.3%	15.1%	13.7%	14.2%	15.8%
\$50,000 to \$74,999	18.5%	20.5%	16.9%	18.8%	19.7%	19.8%	20.0%
\$75,000 to \$99,999	13.6%	13.2%	13.9%	13.6%	13.5%	13.2%	13.7%
\$100,000 to \$149,999	16.0%	13.1%	18.3%	13.4%	15.2%	11.1%	14.8%
\$150,000 to \$199,999	6.7%	4.6%	8.8%	4.4%	5.8%	3.3%	5.1%
\$200,000 or More	6.6%	3.5%	9.6%	3.7%	4.6%	2.9%	4.0%

Note: Total households: Kansas = 1,139,738; North Central = 113,771; Northeast = 524,201; Northwest = 52,314; South Central = 292,193; Southeast = 94,180; and Southwest = 63,079.

Source: Kansas Health Institute analysis of U.S. Census Bureau, American Community Survey (2017–2021), 5-Year Estimate, Table DP03.

BUSINESS OWNERSHIP

Key Findings: More than half of Kansas business owners are male (57.6 percent), non-Hispanic (88.3 percent) and White (86.3 percent).

Figure 47. Business Ownership by Sex, Race and Ethnicity, and Veteran Status, 2020

POPULATION GROUP	MALE	FEMALE	EQUALLY MALE/FEMALE	HISPANIC	NON-HISPANIC	WHITE	ASIAN	VETERANS
Kansas	57.6%	18.6%	15.6%	2.6%	88.3%	86.3%	4.4%	6.3%
United States	61.0%	21.4%	14.0%	6.5%	88.9%	82.7%	10.6%	0.7%

Note: Total number of firms: Kansas = 52,963; and United States = 5,775,258. The total number of business equally owned by Hispanic/Non-Hispanic business owners is not available due to small sample size. In Kansas, the other race groups that are also suppressed due to small sample size includes Black or African American, American Indian and Alaskan Native, Native Hawaiian and other Pacific Islander. In the United States, business ownership for Black or African American = 2.4 percent, American Indian and Alaskan Native = 0.7 percent, and Native Hawaiian and other Pacific Islander = 0.2 percent. Equally veteran/non-veteran owned businesses in Kansas = 2.2 percent and in the United States = 2.2 percent. Minority-owned businesses in Kansas = 8.4 percent and in the United States = 19.9 percent.

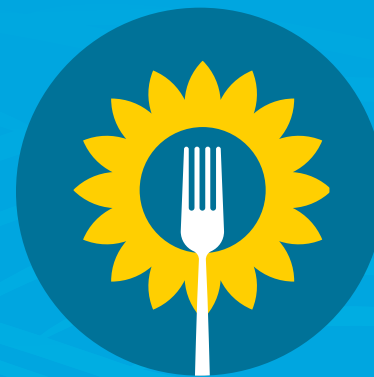
Source: U.S. Census Bureau Annual Business Survey Census Table AB2000CS01, 2020.



DISCUSSION AND CONCLUSIONS

This report serves to provide an overview of key data related to food security in Kansas but is not comprehensive of all potential sources and data related to hunger and food security. This overview is intended to help inform stakeholders during initial planning of the Hunger Free Kansas initiative and can be further extended to explore these and new indicators in additional detail in the future. Using the conceptual frameworks of social determinants of health and the USAID Food Systems, this report structured data indicator analysis under the four domains of 1) demographics; 2) hunger, nutrition and food insecurity; 3) food access infrastructure; and 4) wealth development. Within this, three definitions related to hunger were explored, including food sufficiency, food security and nutrition security. In the secondary data analysis included in this report, each domain section includes considerations for the domain's influence on different population groups and the health outcomes associated with the selected indicators. When available, data are presented by race and ethnicity, age, disability status, gender, sex and other demographics. Additionally, some indicators are presented at a regional and county level in recognition that communities can vary greatly across regions in size and resources. However, one limitation of using secondary data is that disaggregated data by demographic groups is not publicly available for all indicators, and definitions used to define community member identities can differ by source. Two opportunities to further expand this analysis are to request disaggregated data that is not currently publicly available, and to work directly with communities and local institutions to collect and share data by demographics.

Community engagement also offers an opportunity for future work to build an understanding of assets and needs within communities and engage with people who have historically not been included in these conversations. Future work to evaluate hunger in Kansas could engage community stakeholders in the design, implementation and monitoring of the initiative. This could include both qualitative and quantitative methodologies and allow stakeholders to evaluate outcomes that are best aligned with their work, even if the outcome is not currently available from a secondary source.



APPENDIX A: REPORT FINDINGS

DEMOGRAPHICS

- **Age:** Three in 10 people living in the Southwest Region are age 0–19 (30.7 percent) and in the Northwest Region are age 60 and older (28.8 percent). In Kansas overall, about 1 in 4 are age 0–19 (26.3 percent) and age 60 and older (23.4 percent). *Source: U.S. Census Bureau, 2022.*
- **Sex:** Across Kansas overall and regionally, the proportion of males and females are approximately half and half. *Source: U.S. Census Bureau, 2022.*
- **Race and Ethnicity:** About 2 in 5 (41.2 percent) people living in the Southwest Region are Hispanic or Latino. About 1 in 10 people are Hispanic or Latino in Kansas overall (13.0 percent) and in other regions (7.8 to 13.9 percent). *Source: U.S. Census Bureau, 2022.*
- **Peer County Group Designation:** Two-thirds (66.7 percent) of the counties in Kansas are designated as frontier (<6.0 persons per square mile, 37 counties) or rural (6.0 to 19.9 persons per square mile, 33 counties). *Source: Kansas Department of Health and Environment (KDHE), 2020.*

HUNGER, NUTRITION AND FOOD INSECURITY

- **Food Insufficiency:**
 - About 1 in 10 (12.5 percent) Kansas adults with children reported food insufficiency, which means sometimes or often not having enough to eat. *Source: U.S. Census Bureau, 2023.*
 - More than 1 in 10 (14.4 percent) Kansas adults age 18–24 reported food insufficiency. *Source: U.S. Census Bureau, 2023.*
 - Nearly 1 in 3 (29.6 percent) Kansas adults identifying as transgender reported food insufficiency. *Source: U.S. Census Bureau, 2023.*
 - About 1 in 10 (13.1 percent) Kansas adults who identify as lesbian, gay, bisexual or transgender reported food insufficiency. *Source: U.S. Census Bureau, 2023.*
 - About 1 in 5 Kansas adults who identify as Hispanic or Latino, any race (19.9 percent), Asian, not Hispanic (19.0 percent) and Black, not Hispanic (18.2 percent) reported food insufficiency. *Source: U.S. Census Bureau, 2023.*
 - About 1 in 5 (21.7 percent) Kansas adults who have less than a high school degree reported food insufficiency. Only 5.0 percent of Kansas adults with a bachelor’s degree or higher reported food insufficiency. *Source: U.S. Census Bureau, 2023.*
 - About 1 in 3 (35.0 percent) Kansas adults who have a lot of difficulty walking or climbing stairs reported food insufficiency. *Source: U.S. Census Bureau, 2023.*
 - About 1 in 4 (26.5 percent) Kansas adults who have a lot of difficulty seeing reported food insufficiency. *Source: U.S. Census Bureau, 2023.*
 - About 1 in 4 (26.4 percent) Kansas adults who have a lot of difficulty hearing reported food insufficiency. *Source: U.S. Census Bureau, 2023.*
- **Food Insecurity:** More than 1 in 10 (13.4 percent) Kansas children experience food insecurity. Twelve of the 16 counties in the Southeast Region have food insecurity rates greater than 15.1 percent. The food insecurity rate among Latino or Hispanic Kansans is 15.0 percent. Nearly 1 in 4 (24.0 percent) Black Kansans experience food insecurity. *Source: Feeding America, 2021.*

- **Fruit and Vegetable Consumption:** The consumption of fruit one or more times per day decreased from 62.2 percent in 2017 to 55.9 percent in 2021. *Source: Centers for Disease Control and Prevention (CDC), 2021.*
- **Breastfeeding:** Both Kansas (22.2 percent) and the United States (25.4 percent) fall short of the Healthy People 2030 goal of 42.4 percent of infants exclusively breastfed during the first six months. Additionally, the rates for any breastfeeding at 12 months are below the Healthy People 2030 goal of 54.1 percent, with Kansas at 36.4 percent and the United States at 37.6 percent. *Source: CDC, 2020.*

FOOD ACCESS INFRASTRUCTURE

- **Supplemental Nutrition Assistance Program (SNAP) Participation and Eligibility:** Based on the best approximation available, about 15.3 percent of Kansans are eligible for SNAP. However, only about 7.1 percent of Kansas households currently participate in SNAP. Nationally, about 16.7 percent of people are eligible for SNAP and about 11.4 percent of United States households currently participate in the program. *Source: U.S. Census Bureau, 2017–2021 5-Year Estimate.*
- **SNAP Online Purchasing:** Kansas ranks sixth in the U.S. for percent of SNAP households shopping online (28.8 percent). Of Kansas SNAP redemptions, 7.5 percent use online purchasing. *Source: U.S. Department of Agriculture (USDA), Fiscal Year 2022.*
- **Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Participation and Eligibility:** Of those eligible for WIC in Kansas, almost half (45.2 percent) were enrolled in 2020. Four in 5 eligible infants (79.6 percent) were enrolled. Only 1 in 3 eligible children (35.6 percent) were enrolled. About one third (35.0 percent) of White, non-Hispanic Kansans eligible for WIC were enrolled. *Source: USDA, 2020.*
- **Free- or Reduced-Price Lunch Program Participation:** Two in 5 (39.7 percent) Kansas students were approved to receive free lunch for the 2022–2023 school year. In the Southwest Region, more than 3 in 5 students (64.2 percent) were approved to participate in free- or reduced-price lunch during the 2022–2023 school year. *Source: Kansas State Department of Education (KSDE), 2018–2023.*
- **Summer Food Service Program Sites:** All counties in the Southeast Region have at least one site participating in the Summer Food Service Program (SFSP). In the Northwest Region, less than half (47.6 percent) of counties have sites. *Source: KSDE, 2022–2023.*
- **Community Eligibility Program (CEP) Participation and Eligibility:** More than half (57.4 percent) of all sites assessed for eligibility in Kansas are eligible or potentially eligible for CEP. However, just 6.9 percent of eligible sites are participating in CEP. *Source: KSDE, 2022–2023.*
- **Child and Adult Care Food Program (CACFP) Participation:** Although most Kansas regions have at least three-fourths (75.0–100.0 percent) of their counties covered by at least one CACFP site, only about one-third (36.0 percent) of the Southwest Region’s counties have a CACFP site in 2023. In 2023, about half of all CACFP sites (53.3 percent) were child care centers. *Source: KSDE, 2019–2023.*
- **Temporary Assistance for Needy Families (TANF) Participation:** The state monthly average TANF enrollment for state fiscal year 2023 was 2,842 households. *Source: Kansas Department for Children and Families, July 2022–September 2023.*
- **Low-Income, Low-Access Census Tracts:** Almost 2 in 5 census tracts in the South Central (38.0 percent) and Southeast (39.2 percent) Regions of Kansas are classified as low-income census tracts where a significant number or portion of residents live more than a half mile (urban) or 10 miles (rural) from the nearest supermarket. *Source: USDA, 2019.*

- **Safe Drinking Water Access:** There were 109 boil water advisories in Kansas in 2022. The North Central Region experienced nearly six months (172 cumulative days) in which water distribution systems in one or more counties issued boil water advisories. Water distribution systems in the Northwest Region issued fewer boil water advisories (45 cumulative days) in one or more counties than other regions (80–172 cumulative days). *Source: KDHE, 2022.*
- **Consumer Cost Index:** Average household spending on food and housing is nearly half (43.8 percent in Kansas and 44.7 percent nationally) of annual household median income. *Source: Claritas Consumer Index Estimates, 2023.*

WEALTH DEVELOPMENT

- **Poverty:** Black or African American Kansans experience a higher poverty rate (23.8 percent) than all other racial and ethnic demographic groups in the state. The poverty rates for all racial and ethnic groups in Kansas (13.6–23.8 percent), besides White (9.7 percent), are higher than the Kansas overall poverty rate (11.5 percent). *Source: U.S. Census Bureau 2017–2021 5-Year Estimate.*
- **Child Care Cost Burden:** Households with one child under age 3 spend \$10,843 on average each year on child care, which is 16.8 percent of the median household income in Kansas. *Source: Child Care Aware of Kansas, 2023.*
- **Housing Affordability:** About 2 in 5 (43.0 percent) renter-occupied households are without affordable housing in Kansas. *Source: U.S. Census Bureau 2017–2021 5-Year Estimate.*
- **Housing Ownership:**
 - In Kansas, 9 in 10 (89.2 percent) owner-occupied households are White. *Source: U.S. Census Bureau 2017–2021 5-Year Estimate.*
 - In Kansas, 3 in 4 (76.5 percent) renter-occupied households are White. *Source: U.S. Census Bureau 2017–2021 5-Year Estimate.*
- **Educational Attainment:** In Kansas at least 3 in 5 (60.8–94.9 percent) adults age 25 or older across all racial and ethnic groups have a high school degree or higher. Across all racial and ethnic groups, less than one third of adults age 25 or older in the Southeast Region (5.6–30.9 percent) and Southwest Region (0.0–27.2 percent) have a bachelor’s degree or higher. *Source: U.S. Census Bureau 2017–2021 5-Year Estimate.*
- **Median Income by Educational Attainment:** In Kansas, adults age 25 and older with less than a high school degree have the lowest median income (\$29,301) across all educational attainment groups. Median income of adults age 25 and older with a high school degree or equivalent is \$33,428. *Source: U.S. Census Bureau 2017–2021 5-Year Estimate.*
- **Employment:** Across all KDHE District Office Regions about 3 in 5 (58.9–65.4 percent) individuals age 16 and older are employed. *Source: U.S. Census Bureau 2017–2021 5-Year Estimate.*
- **Income Distribution:** About 1 in 5 (18.5 percent) households in Kansas earn between \$50,000 to \$74,999 annually. *Source: U.S. Census Bureau 2017–2021 5-Year Estimate.*
- **Business Ownership:** More than half of Kansas business owners are male (57.6 percent), non-Hispanic (88.3 percent) and White (86.3 percent). *Source: U.S. Census Bureau Annual Business Survey, 2020.*

APPENDIX B: DATA SOURCES USED IN THIS REPORT

The following figure describes the measures included in this report by section and includes each measure’s source and years of data used.

Figure B-1. Description of Measures Used in This Report

MEASURE	DESCRIPTION	SOURCE	YEARS
DEMOGRAPHICS			
Age	Percent of population by age	U.S. Census Bureau's Vintage Population Estimates	2022
Sex	Percent of population identified as male or female	U.S. Census Bureau's Vintage Population Estimates	2022
Race and Ethnicity	Percent of population identified as Non-Hispanic White, Non-Hispanic Black, Non-Hispanic American Indian/Alaskan Native, Non-Hispanic Asian/Pacific Islander, Non-Hispanic Two or More Races, or Hispanic	U.S. Census Bureau's Vintage Population Estimates	2022
Peer County Group Designation	Kansas peer county groups by population density	Kansas Department of Health and Environment	2022
HUNGER, NUTRITION AND FOOD INSECURITY			
Food Sufficiency	Percent of population experiencing food insufficiency by households with children, age, sex, sexual orientation, race and ethnicity, education status, difficulty walking or climbing stairs, difficulty seeing and difficulty hearing	U.S. Census Bureau Household Pulse Survey	2023
Food Insecurity	Percent of population by county experiencing food insecurity overall in Kansas and by race	Feeding America	2021
Fruit and Vegetable Consumption	Percent of population that consumed fruit or vegetables	Kansas Department of Health and Environment's Behavioral Risk Factor Surveillance System	2017–2021

MEASURE	DESCRIPTION	SOURCE	YEARS
Breastfeeding	Rates of any and exclusive breastfeeding among children	National Immunization Survey-Child, Centers for Disease Control and Prevention, Department of Health and Human Services	2020
FOOD ACCESS INFRASTRUCTURE			
Supplemental Nutrition Assistance Program (SNAP) Participation and Eligibility	Supplemental Nutrition Assistance Program eligibility and participation in Kansas	American Community Survey	2017–2021 5-year estimate
SNAP Online Purchasing	Percent of SNAP households shopping online and percent of state redemptions spent online	U.S. Department of Agriculture Food and Nutrition Service, Supplemental Nutrition Assistance Program (SNAP) retailer participation	Federal FY 2022
WIC Participation and Eligibility	WIC participation and eligibility of infants, children under five, and women, by race and ethnicity	U.S. Department of Agriculture Food and Nutrition Service National and State Level Estimates of WIC Eligibility and Program Reach	2020
Free- or Reduced-Price Lunch Program Participation	Percent of Kansas students approved for free or reduced lunch	Kansas State Department of Education	2018–2023
Summer Food Service Program Sites	Number of operating days of summer meal program by region	Kansas State Department of Education	2022–2023
Community Eligibility Provision (CEP) Participation and Eligibility	Percent of eligible and potentially eligible CEP locations in Kansas	Kansas State Department of Education	2022–2023
Child and Adult Care Food Program (CACFP)	Percent of counties with a CACFP site by region and Kansas	Kansas State Department of Education	2019–2023
Temporary Assistance for Needy Families (TANF) Participation	Monthly household enrollment in TANF	Kansas Department for Children and Families Family Services Division Economic and Employment Services	State FY 2023

MEASURE	DESCRIPTION	SOURCE	YEARS
Low-Income, Low-Access Census Tracts	Percent of LILA Census Tracts by region and distance from the nearest supermarket	USDA Food Access Research Atlas	2019
Safe Drinking Water Access	Number of days with a Boil Water Advisory in Kansas and regions	Kansas Department of Health and Environment	2022
Consumer Cost Index	Percent of all annual household spending on food, health care, transportation and housing in Kansas	Claritas Consumer Index Estimates	2023
WEALTH DEVELOPMENT			
Poverty	Percent of population in poverty by race and ethnicity	American Community Survey	2017–2021 5-year estimate
Child Care Cost Burden	Cost burden for child care	Childcare Aware of Kansas	2023
Housing Affordability	Percent of households without affordable housing by housing type	American Community Survey	2017–2021 5-year estimate
Housing Ownership	Homeownership compared to renter by race and ethnicity	American Community Survey	2017–2021 5-year estimate
Educational Attainment	High school and bachelor's degree or higher by race and ethnicity	American Community Survey	2017–2021 5-year estimate
Median Income by Educational Attainment	Median income by educational attainment	American Community Survey	2017–2021 5-year estimate
Employment	Percent of population age 16 and older who are employed	American Community Survey	2017–2021 5-year estimate
Income Distribution	Distribution of household income by income bracket	American Community Survey	2017–2021 5-year estimate
Business Ownership	Number of employer firms by race, ethnicity, sex and veteran status	U.S. Census Bureau Annual Business Survey	2020

APPENDIX C: ENDNOTES

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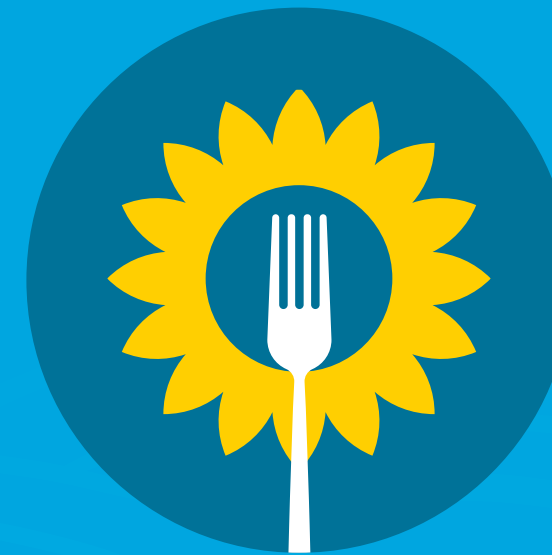
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