

A Story of Displacement: Housing Affordability in Seattle

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Introduction and Purpose

Despite the fact that public servants may be viewed highly in society, they are not valued or compensated nearly as much as technicians and computer scientists in Seattle (and the U.S. as a whole). This leads to economic inequality that determines where public servants, especially teachers, can choose to live. This project aims to answer the question of how occupation affects housing choices in Seattle, and analyzes where displacement is taking place as more affluent tech workers move into Seattle. What neighborhoods in the city can public servants (for example, teachers) afford to rent a one-, two-, or three-bedroom home, and how does this compare with computer engineers and tech workers?

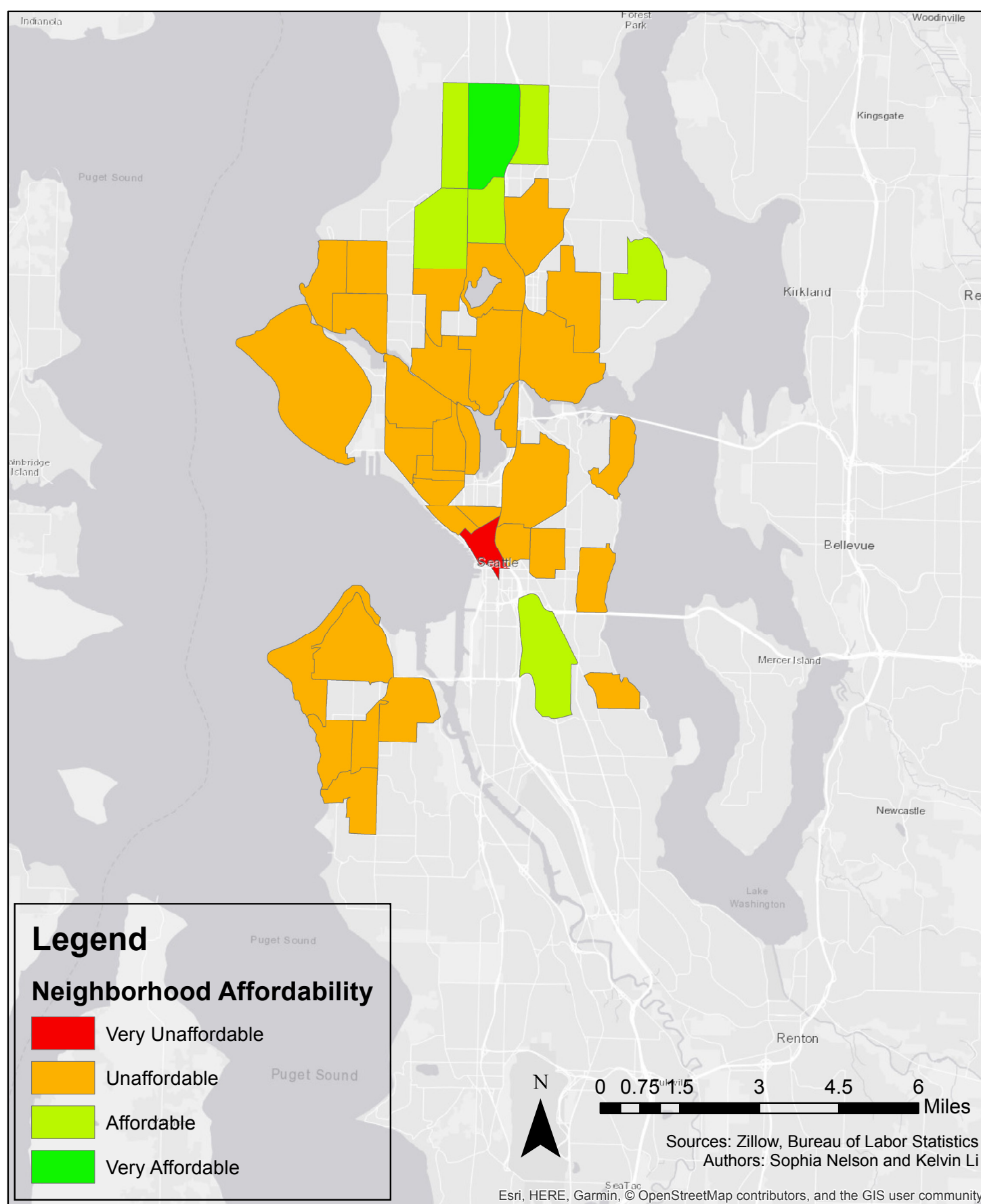
Methods

1. First, data was compiled on median rent prices for each month in 2017 by number of bedrooms for each of Seattle's neighborhoods.
2. Then, rent prices were averaged for the entire year to account for seasonal fluctuations.
3. Next, data was gathered on earnings for Education, Training, and Library Occupations and Computer and Mathematical Occupations for Seattle in 2017.

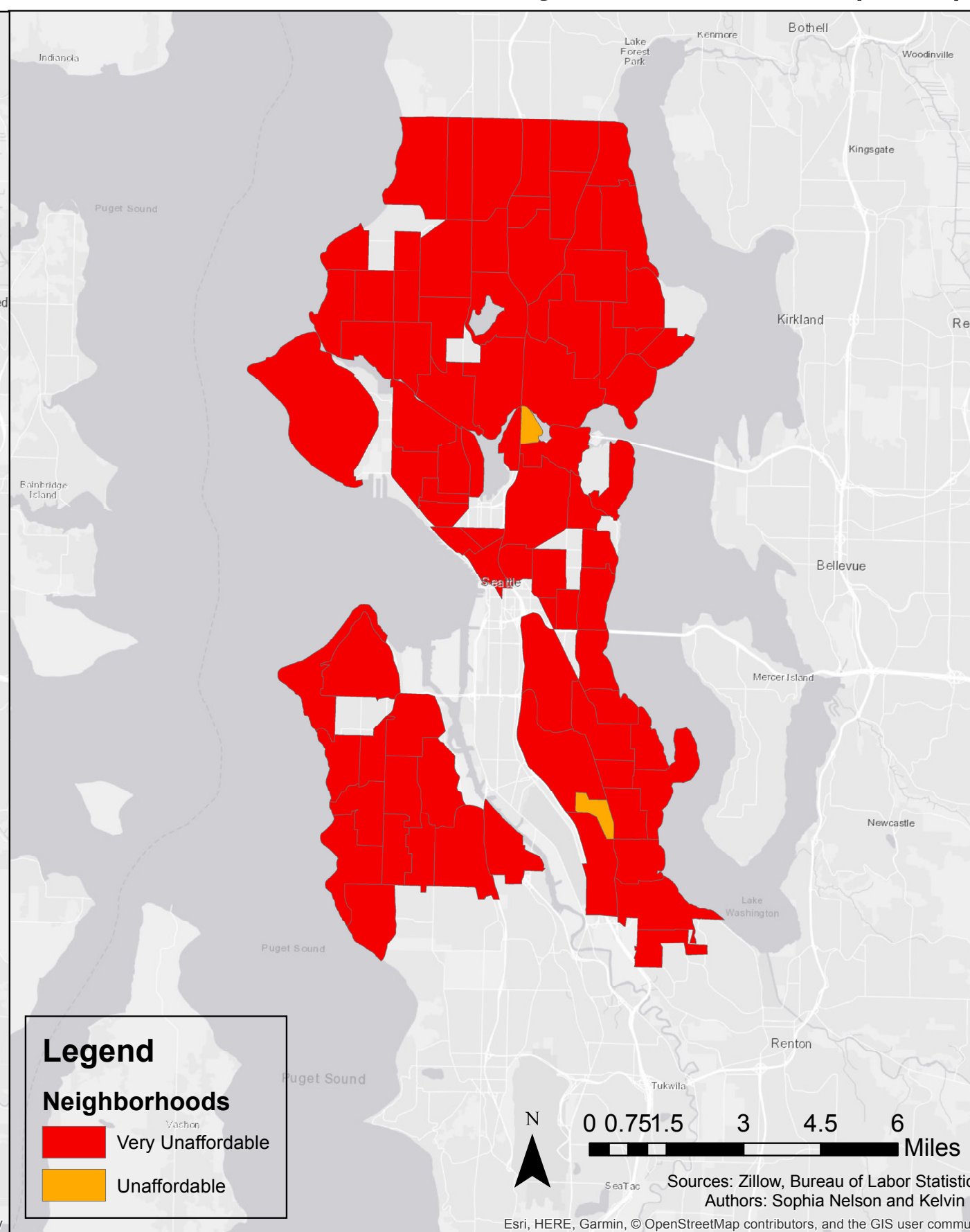
4. Using the standard that 30% of income should go towards housing, each neighborhood was categorized as "Very Affordable," "Affordable," or "Unaffordable" for each group based on median annual earnings.
5. Then, this data was joined to a shapefile of Seattle's neighborhoods in ArcMap.
6. This data was used to produce maps for one-, two-, and three-bedroom units.

Education, Training, and Library Occupations

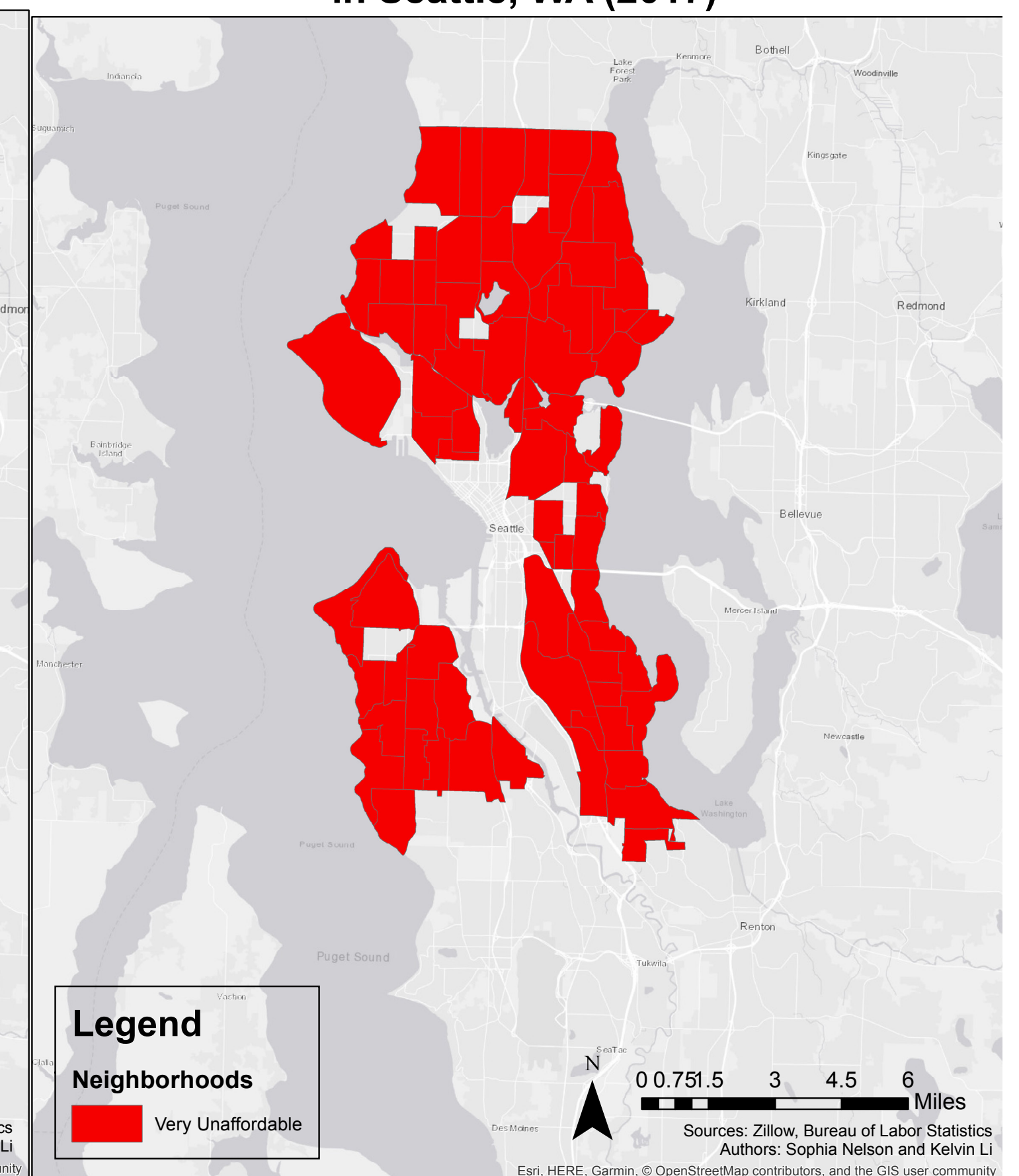
One-Bedroom Affordability in Seattle, WA (2017)



Two-Bedroom Affordability in Seattle, WA (2017)

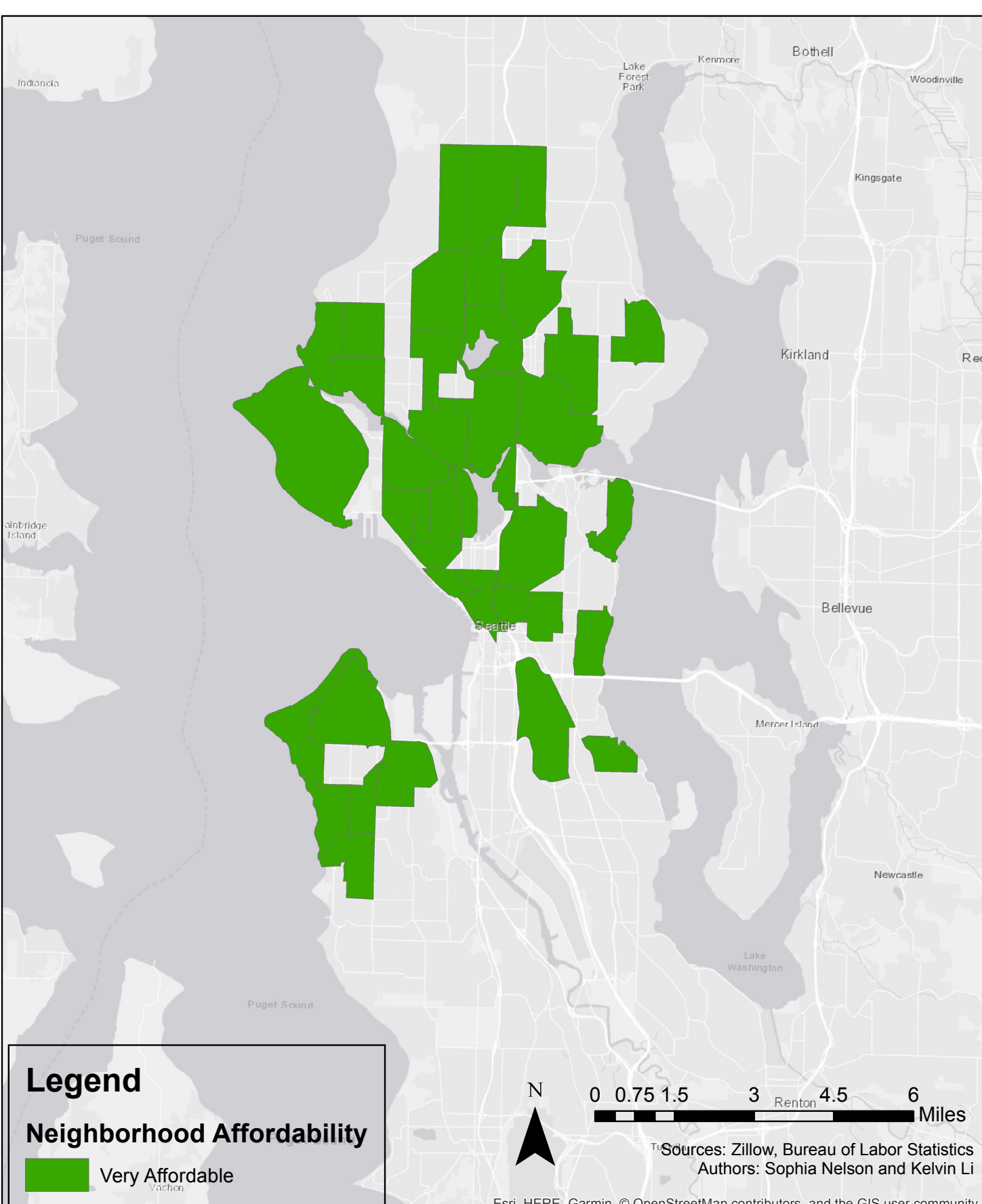


Three-Bedroom Affordability in Seattle, WA (2017)

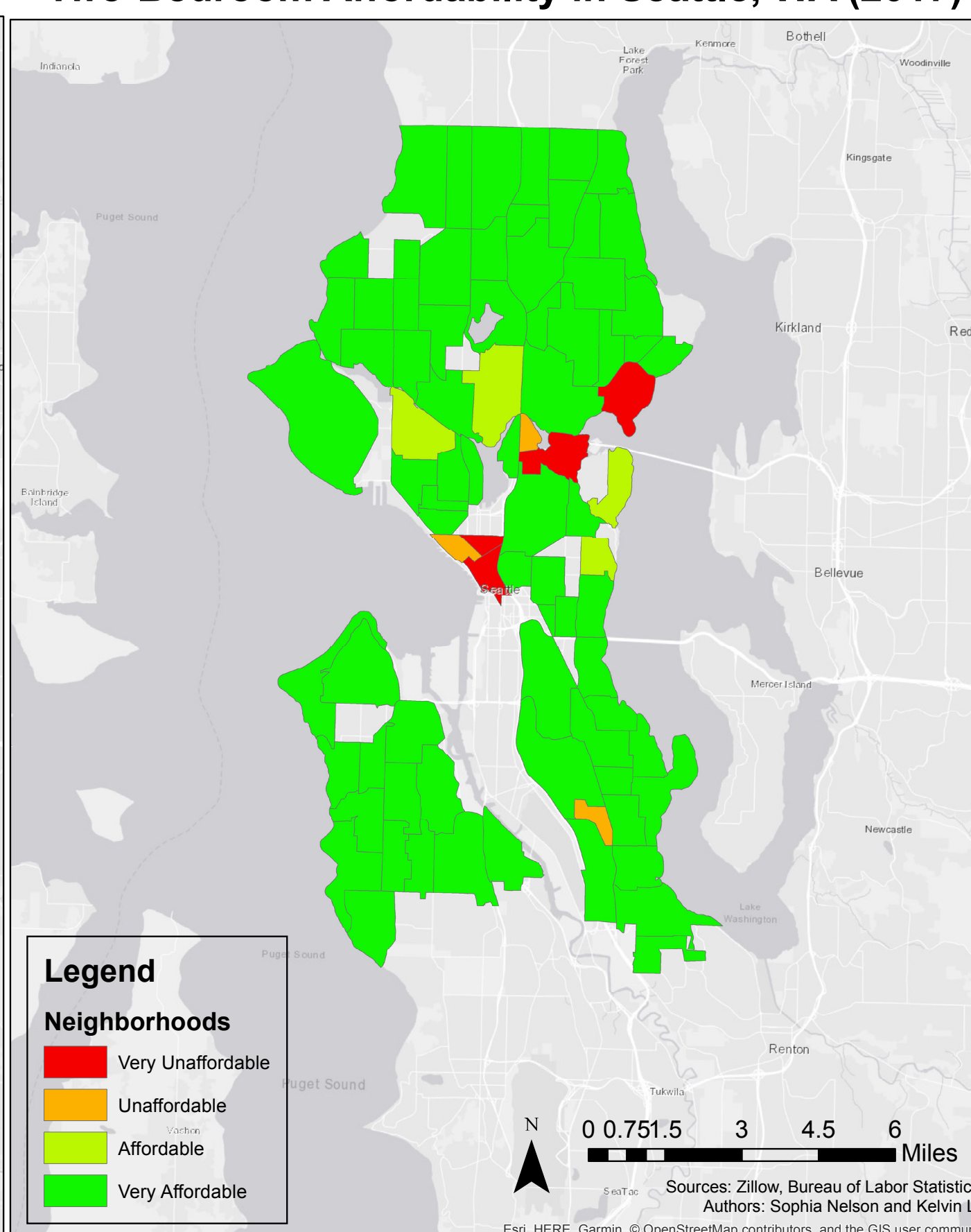


Computer and Mathematical Occupations

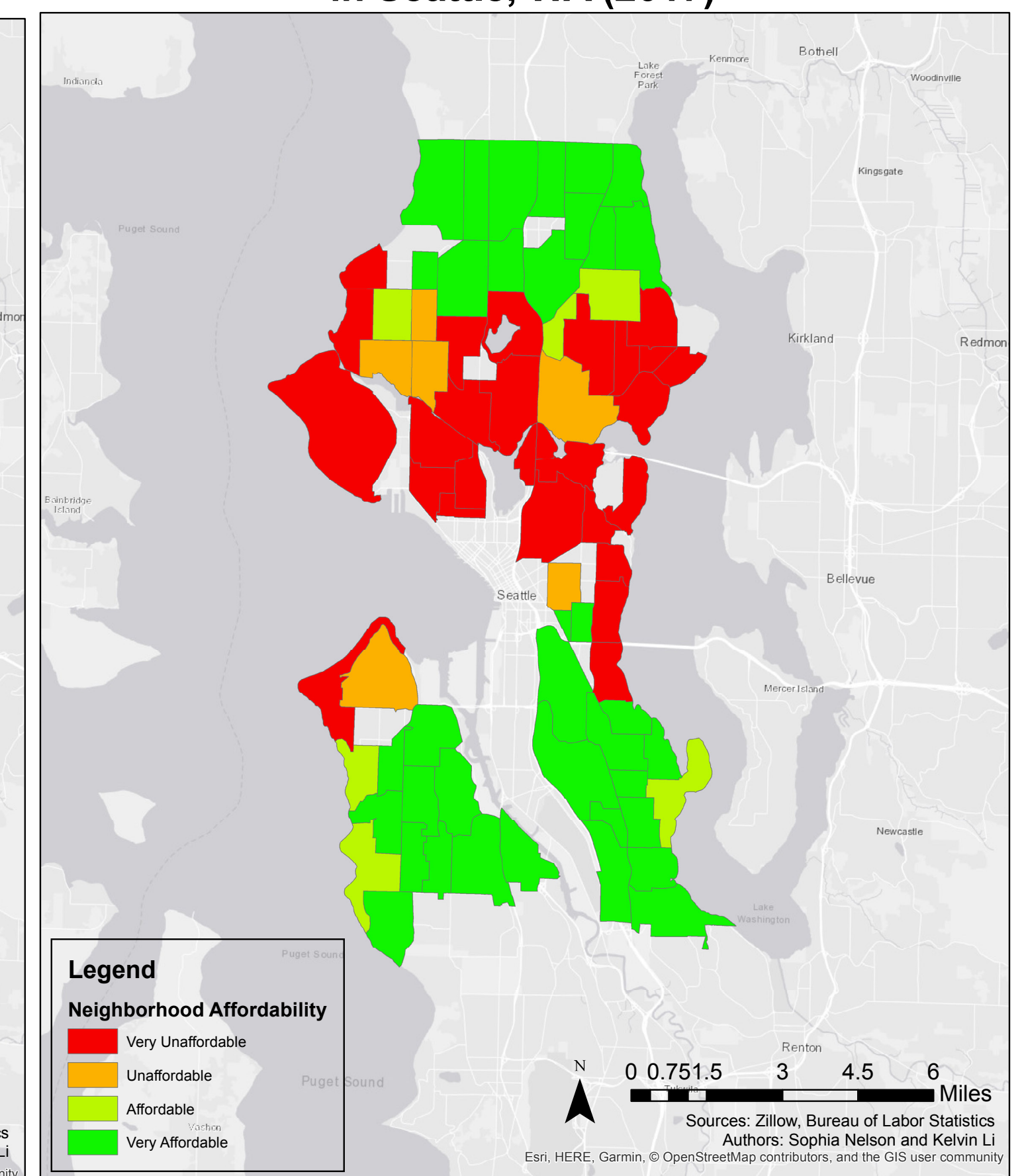
One-Bedroom Affordability in Seattle, WA (2017)



Two-Bedroom Affordability in Seattle, WA (2017)



Three-Bedroom Affordability in Seattle, WA (2017)



Findings and Conclusions

- Those working in Computer and Mathematical Occupations, in general, had more housing options when it comes to neighborhood affordability.
- Those working in Education, Training, and Library Occupations were limited to certain neighborhoods in the city.
- Those working in Education, Training, and Library Occupations who support dependents may not be able to afford a larger home within Seattle.
- Because teachers cannot choose to live anywhere in the city, commutes may be longer as schools are located all over Seattle.
- One limitation is the use of the 30% standard. While this has been used in studies and literature for a long time in the U.S., it does not accurately represent how much the urban population spends on housing, especially in expensive cities such as Seattle.
- Other categories of public servants were more variable and were more difficult to measure. This could mean, for example, that policemen and/or firefighters have different housing options than teachers.

References

- Zillow Research. (2017). Home Values [Data file]. Retrieved from <https://www.zillow.com/research/data/>.
- Bureau of Labor Statistics. (2017). May 2017 Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates: Seattle-Bellevue-Everett, WA Metropolitan Division [Data file]. Retrieved from https://www.bls.gov/oes/current/oes_42644.htm#25-0000