

Reside Vancouver Appendix B

Vulnerability Assessment

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Introduction

While public investment and private development into historically disinvested areas comes with a multitude of benefits – doing so without centering equity leads to serious consequences for the areas’ vulnerable communities. Investment with equity considerations can lead to pressures on the housing market that leads to involuntary displacement for residents who cannot afford escalating housing costs and voluntary displacement due to changing neighborhood character that no longer reflects the existing community that lives there.

Thread Community Planning identified Vancouver’s most vulnerable census tracts in order to engage with community residents and relevant services providers to formulate policies that can counter externalities stemming from investment. To do so Thread conducted a vulnerability assessment that was adapted from Dr. Lisa Bates’ Gentrification and Displacement Study.¹

Methodology

Thread assessed census the vulnerability of Vancouver’s communities at the tract level using six vulnerability indicators that identify the census tracts most at risk to displacement. These vulnerability indicators include: people of color, educational attainment, child poverty, households with lower incomes, renters, and median gross rents (MGR). The first five indicators were adapted from Dr. Lisa Bates’ Gentrification and Displacement study. MGR was added since low rents can act as a signal for gentrification because as more public dollars are invested into historically disinvested communities – which tend to have lower rents – this can trigger private development in these areas as they become more desirable. As these areas become more desirable, rents can spike leading to displacement of those who could only afford lower rents.

Table B1. Vulnerability Indicators

Indicator	Description
People of Color	Percentage of population who identify as non-white
Educational Attainment	Percentage of population 25 years and over with a Bachelor’s degree or higher
Child Poverty	Percentage of families with children related to householder under 18 years below the
Low-income Households	Percentage of households making metro’s 80% MHI or less
Renters	Percentage of renter-occupied housing
Median Gross Rent	Median amount paid per month on housing costs, including rent and estimated average utilities

For the citywide assessment Thread identified 58 census tracts that make up the city of Vancouver. Each census tract was given a rank between 1 and 58 for each vulnerability indicator with 58 being the most vulnerable census tract. This was conducted for all vulnerability indicators. Therefore, the least vulnerable of all census tracts within the city could have a possible overall score of 6, while the most vulnerable census tract could have a possible score of 348. The following indicators received the highest scores:

- Highest proportion of households with lower incomes
- Highest proportion of people of color with lower incomes
- Highest child poverty rates
- Highest proportion of renters
- Lowest proportion of people who hold bachelor's degrees or higher
- Lowest median rents

For example, the proportion of people of color in Tract 416 is 27%. This is the highest proportion of people of color among any census tract in the city. Therefore, it gets a score of 58 (out of 58 census tracts within the city). The same tract has the second highest child poverty rate of any tract in the city, so it gets a score of 57. This ranking is done for each indicator and the tract with the highest score – out of 348 – is the most vulnerable tract in the city.

Thread utilized the same unweighted ranking system to identify the most vulnerable neighborhood(s) in central Vancouver – which is made up of sixteen census tracts - where the least vulnerable tracts could have a possible score of 6, while the most vulnerable census tract could have a possible score of 96.

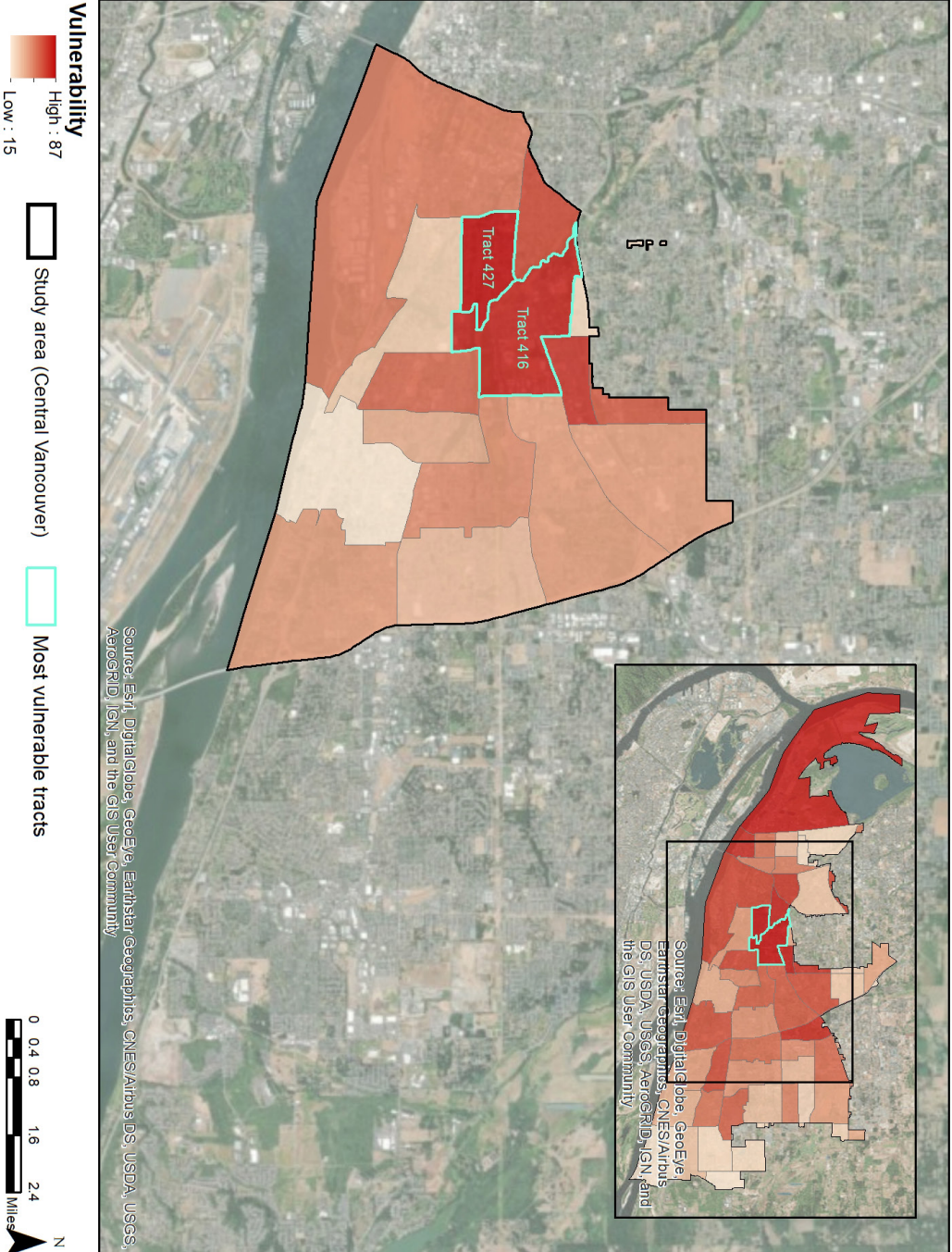
Please note that this assessment does not reflect the same methodology used in Bates' study. We assessed the vulnerability of each census tract by comparing the indicators of each census tract to one another instead of measuring neighborhood change over time per indicator as conducted by Bates' methodology. Therefore, our approach does not assess stages of gentrification that a particular census tract may be in. However, our approach does provide the demographic, socioeconomic, and housing market context of Vancouver at a single point-in-time: 2017.

After identifying the most vulnerable census tracts, Thread conducted a more comprehensive assessment within each indicator. Data were assessed temporally from 2010 to 2017, comparing the individual tracts against citywide, countywide, regionwide, and statewide trends. This timeline was chosen due to American Community Survey

(ACS) data availability. ACS data was chosen over U.S. Decennial Census data due to the significant changes that occur in housing/rental costs and population growth in less than 10-year increments. Thread believes that 2010 Decennial data would not accurately reflect the current state of displacement vulnerability to the degree that was acceptable for this assessment since the most recent census is from 2010.²

Vulnerability Indicators

From the citywide assessment Thread corroborated the City of Vancouver's information that central Vancouver is the most vulnerable district in the city (see Map 1 on the following page). Tract 410.05, the darkest shade of red west of the study area, is zoned primarily for industrial use and open space, which means that the shade of red does not accurately reflect vulnerability of that particular tract. East of central Vancouver has much lower vulnerability to displacement, as the SE tracts typically have lower rates of child poverty, lower proportions of households with lower incomes, and higher proportions of people that hold bachelor's degrees or higher.



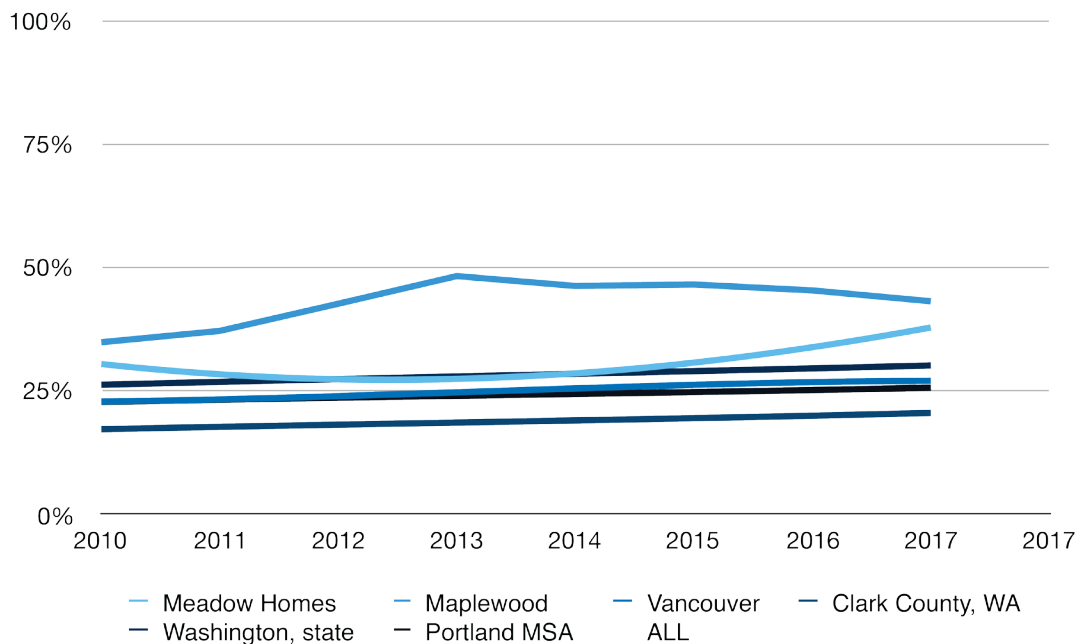
Map: Vulnerability Assessment - Spatial Rerepresentation of Central Vancouver
Source: American Community Survey, 5-year estimates, 2017

People of Color

People of color face more barriers to employment, housing, and wealth generation opportunities compared to White populations and are less likely to be resilient in the face of housing or economic market shocks.³ The geographical overlay of populations of color and low-income neighborhoods exacerbates inequality, particularly if there is a lack of quality public schools nearby. Further, neighborhoods that are historically more racially/ethnically diverse, tend to have lower property values due to past housing segregation efforts.⁴ These depressed land values become ripe for gentrification and development upon public investment.

Since 2010, the number of people of color in the city of Vancouver has risen modestly from 22.9% to 27.1% by 2017. Most census tracts in central Vancouver have a higher concentration of people of color than the city's concentration overall. Among them, Tract 416 - or "Meadow Homes" - showed a growth rate of about 7.4% since 2010 and has over 10.8% higher concentration of people of color than the city. Growth rates at other scales show a more gradual ascent, with a subtle decline in the share of people of color occurring in the Maplewood neighborhood area between 2013 and 2017 and a decline of 5.1%.

Figure B1. Population Share – People of Color, 2010-2017



Source: American Community Survey 5-year estimates, 2010-2017

Table B2. Population Share – People of Color

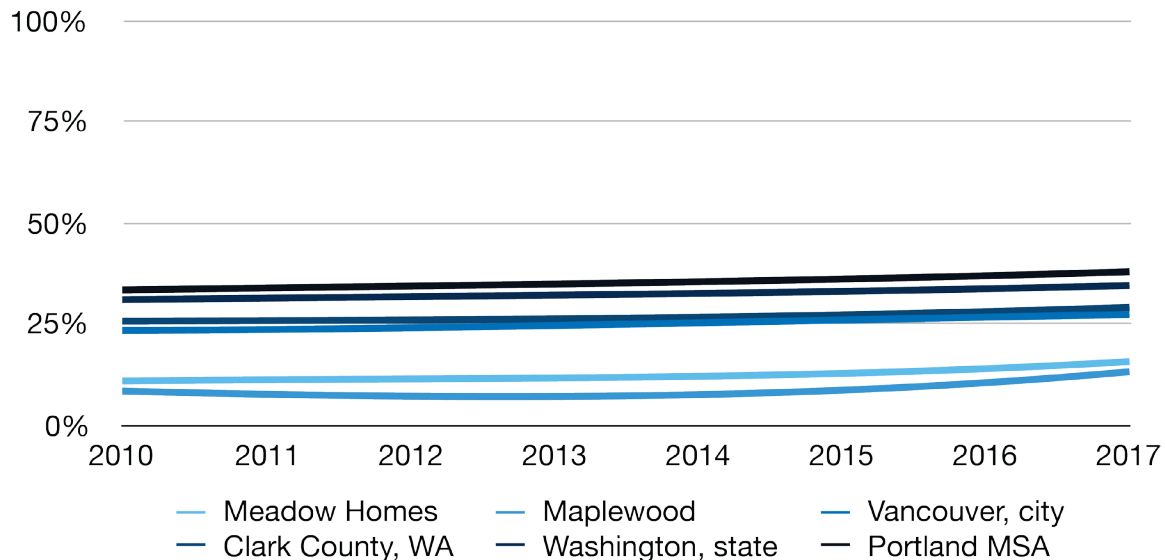
	2010	2011	2012	2013	2014	2015	2016	2017
Meadow Homes	30.5%	27.9%	27.2%	26.8%	27.4%	30.6%	33.5%	37.9%
Maplewood	34.9%	37.2%	42.7%	48.3%	46.3%	46.6%	45.4%	43.2%
Vancouver	22.9%	23.2%	24.2%	24.8%	26.5%	26.9%	27.0%	27.1%
Clark County, WA	17.3%	17.8%	18.2%	18.7%	19.2%	19.7%	20.0%	20.6%
Washington, state	26.3%	26.9%	27.5%	28.1%	28.7%	29.2%	29.6%	30.2%
Portland MSA	22.8%	23.3%	23.7%	24.1%	24.5%	24.9%	25.2%	25.7%

Source: American Community Survey 5-year estimates, 2010-2017

Educational Attainment

Educational attainment is a common indicator of neighborhood change. As educational attainment increases in a region, earnings improve, and unemployment rates decrease. The proportion of people who hold bachelor's degrees has increased by 4%, from 23.4% in 2000 to 27.3% in 2017. While this trend is reflected throughout much of central Vancouver's census tracts, some tracts have a much lower proportion of people with bachelor's degrees or more than the city average, including the Meadow Homes and Maplewood neighborhood areas. Educational attainment levels have been increasing at a similar rate at every scale.

Figure B2. Percent of Population with Bachelor's Degree or Higher, 2010-2017



Source: American Community Survey 5-year estimates, 2010-2017

Table B3. Percent of Population with Bachelor's Degree or Higher

	2010	2011	2012	2013	2014	2015	2016	2017
Meadow Homes	10.9%	11.3%	12.3%	10.8%	12.3%	13.6%	13.6%	15.7%
Maplewood	8.4%	7.5%	8.5%	6.6%	7.2%	8.9%	10.0%	13.2%
Vancouver, city	23.4%	23.5%	23.7%	24.5%	25.1%	26.0%	26.7%	27.3%
Clark County, WA	25.7%	25.8%	26.0%	26.0%	26.5%	27.2%	27.9%	29.1%
Washington, state	31.0%	31.4%	31.6%	31.9%	32.3%	32.9%	33.6%	34.5%
Portland MSA	33.4%	33.9%	34.3%	34.5%	34.9%	35.8%	36.8%	37.9%

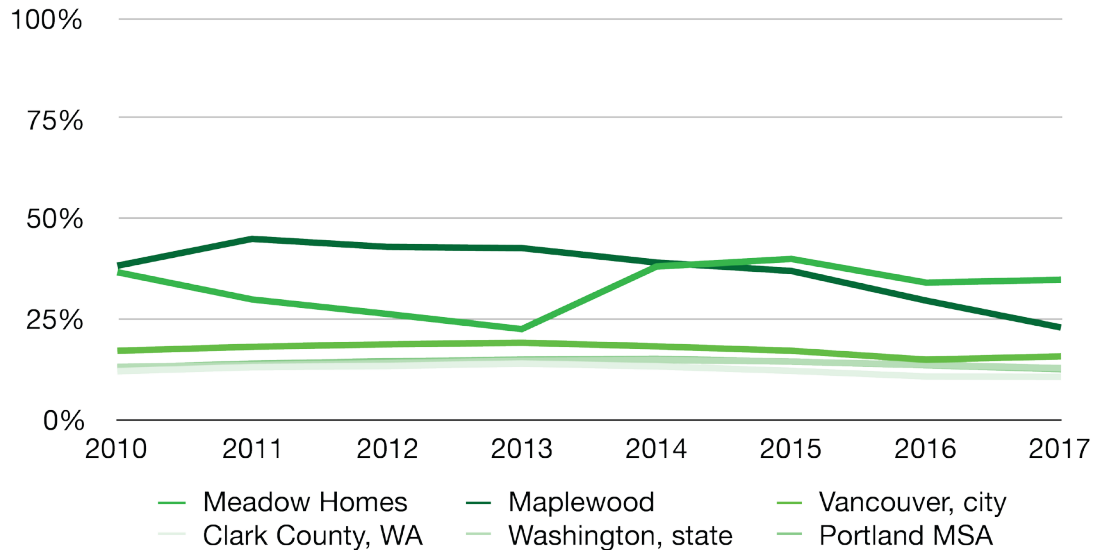
Source: American Community Survey 5-year estimates, 2010-2017

Child Poverty

Of all household makeups, families of lower incomes and children in the home are most vulnerable to displacement.⁵ Further, displaced families are also particularly difficult populations to find housing – even with the Fair Housing Act in place, which aims to protect marginalized populations from being discriminated against.⁶

The percentage of families living below the poverty level in the city has slightly decreased from 17.1% in 2010 to 15.7% in 2017. Most census tracts in central Vancouver have shown higher rates of children in poverty than the city overall. As of 2017, the Meadow Homes neighborhood area had over twice the rate of child poverty than the city, three times that of Clark County, and nearly three times that of the state and the Portland metropolitan region.⁷ Maplewood also has a high rate of child poverty compared to other scales, with rates between 5 to 10 percent lower at the city, county, state, and regional scale. The poverty rate in Maplewood has been decreasing since 2011.

Figure B3. Percent of Child Poverty, 2010-2017



Source: American Community Survey 5-year estimates, 2010-2017

Table B4. Percent of Child Poverty

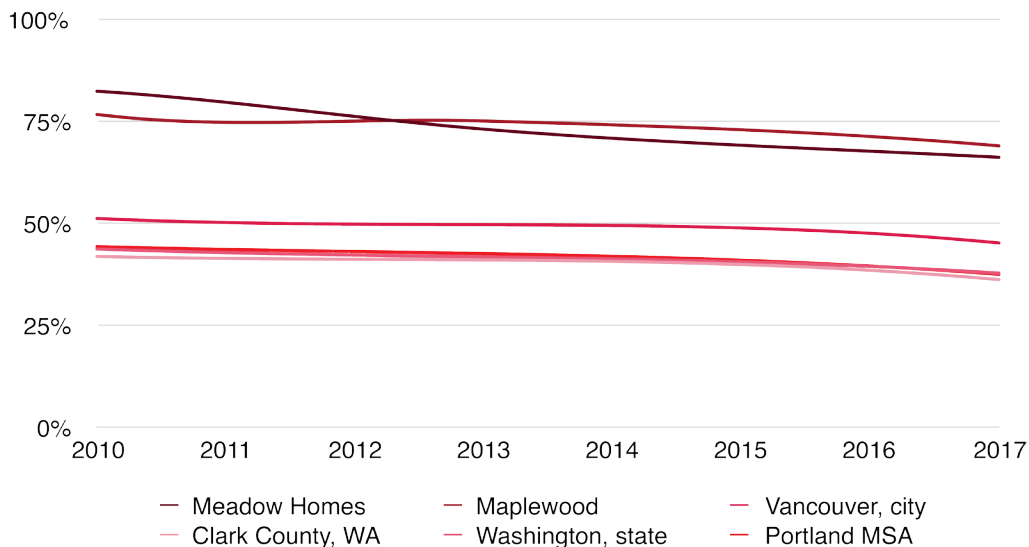
	2010	2011	2012	2013	2014	2015	2016	2017
Meadow Homes	36.7%	29.9%	26.3%	22.5%	38.1%	40.0%	34.1%	34.8%
Maplewood	38.3%	45.0%	43.0%	42.7%	39.1%	37.0%	29.6%	22.9%
Vancouver, city	17.1%	18.1%	18.7%	19.1%	18.2%	17.1%	14.9%	15.7%
Clark County, WA	12.0%	13.0%	13.3%	13.9%	13.2%	12.1%	10.7%	10.6%
Washington, state	13.1%	13.5%	14.0%	14.6%	14.8%	14.4%	13.6%	12.8%
Portland MSA	12.9%	13.9%	14.5%	14.9%	15.1%	14.4%	13.5%	12.5%

Source: American Community Survey 5-year estimates, 2010-2017

Households with Lower Incomes

This category is comprised of households making 80% or less of the Portland metro area’s Median Household Income (MHI). When accompanied with other indicators, a reduction in the number of households with lower incomes in a census tract over time can be indicative of impacts of gentrification. This is due to low income households being less resilient to rising housing costs compared to higher income earners since they have fewer resources to lean on when housing burdens arise and have less access to options if they are forced to move.⁸ The MHI of the region increased by over 16% from \$57,307 in 2010 to \$66,657 in 2017. The number of households making 80% MHI or less has been decreasing at every scale since 2010. The proportion of households with lower incomes both at the city level and in central Vancouver was higher than the share at the county, state, and metro level. The proportion of households with lower incomes in Maplewood and Meadow Homes is significantly higher than at any other scale but has decreased approximately 8% and 16% respectively since 2010.

Figure B4. Percent of Low-Income Households 2010-2017



Source: American Community Survey 5-year estimates, 2010-2017

Table B5. Percent of Low-Income Householders (80% of MHI)

	2010	2011	2012	2013	2014	2015	2016	2017
Meadow Homes	82.3%	80.3%	76.3%	73.0%	71.1%	68.5%	67.7%	66.1%
Maplewood	76.6%	72.8%	75.3%	75.0%	73.5%	73.0%	71.6%	68.9%
Vancouver, city	51.1%	49.7%	50.7%	51.0%	49.6%	49.1%	48.1%	45.1%
Clark County, WA	41.8%	41.1%	41.4%	42.2%	41.0%	40.3%	38.9%	36.1%
Washington, state	43.6%	42.5%	42.3%	42.1%	41.7%	41.0%	39.7%	37.7%
Portland MSA	44.2%	43.4%	43.0%	43.1%	42.5%	41.8%	39.8%	37.4%

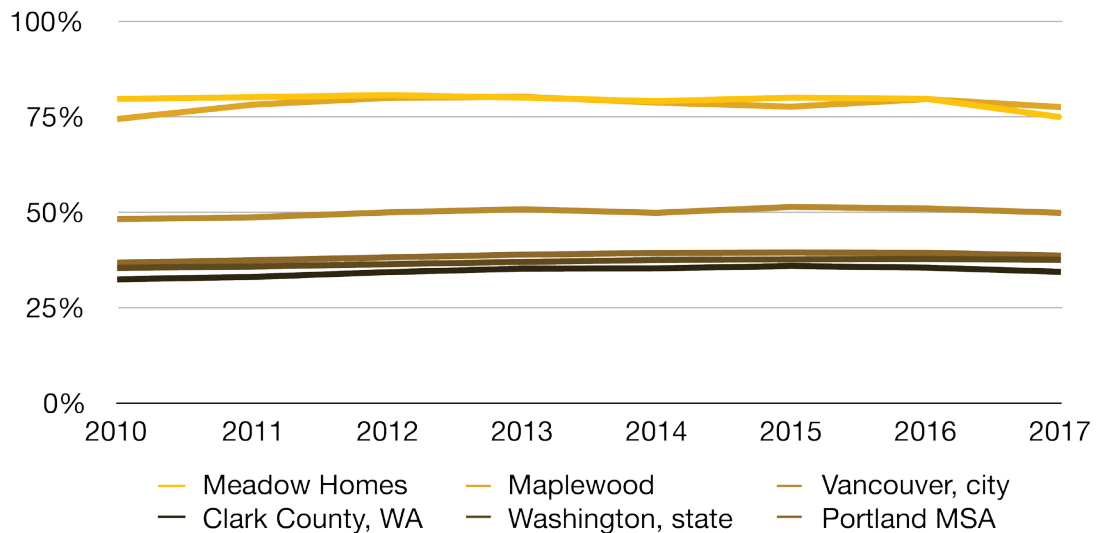
Source: American Community Survey 5-year estimates, 2010-2017

Renters

Rapid population growth that has outpaced the development of affordable housing options in the Portland metro region has led to low vacancy rates and increased rents in Vancouver. The sharp increase in rents year-by-year (and even month-by-month) exacerbates housing affordability and availability issues among lower-income renter populations with less protections or resources to keep them in their homes, making the assessment of the renter population an important indicator for neighborhood vulnerability to displacement.

The percentage of renters in the city of Vancouver has slightly increased from 48% in 2010 to nearly 50% in 2017. Most census tracts within central Vancouver have experienced an increase in the number of renters and at a higher rate than the city of Vancouver as a whole, however the trend of renters has stayed relatively stagnant at all scales.

Figure B5. Percent of Renter Households, 2010-2017



Source: American Community Survey 5-year estimates, 2010-2017

Table B6. Percent of Renter Households

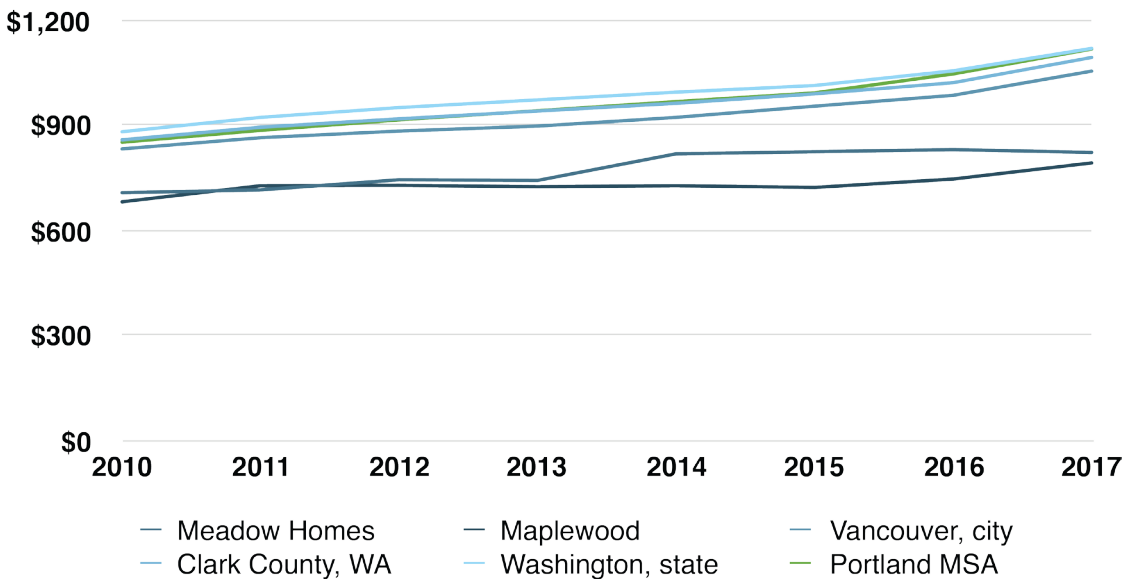
	2010	2011	2012	2013	2014	2015	2016	2017
Meadow Homes	79.5%	80.0%	80.5%	79.9%	78.9%	79.9%	79.6%	74.7%
Maplewood	74.3%	78.0%	79.8%	80.1%	78.6%	77.5%	79.5%	77.4%
Vancouver, city	48.0%	48.5%	49.8%	50.6%	49.7%	51.2%	50.8%	49.7%
Clark County, WA	32.2%	32.9%	34.1%	35.0%	35.1%	35.7%	35.3%	34.2%
Washington, state	35.2%	35.6%	36.2%	36.8%	37.3%	37.5%	37.6%	37.3%
Portland MSA	36.6%	37.3%	38.0%	38.7%	39.1%	39.3%	39.2%	38.5%

Source: American Community Survey 5-year estimates, 2010-2017

Median Gross Rent (MGR)

Rents increasing in previously disinvested neighborhoods can signal gentrification, especially if rents have been relatively stagnant for years prior. From 2010 to 2017, MGR of the city has increased modestly and most tracts also have shown an increasing trend during the same period. Vancouver’s MGR has risen by nearly 27% from \$833 in 2010 to \$1,055 in 2017. The MGR rate in most of central Vancouver the tracts seemed to trend in line with the city overall. However, the rents of some tracts, like the Meadow Homes and Maplewood neighborhood areas were lower by approximately \$200 compared to the city median.

Figure B6. Median Gross Rent



Source: American Community Survey 5-year estimates, 2010-2017

Table B7. Median Gross Rent

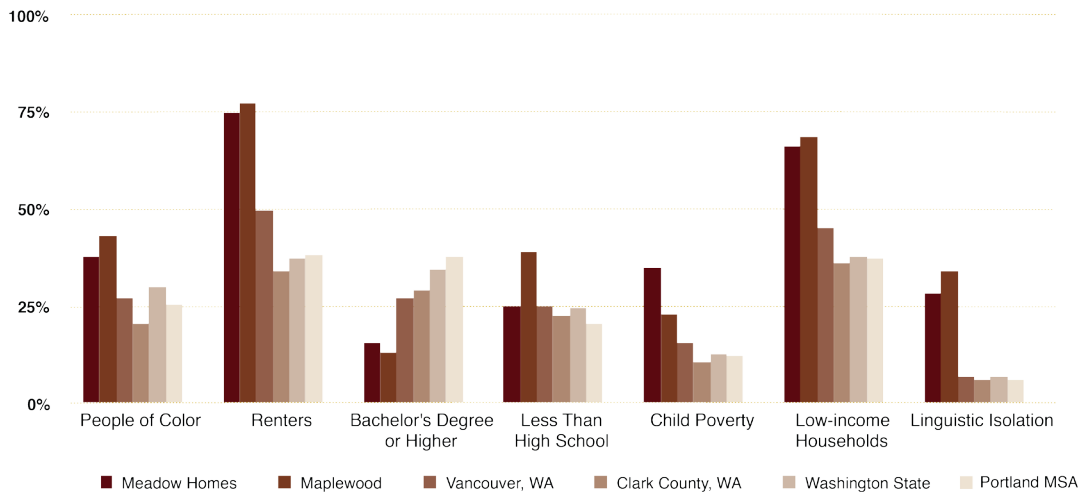
	2010	2011	2012	2013	2014	2015	2016	2017
Meadow Homes	\$708	\$716	\$745	\$743	\$819	\$825	\$831	\$823
Maplewood	\$682	\$728	\$729	\$725	\$728	\$723	\$747	\$793
Vancouver, city	\$833	\$865	\$884	\$898	\$923	\$955	\$986	\$1,055
Clark County, WA	\$859	\$895	\$919	\$941	\$963	\$990	\$1,022	\$1,094
Washington, state	\$882	\$923	\$951	\$973	\$995	\$1,014	\$1,056	\$1,120
Portland MSA	\$852	\$886	\$916	\$942	\$968	\$993	\$1,047	\$1,118

Source: American Community Survey 5-year estimates, 2010-2017

Neighborhood Drilldowns

Doing a deeper dive at the neighborhood-level can provide additional insight into the current state of vulnerability at a smaller scale. This is particularly important since neighborhood change typically occurs on a street-by-street basis. While census tracts cannot get to that level of detail with any certainty, census tracts can still provide us with a more nuanced perspective. The section below offers a higher level of detail at each scale, which includes assessing additional indicators such as high school graduation rate, median home values, and linguistic isolation. Figure B7 offers a snapshot of just how vulnerable these neighborhoods are to displacement compared to other geographic scales, with some indicators – households with lower incomes, renters, and linguistic isolation specifically – showing significant disparities compared to other scales.

Figure B8. Vulnerability Indicator Comparison, 2017



Source: American Community Survey 5-year estimates, 2017

Table B8. Vulnerability Indicator Comparison

	Meadow Homes	Maplewood	Vancouver, WA	Clark County, WA	Washington, state	Portland MSA
People of Color	37.9%	43.2%	27.1%	20.6%	30.2%	25.7%
Renters	74.7%	77.4%	49.7%	34.2%	37.3%	38.5%
Bachelor's Degree or Higher	15.7%	13.2%	27.3%	29.1%	34.5%	37.9%
Less Than High School	25.0%	38.9%	25.0%	22.5%	24.5%	20.4%
Child Poverty	34.8%	22.9%	15.7%	10.6%	12.8%	12.5%
Low-income Households	66.1%	68.9%	45.1%	36.1%	37.7%	37.4%
Linguistic Isolation	28.4%	34.1%	7.1%	6.0%	6.9%	6.2%
Median Gross Rent	\$823	\$793	\$1,055	\$1,094	\$1,120	\$1,118
Median Home Values	\$173,100	\$165,800	\$238,300	\$272,400	\$286,800	\$312,500

Source: American Community Survey 5-year estimates, 2017

Meadow Homes Neighborhood Area (Tract 416)

Vulnerable Populations:

- Nearly 38% of residents are people of color, compared to 27.1% in the city overall
- Of Meadow Homes households, 74.7% are renters, compared to 49.7% in the city of Vancouver
- Residents over age 25 are less likely to have a Bachelor's degree compared to the city (15.7% vs. 27.3%)
- Of residents over age 25, approximately 25% graduated high school, which matches the city rate
- Over 66% of households earn 80% or less of MHI

Demographic Changes:

- Between 2010 and 2017, Meadow Homes has experienced a larger increase in people of color compared to the city (7.4% vs. 4.2%)
- Meadow Homes has increased homeownership rates at around 5% from 2010 to 2017 but the homeownership rate in the neighborhood is much lower than the city (25.3% vs. 50.3%)
- The number of residents with Bachelor's degree have increased over the time but the rate is much lower than the city
- MHI has increased rapidly and the increase rate is about three times of the city (39.0% vs. 13.7%)

Housing Market Conditions:

- Meadow Homes' median home values remain below the city's MHV (\$173,100 versus \$238,300)

Racial/Ethnic Highlights

- Residents of color in Meadow Homes are primarily comprised of Latinx/Hispanic (24.5%), African-American (3.40%) and Asian/Asian-American (4.6%) populations
- Over 78% of people ages 5 to 17 speak only English at home
- Over 17% of people ages 5 to 17 speak Spanish at home

Maplewood Neighborhood Area (Tract 427)

Vulnerable Populations:

- Over 43% of Maplewood residents are of people of color, compared to 27.1% in the city
- Over 77% of residents are renters, compared to 49.7% in the city
- Residents over the age of 25 are much less likely to have a Bachelor's degree compared to the city (13.2% vs. 27.3%).
- Residents over the age of 25 have a high school diploma graduation rate of 38.9%, higher than the city rate by nearly 14% (25.0%)
- Nearly 69% of households earn 80% or less of MHI

Demographic Changes:

- There has been a significant increase in people of color compared to the increase in the city (8.3% vs. 4.2%) between 2010 and 2017
- Maplewood has decreased homeownership rates at around 3% and the homeownership rate in the neighborhood is much lower than the city (22.6% vs. 50.3%)
- The number of residents that hold a Bachelor's degree or higher have increased since 2010 but the rate is much lower than the city
- Maplewood's MHI has increased slightly, but is still lower than the city's increase in MHI (8.2% vs. 13.7%)

Housing Market Conditions:

- Maplewood's median home values remain below the citywide median (\$165,800 versus \$248,300)

Racial/Ethnic Highlights

- Residents of color in Maplewood are primarily comprised of 27.9% Latinx/Hispanic, 4.5% Asian/Asian-American, and 2.1% Black or African-American populations.

- 34.1% of people speak a language other than English at home. 2.4% of people ages 5 to 17 who speak a language other than English speak English “not well” and “not at all”, which is lower than the city overall.

Summary

The majority of neighborhoods in central Vancouver show continued vulnerability to displacement with some combination of higher proportion of people of color, low proportion of people with bachelor’s degrees or higher, high rates of child poverty, higher proportions of households with lower incomes, higher proportions of rental households, and much lower median gross rents when compared to various scales.

Given these six indicators, most households in central Vancouver are more vulnerable to displacement compared to the city, county, state, and Portland metro region overall. While not scoring 57 or 58 in every indicator of vulnerability the Maplewood and Meadow Homes neighborhood areas are particularly susceptible to impacts from public investment. This is most blatant in the neighborhoods’ low educational attainment levels (bachelor’s degree or higher), higher population share of people of color, lower median gross rents, and higher number of renter households.

Endnotes

¹ Bates, L. K. (2013). Gentrification and Displacement Study: Implementing an equitable inclusive development

² Thread recognizes the limitations to this approach, as we do not have pre-recession data to compare and that a 7-year timeline provides only a glimpse of the city's demographic and socioeconomic history. However, the benefits of using more current data via ACS 5-year estimates outweighed the shortcomings of Decennial data.

³ Wolff, E.N. (n.d.) Recent trends in the United States: Rising debt and the middle-class squeeze—an update to 2007. Annandale-on-Hudson: Bard College as cited by Uprooted, the City of Austin's Anti-Displacement Report.

⁴ Rothstein, R. (2017). The Color of Money. Massey, Douglas, & Denton, Nancy, American Apartheid, 1998. as cited by Uprooted, the City of Austin's Anti-Displacement Report.

⁵ Desmond, M., et al. (2013). Evicting children. *Social Forces*, 92, 303-327 as cited by Uprooted, the City of Austin's Anti-Displacement Report.

⁶ Mazzara, A., et al. (2016). Rental assistance to families at lowest point in decade. Center on Budget and Policy Priorities as cited in the City of Austin's Anti-Displacement Report.

⁷ The cause of the significant uptick in child poverty in the Meadow Homes neighborhood area between 2013 and 2014 could not be identified.

⁸ Pendall, R. et al. (2012). Vulnerable people, precarious housing, and regional resilience: An exploratory analysis. *Housing Policy Debate*, 22(2), 271-296 as cited by Uprooted, the City of Austin's Anti-Displacement Report.

⁹ Affordable Housing Task Force. (2016). Affordable Housing Task Force Report. City of Vancouver Washington.

