

# Vacancy Change in Vulnerable Census Tracts in Portland, Oregon

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## Abstract

This article examines areas of suspected blight in Portland, Oregon, by analyzing the increase of vacant addresses in vulnerable census tracts between 2015 and 2019 using U.S. Postal Service (USPS) data on vacant residential or no-stat addresses that are reported to the U.S. Department of Housing and Urban Development (HUD). From 2015 to 2019, 15.8 percent of vulnerable census tracts experienced suspected blight in the City of Portland, representing 11.4 percent of the total population of Portland. Trends from 2020 to 2021 indicate a general decline of vacancies reported by USPS, suggesting fewer instances of blight in Portland. Further analysis of 2020 to 2021 data and vulnerable census tracts is needed, pending the release of American Community Survey (ACS) data.

## Blight and its Impacts on Neighborhoods

No single definition of blight exists; it is a weaving together of definitions from various levels of government across jurisdictions. Blight is a subjective understanding of places—like abandoned homes or empty lots—that seem to be falling into disrepair and abandonment. Considering that there is no definition or standard data collection system for blight, U.S. Postal Service (USPS) housing vacancy data are used here to infer where blight is likely occurring in Portland, Oregon. American Community Survey (ACS) data are incorporated to measure who lives in the neighborhoods being impacted by blight in Portland.<sup>1</sup>

Blight is problematic because it potentially depreciates home values and marketability of surrounding properties, depresses city tax revenue, and creates social challenges for low-income

<sup>1</sup> ACS data is released on a 5-year cycle; therefore, this analysis considers 2015–19 ACS data and 2015–19 USPS data.

populations who live in blighted neighborhoods (Pough and Wan, 2007). Blight negatively impacts neighborhood status by creating low-value areas, reducing property values and business investment, and increasing unemployment (Ferreira et al., 2022).

## Blight in the City of Portland

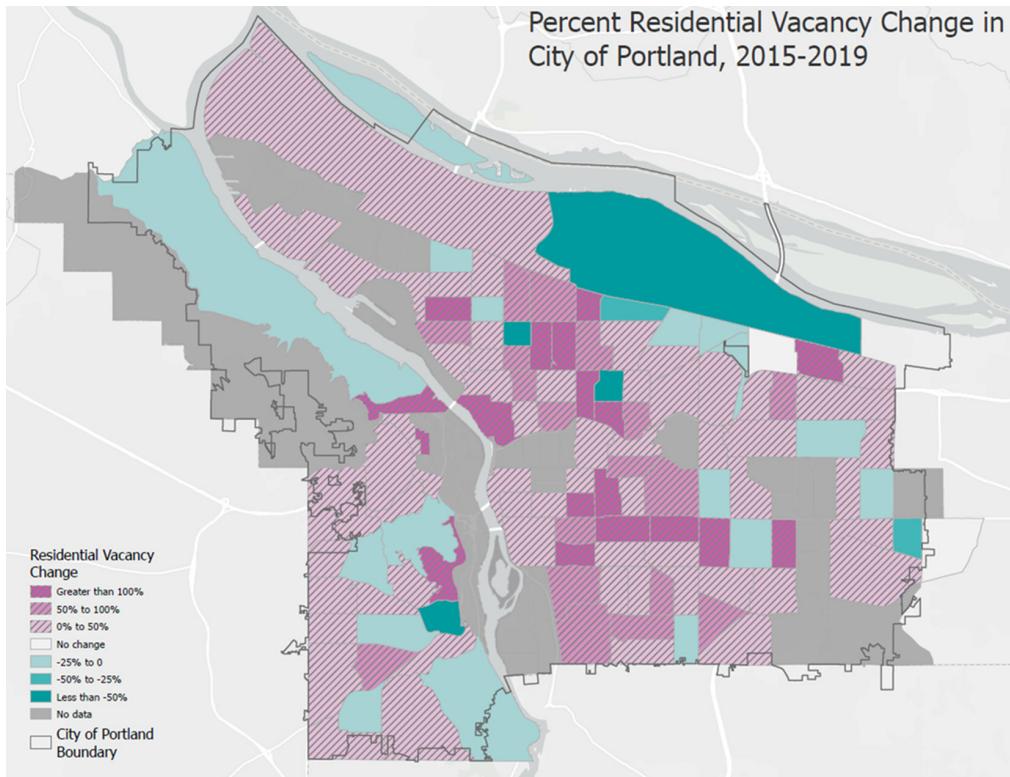
Blight in Portland is examined by analyzing USPS address data between 2015 and 2019. This dataset informs patterns in unoccupied residential units. The total number of unoccupied residential units includes the total vacant residential units and total no-stat counts reported by USPS. No-stat properties are addresses that are either abandoned or are under construction and are not yet habitable. No-stat properties are included in the approximation of supposed blight to maintain consistency with other research that examines blight with USPS data. If this data were omitted, this report might not be considered in broader analyses (Morckel and Durst, 2021; Morckel and Rybarczyk, 2018; Plier and Ortiz, 2012).

Vacant buildings as reported by the USPS are not equivalent to vacancy rates as reported by the Census Bureau. The Census Bureau does not include units that are likely abandoned in its vacancy count. The Census definition for vacant units states, “Vacant units are excluded if they are exposed to the elements, that is, if the roof, walls, windows, or doors no longer protect the interior from the elements, or if there is positive evidence (like a sign on the house or block) that the unit is to be demolished or is condemned” (U.S. Census, 2021). Therefore, USPS data provide a more holistic view of possible blight, and U.S. Census housing vacancy data are not considered in this analysis.

Exhibit 1 displays the percent change from 2015 to 2019 in vacant addresses in Portland, aggregated by census tract. More than three-fourths (78.5 percent) of the census tracts in Portland saw an increase in vacant homes between 2015 and 2019, as reported by USPS. Vacant housing grew in most census tracts, with the most growth centering around the Concordia neighborhood in northeast Portland and the Creston-Kenilworth neighborhood. The vacant housing stock declined in a few neighborhoods dispersed throughout the city. Darker shades with hatching represent the greater percent change in increased vacancy between 2015 and 2019, and darker shades without hatching symbolize a greater percent change of decrease in vacancy between 2015 and 2019.

**Exhibit 1**

Percent Change of Total Residential and No-Stat USPS Data from 2015 to 2019



USPS = U.S. Postal Service

Source: U.S. Department of Housing and Urban Development (2022)

## Vulnerable Census Tracts in City of Portland

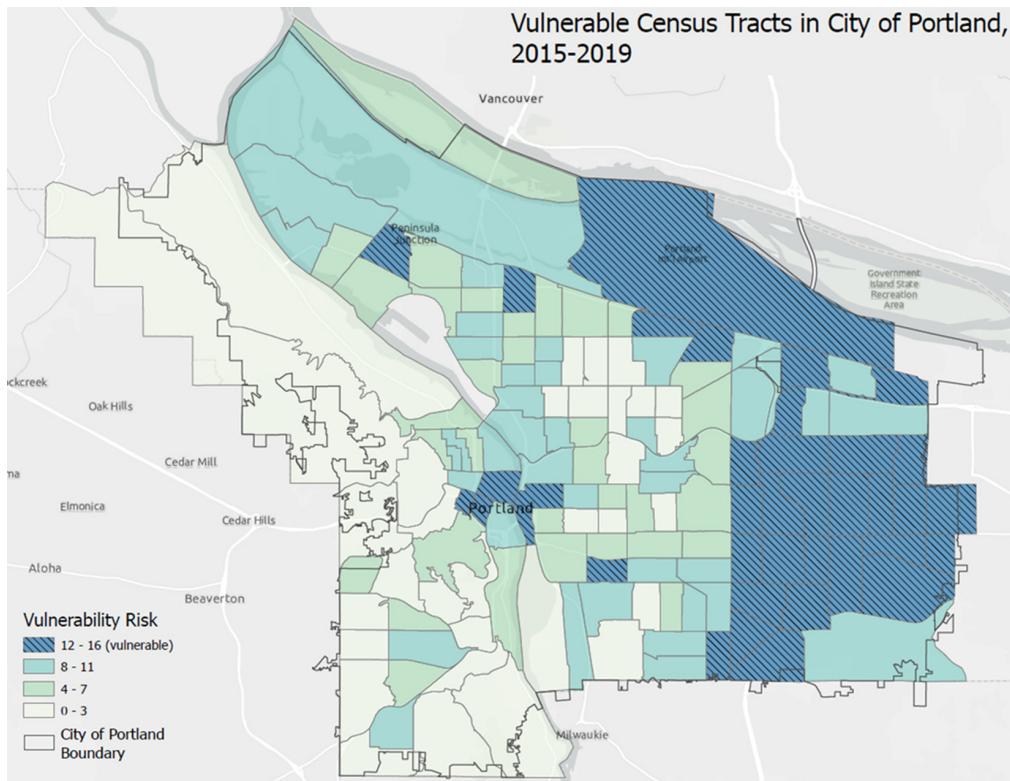
When analyzing blight, it is important to consider who lives in these regions because of disproportionate and compounding impacts to those populations (Haney, 2007). The Bureau of Planning and Sustainability analyzes socioeconomic data to determine which census tracts in Portland are vulnerable to changing neighborhood conditions as part of its city planning efforts (Bureau of Planning and Sustainability, 2021). The city defines a vulnerable census tract as having a significant proportion of renters, communities of color, residents aged 25 and older without a bachelor's degree, or households with income at or below 80 percent of Median Family Income (Bureau of Planning and Sustainability, 2012). This definition of a vulnerable census tract is used in this analysis to understand the disproportionate impacts of blight.

Exhibit 2 displays vulnerable census tracts in Portland. The share of census tracts in Portland defined as vulnerable is 19.7 percent, and 23.1 percent of the total population of Portland lives in vulnerable census tracts. Of the people who live in vulnerable census tracts, 34 percent are non-White, whereas 22.5 percent of the total population of Portland is non-White. Vulnerable

census tracts, indicated by the hatched polygons, are generally clustered in East Portland; 82nd Avenue marks the north/south corridor separating vulnerable census tracts from non-vulnerable census tracts. A smaller concentration of vulnerable tracts is located in downtown Portland and its inner eastside.

## Exhibit 2

Vulnerable Census Tracts in Portland as Defined by the City of Portland Using 5-year ACS Data



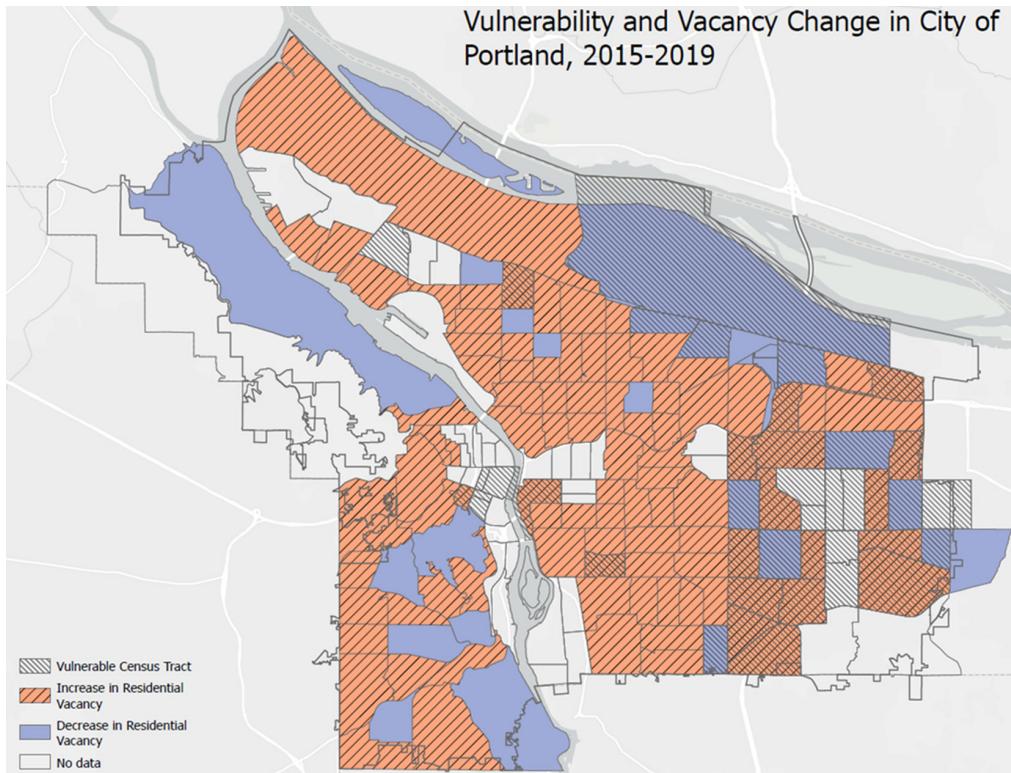
Sources: Bureau of Planning and Sustainability in City of Portland (2021); U.S. Department of Housing and Urban Development (2022)

## Vacancy Change and Vulnerable Census Tracts

Exhibit 3 visualizes the relationship between census tracts with high and low changes in vacancy, utilizing data from exhibit 1—which combines no-stat addresses that are abandoned or under construction and residential vacancies—compared with census tracts that are considered vulnerable, as defined by the City of Portland (exhibit 2). This map represents the spatial distribution of vulnerable areas that saw increased blight; the division of vulnerable census tracts, shown with hatched fill, remains visible at 82nd Avenue.

**Exhibit 3**

Vulnerable Census Tracts and Vacancy Change from 2015–19



Sources: Bureau of Planning and Sustainability in City of Portland (2021); U.S. Department of Housing and Urban Development (2022)

Within the 78.5 percent of census tracts that saw an *increase* in vacant homes, 15.8 percent of the census tracts are vulnerable census tracts, as is depicted in exhibit 3 by polygons with cross-hatching. These regions comprise 11.4 percent of the total population of Portland. Of the population in vulnerable census tracts that saw an increase in vacant homes, 34.5 percent are non-White. Conversely, of the census tracts that increased in vacancies, 84.2 percent were not vulnerable, as represented by census tracts with wide-spaced hatching in exhibit 3. These regions suggest housing development as an indication of USPS-reported address vacancy. Of the non-vulnerable census tracts that experienced an increase of vacant homes, 18.5 percent of their populations were non-White.

Of the census tracts that saw *decreased* vacancies, 27.3 percent were vulnerable census tracts, comprising 3.4 percent of the total population of Portland, as represented by narrow-spaced hatching in exhibit 3. The suspected blight may have decreased in 72.7 percent of Portland's non-vulnerable census tracts, where 78.8 percent of the population is White. The solid fill

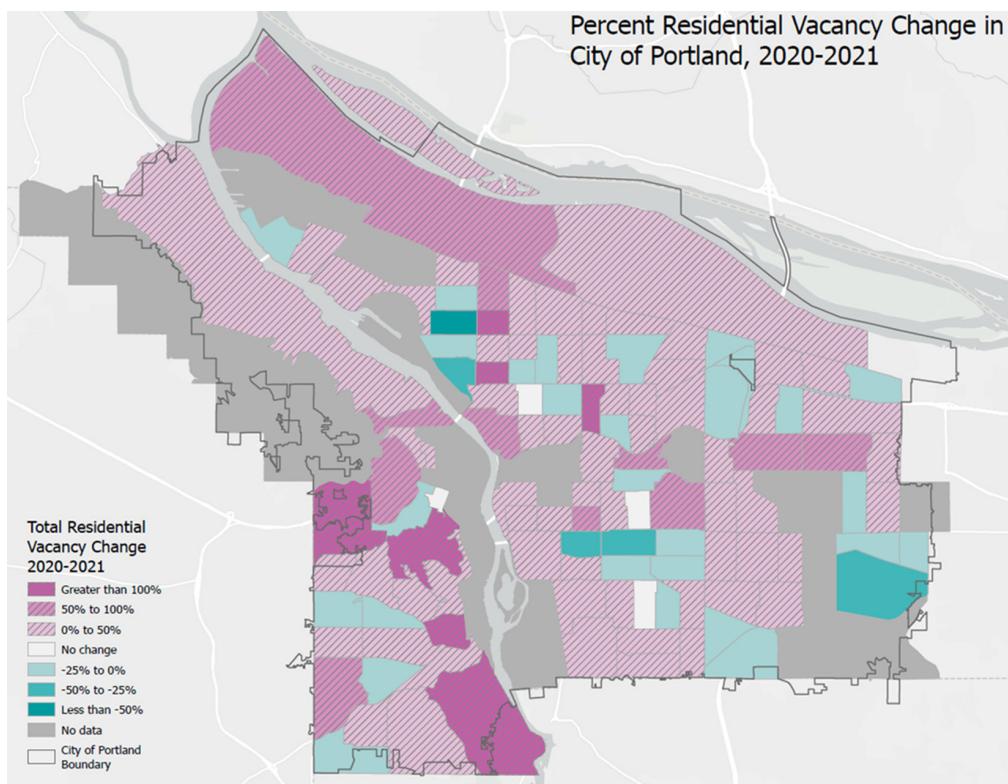
polygons, primarily situated in the Southwest Hills of Portland, saw minimal change in vacancy and do not represent vulnerable census tracts.<sup>2</sup>

## Opportunities for Future Research

Quarterly reporting of address data from USPS allows for a recent analysis of vacant addresses in Portland. Exhibit 4 illustrates the percent change in inactive residential addresses between March 2020 and December 2021, roughly the same period as the beginning of the COVID-19 pandemic to when the latest data were available at the time this article was written. Most census tracts throughout Portland continue to see growth in vacant housing units; however, because this calculation includes residential addresses coded as no-stat, this may include housing under construction. Only a few census tracts had decreased rates of housing vacancy, most of which were on the east side of the Willamette River.

### Exhibit 4

Percent Change of Total Residential and No-Stat USPS Data from 2020–2021



USPS = U.S. Postal Service

Source: U.S. Department of Housing and Urban Development (2022)

<sup>2</sup> USPS does not report on a total of 23 census tracts in Portland, 7 of which are vulnerable census tracts.

## Acknowledgments

The author would like to thank her colleagues in the office of Field Policy and Management at the Portland Field Office of HUD.

## Author

Kirsten Ray is a program analyst at the U.S. Department of Housing and Urban Development Portland Field Office.

## References

City of Portland, Bureau of Planning and Sustainability. 2021. *Vulnerability Risk Analysis Dataset. PortlandMaps: Metadata*.

———. *Methodology for Vulnerability Risk Analysis*. [2012-vulnerability-analysis.pdf \(portland.gov\)](https://portland.gov).

Ferreira, Fernando A.F., Ronald W. Spahr, Mark A. Sunderman, Kannan Govindan, and Ieva Meidutė-Kavaliauskienė. 2022. “Urban Blight Remediation Strategies Subject to Seasonal Constraints,” *European Journal of Operational Research* 296 (1): 277–88. <https://www.sciencedirect.com/science/article/abs/pii/S037722172100271X>.

Haney, Timothy J. 2007. “‘Broken Windows’ and Self-Esteem: Subjective Understandings of Neighborhood Poverty and Disorder,” *Social Science Research* 36 (3): 968–94. <https://doi.org/10.1016/j.ssresearch.2006.07.003>.

Morckel, Victoria, and Greg Rybarczyk. 2018. “The Effects of the Water Crisis on Population Dynamics in the City of Flint, Michigan,” *Cities & Health* 2 (1): 69–81. <https://doi.org/10.1080/23748834.2018.1473095>.

Morckel, Virginia, and Noah Durst. 2021. “Using Emerging Hot Spot Analysis to Explore Spatiotemporal Patterns of Housing Vacancy in Ohio Metropolitan Statistical Areas.” Sage Journals. <https://doi.org/10.1177/10780874211065014>.

Plier, Allison, and Elaine Ortiz. 2012. *Benchmarks for Blight. How Much Blight Does New Orleans Have?* Greater New Orleans Community Data Center. [https://gnocdc.s3.amazonaws.com/reports/GNOCDC\\_BenchmarksForBlight\\_March2012.pdf](https://gnocdc.s3.amazonaws.com/reports/GNOCDC_BenchmarksForBlight_March2012.pdf).

Portland Housing Bureau. 2020. *2020 State of Housing in Portland*. <https://www.portland.gov/sites/default/files/2021/phb-soh-2020-web-part-0.pdf>.

Pough, Bradley, and Qian Wan. 2017. “Data Analytics and the Fight Against Housing Blight: A Guide for Local Leaders,” *Responsive Communities* (March). <https://dash.harvard.edu/handle/1/31852257>.

U.S. Census Bureau. Definitions and Explanations. 2021. <https://www.census.gov/housing/hvs/definitions.pdf>.

U.S. Department of Housing and Urban Development. n.d. HUD Aggregated USPS Administrative Data on Address Vacancies. <https://www.huduser.gov/PORTAL/datasets/usps.html>.

