Selecting neighborhood for a new wine store in Toronto

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Looking for the best neighborhood for opening the wine store

- A retail store wants to open a store in Toronto. This company sell wines to both people directly in the shop and to restaurants.

- They want to open their store near their potential customers.

- They think the best place to start business in the city will be a neighborhood with as many restaurants as possible, with more population (where presumably their products would be consumed more often), and with more average income where their more expensive (and more profitable) products will sell better.

- They want me to find them several neighborhoods with this criterium, but finally will be they who select the final location
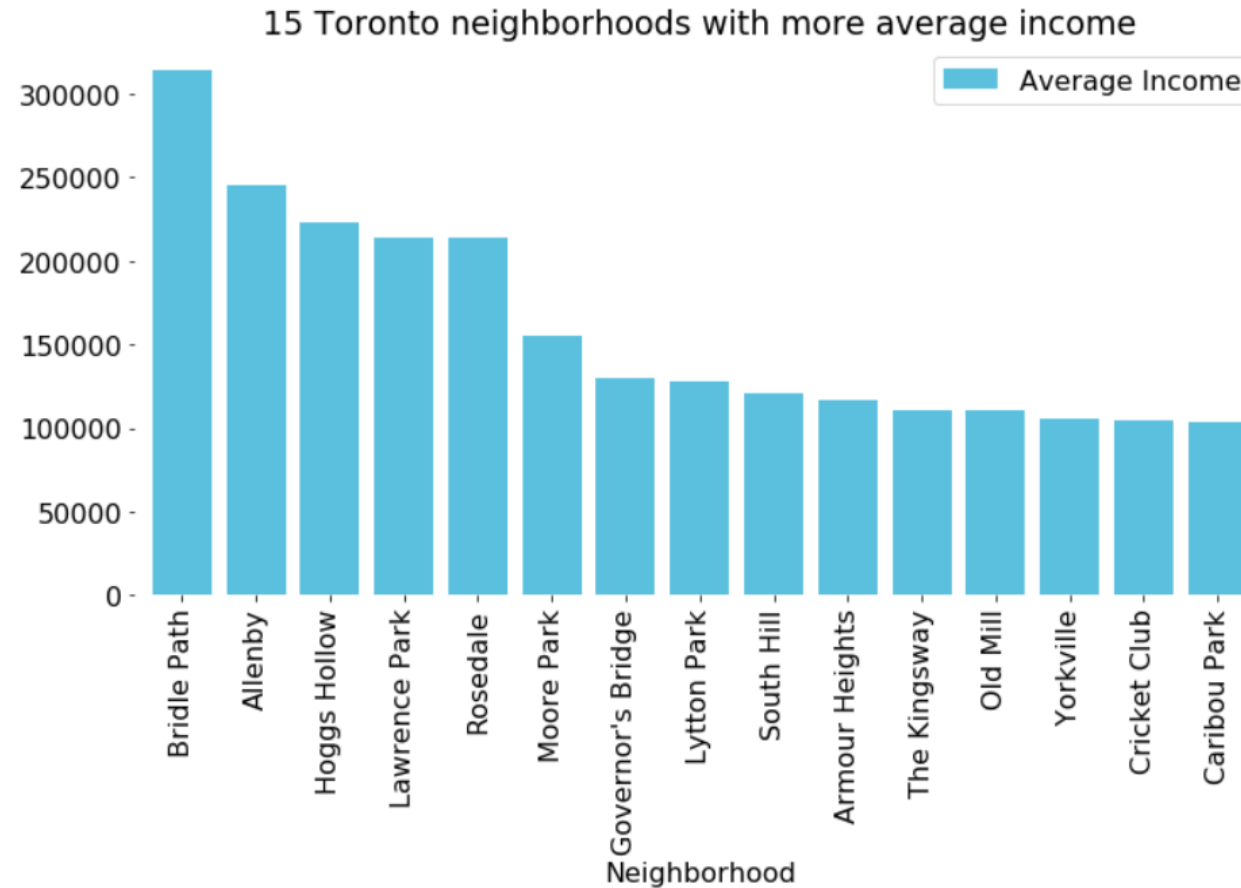
Data acquisition and cleaning

- Population and average income in Toronto can be found in the web page https://en.wikipedia.org/wiki/Demographics_of_Toronto_neighbourhoods

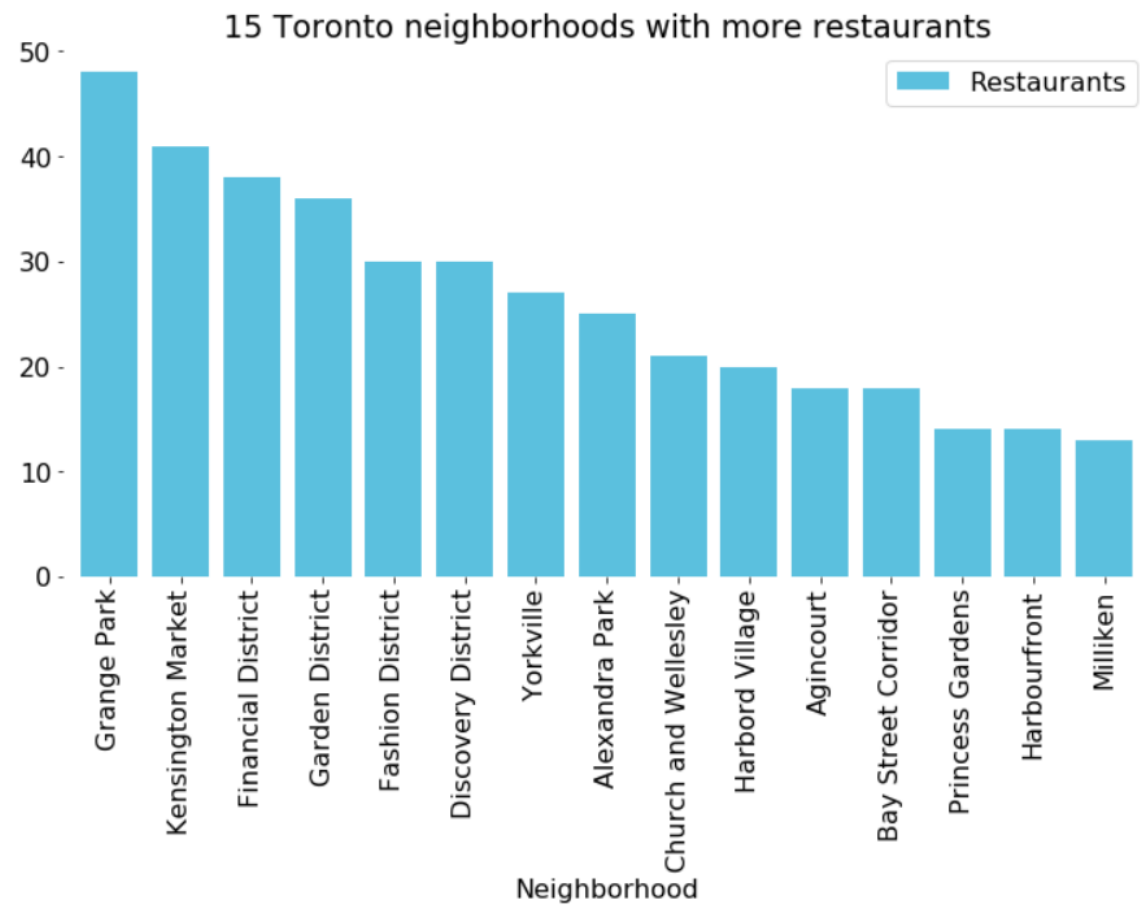- The restaurants in every neighborhood can be obtained from FourSquare using their API
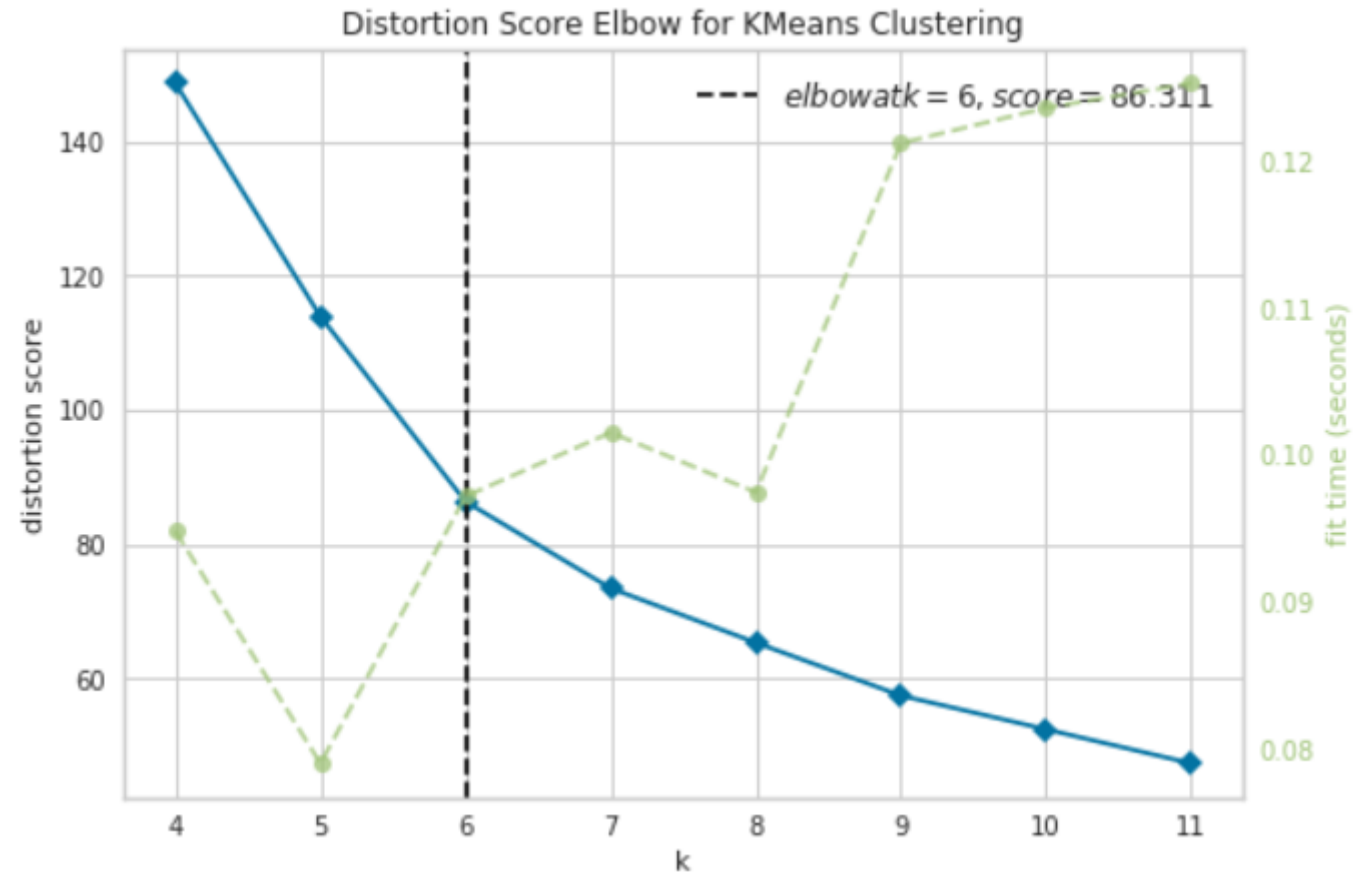
Analyze Toronto neighborhoods by population
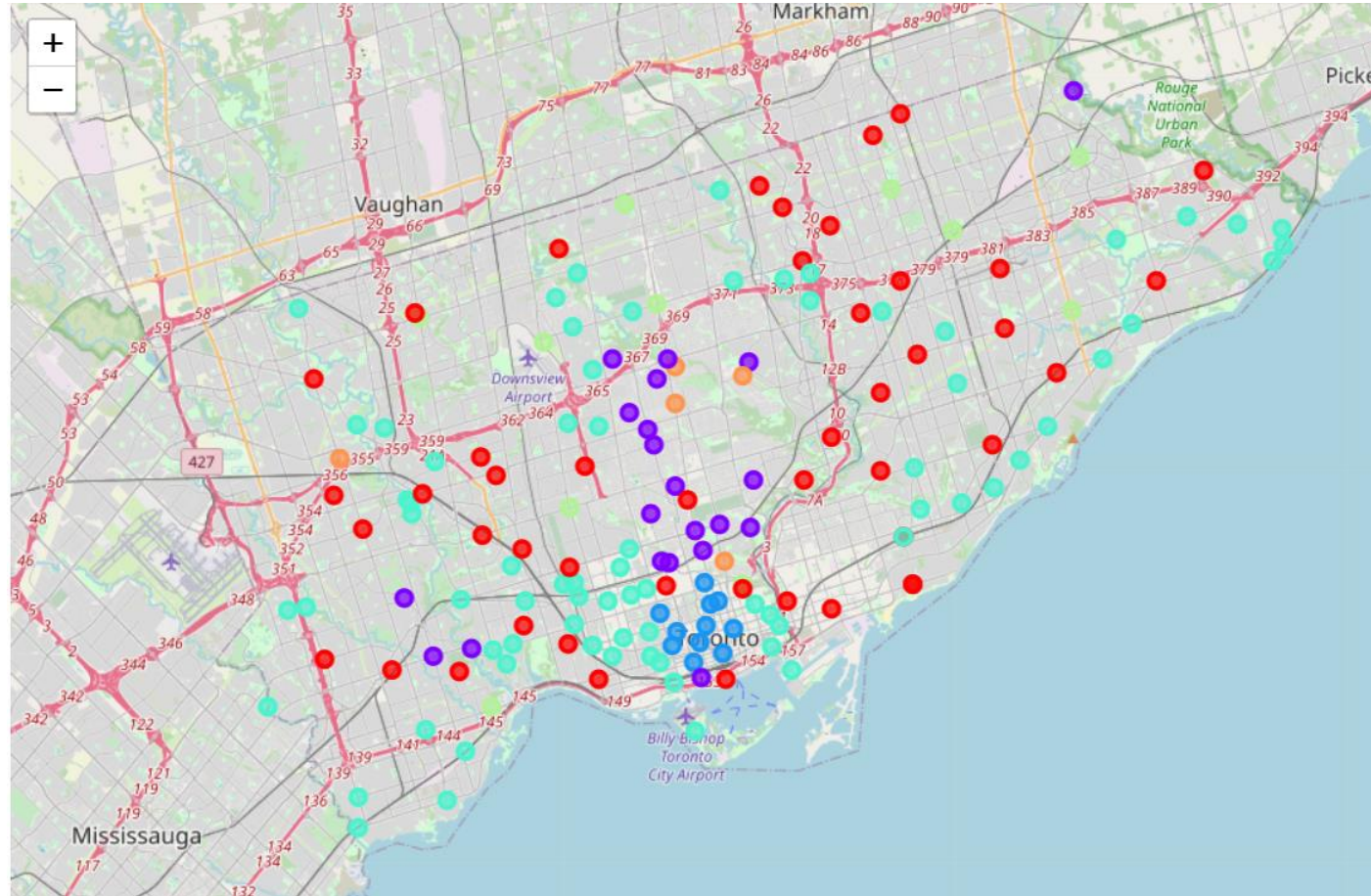

15 most populated Toronto neighborhoods

Analyze Toronto neighborhoods by average income

15 Toronto neighborhoods with more average income

Analyze Toronto neighborhoods by number of restaurants

Clustering Neighborhoods. Best K in K-means

Distortion Score Elbow for KMeans Clustering

Clustering Neighborhoods. K-means result

- Red: middle income, high population, no restaurants
- Purple: high income, low population, no restaurants
- Blue: middle or high income, low population, many restaurants
- Light blue: middle income, middle population, no restaurants
- Green: middle income, high population, few restaurants
- Orange: high income, low population, few or no restaurants

Concussion and future directions

- Built clustering model to find the best neighborhood for a new wine store

- Accuracy of the data has room for improvement:
  - The number of restaurants obtained using a radius of 500.
  - The population of every neighborhood are data of 2012 year.