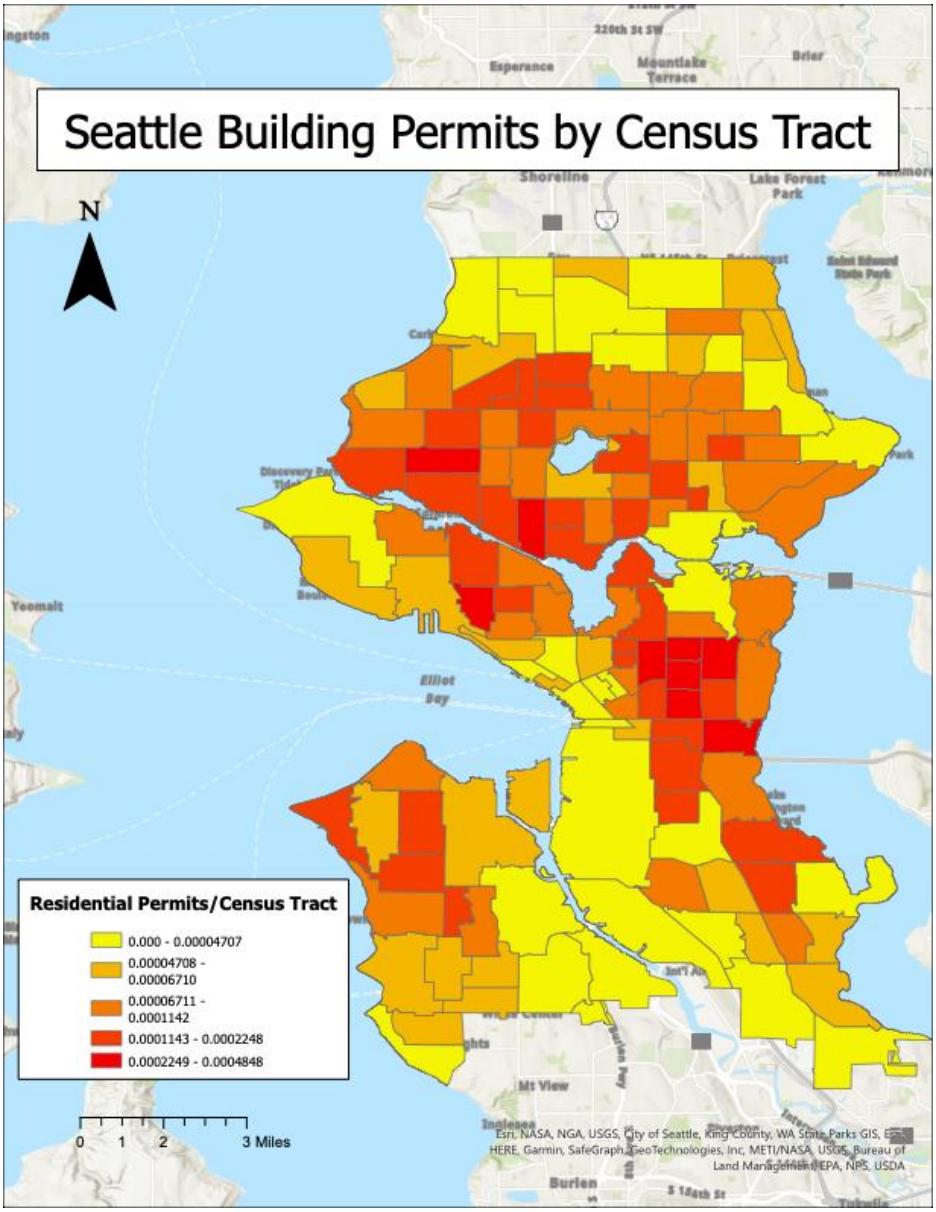
Residential Building Permits in Seattle

To gain a solid understanding of where residential construction has taken place over the past one to two decades, we can look at data on residential building permits. The data I used to create the following visualizations are from Seattle GeoData and include data from 2002-present.

First, to get baseline information on where exactly we are seeing increased residential construction, I created a choropleth map. This map separates Seattle in census tracts so that we can recognize and analyze the geographical significance of our data in a way we are already familiar with. Residential permits are mapped per census track on a yellow to red scale, with census tracts on the red side signifying more permits and on the yellow side, less. Through this visualization, we can see that there are clusters of census tracts with higher residential permits, but overall, these clusters are relatively spread out. The most notable cluster is seemingly between Capitol Hill and Central District, with smaller clusters in West Seattle and Rainier Valley. There is also a largely spread-out cluster through Ballard, Phinney Ridge, Green Lake, Freemont, U District, and Olympic Hills. Identifying these general areas of where residential construction is taking place, can help prepare for city changes that are necessary and/or beneficial as a response to changes in residential occupancy around the city, including but not limited to: transportation, retail stores, grocery stores, parks,



school zone boundaries, and more. Making these adjustments can add convenience to new residents causing relocation to be more appealing, as well as minimize inconvenience for existing residents to encourage them to stay.

After having a general understanding of where residential construction takes place, I thought it would be valuable to identify the building value for these residential permits to gain a more detailed understanding of the residential construction. Orange and red signifies hot spots for high building values, green and blue signifies cold spots for low building values, and grey signifies that there is no significance. Through this map, we can see that the hot spots are more noticeably clustered than cold spots are. The most significant hot spot spreads through Downtown Seattle, Queen Anne, Capitol Hill, and Central District. There are also a few smaller hot spot clusters in U District and West Seattle. The cold spots are not as clustered and more spread out, with the most noticeable stretching through Ballard, Phinney Ridge, Green Lake, Freemont, and a little into U District. Another significant cluster is the cold spot cluster with 99% confidence that is in Ballard. There is also another spread out cluster that goes through Capitol Hill and Central Seattle, as well as a few smaller clusters in West Seattle and Queen Anne. Identifying this information is useful as higher valued building permits likely means that the cost to live in those residences is higher (and vice versa). As a result, when we analyze this data we can better anticipate the cost of living and socio-economic demographics for different areas in Seattle.