

# **The Impact Of Food insecurity In New Mexico**

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## **The Impact of Food Insecurity in New Mexico**

### **Abstract**

Food insecurity remains a critical issue in the United States, with New Mexico experiencing disproportionately high rates compared to the national average. This paper explores the nature of food insecurity and its contributing factors. We propose a conceptual app using data analytics to develop a solution, *CommuniEats*, a platform designed to address food insecurity by optimizing food distribution, reducing waste, and improving access to nutritious meals in vulnerable communities. This paper outlines the background, methodology, and potential impact of this approach, emphasizing the role of collaboration with experts and organizations such as Roadrunner Food Bank and Feeding America.

## Background

My interest in the impact of food insecurity in New Mexico began with a personal experience. A recently unemployed neighbor, new to the community, came to our apartment seeking food for her children. Despite my family's limited resources, my mother cooked a meal for the family and shared half of our groceries with them. She also referred the woman to a local food bank. Still, transportation challenges compounded the situation, as neither our family nor the neighbor could access the food bank. Soon after this incident, I arranged for my fellow Justice Code National Society of Black Engineers (NSBE) members to volunteer at one of the largest food banks in New Mexico, the Roadrunner Food Bank, where we learned just how widespread the problem of food insecurity is. We knew that 1 in 5 children in New Mexico are at risk of hunger, and 1 in 7 adults in New Mexico face that same dilemma.

These encounters inspired the concept of an application similar to Uber Eats, DoorDash, or Grubhub, explicitly designed to address food insecurity. Collaborating with a close friend and team member, we conceptualized **CommuniEats**. This app enables individuals experiencing food insecurity to order food discreetly and deliver it to their homes, particularly in vulnerable communities. However, as our idea remains conceptual due to a lack of resources to test and record outcomes, we sought guidance from experts in the field. One such expert was Mr. Brian Brown, Manager of Volunteer Engagement at Roadrunner Food Bank, whom we had worked with during several volunteer sessions in the Roadrunner Food Bank warehouse in 2024.

Additionally, we contacted Feeding America's research team to gather relevant data on food insecurity in the United States, specifically focusing on New Mexico. For further research, we

attended workshops, and spoke with with numerous community leaders and policy analyst to better understand the the impact that food insecurity as well as its main contributing factors. We spoke with Dr. Mariana Chilton, author of *The Painful Truth About Hunger in America*. Dr. Chilton is a Professor at Drexel University's Dornsife School of Public Health. Director of the **Center for Hunger-Free Communities** (founded in 2008). She is trained in anthropology and public health, with a focus on the intersection of poverty, trauma, and hunger. During the workshop with Dr. Chilton, we learned how policy failures and systemic racism remains key factors in the root causes of hunger and food insecurity. We also learned the difference between food deserts and food apartheid. The Albuquerque South Valley neighborhood is a prime example of food apartheid, due to a lack of investment/funding into the neighborhood which results in grocery stores choosing not to build in the vicinity of South Valley community. Convenient stores and liquor stores often build in poorly funded neighborhoods. The end result makes it difficult for families to access well stocked grocery stores, instead they are forced to buy food from small convenient stores. During the workshop, Dr. Lauri Andress (Associate Dean for the College of Population Health) demonstrated what a meal purchased in a convenient store might consist of, which was pizza rolls, hot pockets, chips, and soda. Convenient stores do not provide access to a sufficient amount of nutritious foods.

## **What Is Food Insecurity?**

According to the United States Department of Agriculture (USDA), food insecurity is defined as a lack of consistent access to enough food for an active, healthy life for all household members.

This issue is a pervasive challenge both in the United States and globally.

In 2023, 13.5% of U.S. households, or approximately 18 million people, experienced food insecurity at some point during the year, according to the United States Economic Research Service. For our project, we narrowed our focus to New Mexico, where food insecurity rates significantly exceed national averages. Data from Feeding America's **Map the Meal Gap** research study highlights that between May 2022 and May 2024, New Mexico consistently recorded hunger rates higher than the national average.

## **What Does Food Insecurity Look Like?**

- Skipping meals
- Forced to choose between paying bills or buying medicine over food, ect.
- Not having access to nutritional foods.

## **What Are the Major Contributing Factors for Food Insecurity?**

- Poverty
- Systemic racism
- Food Deserts/Food apartheid
- Unemployment
- Food wastage (40 % of food is wasted each year)

## What Are Some of the Effects of Food Insecurity?

- Health impacts such as chronic conditions like diabetes, hypertension, heart disease, and obesity.
- Mental health contributes to depression, anxiety,
- Developmental problems in children: lack of concentration/focus
- learning disabilities/delays

Notes from the workshop - *The Painful Truth About Hunger And America*” by Mariana Chilton

1. Hunger is not just “lack of food,” food insecurity can have both profound physical and psychological impacts.
2. Hunger is caused by things such as socioeconomic struggle, inadequate income, racial/gender discrimination, and poor safety nets.
3. Policy changes are necessary to make a lasting impact. Programs like SNAP and WIC, while beneficial, are not enough.
4. Quote from Dr. Mariana Chilton on our CommuniEats Application: “*If you could build a delivery system for free food and do it as a mutual aid effort, I think it could be extraordinary.*”

Main Takeaway: Mariana Chilton, a leading researcher and advocate for food justice, led a workshop focused on her book, *The Painful Truth About Hunger In America*, which explores the complex nature of hunger in the United States. What I was able to conclude from the various speakers was that food insecurity and hunger are more than a lack of food, it is deeply rooted in systemic societal issues including, but not limited to, poverty, racism, and policy failures rather than a result of individual shortcomings. I learned that solving hunger and food insecurity will take a solidarity model over today's charity model. Dr. Chilton advocates for transformative policy changes, including living wages, stronger social safety nets, and community-driven solutions, which can include a conceptual model such as CommuniEats. I hope our communities have the solutions to the injustices we face. Real change comes when we listen to the voices of those impacted and replace charity systems with systems that honor dignity for all.



4/14/25

## **Interview Between Lukas Baires, Mekhi Bradford, and Mr. Brian Brown of Roadrunner Food Bank**

**Lukas Baires:** To start, **how does Roadrunner Food Bank work with communities to identify their unique needs and create solutions?**

**Brian Brown:** Roadrunner Food Bank collaborates closely with communities to address their specific needs and develop tailored solutions. Here are some key ways we achieve this:

- **Community Partnerships:** Roadrunner Food Bank works with a network of 500 partners, including food pantries, soup kitchens, shelters, schools, senior centers, and healthcare clinics around New Mexico. These partnerships help us understand the unique needs of different communities and ensure food reaches those who need it most.
- **Advocacy and Additional Services:** The food bank advocates for policies that benefit the people we serve and encourages our partners to provide additional services at distribution points. These services can include healthcare screenings, nutritional education, and help with SNAP applications.
- **Innovative Programs:** Roadrunner Food Bank has initiatives like the Childhood and Senior Hunger Initiatives, which focus on addressing the specific needs of these vulnerable groups. We also connect health and hunger by providing nutritious food through healthcare sites and an on-site medical referral food pantry.
- **Community Feedback:** The food bank actively seeks feedback from the communities we serve to continuously improve our services and address emerging needs effectively.

By leveraging these strategies, Roadrunner Food Bank ensures we are not just providing food but also supporting the overall well-being and self-sufficiency of the communities we serve.

**Mekhi Bradford:** That's inspiring. **Can you share a success story where the food bank's work led to measurable improvements in food security in the most vulnerable areas?**

**Brian Brown:** Our Healthy Food Center (HFC) opened in 2015 to provide food to New Mexicans who are facing food insecurity and living with chronic conditions such as cancer, diabetes, heart disease, and more. We work with partner clinics to screen patients to see if the

HFC would be beneficial. When a medical provider identifies a patient who could use this service, they are given a referral to become a client of the HFC.

The HFC is an onsite pantry where participants can come once a week to shop (no exchange of money) for groceries. The items in the center are healthier in nature, so patients can get the food that will help them heal. We have volunteers who conduct outreach over the phone to see if the food in the HFC is making a difference in participants' lives.

Several participants have been able to lower their A1C thanks to the healthy food provided by the HFC. For example, we have a gentleman who was using a wheelchair due to his diabetes and weight. I am happy to say that he is no longer in a wheelchair and has lost over 100 pounds. This gentleman is just one of many success stories.

**Lukas Baires:** Balancing immediate hunger relief with systemic issues like poverty must be challenging. **How does the food bank balance addressing immediate hunger needs with tackling root causes like poverty or policy gaps?**

**Brian Brown:** *[Answer pending referred to another staff member]*

**Mekhi Bradford:** New Mexico has rich cultural diversity, including Indigenous communities. **Are there culturally specific programs designed for NM's diverse populations, especially Indigenous communities?**

**Brian Brown:** Yes, Roadrunner Food Bank has created a new position, Director of Tribal Affairs. The person that is in this role acts as the liaison between the food bank and the reservations. The person in this role is a Native American, who knows the culture and languages. Thanks to this position the food bank is now delivering food to 12-chapter houses on Navajo Nation. Thanks to grants that we receive, we are able to provide culturally appropriate food items.

**Lukas Baires:** **What are some of the misconceptions about food insecurity?**

**Brian Brown:** The biggest misconception about food insecurity is [it only affects] the homeless. At our food bank, the homeless population is 8% of who we feed. The majority of the people receiving food from the food bank are households with at least 1 member having a job.

**Mekhi Bradford:** Technology plays a big role in operations. **What technological tools or platforms help the Roadrunner coordinate efforts or engage volunteers effectively?**

**Brian Brown:** There are several technological tools and platforms that can help organizations like Roadrunner Food Bank coordinate efforts and engage volunteers effectively:

1. **Volunteer Management Software:** We use Cervis, which offers centralized databases to track volunteer information, hours, and impact. These tools streamline administrative tasks and provide valuable insights for program optimization.
2. **Communication Tools:** Digital engagement tools such as online social platforms, ABQ ONE Volunteer, List Serve, and other platforms to facilitate seamless communication.

By leveraging these technologies, Roadrunner Food Bank can enhance its volunteer engagement, streamline coordination efforts, and create a more impactful and rewarding experience for all involved.

**Lukas Baires:** **How is data used to identify gaps in services, and are there any advocates for policy changes?**

**Brian Brown:** *[Answer pending referred to another staff member.]*

**Mekhi Bradford:** Finally, **do you have an opinion on charity models vs. solidarity models?**

**Brian Brown:** *[Answer pending it was referred to another staff member.]*

**Lukas Baires:** Thank you, Mr. Brown, for your insights today. We look forward to continuing this conversation and learning more about Roadrunner's critical work.

## **Conclusion**

Addressing food insecurity requires innovative approaches and collaboration among communities, organizations, and policymakers. While **CommuniEats** remains a conceptual application, its potential highlights the importance of leveraging technology to combat systemic issues such as food insecurities. Our application also helps prevent food wastage by preventing prolonged storage of perishable items. Our collaboration and insight from experts like Dr. Mariana Chilton, author of *The Painful Truth about Hunger In America*, Mr. Brian Brown, Volunteer Coordinator from Roadrunner Food Bank, Feeding America's Research Team's DATA serve as foundational steps toward understanding the many complexities of food insecurity and exploring actionable solutions such as CommuniEats Application.

## **Acknowledgements**

We would like to give a special thanks to our coach, Mrs. Patty Meyer. Thank you for your dedication, hard work, patience, and mentorship. Thank you to Justice Code for providing the opportunity to participate in Supercomputing and for establishing a foundation in STEAM-L. Thank you to the judges for your time and careful consideration. Thanks to Joseph Olonia for your mentorship and data organization. Thank you to Brian Brown, the RRFB volunteer engagement manager, and for hosting Justice Code volunteer opportunities. Thanks to Rae Bennu, a horticulturist, and local business owner for your insight and suggestions. Thank you to Joaquin Lujan, who is the organizer for and founder of Project Feed The Hood for your insight. Thank you to Lauri Andress, associate dean for the college of population health at UNM for your keen insight, mentorship and all you do for the New Mexico community. Finally, thank you to

Dr. Mariana Chilton for your mentorship, for the insight you provided during the workshop, and a very special thank you for your kind words and encouragement. Thank you for teaching us the difference between solidarity, and charity.

## Data

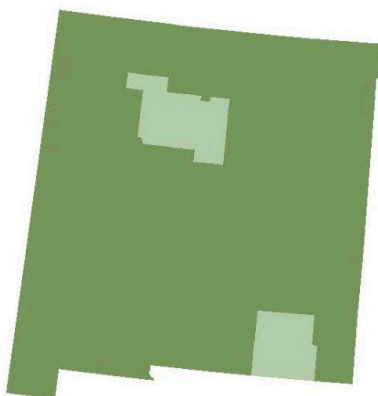
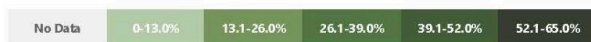


# New Mexico



2022 FOOD INSECURITY & FOOD COST IN THE US

### Overall Food Insecurity Rate



### AVERAGE MEAL COST

**\$3.71**

National average cost of a meal is \$3.99

### TOP COUNTIES WITH THE HIGHEST FOOD INSECURITY RATES

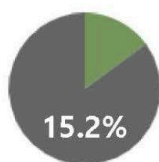
Catron  
Socorro  
McKinley  
Sierra  
Luna

### FOOD INSECURE PEOPLE

321,370



### FOOD INSECURITY RATE



### ESTIMATED PROGRAM ELIGIBILITY AMONG FOOD INSECURE PEOPLE



45% Above SNAP threshold  
55% Below SNAP threshold of 165%

Hunger exists in every corner of the United States, but as Feeding America's Map the Meal Gap study shows, food insecurity looks different from one county to the next. In addition to providing data about the prevalence of food insecurity at the local level, Map the Meal Gap estimates the share of food insecure individuals who are income-eligible for federal antihunger programs and provides local variations in food costs.

The study finds that many food insecure individuals do not qualify for federal nutrition programs and must rely on charitable food assistance, suggesting that complementary programs and strategies are necessary to reach food insecure individuals at different income levels. By providing information about hunger at the local level, Map the Meal Gap can help policymakers and service providers identify strategies to best reach those in need of assistance.

Visit [map.feedingamerica.org](http://map.feedingamerica.org) for more information.  
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# Identifying Racism in the Drivers of Food Insecurity



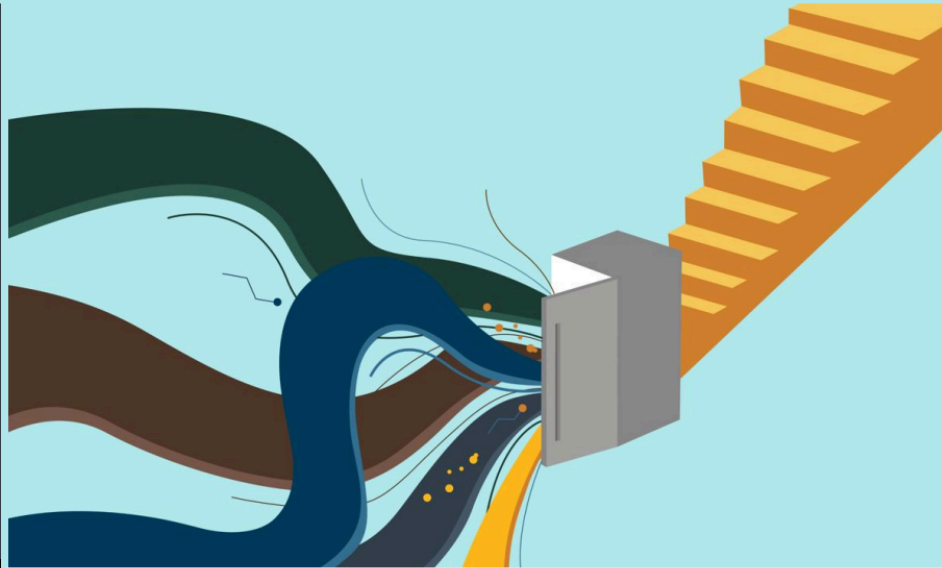
## Introduction

*Food insecurity exists in every county in the United States - as does systemic racism in its root causes.*

Individuals experience food insecurity within the context of their community and broader environment. Associations between household characteristics and increased risk of food insecurity often reflect underlying inequalities, such as longstanding economic and social disadvantage resulting from systemic racism.

Food insecurity is an economic condition, meaning it is driven primarily by lack of money and other critical resources. This tool outlines five drivers that have been directly linked to food insecurity.

**Click on one of the variables below to learn more.**



### NAVIGATE ELSEWHERE:

<b>Food Insecurity</b> (NEW)
Disability
Homeownership
Median Income
<b>Poverty</b>
Unemployment
About the Data

### National Food Insecurity Rates by Race or Ethnicity

Asian	5%
Black	21%
Latino	17%
Native American	23%
Pacific Islander	16%
White, non-Hispanic	8%



Disability



Homeownership



Median Income



Poverty

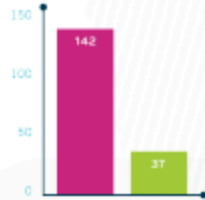


Unemployment

8%	62%	\$107,637	10%	4%
14%	43%	\$50,901	22%	9%
10%	50%	\$64,936	17%	6%
16%	55%	\$55,925	23%	9%
12%	43%	\$76,568	17%	8%
14%	73%	\$81,423	9%	4%

## REDUCED USE OF COSTLY HEALTH CARE SERVICES

After enrolling in a care transition program partnership in Baltimore, MD between a local Meals on Wheels program, a hospital and Meals on Wheels America, participants experienced a **SIGNIFICANT DECLINE IN HOSPITALIZATIONS** when comparing the three months before and after enrollment.



The same care transition program resulted in a significant **COST REDUCTION OF OVER \$1 MILLION.**

**92% REPORTED THE MEALS HELPED THEM TO CONTINUE TO LIVE INDEPENDENTLY**, in the 2022 national survey of Older Americans Act Title III home-delivered meal participants.



## REDUCED SOCIAL ISOLATION AND LONELINESS

Among people living alone, those receiving daily-delivered meals were **SIGNIFICANTLY MORE LIKELY TO SHOW IMPROVEMENT IN FEELINGS OF SOCIAL ISOLATION** over 15 weeks in the Meals on Wheels America *More Than a Meal®* pilot study.



Older Americans Act home-delivered meal participants say knowing they will receive regular visits by the meals volunteer or driver has **MADE THEM FEEL SAFER AT HOME.**

Learn more about how you can support Meals on Wheels and our nation's seniors at [mealsonwheelsamerica.org/get-involved](https://mealsonwheelsamerica.org/get-involved)



Get the full report and data sources at [www.mealsonwheelsamerica.org/research](https://www.mealsonwheelsamerica.org/research). © September 2023 Meals on Wheels America



## THE CASE FOR MEALS ON WHEELS: AN EVIDENCE-BASED SOLUTION TO SENIOR HUNGER AND ISOLATION

An extensive review of 38 research studies demonstrates the effectiveness of Meals on Wheels in improving food security and diet quality, reducing use of costly health care services and reducing social isolation and loneliness. These remarkable outcomes are attributed to the life-changing impact of Meals on Wheels services on the lives of the older adults we serve.

### INCREASED FOOD SECURITY AND IMPROVED DIET

In a study at a Meals on Wheels program in central Florida, the percentage of senior participants experiencing low or very low food security DECREASED BY NEARLY HALF.



Home-delivered meal participants reported that the meals **HELP THEM EAT HEALTHIER FOODS**, in the National Survey of Older Americans Act Participants.

After 3 months of meals from two Meals on Wheels programs in central Texas, the percentage of participants who were malnourished DROPPED FROM 42% TO 8%.











## Resources

### 1. Federal and State Nutrition Programs

- Supplemental Nutrition Assistance Program (SNAP)
    - Administered by the NM Human Services Department (HSD), SNAP provides monthly benefits for groceries.
    - Apply online: YesNM or call 1-800-283-4465.
    - Double Up Food Bucks NM: Matches SNAP benefits for fresh produce at participating farmers' markets.
      - Website: Double Up NM
  - Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)
    - Provides nutrition support for pregnant women, new mothers, and children under 5.
    - Apply through the NM Department of Health: 1-800-445-6174 or NM WIC.
  - National School Lunch Program (NSLP) & School Breakfast Program
    - Free/reduced-price meals for students. Contact local school districts or visit NM Public Education Department.
  - Summer Food Service Program (SFSP)
    - Free meals for kids 18 and under during summer. Locations: NM SFSP or text "FOOD" to 304-304.
- 

### 2. Food Banks and Pantries

- Roadrunner Food Bank (Serving statewide)

- Distributes food through 600+ partner agencies.
    - Mobile food pantries, senior programs, and emergency boxes.
    - Contact: 505-247-2052 or Roadrunner Food Bank.
  - The Food Depot (Northern NM)
    - Serves 9 counties with fresh produce, pantry staples, and senior programs.
    - Call 505-471-1633 or visit The Food Depot.
  - Community Pantry (Echo Food Bank) (Gallup and Northwest NM)
    - Focuses on rural and Indigenous communities.
    - Website: Echo Food Bank.
- 

### 3. Nonprofit and Community Organizations

- Feeding Santa Fe
    - Offers food distributions, cooking classes, and nutrition education.
    - Visit Feeding Santa Fe.
  - Silver Horizons
    - Provides meal delivery and food boxes for seniors.
    - Contact: 505-217-0777 or Silver Horizons.
  - Indigenous Lifeways
    - Supports Native communities with traditional food access and sovereignty programs.
    - Connect via Native American Food Sovereignty Alliance.
-

#### 4. Emergency Assistance

- NM 211
    - Dial 2-1-1 or visit NM 211 to find local food pantries, meal sites, and utility assistance.
  - Hunger Coalition of NM
    - Advocacy group connecting residents to resources. Visit Hunger Coalition.
- 

#### 5. Community-Led Initiatives

- Southwest Organizing Project (SWOP)
    - Addresses systemic inequities impacting food access, especially in BIPOC communities.
    - Visit SWOP NM or call 505-247-8832.
  - Agri-Cultura Network (Albuquerque)
    - Urban farming collective providing affordable produce via CSA programs and farmers' markets.
    - Website: Agri-Cultura Network.
  - Food Is Free Albuquerque
    - Neighborhood-based sharing of homegrown produce and resources.
    - Connect via Facebook.
- 

#### 6. Tribal Resources

- First Nations Development Institute

- Supports Native food systems through grants and training.
    - Visit First Nations.
  - Pueblo of Isleta Food Distribution Program
    - USDA-funded program for tribal members. Call 505-869-9799.
- 

## 7. Advocacy and Policy

- NM Center on Law and Poverty
    - Fights for policies to reduce hunger, including SNAP expansion and fair wages.
    - Website: NMCLP.
  - New Mexico Food and Agriculture Policy Council
    - Advocates for equitable food systems. Visit NMFAPC.
- 

## Mutual Aid Networks

- Mutual Aid NM (Statewide)
  - Grassroots groups providing food, supplies, and support. Find local networks via Mutual Aid NM.



## Sources Cited

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*Food security in the U.S. | Economic Research Service.* (n.d.).

<https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us>

<https://www.jotform.com/app>

## Interactive Map Identifying Drivers of Food Insecurity

<https://public.tableau.com/app/profile/feeding.america.research/viz/IdentifyingRacismIntheDriversofFoodInsecurity/Introductionv2?publish=yes>

## Workshop speakers/presenters:

**Mariana Chilton** - Doctor and Author of *The Painful Truth About Hunger In America*

**Rae Bennu** - Horticulturist and local business owner with a focus on edible landscapes

**Joaquin Lujan** - Organizer, farmer, and founder of Project Feed the Hood

**Lauri Andress** - Associate dean for the College of Population Health at UNM, Public health policy analyst

<https://www.swop.net/>