Addressing Food Access In Arkansas

A Report & Recommendations

From The 2022 Arkansas Governor's Food Desert Working Group

Prepared By The Winthrop Rockefeller Institute

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Additionally, this report would not have been possible without the support of Arkansas community members and leaders throughout the state. Thank you to the locations that hosted our focus groups: The Arkansas Foodbank, Feed Rogers Food Pantry, The Food Bank of Northeast Arkansas, First Assembly of God Church in Swifton, Life House Church in Texarkana, and The Boys & Girls Club of McGehee. Thank you to Hope Credit Unionspecifically Charity Hallman, Kevin Coogan, Kathy Saloy, and Kimberly Lee-for their help in connecting us with several grocery stores and alternative models. Thank you to all of the grocery stores and their representatives for sharing your time and expertise-James Jeffcoat, Jimmy Wright, Alex and Caileen Ostenson, Caroline Harries, and Eric Mueck. Thank you to Andrew Morgan at the Arkansas Municipal League for documenting our trip to Mississippi. Most importantly, the Working Group thanks Governor Asa Hutchinson and his staff for making this report possible.





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EXECUTIVE SUMMARY

Introduction

The Arkansas Governor's Food Desert Working Group was organized in the spring of 2022 to provide recommendations for actionable steps the State of Arkansas could take to eliminate food deserts. This report contains their recommendations at both the policy and community level, including actionable models and funding structures the Working Group believes are a good fit for Arkansas. The core audiences for this report are the Governor of the State of Arkansas, state legislators, community leaders such as mayors, city council members, county judges, local nonprofits and foundations, and entrepreneurs. As new models emerge, this report will be amended to include those stories. Ultimately, however, the Food Desert Working Group believes that anyone with a drive and desire to help increase food access in their local community will find inspiration and practical information in this report.

Food Desert Definition

For the purposes of this report:

A community is a food desert or low food access location if residents must travel more than one mile in an urban setting or more than 10 miles in a rural setting to obtain a selection of fresh, nutritious food.

Scope of the Problem

- Households report having food insecurity limited or uncertain access to adequate food - due to income instability, financial hardships, access barriers (e.g., no transportation or lack of nearby food establishments), and mental and physical health issues.^{1,2}
- The consequences of food insecurity are being felt across the United States, but the rates in Arkansas are alarming ranking above the national average.³



- There are nearly 700,000 Arkansas residents who are living in a Low-Income, Low-Access (LILA) census tract as designated by the United States Department of Agriculture (USDA).⁴
- Out of 75 counties in Arkansas, there are only 13 that do not have any USDA-designated LILA census tracts. That means that over 82% of Arkansas counties have one or more communities that need improved access to food.⁵
- Traditional grocery store expansion has been stagnant in Arkansas, with the number of supermarkets and grocery stores per 10,000 people hovering around two since 2010, limiting the ability for some Arkansans to purchase fresh food close to their homes.⁶
- Many Arkansans use nutrition programs like the Supplemental Nutrition Assistance Program (SNAP), and the Special Supplemental Nutritional Program for Women, Infants, and Children (WIC) to access food. An estimated 66% of eligible individuals participate in SNAP in Arkansas, and only 49% of eligible individuals participate in WIC. This suggests that improvements to these programs could help more families across the state access resources they need to get food. According to an American Journal of Public Health article, adults who received SNAP benefits during childhood were more likely to be foodsecure than adults whose families were eligible during childhood but chose not to receive SNAP benefits.

	Arkansas	United States
nsecurity	15%	10.2%
od Security	6%	3.8%

- As demonstrated in the pandemic, online grocery ordering facilitated access to food for many Arkansans. However, broadband limitations – less than 50% of the population in three Arkansas counties has broadband access⁸– and middle/last mile delivery challenges limit rural access and expansion of SNAP and WIC participation that could support lowincome low-access areas.
- Over 138,000 children in Arkansas receive free or reduced meals at school through the National School Lunch Program, according to Feeding America's Map the Meal Gap Report.⁹
- Charitable food sources cannot fill the gap created by food deserts. According to the Feeding America Map the Meal Gap data, Arkansans need an additional \$200,073,000 to meet their food needs at the average cost of \$2.80 per meal.¹⁰ That means that more than 71 million meals are missing from Arkansas tables each year.

Impacts on Arkansas

Consistent access to healthy food is necessary to lead productive lives and avoid chronic conditions that require treatment and consume resources. The following table lists Arkansas's ranking (first being the healthiest) among U.S. states for some chronic health conditions linked to food insecurity.¹¹

Year 2020

Health Outcome	Arkansas Ranking	% of Arkansas Population	% of National Population
Adult Obesity	41	31.9%	36.4%
High Blood Pressure	46	41%	32.5%
Cardiovascular Disease	48	12.2%	8.1%
Diabetes	44	13.2%	10.6%
Cancer	44	7.6%	6.8%

Promising Models

The Working Group sought inspiration from other states with similar food access challenges and connected with several successful alternative grocery models. Following are some promising models that could be implemented in Arkansas.

- **Grocery Distribution Hub**: The Grocery Online Ordering Distribution Service (GOODS) in Drew, Mississippi, is a partnership between concerned local citizens, the W.K. Kellogg Foundation, and HOPE Enterprises. The model provides a local hub for online ordering where a full brick-and-mortar store would not be sustainable. Instead, members can order whatever food they want from an agreed-upon provider, in this case Walmart, and have it delivered to the GOODS location that is much closer than the nearest grocery option.
- Online and Delivery Expansion: Wright's is a family-owned grocery store in Opelika, Alabama, that has operated since 1973. Wright's adjusted to the needs of their community to thrive. Leveraging opportunities through the Healthy Food Financing Initiative and other funding sources, Wright's has expanded their capacity to accept SNAP, to provide shuttle and delivery services to customers, and to offer a robust online ordering platform.
- Grocery Store as a Public Utility: Erie Market is a local grocery store owned and operated by the city of Erie, Kansas. The city polled residents on the need to keep their only grocery store from closing and received enough positive support to purchase the market. It is now run by an experienced manager hired by the city and treated as a public utility.
- Subscription and Self-Service Market: Main Street Market in the small town of Evansville, Minnesota, is owned and operated entirely by two locals. The storefront features three "regular" shopping days open to the public but offers 24-hour service for subscription members. Access to the store, shopping, and payments are done through an app downloaded to subscribers' phones.



of *missing meals* from Arkansas tables annually

Recommendations

After careful consideration, the Governor's Food Desert Working Group offers the following recommendations as long-term solutions to improve food access in food desert communities in Arkansas:

Recommendations to the Governor and Arkansas General Assembly:

1. Increase Arkansas Government accountability for improving food access.

- Designate a food access liaison within the Governor's Office.
- Establish a legislative subcommittee on food access.
- Create a cross-agency, cross-sector Food Access Council with clearly defined roles.
- Establish measures and tracking processes to monitor the success of interventions implemented, such as changes in public test scores, crime rates, and long-term health outcomes such as a decrease in diabetes, hypertension, and other diet-related illnesses.

2. Incorporate support for food access into state fiscal policy.

- Offer tax incentives for grocers opening stores in Low-Income, Low-Access LILA areas.
- Establish a revolving loan program for projects increasing food access in LILA areas.
- Provide pilot grant funds for food access startups.

3. Improve access to state food benefit programs.

- Continue advancing technology solutions to ensure the application and recertification processes for nutrition benefits, such as SNAP and WIC, are simple for people to navigate.
- Consider long-term implementation of COVID-era innovations and flexibilities to improve program access.
- Apply for a waiver from the USDA Food and Nutrition Service (FNS) and create a plan to enable online ordering for WIC.
- Leverage local food production by increasing WIC and SNAP farmers market vouchers and incentive programs.
- Increase or eliminate the SNAP asset limit.
- Encourage smaller retailers to accept SNAP benefits by ensuring they are aware of technical assistance resources from the USDA.

- **Recommendations for cities, towns, and** municipalities who want to address food deserts locally:
- Mobilize community-driven, creative models to increase food access.
- 2. Create strong community partnerships.
- 3. Use integrated funding combining private and public dollars.

Recommendations for Foundations that provide funding for food access or improved health outcomes:

1. Partner with other foundations that have similar interests to provide increased funding and larger grants, enabling more impactful projects which increase access to fresh, nutritious food in LILA communities.

5 executive summary

THE GOVERNOR'S FOOD DESERT WORKING GROUP

The Governor's Food Desert Working Group (Working Group) is a collective of 18 people representing Arkansas State Government, nonprofit organizations that focus on health and hunger issues, and the commercial grocery sector. The group was named by Governor Asa Hutchinson based on recommendations from Working Group Co-Chair Kathy Webb. Webb partnered with the Winthrop Rockefeller Institute to provide facilitation and meeting design services to the Working Group, as well as conduct community research.

Kathy Webb (Co-Chair) Arkansas Hunger Relief Alliance

k /-

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Bank On Arkansas +

WHAT IS A Food desert

Far from the first group to tackle the issue of food deserts, the Working Group definition was informed by the work of several organizations and agencies. The Working Group learned that there are different definitions to describe food deserts.

The Annie E. Casey Foundation, a prominent foundation focused on supporting family and community growth, defines food deserts as¹²:

Geographic areas where residents have few to no convenient options for securing affordable and healthy foods-especially fresh fruits and vegetables. Disproportionately found in high-poverty areas, food deserts create extra, everyday hurdles that can make it harder for kids, families, and communities to grow healthy and strong. In low-access census tracts, a significant share (33% or more) of residents must travel an inconvenient distance to reach the nearest supermarket or grocery store (at least one mile in urban areas and 10 miles in rural areas). In low-income census tracts, the local poverty rate is at least 20% or the median-family income is at most 80% of the statewide median family income.

The Department of Agriculture has moved away from using the term food desert, preferring to use Low-Income, Low-Access (LILA) as a designation of need.

Different nonprofits and foundations might have different thresholds for determining low-food access areas. However, at the core of the different options is a person's proximity to readily available food choices, especially fresh, nutritious food.

After taking into consideration the different definitions of a food desert, or a low-income, low-access area, the Working Group chose the following definition of need to guide their efforts:

A community is a food desert or low-food access location if residents must travel more than one mile in an urban setting or more than 10 miles in a rural setting to obtain a selection of fresh, nutritious food. In their investigation, the Working Group discovered many factors that can lead to the creation of a food desert. Given the charge of submitting recommendations that will eliminate areas of low food access, the Working Group chose to ultimately focus on two things:

1. Ways to establish sustainable grocery options in low-access areas; and,

2. Addressing hurdles faced by the users of food benefit programs.

The Working Group recognizes that there are many other ways to alleviate the symptoms of limited food access, not the least of which is the great number of emergency food providers across the state. Still, those solutions do not provide the consistency, variety, and other services one might find at a local grocery store. Data from focus groups and other research support the belief that a steady and reliable grocery source must exist to truly eliminate an area of low food access.

METHODOLOGY

The Working Group gathered insights for this report in three broad ways:

- 1. Existing data sources including USDA data, census data, and organizational data;
- 2. Outreach and visits to successful models in other rural states: and
- 3. A series of in-person and virtual focus groups with emergency food providers, residents of low-food access areas, and grocers.

Extreme care was taken to ensure that the data, models, and examples collected and presented mirror the diverse needs of Arkansans. To meet people where the need exists, the focus groups were scheduled at in-person locations in geographically diverse portions of the state. Virtual focus groups were also available for those with technology and internet access.



of Arkansans who do not know where their next meal is coming from

SCOPE OF THE PROBLEM

Low access to food is no small problem in Arkansas. According to Feeding America, approximately 15% of Arkansans (over 400,000 people) did not know where their next meal was coming from in 2020.¹³ In fact, of the 75 counties in Arkansas, 62 have a LILA census tract or identified food desert.¹⁴ Based on a three-year average from 2019-2021, six percent of Arkansas households faced very low food security, one of the highest rates in the nation.¹⁵

One barrier to accessing nutritious food is transportation. An estimated six percent of Arkansas households do not have a vehicle.¹⁶ Rising gas prices and a lack of public transportation in much of Arkansas only exacerbate the problem, leaving many forced to choose between trips to the grocery store or getting to work, school, or the doctor.



Another major factor contributing to food deserts is the additional challenge of keeping a grocery store operating. The average national profit margin for a grocery store can be as low as one percent, making them vulnerable to market changes.¹⁷ Paired with low-income areas and limited transportation, the ability to maintain a traditional grocery store model can be difficult. As of 2020, there were fewer than two grocery stores or produce vendors for every 10,000 people in Arkansas, contributing to the inability of many Arkansans to access healthy food.¹⁸ In the place of stores that provide nourishing. fresh food are corner and convenience stores that offer unhealthy processed food with low nutritional value, leading to higher rates of diet-related diseases in these communities.¹⁹ With current inflation rates in Arkansas raising the price of food by as much as 13.5%, both citizens in LILA census tracts and those with access to traditional grocery store models will be significantly affected.²⁰

Many Arkansans use federal nutrition programs to access food. SNAP is a federal program that provides nutrition benefits to supplement the food budget of needy families so they can purchase healthy food. The gross income limit for SNAP benefits in Arkansas is 130% of poverty (net income limit is 100% of poverty) with asset limitations of \$4250 for households with elderly or disabled members and \$2750 for all other households.²¹ In 2021, approximately 11% of Arkansas residents participated in SNAP.²² The national average was 13%. It is estimated that only 66% of eligible Arkansans participate in SNAP, below the national average of 82%.²³ WIC is an assistance program of the USDA to provide supplemental foods, healthcare referrals, and nutrition education for low-income pregnant, breastfeeding, and non-breastfeeding postpartum women, and to infants and children up to age five who are found to be at nutritional risk. The eligibility requirement for WIC is a family income below 185% of the federal poverty level. Considering that USDA LILA defines low income at or below 200% of the poverty level, one can see the overlap in need regarding federal nutrition programs.

Low-income families also receive some support by accessing free and reduced meals at school through the National School Lunch Program. Today, through a concerted effort by schools, the Governor's office, the legislature, and nonprofit organizations, the number of students accessing this benefit has grown.²⁴ While the benefits of reducing barriers to accessing these programs are widely accepted – including higher attendance, less truancy, higher test scores, and better well-being – barriers to accessing other programs like SNAP and WIC have not been lowered.²⁵

138,410

of Arkansas children in food insecure households,

according to Feeding America's *Map the Meal* Focus groups showed that SNAP and WIC are often the only way Arkansans living with food insecurity can obtain food. Yet many Arkansans are unable to take part in these programs because of the overburdensome application and recertification processes. Clients using the Arkansas Hunger Relief Alliance Call Center report difficulties completing the SNAP application and gathering needed documents, often due to transportation barriers. Additionally, the asset limit on SNAP serves as a cliff and a disincentive for individuals to accumulate savings and become upwardly mobile. Likewise, current WIC requirements place an undue burden on the mother and child.

ALTHOUGH ARKANSAS HAS A STRONG STATE-WIDE CHARITABLE FOOD SYSTEM, IT IS NOT THE SOLUTION TO ELIMINATING FOOD DESERTS. In all of our conversations with Arkansans whether they were residents of food deserts. charitable food providers, or commercial grocers - expanding broadband access is paramount to addressing food deserts. In the last decade, and certainly in the last two years, there has been an increase in online commerce. Even small businesses can sell their products online and have them delivered to the doors of customers. Having reliable access to the internet alleviates the burden of having to drive 10 or more miles to the grocery store, and yet according to the Arkansas Broadband Master Plan. close to 110.000 households do not have access to broadband.²⁶ Many of these households exist within a LILA census tract and are therefore left out of innovative solutions to accessing healthy food.²⁷ The Arkansas Broadband Master Plan lays out some potential recommendations for expanding access to broadband to all Arkansans. Implementation of these recommendations would significantly improve the ability of food security stakeholders to implement the recommendations detailed in this report.

According to the Feeding America Map the Meal Gap data, Arkansans need an additional \$200,073,000 to meet their food needs at the average cost of \$2.80 per meal. That means that more than 71 million meals are missing from Arkansas tables each year.²⁸ Although Arkansas has a strong state-wide charitable food system, it is not the solution to eliminating food deserts.

In 2021, the charitable food system distributed the equivalent of 64 million meals in Arkansas, still leaving a considerable gap between the meals needed and the meals provided (*see Appendix F: "Charitable Food Distribution in Arkansas by County in 2021" for more details*).

IMPACTS **ON ARKANSAS**

Consistent access to healthy food is necessary to lead productive lives and avoid chronic conditions that require treatment and consume resources. The following is how Arkansas ranks (first being the healthiest) among the rest of the U.S. concerning some chronic health conditions linked to food insecurity.²⁹

Health Outcome	Arkansas Ranking	% of Arkansas Population	% of National Population
Adult Obesity	41	31.9%	36.4%
High Blood Pressure	46	41%	32.5%
Cardiovascular Disease	48	12.2%	8.1%
Diabetes	44	13.2%	10.6%
Cancer	44	7.6%	6.8%

Food insecurity, as seen in areas lacking a local grocery supplier, has been shown to contribute to lower educational outcomes and poorer health, including higher rates of dietrelated diseases and stress.³⁰ A 2005 study found that children who experienced food insecurity at home had a harder time getting along with others, were more likely to repeat a grade, and had lower test scores than food-secure children.³¹ Food insecurity is also linked to higher school absenteeism, with food-insecure children missing more days of school than food-secure children.³²

The connection between nutrition-based illnesses like obesity and food insecurity has been known in Arkansas for some time. In October 2015, Governor Hutchinson launched Healthy Active Arkansas (HAA), a 10-year initiative to reduce obesity in Arkansas and the corresponding chronic diseases associated with obesity, such as hypertension and diabetes. One of the nine priorities of HAA is ensuring access to healthy foods, including the elimination of food deserts. While research has been conducted on financial incentives, tax rebates, loan options, and private-public partnerships, Arkansas still needs to progress toward this goal. The number of grocery stores in Arkansas continues to decline, making access to fresh, nutritious food more difficult for many in our state.³³

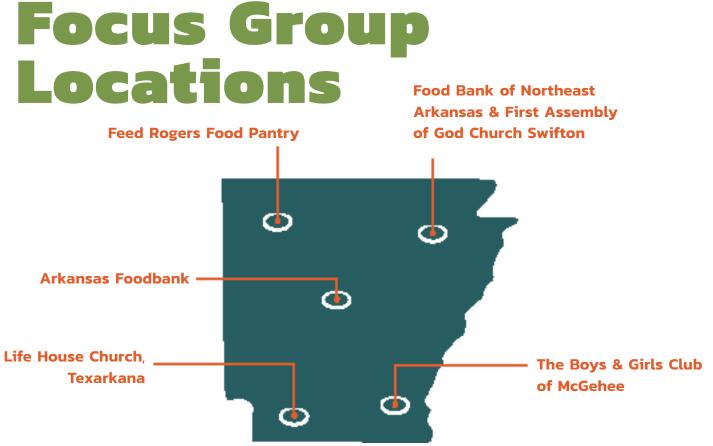
15 impacts on arkansas

FOCUS GROUPS

To better understand the issues facing emergency food providers, residents of food deserts, and commercial grocers in the state, the Institute conducted a series of in-person and virtual focus groups. Two in-person focus groups were held in each of the state's four corners and Central Arkansas. Each area hosted a focus group for people who provided food services to those living with food insecurity (providers) and a second focus group for people who lived with food insecurity (consumers).

Additionally, the Working Group and the Institute connected one-on-one with commercial grocers in the state, held a grocers focus group, and distributed a survey to the Arkansas Grocers & Retail Merchants Association. To accommodate people unable to attend one of the in-person focus groups, four virtual focus groups were held between the various cohorts.

In-Person





FACES-**FOOD INSECURITY**

Meet Paul

Paul is a sophomore at the University of Central Arkansas. Paul comes from a middle class family who is able to pay for his college education through savings and his parents' salaries. However, they are not able to cover his living expenses, including Paul's weekly grocery bill.

Paul works a part-time job, but there are many weeks when he does not have enough money to buy groceries after paying for rent and utilities. Because his family makes too much money to qualify for any government assistance, Paul cannot buy food during these weeks and has to do without.

*Names have been changed to preserve anonymity

Commercial Grocer Focus Group Findings

Participants in the commercial grocer focus groups identified the following barriers to having traditional brick-and-mortar grocery stores in some communities:

- Limited number of distributors for inventory
- Lack of ability to get volume discounts in low-population density stores
- Challenge of shelf-life for fresh fruits and vegetables
- Competition with fast-food/gas station stores
- Cost/challenges with WIC/SNAP participation

To work around some of the challenges of maintaining physical stores, the commercial grocery sector is integrating alternative delivery models. Across the United States, 90% of people living within a food desert area have access to home delivery from at least one of the major providers of grocery items; Amazon (Amazon Fresh and Whole Foods), Uber Eats, Instacart, or Walmart.³⁴ However, there have been barriers to reaching the rest of the population not served by online delivery options.

The major issues facing the expansion of delivery options are low driver availability in rural and low-income areas, the inability of stores to deliver as far out as customers are, and the lack of broadband access. Lack of access to broadband can exist for several reasonsbroadband infrastructure gaps, high prices, a household not having any devices to use broadband, or low digital literacy.³⁵ Whatever the reason, the result is that these households are left without access to the internet and are therefore unable to access online retailers.³⁶ Online ordering and delivery can bridge gaps in food access for many people living within food deserts, as highlighted in the model program section of this report.

OF FOOD INSECURITY

Meet Patricia & Amelia

Patricia runs a small food pantry in Southeast Arkansas, where she proudly serves anyone who comes to her. In March of 2022, all of the external funding for her pantry had dried up, but the need remained in her community. She and her pantry volunteers began funding and supplying the pantry out of their own pockets for an average of \$300 a week.

Patricia's friend Amelia also runs a small food pantry and found herself in the same position. To help ensure that her pantry remained in operation, Amelia took out a \$2,500 personal loan. Both women's sacrifices help to fill the immediate needs of those living with food insecurity but are not sustainable in the long run.

*Names have been changed to preserve anonymity

Provider Focus Groups Findings

Participants in provider focus groups identified the following barriers that prevent their customers from accessing fresh food:

Insufficient grocery stores in low-income communities

- Affordable fresh food options / Increased cost of food
- Limitations on qualifying for SNAP or other government subsidies
- Limited storage capacity in homes or limited facilities for unhoused people
- Limited funding and storage capacity at local food pantries
- | Lack of transportation to travel to grocery store
- Lack of knowledge in cooking or preparing fresh foods

Given the concern for these major barriers, it is not surprising that when asked to think of some creative solutions for addressing food deserts the majority of responses involved addressing the inequitable access to resources created by structural barriers such as the SNAP asset limit, increasing transportation opportunities, and finding ways to keep prices down. The cost of going to the grocery store was a primary concern for nearly all focus group participants, who also noted that processed food lower in nutritional value is the cheapest to purchase.

Another recurring theme was the clients' need for help in completing government assistance applications. Provider focus group participants said the most significant need expressed by their clients and customers is education. Customers are not aware of the services and programs available to them or how and where to access them. Customers need assistance gathering information and completing applications for government assistance. Customers also request instructions on preparing healthy food. While customers understand what healthy food is and why it is healthy, they need more education on preparing food that is not shelfstable or ready-made.

The organizations around the state that exist to help bridge these barriers are experiencing more and more people needing their services, especially after the pandemic. Unfortunately, these groups are limited in their ability to meet the demand, resorting to unconventional and unsustainable ways to serve the communities.

munities of food overnment subsidies facilities for unhoused people food pantries ore esh foods

OF FOOD INSECURITY

Meet Lisa

Lisa is a 86-year old resident of Southwest Little Rock who used to shop at the Colonel Glenn Kroger every Sunday, until it closed in August. The short trip down the block to the grocery store was easy to arrange, and if it were nice out she could walk. The closure of the Colonel Glenn Kroger means that Lisa must now travel up to six miles to the closest grocery store, where she also fills her prescriptions. She does not drive due to her age and must rely on friends and neighbors.

Now she fears that she won't be able to find reliable transportation to the grocery store, limiting her ability to get the medication she needs in addition to her weekly groceries.

*Names have been changed to preserve anonymity

Consumer Focus Group Findings

Focus group conversations with food desert residents identified several barriers to accessing fresh food. Barriers are listed below in order of priority based on focus group feedback.

- High food costs
- Lack of transportation, especially for the elderly population
- Navigating the Supplemental Nutrition Assistance Program (SNAP) application
- Lack of online Women, Infant and Children (WIC) redemption options
- Cultural appropriateness of the food available
- Inequitable access to fresh food
- Inequitable access to food delivery options

Customer focus group participants indicated that their food insecurity arose from being unable to buy the food in grocery stores, not necessarily because of distance, but due to high prices. Each of the customer focus groups expressed their frustration with navigating the federal nutrition assistance programs. Many of the focus group participants view the federal nutrition programs as their number one source to afford food. They also expressed disappointment in the limited quantity of healthier foods offered at local food pantries.

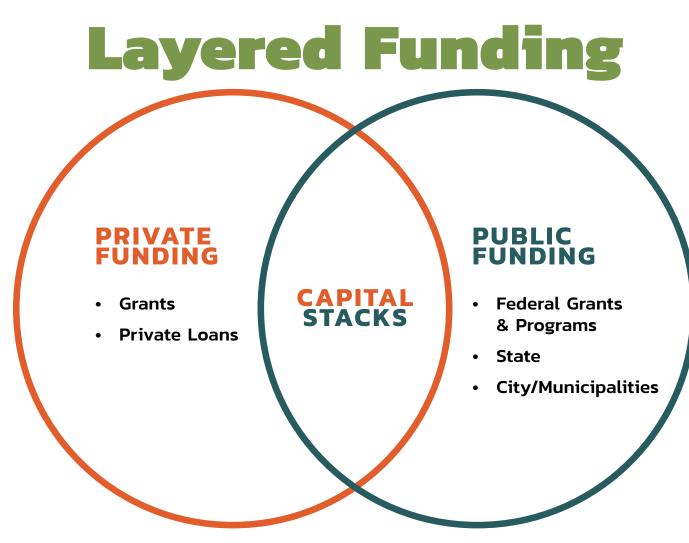
Participants resoundingly rejected the idea that people who cannot purchase fresh food in grocery stores turn to fast food. While the nutritional value of fast food is of concern to LILA residents, the price of fast food was the detracting factor. Price also determines what customers purchase at the grocery store. The focus group participants understood that certain foods have higher nutritional value but noted they are limited in purchasing better quality, healthier food due to the cost. Processed foods that are lower in nutritional value are less expensive.

Aside from better prices and more options, participants expressed a desire to have expanded online ordering and delivery options. In nearly all of our focus groups, participants mentioned a desire for more community involvement in their stores. Focus group participants recognized involvement as the key to a store's success. Several participants highlighted grocery stores as more than just a place to buy goods but as default community centers. In a local grocery store, one could buy stamps, fill prescriptions, and cash a check–providing one location for multiple services. Participants cited the loss of grocery stores, particularly in low-income and minority communities, as a loss of that community's gathering space.

rly population ance Program (SNAP) application (IC) redemption options

FUNDING FOR FOOD **DESERT PROJECTS**

The funding for the report recommendations could come from a combination of private and public capital. As with many communities and economic development projects, there is no simple funding solution for projects aiming to solve food deserts. Funding sources vary based on the scale and business model of the project. As the Working Group's investigation of promising models show, successful projects associated with food deserts commonly use a variety of funding sources through a capital stacking approach. Funding for food desert projects may be viewed through a tiered framework:



- 1. Federal funding for food desert projects most commonly comes from nationwide programs such as the Healthy Food Financing Initiative provided by the USDA. Given that these funds are limited and highly competitive, accessing federal funding requires careful planning from applicants.
- 2. State funding for food desert projects may come from various sources. Case studies in this report benefitted from state-level funding provided through assistance from state agencies and federal pass-through grant funds such as the Community Development Block Grant (CDBG) program. The availability of state funding depends on the involvement of multiple stakeholders such as elected officials, state agency leaders, and community/program-level advocates.
- **3.** Funding from nonprofit sources and foundations is a common starting point for small food desert projects. Nonprofits may serve as collaborators with food access organizations or may lead the organization. Funding from nonprofits ranges from ongoing financial support, short-term grants, and/or assistance in fundraising from private donors.
- 4. Private funding is critical to most food desert projects. Private capital may come from traditional financial instruments such as business loans, private equity, or other methods such as loans through specialized funding partners like the Low-Income Investment Fund (LIIF).

WORKING MODELS

Working Models to Increase Food Access

There is not a one-size fits all model for expanding food distribution in food desert areas. When determining what model would work for an area, it is important to consider the population size and the people being served. Many successful efforts think beyond just four walls of brick-and-mortar storefronts. Where storefronts have been successful, they have often brought in community support or embraced technology, door-to-door delivery models, or even delivery hubs where possible.

This section highlights alternative models for grocery delivery and distribution. The Working Group suggests these models can be used by anyone looking for inspiration for strategies to increase food access in their own communities. One common theme among the following models was the involvement of one or two individuals who were passionate about expanding food access and who took the time to learn the specific needs of their communities.

These models are covered in more detail in Appendix A of this report.



Wright's Market, A Public-Private Grocery Store Model

Location: Opelika, Alabama

Population: 30,000

Service Area: Expanding to 4 counties, 6 cities

Area: Rural and Urban

Type: Public-Private funded grocery store

Funding: Alabama HFFI, USDA HFFI, Food Insecurity Nutrition Incentive grant, Gus Schumacher Nutrition Incentive grant, Healthy Fluid Milk Incentives Program Grant

Website: wrightsmarkets.com

Goods, A Distribution & Direct Delivery Model

Location: Drew, Mississippi

Population: 1,852

Area: Rural

Type: Online delivery

Funding: HOPE Enterprise, Kellogg Foundation, Delta Regional Authority, Robert Wood Johnson Foundation

Website: drewgoods.org

Model: Wright's Market offers innovative strategies for reaching customers, including a shuttle service, online ordering and delivery, and a mobile grocery store for rural areas. They keep prices down by partnering with local providers, thereby addressing the cost barrier so customers can afford the healthy food they want. Through their various programs, Wright's Market offers several models for different types of communities and issues, including transportation and communitycentered markets.

Model: The GOODS model, online ordering and delivery to a convenient location, is a viable option for a small rural community. Having a partnership with a major grocery store, in this case, Walmart, is integral to this model. Broadband access is important to this model as well, however, in some cases, an order taker was able to go to homes without internet access and take an order. Home delivery is also available to those unable to drive or without transportation.

Jeffcoat's Family Market

Location: Marks, Mississippi (Quitman County)

Population: Lambert, MS 1,232 – Marks, MS 1,363 – Quitman County, MS 5,935.

Area: Rural

Type: Brick-and-mortar

Funding: HOPE Enterprise, County/State/ City Funding **Model**: Jeffcoat's Family Market is an example of the success that comes from having a food security hero whose passion for alleviating the impact of food deserts is the key to a brick-and-mortar store's success. James Jeffcoat saw the need for a store in the food desert of Quitman County and put his years of experience in the grocery industry to use in setting up a store that serves the predominantly rural county.

Boston Food Access Council, A Food Access Council Model

Location: Boston, Massachusetts Type: Food Access Council Funding: Boston Office of Food Justice Website: bostonfoodaccesscouncil.org

The Pennsylvania Food Trust, A Food Trust Model

Location: Pennsylvania

Type: Food Trust

Funding: USDA Healthy Food Financing Initiative, US Treasury CDFI Healthy Food Financing Initiative

Website: thefoodtrust.org

Model: The Food Trust is an example of a robust food access and food education program that operates across an entire state. They engage in many activities that local organizations and food pantries do in Arkansas, often on a larger scale. The Food Trust is piloting its Healthy Corner Store model in rural Arkansas in 2023. This model provides grants to small markets to purchase equipment for fresh produce and hire local residents to offer recipes and cooking tips so shoppers know how to use the available produce.

Main Street Market, A Self-Service Grocery Store Model

Location: Evansville, Minnesota

Population: 600

Type: Self-service and subscription grocery store

Area: Rural

Funding: Donations, Subscription fees, Grant

Website: tinyurl.com/2zdbc4nl

Model: The Boston Food Access Council (BFAC) is a group of community stakeholders, including providers, producers, and users, concerned with increasing equitable food access in Boston. This group is one example to consider as a statewide food policy group, as recommended by the Working Group.

Model: A self-service grocery store model would work best in small communities where the management of the store can be limited to when the operators are available. A market analysis of how much a community is willing to pay in a subscription fee would be needed, as well as additional capital for the costs subscriptions cannot cover. Because this model offers 24-hour access to paid subscribers when store staff is not present, communities interested in this model should consider the possibility of theft or other crimes.

Erie Market, A City-Owned Grocery Store Model

Town: Erie, Kansas

Population: 1,000

Type: City-owned grocery store

Area: Rural

Funding: City funds

Model: The Erie Market is city-owned and is treated as a public utility. City-owned grocery stores may not be possible in every community, but this model could be an option for census tracts on the verge of becoming a food desert.

Kroger, A Store-To-Delivery-Hub Distribution Model

States: Ohio, Georgia, and Florida with expansion plans for California, Maryland, Michigan, North Carolina, Oklahoma, Texas, and Wisconsin

Population: Multiple cities

Area: Mixed

Type: Private enterprise

Funding: Corporate

Oasis Fresh Market, A Public-Private Partnership Grocery Store Model

Town: Tulsa, Oklahoma

Population: 411,401

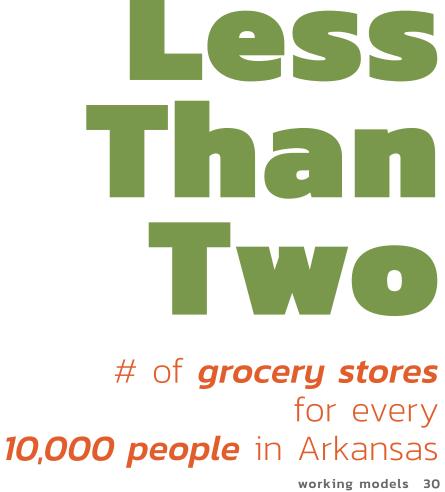
Area: Urban

Funding: Tulsa Development Authority, the city of Tulsa through U.S. Housing and Urban Development's Community Development Block Grant program, the George Kaiser Family Foundation, the Charles and Lynn Schusterman Family Foundation, and the Zarrow Family Foundation

Model: Oasis is a good model for larger cities and fulfills the needs of urban or suburban food deserts. This model includes community involvement and satisfies the desire for grocery stores to become community centers for their customers. This model did require more prolonged work on behalf of the founders, but it has since proven to be an asset to the Tulsa community.

Website: oasisfreshmarkets.net

- **Model**: Kroger is testing a variety of models, including direct delivery from a warehouse and delivery to a predetermined site such as a park. Customers order groceries for pick-up at a certain location, then drive up and have groceries loaded into their vehicles.



RECOMMENDATIONS

Sustainable solutions to eliminating food deserts include multiple strategies. The Food Desert Working Group has outlined the following recommendations for the various report audiences.

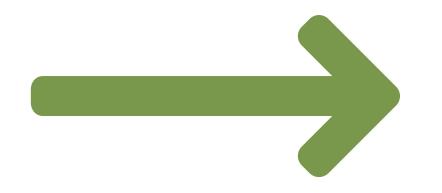
Recommendations for the Arkansas State Assembly

The Working Group recommends the following actions for consideration by the Governor and the Arkansas State Assembly:

The first recommendation is to increase Arkansas government action and accountability for improving food access. This can be accomplished by creating or designating an existing position within the Governor's Office as a food access liaison. Additionally, create a subcommittee within the state legislature to work alongside a state food access council and the Governor's liaison to establish long-term measures and outcomes for expanding food access across the state. The food access council would comprise 10-15 people representing the public, for-profit, medical, and nonprofit sectors from across Arkansas. By taking an active role in addressing food deserts, the State sends the message to Arkansans that the Governor and the legislature take seriously the experiences of those living with food insecurity.

Second, the Working Group recommends incorporating support for food access into state **fiscal policy**. This would be accomplished by establishing local and state tax incentives, creating a revolving loan program, and allocating grant funds for pilot programs in areas with low-to-no access to fresh foods.

The third recommendation is for the legislature to improve state food benefit programs, namely SNAP and WIC. Specific improvements recommended by the Working Group are on the following page.



Methods to Improve State Benefit Programs

- Continue advancing technology solutions to ensure the application and certification processes for nutrition benefits, such as SNAP and WIC, are simple for people to navigate. Focus groups showed that SNAP and WIC are often the only way Arkansans living with food insecurity can obtain food.
- Consider long-term implementation of COVID-era innovations and flexibilities to improve access. Many are unable to take part in SNAP or WIC due to complicated application processes and required in-person visits. Simplifying these processes will allow more people to know where their next meal will come from.
- Apply for a waiver from the USDA FNS and create a plan to enable online ordering for WIC.
- and incentive programs.
- disincentive for individuals to accumulate savings and become upwardly mobile.
- Encourage smaller retailers to accept SNAP benefits by ensuring they are aware of technical assistance resources from the USDA. Expanding SNAP availability and eligibility is one of the easiest ways for the legislature to make the biggest impact. It would allow more people to be able to afford healthy food regularly, which would improve their overall health outcomes. A recent Arkansas Center for Health Improvement food desert report determined that in 2021 the total food costs in Arkansas for the WIC program was nearly \$23 million, and SNAP redemption topped \$925 million.³⁷

Last, establish a public process for measuring and tracking the success of interventions to improve food access. Positive changes in public school test scores, crime rates, and community health are examples of outcomes that could be tracked through this process. Trends in long-term health outcomes such as changes in diabetes, hypertension, and other diet-related illnesses should also be documented. The responsibility for this data monitoring would ideally be shared among the food access council, the legislative committee on food access, and the Governor's food access liaison. Furthermore, a public portal allowing citizens to access that data is recommended.

Leverage local food production by increasing WIC and SNAP farmers market vouchers

Raise or remove the asset limit for SNAP. The asset limit on SNAP serves as a cliff and a

Recommendations for Community Leaders

In addition to the recommendations for the legislature to consider, the Working Group recognizes the opportunity for communities across the state to implement alternative healthy food delivery models that do not require action from the state government. The Working Group recommends that cities, towns, and municipalities develop communitydriven, creative models to increase food access. Building strong community partnerships and leveraging integrated funding will be key components in successful models. Examples of those models and recommendations on how to assess which types would work best in individual communities are detailed in a subsequent section of this report.

Recommendations for Foundations

The funding for model programs featured in this report varied. Many were funded from a combination of private and public capital. As with many communities and economic development projects, there is no simple funding solution for projects aiming to solve food deserts. Funding sources vary based on the scale and business model of the project. As the Working Group's investigation of innovative models shows, successful projects associated with food deserts commonly use a variety of funding sources through a capital stacking approach.

Partnering with other foundations that have similar interests to provide increased funding and larger grants would enable more impactful projects that increase access to fresh. nutritious food in LILA communities.

We Can And Must Make A Difference

CONCLUSION

By whatever name you choose-food deserts, low-income, low-access (LILA) areas, or food insecurity-the fact is that nearly half a million Arkansans do not have adequate access to healthy, fresh foods. This challenge affects every region, voting district, and county in the state. But Arkansas has tackled other large-scale service access issues in its history.

In 1936, the first major effort to provide electricity to rural Arkansas began with the passage of the federal Rural Electrification Act. It provided 25-year loans at three percent interest for constructing power lines in rural areas. Providing electricity to rural communities was costly. Rural areas averaged fewer than five customers per mile of electric line compared to an average of 20 customers per mile of electric line in urban areas. In 1930, only 2.1% of Arkansas farms had electricity. By 1950, 67% of the state's farms had electricity.³⁸

In 2021, Arkansas aspired to create a master plan to expand broadband internet access.³⁹ A 2020 FCC report showed that 210,000 households lacked adequate broadband access. By 2022 a plan was created and funding secured to provide broadband access to 100,000 of those households. To date, more than \$600 million has been invested in Arkansas Broadband expansion, with more funding committed.⁴⁰

Similarly, there is not an easy solution to the large issue of food access in Arkansas, but the stakes are too high to ignore. Arkansas has some of the highest levels of food insecurity and diet-related diseases in the United States. But Arkansas also has a strong agricultural base, innovative entrepreneurs, and committed public and nonprofit sectors. If these stakeholders coordinate their efforts to bring innovative models for food access to Arkansas, it could greatly reduce the number of Arkansans going to bed hungry at night and improve health outcomes across the state. And while there are charitable efforts to help treat the symptoms of not having reliable, steady access to food options, the charge of this Working Group was to put forth recommendations to solve the problem.

While there is no silver bullet that will work across our state, the Working Group feels strongly that the options and methods outlined in this report are a great starting point. The models outlined in this report continue to work in rural and urban communities in multiple states. The key is the collaborative effort of state and local government leaders, nonprofit organizations, foundations, entrepreneurs, and concerned citizens. Together we can and must make a difference.



REFERENCES

- æ The Annie E. Casey Foundation. "Exploring America's Food Deserts." Food Deserts in the United States, The Annie E. Casey Foundation, 14 Feb. 2021, https://www.aecf.org/blog/exploring-americas-food-deserts.
- æ "Arkansas Broadband Master Plan." Arkansas Broadband Master Plan, Arkansas Department of Commerce Broadband Office, 18 Apr. 2022, https://broadband.arkansas.gov/wp-content/uploads/2022/04/Arkansas-Broadband-Master-Plan.pdf.
- æ "Arkansas Snap Eligibility Information." Arkansas SNAP Eligibility Information, https://www.snapscreener.com/ guides/arkansas.
- æ "Arkansas Snap Eligibility Information." Arkansas SNAP Eligibility Information, https://www.snapscreener.com/ guides/arkansas.
- æ Ashiabi, Godwin. "Household food insecurity and children's school engagement." Journal of children and poverty 11.1 (2005): 3-17.
- æ Bodor, J. Nicholas, et al. "The association between obesity and urban food environments." Journal of Urban Health 87.5 (2010): 771-781.
- æ Bolen, Ed, and Elizabeth Wolkomir. "Snap Boosts Retailers and Local Economies." Center on Budget and Policy Priorities, Center on Budget and Policy Priorities, 28 May 2020, https://www.cbpp.org/research/foodassistance/snap-boosts-retailers-and-local-economies.
- æ Bowen, Sarah, Sinikka Elliott, and Annie Hardison-Moody. "The structural roots of food insecurity: How racism is a fundamental cause of food insecurity." Sociology Compass 15.7 (2021): e12846.
- æ "Broadband Funding CARES_ARPA." Arkansas Department of Finance and Administration, 15 Sept. 2022.
- Bureau, U.S. Census. "PHYSICAL HOUSING CHARACTERISTICS FOR OCCUPIED HOUSING UNITS." Explore Census æ Data, United States Census Bureau, https://data.census.gov/table?q=Arkansas%2Bvehicles.
- æ Bureau, US Census. "2019 SUSB Annual Data Tables by Establishment Industry." Census.gov, SUSB, 27 May 2022, https://www.census.gov/data/tables/2019/econ/susb/2019-susb-annual.html.
- æ Bureau, US Census. "County Business Patterns (CBP)." Census.gov, United States Census Bureau, 18 Oct. 2022, https://www.census.gov/programs-surveys/cbp.html.
- æ Coleman-Jensen, Alisha, et al. "Household food security in the United States in 2021." United States Department of Agriculture Economic Research Service: Washington, DC, USA (2022): 51.
- æ "FCC National Broadband Map." National Broadband Map, Federal Communications Commission, https:// broadbandmap.fcc.gov/area-summary/mobile?geoid=05&type=state&zoom=5.89&vlon=-92.129428&vlat=34.770 518&tech=tech4g&env=0.
- æ Feeding America, "Food Insecurity among Overall (all ages) Population in Arkansas." 2020. Web. 20 November 2022 https://map.feedingamerica.org/county/2020/overall/arkansas

- æ "Food Insecurity." Food Insecurity Healthy People 2030, United States Department of Health and Human Services, https://health.gov/healthypeople/priority-areas/social-determinants-health/literature-summaries/ food-insecurity.
- æ "Go to the Atlas." USDA ERS Go to the Atlas, United States Department of Agriculture, 27 Apr. 2021, https://www.ers.usda.gov/data-products/food-access-research-atlas/go-to-the-atlas/.
- æ George, Caroline, and Adie Tomer. "Delivering to Deserts: New Data Reveals the Geography of Digital Access to Food in the U.S." Brookings , Brookings, 11 May 2022, https://www.brookings.edu/essay/delivering-todeserts-new-data-reveals-the-geography-of-digital-access-to-food-in-the-us/.
- æ Gundersen, Craig, and James P. Ziliak. "Childhood food insecurity in the US: trends, causes, and policy options." The Future of Children (2014): 1-19.
- æ Hall, Lauren, and Caitlin Nchako. "A Closer Look at Who Benefits from Snap: State-by-State Fact Sheets." Center on Budget and Policy Priorities, Center on Budget and Policy Priorities, 25 Apr. 2022, https:// www.cbpp.org/research/food-assistance/a-closer-look-at-who-benefits-from-snap-state-by-state-factsheets#Arkansas.
- æ Hoffman, Graham. "The Guide to Grocery Store Profit Margins (and How to Improve Them)." Point of Sale (POS) Systems for Small Business, POS Nation, 11 Aug. 2022, https://www.posnation.com/blog/grocery-storeprofit-margins.
- Security in Adulthood, 1984-2019." American Journal of Public Health 112.10 (2022): 1498-1506.
- æ Murphy, J. Michael, et al. "Relationship between hunger and psychosocial functioning in low-income American children." Journal of the American Academy of Child & Adolescent Psychiatry 37.2 (1998): 163-170.
- the United States, Feeding America, https://map.feedingamerica.org/county/2020/overall/arkansas.
- Bureau of Labor Statistics, 15 Sept. 2022, https://www.bls.gov/opub/ted/2022/prices-for-food-at-home-up-13-5-percent-for-year-ended-august-2022.htm.
- æ "SNAP Participation Rates by State, All Eligible People." Food and Nutrition Service U.S. Department of Agriculture, Food and Nutrition Service U.S. Department of Agriculture, https://www.fns.usda.gov/usamap#.
- æ "State Summaries Arkansas: 2021 Annual Report." America's Health Rankings, United Health Foundation, https://www.americashealthrankings.org/learn/reports/2021-annual-report/state-summaries-arkansas.
- æ Suter, Mary. "Rural Electrification." Encyclopedia of Arkansas. Central Arkansas Library System. 12 October 2022. Web. 21 November 2022. https://encyclopediaofarkansas.net/entries/rural-electrification-2162/
- 2 United Health Foundation. "State Summaries Arkansas | 2021 Annual Report | AHR." America's Health Rankings. Web. 20 November 2022. https://www.americashealthrankings.org/learn/reports/2021-annualreport/state-summaries-arkansa

a Insolera, Noura, Alicia Cohen, and Julia A. Wolfson, "SNAP and WIC Participation During Childhood and Food

æ "Overall (All Ages) Hunger & Poverty in Arkansas: Map the Meal Gap." Overall (All Ages) Hunger & Poverty in

æ "Prices for Food at Home up 13.5 Percent for Year Ended August 2022." U.S. Bureau of Labor Statistics, U.S.

APPENDIX A: Working model details

Wright's Market, A Public-Private Grocery Store Model

Background

Wright's Market has been family owned and operated since 1973, expanding through the years to a 20,000 square foot store. Despite having several competitors in their hometown location and the surrounding area-including five national chains and multiple dollar stores-Wright's remains competitive by offering low prices and quality, fresh foods. This is partly achieved through partnerships with local food providers. However, part of its recent success lies in innovative strategies to reach customers and provide expanded food access.

They created the "Wright 2 U" shuttle service for their local region, providing a transport shuttle that brings customers from their homes to the market to shop and then back home. This later expanded to online ordering and doorstep delivery. In addition to the regular benefits of delivery, Wright's also sought and received USDA permission to take SNAP benefits through its online portal. This launched in 2020, just ahead of the pandemic and an exponential increase in online ordering. Wright's also serves as the supplier for an urban food market across the state border in Atlanta. Run by an Atlanta community nonprofit, Focused Community Strategies, Carver Market fills the need created by a food desert in the heart of Atlanta.

The next step is increasing their rural delivery capabilities by partnering with the Lee Russell Council of Governments to create a "rolling store" concept in the region. The plan is to have a self-contained mobile market stocked with high-demand items that can make a specified route to outlying cities in the region without convenient grocery stores of their own. The plan is to start out focusing heavily on community events to build up a subscription service for the deliveries. This program is slated to launch in 2023.

Benefits

The expansion to online ordering and delivery models from this local provider has helped bridge the gap between the brick-and-mortar location and those unable to access it. This benefits foodinsecure people by providing new ways to access reliable food options and helps the store expand its customer base without creating more storage space. Likewise, partnering with Carver Market as a supplier provides fresh, sustainable food to an area of need without requiring Wright's to expand storefront space into another state. The upcoming public/private partnership with the Lee Russell Council of Governments will help grow services and revenue with lessened risk due to an invested local partner.

Potential Drawbacks

Although this model features lower overhead than many brick-and-mortar stores, securing delivery trucks, figuring out logistics, and maintaining supplies for expanded business do not come without costs. The use and application of available funds, such as the Healthy Food Funding Initiative (HFFI) and specific grant funding, helped mitigate those cost barriers. In this model, the funding helped purchase delivery trucks and supported offering 2-for-1 SNAP benefits as incentives. While the pivot to online ordering does make food more accessible for some, it does not solve areas where broadband internet is not readily available. Likewise, subscription-based models might not be affordable for lower-income families with variable monthly budgets.

Goods, A Distribution & Direct Delivery Model

Background

The closest grocery store to Drew, Mississippi, before the establishment of GOODS was in Cleveland, Mississippi, 30 minutes away. After a group of Drew citizens did a market analysis with HOPE Enterprise and the Kellogg Foundation, they determined that a brick-and-mortar grocery store would not be sustainable in a town of Drew's size. They began to think outside of the box. The idea for an online grocery store was created, called Grocery Online Ordering Distribution Service (GOODS). Drew citizens place their grocery orders online or at the GOODS distribution center, and a driver goes to the Walmart in Cleveland to pick up the orders. From there, they utilize refrigerated transportation and storage to bring the orders back to Drew where they are stored in the town's old armory building for pickup. The order may be delivered to customers' homes if someone does not have transportation to the armory. Deliveries happen daily, and people can place their order around 9 a.m. and get their delivery the same day. Currently, GOODS has one driver who goes to get the food daily, and someone back at the distribution center who stays in the office and helps people do their orders. Both of these people are paid employees of GOODS. After receiving initial capital for GOODS from HOPE Enterprise, the Kellogg Foundation, and the Delta Regional Authority, The Robert Wood Johnson Foundation awarded Drew the 2020-2021 Culture of Health Prize, along with \$25,000.

Benefits

The online delivery model does not require the same amount of overhead associated with a brickand-mortar store, and it helps bring the food that a community needs directly to them. GOODS can keep costs down by maintaining a small employee force, but that can be scalable based on the size of the community. Perhaps the biggest benefit of the GOODS model is the community investment in it. Sunflower County Supervisor Gloria Dickerson, who was instrumental in getting GOODS started, indicated that most of the Drew community utilizes GOODS regularly and is grateful for the fresh food it brings into an area that has been without a grocery store for a while.

Potential Drawbacks

The GOODS model relies on customers being able to place their orders over the internet or physically traveling to the distribution center to place orders. This could be a drawback in Arkansas's rural communities, which struggle to access reliable broadband and transportation. To overcome these challenges, GOODS staff often have to find creative ways to meet the needs of their customers. Additionally, some communities in Arkansas may be even further out from a grocery store than Drew is, and there is no guarantee that the closest one is large enough to support a model similar to GOODS.

Jeffcoat's Family Market

Background

James Jeffcoat is the hero backing the much-needed food resource for the Marks, Mississippi, community. Quitman County had no real grocery store for years until Jeffcoat's Family Market launched their Marks store in March 2021. James Jeffcoat serves the people of Marks, Lambert, and the entire county. The building that now houses the grocery store was initially not in good shape (after being vacant for six years) and local leaders got the city and county to obtain state funding, purchase, and renovate the building, and then turn it over to James Jeffcoat for Jeffcoat's Family Market. This is one of two existing Jeffcoat's Family Markets with a third in the making for Mississippi.

Benefits

The Marks community is grateful for the fresh food it brings into a county that has been without a grocery store for a while. Jeffcoat's Family Market is bringing jobs, job training, and economic development into the area.

Potential Challenges

This brick-and-mortar model relies on customers being able to physically travel to the Family Market. This could be a drawback in Arkansas's rural communities, which struggle to afford and/or have access to reliable transportation and available state/county/city funding.

Main Street Market, A Self-Service Grocery Store Model

Background

Evansville residents Alex and Caileen Ostenson moved to the town in 2017. Not long before that, the local grocery store closed, which meant they and other residents faced a 40-mile round trip for groceries. To address that challenge, the Ostensons devised a plan for a downtown market requiring minimal staffing support and leaning on available technology instead. That plan became Main Street Market in 2020.

By gathering local donations from other concerned citizens, the couple found a storefront space in downtown Evansville to renovate into their grocery concept. In addition to a traditional model where the couple staffs the store for regular business hours three days a week, they have also implemented a 24-hour access subscription service. For an annual membership fee of \$75-100, locals can subscribe to a digital service that lets them unlock the store's front door when it is not open for traditional hours and shop at their leisure. The phone app also allows subscribers to scan the food and check out, though there are traditional scanners and checkout spaces, as well as security cameras.

In their first year, the store had 122 subscribers and is sustainable, though the Ostensons remain the only employees and have yet to draw a salary.

Benefits

This model demonstrates an innovative use of technology and a non-standard relationship with customers through the subscription model. Both the use of technology and the size of the user base allow for low overhead and cost savings over a traditionally staffed store. This circumvents the challenge faced by a more traditional model where having the store downtown might not increase food access if the open hours are limited. There is also intense community support for this model and built-in community connections, from donations to renovate the space to the chalkboard of suggested products to add.

Potential Drawbacks

This model does address food access but is still limited in its economic impact and variety of foods. While the model is promising, only the Ostensons currently staff the store and have yet to draw a salary. While this unstaffed overhead allows them to keep food prices affordable for customers, it limits their ability to hire additional staff or sustain themselves. This model could open the store up to increased theft during unstaffed hours, though the individual access codes and smaller population mitigate this. Beyond food access, local local grocery stores can also be economic drivers when they can hire staff and create additional jobs in the community. Also, while they can carry staple food items, they do not have everything the residents might need, meaning some trips to the grocery store 20 miles away are still needed.

Erie Market, A City-Owned Grocery Store Model

Background

In 2012, the only grocery store in Erie, Kansas, closed its doors and left the town with no ready options for fresh food. They found a stopgap by having previous owners of the space again occupy the store, opening Stub's Market. However, around 2019, the owners were looking to retire and sell their businesses. With few takers, they floated the idea that the city purchase and operate the store. After polling residents and seeing a 68.5% positive response to the idea, the city moved forward and purchased the store.

Employees of the former Stub's Market, rebranded Erie Market after the city purchase, were largely retained. Daily operation of the store stayed in the hands of existing employees, though the city did bring in an experienced manager to replace the retiring owners. An additional benefit of the city owning the store is that all of the employees are now city employees, complete with insurance and other benefits.

The city operates the store at a breakeven philosophy, helping to keep the store operational even with fluctuating food costs and inflation. When extra funds are needed to help the store weather a short downturn, the city will add a small fee to existing monthly utility bills to help cover the cost.

Benefits

By seeking city input and support before purchasing the store, Erie created immediate citizen support for the store. Residents frequently use the store for lunches, and the economic development has stirred the opening of several small businesses nearby. Operating as a municipal service also allows the store to weather inflation and other woes that plague the razor-thin margins of a traditional grocery store. The employment and salary benefits for employees working at the Erie Market are also buoyed up by becoming part of the city workforce. This can hopefully ensure longer employment and more economic returns than traditional grocery store turnover.

Potential Drawbacks

Although the store is operated with a breakeven mindset, rising inflation costs and the necessity of passing those costs along to city residents might make the model unfavorable in the long term. Even in small amounts, the monthly increase in utility cost could outweigh the public goodwill around the store if it becomes the norm rather than a random expense. With fewer customers compared to larger cities and no other operating areas to help relieve pressure like larger franchises, Erie Market is at the mercy of wholesalers and market prices.

Oasis Fresh Market, A Public-Private Partnership Grocery Store Model

Background

In 2018, the City of Tulsa mandated that dollar stores in North Tulsa be at least a mile apart. Before this decision, dollar stores had been popping up in low-income areas of North Tulsa, muscling out stores selling fresh produce. Despite this mandate, full-service grocery stores did not pop up in low-access areas. The lack of convenient access to fresh food was exacerbated by the COVID-19 pandemic, prompting Tulsa District 1 City Councilor Vanessa Hall-Harper and CEO of Tulsa Economic Development Corp. Creative Capital, Rose Washington, to approach several community leaders about establishing a grocery store in North Tulsa. The result was the opening of Oasis Fresh Market in May 2021, the first full-service grocery store to open in the area in 14 years. Oasis Fresh Market is set up as a for-profit grocery store that contracts with other nonprofit service providers to offer more than just groceries to its customers. AJ Johnson, who also heads the Tulsa Dream Center, is the founder and CEO of Oasis and leads the owner-operator coalition that manages the store.

Benefits

The owner-operator model, where people from the community in which the store is located own and operate the store, creates more community buy-in, thereby increasing the number of people who patronize the store daily. AJ Johnson estimates that Oasis sees anywhere from 400-600 customers daily, many of whom come to the store not just for their groceries but also for the other services offered there. The Oasis Projects (the nonprofit associated with Oasis Fresh Market) invites 13-15 vendors to set up booths inside the store's cafe on the first Sunday of each month to offer clients and community residents a variety of different services and programs. Additionally, Oasis Projects obtained an Emergency Housing Assistance grant that allows it to provide housing-insecure clients with emergency rental vouchers for up to 15 months, helping over 3,761 people. All of this is possible due to the community-centered nature of Oasis and its associated nonprofit that anchors the store in the community.

Potential Drawbacks

The establishment of Oasis required the prolonged work of Hill-Harper and Washington to find community leaders who would take up the store in a way that would ensure its longevity. Additionally, the store faced difficulties in finding a supplier who would service the area after not having a full-service grocery store for 14 years.

Kroger, A Store-To-Delivery-Hub Distribution Model

Background

In 2021, Kroger unveiled a new robotic distribution center in Monroe, Ohio, followed quickly by a distribution center in Groveland, Florida. These distribution centers were developed as a partnership between Kroger and Ocado, an online grocer in the UK. Each distribution center, dubbed Customer Fulfillment Centers (CFC) by Kroger, acts as the hub in their "hub and spoke" distribution model. The spoke locations receive shipments from the hub location and then divide those shipments to fulfill local orders which are then delivered to the client's door.

Each Customer Fulfillment Center can sell the equivalent product of 20–25 physical stores without the overhead of actual physical locations. The CFCs and spoke facilities are operated largely by a troop of autonomous robots. From the initial delivery from Kroger's nationwide bulk distribution network to the packaging of delivery trucks to the spoke facilities, every aspect of the CFCs is built with automation in mind. This efficiency allows for an expanded reach, especially in places where no physical Kroger stores exist. Swift sorting and custom zones for different products (frozen, fresh, and shelf-stable) means a shorter period between the initial distribution of the products and those products landing in the consumer's hands.

Benefits

With a high initial investment, but lower overhead in the long term, this distribution strategy could save Kroger dollars in the long term and make it more feasible to deliver to customers in areas where a physical store might not be profitable. The spoke system allows for a much larger reach, including more rural areas. Likewise, expediting the way food and other products reach the consumer could make for fresher food reaching people than what would normally be available in a physical store.

Potential Drawbacks

Moving to an all-digital platform increases convenience, but it also depersonalizes some of the experience of a local grocery store. In our focus groups, many residents in food deserts look to the local grocery store not only as a place to purchase food but also as a community hub. This is especially true for grocery locations offering additional services, like bank outlets or postal services, such as selling stamps. The broad reach of the distribution models can also exacerbate the challenge of finding culturally appropriate foods for any number of communities in an area. One benefit cited by focus group attendees of local stores is that the owners and operators of those stores are more connected to community needs. Finally, although broadband and other internet access is making headway in Arkansas, full access for those most at risk for hunger and food insecurity is still lacking.⁴¹ Such barriers make an all-online experience for ordering food outside the reach of some Arkansans.

The Pennsylvania Food Trust, A Food Trust Model

Background and Structure

Founded in 1992, The Food Trust works with neighborhoods, institutions, retailers, farmers, and policymakers across the country to ensure delicious, nutritious food for all. Backed by three decades of research and evaluation, their community-centered approach to food security weaves together three core programming elements — access, affordability, and education — as well as a focus on advocating for public policy solutions. In 2022, the Food Trust announced a new five-year strategic plan, which centers on evidence-based programs, community engagement, and policy advocacy.

The Food Trust manages a Healthy Food Access portal where people can research their community and locate resources for healthy, affordable food resources. The trust runs a Nutrition Incentives program, offering Food Bucks and Food Bucks Rx (FBRx) to help make fresh produce and other healthy foods accessible and affordable. The Food Bucks are primarily SNAP incentives earned at the point of purchase by shoppers paying with SNAP. FBRx is a produce prescription distributed to patients by their healthcare providers. Understanding that accessing healthy food begins with education, The Food Trust promotes delicious, nutritious food choices through hands-on food education and cooking workshops, online and in-person through a Farm-to-School and other community-based programming. (Arkansas currently has a Farm-to-School program operated by the Department of Agriculture.)

One of the most well-known programs of The Food Trust is their Healthy Corner Store Initiative (HCSI) and Heart Smarts program, which work side-by-side to ensure that residents have access to delicious, nutritious food and information to choose healthier options in their local corner store. In fact, three pilot sites for the HCSI are set to open in Forrest City, AR, in the spring of 2023. Through in-store nutrition education, nutrition incentives, and technical assistance, their teams support store owners in activating their businesses as community health hubs.

Boston Food Access Council, A Food Access Council Model

Background and Structure

The Boston Food Access Council (BFAC) brings together residents, activists, community leaders, organizations, farmers, researchers, and other diverse stakeholders to address equitable food access in the city of Boston, recognizing its role in the larger Massachusetts food system. The BFAC was relaunched in 2020 by the City's Office of Food Justice and a transition committee that designed the structure of the Council as part of the Mayor's Food Access Agenda. BFAC is a volunteer-led, independent organization that works to engage groups across Boston around food access issues. They work in conjunction with the Office of Food Justice but are not directly affiliated with the City of Boston and maintain their independence as a community-led group.

Anyone interested in food access can be a member, and residency in the City of Boston is not required. To become a member of BFAC, prospective members submit a membership form. Members are encouraged to participate in at least two meetings annually, whether via public meetings or Working Groups.

An elected nine-member panel of community and organizational representatives comprises the BFAC Steering Committee. The Steering Committee works to provide the administrative infrastructure for the BFAC and works to shape the BFAC agenda from member input. Steering committee members serve two-year terms, and four to five seats are up for election each December. Steering Committee members can serve two consecutive terms, per the current by-laws. At least four seats are held for community members. The Steering Committee elects two co-chairs to lead meetings and provide agendas and structure for the Steering Committee. Steering Committee members meet one to two times per month, facilitate quarterly public meetings, and serve as liaisons with the Working Groups.

BFAC currently has four Working Groups:

- i Advocacy and Policy
- i Community Outreach, Education, and Engagement

Working Groups hold regular monthly meetings and implement the BFAC Agenda through each group's focus area, as determined by the Steering Committee and informed by BFAC Membership. The Working Groups develop and implement action plans, research, develop partnerships, and conduct feasibility inquiries and planning. Working Groups engage the community for input gathering and recruitment to bring other voices to the table with a focus on the inclusion of underrepresented voices. Working Groups present recommendations to the BFAC Steering Committee and BFAC Membership via Steering Committee and/or quarterly public meetings.

- ; Fundraising
- ¡ Mayor's Food Access Agenda

APPENDIX B: Faces of food insecurity

Through the course of our conversations with food desert residents and those who experience food insecurity we heard stories of frustration and hardship. We were not able to include all of them in the report; however, we wanted to preserve the ones we did not use so that readers of this report can see the full gambit of what food insecurity looks like in Arkansas.

Names have been changed to preserve anonymity

MEET JULIE

Julie is a single mother of three living in Hope who receives SNAP and WIC benefits. She ensures that she keeps up with the requirements to continue receiving nutritional assistance because it is often the only means she has to buy food for her family. In 2020 she received one of the first rounds of COVID-19 stimulus payments, which helped her for a short time but eventually it ran out. She soon realized that because she received the stimulus payment, she exceeded the asset limit on maintaining SNAP, and lost the assistance. The process of reapplying places a burden on her and her family.

MEET DAVID

David is a Marshallese immigrant living in Springdale. David and his wife, Mary, recently became United States citizens and are proud to be part of their community in Northwest Arkansas. They both work low-paying jobs and qualify for government nutrition assistance. However, most parts of the application are in English, and when they can find resources in Marshallese the translations are usually inaccurate. David and Mary have difficulty navigating the process of applying for SNAP due to the language barrier and must rely on the assistance of others making the process unnecessarily more complicated than it already is.

MEET JIM

Jim is a person who experiences homelessness, living in Northwest Arkansas. People who experience homelessness have needs beyond just finding food, such as shelter, transportation, and hygiene-related needs. Jim knows about an organization that will help those in need obtain a bicycle to help with getting around town, which is how he was able to get a bike. He is currently living in a tent with no access to water, cooking equipment, or electricity. Jim's only resource for staying connected is a prepaid phone he uses to find out how to access different items and locations. Until the day of the Rogers focus group, he was unaware of the Feed Rogers location and what they provided. The experiences of Jim showcase the need for better public education on where to conveniently find healthy food, as well as how food insecurity is part of a much larger problem in Arkansas that includes low transportation options.

APPENDIX C: FOOD INSECURITY RATES IN AR BY COUNTY IN 2020

Location	Total Devulation	Food Insecure	Food
Location	Total Population	Population, Total	Insecurity Rate
USA	326,616,501	33,365,240	10.0%
Arkansas (State)	3,021,293	444,130	14.0%
Arkansas County, AR	17,755	2,610	14.0%
Ashley County, AR	19,940	3,330	16.0%
Baxter County, AR	41,656	6,540	15.0%
Benton County, AR	273,551	29,270	10.0%
Boone County, AR	37,532	5,780	15.0%
Bradley County, AR	10,872	1,620	14.9%
Calhoun County, AR	5,154	670	13.0%
Carroll County, AR	28,000	3,920	14.0%
Chicot County, AR	10,435	2,160	20.7%
Clark County, AR	22,426	3,790	16.9%
Clay County, AR	14,681	2,760	18.8%
Cleburne County, AR	25,093	4,040	16.1%
Cleveland County, AR	8,014	1,170	14.6%
Columbia County, AR	23,621	4,110	17.4%
Conway County, AR	20,833	3,750	18.0%
Craighead County, AR	109,313	17,490	16.0%
Crawford County, AR	63,208	10,050	15.9%
Crittenden County, AR	48,383	8,080	16.7%
Cross County, AR	16,604	2,640	15.9%
Dallas County, AR	7,092	1,000	14.1%
Desha County, AR	11,552	2,010	17.4%
Drew County, AR	18,258	2,830	15.5%
Faulkner County, AR	124,545	17,810	14.3%
Franklin County, AR	17,801	3,400	19.1%
Fulton County, AR	12,303	2,190	17.8%
Garland County, AR	98,920	17,410	17.6%
Grant County, AR	18,239	2,590	14.2%
Greene County, AR	45,294	7,700	17.0%

Appendix C: Food Insecurity Rates in AR by County in 2020, cont.

		Food Insecure	Food
Location	Total Population	Population, Total	Insecurity Rate
Hempstead County, AR	21,742	3,370	15.5%
Hot Spring County, AR	33,734	5,330	15.8%
Howard County, AR	13,311	2,010	15.1%
Independence County, AR	37,484	5,810	15.5%
Izard County, AR	13,536	2,450	18.1%
Jackson County, AR	16,856	3,270	19.4%
Jefferson County, AR	67,975	11,080	16.3%
Johnson County, AR	26,527	4,430	16.7%
Lafayette County, AR	6,738	1,260	18.7%
Lawrence County, AR	16,471	2,800	17.0%
Lee County, AR	8,969	1,740	19.4%
Lincoln County, AR	13,224	2,010	15.2%
Little River County, AR	12,308	1,760	14.3%
Logan County, AR	21,561	3,730	17.3%
Lonoke County, AR	72,963	9,850	13.5%
Madison County, AR	16,387	2,540	15.5%
Marion County, AR	16,538	3,010	18.2%
Miller County, AR	43,497	7,090	16.3%
Mississippi County, AR	41,475	7,590	18.3%
Monroe County, AR	6,885	1,260	18.3%
Montgomery County, AR	8,956	1,630	18.2%
Nevada County, AR	8,294	1,410	17.0%
Newton County, AR	7,730	1,090	14.1%
Ouachita County, AR	23,529	4,000	17.0%
Perry County, AR	10,311	1,660	16.1%
Phillips County, AR	18,108	4,020	22.2%
Pike County, AR	10,702	1,830	17.1%
Poinsett County, AR	23,791	4,330	18.2%
Polk County, AR	20,053	3,770	18.8%
Pope County, AR	63,851	9,450	14.8%

Appendix C: Food Insecurity Rates in AR by County in 2020, cont.

Location	Total Population	Food Insecure Population, Total	Food Insecurity Rate
Prairie County, AR	8,143	1,140	14.0%
Pulaski County, AR	392,449	57,690	14.7%
Randolph County, AR	17,898	3,150	17.6%
St. Francis County, AR	25,487	4,970	19.5%
Saline County, AR	120,776	14,010	11.6%
Scott County, AR	10,244	1,680	16.4%
Searcy County, AR	7,882	1,600	20.3%
Sebastian County, AR	127,515	21,040	16.5%
Sevier County, AR	16,974	2,580	15.2%
Sharp County, AR	17,198	3,130	18.2%
Stone County, AR	12,591	2,430	19.3%
Union County, AR	39,057	6,210	15.9%
Van Buren County, AR	16,554	2,930	17.7%
Washington County, AR	235,778	31,830	13.5%
White County, AR	78,896	12,150	15.4%
Woodruff County, AR	6,450	1,090	16.9%
Yell County, AR	21,429	3,000	14.0%

Data Source: Feeding America. 2020.

APPENDIX D: ARKANSAS SNAP PARTICIPATION BY COUNTY IN 2021

County	Unduplicated Cases	Unduplicated Persons*	Coupons Issued**
Arkansas	1,718	3,340	5,618,126
Ashley	2,294	4,437	7,664,849
Baxter	3,054	6,032	9,949,377
Benton	9,225	21,866	32,450,809
Boone	2,921	6,162	9,826,857
Bradley	1,383	2,523	4,439,549
Calhoun	391	724	1,212,487
Carroll	1,803	3,786	5,736,444
Chicot	1,707	3,086	5,782,925
Clark	1,757	3,345	5,748,744
Clay	1,306	2,532	4,124,444
Celburne	1,908	3,790	6,427,830
Cleveland	701	1,414	2,503,445
Columbia	2,695	5,264	8,954,658
Conway	2,028	3,940	6,502,043
Craighead	8,870	19,990	32,268,999
Crawford	4,553	10,195	16,306,593
Crittenden	6,983	14,742	24,778,900
Cross	1,600	3,153	5,288,580
Dallas	671	1,261	2,192,509
Desha	1,687	3,247	5,942,613
Drew	2,022	3,832	6,682,706
Faulkner	7,430	15,532	23,994,727
Franklin	1,303	2,895	4,569,785
Fulton	1,168	2,403	4,086,946
Garland	9,600	18,924	30,820,575
Grant	1,048	2,224	3,549,169
Greene	4,250	8,980	14,478,312
Hempstead	2,085	4,260	7,103,115

Appendix D: Arkansas SNAP Participation by County in 2021, cont

County	Unduplicated Cases	Unduplicated Persons*	Coupons Issued**
Hot Spring	2,763	5,544	9,042,434
Howard	1,187	2,523	4,321,348
Independence	2,879	6,196	10,171,784
Izard	1,299	2,538	4,316,596
Jackson	2,080	3,875	6,782,852
Jefferson	9,786	18,407	32,311,109
Johnson	2,460	5,482	8,874,714
Lafayette	759	1,414	2,499,946
Lawrence	1,658	3,413	5,702,073
Lee	1,483	2,630	5,081,986
Lincoln	1,148	2,125	3,844,070
Little River	1,142	2,271	3,849,545
Logan	1,921	4,135	6,710,501
Lonoke	4,080	8,637	13,208,116
Madison	1,135	2,690	4,421,589
Marion	1,462	3,039	5,025,135
Miller	4,618	9,509	15,093,649
Mississippi	5,724	11,746	20,222,365
Monroe	1,058	1,910	3,475,279
Montgomery	674	1,359	2,357,860
Nevada	686	1,381	2,199,068
Newton	643	1,305	2,268,751
Ouachita	2,676	4,997	8,759,976
Perry	840	1,707	2,756,48
Phillips	3,818	7,358	14,254,348
Pike	877	1,998	3,312,596
Poinsett	2,891	5,851	10,056,007
Polk	1,870	3,985	6,573,722
Роре	4,172	8,523	13,654,465
Prairie	591	1,118	1,820,657
Pulaski East	211	375	275,575
Pulaski Jacksonville	6,674	14,279	22,877,535

Appendix D: Arkansas SNAP Participation by County in 2021, cont

County	Unduplicated Cases	Unduplicated Persons*	Coupons Issued**
Pulaski North	10,146	19,780	32,965,518
Pulaski South	12,915	23,136	38,238,443
Pulaski Southwest	10,042	20,761	34,148,876
Randolph	1,638	3,405	5,594,888
Saline	4,956	10,563	16,407,163
Scott	1,119	2,493	4,279,589
Searcy	604	1,190	2,076,028
Sebastian	12,445	25,082	41,312,529
Sevier	1,395	3,034	5,120,162
Sharp	1,809	3,664	6,047,760
St. Francis	3,416	6,781	12,426,911
Stone	1,177	2,396	4,110,865
Union	4,155	8,176	13,696,855
Van Buren	1,442	2,981	4,762,968
Washington	10,639	23,373	35,026,115
White	6,359	13,230	21,075,008
Woodruff	879	1,613	2,930,381
Yell	1,385	3,084	5,085,881
State Total	249,947	510,941	840,434,188

Data Source: https://humanservices.arkansas.gov/data-reports/statistical-reports/

APPENDIX E: POPULATION RECEIVING SNAP IN ARKANSAS BY COUNTY 2019

Location	Total Population	Population Receiving SNAP Benefits	Population Receiving SNAP Benefits, Percent
USA	328,239,523	38,537,386	11.7%
Arkansas	3,017,804	357,344	11.8%
Arkansas County, AR	17,486	2,539	14.5%
Ashley County, AR	19,657	3,234	16.5%
Baxter County, AR	41,932	4,219	10.1%
Benton County, AR	279,141	12,298	4.4%
Boone County, AR	37,432	4,262	11.4%
Bradley County, AR	10,763	1,928	17.9%
Calhoun County, AR	5,189	477	9.2%
Carroll County, AR	28,380	2,341	8.3%
Chicot County, AR	10,118	2,719	26.9%
Clark County, AR	22,320	2,557	11.5%
Clay County, AR	14,551	1,735	11.9%
Cleburne County, AR	24,919	2,620	10.5%
Cleveland County, AR	7,956	1,072	13.5%
Columbia County, AR	23,457	3,701	15.8%
Conway County, AR	20,846	3,027	14.5%
Craighead County, AR	110,332	13,532	12.3%
Crawford County, AR	63,257	7,067	11.2%
Crittenden County, AR	47,955	11,322	23.6%
Cross County, AR	16,419	2,431	14.8%
Dallas County, AR	7,009	1,015	14.5%
Desha County, AR	11,361	2,510	22.1%
Drew County, AR	18,219	2,910	16.0%
Faulkner County, AR	126,007	9,583	7.6%
Franklin County, AR	17,715	1,980	11.2%
Fulton County, AR	12,477	1,801	14.4%



Location	Total Population	Population Receiving SNAP Benefits	Population Receiving SNAP Benefits, Percent
Garland County, AR	99,386	13,117	13.2%
Grant County, AR	18,265	1,548	8.5%
Greene County, AR	45,325	6,062	13.4%
Hempstead County, AR	21,532	2,929	13.6%
Hot Spring County, AR	33,771	4,007	11.9%
Howard County, AR	13,202	1,990	15.1%
Independence County, AR	37,825	4,272	11.3%
Izard County, AR	13,629	1,534	11.3%
Jackson County, AR	16,719	2,888	17.3%
Jefferson County, AR	66,824	13,434	20.1%
Johnson County, AR	26,578	3,997	15.0%
Lafayette County, AR	6,624	1,099	16.6%
Lawrence County, AR	16,406	2,487	15.2%
Lee County, AR	8,857	2,086	23.6%
Lincoln County, AR	13,024	1,608	12.4%
Little River County, AR	12,259	1,728	14.1%
Logan County, AR	21,466	2,811	13.1%
Lonoke County, AR	73,309	6,302	8.6%
Madison County, AR	16,576	1,771	10.7%
Marion County, AR	16,694	2,125	12.7%
Miller County, AR	43,257	6,102	14.1%
Mississippi County, AR	40,651	8,213	20.2%
Monroe County, AR	6,701	1,473	22.0%
Montgomery County, AR	8,986	1,089	12.1%
Nevada County, AR	8,252	1,066	12.9%
Newton County, AR	7,753	949	12.2%
Ouachita County, AR	23,382	3,929	16.8%
Perry County, AR	10,455	1,223	11.7%
Phillips County, AR	17,782	6,076	34.2%
Pike County, AR	10,718	1,310	12.2%
Poinsett County, AR	23,528	4,442	18.9%

Location	Total Population	Population Receiving SNAP Benefits	Population Receiving SNAP Benefits, Percent
Polk County, AR	19,964	2,976	14.9%
Pope County, AR	64,072	6,415	10.0%
Prairie County, AR	8,062	853	10.6%
Pulaski County, AR	391,911	52,830	13.5%
Randolph County, AR	17,958	2,177	12.1%
St. Francis County, AR	24,994	5,423	21.7%
Saline County, AR	122,437	7,435	6.1%
Scott County, AR	10,281	1,849	18.0%
Searcy County, AR	7,881	826	10.5%
Sebastian County, AR	127,827	16,811	13.2%
Sevier County, AR	17,007	2,392	14.1%
Sharp County, AR	17,442	2,640	15.1%
Stone County, AR	12,506	1,784	14.3%
Union County, AR	38,682	5,838	15.1%
Van Buren County, AR	16,545	2,092	12.6%
Washington County, AR	239,187	15,534	6.5%
White County, AR	78,753	9,358	11.9%
Woodruff County, AR	6,320	1,267	20.1%
Yell County, AR	21,341	2,299	10.8%

Data Source: Arkansas Department of Human Services

APPENDIX F: CHARITABLE FOOD DISTRIBUTION IN ARKANSAS BY COUNTY IN 2021

County	Pounds Distributed	Meal Equivalent	Food Bank Service Area
Arkansas	301,366	251,138	Arkansas Foodbank
Ashley	422,499	352,083	Arkansas Foodbank
Baxter	810,927	675,773	Food Bank of North Central Arkansas
Benton	6,832,882	5,694,068	Northwest Arkansas Food Bank
Boone	532,468	443,723	Food Bank of North Central Arkansas
Bowie	863,583	719,653	Harvest Regional Food Bank
Bradley	1,361,147	1,134,289	Arkansas Foodbank
Calhoun	464,597	387,164	Arkansas Foodbank
Carroll	601,870	501,558	Northwest Arkansas Food Bank
Chicot	735,312	612,760	Arkansas Foodbank
Clark	520,321	433,601	Arkansas Foodbank
Clay	426,133	355,111	Food Bank of Northeast Arkansas
Cleburne	421,591	351,326	Arkansas Foodbank
Cleveland	167,611	139,676	Arkansas Foodbank
Columbia	457,256	381,047	Harvest Regional Food Bank
Conway	414,600	345,500	Arkansas Foodbank
Craighead	1,716,229	1,430,191	Food Bank of Northeast Arkansas
Crawford	3,062,973	2,552,478	River Valley Regional Food Bank
Crittenden	397,120	330,933	Food Bank of Northeast Arkansas
Cross	587,736	489,780	Food Bank of Northeast Arkansas
Dallas	224,077	186,731	Arkansas Foodbank
Desha	359,790	299,825	Arkansas Foodbank
Drew	410,443	342,036	Arkansas Foodbank

Appendix F: Charitable Food Distribution in Arkansas by County in 2021, cont.

County	Pounds Distributed	Meal Equivalent	Food Bank Service Area
Faulkner	2,271,389	1,892,824	Arkansas Foodbank
Franklin	339,592	282,993	River Valley Regional Food Bank
Fulton	326,670	272,225	Food Bank of North Central Arkansas
Garland	1,725,450	1,437,875	Arkansas Foodbank
Grant	340,913	284,094	Arkansas Foodbank
Greene	1,025,920	854,933	Food Bank of Northeast Arkansas
Hempstead	440,638	367,198	Harvest Regional Food Bank
Hot Spring	646,708	538,923	Arkansas Foodbank
Independence	805,857	671,548	Arkansas Foodbank
Izard	223,996	186,663	Food Bank of North Central Arkansas
Jackson	733,624	611,353	Food Bank of Northeast Arkansas
Jefferson	2,972,434	2,477,028	Arkansas Foodbank
Johnson	466,386	388,655	River Valley Regional Food Bank
Lafayette	391,874	326,562	Harvest Regional Food Bank
Lawrence	291,435	242,863	Food Bank of Northeast Arkansas
Lee	633,997	528,331	Arkansas Foodbank
Lincoln	303,516	252,930	Arkansas Foodbank
Litte River	296,161	246,801	Harvest Regional Food Bank
Logan	1,301,216	1,084,347	River Valley Regional Food Bank
Lonoke	1,232,901	1,027,418	Arkansas Foodbank
Madison	683,848	569,873	Northwest Arkansas Food Bank
Marion	326,616	272,180	Food Bank of North Central Arkansas
Miller	780,012	650,010	Harvest Regional Food Bank
Mississippi	974,999	812,499	Food Bank of Northeast Arkansas
Monroe	541,566	451,305	Arkansas Foodbank

Appendix F: Charitable Food Distribution in Arkansas by County in 2021, cont.

County	Pounds Distributed	Meal Equivalent	Food Bank Service Area
Montgomery	231,844	193,203	Arkansas Foodbank
Nevada	186,216	155,180	Harvest Regional Food Bank
Newton	264,099	220,083	Food Bank of North Central Arkansas
Ouachita	637,955	531,629	Arkansas Foodbank
Perry	177,317	147,764	Arkansas Foodbank
Phillips	1,180,531	983,776	Arkansas Foodbank
Pike	229,268	191,057	Harvest Regional Food Bank
Poinsett	624,914	520,762	Food Bank of Northeast Arkansas
Polk	386,659	322,216	River Valley Regional Food Bank
Pope	3,041,789	2,534,824	Arkansas Foodbank
Prairie	130,861	109,051	Arkansas Foodbank
Pulaski	10,194,761	8,495,634	Arkansas Foodbank
Randolph	396,552	330,460	Food Bank of Northeast Arkansas
Saline	1,262,235	1,051,863	Arkansas Foodbank
Scott	1,045,860	871,550	River Valley Regional Food Bank
Searcy	145,805	121,504	Food Bank of North Central Arkansas
Sebastian	2,625,312	2,187,760	River Valley Regional Food Bank
Sevier	396,283	330,236	Harvest Regional Food Bank
Sharp	659,182	549,318	Food Bank of North Central Arkansas
St. Francis	505,889	421,574	Food Bank of Northeast Arkansas
Stone	350,597	292,164	Food Bank of North Central Arkansas
Union	628,850	524,042	Arkansas Foodbank
Van Buren	537,994	448,328	Arkansas Foodbank
Washington	7,477,565	6,231,304	Northwest Arkansas Food Bank
White	1,351,320	1,126,100	Arkansas Foodbank

Appendix F: Charitable Food Distribution in Arkansas by County in 2021, cont.

County	Pounds Distributed	Meal Equivalent	Food Bank Service Area
Woodruff	321,176	267,647	Food Bank of
			Northeast Arkansas
Yell	432,925	360,771	River Valley
			Regional Food Bank
	77,594,008	64,661,673	
	Pounds	Meal Equivalent	

Data Source: Arkansas Foodbank, Food Bank of Northeast Arkansas, Food Bank of North Central Arkansas, Harvest Regional Food Bank, Northwest Arkansas Food Bank, River Valley Regional Food Bank

APPENDIX G: ARKANSAS AVERAGE MONTHLY WIC PARTICIPATION BY COUNTY IN 2022

County	2022 WIC Participation (Jan - Oct 2022)
Arkansas	584
Ashley	422
Baxter	828
Benton	2,638
Boone	741
Bradley	271
Calhoun	80
Carroll	412
Chicot	156
Clark	481
Clay	319
Cleburne	392
Cleveland	131
Columbia	463
Conway	396
Craighead	2,251
Crawford	804
Crittenden	1,061
Cross	515
Dallas	155
Desha	345
Drew	334
Faulkner	1,563
Franklin	285
Fulton	210
Garland	1,456
Grant	371
Greene	1,261

County	2022 WIC Participation (Jan - Oct 2022)
Hempstead	703
Hot Spring	469
Howard	384
Independence	946
Izard	220
Jackson	342
Jefferson	1,028
Johnson	869
Lafayette	109
Lawrence	505
Lee	199
Lincoln	204
Little River	258
Logan	734
Lonoke	954
Madison	363
Marion	251
Miller	905
Mississippi	1,232
Monroe	254
Montgomery	182
Nevada	182
Newton	136
Ouachita	478
Perry	133
Phillips	555
Pike	210
Poinsett	965

Appendix G: Arkansas Average Monthly WIC Participation by County in 2022, cont.

County	2022 WIC Participation (Jan - Oct 2022)
Polk	561
Роре	1,218
Prairie	129
Pulaski	6,025
Randolph	775
Saline	978
Scott	372
Searcy	213
Sebastian	3,781
Sevier	707
Sharp	373
St. Francis	501
Stone	305
Union	874
Van Buren	282
Washington	4,926
White	1,625
Woodruff	105
Yell	701
Total Participation	57,146

Data Source: Arkansas DHS

ENDNOTES

1 Gundersen, Craig, and James P. Ziliak. "Childhood food insecurity in the US: trends, causes, and policy options." *The Future of Children* (2014): 1–19.

2 Bowen, Sarah, et al. "The Structural Roots of Food Insecurity: How Racism Is a Fundamental Cause of Food Insecurity." Sociology Compass 3 May 2021.Web. 10 November 2022 <https://compass.onlinelibrary.wiley. com/doi/full/10.1111/soc4.12846>

3 Coleman–Jensen, Alisha, Matthew P. Rabbitt, Christian A. Gregory, Anita Singh. "Household Food Security in the United States in 2021" *Economic Research Report 309*, U.S. Department of Agriculture, Economic Research Service September 2022. Web .14 November 2022. <https:// www.ers.usda.gov/webdocs/ publications/104656/err-309.pdf>

4 Coleman–Jensen, Alisha. "Household Food Security in the United States in 2021," 2

5 Coleman-Jensen, Alisha. "Household Food Security in the United States in 2021," 2

6 Coleman-Jensen, Alisha. "Household Food Security in the United States in 2021," 2 7 Insolera,Noura, Alicia Cohen, and Julia A. Wolfson. "SNAP and WIC Participation During Childhood and Food Security in Adulthood, 1984–2019" *American Journal of Public Health*. 14 September 2022. Web. 20 November 2022. <https://doi. org/10.2105/AJPH.2022.306967>

8 Federal Communications Commission, "FCC National Broadband Map." 30 June 2021. Web. 16 November 2022 <https:// broadbandmap.fcc.gov/areasummary/mobile?geoid=05&t ype=state&zoom=5.89&vlon=-92.129428&vlat=34.770518&tech=tec h4g&env=0>

9 Feeding America, "Food Insecurity among Overall (all ages) Population in Arkansas." 2020. Web. 20 November 2022 <https://map.feedingamerica.org/ county/2020/overall/arkansas>

10 Feeding America, "Food Insecurity among Overall (all ages) Population in Arkansas." 3

11 United Health Foundation.
"State Summaries Arkansas
| 2021 Annual Report | AHR."
America's Health Rankings. Web.
20 November 2022. https://www.americashealthrankings.org/learn/
reports/2021-annual-report/statesummaries-arkansas>

12 Annie E. Casey Foundation. "Food Deserts in the United States." Annie E Casey Foundation Blog. 13 February 2021. Web. 9 November 2022. <https://www. aecf.org/blog/exploring-americasfood-deserts> 13 Feeding America. "FoodInsecurity among Overall (all ages)Population in Arkansas." 3

14 USDA Economic Research Service. "Food Access Research Atlas – Go to the Atlas – Arkansas." 27 April 2021. Web. 20 November 2022. <https:// www.ers.usda.gov/data-products/ food-access-research-atlas/go-tothe-atlas/>

15 Coleman-Jensen, Alisha. "Household Food Security in the United States in 2021," 2

16 US Census Bureau. "S2504
Physical Housing Characteristics for Occupied Housing Units."
American Community Survey.
Web. 20 November 2022.
<https://data.census.gov/
table?q=Arkansas+vehicles>

17 Hoffman, Graham. "The guide to grocery store profit margins (and how to improve them)." *Point of Sale (POS) Systems for Small Business Website*. 11 August 2022. Web. 20 November 2022. https://www.posnation.com/blog/grocery-store-profit-margins

18 US Census Bureau. "County Business Patterns." Web. 15 November 2022. <https:// www.census.gov/programssurveys/cbp.html>

Bodor J. Nicholas et. al., "The Association Between Obesity and Urban Food Environments."
Journal of Urban Health (2010):771-781. Web. 20 November 2022.
k.springer.com/article/10.1007/s11524-010-9460-6>

20 Bureau of Labor Statistics, U.S. Department of Labor. "Prices for food at home up 13.5 percent for year ended August 2022" *The Economics Daily.* 15 September 2022. Web. 20 November 2022. <https://www.bls.gov/opub/ ted/2022/prices-for-food-athome-up-13-5-percent-for-yearended-august-2022.htm>

21 "Arkansas SNAP Eligibility Information – Oct. 1, 2022 through Sept. 30, 2023." *Snap Screener.* Web. 20 November 2022. <https://www.snapscreener.com/ guides/arkansas>

22 Hall, Lauren and Nchako, Catlin "A Closer Look at Who Benefits from SNAP: State-by-State Fact Sheets," *Center on Budget and Policy Priorities.* 25 April 2022. Web. 14 November 2022. <https://www.cbpp.org/ research/food-assistance/acloser-look-at-who-benefitsfrom-snap-state-by-state-factsheets#Arkansas>

23 "SNAP Participation Rates by State, All Eligible People." U.S. Department of Agriculture website. Web. 14 November 2022. <https:// www.fns.usda.gov/usamap#>

24 Feeding America. "Food Insecurity among Overall (all ages) Population in Arkansas." 3

25 Murphy, J. Michael, et al. "Relationship between hunger and psychosocial functioning in low-income American children." *Journal of the American Academy of Child & Adolescent Psychiatry* 37.2 (1998): 163–170. 26 Arkansas Broadband Master Plan: Assessment and Recommendations." 18 April 2022. Web. 20 November 2022. <https://broadband.arkansas.gov/ wp-content/uploads/2022/04/ Arkansas-Broadband-Master-Plan.pdf>

27 Feeding America. "Food Insecurity among Overall (all ages) Population in Arkansas." 3

28 Feeding America. "Food Insecurity among Overall (all ages) Population in Arkansas." 3

29 United Health Foundation. "State Summaries Arkansas | 2021 Annual Report | AHR." 4

30 Office of Disease Prevention and Health Promotion. "Food Insecurity." Web. 26 October 2022. <https://health.gov/healthypeople/ priority-areas/socialdeterminants-health/literaturesummaries/food-insecurity>

31 Ashiabi, Godwin. "Household food insecurity and children's school engagement." *Journal of children and poverty* 11.1 (2005): 3–17

32 Murphy. "Relationship between hunger and psychosocial functioning in low-income American children." 10

33 US Census Bureau. "2019 SUSB Annual Data Tables by Establishment Industry." US Census Bureau website. February 2022. Web. 16 November 2022. https://www.census.gov/data/tables/2019/ econ/susb/2019-susb-annual.html> 34 George, Caroline and Adie Tomer. "Delivering to deserts: New data reveals the geography of digital access to food in the U.S." *The Brookings Institution Website.* 11 May 2022. Web. 16 November 2022. <https://www.brookings.edu/ essay/delivering-to-deserts-newdata-reveals-the-geography-ofdigital-access-to-food-in-the-us/>

35 George. "Delivering to deserts: New data reveals the geography of digital access to food in the U.S." 14

36 George. "Delivering to deserts: New data reveals the geography of digital access to food in the U.S." 14

37 USDA Food and Nutrition Service. "SNAP Authorized Firms FY 2021 Year-End Summary" *USDA Food and Nutrition Service website*. 19 April 2022. Web. 16 November 2022. <https://www.fns. usda.gov/snap/retailer/data>

38 Suter, Mary. "Rural Electrification." *Encyclopedia of Arkansas*. Central Arkansas Library System. 12 October 2022. Web. 21 November 2022. <https:// encyclopediaofarkansas.net/ entries/rural-electrification-2162/>

39 "Arkansas Broadband Master Plan: Assessment and Recommendations." 11

40 "Broadband Funding CARES_ ARPA." Arkansas Department of Finance and Administration, 15 Sept. 2022.

41 "Arkansas Broadband Master Plan."

A COMMUNITY IS A FOOD DESERT OR LOW FOO ACCESS LOCAT IF RESIDENTS M RE THA TRAVEL MO Ξ NEI URBAN SET C ES IN A RU NG TO SETT OBTA A SELECT **OF FRESH**, NUTRITIOUS FOOD