

Problem Statement

- Understand the similarities and differences between North York and Scarborough
- Help people to choose the right location in North York and Scarborough by providing data about the neighborhoods average income, school ranking and venue density

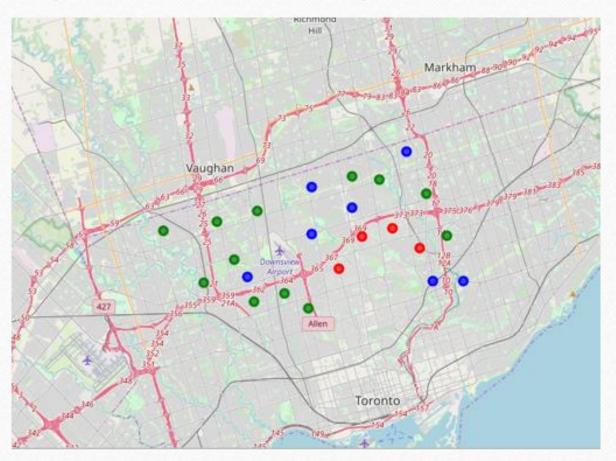
Objective

- Collect the data on neighborhoods average income, school ratings, venue density
- Discover clusters in neighborhoods based on collected data using K-Means clustering algorithm
- Obtain insights into the neighborhoods by identifying the similarities and differences between them

North York clusters (based on Average Income and Average School Rate)

High-income/high-school rating cluster is located just south of the 401, between Allen Road and Don Valley Pkwy.

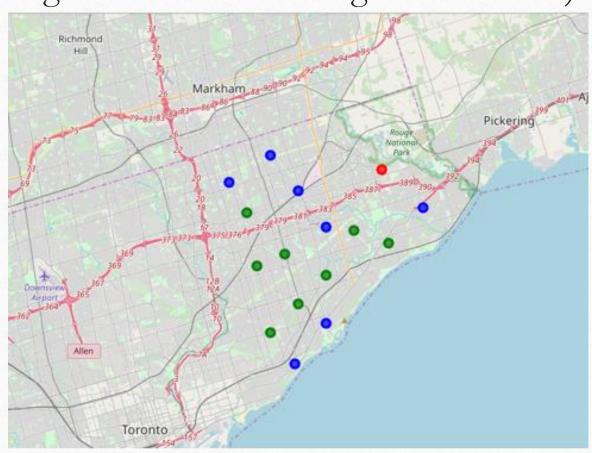
There is no clear geographical separation between the other two clusters, with high-income/middle-school rating and with middle income-lower school rating.



Scarborough clusters (based on Average Income and Average School Rate)

High-income/high-school rating cluster consists of just one neighborhood and located near the Rouge National Park.

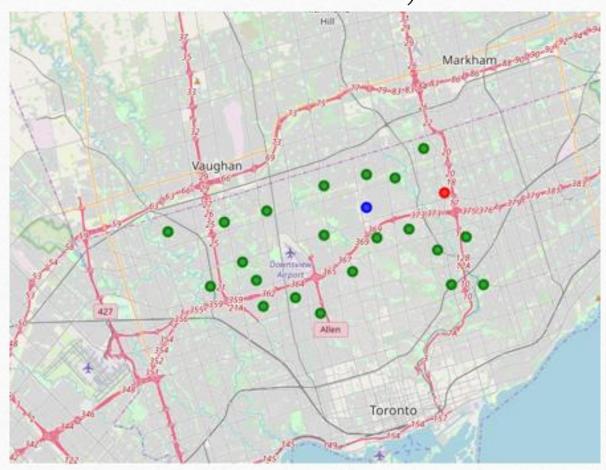
There is geographical separation between the other two clusters, with high-income/middle-school rating and with middle income-lower school rating.



North York clusters (based on Venues distribution)

K-means analysis didn't discover much diversity in Venues distribution in North York.

One cluster (high-density Venues) contains 21 neighborhood, each of other 2 contains just 1 neighborhood.



Scarborough clusters (based on Venues distribution)

According to K-means analysis
Venues in Scarborough spread even
more uniformly than in North
York.

All 16 neighborhoods in Scarborough were classified as belonging to the same cluster as 21 out of 23 neighborhoods in North York.



Conclusion

Research described in this paper didn't find significant differences between North York and Scarborough.