capstone_boston_report

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1 Boston Neighborhoods: Trending Locations and WiFi Usage

1.1 Introduction

When moving to or visiting a new city, the types of locations and relative density of retail, restaurants, etc can give you a good idea of the character of the various neighborhoods. However, the lists of locations miss a crucial factor in determining where to live or visit - namely who frequents the trending locations. Are these neighborhoods where locals go out to eat, hang out at the park, or find entertainment? Or are the locations primarily a draw for others to come into the neighborhood?

Particularly in a city like Boston that hosts a massive student population and is a historic tourist draw, the prospective new resident will want to understand the amenities of each neighborhood in context of who frequents them. As a first step towards answering this question, the Wicked Free Wireless dataset from the city of Boston can help to understand who is out and about in the various neighborhoods.

Areas that see high traffic from non-residents would see an increase in public wireless connections compared to otherwise similar neighborhoods catering primarily to locals. Alongside FourSquare locations data and proximity of universities this data will give a fuller picture of the Boston neighborhoods for both potential residents and visitors to use.

1.2 Data

The city of Boston recognizes 23 neighborhoods. Many data sets for the city and it's neighborhoods are available from Analyze Boston (https://data.boston.gov/). This includes a neighborhood geospatial dataset accessible as JSON or csv (https://data.boston.gov/dataset/bostonneighborhoods) and the Wicked Free Wi-Fi Daily Connections dataset, accessible as csv.

The Wi-Fi dataset provides a count of connections by day by neighborhood to the Boston public wireless (known as Wicked Free) that is available throughout the city in public spaces.

Analyze Boston also has a list of colleges and universities with addresses and neighborhoods (https://data.boston.gov/dataset/colleges-and-universities).

Analysis will additionally make use of the FourSquare API "explore" function to find popular locations in each neighborhood.

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