

The background features a series of concentric circles in light gray, some solid and some dashed, creating a ripple effect. A large, solid red oval is positioned in the center-right of the frame. A dark gray, curved, comma-like shape is located to the left of the red oval, partially overlapping its edge.

The Battle Of Neighborhoods

Recommending Neighborhoods to new
home buyers in Calgary, AB

Introduction

Calgary City overview for Potential Home Buyers

Problems newcomers to Calgary face in buying a home

- Overwhelming options

Who should use this tool?

- Home Buyers
- Real Estate Agents

Success Criteria

- Provide accurate recommendation of neighborhoods based on client provided parameters for budget and types of amenities they prefer



Data requirements for this project:

Neighborhood Information (Name, Coordinates, Property Values)

Venue Information (Category, coordinates)



Data Sources for this project

Data.Calgary.ca

Foursquare.com API



Data Processing for this project

Data cleaning is required

Data needs to be processed

Data needs to be restructured

Data Description

Methodology

Data.Calgary.Ca

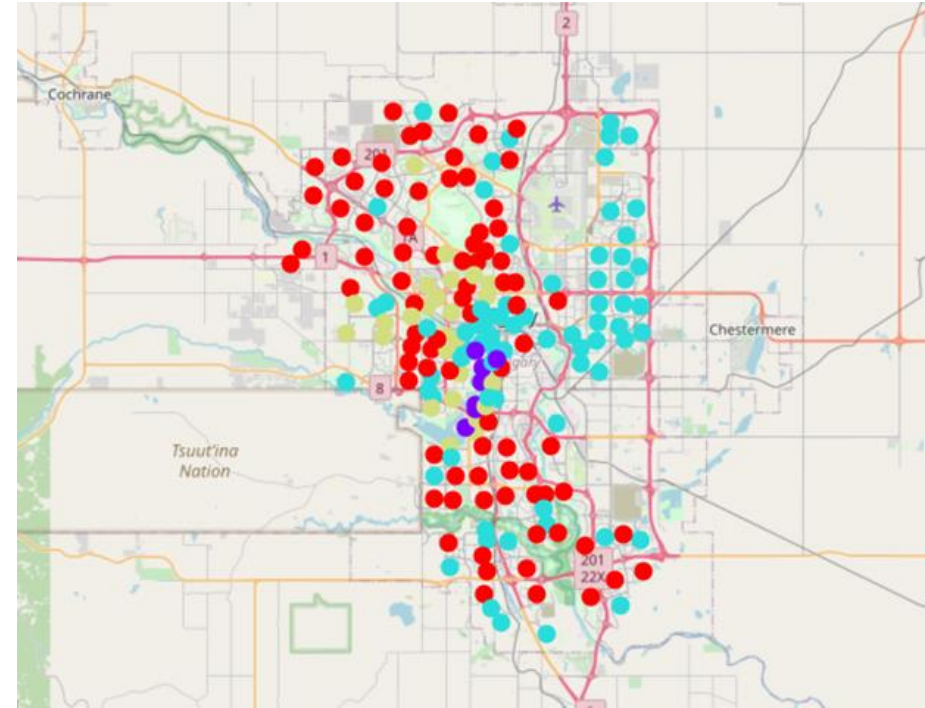
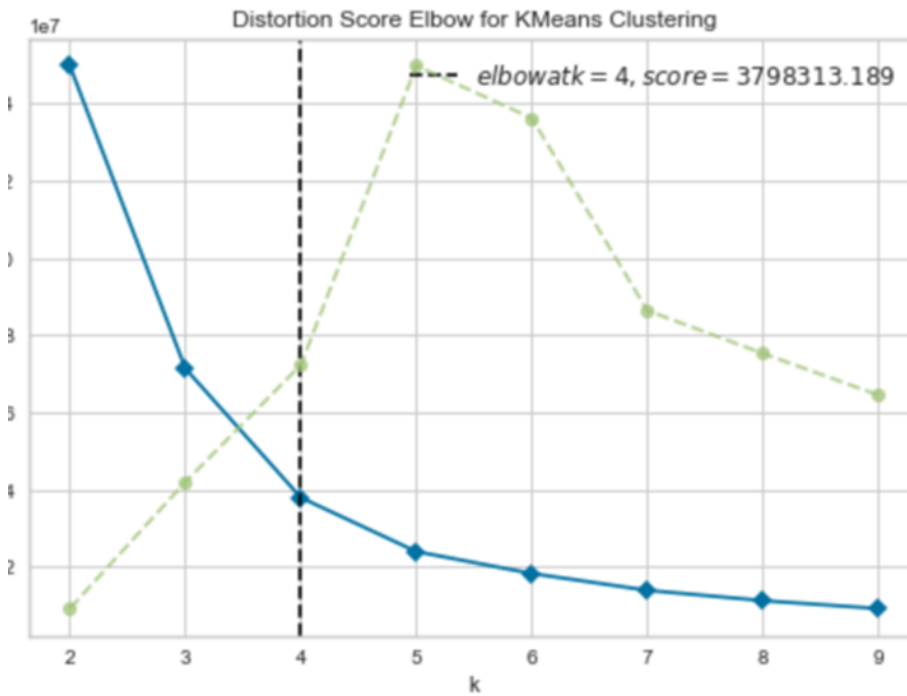
- We must trim excess data which is irrelevant to our needs
- We must process data to find median home values based on neighborhoods.

Foursquare.com

- Retrieve venue information from API

K-Means Machine Learning

- Segment and Cluster similar neighborhoods
- Group them based on most common venues, and home price



Result

- Clustering Similar Neighborhoods
 - 4 Clusters became apparent

Cluster	Neighborhood	1st Most Common Venue	2nd Most Common Venue	3rd Most Common Venue	4th Most Common Venue	5th Most Common Venue	6th Most Common Venue	LATITUDE	LONGITUDE	Value
1	BOWNESS	Pub	Coffee Shop	Café	Stadium	Food & Drink Shop	Eastern European Restaurant	51.088532	-114.196535	383500.0
2	DOWNTOWN WEST END	Coffee Shop	Sandwich Place	Light Rail Station	Pub	Nightclub	Pharmacy	51.047856	-114.086675	199250.0
2	MILLRISE	Pub	Bank	Pizza Place	Coffee Shop	Golf Course	Grocery Store	50.916793	-114.078138	346500.0

Discussion

- Our client provided us with a budget of \$400,000 and specified that Coffee Shops and Pubs are their two most frequented venues, which they'd like close by.
- Using these parameters we are provided with these results



Conclusion

- Recommendation Summary:
 - Best Fit Cluster: Cluster 2
 - Best Fit Neighborhoods: Bowness, Downtown West End, Millrise