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FOOD INSECURITY IN KANSAS

Technical Report


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Executive Summary

Access to a variety of nutritious foods in appropriate amounts is a fundamental human need and a prerequisite for good health. In the United States, and in Kansas, food is plentiful and in ample supply. Yet, many American and Kansas families struggle to put enough and the right kinds of food on their tables because a lack of financial resources to purchase it. This lack of consistent access to enough food because of a lack of resources is frequently described as “food insecurity.” In Kansas, one out of every six households (16.5 percent) was food-insecure at some time during 2013. That means that more than 183,000 households, representing approximately 450,000 Kansans, did not have reliable access to enough food. One in five Kansas households which included children were food-insecure in 2013; nearly half of Kansas households headed by single women with children faced food insecurity.

Food insecurity in Kansas, and in the United States, is largely a consequence of inadequate household income and financial instability. Although food insecurity is not confined only to households living in poverty, income is a primary risk factor. Low-income households frequently face difficult choices when trying to stretch household budgets to cover basic needs such as housing, utilities, food, transportation, and medical care, and food is often the only area where expenditures can be cut without external penalty. Unexpected expenses or loss of income can quickly push a family that is just getting by into a situation of food insecurity and a need for assistance.

The costs and consequences of food insecurity are substantial. Numerous research studies have shown that food insecurity is associated with declines in health status, increased rates of chronic disease, anxiety and depression among adults. Children who grow up in food-insecure homes are at increased risk for poor health and hospitalization, more likely to perform poorly in school, and more likely to exhibit behavioral problems than their food-secure peers. Food insecurity is often associated with obesity, as food-insecure families struggle to maintain healthy diets. Economic studies have estimated the costs of food insecurity in Kansas to be in excess of \$1.62 billion annually. In addition, more than \$800 million is spent each year in Kansas on food assistance programs.

Despite the efforts of a network of private sector and government-funded food assistance programs, the problem of food insecurity in Kansas has not declined since first measured in 1995, and recent data suggest that rates of food insecurity is on the rise. Getting food to those in need is a critical first step toward alleviating food insecurity and preventing hunger, but most food assistance programs do little to address the underlying causes of the problem.

Consequently, it is unlikely that food assistance efforts alone will ever produce significant and sustainable reductions in rates of food insecurity. To achieve lasting reductions in rates of food insecurity, changes that improve opportunities for all Kansas families to achieve financial stability will also be needed. Effective long-term policy solutions will need to take a two-pronged approach: 1) support through food assistance programs until food-insecure families achieve financial stability and food security, and 2) programmatic and policy supports that improve the prospects for economic opportunity and financial stability among low-income households. Additionally, policies that improve access to and affordability of nutritious foods could help to reduce rates of food insecurity and support low-income families in their selection of healthier food options. There are numerous state-level policy options that might be considered if Kansas policymakers wish to reduce the burden of food insecurity in Kansas, including offering summer food service programs in low-income schools, lowering sales taxes on healthy food items, and including personal finance education in high school curricula. These, and other, possible strategies are outlined in the body of this report.

Introduction

The term “food-insecure” is used to describe households or individuals that lack reliable access to nutritious food to support a healthy lifestyle because of a lack of financial resources (USDA, Economic Research Service). In Kansas, an agricultural state sometimes referred to as the “Breadbasket of the Nation,” one out of six households (16.5 percent) was food-insecure during 2013. That means that more than 183,000 Kansas households, representing approximately 450,000 people lacked reliable access to affordable, nutritious food because they did not have the money necessary to purchase it. In these households, family members frequently reported that they had reduced the quality or variety of their diets in order to stretch their food supply. In its most severe form, food insecurity may result in hunger, with one or more members of the household skipping meals because there is not enough food for all family members.

With the help of numerous food assistance programs that serve families in need, the images of food insecurity and hunger in the United States and in Kansas are not those of severe malnutrition and starvation. Instead, they are more subtle, and largely invisible to those who are fortunate enough to be free from worries about access to enough food. Food insecurity might be more accurately depicted by images of stressed and anxious families struggling to stretch limited budgets to pay for basic needs, or by children struggling to pay attention in the classroom because they are hungry. When money is short, food purchases are frequently the one area where expenses can be cut back without external penalties. Efforts to reduce spending on food often result in the purchase of cheaper foods that are of poor nutritional quality, and sometimes mean that some members of the household eat less or go without.

The purpose of this study is to describe the extent and characteristics of food insecurity among Kansas families, and to outline possible policy strategies for reducing the number of Kansans that are food-insecure.

Understanding Food Insecurity and Hunger in Kansas

Definitions, Measurement and Data Sources

As measured in the United States, the term “food security” is defined as the ability to obtain enough nutritious foods, through socially acceptable means, to support a healthy lifestyle. Households that report no concerns about their ability to obtain enough food are referred to as “food-secure.” Households that indicate only concerns about food running out before there was money to buy more, without additional indications of changes in diet or food intake, are classified as “marginally food-secure.” Individuals and families that report more severe indications of uncertainty or anxiety about their abilities to obtain enough food because of a lack of resources are termed “food-insecure.” The category of “food-insecure” is further divided into two groups to better describe severity. Those individuals and families who report reduced quality or variety in their diets, but no reductions of food intake are described as having “low food security.” Households that report indications of disrupted eating patterns and reduced food intake due to lack of access to food are described as having “very low food security” (Figure 1).

Figure 1. Levels of Food Security

USDA – Reported Food Security Status	Detailed Food Security Status	Conditions in the Household
Food-secure	Food-secure	No reported indications of food-access problems or limitations.
	Marginal food security	One or two reported indications of anxiety about shortage of food in the home. Little or no indication of changes in diet or food intake.
Food-insecure	Low food security	Three to five reported food-insecure conditions. Reports of reduced quality, variety or desirability of diet. Little or no indication of reduced food intake.
	Very low food security	Six or more reported food-insecure conditions. Reports of multiple indications of disrupted eating patterns and reduced food intake.

Source: USDA, Economic Research Service.

Since 1995, national and state levels of household food insecurity in the United States have been measured annually through a supplemental Food Security module that is administered by the U.S. Census Bureau in conjunction with the Current Population Survey (CPS). In each participating household, an adult respondent is asked a series of 18 questions about food-related experiences and behaviors during the previous 12 months, such as being unable to afford balanced meals or cutting the size of meals because of insufficient money to buy food (See *Appendix 1, page 39*, for screening questions). In addition to questions about food security status, families are queried about their use of public and private food assistance programs, spending on food, demographics, employment and income characteristics. Results from the CPS Food Security Supplement are analyzed and published annually by the U.S. Department of Agriculture's (USDA) Economic Research Service.

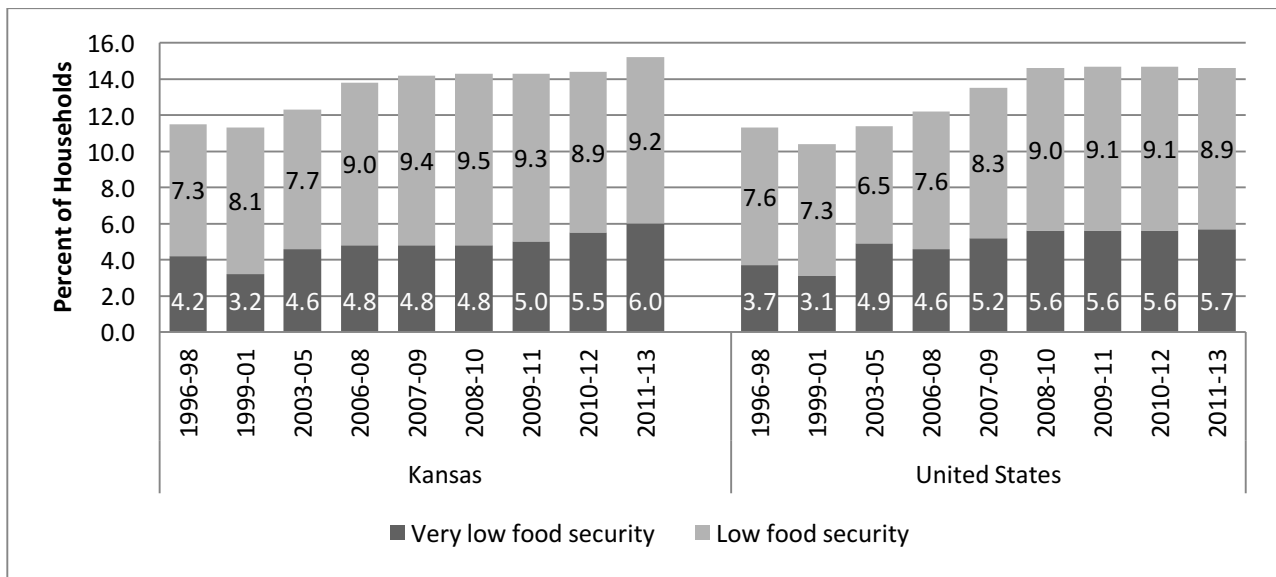
While the CPS Food Security survey provides standardized measurement of food insecurity and hunger at the national and state levels, sample sizes and methodology are not (except a few densely populated locations) sufficient to provide estimates of food insecurity at the county or city levels. Since 2009, Feeding America – the national umbrella organization for a network of private sector food banks and affiliated food assistance agencies – has utilized a statistical modeling process that pairs state level food security data from the CPS survey with county-level demographic characteristics that are associated with an increased risk of food insecurity to produce estimates of food insecurity at congressional district and county levels (Feeding America, *Map the Meal Gap*). Feeding America and its affiliate agencies also conduct periodic surveys of their affiliate agencies and clients to document and describe current characteristics of the private sector food assistance network and the clients that it serves. Results of these surveys are summarized at the state level and provide additional insight about the challenges faced by food-insecure individuals who turn to food pantries or emergency meal programs for help.

In addition to these data sources, data and reports related to the major government-sponsored and private sector food assistance programs provide additional indications of the level of food insecurity and need for assistance. Data, results and findings from all of these sources have been reviewed and synthesized to produce this report describing food insecurity and hunger in Kansas.

Food Insecurity in Kansas

Historically, rates of household food insecurity in Kansas have been similar to or slightly higher than national rates since annual measurement first began in 1995. Each year, the U.S. Department of Agriculture's Economic Research Service has published reports that include three-year rolling averages of state-level food insecurity rates (Figure 2). The three-year averages help to smooth out variability resulting from smaller sample sizes at the state level, but may mask emerging temporal trends. For that reason, the Kansas Health Institute (KHI) has also calculated annual rates of household food insecurity in Kansas, as presented in Figure 3 (page 7).

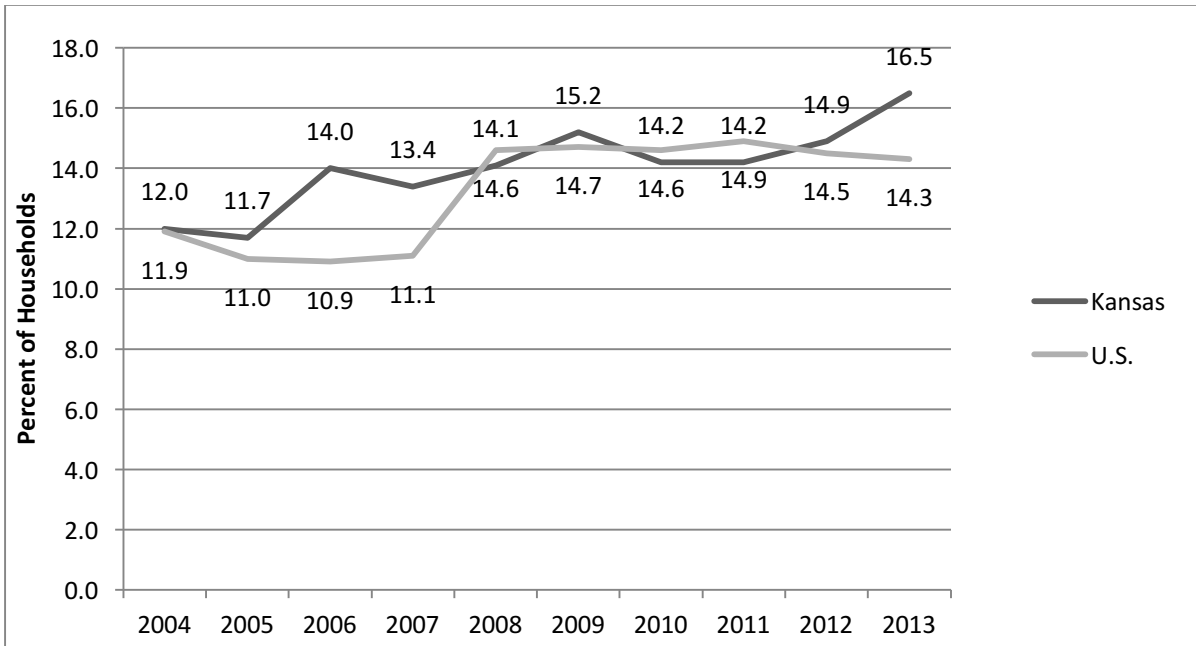
Figure 2. Rates of Household Food Insecurity, 1996–2013, Three-Year Rolling Averages



Source: USDA Economic Research Services, annual reports on Household Food Security in the United States.

Nationally, rates of household food insecurity (low or very low food security) increased sharply between 2007 and 2008, remained high through 2011 and then began to decline slightly between 2011 and 2013 (Figure 3, page 7). Annual food insecurity rates in Kansas show more fluctuation from year to year due to smaller sample sizes, but show rates of household food insecurity that were higher than national levels between 2005 and 2007 and similar to national rates between 2008 and 2011. As national food insecurity rates have declined slightly between 2011 and 2013, rates of food insecurity have increased in Kansas during the same time period. While this trend is not statistically significant, it does raise concern and suggests a need for close monitoring.

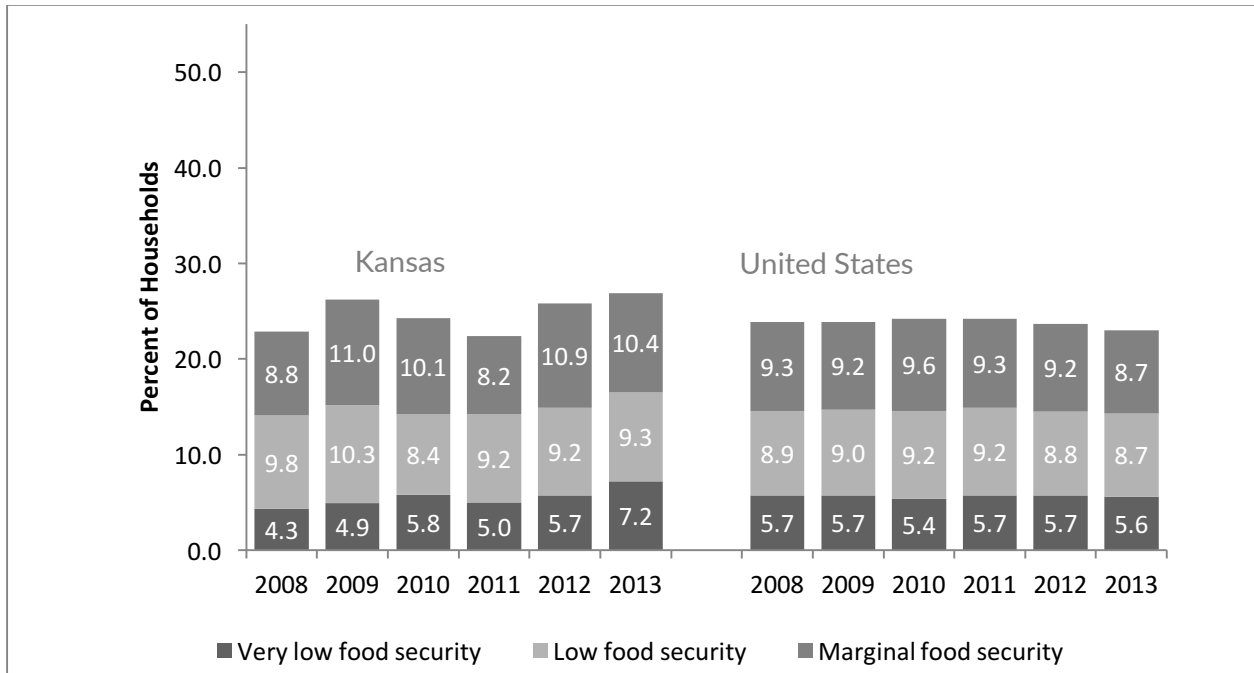
Figure 3. Annual Rates of Household Food Insecurity (Low or Very Low), Kansas vs. United States, 2004–2013



Source: Rates calculated by KHI, using data from the 2004 through 2013 December Current Population Survey (CPS) Food Security Supplements.

When households classified as “marginally food-secure” (defined as reporting one or two indications of anxiety about being able to obtain enough food) are included, more than one in four (26.9 percent) of Kansas households reported some level of uncertainty about their ability to obtain enough food during 2013 (Figure 4, page 8). About 10 percent of Kansas households were marginally food-secure, indicating that they worried about food running out, or that the food that they bought did not last and there was no money to buy more. Nine percent of Kansas households experienced “low food security,” frequently indicating that they were unable to afford to eat balanced meals and that they had reduced portions or eaten less because there was not enough food and no money to buy more. Slightly more than seven percent of Kansas households experienced “very low food security,” experiencing more severe patterns of reduced food intake and disrupted eating patterns due to a lack of food and resources.

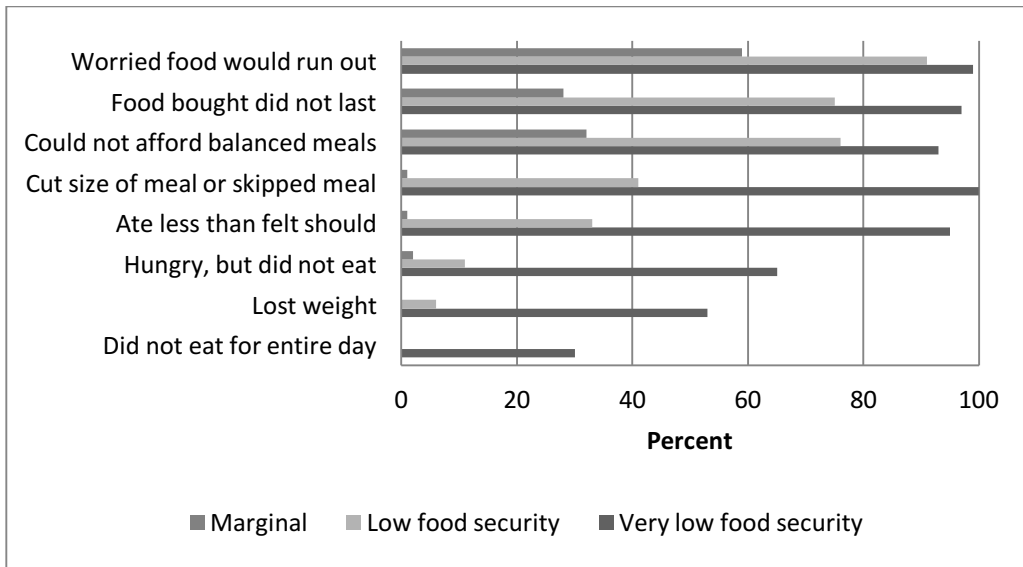
Figure 4. Annual Rates of Household Food Insecurity, Including Marginal Food Security, Kansas vs. United States, 2008–2013



Source: Rates calculated by KHI, using data from the 2008 through 2013 December Current Population Survey Food Security Supplements.

The chart in *Figure 5* (page 9) shows how Kansas households that were classified at each level of food insecurity in 2013 answered the questions from the Food Insecurity Screening panel, and is helpful in understanding the nature of the food hardship that the households experienced. Families that were “marginally food secure” expressed concern about running out of food or not being able to afford balanced meals, but few indicated the need to reduce portions or skip meals because of inadequate food. Households that were rated as “low food security,” indicated more severe food stress. About three-quarters of them indicated that they could not afford balanced meals, and about 40 percent stated they had reduced portions or skipped meals due to a lack of food and resources. Among the households rated as “very low food security,” significant food hardship was evident with 100 percent indicating that they had reduced portions or skipped meals. Two-thirds indicated that someone had gone hungry and did not eat because there was not enough food, and more than half indicated they lost weight because there was not enough to eat.

Figure 5. Percentage of Kansas Households Reporting Each Indicator of Food Insecurity, by Food Security Status, 2013



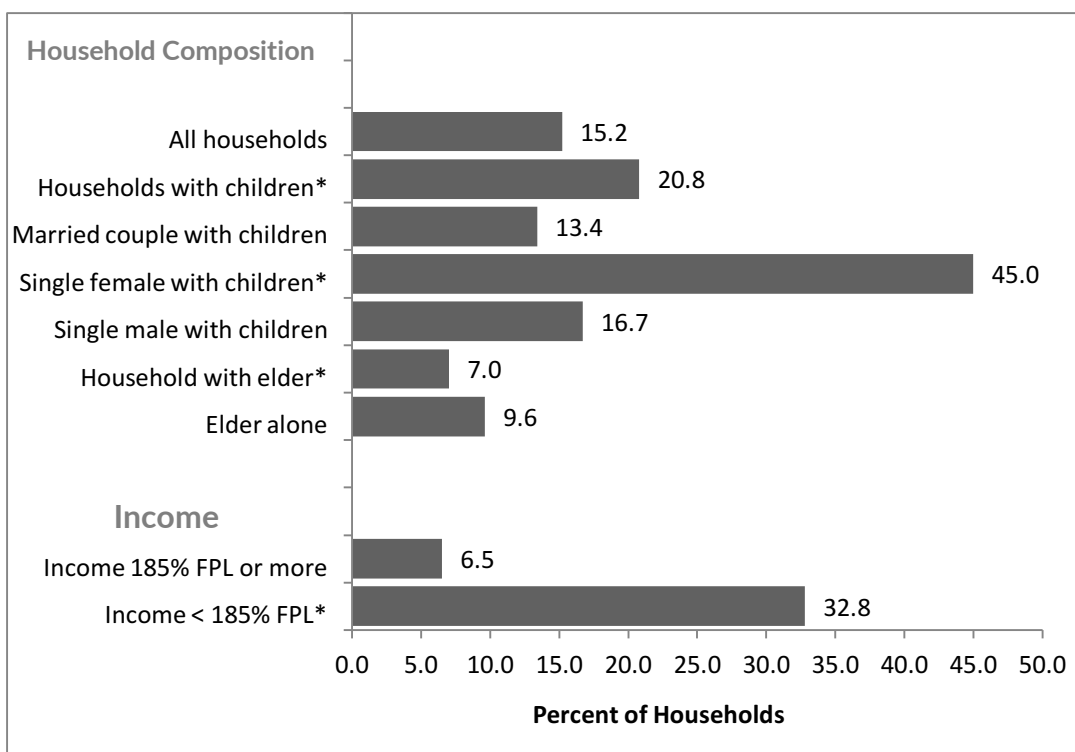
Source: Rates calculated by KHI, using data from the 2013 December Current Population Survey (CPS) Food Security Supplement.

Characteristics of Food-Insecure Households

Analysis of CPS Food Security Supplement data and other research studies have identified demographic characteristics that are frequently associated with increased rates of household food insecurity. Not surprisingly, households with lower incomes are at increased risk for food security, although food insecurity is not entirely limited to low-income households. Nearly one-third of Kansas households with annual incomes below 185 percent of the federal poverty level (FPL) (approximately \$44,100 for a family of four) experienced food insecurity between 2011 and 2013, compared to 6.5 percent of those with incomes higher than 185 percent of the FPL. This income comparison is important because families with incomes above 185 percent of the FPL would be ineligible for help from any government-sponsored food assistance programs. Lower educational attainment and minority racial/ethnic status of the head of household are also characteristics that are associated with increased likelihood of food insecurity.

Rates of food insecurity also vary with household composition. Households that include children are more likely to experience food insecurity than those without children. Among households with children, single parent households — particularly those headed by single mothers — are at increased risk of food insecurity. Between 2011 and 2013, nearly half (45 percent) of Kansas households headed by single women with children were food-insecure. Generally, seniors (adults age 60 years or greater) were less likely than the general population to be food-insecure.

Figure 6. Low or Very Low Food Security Rates by Household Characteristics, Kansas, 2011–2013



Source: Rates calculated by KHI, using data from the 2011 through 2013 December Current Population Survey Food Security Supplements. Rates are aggregated across the three years to provide sufficient sample size for subgroup analysis. * indicates that there is a statistically significant ($p < 0.05$) difference between group and reference group. Reference groups are “All households” for household composition, and “Income 185% of FPL or more” for household income.

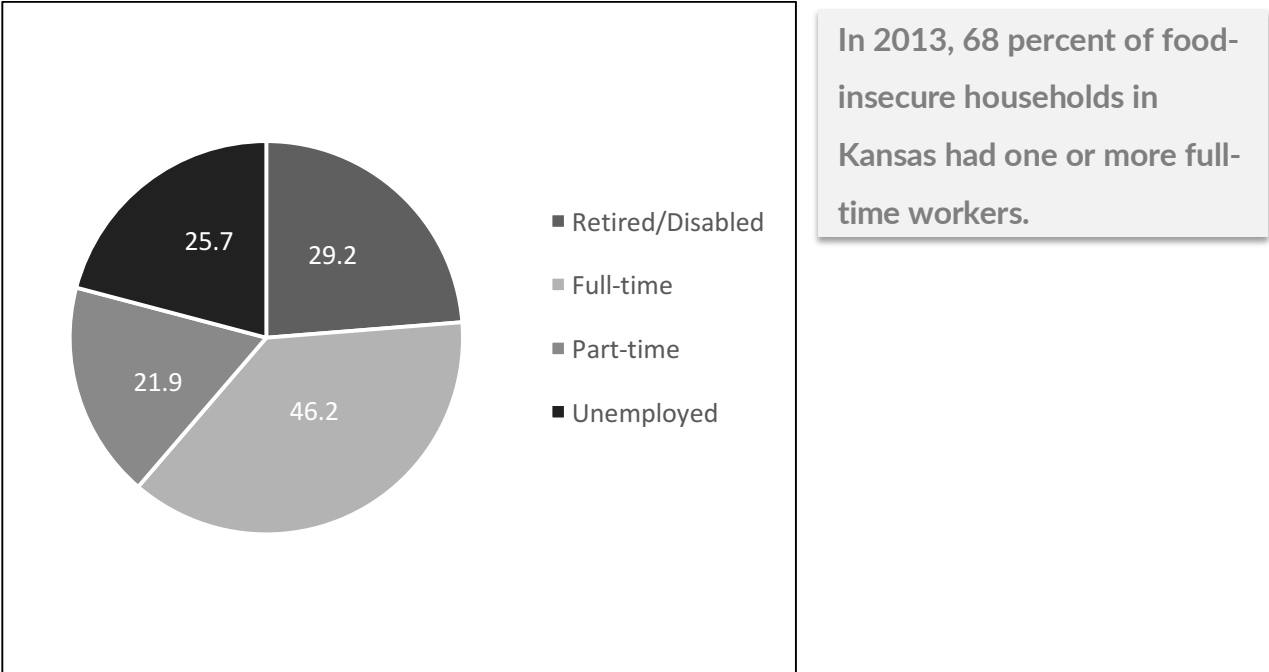
Employment Status of Food-Insecure Households

Results from the CPS Food Security Supplement show that the majority of food-insecure households are working families. During 2013, more than two-thirds (68 percent) of food-insecure households in Kansas included at least one full-time worker.

When looking only at the employment status of the food-insecure heads of household, slightly less than half (46 percent) were employed full-time (35 or more hours per week), and another 22 percent were working part-time (less than 35 hours per week). In nearly one-third (29 percent) of the Kansas households that experienced food insecurity during 2013, the head of the household was not in the workforce due to either retirement or disability (Figure 7).

These results are consistent with previous studies (LaClair, 2005; Nord, 2009), and suggest that the majority of families that experience food insecurity are trying to support themselves by working, but have earnings that are insufficient to support the families' basic needs.

Figure 7. Employment Status of Heads of Food-Insecure Household, Kansas, 2013



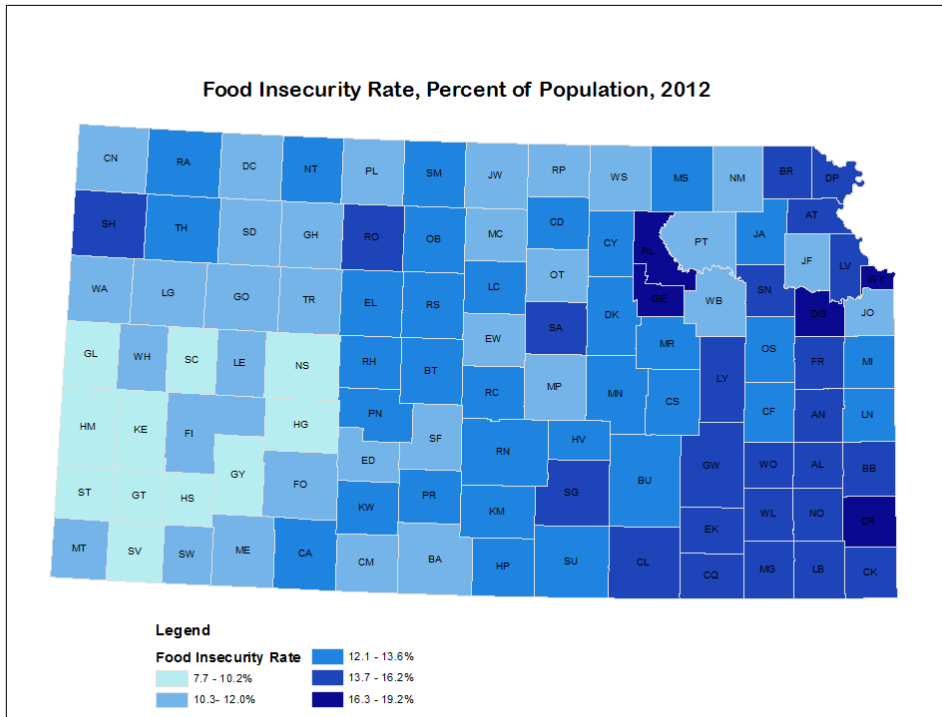
Source: Rates calculated by KHI, using data from the 2013 Current Population Survey Food Security Supplement.

Geographic Distribution of Food Insecurity

Food insecurity exists in both rural and urban locations in Kansas, at approximately equal rates. At the county level, estimated rates (expressed as percent of the population) of low or very low food insecurity are highest in Wyandotte, Douglas, Riley, Geary and Crawford counties (Feeding America, Map the Meal Gap). Rates of food insecurity are generally highest in the eastern third of the state, particularly in the southeastern corner (Figure 8, page 12).

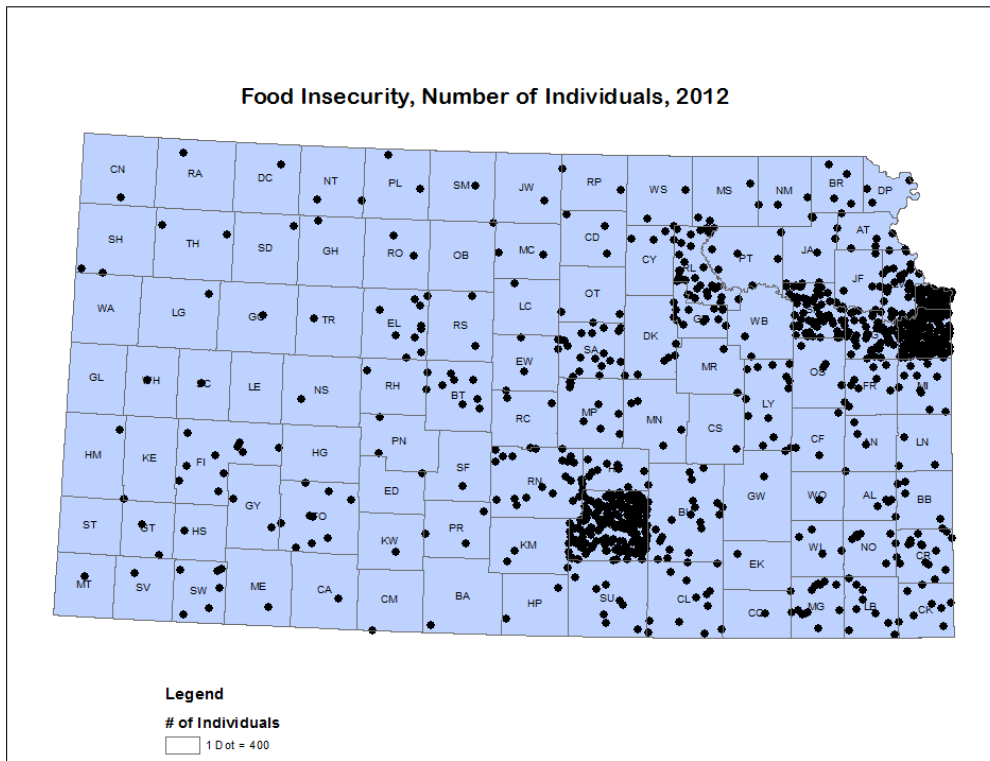
Rates of food insecurity are lowest in the southwestern corner of the state. In terms of the numbers of individuals who are food-insecure, the highest counts concentrate around population centers in the state, primarily in Wyandotte, Johnson, Douglas, Shawnee and Sedgwick counties (Figure 9, page 13).

Figure 8. Estimated County-Level Rates of Food Insecurity, 2012



Source: Data from Feeding America, Map the Meal Gap, <http://www.feedingamerica.org/hunger-in-america/our-research/map-the-meal-gap/>. Maps created by the Kansas Health Institute.

Figure 9. Estimated Number of People Who Were Food-Insecure, 2012



Source: Data from Feeding America, *Map the Meal Gap*, <http://www.feedingamerica.org/hunger-in-america/our-research/map-the-meal-gap/>. Maps created by the Kansas Health Institute.

Vulnerable Sub-Populations and Emerging Concerns

Research focused on measuring and analyzing food insecurity in the United States has shown that certain demographic and socioeconomic characteristics are associated with households at increased risk for food insecurity. Research has also shown that children and seniors are particularly vulnerable to adverse health consequences associated with food insecurity. In recent years, there have been emerging reports of high rates of food insecurity among college students, veterans and active military families. In the study *Hunger in America 2014*, researchers estimated that one in 10 adults seeking assistance through Feeding America’s national network of private-sector emergency food providers during 2013 was a student. In the same study, one in five households served had a member who had served in the U.S. Military, and 4 percent of households served had at least one member who was currently serving.

A study conducted in Minnesota in 2012 found that one in four U.S. veterans of wars in Iraq and Afghanistan had experienced food insecurity during the previous year (Widome, 2015). A number of recently published studies and reports have cited high rates of food insecurity among college students (Bahrapour, 2014; Chaparro, 2009; Maroto, 2014; Patton-Lopez, 2014; Shepherd, 2014).

Food Insecurity and Children

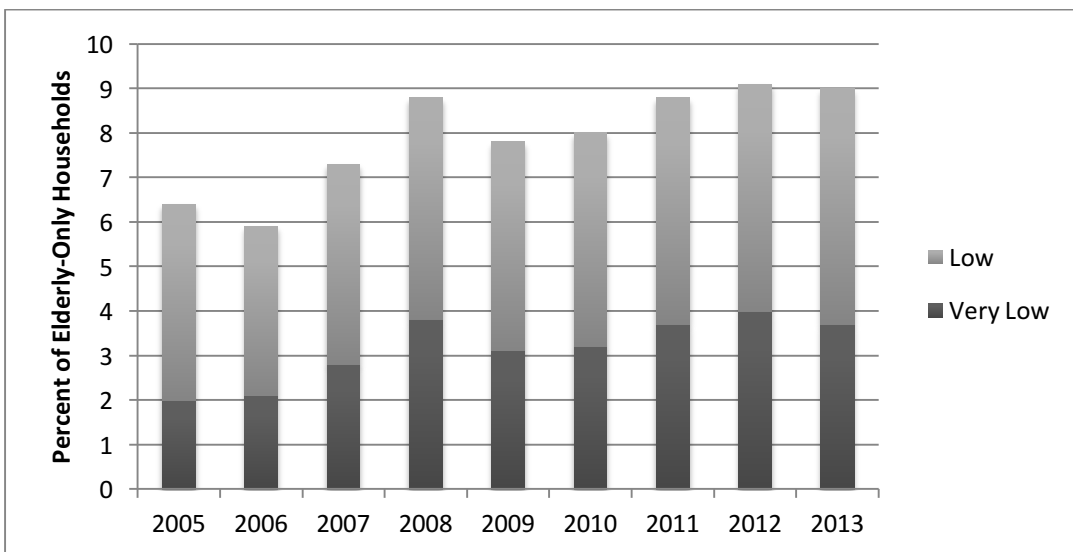
Research has consistently shown that at the national level and in Kansas, households which include children are nearly two times more likely to be food-insecure than childless households; the risk of food insecurity is further elevated if the household is headed by a single parent. Recent USDA estimates show that nearly one in five (19.5 percent) U.S. households with children experienced food insecurity during 2013 (USDA, 2014). The impact of food insecurity upon children is particularly severe. Studies have shown that children who grow up in food-insecure homes are more likely to experience health problems and hospitalization, are more likely to have trouble learning in school, and are more likely to exhibit behavioral problems resulting in the need for professional counseling (Murphy, 2008).

In Kansas, slightly more than one in five (20.8 percent) of households with children experienced food insecurity between 2011 and 2013 (see *Figure 5*, page 9). Households headed by single parents (either male or female) faced a significantly higher risk of food insecurity than two-parent households. Households headed by single women were at higher risk than those headed by single males with children. Nearly half (45 percent) of single-mother households experienced food insecurity between 2011 and 2013. If households that are marginally food-secure are included, approximately 60 percent of single-mother households worried about not having enough food between 2011 and 2013.

Food Insecurity Among Seniors and ‘Near-Seniors’

Historically, seniors have been less likely to experience food insecurity than younger households, especially households with children. Nevertheless, senior households are not immune to the experience of food insecurity. We also know from research that food insecurity among senior populations is associated with increased rates of chronic disease and poor health outcomes. A study sponsored by Feeding American and the National Foundation to End Senior Hunger (2014) found increased rates of diabetes, high cholesterol, high blood pressure, heart attacks and other health problems among seniors who were food-insecure. At the national level, rates of food insecurity among senior-only households rose with the beginning of the recession in 2008, declined during 2009–2010 and rose again from 2011–2013 (Figure 10). Sample sizes from the CPS Food Security Supplement are insufficient to produce comparable Kansas rates.

Figure 10. Food Insecurity Among U.S. Elderly-Only Households (age 60+)



Source: Data published by USDA, Economic Research Service, annual reports on Household Food Security in the United States.

While these increases in rates of food insecurity among senior households may be sufficient to raise concern, they likely present an incomplete picture and may underestimate the true levels of food insecurity among seniors. Some researchers have suggested that elders may experience difficulties in accessing enough food for reasons other than a lack of money, which would not be captured by the current methods of measuring food insecurity with the CPS Food Security Supplement.

Limitations in transportation, or inability to prepare or eat available foods because of functional impairments or health problems may also result in elders being unable to access enough food (Wolfe, 2003). It has also been suggested that experiences such as food deprivation during the Great Depression may affect elder's perceptions of food insecurity and the ways in which they respond to food security questions (Wolfe, 2003), resulting in an underestimation of the number of seniors who are experiencing food hardship.

Research has also shown that younger "seniors" (ages 60 to 69) are at higher risk for food insecurity than their older counterparts. In 2011, nearly 65 percent of food-insecure seniors were between the ages of 60 and 69 years (FA/NFESH, 2013). The higher rates of food insecurity among the 60 to 69-year-old age group suggest that these numbers may represent individuals who have experienced job loss and have had difficulty finding new work due to age or disability, but are not yet old enough to be fully eligible for Social Security and Medicare benefits.

Emerging Food Insecurity Concerns

In recent years, reports of food insecurity among college students have emerged with increasing frequency. Of the few research studies that have been published in peer-reviewed literature to date, rates of food insecurity among college students has ranged from 20 to 60 percent of students (Chaparro, 2009; Hanna, 2014; Maroto, 2014; Patton-Lopez, 2014). Many more anecdotal reports of food insecurity among college students have appeared in the grey literature (Bahrampor, 2014; Resnikoff, 2014; Shephard, 2014). *Feeding America's Hunger in America 2014* report estimated that approximately 10 percent of its 46.5 million adult food pantry clients were students. In Kansas, at least three state universities have either already conducted or are preparing to conduct surveys of students to assess rates of on-campus food insecurity. At least nine college campuses in the state are known to have established food pantries or food closet programs to assist food-insecure students (Bachelor, 2014; Shephard, 2014). To date, the possible impacts of student food insecurity on academic performance and student mental health have not been assessed adequately and are largely unknown.

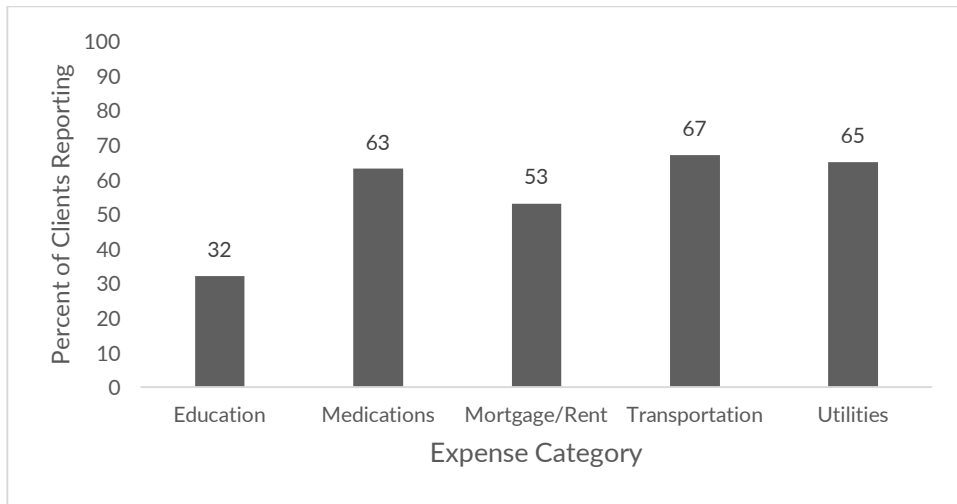
The Causes of Food Insecurity and Hunger

In America, food insecurity is not a problem of not having enough food in the supply chain. In terms of calories, food production and availability in the United States consistently exceeds the needs of the population. Rather, food insecurity is largely a distribution issue resulting from poverty and inadequate wages. Food insecurity is, by definition, a condition resulting from insufficient resources. Previous and current analyses have shown that the majority of food-insecure households are working families, but not earning enough to make ends meet (LaClair, 2001; Nord, 2009). For many, food insecurity is a transient but recurrent problem faced when money runs out before the next paycheck comes in, or when unexpected expenses arise. Although food insecurity is far more prevalent among households with lower annual incomes, it is not exclusive to those families. Many factors, such as job loss, divorce, or other unexpected events may disrupt family finances for a period of time but not be reflected in annual income measures.

Characteristics at both the household and community levels have been shown to be associated with increased risk of food insecurity. In addition to low household incomes, lower educational attainment by the head of the household, minority race or ethnicity of the householder and single-parent household status, poor health status of the householder and social isolation are associated with higher risk of food insecurity (*Figure 2, page 6*). Home ownership, longer housing tenure (the amount of time that the family has resided in the same home), and households that include senior citizens have been associated with lower risks of food insecurity. At the state and community level, access to quality jobs, affordable housing, access to health insurance or affordable health care services, access to food assistance programs, tax policies, welfare policies and the social context of the community have all been shown to relate to the risk of household food insecurity (Bartfeld, 2005; Bartfeld, 2006a; Bartfeld, 2006b; Tapogna, 2004).

Food-insecure families often face difficult choices when trying to stretch the family budget to cover basic needs. Clients served by private sector food assistance agencies in Kansas during 2013 frequently reported that they were forced to choose between food and other necessities such as education, medications, mortgage or rent payments, transportation and utilities (*Figure 11, page 18*).

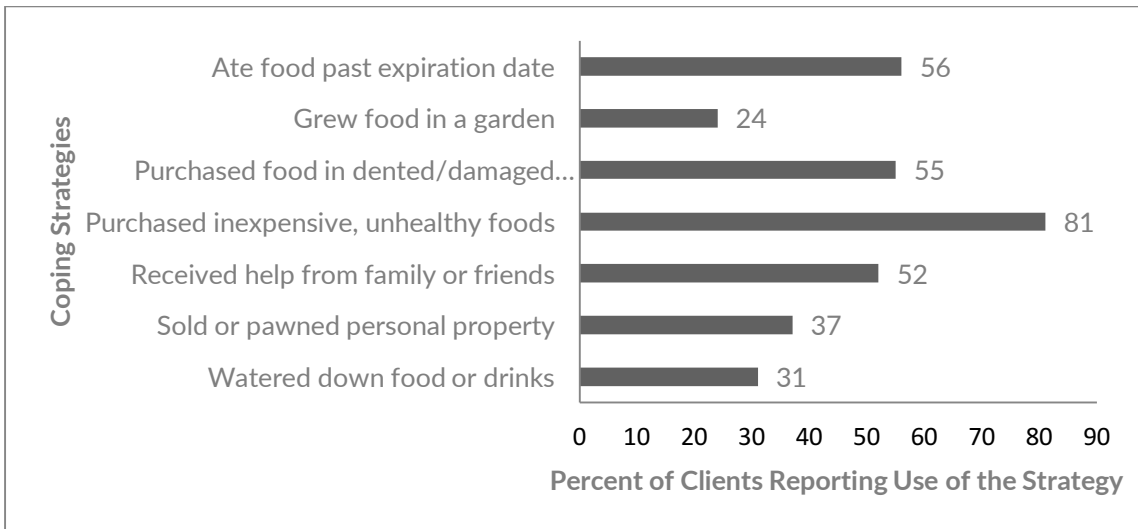
Figure 11. Percent of Food Pantry Clients Choosing Between Food and Other Basic Needs, 2013



Source: Feeding America, *Hunger in America 2014: State Report for Kansas*.

Kansans who sought assistance from food pantries or emergency meal programs during 2013 were also asked about coping strategies that they had employed during the previous 12 months in trying to feed household members. Four out of five (81 percent) reported purchasing inexpensive, unhealthy foods as a coping strategy, while just 24 percent grew food in a garden (Figure 12, page 19). A substantial percentage of clients at food pantries or emergency meal programs were also receiving assistance through federally funded programs; 53 percent reported that they were receiving benefits through the federally sponsored Supplemental Nutrition Assistance Program (SNAP) program at the time they were surveyed.

Figure 12. Coping Strategies Employed by Kansas Food Pantry or Emergency Meal Program Clients, 2013



Source: Feeding America, *Hunger in America 2014: State Report for Kansas*.

The Costs and Consequences of Food Insecurity and Hunger

Access to healthy food in adequate amounts is a basic human need and a prerequisite for an active, healthy life. Yet, in one of every six households in the Kansas, family members struggle to satisfy this basic need. Although food insecurity and hunger in the United States rarely progress to the point of severe malnutrition and starvation, the impact is nonetheless significant.

Adults who experience food insecurity report higher rates of anxiety and depression and poorer overall health status (Vozoris, 2003). Among seniors, food insecurity is associated with poorer nutritional status and poorer overall health (Ziliak, 2008). Ironically, food insecurity is also associated with obesity (Adams, 2003; FRAC, 2011), as many food-insecure families face difficult tradeoffs between the calorie-dense foods that are most affordable and healthier food choices that are frequently beyond the reach of their budgets.

The experience of food insecurity during childhood sets children on a path of poor health and poor academic performance from which many never fully recover. Young children age 0 to 3 who grow up in food-insecure homes are more likely than their food-secure peers to have iron-deficiency anemia, are more susceptible to infection, and are more likely to have a history of hospitalization.

Children from food-insecure homes enter kindergarten with lower math scores, and learn less over the course of their first year in school. By the third grade, children who were food-insecure in kindergarten have been shown to have lower reading and math scores than their peers who had not been food-insecure. Elementary students from food-insecure homes are more likely to have repeated a grade than peers from food-secure homes (Murphy, 2008).

Older children continue to exhibit the negative effects of food insecurity. Food-insecure children have an increased prevalence of behavioral problems, and are more than twice as likely as their food-secure peers to receive psychological care. Elementary children who experience hunger are four times more likely than non-hungry children to have a history of mental health counseling, seven times more likely to be classified as clinically dysfunctional, and 12 times more likely to steal. Food-insecure teenagers are twice as likely as their food-secure peers to have been suspended from school. These statistics, drawn from rigorous scientific studies, suggest that children who grow up in food-insecure homes start life at significant disadvantage, which has effects that may persist throughout their lives. Even after studies controlled for the effects of poverty, children who lived in food-insecure homes have been shown to be at risk for poor academic performance and more apt to develop problematic behaviors (Murphy, 2008).

Most food security studies focus primarily on a family's access to *enough* food, and tell us little about the quality of the diets of food-insecure families. Healthy foods—including a variety of whole grains, fruits and vegetables—are necessary to support good health and active lifestyles. For low-income families, the costs of purchasing fresh fruits and vegetables are sometimes more than the food budget can be stretched to accommodate. Too often, the least expensive food items on the grocery shelves are also the most highly processed, calorie-dense but nutrient-poor food choices. In one study, researchers interviewed low-income women and found that when food prices rose, the women reported cutting back on purchases of more expensive foods such as milk, cereal, fruits and meat (Seefeldt, 2009). Another study published by the USDA in 2008 found that low-income households (incomes less than 130 percent of the federal poverty level) spent less per capita on foods for at-home consumption than middle-income households. Differences were largest for fruit purchases, where purchases by low-income families were 23 percent less than for middle-income households (Stewart, 2008).

Food insecurity and hunger have significant negative impact on the health and productivity of our nation. Children who are poor learners in school are less likely to be prepared at graduation to move into jobs that earn wages sufficient to support themselves and their families. Adults who suffer poorer physical and mental health as a result of inadequate nutrition and the stress of worrying about not having enough food are more likely to perform poorly at work and miss more work days. Additionally, food insecurity and obesity often go hand-in-hand. The health consequences of food insecurity and hunger contribute directly to escalating health care costs. While the linkages between food insecurity and its consequences are not always obvious, they are real and significant.

Food Insecurity and Obesity

Although it may seem somewhat counterintuitive, food insecurity and obesity are often found in the same individual or family. The relationship between the two, however, is complex and research studies have yielded inconsistent results. The strongest and most consistent evidence is of an increased risk for overweight/obesity among food-insecure adult women. Some studies have also found associations between food insecurity and obesity among children, but the results are less consistent. Several possible explanations for the observed associations between food insecurity and increased risk of obesity have been posited.

Because of the close relationships between food insecurity and poverty, food-insecure people may be at increased risk for obesity due to risk factors commonly associated with poverty, such as lack of access to affordable and healthy foods, fewer opportunities for physical activity, high levels of stress, and cycles of deprivation and overeating and limited access to health care. Healthy foods are often more expensive than less healthy options such as processed foods which are higher in refined grains, added sugars and fats. Many lower-income neighborhoods lack access to a full-service grocery store and residents without reliable transportation may be forced to select their foods from convenience or discount stores that offer limited healthy food choices.

Lower-income neighborhoods may lack safe opportunities and resources for physical activity, and low-income children are less likely to participate in organized sports programs.

Individuals who are forced to eat less or skip meals during periods of food scarcity may overeat when food becomes more available, and such cycles of food restriction and overconsumption may result in metabolic changes that promote fat storage. Stress and anxiety may contribute to weight gain through hormonal and metabolic changes as well as unhealthy eating behaviors. (FRAC, 2011).

Costs of Food Insecurity

There are a variety of direct and indirect costs associated with food insecurity. In 2007, a report commissioned by the Sodexo Foundation estimated the annual cost of hunger in Kansas to be \$900 million (Brown, 2007). This analysis included costs of charitable food assistance programs, mental health services and health care to treat hunger-related illness and psychological dysfunction, and costs related to reduced learning and lowered economic productivity of children and adults who experience hunger. It did not include the costs of government-sponsored food assistance programs. A 2011 report commissioned by the interest group Center for American Progress estimated the indirect cost of food insecurity in Kansas during 2010 to be \$1.62 billion (Shepard, 2011). These estimates included the economic costs of lost productivity, more expensive remedial educational services necessitated by poor educational outcomes, avoidable health care costs and the cost of private-sector food assistance programs. However, it did not include costs of key government-sponsored nutrition assistance programs such as SNAP.

A tally of expenditures of major food assistance programs serving Kansans finds direct program costs in excess of \$800 million per year (*Figure 13*, page 23). Federally sponsored nutrition assistance programs provide help valued at more than \$736 million in Kansas each year. Added to that were another \$22 million of supplemental funding from the state government, and operating costs in excess of \$66 million for the network of private-sector food banks and food pantries that serve the state.

Figure 13. Annual Costs of Food Assistance Programs in Kansas

Program	Number of Kansans Receiving Benefits	Annual Program Cost \$ Amount	Funding Source
Supplemental Nutrition Assistance Program (SNAP), FFY 2013 ¹	316,983/month	\$474,255,829 - Benefits \$45,262,471 - Admin	Benefits - 100% Federal Admin - Federal/State share, approximately 50/50%
The Emergency Food Assistance Program (TEFAP), FFY 2014 ¹	Not Available	\$1,771,598 - Food \$568,216 - Admin	Federal
Commodity Supplemental Food Program (CSFP), FFY 2014 ¹	4,938	\$359,475 - Admin	Federal
Women, Infants & Children Supplemental Nutrition Program (WIC), FFY 2013 ¹	70,615	\$47,453,630	Federal
School Lunch Programs (FFY 2013) ¹	348,152/day	\$111,775,572	Federal
Free or reduced price school meals (2011-2012) ²	199,849/day		
School Breakfast Program (FFY 2013) ¹	111,453/day	\$27,470,835	Federal
Free or reduced price school breakfast (2011-2012) ²	88,615/day		
Summer Food Service Program (FFY 2013) ¹	25,237/day	\$2,828,989	Federal
Child & Adult Care Food Program (CACFP), FFY 2013 ¹	47,644/day	\$28,912,840	Federal
Senior Congregate Meals (ENP-CM), FFY 2011 ³	24,826	\$8,466,958	Federal
Senior Home-Delivered Meals , FFY 2011 ³	11,600	\$9,821,126	Federal
Senior Farmers' Market Nutrition Program, FFY 2013 ¹	7,031	\$176,261	Federal
Feeding America Network of Food Banks, Food Pantries, Meal Programs (2013) ^{4,5}	374,400/year	\$66,901,638	Private - donations and fundraising
Total Expenditures	-----	\$826,025,438	Public & Private

Source: 1) U.S. Department of Agriculture, Food and Nutrition Services program data, 2) FRAC, Profile of Hunger, Poverty and Federal Nutrition Programs, Kansas, 2012 3) U.S. Department of Health & Human Services, Administration for Community Living, Administration on Aging (AoA) State Program Reports, 4) Feeding America "Hunger in America 2014," Kansas report, 5) Expenses from organizational annual reports with Kansas share prorated based on number of counties in service area. All data are the most recent that were available at the time of this report.

Reducing Food Insecurity: The Food Assistance Safety Net

Help for food-insecure families is available from many sources. Without the aid that food assistance programs provide, there is little doubt that rates of food insecurity would be much higher, and the severity of the hunger much worse. Across the U.S. and in Kansas, the nutrition assistance safety net consists of a patchwork of public and privately-funded programs and services. Depending upon a family's household income, financial resources, age of household members, citizenship status, geographic location and other factors, food-insecure households may qualify for help from one or more of nearly a dozen federally funded nutrition assistance programs (*Figure 14, page 25*).

Responsibility for administration of the federally sponsored nutrition programs is spread across multiple government agencies at both the federal and state levels. In addition to government-sponsored assistance, an extensive network of private-sector organizations such as food banks, local food pantries, and meal programs works to distribute emergency food assistance to those in need.

Figure 14. Federally Sponsored Nutrition Assistance Programs Available in Kansas

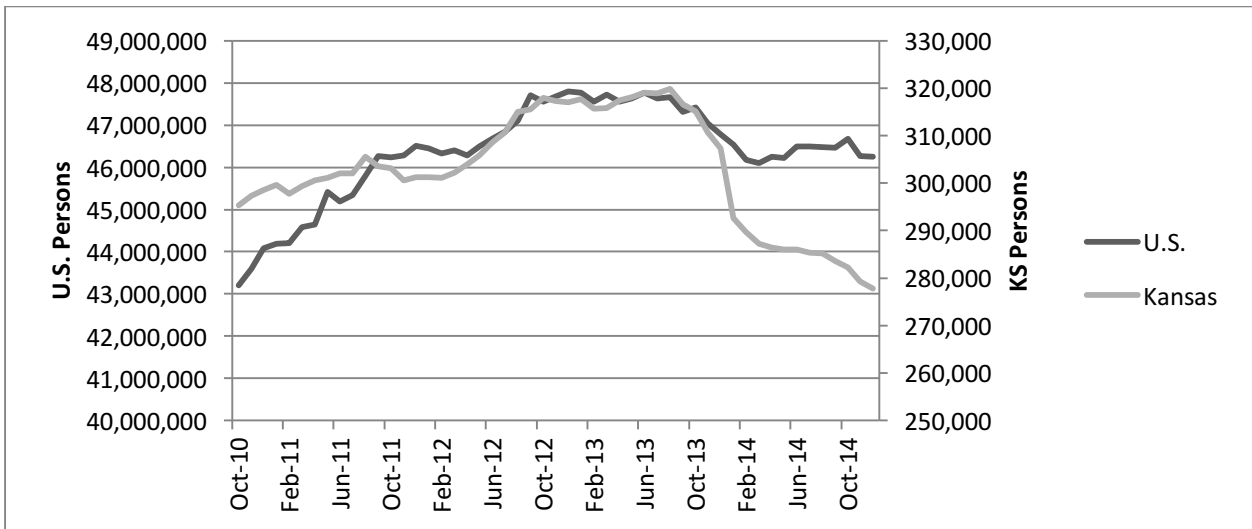
Program	Eligibility	Assistance Provided
Supplemental Nutrition Assistance Program (SNAP)/ KS Food Assistance Program	Gross income up to 130% FPL, Net income (after deductions) up to 100% FPL.	Monthly benefit, in the form of an electronic transaction card, to be used to purchase food for home use.
The Emergency Food Assistance Program (TEFAP)	Income up to 130% FPL.	Quarterly distribution of food for home use.
Commodity Supplemental Food Program (CSFP)	Income up to 185% FPL for pregnant, post-partum or breastfeeding women, infants and children. Income up to 130% FPL for seniors age 60+.	Monthly distribution of food for home use. Available in 28 Kansas counties.
Women, Infants & Children Supplemental Nutrition Program (WIC)	Pregnant, postpartum, or breastfeeding women, infants and children up to age 5, income up to 185% FPL.	Monthly issue of vouchers for the purchase of specific food items.
Free & Reduced-Price School Meal Programs	Income up to 130% FPL receive free meals; between 131% and 185% of FPL receive reduced-price meals.	Breakfasts and lunches provided through school meal programs to children in school.
Summer Food Service Program	School-age children in qualifying locations where summer meal sites operate.	Free meals and snacks for low-income school children during summer recess. Meals must be consumed at meal sites; location must have 50% of children qualifying for free or reduced-price school meals.
Child & Adult Care Food Program (CACFP)	Meal subsidy to care provider, based upon number of participating clients who meet income eligibility guidelines (less than 130% FPL for free meals, 131-185% FPL for reduced-price).	Prepared meals to children and adults cared for by participating child care centers, family child care homes, and adult day care centers.
Senior Congregate Meals (ENP-CM)	People age 60+ and their spouses.	Prepared meals served at community meal sites.
Senior Home-Delivered Meals	People age 60+ and their spouses, if homebound with no support system and unable to prepare meals, or are isolated.	Prepared meals delivered to the home.
Senior Farmers' Market Nutrition Program	Low income people age 60+ who also participate in CSFP, TEFAP, or ENP-CM.	Vouchers for purchase of locally grown fruits, vegetables and herbs at participating farmers' markets or roadside stands. Program was available in 33 Kansas counties in 2014.

The Supplemental Nutrition Assistance Program (SNAP)

The Supplemental Nutrition Assistance Program (SNAP, called Kansas Food Assistance in Kansas and frequently referred to as “food stamps”) is one of the largest federally sponsored food assistance programs for low-income families. In this program, participating households receive monthly benefits in the form of credits on an electronic debit card, which can be used to purchase food items for home consumption. To be eligible for participation in the program, households must have incomes that do not exceed 130 percent of the federal poverty level (approximately \$31,000 for a family of four in 2014) and meet other asset, citizenship and work requirements. Not all families who would be eligible for SNAP assistance actually apply and receive benefits. Historically, Kansas has experienced low participation rates in comparison to other states, and ranked 44th in 2010 with an estimated 69 percent of those who would be eligible actually participating (FRAC, 2013).

With the onset of the recession in 2008, participation in SNAP rose as increasing numbers of households had difficulty making ends meet. Across the U.S. and in Kansas, record numbers of low-income individuals and families enrolled in the SNAP program. SNAP enrollment in Kansas peaked at nearly 320,000 people during 2013. SNAP enrollment numbers remained high through the end of 2013, and declined during 2014, but dropped much more rapidly in Kansas than nationally (*Figure 15*, page 27). The larger decline in SNAP participation in Kansas was precipitated in part by the state’s decision to re-instate a three-month limit on benefits for unemployed adults who are not disabled or raising children (Bolen, 2015). The three-month limit had been rescinded temporarily by most states during the peak of the recession, and many states have continued to waive work requirements through 2014.

Figure 15. Average Monthly Persons Receiving SNAP Benefits, Kansas and U.S., 2010–2014

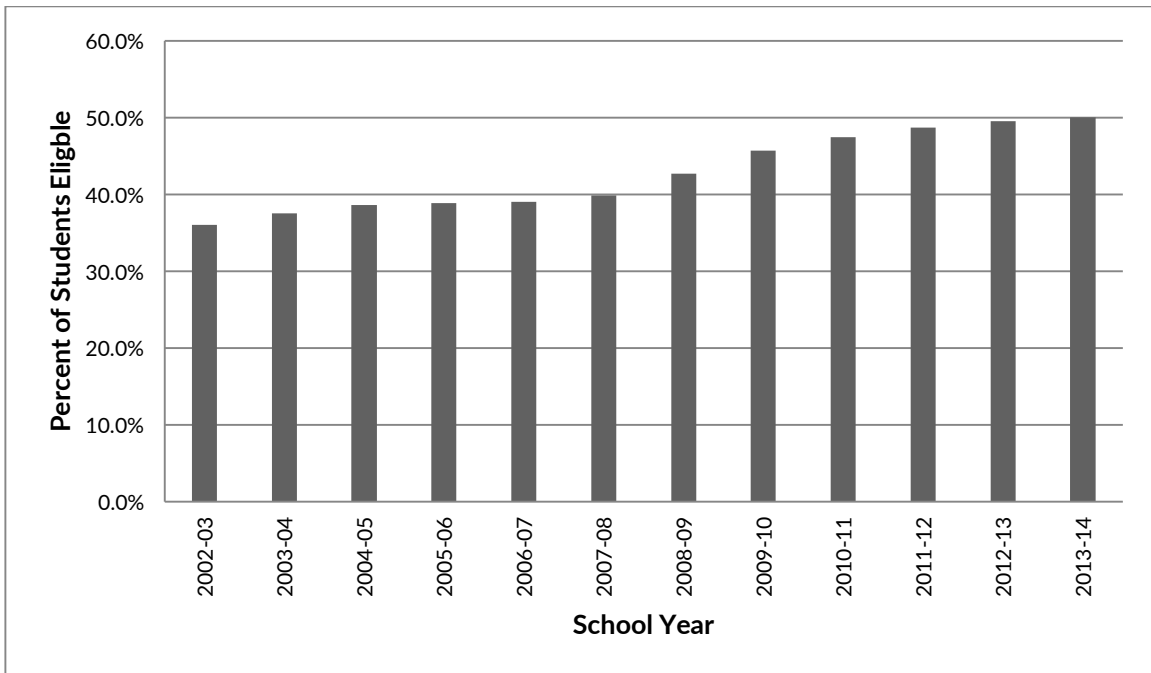


Source: U.S. data from U.S. Department of Agriculture, Food and Nutrition Services, SNAP Program data. Kansas data from Kansas Department of Children and Families, Public Assistance Reports

The National School Lunch Program

The National School Lunch program is another key source of food assistance support for low-income families with children. School-age children whose family incomes are less than 130 percent of the federal poverty level (FPL) qualify to receive free school meals, and those whose family incomes are between 130 and 185 percent of the FPL are eligible to purchase meals at reduced prices. In addition to lunch programs, many schools offer federally sponsored school breakfasts, and some offer after-school snacks. The numbers and percent of school children eligible for free or reduced-price school meals in Kansas have also increased during the recent recessionary period. During the 2013–2014 school year, half (50 percent) of all K-12 students were eligible (Figure 16, page 28). These statistics reinforce findings from CPS Food Security data that suggest that food hardship has not declined in Kansas since 2008 and may, in fact, still be increasing.

Figure 16. Percent of Kansas K-12 Students Eligible for Free or Reduced Price School Meals



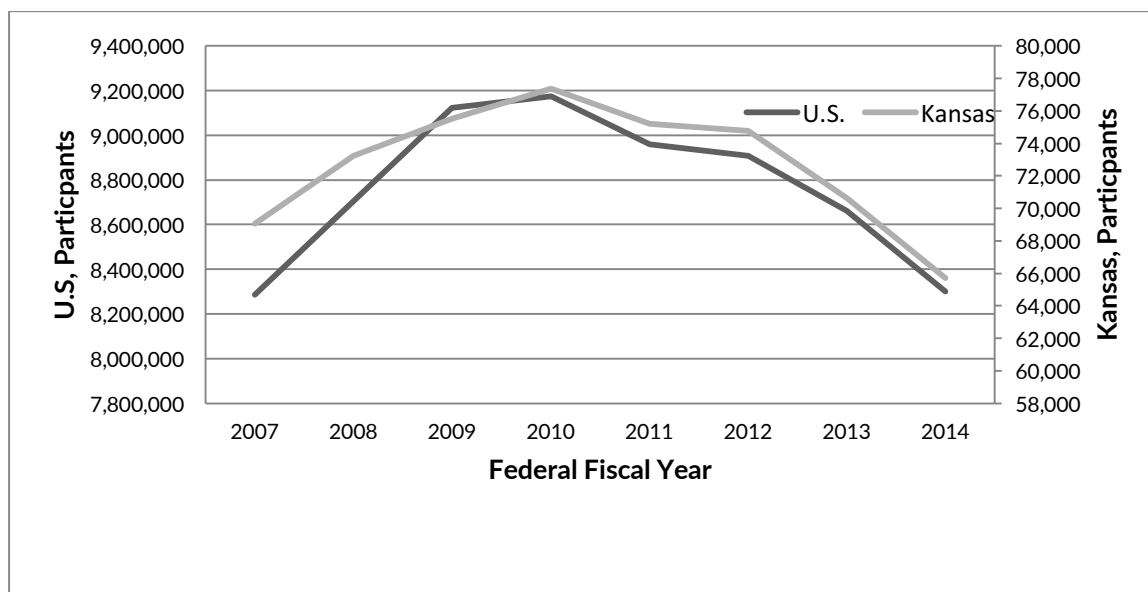
Source: Data from the Annie E. Casey Foundation, Kids Count Data Center.

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

The Special Supplemental Nutrition Program for Women, Infants and Children (WIC) is the third of the three largest federally sponsored nutrition assistance programs. The WIC program provides food, nutrition education, breastfeeding support and referrals to health care and social services for low-income pregnant women, new mothers, and infants and children through age four who are determined to be nutritionally at-risk. In this program, participants are provided with monthly vouchers that can be redeemed for specific food items (e.g. whole-grain cereals, bread, milk, cheese, beans, peanut butter, eggs, lean proteins, fruits and vegetables) at participating grocery retail locations. Nationally, and in Kansas, approximately half of infants and children up to age five receive assistance through the WIC program.

Unlike other food assistance programs, participation in WIC did not increase sharply during the post-recessionary period and has, in fact, been declining at both the state and national levels since 2010. Reasons for these declines in numbers of participants are not entirely clear. Declining numbers of births likely explain some, but not all, of the decreases in WIC participation numbers. Other possible explanations include a growing opinion among potentially eligible mothers that the program benefits do not outweigh the time and inconvenience burdens associated with WIC clinic visits and the requirements to use food benefits for highly-specified quantities and types of foods.

Figure 17. Participation in the Kansas WIC Program, 2010–2014



Source: U.S. Department of Agriculture, Food and Nutrition Service, WIC program data; Kansas Department of Health and Environment, WIC Program Annual Report, 2008.

Private-Sector Food Assistance

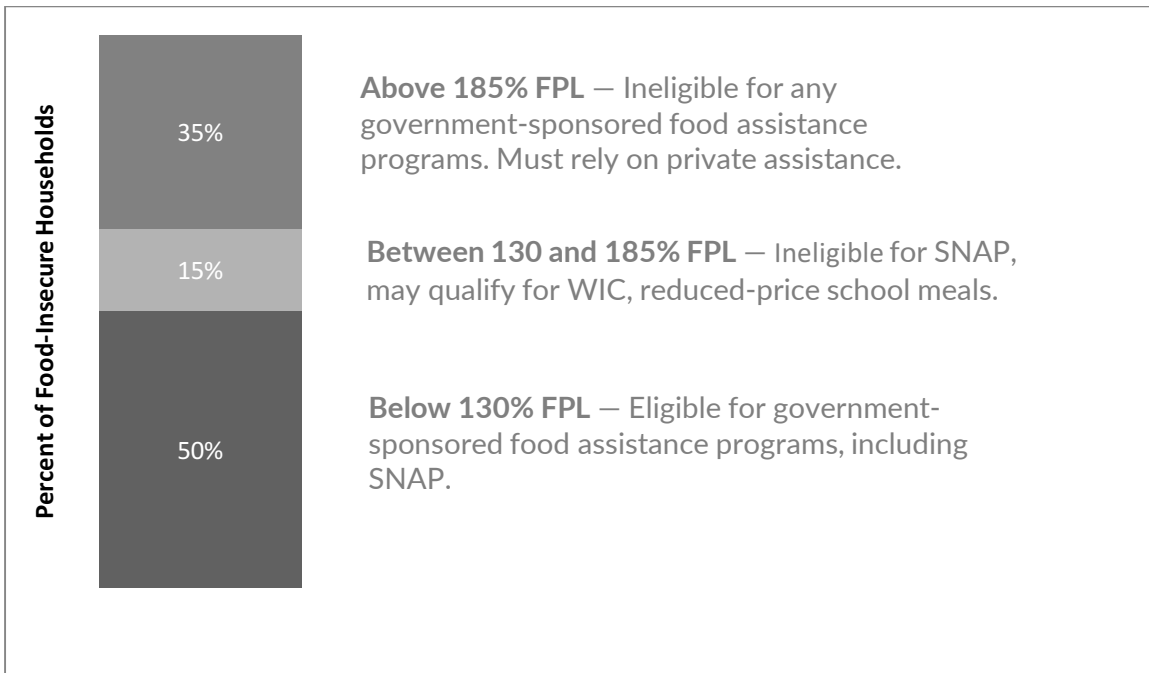
In addition to the federally sponsored nutrition assistance programs, a network of privately-funded food banks, food pantries, and emergency meal programs provide assistance to food-insecure individuals and families. Feeding America, the primary private-sector distribution hub for food assistance in the U.S., administers a network of 200 affiliate food banks serving all 50 states. In turn, the food banks distribute food and grocery products to more than 60,000 local food pantries and meal programs (Feeding America, 2014b).

In Kansas, three Feeding America affiliate food banks – the Kansas Food Bank, Harvesters Community Food Network, and Second Harvest Community Food Bank – distribute food to those in need through a network of more than 440 local partner agencies. During 2013, these agencies distributed more than 35 million pounds of food to an estimated 374,000 Kansans living in 113,900 households. Approximately half (47 percent) of the assistance agencies employed paid staff during 2013, but all depended heavily upon volunteer labor. During 2013, more than 15,000 volunteers provided on average 68,800 hours each week to support agency food assistance efforts (Mills, 2014).

Foods distributed through the Food Bank system are a combination of corporate donations, purchased foods, foods obtained through the federally sponsored Emergency Food Assistance Program (TEFAP), and foods donated locally. Food bank and food pantry resources are often supplemented at the local level through food drives, fundraisers, and donations of fresh produce from community gardens or “Plant a Row” programs where gardeners intentionally plant excess to be donated to a local food assistance organization.

Some food-insecure households do not qualify for assistance from federally sponsored food assistance programs because their income exceeds eligibility thresholds, which are generally no more than 185 percent of the federal poverty level, or \$44,862 for a family of four in 2015. Those families must rely upon help from privately funded food assistance organizations. During 2012, slightly more than one-third (35 percent) of the 426,000 Kansans who experienced food insecurity lived in households with incomes that were too high to be eligible for any of the federally funded food assistance programs (*Figure 18, page 31*). Another 15 percent of food-insecure Kansans had income levels that might allow household members to qualify for reduced-price school meals, or food vouchers from the Women, Infants & Children Supplemental Nutrition Program (WIC), but would render them ineligible for assistance through the SNAP program.

Figure 18. Estimated Household Income Levels of Food-insecure Kansans, 2012



Source: Feeding America, *Map the Meal Gap*.

In Kansas, private-sector food banks and food pantries consistently report increasing demand for the assistance that they offer. Many report difficulty in meeting that demand. During 2013, the 440 Kansas agencies affiliated with the Feeding America network provided food assistance to 374,400 clients in nearly 114,000 households. Approximately one-third of the individuals served were children under the age of 18. Another 15 percent were clients 60 years old or older. Nearly one-third (29 percent) of the adults served had a post-high school education, including license or certification, some college, or a two-year or four-year degree (Feeding America, 2014).

In a stakeholder meeting hosted by the Kansas Health Institute (KHI) in November 2014, agency staff described changes in their client constituency. Increasing need was a recurrent theme. It was noted that clients were returning to food assistance agencies more often, and that food pantries were becoming more of a routine resource for families rather than an occasional source of aid in an emergency situation. Agencies reported serving more seniors than in previous years, and more families working in low-wage or part-time jobs that did not generate enough income to cover the family's needs. As one person commented, "two jobs is not equal to a full-time job." Challenges in serving rural areas in Kansas were also noted.

Changes in the Food Assistance Safety Net

These data and reports from private-sector agencies, in combination with the data presented in previous sections pertaining to government-sponsored food assistance programs, suggest a shift of responsibility within the food assistance safety net in Kansas. While data from the CPS Food Security Supplement, and the number of K-12 students meeting eligibility guidelines for free or reduced-price school meals suggest increasing levels of food insecurity and needs for food assistance in Kansas, changes in state policy have resulted in significant decreases in the numbers of individuals receiving assistance through the SNAP program. Although the reasons are less clear, participation in the WIC program has also declined in recent years. Private-sector food assistance agencies have reported steady increases in client need. In 2009, it was estimated that private-sector food banks and their affiliate agencies served 198,400 unique clients in Kansas; during 2013 that number had increased to 374,000 (Mabli 2010; Mills 2014).

This apparent shift in food assistance responsibility raises questions about sustainability. It is unclear how long private-sector organizations that rely heavily upon donations and volunteers will be able to keep up with increasing needs. More than half of Kansas food assistance agencies (53 percent) had no paid staff during 2013. Twenty-one percent reported having less food than needed to meet client needs during the year. Fifty-two percent reported that they had implemented some type of limitation or restriction on the number of times a client could get food in a given period. Nearly one-quarter of Kansas food assistance agencies reported that they had been forced to cut back services during the previous year due to economic conditions (Mills, 2014).

Policy Options for Reducing Food Insecurity in Kansas

Few Kansans would suggest that no assistance should be offered to families that are struggling to get enough to eat. To date, both private-sector and governmental responses to food insecurity have been primarily through food assistance programs. Getting food, or resources with which food can be purchased, to families at risk for hunger is a critical first step toward preventing hunger and reducing rates and severity of food insecurity. Food assistance in Kansas is available to families through a mix of government-sponsored and private-sector programs and agencies, with the current price tag for those programs totaling more than \$800 million per year. Yet, many food-insecure families do not receive the assistance that is available to them, and food insecurity persists even among those that do. Rates of food insecurity are not decreasing in Kansas.

Most food assistance programs, while vital in halting the progression of food insecurity to the point of severe malnutrition and starvation, do little to address the underlying root causes of food insecurity. As a result, it is unlikely that food assistance programs alone will ever produce significant and sustainable reductions in food insecurity rates, either in Kansas or across the United States. To achieve lasting reductions in rates of food insecurity, changes that improve opportunities for all Kansas families to achieve financial stability would also be needed.

Effective long-term policy solutions would need to take a two-pronged approach: 1) continued food assistance until food-insecure families achieve financial stability, and 2) programmatic and policy supports that improve the prospects for economic opportunity and financial stability among low-income households. Additionally, policies that improve access to and affordability of nutritious foods could help to reduce rates of food insecurity and support low-income families in their selection of healthier food options. There are numerous state-level policy options that might be considered if Kansas policymakers wish to reduce the burden of food insecurity in Kansas.

Possible strategies might include:

1. Maintain and strengthen access to food assistance programs.

Getting food to those in need is a critical first step in alleviating food insecurity and preventing hunger. As outlined in *Figures 13* (page 23) and *14* (page 25), a number of federally sponsored food assistance programs are available to low-income families in Kansas. Currently, many Kansas families that would likely be eligible to receive benefits are not doing so. Kansas has one of the lowest SNAP participation rates among all U.S. states (FRAC, 2013). Kansas ranked slightly higher (36th) in terms of the number of low-income children that receive breakfast at school, and ranked 50th among the states for the number of low-income children served by the Summer Food Service Program (FRAC, 2013). Nearly all of the administrative and benefits costs related to these programs are paid by federal dollars, which not only provide direct food assistance but also stimulate state and local economies as they are spent in local communities. Maximizing participation in federally sponsored food assistance programs could help to reduce food insecurity and hunger while also providing an economic benefit to Kansas. Kansas policymakers could consider alleviating food insecurity by improving participation rates in federally sponsored nutrition assistance programs.

2. Improve opportunities for Kansas families to achieve financial stability.

Household income levels that are insufficient to cover basic costs of living, along with unanticipated expenses or disruption of income streams are frequently the root causes of food insecurity. Policies that encourage financial stability for low-income families will be needed to achieve sustainable reductions in food insecurity in Kansas. Actions that could be considered include requiring personal finance education in high school curricula, increasing employment opportunities that provide stable wages for low-income families, and programs to encourage low-income families to build their financial assets with savings reserves that could be accessed in emergency situations.

More specifically, actions that Kansas policymakers could consider include:

- Implement mandatory personal finance courses in high school curricula – In 2013, only 17 states required that all high school students complete a class in personal finance; Kansas was not one of those states (Council for Economic Education, 2014).
- Continue to support and expand vocational training opportunities for Kansas high school students and adults.

- Encourage low-income families to build savings and assets by expanding and promoting opportunities for low-income families to participate in Individual Development Accounts.

3. Improve access to and affordability of healthy food options.

Policy measures that improve access to and affordability of healthy food options could also aid in reducing rates of food insecurity and improving the diets of low-income families. For example, Kansas is one of only 14 states that collects sales tax on food. As a result of the Kansas budget bill signed in the final hours of the 2015 Kansas Legislative session, Kansas taxes on food is the second highest rate (6.5 percent) in the nation. Reducing or eliminating sales tax on healthier food items could help low-income families to stretch their food budgets. Offering incentive programs that provide matching funding for purchases of healthy food choices at farmers' markets using SNAP benefits could also help low-income families to expand their purchasing power and support healthier food choices. A pilot study conducted in 2012 by the U.S. Department of Agriculture (USDA) found that fruit and vegetable consumption increased by 26 percent among SNAP participants who received modest financial incentives in the form of additional SNAP benefits (30 percent per SNAP dollar spent) for the purchase of select fruits and vegetables. USDA is currently offering competitive grants to support nutrition incentive programs such as this for SNAP program participants.

Conclusion

Food insecurity in Kansas is a complex problem, with significant and costly consequences. Rates of food insecurity in Kansas are not declining. Evidence shows that the majority of food-insecure families in Kansas are working, but not earning enough to meet their basic needs. Many are facing difficult choices and tradeoffs, choosing between nutritious food and other basic needs such as housing and health care. While millions of dollars are spent in food assistance safety net programs in Kansas each year, rates of food insecurity and hunger are not falling. Current costs of food assistance efforts alone exceed \$800 million. In addition, indirect costs of lost productivity, avoidable health care and the need for increased educational services have been estimated at \$1.62 billion in Kansas. These estimated costs represent an enormous loss of potential and negative impact on the quality of life for Kansans.

There are numerous opportunities for policy change that could help to reduce rates of food insecurity and create an economic environment where more Kansas families have opportunity to achieve financial stability. Such changes could yield long-term benefits to Kansas in terms of increased productivity reduced educational and health care costs, and improvements in well-being and quality of life.

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Appendix

Appendix 1: CPS 18-Question Food Security Screener

Current Population Survey—Hunger and Food Insecurity Screening Questions

For each of these statements, please indicate whether the statement was often true, sometimes true, or never true for you/your household in the last 12 months:

1. We worried whether our food would run out before we got money to buy more.
2. The food that we bought just didn't last, and we didn't have money to get more.
3. We couldn't afford to eat balanced meals.
4. In the last 12 months, did you or other adults in your household ever cut the size of your meals or skip meals because there wasn't enough money for food?
5. (If yes to question 4) How often did this happen?
6. In the last 12 months, did you ever eat less than you felt you should because there wasn't enough money for food?
7. In the last 12 months, were you ever hungry but didn't eat because you couldn't afford enough food?
8. In the last 12 months, did you lose weight because you didn't have enough money for food?
9. In the last 12 months, did you or other adults in your household ever not eat for a whole day because there wasn't enough money for food?
10. (If yes to question 9) How often did this happen?

Questions 11-18 are asked only if the household includes children age 0-18

11. We relied on only a few kinds of low-cost food to feed our children because we were running out of money to buy food.
12. We couldn't feed our children a balanced meal, because we couldn't afford that.
13. Our children were not eating enough because we just couldn't afford enough food.
14. In the last 12 months, did you ever cut the size of your children's meals because there wasn't enough money for food?
15. In the last 12 months, were the children ever hungry but you just couldn't afford more food?
16. In the last 12 months, did your children ever skip a meal because there wasn't enough money for food?
17. (If yes to question 16) How often did this happen?
18. In the last 12 months, did your children ever not eat for a whole day because there wasn't enough money for food?

Scoring: Food-insecure conditions are indicated by responses of "often" or "sometimes" to questions 1-3 and 11-13; "almost every month" or "some months but not every month" to questions 5, 10 and 17; and "yes" to the other questions. Households with no children and reporting 0-2 food-insecure conditions are classified as food-secure, 3-5 conditions as low food security, and 6 or more conditions as very low food security. An additional category of marginal food insecurity is sometimes reported for households that report 1-2 food-insecure conditions. Households with children age 0-17 are classified as very low food security if they report 8 or more food-insecure conditions, including conditions among both adults and children.

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