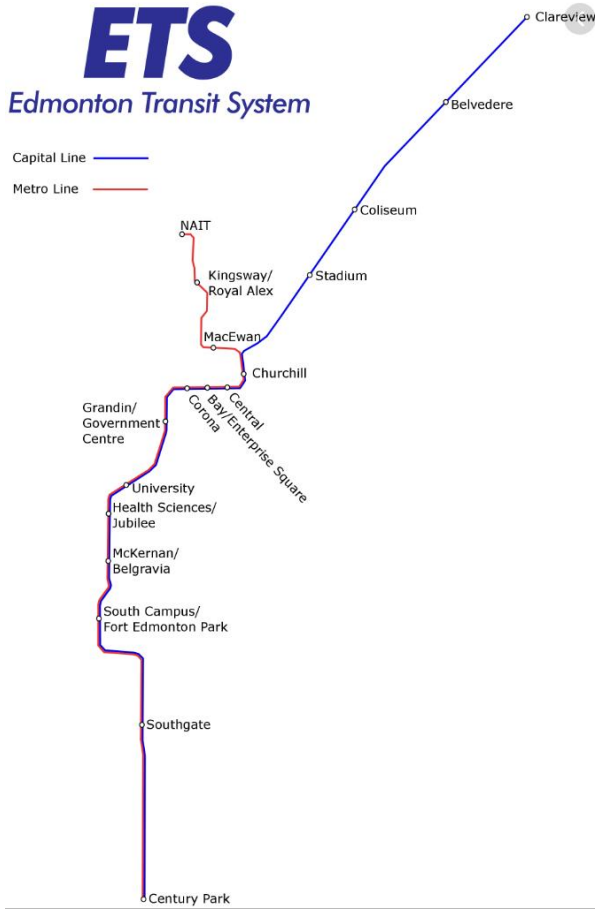
Edmonton Metro Line

By Jayden Geisler

Introduction



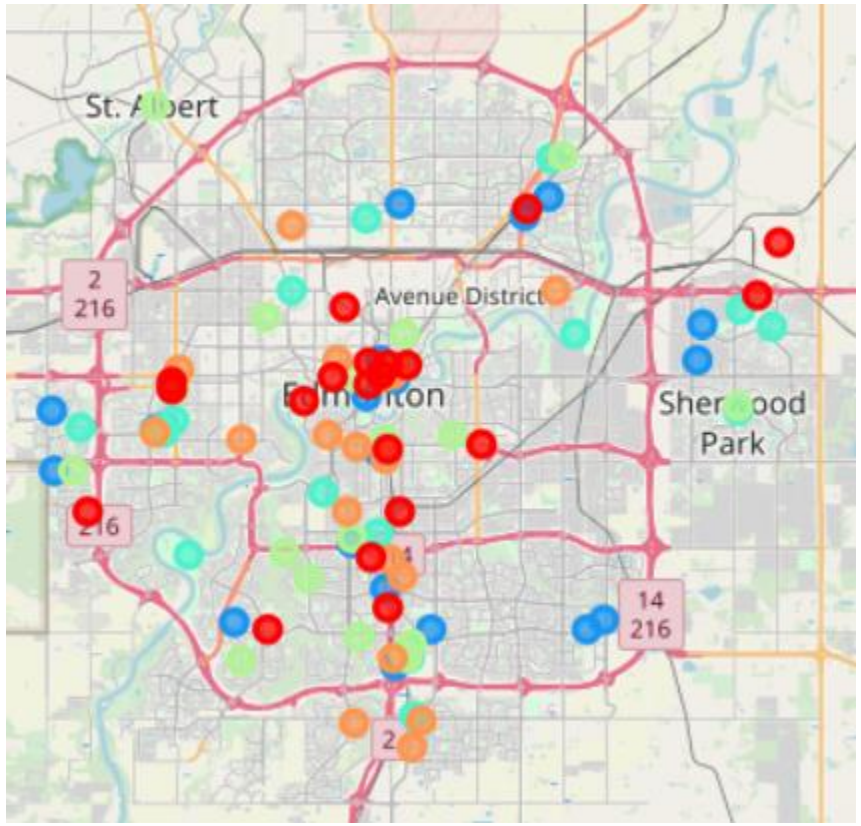
- Edmonton does not have a very good LRT system for people who live on the east west of the city

Methodology

- Location data
  - This will be 100 most popular locations in the city
- Neighborhood data
  - This data will be used as a point to point line for the search algorithm

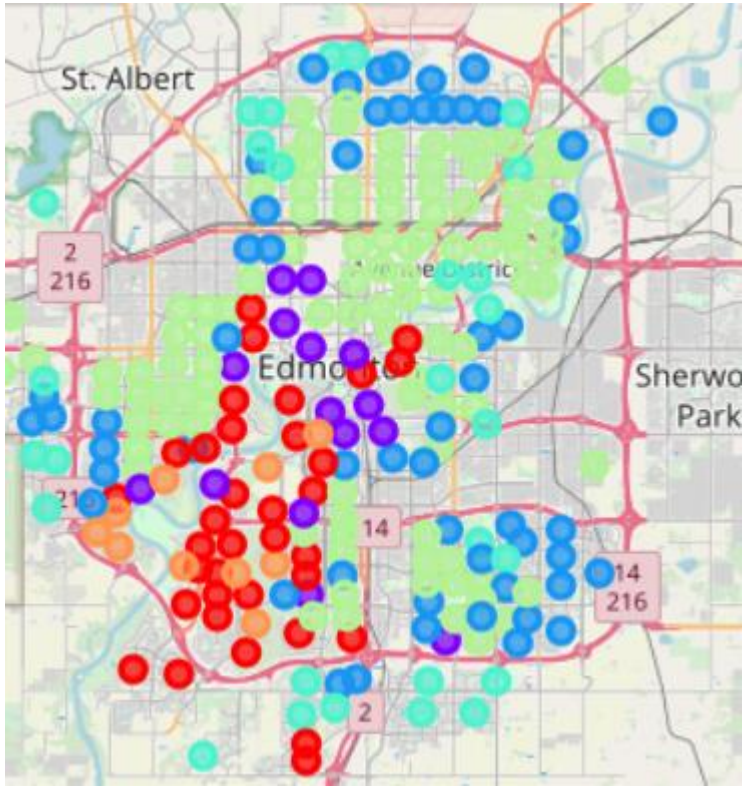
There will be a heuristic that decides how valuable each point will be

Popular locations

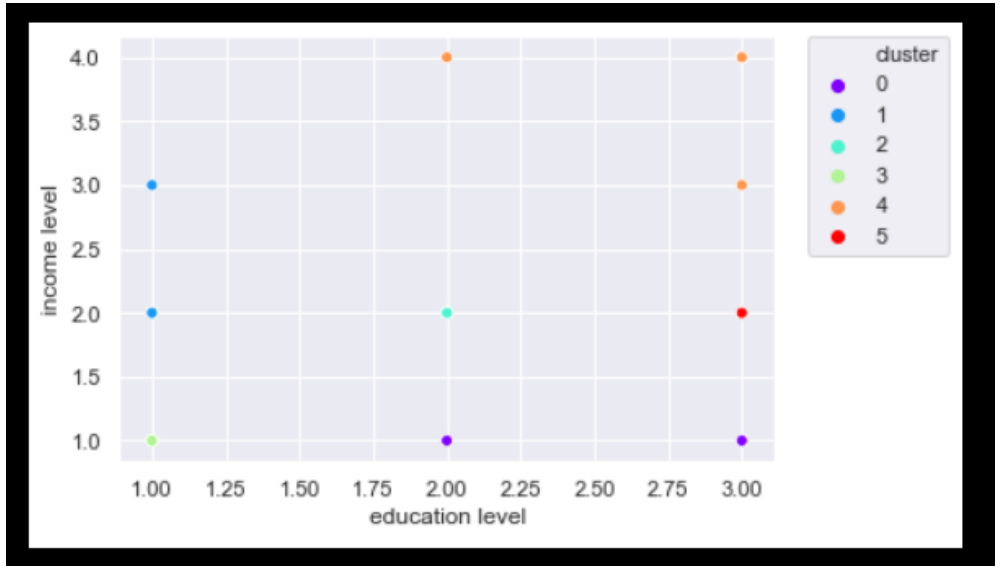


- Most popular locations are down town and south, around the current line but does not go as far south. Also cluster to the west is west Edmonton mall which is a very popular spot.

Neighborhood data



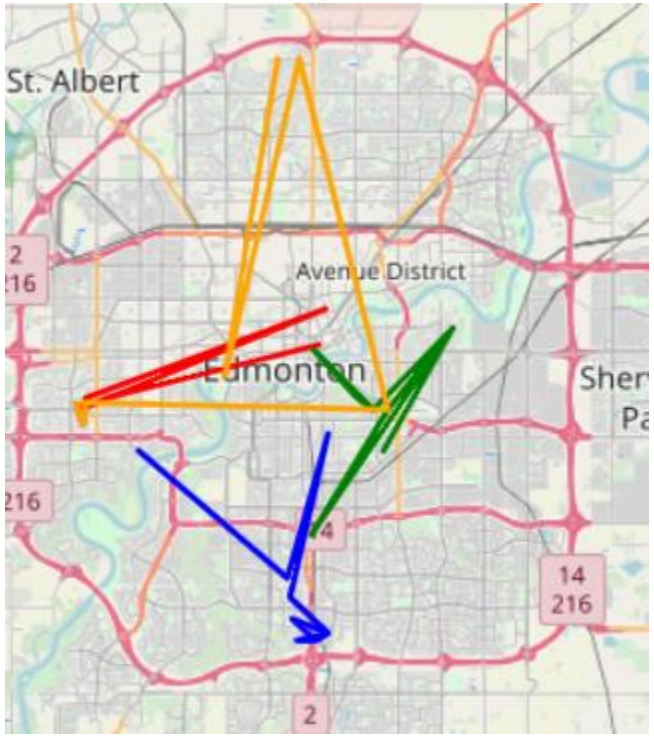
- You can see how the close to the river in and in the south is where the high income high educated populations are



Test to existing line

- as you can see they are pretty close and my prediction is that they would be closer if foursquare picked up the University of Alberta but currently in the data set that is not a location it would definitely be popular enough to spend the line more west

Results



- The first thing to note is even though the red line started at west Edmonton mall the north and south lines both make their way toward it, making it a popular location and one that should be considered for the new line.

Conclusion

The purpose of this project was to see where the best new LRT line would **be, to** help the city **planners** plan the next line in the future. By calculating and clustering the **neighborhood** demographics and then creating a pathing algorithm we can show the general path of people of where they live to where they want to be.