

# Introduction

## *Problem*

When moving to a new city it can be challenging to identify the strengths and weaknesses of different neighborhoods. Each neighborhood is unique in its own right and it can be difficult to tell what the defining characteristics are simply from reviews alone. Wouldn't it be nice to look up a group of neighborhoods and see what types of businesses they specialize immediately? This would save a considerable amount of time in identifying what there is to do in each of these areas.

## *Solution*

This project looks to show how a neighborhood compares against the global mean for each type of business category. The user inputs the neighborhood(s) they would like to evaluate and the code compares the presence of each business category against the average for the city. This code uses Foursquare data to develop distinct business categories for each business to be grouped by. A graph and map are then output for the user to visually understand the offerings of each neighborhood.

## *Target Audience*

This neighborhood comparison looks to provide local residents, out of town visitors, and people moving within a city the ability to quickly assess the types of businesses available in a neighborhood. There are many general guides on the internet that provide neighborhood assessments, but may prove burdensome to dig through and read individually. This tool will offer a strong starting point for these audiences to gain a preliminary analysis of each chosen neighborhood. They can then go more in depth by finding further information and reviews online from other sources. Pulling and grouping the Foursquare data could have further use in developing a heat map based application that holistically shows which neighborhoods are best when compared against a chosen category.