Housing Sales Prices and Venues Data Analysis of Boston Neighborhoods

1. Introduction

Being a recent graduate, I seriously think about relocation from a small town in Eastern Connecticut to a big city with more job opportunities like Boston and New York. There is a lot of information available for choosing a place to live in New York; however, there is significantly less information (at least gathered in one place) about choosing a place to live in Boston. This project will focus on answering the question about choosing a neighborhood in Boston to help people like me who consider a job with relocation to Boston.

Boston is a very diverse city with a population of 694,583 in 2018 on 48 square miles (124 km²). It is sometimes called a "city of neighborhoods" because of the profusion of diverse subsections; the city government has officially designated 23 neighborhoods [1]. In this project, we will analyze venues data for each neighborhood, segment and cluster the venues, and combine this information with the median price for a condo in each neighborhood, so that people with different preferences will have a full picture for choosing a neighborhood to live in Boston.

2. Data

For the project, we will use the following data and tools:

- Boston Neighborhoods Geospatial Dataset from BostonMaps Open Data managed by the City of Boston's GIS Team [2]. This *geojson* file contains polygon coordinates for each Boston neighborhood that will be used to create choropleth maps.
- Foursquare API to get the most common venues of each Boston neighborhood [3].
- Condo Prices in Boston 2018 Report from Boston magazine showing median condo prices in Boston neighborhoods [4]

References:

- 1. Wikipedia Boston
- 2. Boston Neighborhoods Geospatial Dataset
- 3. Foursquare API
- 4. Condo Prices in Boston 2018 Report