### **Main Topic**

 Analyze public and private school distribution amongst Seattle neighborhoods and compare finding to cost of housing within intersecting neighborhoods.

## **Target Audience**

• Urban planners, policy makers, parents

## Study Area

 Urban planning, education equality, housing equality, allocation of city funding

#### **Data Source and Format**

- https://data-seattlecitygis.opendata.arcgis.com/datasets/b6de4b1fca644618a60c
  2a72cbdbbfe5\_0/explore?location=47.640474%2C-122.317622%2C11.69
  Private Schools
- https://data-seattlecitygis.opendata.arcgis.com/datasets/c31cbdbf093b48eaa4ce
  c1fe6bb7c4f9 0/explore Public Schools
- https://data-seattlecitygis.opendata.arcgis.com/datasets/ac2d58e75faa46628a14 8939199b4f8d 0/explore Housing Costs
- https://data-seattlecitygis.opendata.arcgis.com/datasets/b4a142f592e94d39a3bf 787f3c112c1d\_0/explore?location=47.614251%2C-122.336918%2C11.03 Neighborhoods

These data sources are available in a variety of formats, we will likely use the shapefiles so that we can join the data easily in QGIS.

# **Project Plan**

Combine neighborhood shapefile data with our housing cost table to give it a spatial reference. Create an interactive web map that allows the user to analyze specific neighborhoods to view patterns in cost of housing and distribution of private and public schools. Add interactive widgets and/or mouse events to allow the user to perform these functions.

## **Map Design**

We will likely show housing cost per neighborhood in a choropleth map as our polygon layers, and then private school and public school point data separately as a point map. Afterward, we can show some aggregation of the two where it highlights high COL areas that have lots of private schools or high COL areas that don't have lots of private schools. This would be best done as another choropleth map where it combines the number of private schools within the bounds of the neighborhood with the cost of living in the neighborhood. We could show how closely these two variables coincide

with each other for our line chart. We can give the user the ability to hide/show different layers, and when they click on a polygon or a point, give the user information about the feature, like its name, population (if a neighborhood), etc.

### **Draft Idea Sketch**

