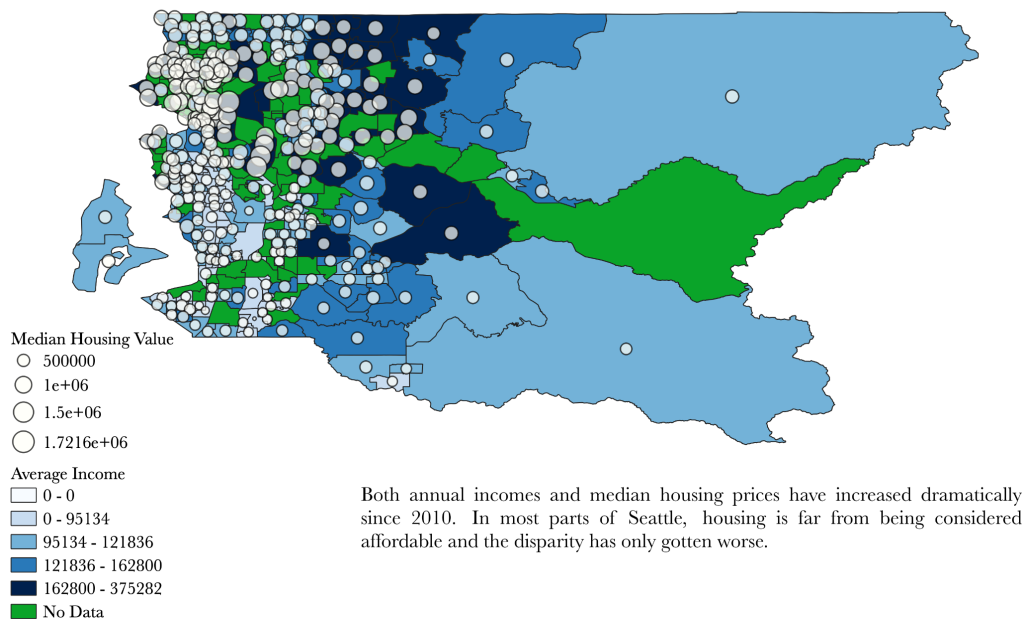


Final Project -
Gentrification In Seattle
Nikita Yadav / May 31, 2022

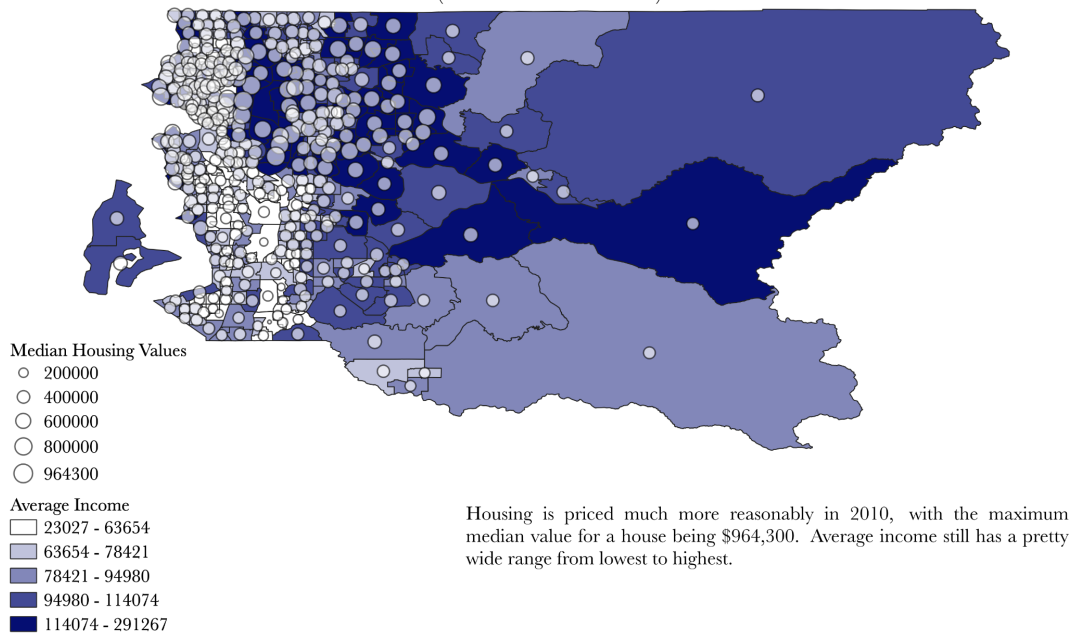
Gentrification in Seattle is becoming a larger problem by the day. As big tech companies move in and establish themselves in the city, they also invite an influx of freshly graduated, highly paid employees to move into the already limited housing in the area. Housing has been unaffordable in Seattle for a long-time, but the problem seems to only be getting worse. I decided to investigate the difference between average incomes in this city and median housing values for the years of 2020 and 2010. I wanted to see how the financial disparity has increased or changed within the decade. An important thing to note is that Seattle is and always has been a hub nationally and internationally. Seattle brings in a variety of people not only of different backgrounds, but of different income levels as well, that all add to the culture of the city. As the tech sector booms and wealthier college graduates move in and push others out, Seattle is facing a housing crisis that is visually apparent to all those who live here. Housing is becoming unaffordable for the many to make space for newer, wealthier transplants. Or at least that's what seems to be happening and what I have chosen to explore in this paper. In answering my question on the financial disparity between income and housing prices, I consulted Census data from 2010 and 2020 and displayed my answers and results on the two maps below.

Research Question: How much is Seattle housing valued at in 2020 and how does that compare to 2020 annual incomes? Does 2010 show a similar trend or was gentrification less of a problem a decade ago?

Average Income vs Median Housing Values in Seattle
(2020 Census Data)



Average Income vs Median Housing Values in Seattle
(2010 Census Data)



I followed the same procedures when making my map for 2020 and 2010. First, I pulled out the data tables for Mean Income and Median Housing Values and downloaded them to my computer. I then opened them both up on Excel and cleaned up the tables a bit. I went in and changed the headers to terms I could more easily understand and got rid of most columns, keeping just the data values I needed to present on my map, as well as the GEOID for the purpose of joining the table to my shapefiles. Once I brought in my tables to QGIS, I used the field calculator to shorten the GEOID, so that it would match what was on my Census Tract shapefile. I also converted the average income and median housing value column that I would be dealing with to Integer form. When it came to making the maps, I chose to make choropleth and proportional symbol mixed symbols maps. I mapped the average income in a choropleth map using Natural Breaks classification and the median housing value in a proportional symbol map that I layered on top of the income layer. It was difficult trying to figure out the best way to show that housing prices were way higher than average incomes, especially with the huge centroids covering up some of the smaller census tracts. I spent quite a bit of time adjusting the size and the opacity. Eventually, I realized in order to answer my research question I would have to query the map itself.

Using the Identify tool, I went through the census tracts on my map to see what the income was compared to the median housing value. What I found was, in most census tracts in King County, housing was beyond what would be considered affordable. Affordable housing is

considered to be only 2.5 - 3 times a person or a households' annual income. Although, people could choose to buy a house that is beyond their means, it doesn't necessarily make it affordable. Also, one thing to keep in mind when examining this map is it's only showing *average* incomes, as well as *median* housing values, meaning that people make above and below the income that's displayed and houses are priced at above and below what is shown. An immediate observation to be made is, the maximum median housing value in 2020 is 1.7 million dollars and in 2010 is 964,000 dollars. That is already a huge jump, within one decade. The highest average income in 2010 is about 290,000 dollars and in 2020 is about 375,000 dollars. Average income doesn't increase as drastically within the decade. When I clicked through the census tracts for 2020, I often found that median housing values were almost 5 - 6 times the average income for the same area. That is worrying, especially when you consider the fact that we are looking at averages and mediums and many people fall below the average income level, while many fall quite a bit higher. While doing the same thing for my map of 2010, I found that housing was still priced quite unaffordably compared to the much lower average incomes. In most census tracts, houses were still out of the range of affordability.

Throughout this research project, I learned just how much of a disparity there is between housing values and average incomes not just in recent years, but going back more than a decade. The problem has existed for quite a long time and only seems to become worse. Obviously, this research doesn't take into account renters and different mortgage levels. We also can't do as close or as in-depth of an analysis with only median and average values. These maps do help to show that gentrification is a serious problem in Seattle and that is definitely clear enough to see with only medians and averages.