Capstone Project – Identifying Food Deserts and Food Swamps

By Nicole Lemis

1. Introduction:
   1. Background

Often I like to look around at houses online, thinking about moving again some day. Often when I do this and find one I like I send to my husband and his first question is “how far is the nearest grocery store?”. From this I learned about the term food deserts; which is used when there is limited access of food from supermarkets and food shops that provide nutritious food where the population resides more than one mile from a supermarket or a large grocery stores and areas with an abundance of unhealthy food sources are considered food swamps (<https://kinder.rice.edu/sites/g/files/bxs1676/f/documents/Food%20Insecurity.pdf>). Houston Texas is a sprawling city with a population of 2.326 million people covering 637.4 square miles (2018 wikipedia) with both urban, suburban and rural areas, the probability of a food deserts and food swamps is highly probable especially due to no zoning laws.

1.2 Problem

The problem with Food deserts is that, with little access healthy food, there may be more health problems. This project aims to identify areas around Houston where Food deserts are located and look at the correlation between food deserts and food swamps. Additionally if possible, examine the population in Houston most affected by food deserts

* 1. Interest

Interest in identifying Food Deserts would be both the governments and Food assistant programs to help increase access to healthy foods. Additionally, it would be advantageous for a grocery store looking for a new location.

1. Data Acquisition and Cleaning
   1. Data Sources

Data that would be used to solve this would include locations of grocery stores and supermarkets, along with and food location from Foursquare. If Food Assistant programs that feed areas are not on Foursquare, that data would also need to be acquired Additionally Demographic data would be useful to look at the effect which will be taken from (<https://www.houstontx.gov/planning/Demographics/>)

Im planning to use the Data to look for areas with little access by calculating the 1 mile radius from each store. From there I should be able to locate areas locations have no access, or areas that are a concern.