Introduction/Business Problem

During a meeting with the home owners association in Huntsville, Alabama, there was a discussion about what to do with an undeveloped plot of land in the neighborhood. One member suggested the installation of a dog park. During the pitch, the member who suggested the dog park noted that while there may be a little bit of maintenance in running a dog park, it would raise property values. After some debate, the rest of the members of the HOA decided it would have to be decided in the next meeting and they requested more information to really identify if building a dogpark is worth it for property values in the neighborhood. The analysis will be done using the foursquare API alongside the API provided by the real estate marketplace, Zillow.

Data

To do this analysis, I will gather up data on multiple neighborhoods in the Huntsville area using foursquare's API. I will use data clustering techniques to identify neighborhoods that are similar to one another in terms of nearby venues and I will then identify if any of those neighborhoods contain a dog park within 3 miles. The neighborhoods with dog parks will be compared to the neighborhoods within their cluster. In an effort to normalize the size of homes and the walk-ability of the neighborhoods which are unaccounted for on Zillow. I will utilize the historical data of average 3 bedroom home values provided by Zillow. Using foursquare, I will identify when the dog park was created by getting the details of the venue. I will then track the value of the homes in the neighborhood overtime and compare how the value rose after the installation of the dog park compared to how values changed for other neighborhoods. I will repeat this process for Columbus, GA as it is also a military city with a similar population as well as for Port St. Lucie, FL.

After the data is collected, I will compare and plot data showing how home values compared after the installation of a dog park versus other neighborhoods. I