UMD Info Challenge 2022 - USDA
IC TEAM # 22050
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## <u>Top Deterrents to Food Access in Highly Underserved U.S. Populations from National Household Food Acquisition and Purchase Survey (FoodAPS) in 2012</u>

**1.** Research Question: What are top contributors that prevent access to nutritious foods for the demographic with least access?

## 1. Methodology:

- 1. Find demographic with least access to food based on:
  - 1) least income/assets
  - 2) farthest distance to a nearby supermarket
  - 3) no access to transportation
- 2. Abstract: According to the Journal of American Medical Association (JAMA), poor diet posed the greatest risk of death in the United States with poor diet being a primary contributor to over half a million deaths in 2016. Therefore, it is important to examine what prevents a highly under-served population from accessing nutritious foods. By analyzing the United States Department of Agriculture (USDA) National Household Food Acquisition and Purchase Survey (FoodAPS) data collected in 2012, and using Tableau as a data visualization tool, we identified the demographic with the least access to nutritious foods by focusing on the following three variables: 1) least income, 2) farthest distance to a nearby supermarket, and 3) no access to transportation. Once we filtered the data and located this demographic, we analyzed our visualizations along with previous research findings to arrive at a holistic understanding of top contributors that prevent access to nutritious foods for this demographic. Based on our findings, our recommendations for policy change include: 1) increasing access to supermarkets, 2) incentivizing food delivery services for low-access locations, 3) supporting local food businesses, 4) expanding urban agriculture, and 5) increasing efficiency in the perishable food supply chain. For future work, we recommend examining access to technology or implementing smartphone delivery applications as an intervention to low food access in this demographic.

## References

1. The US Burden of Disease Collaborators. The State of US Health, 1990-2016: Burden of Diseases, Injuries, and Risk Factors Among US States. *JAMA*. 2018;319(14):1444–1472. doi:10.1001/jama.2018.0158