**Northern California Food Desert Analysis**

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Summary:

Food deserts are regions where people have limited access to healthful and affordable food. This may be due to having a low income or having to travel farther to find healthful food options. The Food Access Research Atlas, which we used for our analysis, ‘maps food access indicators for census tracts using ½-mile and 1-mile demarcations to the nearest supermarket for urban areas, 10-mile and 20-mile demarcations to the nearest supermarket for rural areas, and vehicle availability for all tracts.’[[1]](#footnote-1) In this report, we examine the socioeconomic and demographic characteristics of these tracts to see how they differ from county to county in Northern California.

In our analysis, food desert tracts in Northern California tend to come from counties with smaller populations, are more rural, from counties with population loss, and lower incomes.

Census tracts with higher poverty rates are more likely to be food deserts but, in our analysis, otherwise similar low-income census counties in rural areas had higher low access scores than counties with very dense and highly populated urban areas. Further, counties with smaller populations and/or with population loss, saw on average, higher decreases of access to healthy food options.

Overall, of the 25 counties on which we focused, there were only 5 counties that saw a significant decrease in access.

Limitations:

First, the figures we used provided data at the county level, so this does not preclude areas with otherwise “good” food desert scores from having multiple areas or tracts where food deserts are present. Also, we focused our analysis Northern California. Consequently, while there may be moderate or even high correlations between, for example low access scores and household income, p-values tended to be high as well. For that reason, the scope may be a little too focused to draw any concrete conclusions without further analysis.

Evidence:

The presence of grocery store and superstore access are two of the most important indicators of low access to healthy food options. We also saw, that as grocery store decreased, so did specialty stores such as butcher shops, vegetables stands, or bakeries. So, when grocery stores decrease, it tends to come along with the decrease of other healthy options.

In addition, while superstore may provide access to healthy foods and tend to increase with the decrease of traditional grocery stores, they are not replaced on a one-to-one basis and usually fewer and farther in between, making the travel times in rural communities even longer.

At the same time, fast food options stayed relatively constant even as other option decreased, leaving counties with low access scores, higher access to fast food in comparison to other healthy option.

We found a moderate correlation between counties with population loss and an increase in low access scores. In addition, a moderate correlation between the population and change in low access.

Conclusion:

1. https://www.ers.usda.gov/data-products/food-access-research-atlas/about-the-atlas/ [↑](#footnote-ref-1)