

An Analysis of Inadequate Grocery Store Access in the United States

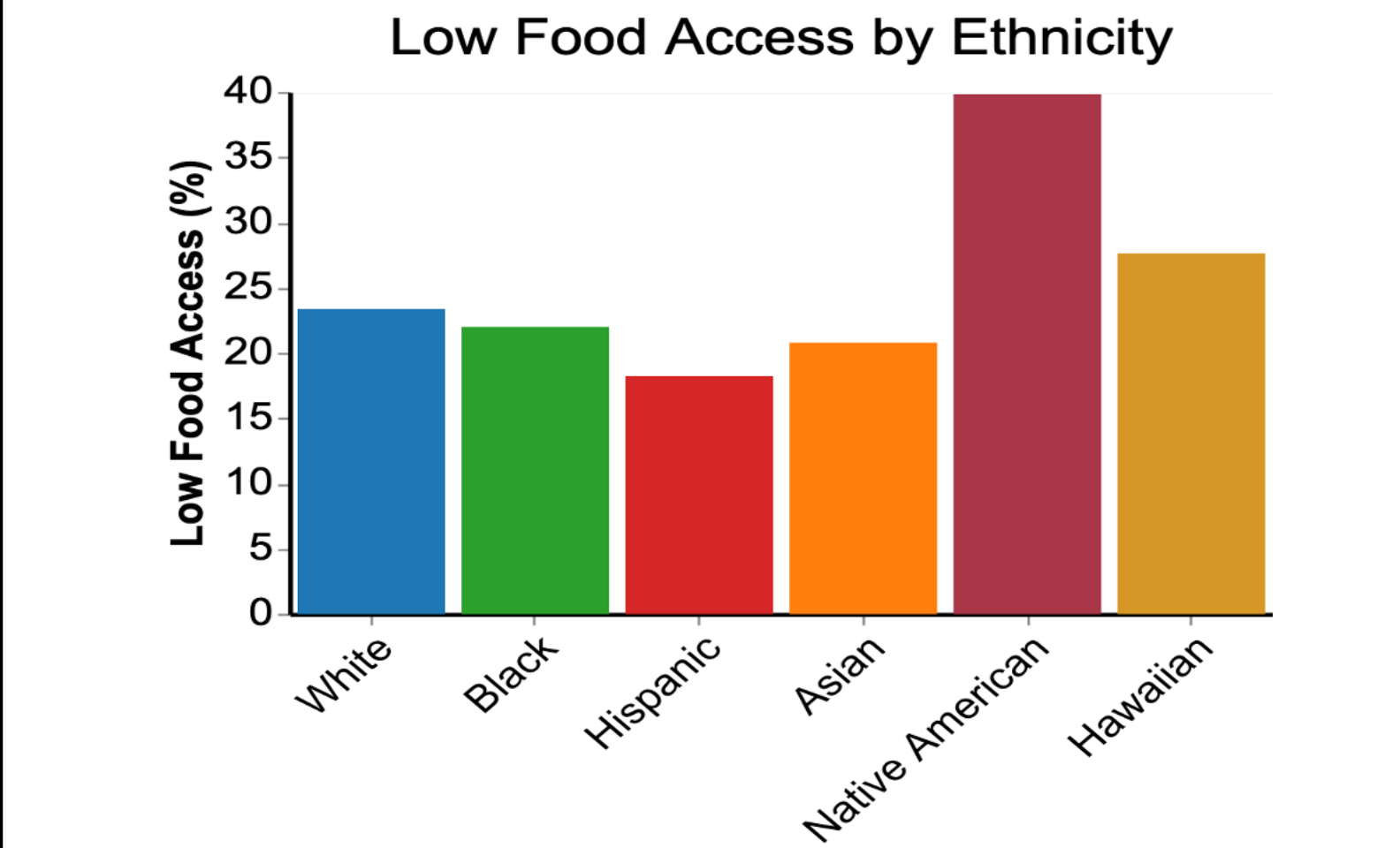
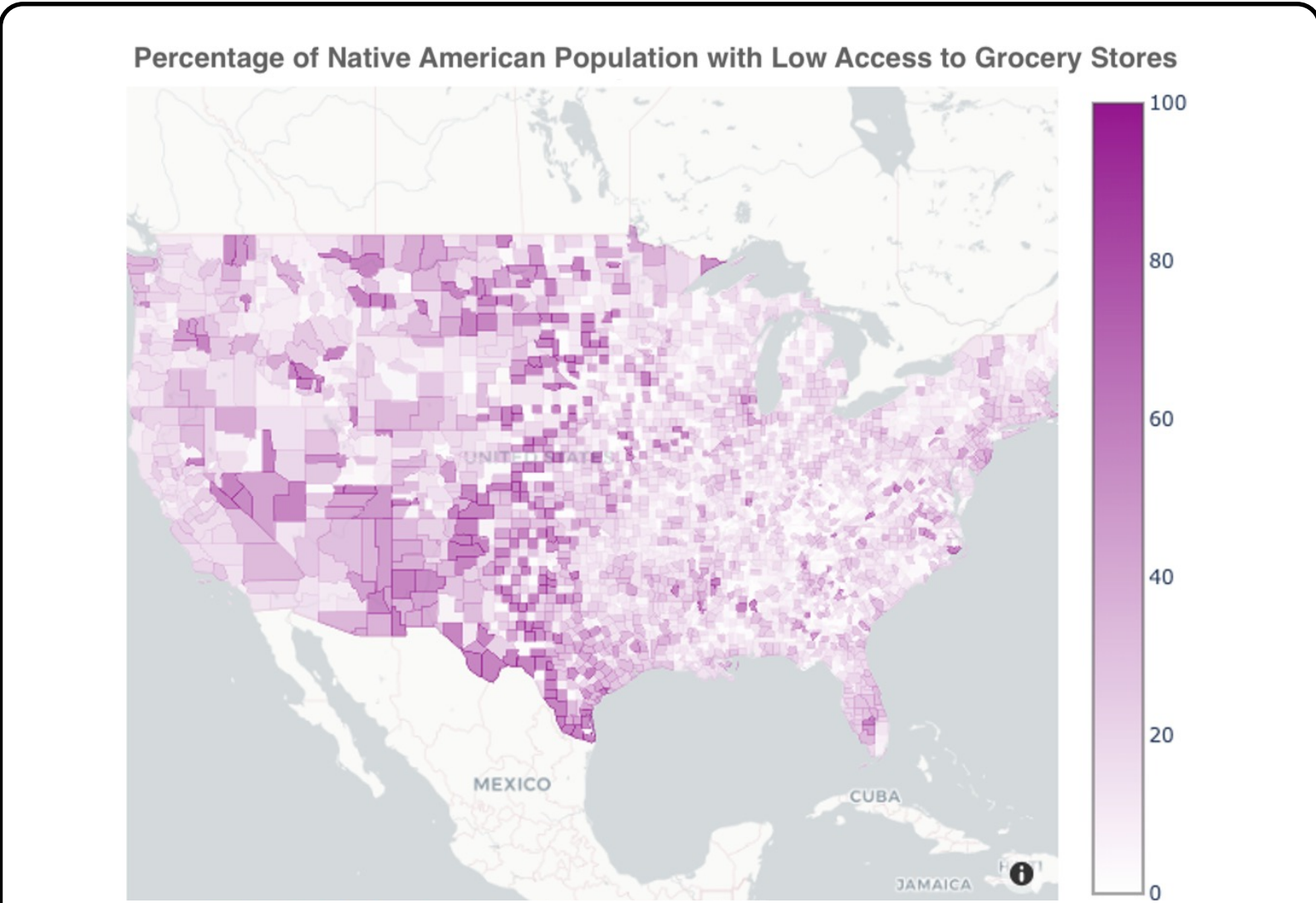
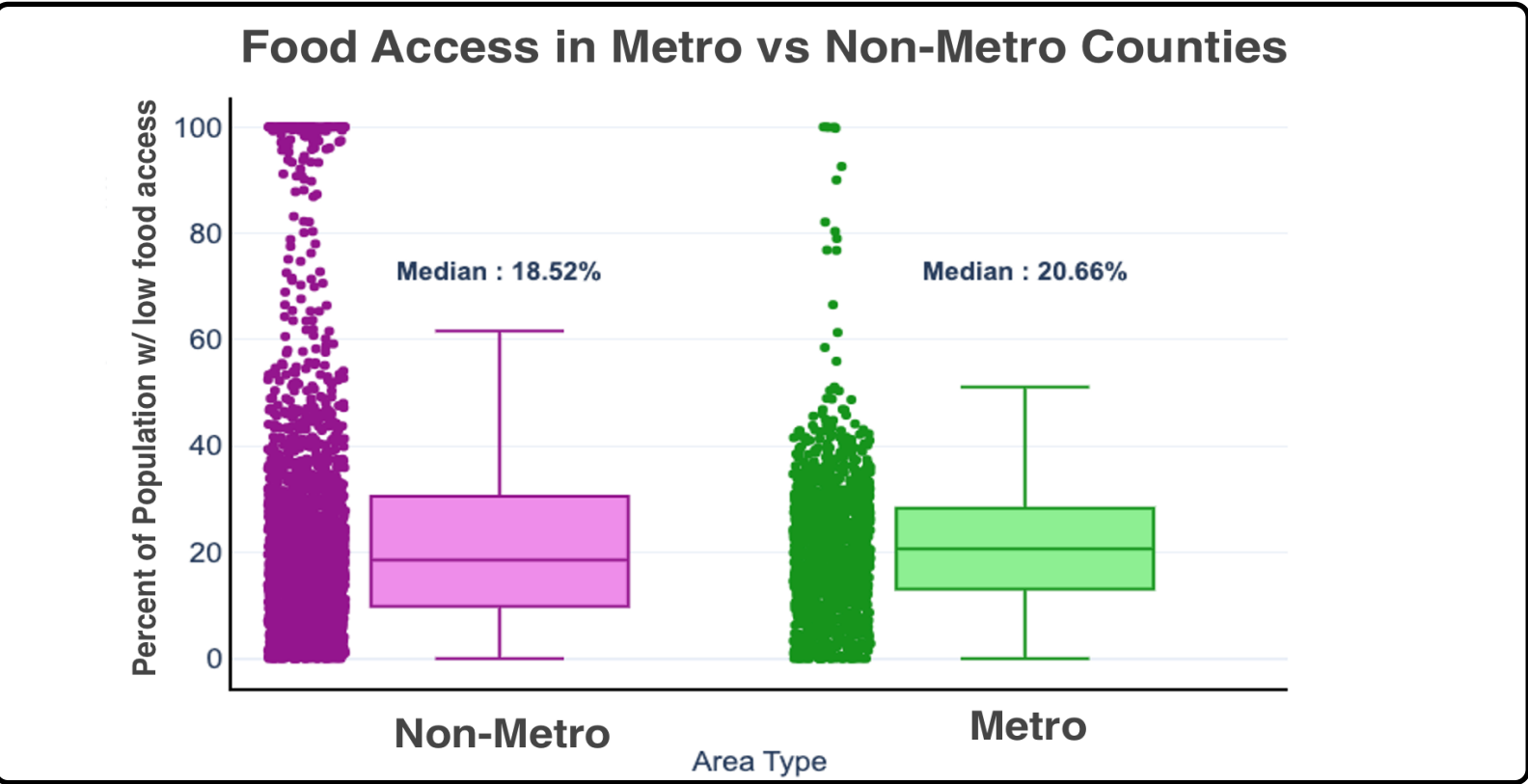
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Introduction

In the United States, over 10% of the population experiences food insecurity. Food insecurity has significant health and economic impact on both individuals and communities. Typically, people think about food insecurity as a financial problem, however it can also be a geographic one, known as living in a “food desert”. Having poor access to grocery stores and quality foods can be a form of food insecurity, and the average rate of poor food access is over 20%. This means that many Americans may be food insecure without knowing it. In this analysis we will visualize what areas of the country suffer from inadequate access to food, and what populations have low food access at disproportionately high rates. We will also take a look at WIC, a federal food assistance program, participation rates. In addition, we will look at the relationship between food access and other variables, including food insecurity in the hopes of gaining a comprehensive understanding of where and who is disproportionately suffering from inadequate food access.

Methodology

The data used for this analysis is the Food Environment Atlas collected by the US department of Agriculture. It consist of county level data regarding food accessibility measures and other demographic variables such as ethnicity and population. Low food access is defined as being 1+ mile away from a grocery store in a metro county and 10+ miles in a non-metro county



Results

- 1) Most counties with high percentage of resident lacking adequate food access are in the middle of the country (Oklahoma, Kansas, Nebraska, Dakota's)
- 2) Counties in Metro areas have a higher median low food access rate, however there are far more non metro counties with nearly 100% low food access than metro counties
- 3) Native American populations are especially hard hit in western and southwestern counties
- 4) Native American and Hawaiian ethnic populations have significantly higher rates of inadequate food access than other ethnicities
- 5) Counties with high rates of food insecurity typically have lower median income and higher rates of obesity.
- 6) Low food access rate does not strongly correlate with standard county demographic variables.
- 7) WIC (Food Assistance Program) participation fell across all states between 2012 and 2018

Conclusion/Discussion

This analysis shows that there are certainly disparities in geographic regions suffering low food access and specific populations as well. Particularly the flyover states and Native American populations are especially hard hit. However, it is clear from this analysis that low food access is not the result of any standard demographics regarding a county, however food insecurity is. This gives policy makers an idea of where the problem lies, but further research needs to be done to address why the problem arises in these areas. Finally, this analysis found that WIC participation rates have fallen in all states between 2012 and 2018. WIC is a vital program for many families experiencing food insecurity and it is therefore crucial that the cause and effects of this drop in participation are further researched.

