

Survey of Food Assistance Need in Central Indiana

2025

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Table of Contents

1	Introduction	1
2	Data	5
2.1	Survey Design	5
2.1.1	Sample	5
2.1.2	Design	7
2.1.3	Fielding	7
2.2	Defining Food Security	7
2.3	General Survey Methodology	8
3	Results	11
3.1	Summary Statistics	11
3.2	Prevalence of Food Insecurity	13
3.3	Severity of Food Insecurity	16
3.3.1	Food Need	16
3.3.2	Missed Meals	19
3.4	Use of Food Assistance	22
3.4.1	Supplement Nutrition Assistance Program (SNAP)	22
3.4.2	Sources of Food Assistance	23
3.4.3	Visits to Community Organizations	27
3.4.4	Importance of Community Assistance	29
3.5	Experience with Food Assistance	33
3.6	Historical Comparison	37
4	Conclusion	39

Acknowledgments	41
 Appendices	
A Survey Instrument	45
A.1 Pre-Screen Questions	45
A.2 Screener Questions	45
A.3 Food Insecurity	46
A.4 Sources of Food / Money for Food	47
A.5 Missing Meals	48
A.6 Demographics	51
 B Modeling Results	 53
 C Historical Trends	 55
 References	 61

CHAPTER 1

Introduction

Food security remains a primary concern for many families in the United States of America. Addressing this need requires accurate measures of the number of people experiencing food insecurity and the extent of that insecurity. While many measures of food insecurity exist in the United States, these are typically optimized for aggregate-level analysis. For example, the U.S. Department of Agriculture (USDA) provides aggregate measures of food insecurity collected from a nationwide survey. Similarly, Feeding America uses statistical methods to estimate county-level measures of meal gaps, which is a strong indicator of the severity of food insecurity. However, many public and non-profit organizations operate at much more granular geographic levels and thus require more geographically disaggregated measures of food insecurity. For example, Indy Hunger Network is a coalition of public agencies, non-profit organizations, and corporations that focuses on addressing food insecurity in central Indiana, including Marion County and the eight surrounding counties.

IHN and its partners provide resources including food and complimentary services to help Indiana residents who are experiencing food insecurity. They also advocate for public policies that will improve food security. Both of these efforts require accurate information on the extent of food insecurity in the targeted geographic area. IHN has worked diligently to provide the data required to estimate the extent of food insecurity by fielding the survey of food assistance need – a food insecurity survey specific to the central Indiana region.¹ Presently, the survey of food need is the only survey-based study that reports food insecurity statistics at the county level in Marion County and the regional level for central Indiana.

This report provides a detailed analysis of the data obtained from the sixth round of the survey. The data were obtained via a web-based, quota-driven survey administered by Qualtrics from February through April 2025. The survey questions were taken from the USDA’s 6-item short form survey food security module. Over 1,300 household survey responses were collected from a sample of residents that is largely representative of the central Indiana population. We use these data to classify respondents into three groups indicative of food security: high, low, and very low food security. The data also allow us to comment on the severity of food insecurity as well as respondents’ interaction with food assistance systems.

¹IHN first fielded a survey of food need in 2014 and continued to do so in 2017, 2020, 2021, and 2023. Starting in 2020, the survey of food need also reweighted state-level food insufficiency prevalence rates from the U.S. Census Household Pulse Survey [19] to match the race/ethnicity demographics of Marion County. In October 2024, the Household Pulse Survey transitioned to the longitudinal Household Trends and Outlook Pulse Survey and will no longer report state-level statistics [18]. As a result, the survey of food need is no longer able to report reweighted food insufficiency rates for Marion County.

We report several key findings:

1. **Prevalence of Food Insecurity.** Up to 54% of central Indiana households experienced food insecurity between April 2024 and March 2025.
 - ◊ 16% and 37% of the respondents are experiencing low and very low food security, respectively.
 - ◊ Food security is lower among households with children, lower among the self-employed, higher among retirees, and higher among suburban residents.
 - ◊ In Marion County, the rate of food insecurity was 53%.
2. **Severity of Food Insecurity.** The severity of food insecurity varies over time, but periods of insecurity are painful for families who must miss complete or partial meals.
 - ◊ 80% of the very low food secure respondents report not having all the food they needed in the last 12 months compared to 38% who didn't have all the food they needed last week. Corresponding numbers for respondents with low food security are 49% (last 12 months) and 20% (last week).
 - ◊ 77% of households with very low food security report missing 1-7 meals last week and 13% report missing 8 or more meals. The comparable numbers for low food secure households are 56% and 4%.
 - ◊ Approximately 13% of the 208 high food security households who completed the missed meal questions, report missing 1-7 meals in the prior week.
 - ◊ Among food insecure households in Marion County, 80% missed meals during this period.
3. **Use of Food Assistance.** Food assistance plays a key role in helping households transition through periods of food insecurity.
 - ◊ 70% and 86% of the low and very low food secure households, respectively, depend on food assistance.
 - ◊ Respondents typically rely on multiple sources for their food needs, with SNAP, food pantries, and family and friends being the most common sources of assistance.
 - ◊ Approximately 48% of respondents say they were on SNAP at some point in the last 12 months.
 - ◊ Approximately 53% of respondents visited the charitable food system in the last month, with 20% visiting twice and 16% visiting three or more times.
 - ◊ The average share of food that comes from food assistance systems is 35%. The share is closer to 50% for respondents who visited a community organization in the last month.
 - ◊ 80% of food insecure Marion County households rely on food assistance.
4. **Experience with Food Assistance.** Respondents often face negative experiences when seeking food assistance.
 - ◊ The most common reasons for not visiting a pantry are “other people need it”, “pantry not open”, and “lack of transportation”.
 - ◊ 46–65 percent of respondents deal with one or more negative experiences at least once per year as they seek food assistance.
 - ◊ Respondents cite race, gender, age, and education as the most likely reason for negative experiences.

Overall, our results indicate that food insecurity is prevalent to various degrees through-

out central Indiana. Food assistance systems, however, play a significant role in reducing the burden of food insecurity in the region. While assistance from family and friends is crucial for helping households through transitional periods of food insecurity, public programs, such as SNAP, and charitable institutions, such as food pantries, continue to play a central role for most households.

CHAPTER 2

Data

This section describes the survey methodology used to collect data for measuring food insecurity.

2.1 Survey Design

2.1.1 Sample

Participants in our study had to meet several conditions. First, they had to be an adult (18 years old and older) who is responsible for making food-related decisions for the household. Second, the respondent had to be a resident of central Indiana, which includes Marion County and all counties surrounding Marion County (Boone, Hamilton, Hancock, Hendricks, Johnson, Madison, Morgan, and Shelby counties). Third, because we relied on a quota-driven sampling framework, respondents had to satisfy a demographic profile that is representative of the geographic region's race, ethnicity, and income. As a result of the quota-based sampling, no weighting of the sample is applied. We compare our sample to the 2023 5-year American Community Survey (ACS) estimates and report the results in Table 2.1. While the quota-based approach is largely successful, our approach over sampled Hispanics and households with income below 185% of the poverty level.

Table 2.1. Comparing demographic shares between the 2023 5-year American Community Survey population and the 2025 Survey of Food Need survey sample

Demographic	Marion County (N=637)		Donut Counties (N=670)	
	Census	Survey	Census	Survey
Ethnicity				
Hispanic or Latino	13.4%	19.6%	4.6%	26.5%
Not Hispanic or Latino	86.6%	80.0%	95.4%	73.5%
Race				
White	50.5%	59.0%	83.3%	80.5%
Black	27.3%	28.0%	4.5%	10.0%
Asian	3.9%	6.5%	3.8%	4.3%
Poverty				
Below 185% of FPL	32.3%	44.0%	15.8%	42.5%
Above 185% of FPL	67.7%	56.0%	84.2%	57.5%

Source: 2023 5-year American Community Survey [5]

2.1.2 Design

The survey instrument is divided into five sections: screener, food security, severity of food security, interaction with food support systems, and demographics. The survey was originally developed by Indy Hunger Network and updated in consultation with Indiana University's O'Neill School of Public & Environmental Affairs for 2025.

We include two sets of **screener questions**. The first is a set of pre-screener questions used to restrict the sample to central Indiana adult residents who are responsible for the their household's food-related expenditures. The second was a set of screener questions used to identify respondents who could always afford to eat good and nutritious meals without getting assistance from any source. Respondents who fit this description are coded as "high food security" and only completed the demographic questions on the survey.

The **food security** section includes the USDA's 6-item short form survey, while the **severity of food insecurity** section focuses on questions about food need and missed meals. We are also interested in the role of government and charitable food support systems in supporting food insecure households. Therefore, we include several questions that ask about respondents' interaction with food assistance systems. This section also includes questions that allow us to measure the importance of community organizations in fulfilling households' food needs. Finally, we wrap up the survey with a set of demographic questions that include race, sex, ethnicity, income, household size, and employment status.

2.1.3 Fielding

The online survey instrument was fielded from February 26 to April 17, 2025 by Qualtrics Research Services. Thus, the survey respondents were members of the Qualtrics panel for central Indiana. To create a representative sample, panelist quotas were implemented to mirror U.S. Census population shares by race, ethnicity, and poverty level (i.e., approximately 130% of the 2025 federal poverty level and below) for Marion County exclusively and the surrounding counties in aggregate [11, 5].

2.2 Defining Food Security

The data from each section of the survey are used to create several variables of interest. We describe the main ones in this section.

We distinguish between the level and severity of food security. The level of food security is defined as the share of households that are experiencing high or marginal food security. We follow the USDA methodology and use respondents' responses to the six-item short form survey along with the two screener questions mentioned above to measure the level of food security. These questions ask about money to buy food, access to balanced meals, cutting the size of meals or skipping meals, eating less than the desired amount because of lack of money, and being hungry and not eating. Respondents are coded as either zero or one depending on their responses to these six questions. A value of zero is assigned when a respondent's responses are indicative of high food security. For example, respondents who say they could always afford to eat balanced meals are assigned a value of zero while those who say they couldn't always afford balanced meals are assigned a

value of 1. Respondents who responded to the two screener-questions in the affirmative were not given the opportunity to respond to the six questions, and received a score of 0. We then aggregate the scores across the questions to get a count variable that ranges from 0 to 6. This count variable allows us to categorize respondents into three groups: high or marginal food security if they score 0 to 1, low food security if the score is 2 to 3, and very low food security if they score 4 to 6.

The high food secure group includes two types of respondents. The first group includes 392 respondents who answered the screener questions in the affirmative and thus did not respond to the USDA six-item survey. The second group includes 208 respondents who answered the USDA six-item survey. This distinction becomes important for our analysis when we split the sample based on level of food security. Specifically, we are able to explore the severity of food insecurity (see definition below) among a subsample of respondents who are coded as high or marginal food secure.

We measure the severity of food insecurity in two ways. First, we record the number of missed meals and number of partial meals at the household level. Second, we measure dependence on food support systems including the share of meals for which respondents would need to actively find a replacement source if this assistance were unavailable.

2.3 General Survey Methodology

Measures of food security often differ across and between data collection efforts. This section describes the differences in data collection processes of survey research that lead to variation in food security prevalence (i.e., the extensive margin) across surveys. These include differences in population of interest, sampling techniques, survey modes, survey questions, and post-survey weights [6].

Population of Interest. There are a variety of food security studies that focus on different populations of interest, whether they focus on the national population of U.S. households like the USDA’s annual food security report [17], unhoused residents [12], or preschool-aged Mexican-American children [14]. The results of studying each of these populations will naturally lead to different rates of food insecurity.

Sampling. Sampling (i.e., choosing a subset of the population of interest) is a cost-effective data collection strategy to represent a population of interest. Researchers develop a sampling framework to ensure that a study’s sample is representative of the population. The gold standard, and most expensive sampling method, in survey research is a probability sampling technique, which lists contact information (e.g., address, telephone number) for the entire population and then randomly selects a subset of contacts to participate in the survey with equal probability [6]. Non-probability approaches are generally a more affordable alternative for researchers who cannot afford to purchase probability sampling frames. Quota sampling, as an example of a non-probability sampling technique, allows survey companies to maintain “panels” of ready survey participants who receive incentives for taking surveys. These “panelists” are recruited as needed to match population demographics (the quota). Other types of non-probability sampling include convenience sampling, purposeful sampling, consecutive sampling, and snowball sampling.

Survey Mode. Surveys can be administered through a variety of modes, including in-person interviews, telephone interviews, mail-in surveys, and web-based surveys. How-

ever, survey respondents no longer respond at the same rates across these survey modes [1]. At present, web-based surveys have the lowest response rates, but are the easiest to administer. Most importantly, differences in survey mode can lead to differences in outcomes, as is likely the case with food security surveys [1].

Survey Questions. Beyond these preliminary data collection considerations, differences in survey design are an important factor, if not the most important factor. Surveys on the same topic may ask different questions, which lead to different results. Many domestic food security studies use U.S. Department of Agriculture’s 18-item household survey [7], 10-item adult survey [7], or the 6-item short form survey [9]. USDA collaborates with the U.S. Census Bureau to administer the Current Population Survey’s Food Security Supplement (CPS-FSS), which includes the 18-item survey for households with children and the 10-item survey for households without children. Other popular sets of questions include a 2-item food security survey for use in a fast-paced clinical setting [10] and food sufficiency questions used during the Census’s pandemic-era Household Pulse Surveys [2, 3, 4]. Some of these surveys ask questions in the context of a specific timeline, where the question might restrict responses to the current calendar year, the last 12 months, the last 30 days, or the last 7 days. Additionally, the CPS-FSS began to use a consistent set of pre-screening questions in 1998 to filter out households that are likely food secure and should not take the full food security survey [16]. Since then, other studies use external and internal screening to reduce respondent burden as well [1].

Survey Weights. Researchers often have the option of applying survey weights to improve the representativeness of the sample [6]. For example, if a sample only includes 20% women respondents when the true population is 50% women, the survey sample can be adjusted so that women’s responses represent a greater share of the analysis in the end.

Given these data collection differences, it is critical to understand the data collection process in our study and how our processes compare with other food security studies. Our population of interest is central Indiana. Thus, we have sampled residents of nine central Indiana counties: Boone, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, and Shelby. The sampling method involved a web-based, quota-driven survey administered by Qualtrics from February through April 2025. The survey questions were taken from the CPS-FSS’s 6-item short form survey module (ERS, 2024) with two external screener questions on food affordability and food assistance (see the Appendix for survey details).

CHAPTER 3

Results

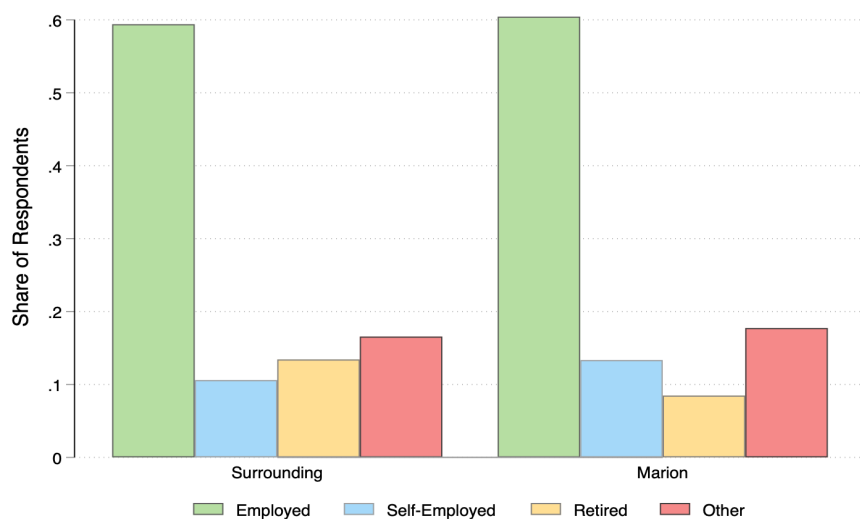
This section describes our findings. We begin with a description of the sample, focusing on the prevalence and severity of food insecurity, and the role played by both charitable and government assistance.

3.1 Summary Statistics

Our sample includes 637 respondents from Marion County and 670 respondents from the surrounding counties for a total of 1,307 respondents. The summary statistics reported in Figures 3.1 to 3.2 show that the average age in the sample is 43 years and ranges from 18 to 88 years old. The full sample is 22.8% Hispanic, 70.0% white, and 19.0% Black. Approximately 15% reported living in a rural area and 50% lived in the city. More than 52% of respondents have one or more children in their households, and approximately 40% of respondents live in a household with four or more people. Approximately 60% of respondents are employed for wages, 12% report being self-employed, 6% report being unemployed, and over 86% live in a household with at least one wage earner.

Figure 3.1. Location of respondents

Notes: Marion indicates Marion County.

Figure 3.2. Employment status of respondents

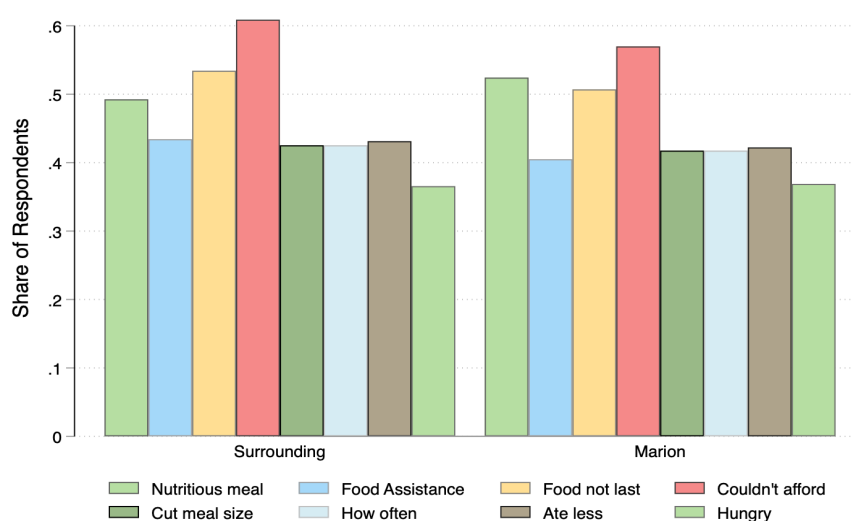
Notes: Marion indicates Marion County. Surrounding includes the following surrounding counties: Boone, Hamilton, Hancock, Hendricks, Johnson, Madison, Morgan, and Shelby. 'Other' includes student, disabled, and homemaker.

3.2 Prevalence of Food Insecurity

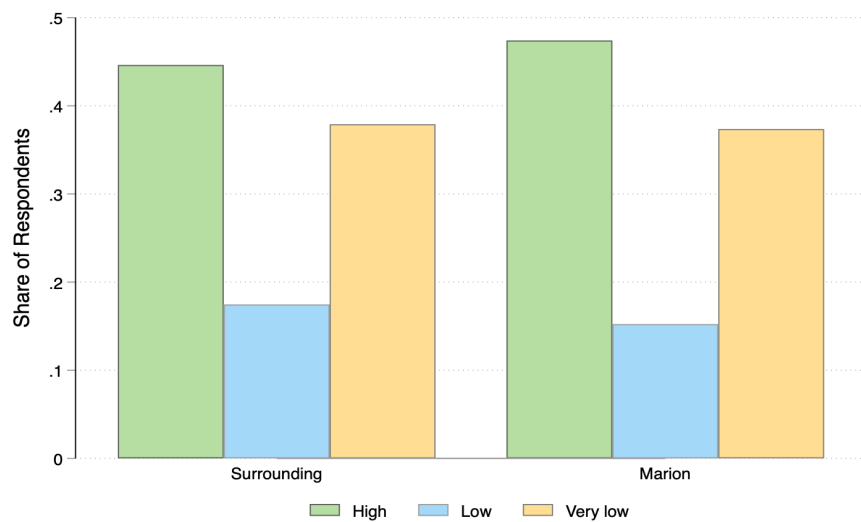
This section describes the prevalence of food insecurity in central Indiana by food security status. We present the 2025 baseline estimate following the USDA approach, then present these results in context of historical trends in Appendix C.¹

Figure 3.3 reports responses to each of the food security questions. We find that approximately 46% of the people in the central Indiana sample are experiencing high food security (see Figure 3.4). The difference between Marion County and the surrounding counties is 3 percentage points, which is not statistically different from zero. This implies that about 54% of the respondents are not food secure with 16% and 37% experiencing low and very low food security, respectively. While the share of very low food security is similar between the two regions at 37%, Marion County has a modestly lower share of low food secure households (15% vs 17.5%). Again, these differences are not statistically distinguishable from zero.

¹In the USDA six-item short form food security module, the responses to questions are scored as 'High' for a food security score of 0, 'Marginal' for a food security score of 1, 'Low' for a food security score of 2 – 3, and 'Very Low' for a food security score of 4 – 6. We, however, label food security scores of 0–1 as 'High' for simplicity.

Figure 3.3. Response to food security questions

Notes: Marion indicates Marion County. Surrounding includes the following surrounding counties: Boone, Hamilton, Hancock, Hendricks, Johnson, Madison, Morgan, and Shelby. "Nutritious meal" is associated with a screener question, where an affirmative response is that you cannot always afford to eat a good, nutritious meal. "Food Assistance" is associated with a screener question, where an affirmative response is that, in the last 12 months, someone in your household has received food assistance from family or friends, community organizations, or government food programs. In the six-item short form food security survey: "Food not last" is an affirmative response that the food you bought just didn't last, and you didn't have money to get more. "Couldn't afford" is an affirmative response that you couldn't afford to eat balanced meals. "Cut meal size" is an affirmative response that, in the last 12 months, someone in the household cut the size of meals or skipped meals because there wasn't enough money for food. "How often" is an affirmative response that meals were cut or skipped frequently. "Ate less" is an affirmative response that, in the last 12 months, you ever ate less than you felt you should because there wasn't enough money for food. "Hungry" is an affirmative response that, in the last 12 months, you were ever hungry but didn't eat because there wasn't enough money for food.

Figure 3.4. Food security of respondents

Notes: Marion indicates Marion County. Surrounding includes the following surrounding counties: Boone, Hamilton, Hancock, Hendricks, Johnson, Madison, Morgan, and Shelby. 'High' indicates food security score of 0–1, 'Low' indicates food security score of 2 – 3, and 'Very low' indicates food security score of 4 – 6.

We also explore the correlation between food insecurity and the demographic variables (see the model equation and modeling results in the Appendix.) We find that relative to White respondents, food insecurity is about 12 and 16 percentage points higher among respondents whose self-reported race is Black or Asian, respectively. Relative to urban city dwellers, food insecurity is about 14 percentage points lower among suburban respondents and 6 percentage points higher among rural respondents. However, the difference between urban and rural respondents is not distinguishable from zero. Food insecurity is also significantly higher for households with children. In fact, it is 25 percentage points higher for households with one child and about 15 percentage points higher for those with 2 or more children. Having two adults in the household doesn't have any statistically meaningful effect on food insecurity relative to having only one adult. However, we find that food insecurity is about 11 to 13 percentage points higher for households with 3 or more adults. Food insecurity is about 8 percentage points higher among self-employed respondents compared to employed respondents. Interestingly, retired respondents report significantly lower food insecurity relative to employed respondents (25 percentage points lower). Respondents who are disabled, students, or unemployed report food insecurity prevalence that is about 15 percentage points higher compared to employed respondents.

When we estimate the regression with all the demographic variables included, we find that the number of children, employment status, and geographic location are the only correlations that remain statistically different from zero. Food insecurity is higher among households with children, higher among the self-employed, lower among retirees, lower among suburban residents, and lower in Marion County.

Overall, we find that the majority of the respondents in the sample are experiencing low and very low food security, suggesting a need for continued support for programs designed to fill these needs.

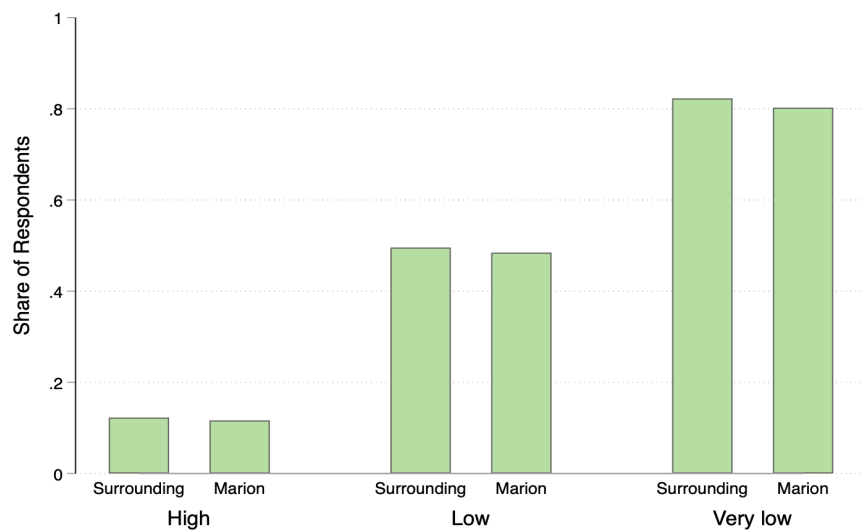
3.3 Severity of Food Insecurity

This section reports the severity of food insecurity experienced by the respondents using the presence of food need and the number of missed meals.

3.3.1 Food Need

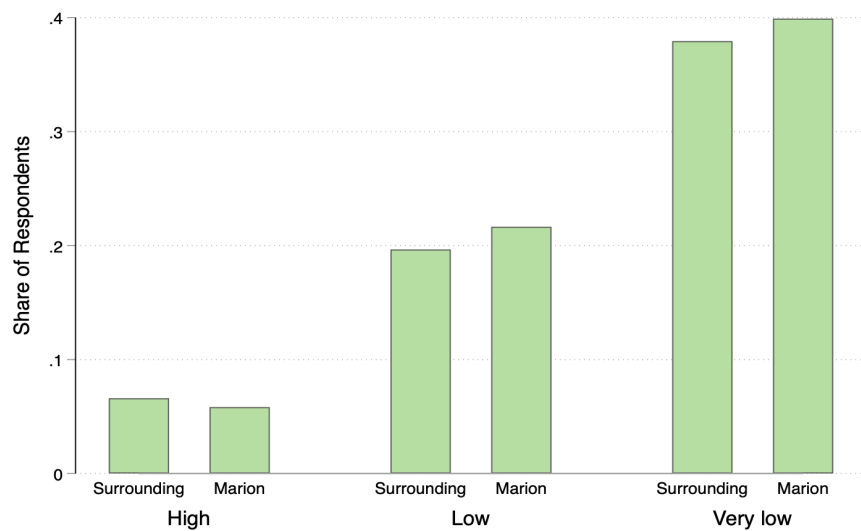
We ask respondents to report whether they had all the food they needed in the last 12 months as well as in the last week. These two questions allow us to identify the **existence** and frequency of food need, though not the magnitude of the need. We find that the existence of food need in the last 12 months is the same in Marion County as the surrounding counties. More importantly, the results in Figure 3.5 show that approximately 80% of respondents experiencing very low food security report having persistent food need in the last 12 months. The corresponding share for low food security respondents is 49%. A similar pattern is observed for food need in the last week, where 38% of very low food secure households reported having a need compared to only 20% among low food secure households (see Figure 3.6). However, notice that the share of respondents experiencing a need in the last week is about half the size as the share that experienced a need in the last 12 months. This suggests that the severity of food insecurity fluctuates within households over time.

Figure 3.5. Respondents experiencing food need in the last 12 months



Notes: Marion indicates Marion County. Surrounding includes the following surrounding counties: Boone, Hamilton, Hancock, Hendricks, Johnson, Madison, Morgan, and Shelby. 'High' indicates food security score of 0–1, 'Low' indicate food security score of 2 – 3, and 'Very low' indicates food security score of 4 – 6. 'Food need' is defined as not having all the food needed in the last 12 months.

Figure 3.6. Respondents experiencing food need in the last week



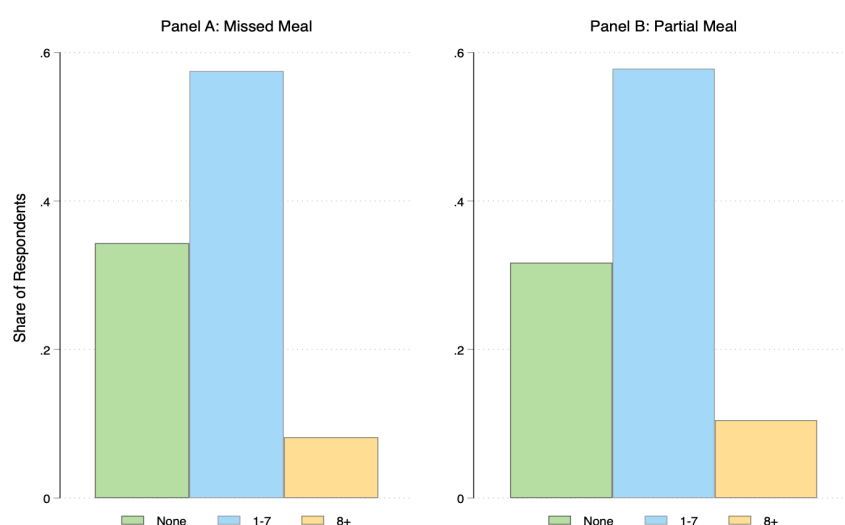
Notes: Marion indicates Marion County. Surrounding includes the following surrounding counties: Boone, Hamilton, Hancock, Hendricks, Johnson, Madison, Morgan, and Shelby. 'High' indicates food security score of 0–1, 'Low' indicates food security score of 2 – 3, and 'Very low' indicates food security score of 4 – 6. 'Food need' is defined as not having all the food needed in the last 12 months.

It is worth noting that households with high food security also report having food need both in the last week and in the last 12 months, 6% and 12% respectively. We find no meaningful difference in these numbers across geographic location. Food need appears to be predominantly in the winter months, though each season of the year was selected by at least 20% of respondents.

3.3.2 Missed Meals

Respondents were also asked to report the number of missed meals and number of partial meals for their households in the last week.² We group the raw data in the following categories: no missed meals, 1-7 missed meals, and 8 or more missed meals in the last week. Figure 3.7 shows that approximately 34% and 31% of respondents report having no missed or no partial meals, respectively. These shares are comparable across Marion and surrounding counties.

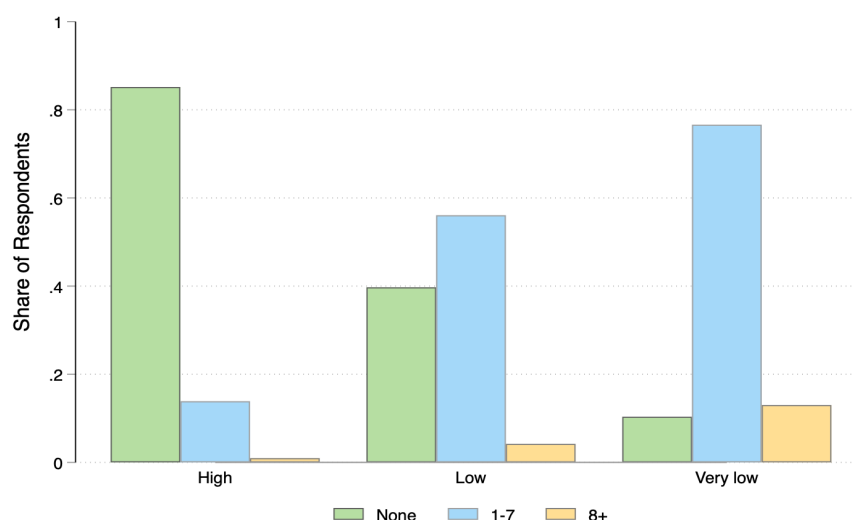
Figure 3.7. Number of missed and partial meals in the last week



²A household with 2 people who both missed 2 meals in the last week would report 4 missed meals.

Approximately, 80% of food insecure households report missing at least 1 meal. As expected, households with very low food security experience a lot more missed and partial meals compared to households that are classified as low food security. For example, Figure 3.8 shows that only 10% of very low food security households report missing no meals compared to 40% of low food security households. Similarly, 77% of very low food secure households report missing 1-7 meals and 13% report missing 8 or more meals. The comparable numbers for low food secure households are 56% and 4%. Interestingly, even the high food secure households report missing meals, though at much lower levels. For example, approximately 13% of the 208 high food secure households who completed the missed meal questions, report missing 1-7 meals in the last week.

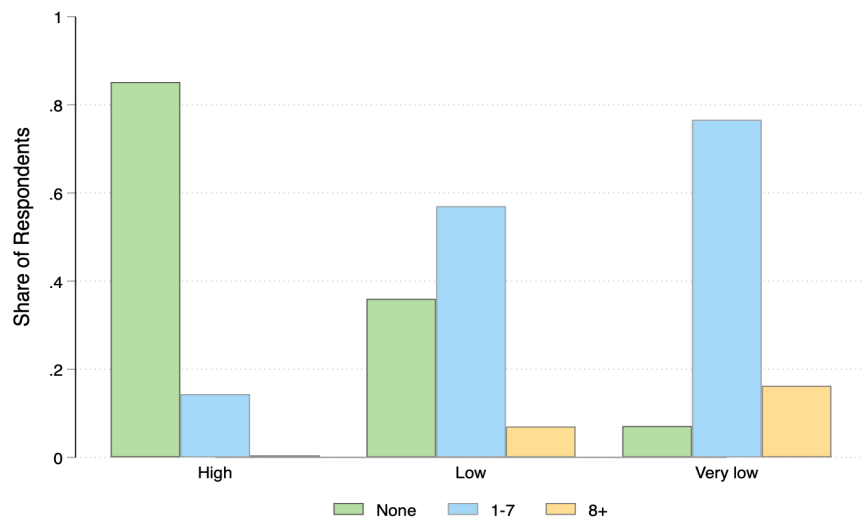
Figure 3.8. Number of missed meals in the last week, by food security status



Notes: 'High' indicates food security score of 0–1, 'Low' indicate food security score of 2 – 3, and 'Very low' indicates food security score of 4 – 6.

The patterns in the data are very similar for partial meals. Additionally, we do not find any meaningful difference in these patterns between Marion and surrounding counties (see Figure 3.9).

Figure 3.9. Number of partial meals in the last week, by food security status



Notes: Marion indicates Marion County. Surrounding includes the following surrounding counties: Boone, Hamilton, Hancock, Hendricks, Johnson, Madison, Morgan, and Shelby. 'High' indicates food security score of 0–1, 'Low' indicates food security score of 2 – 3, and 'Very low' indicates food security score of 4 – 6.

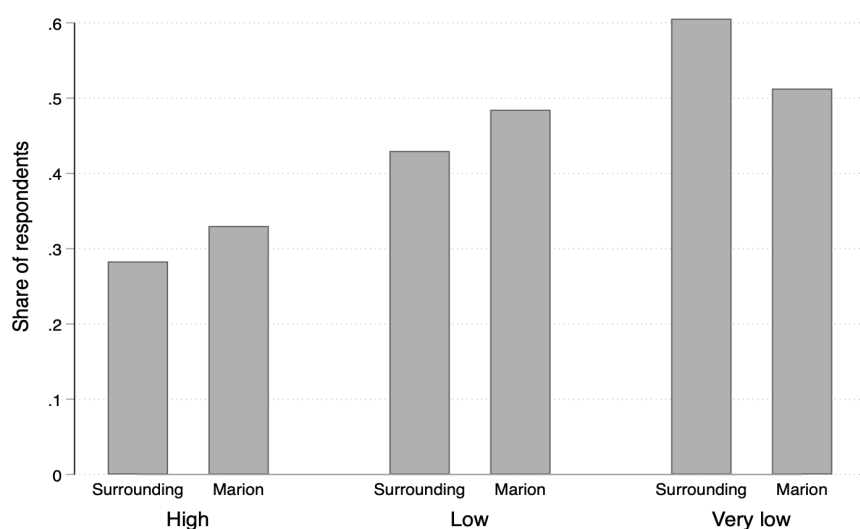
3.4 Use of Food Assistance

These next sections describe where respondents get food assistance, the importance of food assistance, and their experiences with food assistance.

3.4.1 Supplement Nutrition Assistance Program (SNAP)

We first ask respondents if they have ever received SNAP benefits in the last 12 months. Approximately 48% of respondents say they were on SNAP at some point between March 2024 and February 2025. The difference between Marion County and the surrounding counties is only 3 percentage points, which is neither economically meaningful nor statistically different from zero. Figure 3.10 shows some interesting patterns when we split the sample by food security status and location. On the one hand, dependence on SNAP in the last 12 months does not differ between low and very low food security respondents from Marion County; approximately 50% of these respondents depend on SNAP. On the other hand, there is an approximately 17 percentage point difference in SNAP usage between low and very low food security respondents from the surrounding counties. Again, it is worth pointing out that respondents with high food security also receive SNAP benefits; this share is approximately 28 to 30 percent among high food security respondents who responded to the SNAP question.

Figure 3.10. SNAP use in last 12 months



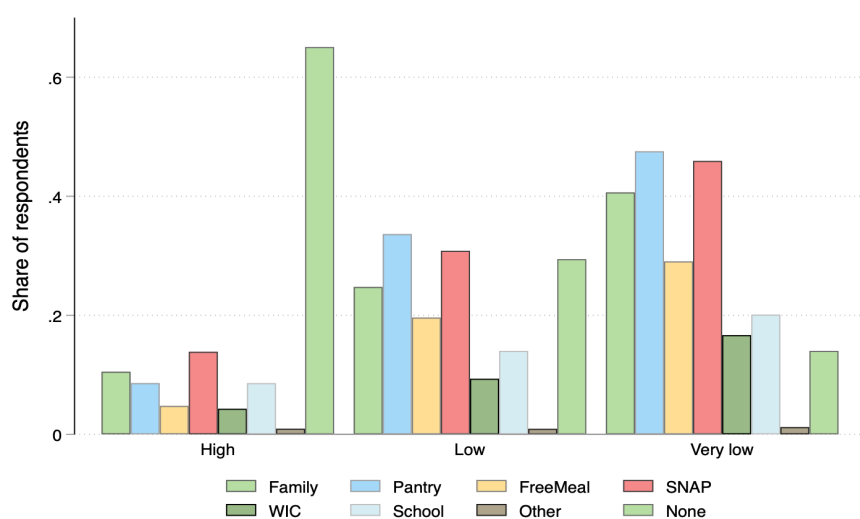
Notes: Marion indicates Marion County. Surrounding includes the following surrounding counties: Boone, Hamilton, Hancock, Hendricks, Johnson, Madison, Morgan, and Shelby. ‘High’ indicates food security score of 0–1, ‘Low’ indicates food security score of 2 – 3, and ‘Very low’ indicates food security score of 4 – 6.

3.4.2 Sources of Food Assistance

We also ask respondents to select the kinds of food assistance programs they currently rely on. The list includes: (1) Family or friends, (2) Food from a food pantry, church, or food bank, (3) Free meal from a church, community center, park, or soup kitchen, (4) Food stamps or SNAP, (5) WIC, the Special Supplemental Program for Women, Infants and Children, (6) Free or reduced school lunch, (7) Other, and (8) None of the above. Among the listed sources of assistance, respondents could select multiple items. We calculate the importance of each source of food assistance using the share of respondents who selected that source. There are meaningful differences in reliance on each type of food assistance by food security status: high, low, and very low food security.

Figure 3.11 reports the share of respondents who selected each food assistance source by food security status. Approximately 70% of the low food secure respondents rely on food assistance, with food pantries (34%), SNAP (31%), and family or friends (25%) being the top three sources. While the relative ranking of each food source is the same for very low food secure households, the level of use is much higher among these households. Specifically, 86% of these households depend on food assistance from food pantries (47%), SNAP (46%), and family or friends (40%) continuing to dominate the top three sources. However, we find that free meals, WIC, and school programs play a much larger role in food assistance for very low food secure respondents compared to the low food secure respondents. For example, WIC was selected by 17% of the very low secure respondents compared to only 9% of the low and 4% of the high food secure respondents. Similarly, 30% of the very low food secure households depend on free meals compared to 20% of the low secure households.

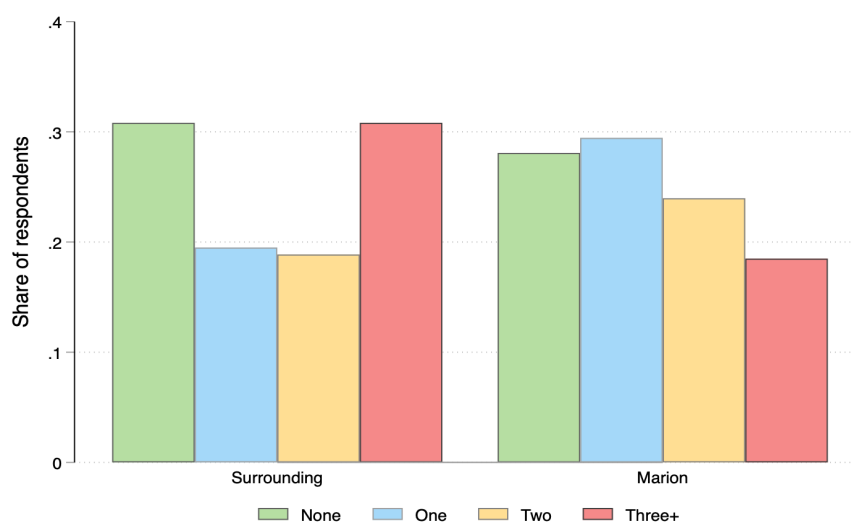
Figure 3.11. Type of food assistance currently receiving, by food security status



Notes: Marion indicates Marion County. Surrounding includes the following surrounding counties: Boone, Hamilton, Hancock, Hendricks, Johnson, Madison, Morgan, and Shelby. 'High' indicates food security score of 0–1, 'Low' indicates food security score of 2 – 3, and 'Very low' indicates food security score of 4 – 6. "Family" is family or friends. "Pantry" is a food pantry, church, or food bank. "FreeMeal" is a free meal from a church, community center, park, or soup kitchen. "SNAP" is the Supplemental Nutrition Assistance Program (formerly Food Stamps). "WIC" is the Special Supplemental Nutrition Program for Women, Infants, and Children. "School" is free or reduced-price school lunch. "Other" includes other types of food assistance you receive. "None" indicates that you or your household do not currently receive food assistance.

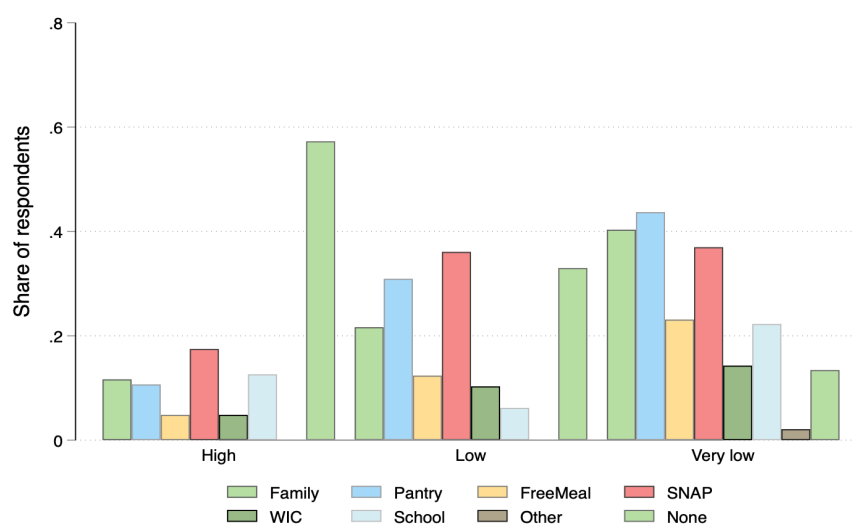
Again, we note important differences between Marion County and surrounding counties. First, Figure 3.12 shows that while the level of any type of food assistance use is the same in both regions (28% in Marion and 30% in surrounding counties), respondents from surrounding counties rely on a greater number of sources for food assistance compared to Marion County respondents. Specifically, 30% of surrounding county respondents depend on three or more kinds of food assistance compared to 18% in Marion County. Second, Figures 3.13 and 3.14 show that the relative importance of each food source is meaningfully different across food security status. For example, the ranking of the top three sources among very low food secure households in Marion county are SNAP (36%), food pantries (31%), and family or friends (22%), while the top three in the surrounding counties are food pantries (36%), family or friends (27%), and SNAP (27%). The 9 percentage point higher dependence on SNAP in Marion County compared to the surrounding counties is noteworthy. Third, while the top three sources for low food secure respondents in both regions are family, pantries, and SNAP, we find that free meals from community organizations (26%) and school programs (21%) are arguably as important as the top three sources in the surrounding counties.

Figure 3.12. Number of food assistance types currently receiving



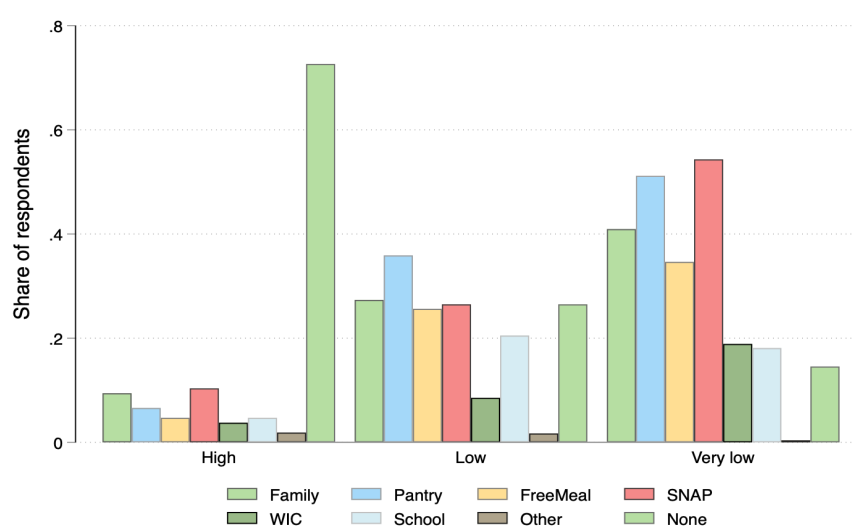
Notes: Marion indicates Marion County. Surrounding includes the following surrounding counties: Boone, Hamilton, Hancock, Hendricks, Johnson, Madison, Morgan, and Shelby.

Figure 3.13. Type of food assistance currently receiving: Marion County



Notes: 'High' indicates food security score of 0–1, 'Low' indicates food security score of 2 – 3, and 'Very low' indicates food security score of 4 – 6.

Figure 3.14. Type of food assistance currently receiving: Surrounding counties



Notes: 'High' indicates food security score of 0–1, 'Low' indicates food security score of 2 – 3, and 'Very low' indicates food security score of 4 – 6.

Again, we find it important to point out that households with high food security are also dependent on food assistance. Specifically, 35% of the 208 food secure respondents rely on some kind of food assistance from family or friends (11%) and SNAP (13%) being the two most important sources. Marion County high food secure respondents are more reliant on food assistance compared to surrounding county respondents. For example, 43% of high food secure Marion County respondents rely on food assistance compared to only 28% in the surrounding counties. High food secure Marion County residents are more reliant on food pantries, SNAP, and school meals.

3.4.3 Visits to Community Organizations

Respondents also report their use of the charitable food system. Specifically, we ask about visits to community organizations in the last month, share of food sourced from community organizations, and share of food that would have to be replaced if the community organization they use closed.

Figure 3.15 shows that approximately 53% of respondents visited community organizations for food assistance in the last month with 16% visiting once, 20% visiting twice, and 16% visiting three or more times. This pattern of reliance is very similar between Marion and surrounding counties. When we focus on the food insecure respondents in Figure 3.16, we find that 70% of very low food secure households have relied on community organizations in the last month with 27% visiting twice and 26% visiting three or more times. Approximately 26% of low food security households visited only once and only 8% visited three or more times.

Figure 3.15. Visits to community organizations

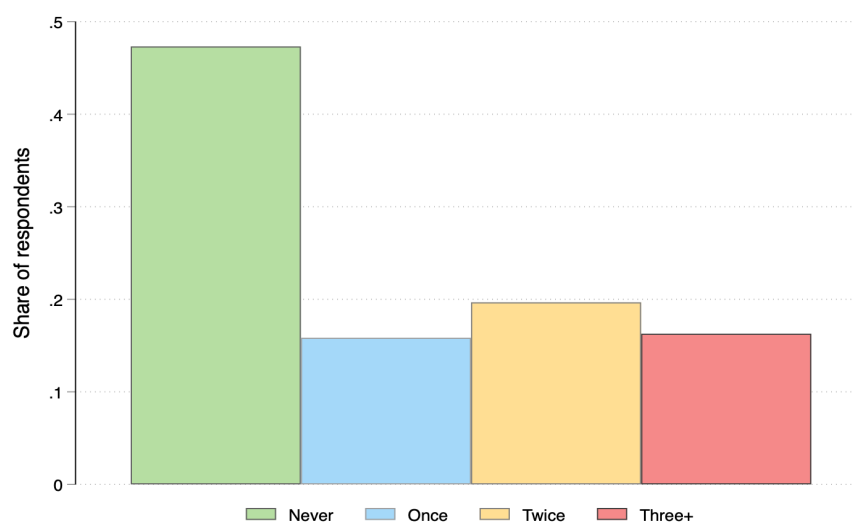
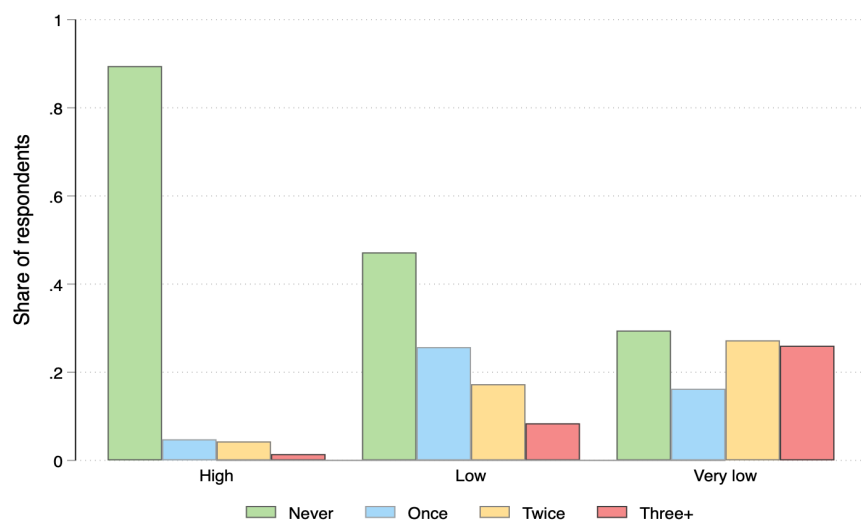


Figure 3.16. Visits to community organizations, by food security status

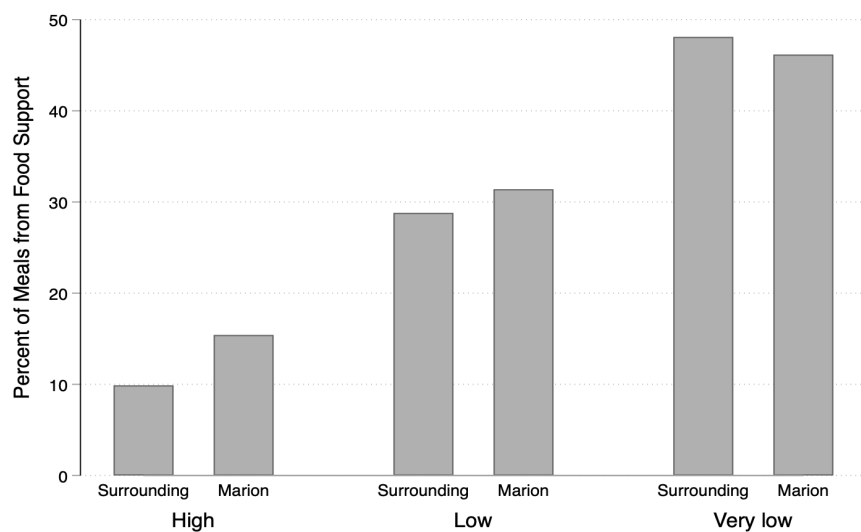


Notes: 'High' indicates food security score of 0–1, 'Low' indicates food security score of 2 – 3, and 'Very low' indicates food security score of 4 – 6.

3.4.4 Importance of Community Assistance

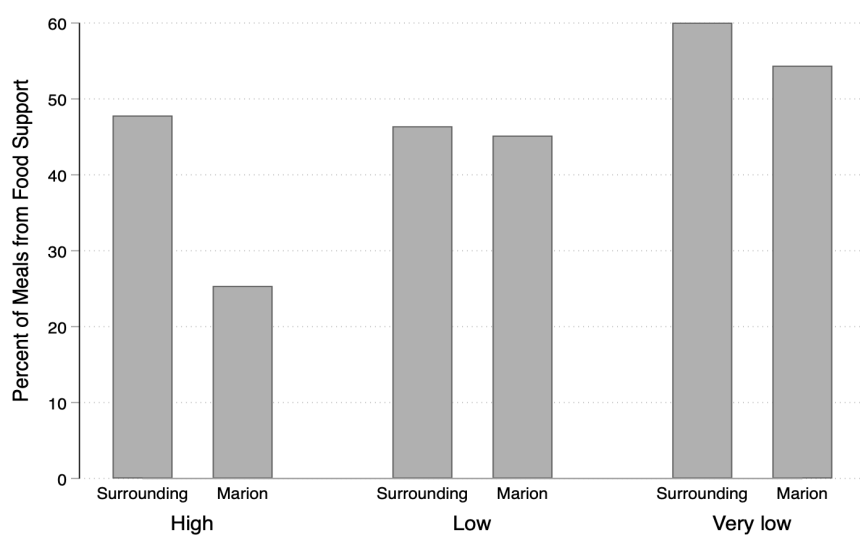
We also measure the importance of food assistance by asking respondents what share of their food comes from food assistance and what share of their food would have to be replaced if the community organizations they rely on were closed. The latter question is only asked of respondents who reported visiting a community organization in the last month. The results in Figure 3.17 show that the average share of food that comes from community food assistance is 12%, 30%, and 47% for high, low, and very low food secure households, respectively, and the mean across all respondents is 35%. The level of dependence is very similar across Marion and surrounding counties. Maybe unsurprisingly, we find that the share of food that comes from community food assistance is substantially higher for respondents who visited a community organization in the last month (see Figure 3.18). For these subjects, the average share of food that comes from food assistance is 37%, 46% and 57% for high, low and very low food secure respondents, respectively.

Figure 3.17. Food obtained from food assistance system, by food security status



Notes: Marion indicates Marion County. Surrounding includes the following surrounding counties: Boone, Hamilton, Hancock, Hendricks, Johnson, Madison, Morgan, and Shelby. 'High' indicates food security score of 0–1, 'Low' indicates food security score of 2 – 3, and 'Very low' indicates food security score of 4 – 6.

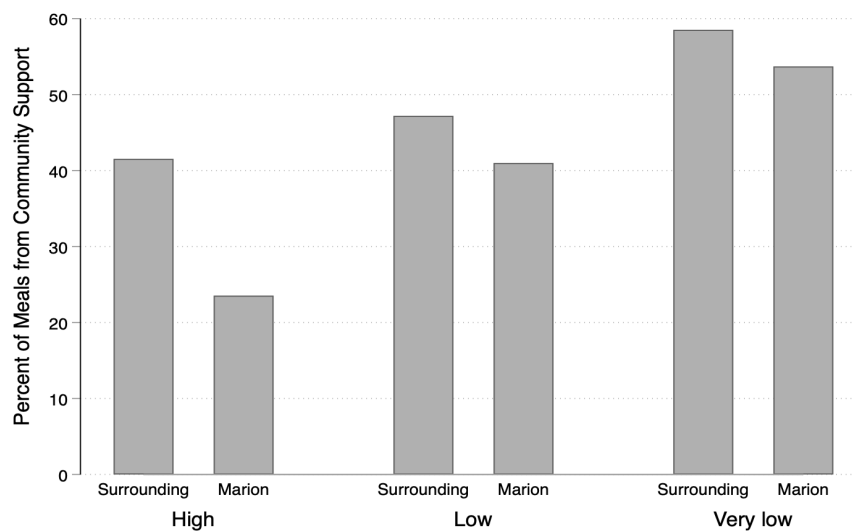
Figure 3.18. Community organization visitors:
Food obtained from food assistance
system, by food security status



Notes: Sample restricted to respondents who report visiting a community organization. Marion indicates Marion County. Surrounding includes the following surrounding counties: Boone, Hamilton, Hancock, Hendricks, Johnson, Madison, Morgan, and Shelby. 'High' indicates food security score of 0–1, 'Low' indicate food security score of 2 – 3, and 'Very low' indicates food security score of 4 – 6.

The shares for low and very low food secure samples are a bit higher in the surrounding counties compared to Marion County with averages of 56% and 51% for surrounding counties and Marion County, respectively. Additionally, these same respondents report that the share of food for which they would need to replace if their community organization closed to be very similar to the reported share of food that comes from food assistance (see Figure 3.19). This suggests that the majority of food assistance is obtained via community organizations.

Figure 3.19. Potential food replacement from community food assistance, by food security status

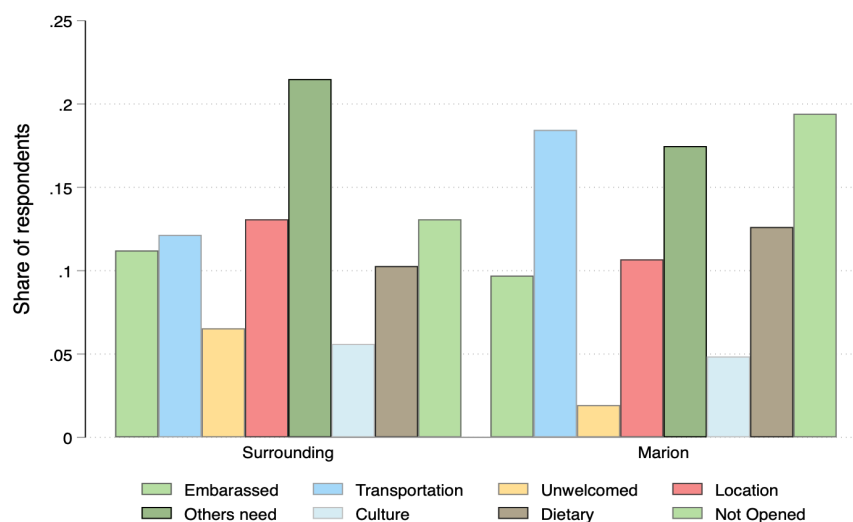


Notes: Reported is the percent of food that would have to be replaced if community organization closed. Sample restricted to respondents who report visiting a community organization. Marion indicates Marion County. Surrounding includes the following surrounding counties: Boone, Hamilton, Hancock, Hendricks, Johnson, Madison, Morgan, and Shelby. 'High' indicates food security score of 0–1, 'Low' indicates food security score of 2 – 3, and 'Very low' indicates food security score of 4 – 6.

We also explore the reason for non-participation with food pantries by asking respondents to select the reason they do not visit food pantries despite indicating a need for food assistance. Respondents could select from the following: (1) I don't have transportation, (2) The pantry near me is not open when I can go, (3) I don't know where my nearest food pantry is located, (4) The food offered at the pantry in my area does not meet my dietary needs, (5) The food at my area pantry does not meet my cultural needs, (6) I don't feel welcome there, (7) I am too embarrassed to ask for assistance, and (8) Other people need it more.

Interestingly, Figure 3.20 shows that the most common reason for not visiting a pantry in the surrounding counties is “other people need it” (22%), with pantry not open, lack of transportation, unknown location, dietary needs, and feeling embarrassed all in the 10–13 percent range. The most common reasons in Marion County are other people need it, with pantry not opened and lack of transportation in the 17–19 percent range. Responses in surrounding counties include unknown location, dietary needs, and feeling embarrassed, where are all in the 10–13 percent range.

Figure 3.20. Reasons for not visiting a food pantry



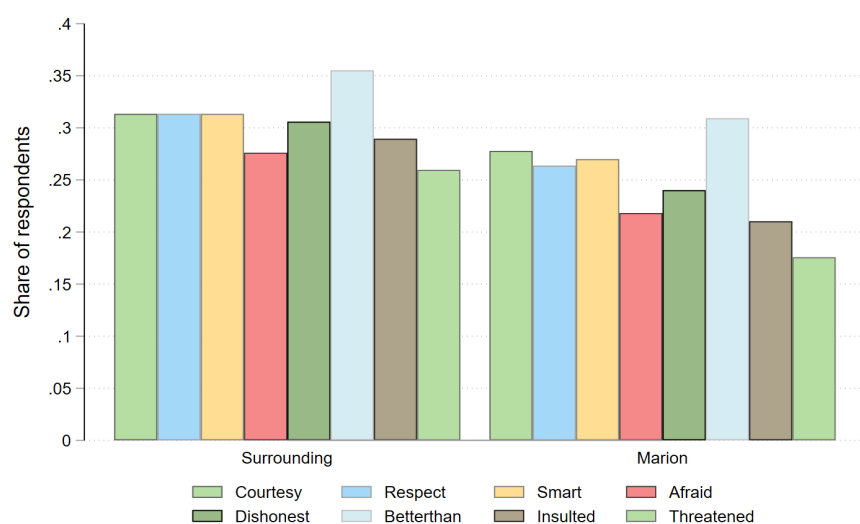
Notes: Marion indicates Marion County. Surrounding includes the following surrounding counties: Boone, Hamilton, Hancock, Hendricks, Johnson, Madison, Morgan, and Shelby.

3.5 Experience with Food Assistance

Finally, we ask respondents to tell us about the treatment they receive as they seek food assistance. Respondents are asked about the following eight types of treatment, including: (1) You are treated with less courtesy than other people are, (2) You are treated with less respect than other people are, (3) People act as if they think you are not smart, (4) People act as if they are afraid of you, (5) People act as if they think you are dishonest, (6) People act as if they're better than you are, (7) You are called names or insulted, and (8) You are threatened or harassed.

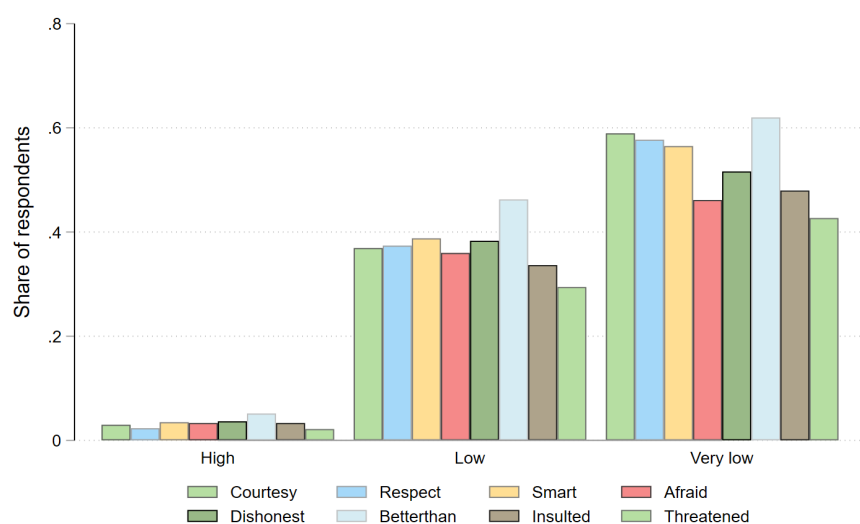
Respondents could select never, every day, once a week, a few times per month, a few time per year, less than once per year, or never for each type of reaction. We find that 35% to 54% of respondents report never encountering any problems as they seek food assistance 3.21. These results suggest that 46% to 65% of subjects have to deal with some kind of negative experiences at least once per year. To better capture the share of subjects with these bad experiences, we create indicator variables that take a value of one if every day, once a week, or a few times per month is selected and zero otherwise. These new variables identify subjects who report negative experiences at a monthly or higher frequency. Figure 3.22 shows that very low food secure households are more likely to experience all kinds of negative experiences compared to low food secure households. For example, the differences for courtesy, respect, and smart are approximately 20 percentage points higher. With the exception of courtesy, these experiences appear to be worse among respondents in the surrounding counties; differences range from 4–8 percentage points. Respondents list race, ethnicity, gender, age, and education as the main reasons for their negative experiences (see Figure 3.23).

Figure 3.21. Experience while seeking food assistance



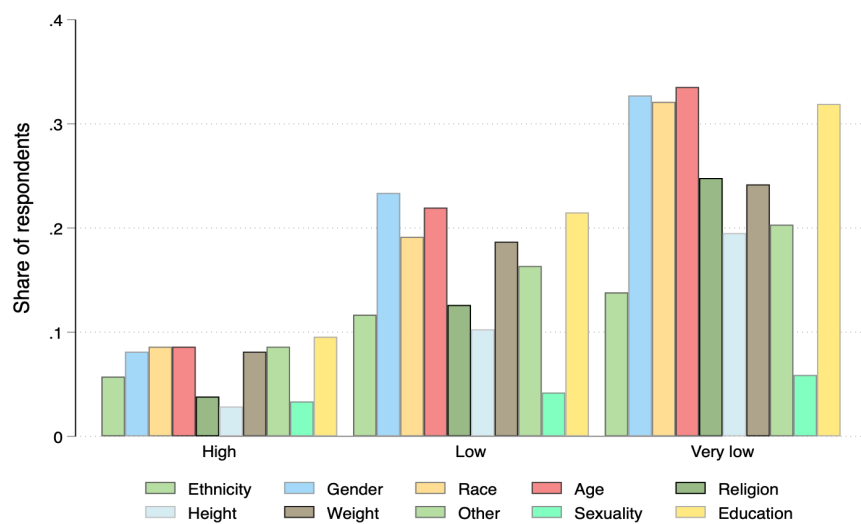
Notes: Marion indicates Marion County. Surrounding includes the following surrounding counties: Boone, Hamilton, Hancock, Hendricks, Johnson, Madison, Morgan, and Shelby. "Courtesy" is whether you felt treated with less courtesy than others. "Respect" is whether you felt treated with less respect than others. "Smart" is whether people act as if they think you are not smart. "Afraid" is whether people act as if they are afraid of you. "Dishonest" is whether people act as if they think you are dishonest. "Betterthan" is whether people act as if they are better than you. "Insulted" is whether you are called names or insulted. "Threatened" is whether you are threatened or harassed.

Figure 3.22. Experience while seeking food assistance, by food security status



Notes: 'High' indicates food security score of 0–1, 'Low' indicates food security score of 2 – 3, and 'Very low' indicates food security score of 4 – 6. Courtesy is whether you felt treated with less courtesy than others. Respect is whether you felt treated with less respect than others. Smart is whether people act as if they think you are not smart. Afraid is whether people act as if they are afraid of you. Dishonest is whether people act as if they think you are dishonest. Betterthan is whether people act as if they are better than you. Insulted is whether you are called names or insulted. Threatened is whether you are threatened or harassed.

Figure 3.23. Reasons for negative experience, by food security status



Notes: 'High' indicates food security score of 0–1, 'Low' indicates food security score of 2 – 3, and 'Very low' indicates food security score of 4 – 6.

3.6 Historical Comparison

The estimates reported here are not directly comparable to those of prior surveys of food need or other organizations' studies due to various differences in survey methodology (see Section 2.3). One of the main differences is that the 2025 data collection includes a larger share of respondents with income above 185% of the poverty level compared to previous waves of the survey in order to better measure food insecurity prevalence in the entire population. To provide a useful comparison, we restrict the data to Marion County respondents who are below 185% of the poverty level and recalculate our measures of food insecurity (see Appendix C).

In the restricted comparison of low-income Marion County households, we find that the share of respondents with a high level of food security increased in 2025 from prior years – 28% of low-income Marion County residents reported high food security in 2025, compared to 15% in 2023, 16% in 2021, and 20% in 2020 (see Figure C.2). On the other hand, the proportion that reported very low food security in 2025 was similar to previous years – 56% versus 57% in 2023, 52% in 2021, and 50% in 2020. This implies that the change is from a decreasing proportion of low-income Marion County households reporting low food security, the less severe form of food insecurity.

Restricted responses to food insecurity questions were similar in 2025 compared to previous years, except for a marked increase in the number of respondents who reported that someone in their household received some kind of food assistance in the past 12 months (see Figure C.1). In 2020, 2021, and 2023, approximately 12% to 14% of low-income respondents received food assistance in the last year, but in 2025 that proportion more than doubled to 54%.

This increase in utilization of food assistance is also apparent in the breakdown of the source of food assistance (see Figure C.6), where we see a steady decline in the share of low-income households that report currently receiving no food support. This is true regardless of food security status. For instance, among respondents with very low food security, approximately 13% reported in 2025 that they did not currently receive food support, a decline from approximately 30% in prior years. Similarly, among households with high food security, 50% reported receiving no food support in 2025, compared to 52% in 2023, 59% in 2021, and 63% in 2020. We see little change in the proportion of households reporting food need in 2025 in comparison to prior years of data (see Figure C.3).

CHAPTER 4

Conclusion

This study of food insecurity in central Indiana has highlighted several important findings related to the prevalence of food insecurity, the severity of food insecurity, the use of food assistance, and experiences with food assistance.

The results show that reports of very low food security are twice as high as reports of low food security. This is important in that very low food security is a more severe form of food insecurity that results in reduced or missed meals rather than simply eating low-quality meals. Among households with very low food security, nearly 80% reported reducing or missing meals. Additionally, 6% of households with high food security (i.e., no indication of food hardship) reported reducing or missing meals. This finding should be an indication to hunger relief organizations that there is more work to be done to ensure households' basic food needs are met.

Despite the persistent need, households are supported by the public and charitable food assistance system. While nearly half of households said they received SNAP benefits at some point in the last 12 months, many households also relied on food pantries as well as family or friends for assistance. Moreover, there was variation in the use of SNAP benefits. While low and very low food secure households in Marion County used SNAP at similar rates, there is a 17% point difference in SNAP use between low and very low food secure households in the surrounding counties. As a result, households in surrounding counties relied on more sources of food assistance than Marion County residents. These findings show that hunger relief organizations cannot apply a one-size-fits-all approach in central Indiana, and must realize that changes in SNAP benefits may strongly impact Marion County while changes in charitable assistance may strongly impact the rest of the region.

There are limitations to this study. Most strikingly, there is limited comparability to existing food security research because the 2025 Survey of Food Need focuses on a different population (central Indiana) with a different survey (USDA's six-item short form survey with two unique screener questions) and different data collection procedures (most recently, quota-driven sampling). The food insecurity prevalence rate for central Indiana (54%) is over four times higher than the state food insecurity prevalence rate averaged for 2021-23 (12.2%) published by the USDA [17]. The study's food insecurity prevalence rate was also considerably higher than historical estimates from Feeding America's Map the Meal Gap, which are statistically calculated based on USDA estimates. Although there are methodological reasons that can explain the difference in this study's outcomes compared to that of other analysis, there is likely some form of survey bias in this study's estimation. Although the study's share of households above 185% of the poverty level as well as race and ethnicity demographic shares were similar to the Marion County's

population, this was not the case for the surrounding counties, where the sample was biased towards a larger share of Hispanic respondents and a larger share of respondents with household income below 185% of the poverty level. In these cases, sampling bias may exist. For example, researchers have found that a survey company's panel of respondents may not be fully representative of a geographic population [13, 15], which can cause self-selection in non-probability, quota-driven samples like the one used in this study.

In future research on the topic of food insecurity in central Indiana, we recommend experimenting with sampling and surveying techniques to understand their effects on food insecurity outcomes in central Indiana. We recommend instituting survey quotas for stratified sampling of households above 185% of the poverty level (e.g., above 200%, 300%, 500%, etc.). We also recommend a future iteration of the Survey of Food Need that uses a split-sample methodology to test for differences in surveying techniques; comparing the typical survey instrument with either a survey using USDA screener questions or a survey without screener questions entirely. While these technical recommendations may increase the cost of the Survey of Food Need, they will improve the robustness of food insecurity measurement in central Indiana.

Another important avenue for future research is respondents' understanding of where their food comes from. While respondents identify SNAP and food pantries as two primary source of food support, it is possible they do not know that these two programs are from two different sources: charitable organizations versus government programs.

Acknowledgments

We gratefully acknowledge the partnership and support of:

- ◇ Office of Public Health and Safety, City of Indianapolis
- ◇ Central Indiana Community Foundation
- ◇ O'Neill School of Public & Environmental Affairs, Indiana University Bloomington
- ◇ Research Services, Qualtrics

We also acknowledge the remarkable support the members of the Indy Hunger Network provide to people experiencing food insecurity every day through their individual programs, as well as collectively.

Appendices

APPENDIX A

Survey Instrument

The research team programmed the 2025 survey instrument into Qualtrics online software. The survey instrument included the questions below, including USDA's six-item short form survey (Q3-Q7), with respective skip logic depending how respondents answered successive questions. As a result, the final order of the questions revealed to respondents varied by their previous responses. The research team used Qualtrics Research Services to administer the survey instrument to its panel of potential respondents based on county of residence, income, race, and ethnicity quotas to represent the Marion County and surrounding county populations.

A.1 Pre-Screen Questions

PSQ1a What state do you live in?

PSQ1b What county do you live in?

PSQ1c Please tell us your 5-digit home zip code.

PSQ2 Are you involved with or familiar with your household's food preparation or purchasing?

- Yes
- No

PSQ3 To ensure we are reaching people of all ages, please enter your age.

- Age: _____

A.2 Screener Questions

Q1 Which of these statements best describes the food situation in your household in the past 12 months?

- We could always afford to eat good, nutritious meals.
- We could always afford enough to eat, but not always the kinds of food we should eat.
- Sometimes we could not afford enough to eat.
- We often could not afford enough to eat.

Q2 Also during the past 12 months, did you or another household member living with you ever receive food assistance from family or friends, community organizations (e.g, food pantries and soup kitchens) or government food programs (e.g, SNAP also known as food stamps, reduced price school meals or WIC (Women, Infants, and Children nutrition program))?

- Yes
- No

A.3 Food Insecurity

For each of the statements below, please select how often the statement was true for you and your household during the past 12 months.

Q3 The food that we bought just didn't last, and we didn't have enough money to get more.

- Often true
- Sometimes true
- Never true

Q4 We couldn't afford to eat "balanced meals." Balanced meals include healthy servings of a variety of vegetables, fruits, grains, dairy and meat.

- Often true
- Sometimes true
- Never true

Q5 In the past 12 months, that is, since last February, did you or any other adult in your household ever cut the size of your meals or skip meals because there wasn't enough money for food?

- Yes
- No

Skip To: Q7 If In the past 12 months, that is, since last February, did you or any other adult in your household... = No

Q6 How often did you have to cut the size of your meals or skip meals during the last 12 months?

- Every month or almost every month
- Some months, but not every month
- Only 1 or 2 months during the year

Q7 In the past 12 months, did you ever eat less than you felt you should because there wasn't enough money for food?

- Yes

- No

Q8 In the last 12 months, were you ever hungry but didn't eat because there wasn't enough money for food?

- Yes
- No

A.4 Sources of Food / Money for Food

When people do not have enough money to buy all the food their household needs, they may use food assistance programs to get more food. Sometimes combining what they can buy and what they get from food assistance programs gives them enough to eat. Sometimes even with extra food from assistance programs they still do not have enough food. Here are some questions about your use of food assistance programs.

Q9 During the past 12 months, did you or anyone in your household ever receive SNAP (Supplemental Nutrition Assistance Program) benefits, also known as "food stamps"?

- Yes
- No

Q10 Which of the following benefits are you or your household currently receiving? Check all that apply.

- ☐ Food provided by family or friends
- ☐ Food from a food pantry; church; or food bank
- ☐ Free meal from a church; community center; park; or soup kitchen
- ☐ Food stamps or SNAP
- ☐ WIC; also known as the Women Infants and Children program
- ☐ Free or reduced school lunch
- ☐ Other; please list: _____
- ☐ None of the above

Q11 In the last month, how many times did you visit community organizations for food (e.g., food pantries, soup kitchen)?

- Never
- Once
- Twice
- Three times
- Four or more times

Q12 In the last month, what percent of your household's meals would you say were sourced from assistance you received from family, friends, community organizations, or government assistance (e.g., SNAP also known as food stamps, WIC, free or reduced school lunch)?

Display this question: If in the last month, how many times did you visit community organizations for food (e.g., food pant... != Never

Q13 Suppose the community organizations you currently visit were to permanently close. What percent of your meals would you need to actively find a replacement source for?

A.5 Missing Meals

Q14 Was there ever a time in the past 12 months when you did not have all the food you and your household needed?

- ☐ Yes
- ☐ No

Skip To: Q16 If Was there ever a time in the past 12 months when you did not have all the food you and your house... = No

Q15 When would you say you or your household did not have all the food you needed, was it during the spring, summer, fall or winter? Please mark all times that apply.

- ☐ Spring
- ☐ Summer
- ☐ Fall
- ☐ Winter
- ☐ Unsure or don't know

Q16 In the last week, would you say you and your household had all the food you needed?

- ☐ Yes
- ☐ No

Display this question: If Which of the following benefits are you or your household currently receiving? Check all that apply. != None of the above

Q17a Despite getting food assistance from Q10 - how many meals did your household skip altogether because of a lack of food in the last week? For example, if there are three people in your household and everyone skipped one dinner, that would be three skipped meals.

- ☐ Number of skipped meals: _____

Display this question: If Which of the following benefits are you or your household currently receiving? Check all that apply. = None of the above

Q17b How many meals did your household skip altogether because of a lack of food in the last week? For example, if there are three people in your household and everyone skipped one dinner, that would be three skipped meals.

- ☐ Number of skipped meals: _____

Q18 In the last week, approximately how many partial meals were served in your household because of a lack of food? For example, if there are three people in your household and everyone had a partial dinner, that would be three partial meals.

- Number of partial meals: _____

Display this question:

If Which of the following benefits are you or your household currently receiving? Check all that apply. != Food from a food pantry; church; or food bank

Or *Which of the following benefits are you or your household currently receiving? Check all that apply. != Free meal from a church; community center; park; or soup kitchen*

And *If In the last week, would you say you and your household had all the food you needed? = No*

Q19 If you have not had all the food you needed, why haven't you or someone in your household gone to a food pantry?

- I don't have transportation
- The pantry near me is not open when I can go
- I don't know where my nearest food pantry is located
- The food offered at the pantry in my area does not meet my dietary needs
- The food at my area pantry does not meet my cultural needs
- I don't feel welcome there
- I am too embarrassed to ask for assistance
- Other people need it more
- Other, please list: _____

Q20 As you seek food assistance, how often do any of the following things happen to you?

Question	Almost everyday	At least once a week	A few times a month	A few times a year	Less than once a year	Never
You are treated with less courtesy than other people are.	☐	☐	☐	☐	☐	☐
You are treated with less respect than other people are.	☐	☐	☐	☐	☐	☐
People act as if they think you are not smart.	☐	☐	☐	☐	☐	☐
People act as if they are afraid of you.	☐	☐	☐	☐	☐	☐
People act as if they think you are dishonest.	☐	☐	☐	☐	☐	☐
People act as if they're better than you are.	☐	☐	☐	☐	☐	☐
You are called names or insulted.	☐	☐	☐	☐	☐	☐
You are threatened or harassed.	☐	☐	☐	☐	☐	☐

Skip To: End of Block If As you seek food assistance, how often do any of the following things happen to you? [Never] (Count) = 8

Q21 What do you think is the main reason for these experiences? Check all that apply.

- ☐ Your ancestry or national origins
- ☐ Your gender
- ☐ Your race
- ☐ Your age
- ☐ Your religion
- ☐ Your height
- ☐ Your weight
- ☐ Some other aspect of your physical appearance
- ☐ Your sexual orientation
- ☐ Your education or income level

A.6 Demographics

QD22 Do you consider the members your household to be of Latino or Hispanic origin, such as Mexican, Puerto Rican, Cuban or some other Spanish background?

- Yes
- No
- Mixed Hispanic and non-Hispanic
- Prefer not to answer

QD23 Do you consider the members your household to be white, Black, of Asian origin, or some other race, or multi-racial?

- White
- Black (African American)
- Asian
- Other, please specify: _____
- Multi-racial
- Prefer not to answer

QD24 How many people, including yourself, live in your household now? Include adults and children. If your household has no children, please enter '0' for Children.

- Adults: _____
- Children: _____

QD27a Based on Q8 responses we will generate US income which is above 185 percent poverty line

Skip To: QD27b If Click to write the question text = No

Skip To: QD24 If Click to write the question text = Yes

QD27b Based on Q8 responses we will generate US income which is above 130 percent poverty line

Skip To: QD27c If Click to write the question text = No

Skip To: QD24 If Click to write the question text = Yes

QD27c Based on Q8 responses we will generate US income which is above 100 percent poverty line

Skip To: QD27d If Click to write the question text = No

Skip To: QD24 If Click to write the question text = Yes

QD27d Based on Q8 responses we will generate US income which is above 50 percent poverty line

Skip To: QD24 If Click to write the question text = Yes

QD28 What best describes your employment situation today?

- Employed for wages
- Self-employed
- Unemployed
- Homemaker
- Student
- Retired
- Disabled

QD29 How many people in your household are employed for wages?

- Enter number: _____

QD30 How would you describe the area your home is in?

- Rural
- Suburban
- City

QD31 Would you like to make any additional comments about your food need?

APPENDIX B

Modeling Results

In an effort to explore the relationship between food insecurity and demographic characteristics, we generate a binary measure of food security y that takes a value of 1 for respondents who are experiencing low or very low food security and 0 otherwise. We then estimate the following statistical regression model and report the results in Table [B.1](#):

$$y = \alpha + \beta X + \epsilon,$$

where X is a demographic variable of interest (e.g., respondents' reported race, ethnicity, geography, household size, etc.). It is important to note the modeling results are based on a sample size of 1,302 respondents who answered all of the survey's demographic questions.

Table B.1. Correlation between demographics and food insecurity

[illegible]

APPENDIX C

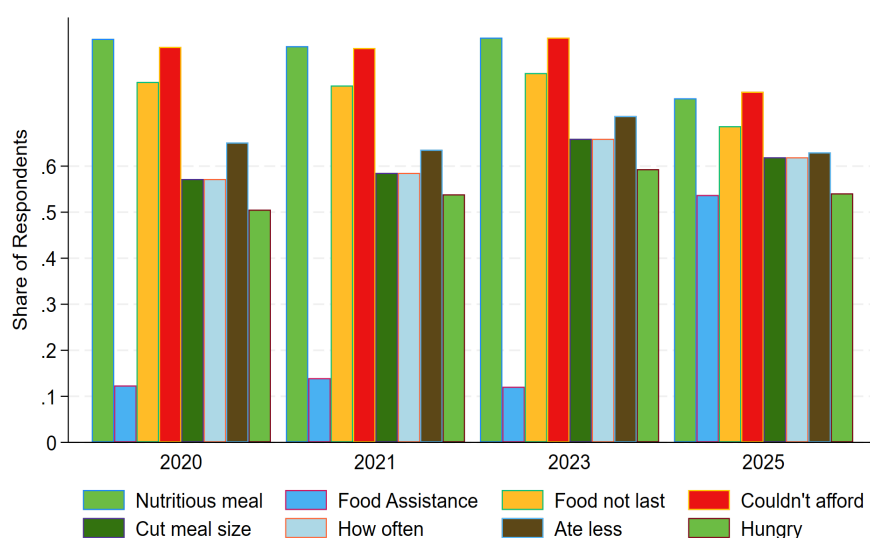
Historical Trends

To account for methodological differences across survey years, we limit our historical analysis to respondents who indicated that they are Marion County residents and have a household income below 185% of the Federal Poverty Level. This yields a total of 1,352 observations across the years 2020, 2021, 2023, and 2025, as seen in Table C.1.

Table C.1. Count of respondents residing in Marion County with income below 185% of federal poverty level

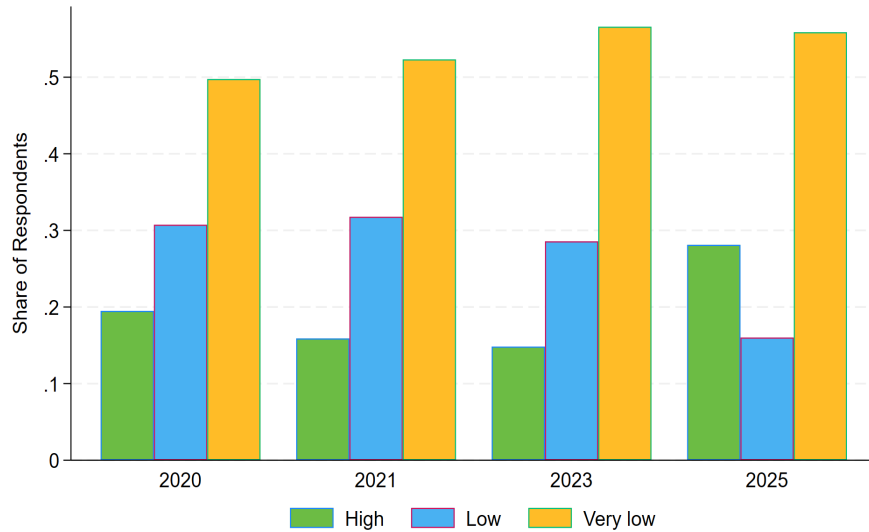
Year	Obs.
2020	631
2021	258
2023	182
2025	281
Total	1,352

Figure C.1. Historical: Food security of respondents



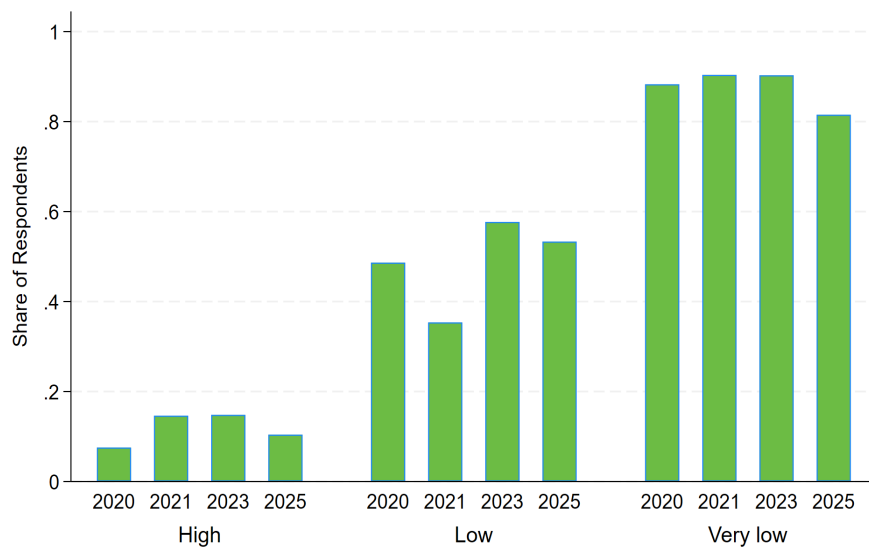
Notes: Respondents residing in Marion County with income below 185% of federal poverty level. "Nutritious meal" is associated with a screener question, where an affirmative response is that you cannot always afford to eat a good, nutritious meal. "Food Assistance" is associated with a screener question, where an affirmative response is that, in the last 12 months, someone in your household has received food assistance from family or friends, community organizations, or government food programs. In the six-item short form food security survey: "Food not last" is an affirmative response that the food you bought just didn't last, and you didn't have money to get more. "Couldn't afford" is an affirmative response that you couldn't afford to eat balanced meals. "Cut meal size" is an affirmative response that, in the last 12 months, someone in the household cut the size of meals or skipped meals because there wasn't enough money for food. "How often" is an affirmative response that meals were cut or skipped frequently. "Ate less" is an affirmative response that, in the last 12 months, you ever ate less than you felt you should because there wasn't enough money for food. "Hungry" is an affirmative response that, in the last 12 months, you were ever hungry but didn't eat because there wasn't enough money for food.

Figure C.2. Historical: Response to food security questions



Notes: Respondents residing in Marion County with income below 185% of federal poverty level

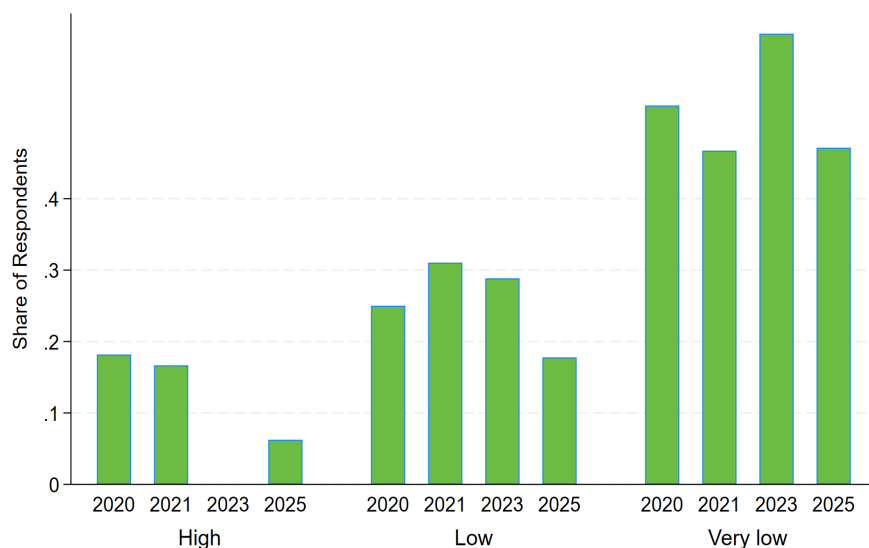
Figure C.3. Historical: Respondents experiencing food need in the last 12 months



Notes: Respondents residing in Marion County with income below 185% of federal poverty level. 'High' indicates food security score of 0–1, 'Low' indicate food security score of 2 – 3, and 'Very low' indicates food security score of 4 – 6. 'Food need' is defined as not having all the food needed in the last 12 months.

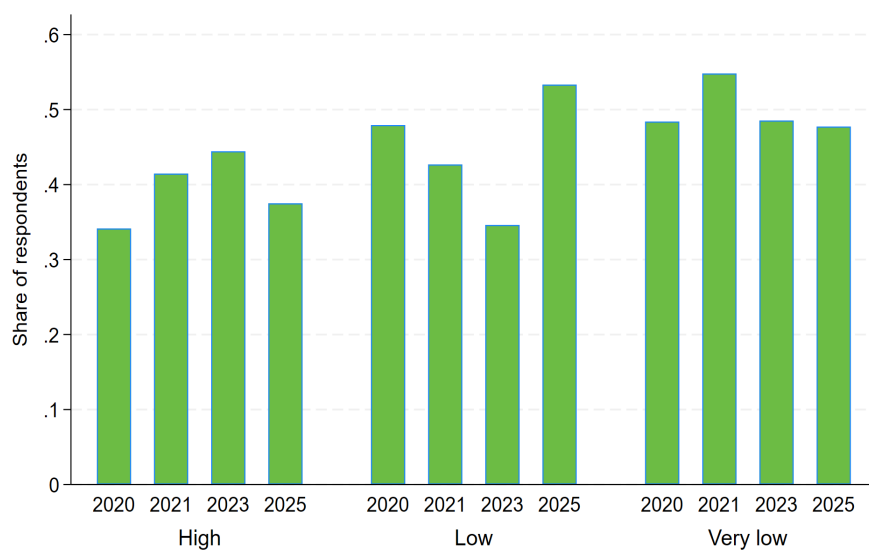
Appendix C. Historical Trends

Figure C.4. Historical: Respondents experiencing food need in the last week



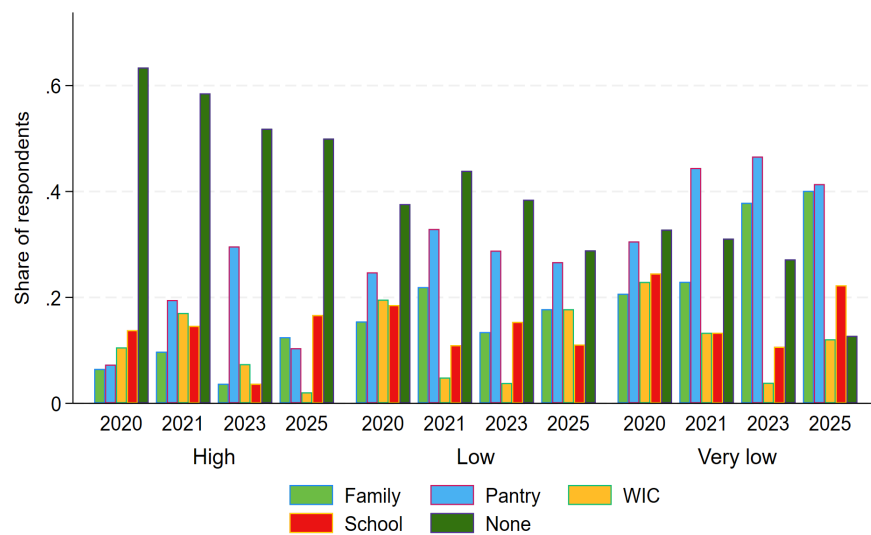
Notes: Respondents residing in Marion County with income below 185% of federal poverty level. 'High' indicates food security score of 0–1, 'Low' indicate food security score of 2 – 3, and 'Very low' indicates food security score of 4 – 6. 'Food need' is defined as not having all the food needed in the last 12 months.

Figure C.5. Historical: SNAP use in last 12 months



Notes: Respondents residing in Marion County with income below 185% of federal poverty level. 'High' indicates food security score of 0–1, 'Low' indicate food security score of 2 – 3, and 'Very low' indicates food security score of 4 – 6.

Figure C.6. Historical: Type of food assistance currently receiving, by food security status



Notes: Respondents residing in Marion County with income below 185% of federal poverty level. ‘High’ indicates food security score of 0–1, ‘Low’ indicate food security score of 2 – 3, and ‘Very low’ indicates food security score of 4 – 6.

References

- [1] Sunjin Ahn, Travis A Smith, and F Bailey Norwood. Can internet surveys mimic food insecurity rates published by the us government? *Applied Economic Perspectives and Policy*, 42(2):187–204, 2020.
- [2] Census. *Phase 1 Questionnaire: Household Pulse Survey Questionnaire (June 11 – July 21)*, 2020.
- [3] Census. *Phase 2 Questionnaire: Household Pulse Survey Questionnaire (August 19 – October 26)*, 2020.
- [4] Census. *Phase 3 Questionnaire: Household Pulse Survey Questionnaire (January – March 29, 2021)*, 2020.
- [5] Census. American community survey 5-year estimates, 2024, 2024.
- [6] Mick P Couper. New developments in survey data collection. *Annual review of sociology*, 43(1):121–145, 2017.
- [7] ERS. *U.S. Adult Food Security Survey module: Three-stage Design, with Screeners*, 2012.
- [8] ERS. *U.S. Household Food Security Survey Module: Three-stage Design, with Screeners*, 2012.
- [9] ERS. *U.S. Household Food Security Survey Module: Six-Item Short Form*, 2024.
- [10] Erin R Hager, Anna M Quigg, Maureen M Black, Sharon M Coleman, Timothy Heeren, Ruth Rose-Jacobs, John T Cook, Stephanie A Ettinger De Cuba, Patrick H Casey, Mariana Chilton, D.B. Cutts, Meyers, A.F., and D. A. Frank. Development and validity of a 2-item screen to identify families at risk for food insecurity. *Pediatrics*, 126(1):e26–e32, 2010.
- [11] HHS. *2025 Poverty Guidelines: 48 Contiguous States (all states except Alaska and Hawaii)*, 2024.
- [12] Anna C Holland, Matthew C Kennedy, and Stephen W Hwang. The assessment of food security in homeless individuals: a comparison of the food security survey module and the household food insecurity access scale. *Public Health Nutrition*, 14(12):2254–2259, 2011.

- [13] Ronaldo Iachan, Tala H Fakhouri, John M Boyle, and Naomi Freedner-Maguire. Characteristics of the population of internet panel members. *Survey Practice*, 10(4), 2017.
- [14] L.L. Kaiser, C.L. Lamp, M.C. Johns, J.M. Sutherlin, J.O. Harwood, and H.R. Melgar-Quinonez. Food security and nutritional outcomes of preschool-age mexican-american children. *Journal of the American Dietetic Association*, 102(7):924–929, 2002.
- [15] Andrew W Mercer, Frauke Kreuter, Scott Keeter, and Elizabeth A Stuart. Theory and practice in nonprobability surveys: parallels between causal inference and survey inference. *Public Opinion Quarterly*, 81(S1):250–271, 2017.
- [16] James Ohls, Larry Radbill, and Allen Schirm. *Household food security in the United States, 1995-1997: Technical issues and statistical report*, 2001.
- [17] M.P. Rabbitt, M. Reed-Jones, Laura J. Hales, and M.P Burke. Household food security in the united states in 2023. Technical report, U.S. Department of Agriculture, Economic Research Service, 2024.
- [18] U.S. Department of Commerce, Bureau of the Census (Census). Evolving the household pulse survey. <https://www.census.gov/newsroom/blogs/random-samplings/2024/09/evolving-household-pulse-survey.html>, 2024. Accessed: 2025-06-26.
- [19] U.S. Department of Commerce, Bureau of the Census (Census). Household pulse survey: Measuring emergent social and economic matters facing u.s. households. <https://www.census.gov/programs-surveys/household-pulse-survey.html>, 2025. Accessed: 2025-06-26.