# **GEOGRAPHY OF OPPORTUNITY: King County & Pierce County** By: Sheena White, Nate Jones, & Marvin Acosta | University of Washington - Department of Geography

## Introduction and Purpose

Being the two most populated counties in Washington State, Pierce and King Counties both have some of the state's most important cities, job clusters, and major transportation systems. Housing affordability pressures in King County have pushed populations into Pierce County. This study examines the differences in the geography of opportunity between the two counties. We created an opportunity index using Housing Indicators (Housing Vacancy, Foreclosure Rates, and Housing Burden), Transportation and Mobility Indicators (Transportation Cost, Access To Transit, Transit Cost, and Walkability), and Health and Environment Indicators (Parks & Open Space, Toxic Waste Release, Access To Healthy Food, and Air Toxic Respiratory Hazard) to compare the overall indexes between the two counties. We hypothesized that overall opportunity in Pierce would be lower than King, indicating that people pushed out of King can expect relatively lower opportunities.

**Research Question:** Is the Geography of Opportunity lower in Pierce County than King County?

## Methods

Our comprehensive opportunity map is the result of calculating z-scores based on the subindicators listed above. Once calculated, we created composite scores for each of the three indicators. We then created one main overall composite of the combined indicators to create the opportunity index based on quintiles ranging from 1 - 5, with the higher number indicating higher opportunity. This is visualized in *Figure 1* with five categories ranging from very low to very high. Very low is the lowest 20% of opportunity, while very high is the highest 20%.

## Findings and Conclusions

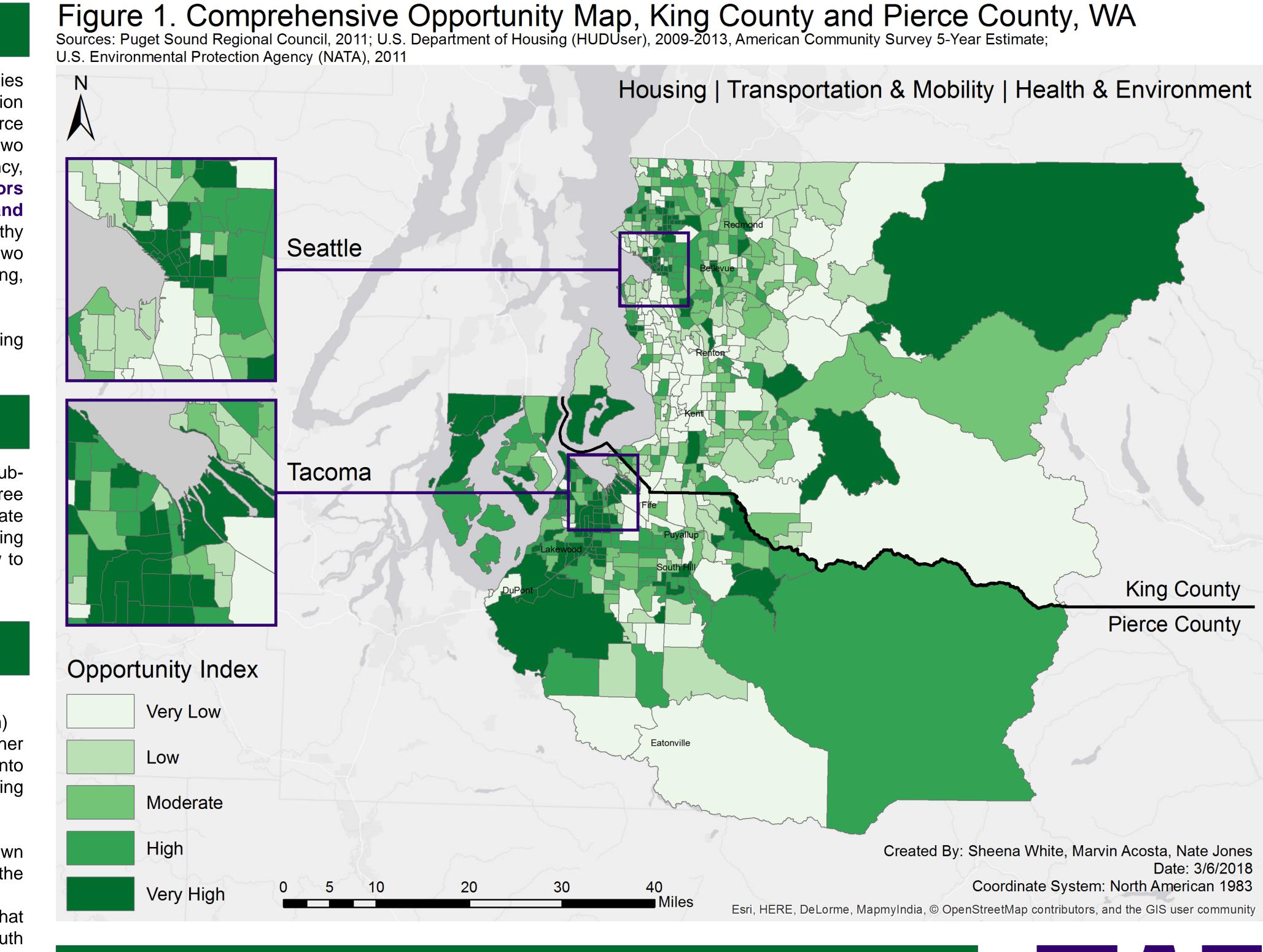
- Average opportunity index score for King County: 2.76 (between low and moderate)
- Average opportunity index score for Pierce County: 3.53 (between moderate and high)
- Based on our index scores, Pierce County ended up having significantly higher opportunities, therefore rejecting our hypothesis. This means that for residents moving into Pierce, they may actually benefit in terms of opportunities despite being pushed out of King County.

### King County:

- o As expected, the majority of high/very high opportunity areas are within Downtown Seattle, and there are clusters in North Seattle and some areas in the east side of the county.
- Areas that have low/very low opportunity appear to cluster in regions of King County that are considered low income and contain high minority population sizes line in South Seattle, Renton, and Kent.

### • Pierce County:

- Noticeable areas that have very high/high opportunities are parts of Downton Tacoma, majority of DuPont area, and Lakewood.
- Very low/low opportunity mostly in east side of Tacoma, Fife, majority of Puyallup, and South Hill.
- Also Eatonville (south part of the county) appeared to score very low in opportunity index.



### References

- Puget Sound Regional Council (Opportunity Index) https://www.psrc.org/opportunity-mapping
- (NATA) • U.S Environmental Protection Agency https://www.epa.gov/national-air-toxicsassessment/2011-nata-assessment-results

- basemaps)

• U.S Department of Housing (HUDUser) https://www.huduser.gov/portal/home.html • Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community (for

