Disparities of Food Insecure Communities in Montgomery, Alabama

Jordan Branchman^{1,*}, and Rebecca Retzlaff²

^{1,*} Undergraduate Student, Department of Political Science, Auburn University ² Professor, Department of Political Science, Auburn University

Food deserts, high rates of poverty, and spatial mismatch-the geographical distance between potential suitable job opportunities and communities that are low-income-are contributors to the overwhelming rates of food related health issues, generational challenges, and urban crime within Montgomery, Alabama. The social and health-related inequalities of food desert communities, as well as the many crippling effects of limited food accessibility and affordability in Montgomery, reflect many regions across the nation. To address these concerns, Montgomery city officials and community leaders are compelled to incentivize grocery retailers, create community-based initiatives, and form an improvement prevention program which addresses both future food-related health risks and economic development.

For many urban and west Montgomery residents, the connection between food desert communities and the lack of economic opportunities and growth is quite evident. As low- income community members attempt to find various forms of transportation and live without appropriate grocery food retailers within their neighborhood (or less than a mile away), the city of Montgomery will also continue to experience a higher rate of morbidity and mortality-when compared to the state and national averages-which are results of food related health issues (e.g., diabetes, cancer, etc.). To further prevent this, community-based initiatives such as community gardens and food pantries have been a welcoming solution for many communities and urban regions across the nation that similarly face food insecurity.

Providing potential grocery retailers with tax incentives to locate to urban, food insecure communities has also been a positive attribute to practicing cities facing the challenges of food deserts in the United States. This return on investment– providing tax incentives to grocery retailers in food desert regions and communities– assists communities beyond the increased accessibility to healthy foods.

Grocery stores are largely recognized as vehicles for economic growth as they also increase property value in surrounding communities and commercial real estate. For cities such as Philadelphia, Pennsylvania, newly placed supermarkets in food insecure communities increased home equity for homeowners in surrounding communities from one-quarter to one-half of a mile. For the city of Montgomery, various opportunities (such as the recruitment of grocery retailers, the implementation of community-based gardens, and the promotion of food education, etc.) will not only decrease the rate of food insecurity but also invest in the lives and generational outcomes for community members.

In this project, I analyzed the population data of Montgomery County, in which Montgomery city residents represent eighty- seven percent, and the rate of individuals experiencing food insecurity. Food insecurity–a household-level economic and social condition of limited access to adequate food–currently impacts nearly 40,000 individuals in Montgomery County, Alabama.

When compared to the nation, Montgomery County has consecutively for the past four years maintained a higher percentage of food insecurity (Figure 1). As inner-city and west Montgomery residents combat the inaccessibility to grocery stores, the effects of minimal employment opportunities due to the lack of economic development contribute to the rise and frequent occurrence of poverty amongst urban communities within the city. Although the city of Montgomery is finding

^{*} Corresponding author: jab0235@auburn.edu

strategies to enhance economic opportunities by way of the Retail Development subsection of the city's Development Division, the rate of poverty amongst those within the city are 9.6% higher than the national average. Contributions to this extreme poverty are linked to the direct disadvantage of minimal job opportunities and low economic opportunity.

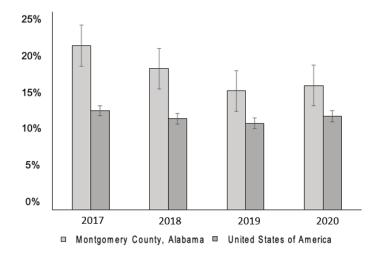


Fig. 1 Rate of food insecurity in Montgomery, AL.

Furthermore, the United States Census Bureau indicates that in 2021 twenty-one percent of individuals in the city of Montgomery were impoverished. As most impoverished communities in Montgomery also experience the hardships of food deserts-communities that meet the thresholds of being both low-income and have low accessibility to a grocery retailer (a mile or less away), it is no coincidence that these communities are also isolated from potential suitable job opportunities due to low vehicle accessibility and limited forms of transportation in these areas of the city (Figure 2).

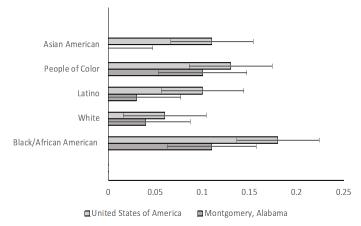


Fig. 2 Vehicle inaccessibility for Montgomery, AL residents.

As established, minimal food and vehicle accessibility amongst these regions guarantee food insecurity; however, in combination with these inequalities, poverty and low economic opportunities create additional stressors for Montgomery residents. Like the rate of food insecurity, Montgomery's rate of reported crime and low social capitol exceed the national average in a consecutive four-to-five-year period. Although the reported crime in Montgomery decreased in the year 2020, the percentage of food insecure individuals increased. Due to the COVID-19 pandemic, food deserts are of great concern for many city officials and local nonprofit organizations, but so is the expected high rate of crime now that city-implemented health restrictions have now lessened.

Researchers have determined that crime with the intent of monetary gain (e.g., robbery and burglary) typically align more with food insecure communities. Utilizing the city of Montgomery's Crime Mapping System, out of 316 crime related incidents within the past observed 180 days, 146 criminal incidents are related to larceny, burglary, robbery, or some form of theft in inner-city and west Montgomery. Although nonviolent crimes are more associated with food insecure communities than reported violent crimes, the city of Montgomery has a violent crime rate that consecutively surpasses the national average of violent crimes in the nation (Figure 3).

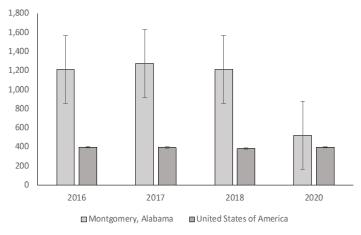


Fig. 3 Rate of violent crimes in Montgomery, AL.

Although there is an established correlation and connection between food insecurity, poverty, and spatial mismatch–and the effects of these variables–within inner-city and west Montgomery communities, unobserved variables (such as primary and secondary education rates amongst community members) may also present pertinent data that further explains the relationship between food insecurity, poverty, and spatial mismatch.

Nevertheless, I determined from my research that vehicle inaccessibility, crime, and the rates of morbidity and mortality seen in food insecure communities within Montgomery, Alabama are related and can be explain by the high rates of food insecurity experienced by community members. As citizens in food insecure communities are likely to not have vehicle accessibility, they are also more likely to experience spatial mismatch and the inaccessibility to economic opportunity beyond their communities. Additionally, the crime rates relating to food insecure communities can be explained by the increased rates of poverty and minimal economic opportunities.

To address food insecurity and the correlating issues, city leaders of Montgomery should be more inclined to attract grocery retailers in urban, food insecure regions of Montgomery. To promote more economic growth, recruiting grocery retailers will likely create a positive impact on the high rate of poverty and limited vehicle accessibility, as well as decreasing the high rates of morbidity and mortality seen in inner-city and west Montgomery.

Statement of Research Advisor

This project analyzes various socioeconomic and communal issues that impact food insecure communities in Montgomery, Alabama. Jordan has successfully identified potential areas of opportunity for city officials and local community members to increase food security and economic growth for impoverished, food desert communities in Montgomery, AL.

- Rebecca Retzlaff, Department of Political Sciences, College of Liberal Arts

References

[1] The Office of Primary Care and Rural Health, Alabama Department of Public Health, and The Alabama Rural Health Association., Selected Health Status Indicators: Montgomery County. Retrieved March 22, 2023, from https://www.alabamapublichealth.gov/ruralhealth/assets/Mo ntgomery13.pdf (April 2013). [2] Goldstein, I., Loethen, L., Kako, E., and Califano, C. CDFI Financing of Supermarkets in Underserved Communities: A Case Study. Retrieved March 24, 2023, from https://www.reinvestment.com/wpcontent/ uploads/2022/03/ CDFI_Financing_of_Supermarkets_ in_Underserved_Communities_A_Case_Study-Report_2008.pdf, (August 2008). pp.7-8.

[3] Feeding America, Food Insecurity among Overall Population in Montgomery County. Retrieved March 25, 2023, from https://rb.gy/h2167, (2020).

[4] The United States Census Bureau, QuickFacts: United States; Montgomery city, Alabama. Retrieved March 28, 2023, from https://rb.gy/jom52, (2021).

[5] National Equity Access, Car Access: Montgomery, AL. Retrieved April 01, 2023, from https://rb.gy/ p82jh,(2023).

[6] Jonathan Randel Caughron, "An Examination of Food Insecurity and Its Impact on Violent Crime in American Communities," Clemson University Tiger-Prints, pp. 26-27, (2016).

[7] Federal Bureau of Investigation, Crime Data Explorer. Retrieved April 06, 2023, from https://rb.gy/rwi4j, (2021).

Authors Biography



Jordan Branchman, a native of Montgomery, Alabama, is an undergraduate student at Auburn University pursuing a B.A. degree in Political Science. Jordan has a strong interest in food justice and equity in urban centers and impoverished communities.



Rebecca Retzlaff, PhD, AICP, is a professor in the Master of Community Planning Program and director of the interdisciplinary Academic Sustainability Program. Her research interests are planning law and planning history.