

Predicting optimal brewery location

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Predicting a new brewery location is important for a new business owner

- ▶ Breweries are known to be great business opportunities
- ▶ It becomes valuable to know what city makes sense as well as where in that city
- ▶ Predicting a new brewery location successfully can lead to an overall successful business

Data Acquisition/Cleaning

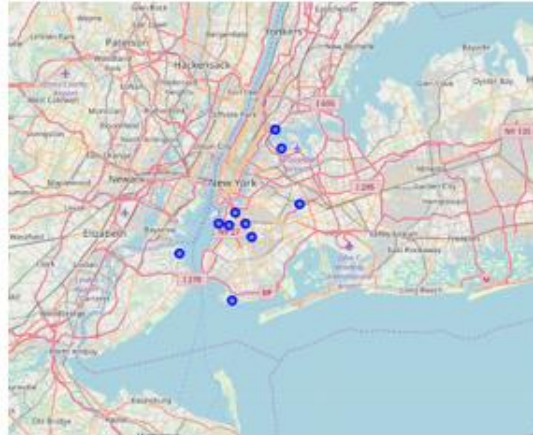
- ▶ Toronto neighborhood data from Wikipedia article:
https://en.wikipedia.org/wiki/List_of_postal_codes_of_Canada:_M
 - ▶ Had to clean null data and duplicate data
 - ▶ Added coordinate data from excel document that linked postal codes
- ▶ NYC data from NYU data set: https://cocl.us/new_york_dataset
 - ▶ Data was clean, but had to set up dataframe
- ▶ Current brewery venue data from Foursquare

Methods

- ▶ Use Folium to visualize where breweries are in NYC and Toronto
- ▶ Pick city to do cluster analysis on based on that
- ▶ Map cluster analysis with changing color on city map

Results

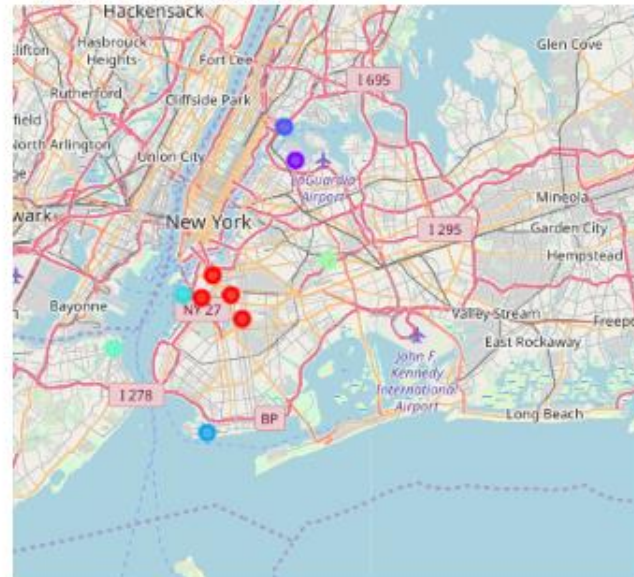
NYC breweries:



Toronto breweries:



Clustered NYC breweries:



Discussion

- ▶ NYC has more current breweries, but they are more spread out than in Toronto
- ▶ Cluster analysis of NYC breweries shows one area that is not recommended for a new brewery which includes the neighborhoods of Prospect Heights, Gowanus, Downtown, or Prospect Lefferts Gardens

Conclusions/Next Steps

- ▶ Opening a new brewery in NYC in any neighborhood besides Prospect Heights, Gowanus, Downtown, or Prospect Lefferts Gardens is recommended
- ▶ Further analysis on other neighborhood attributes such as surrounding venues or taxes will help narrow the search down further