Availability of SNAP Retail Stores in King County, WA

Background

- In 2013, King County, Washington was home to 2,044,049 residents which accounts for slightly less than 1/3 of Washington State’s total population [1].
- 10.9% of persons living in King County were below the poverty level in 2013[1].
- The Supplemental Nutrition Assistance Program (SNAP) is a nationwide program designed to help families in need purchase enough food each month.
- In King County, 14% of people are considered to be food insecure (compared to 15% in Washington State) and of those food insecure people, 55% are eligible for SNAP (compared to 67.5% in Washington State) [2].
- To be eligible to receive SNAP benefits, the household income must be below 200% of the Federal Poverty Level (FPL) [3].

Washington State

King County

Seattle

Project Description

- I explored the relationship between low-income populations and accessibility and availability of food retailers that accept SNAP benefits to purchase healthy food. The aim of this project is to highlight gaps in services where there are large populations of low income people that are eligible for SNAP but few retail locations to use those SNAP benefits.
- My research question is, “are there ‘high need’ areas in Washington State that have high numbers of SNAP eligible populations and few opportunities to use those SNAP benefits to purchase food? Especially healthy foods?”

Methodology

- Census tract level data from the American Community Survey was used to show the number of individuals at 200% FPL in the past 12 months. Data was normalized by calculating the number of individuals per square mile. This helps to illustrate areas with a high volume of SNAP recipients while accounting for differences in census tract size.
- The majority of SNAP stores illustrated on the map are small corner stores, convenience stores or small grocery stores which do not always have healthy options (such as fruits and vegetables). Therefore, locations were hand coded to differentiate between healthy (green dots) and non-healthy stores (blue dots).
- Healthy was defined as large supermarkets and farmers markets which often provide a variety of fruits and vegetables at an affordable price. Gas stations, included in the original data set were excluded from this analysis.
- Access to SNAP retail stores was defined by a ½ mile radius. This was chosen because it is the typical walking distance used by the USDA to define a food desert in an urban area.
- Circular zones were created to represent the number of points within a half mile for every location on the map. Availability of more SNAP stores (within a ½ mile radius) is demonstrated by darker zones on the map.

Results and Conclusion

- After applying the aforementioned spatial analysis to King County a few areas of high need were identified. For example, White Center and the Bryn-Mawr Skyway are two urban residential areas that appear to have a high number of SNAP eligible people and few healthy stores that accept SNAP benefits.
- Overall, access to healthy SNAP retail stores was of particular concern as there were fewer of these options available. Therefore, certain areas in King County may benefit from more retail stores that accept SNAP, especially with healthy options.
- In addition, through further analysis I was able to identify 14 “high need” census tracts in Washington State (see map below). These may be areas of particular interest to investigate in the future.
- Though this analysis was successful in pointing out areas of concern, there are several caveats to these findings:
  - This map does not take into account the influence of public transportation and ability to drive to these locations.
  - Data on SNAP eligibility is a 5 year estimate (2008-2012) and therefore may not paint the whole picture. For future studies involving this question, a more rigorous determination of healthy stores versus non-healthy stores should be completed.

Census Tracts to Investigate Further in WA

- This map shows the number of SNAP Retail stores within a half mile for every location on the map. The darker areas represent neighborhoods with many SNAP stores. Areas shown in dark orange with few stores are considered “high need” areas.