

# Equity Assessment Tool

---

## ZERO CITIES PROJECT

*Grand Rapids, Michigan  
Addendum*

Prepared by The Urban Core Collective

# Table of Contents

<b>Introduction</b>	3
<b>Equity Metrics and the Building Environment</b>	3
1. Energy Cost Burden on People of Color	3
2. Economic Prosperity (Wealth, Jobs, and Business Opportunities for People of Color)	5
3. Gentrification and Displacement	8
4. Substandard Housing and Exposure to Health Risks	12
5. Geographic Location and Exposure to Environmental Risk	15
6. Urban Heat Island Effects	16
<b>Conclusion</b>	18

## Acknowledgements

*Special thank you to Maris Brumel, Ethan Boelkins, Zachary Thiel, Becky Jo Glover, Annabelle Wilkinson for their assistance with data collection.*

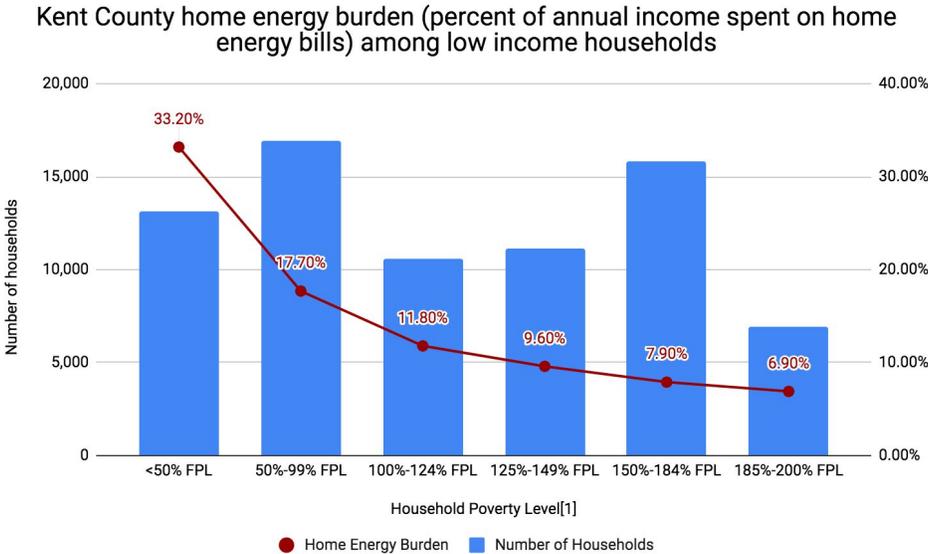
# Introduction

This addendum adapts the equity metrics utilized in the Zero Cities Equity Assessment Tool prepared by Race Forward from the national landscape to the city of Grand Rapids. By highlighting local data, we aim to provide a tool for organizations and community members to utilize as we pursue equity in our city.

## Equity Metrics and the Building Environment

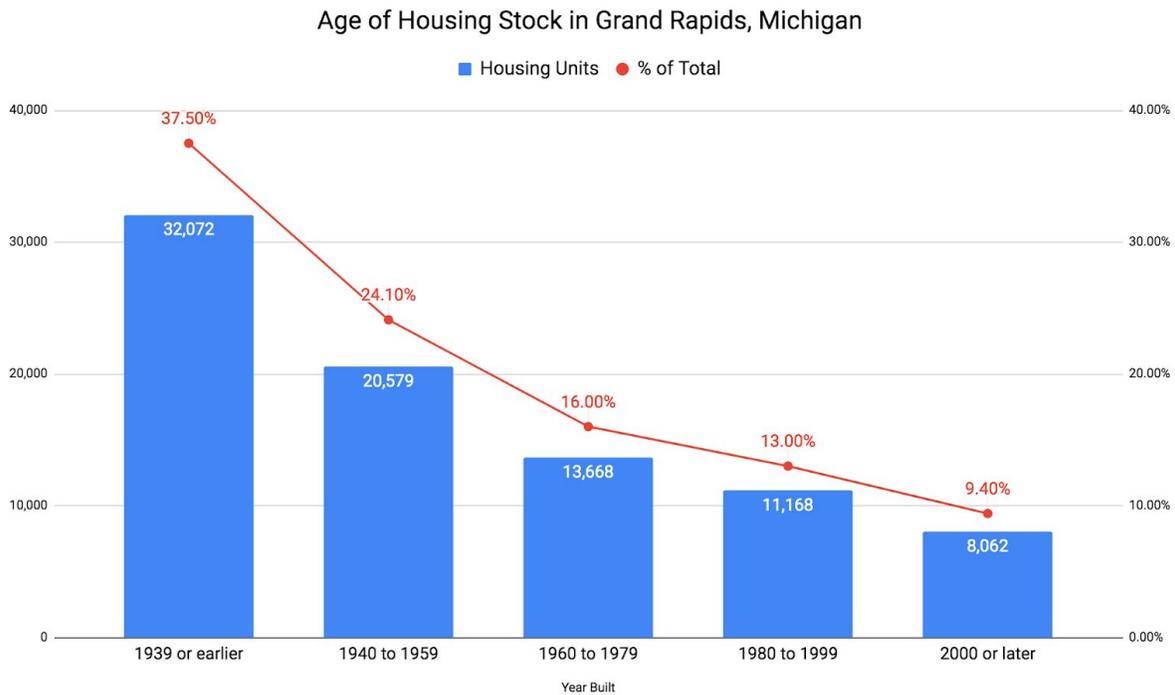
### 1. Energy Cost Burden on People of Color

**ENERGY BURDEN:** A 2019 study conducted by Fisher, Sheehan, & Colton assessed the Home Energy Affordability Gap in states and counties across the country by household poverty level. In Kent County, households with incomes below 50% of the federal poverty level (FPL) spent about a third of their household income on home energy bills whereas households with incomes between 185-200% of the federal poverty level paid almost 7% of their household incomes on energy bills. At each FPL included in the study, households spent more than 6% of their household income on energy costs, which is considered energy burdened. While the analysis did not include data for households with incomes above 200% of the federal poverty level, generally the trend persists with higher income households spending less of their income on energy bills. Beyond household income level, localized data disaggregated by race/ethnicity is needed to capture the impact among community members.



**Figure 1.** Kent County home energy burden by household poverty level<sup>1</sup>; **Source:** Fisher, Sheehan, & Colton. (2019). Home Energy Affordability Gap, Michigan 2019. Retrieved from [http://www.homeenergyaffordabilitygap.com/03a\\_affordabilityData.html](http://www.homeenergyaffordabilitygap.com/03a_affordabilityData.html).

Various factors including the age of housing stock can impact energy efficiency and thus the cost of energy bills. In Grand Rapids, more than 60% of the housing stock was built before 1960. In addition to its impact on energy efficiency, the age of the housing stock is pertinent when evaluating housing quality and health risks. Given the lead-based paint was not banned until 1978, residents, particularly the youngest residents, are vulnerable to lead poisoning from lead-based paint in homes.

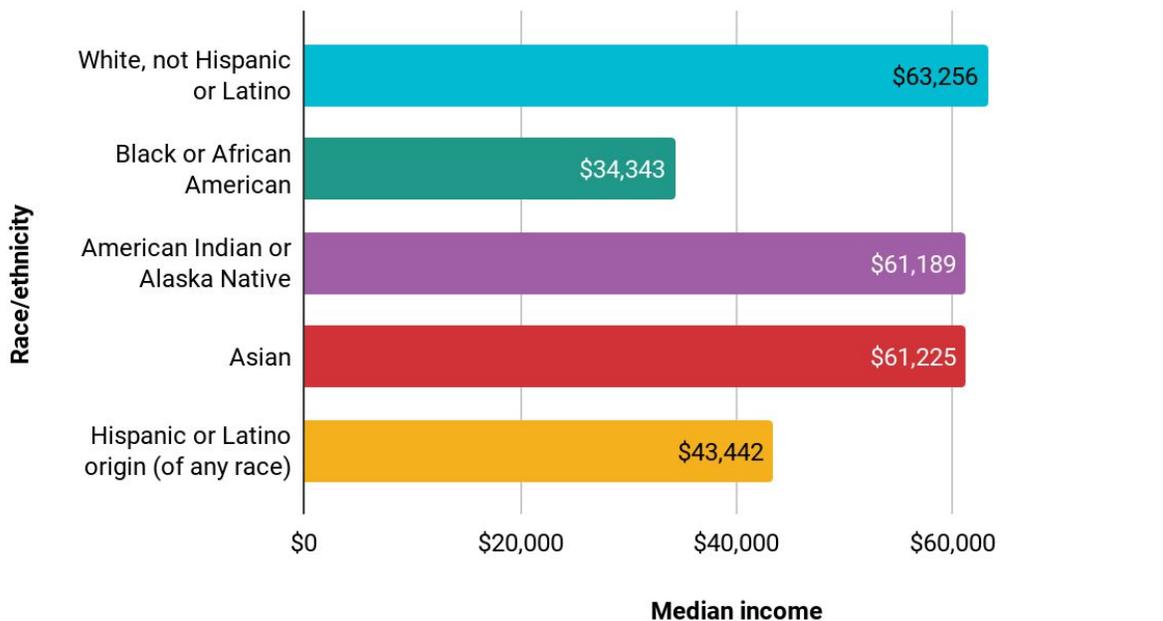


**Figure 2.** Age of Housing Stock in Grand Rapids, Michigan; **Source:** U.S. Census Bureau, American Community Survey (2019) Table DP04. Retrieved from <https://data.census.gov/cedsci/table?q=housing&g=1600000US2634000&tid=ACSDP1Y2019.DP04&hidePreview=false>

## 2. Economic Prosperity (Wealth, Jobs, and Business Opportunities for People of Color)

**WEALTH DISPARITIES FOR PEOPLE OF COLOR:** While data on wealth accumulation and the racial wealth gap is not readily available for residents of Grand Rapids, MI, information on the income gap and home ownership gap (*discussed in the section on Gentrification and Displacement*) offer insight on inequities connected to building wealth. A report produced by the Economic Policy Institute (2018) revealed that the average income of the top 1% of families in Grand Rapids-Wyoming, MI is 25.9 times higher than the average income of the bottom 99% of families in the area, with average incomes of \$1,219,262 and \$47,150, respectively. Among racial/ethnic groups in Grand Rapids the income gap is evident as the annual median income of White residents is nearly twice that of Black or African American residents. The numbers tell a story of centuries of racist policies and practices as well as inequities in funding for K-12 education, disinvestment in neighborhoods, and job discrimination among many other factors that contribute to the income gap. The journey to economic prosperity must address the persistent income gap negatively impacting Black and Latinx residents in Grand Rapids.

### Median income by race/ethnicity in Grand Rapids, Michigan



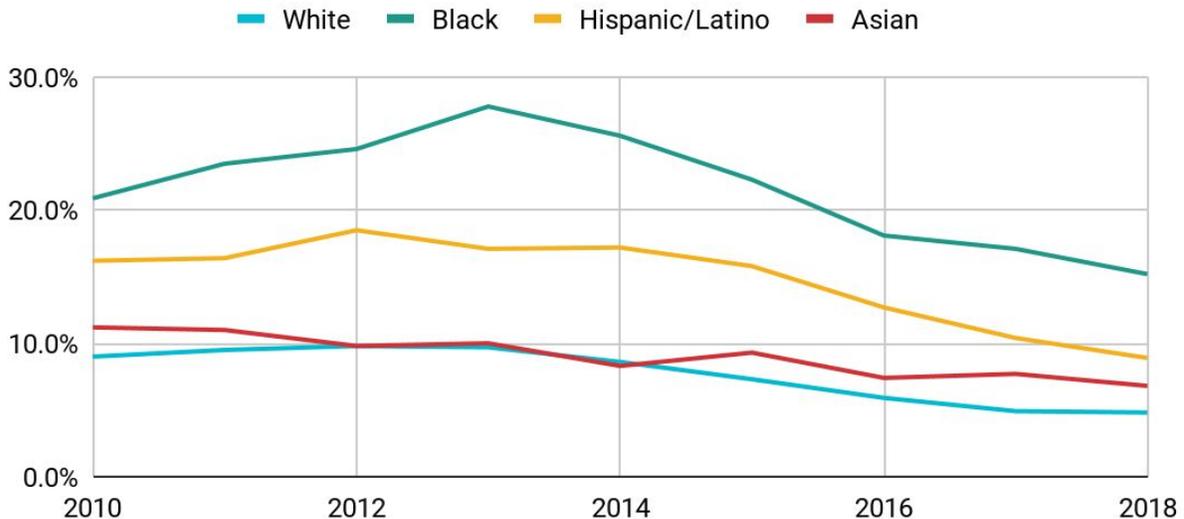
**Figure 3.** Median income by race/ethnicity in Grand Rapids, Michigan in 2019

**Source:** U.S. Census Bureau, American Community Survey (2019 1-year estimates) Table S1903. Retrieved from:

<https://data.census.gov/cedsci/table?q=Income%20and%20Earnings&q=1600000US2634000&tid=ACST1Y2019.S1903&hidePreview=true>

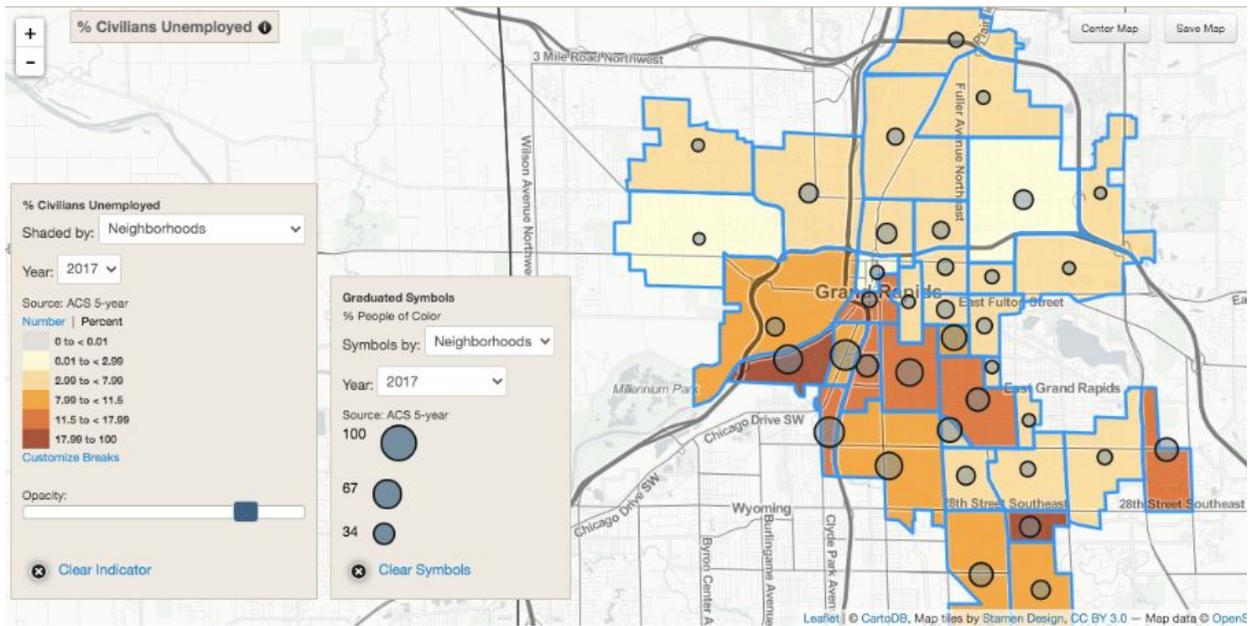
The unemployment rates in Grand Rapids, MI mirror national unemployment data with Black residents experiencing the highest unemployment rate followed by Hispanic residents, while White residents and Asian residents vacillated for the lowest unemployment rate between 2010-2018.

## Unemployment Rate in Grand Rapids, Michigan



**Figure 4.** Unemployment Rate in Grand Rapids, MI by Race/Ethnicity; **Source:** U.S. Census Bureau, American Community Survey (5-year estimates) Table S2301, Retrieved from: <https://data.census.gov/cedsci/table?q=unemployment%20by%20race&t=Employment&g=1600000US2634000&tid=ACSST5Y2018.S2301&hidePreview=false>

Not only do people of color experience the brunt of unemployment, but there is a neighborhood effect. Similar to the trend in Detroit, Michigan, high-unemployment neighborhoods also tend to correlate with communities of color in Grand Rapids (see Figure 5). Neighborhoods like Baxter, Black Hills, Garfield Park, Roosevelt Park, and Southeast Community where more than 60% of the neighbors are people of color experience some of the highest unemployment rates in the city. Whereas in the Alger Heights, West Grand Neighborhood, where less than 40% of the neighbors are people of color the unemployment rates are lower.



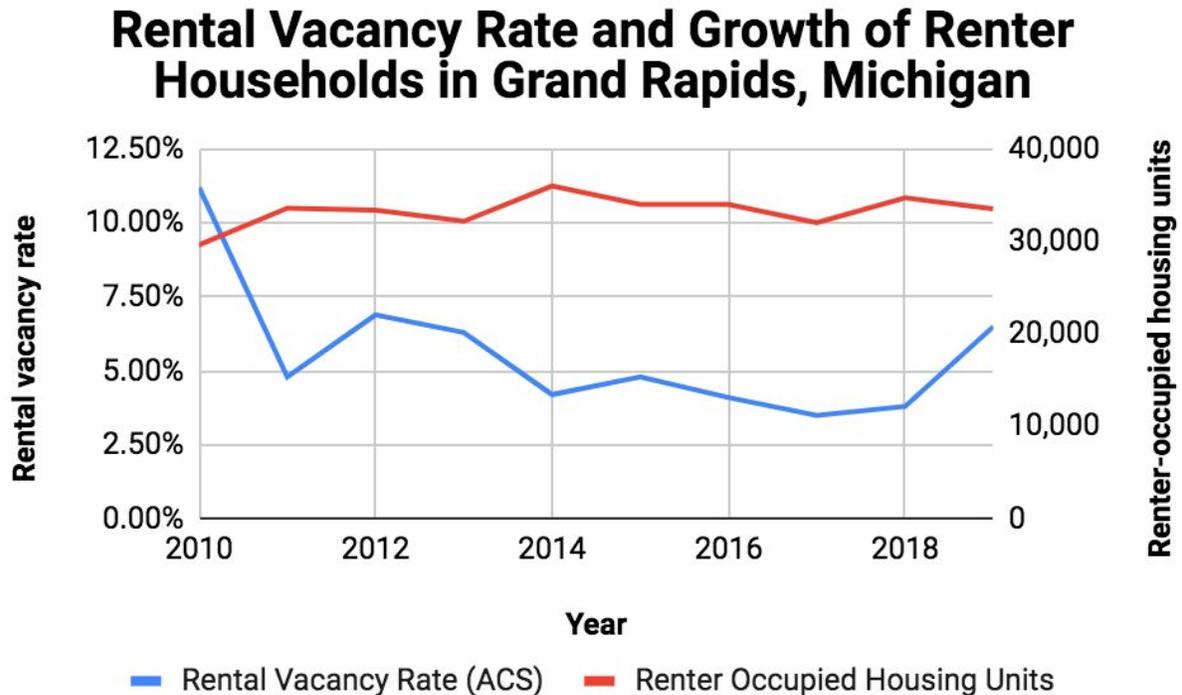
Neighborhood	% of metro unemployment rate (2017)	% people of color (2017)
Alger Heights	47.3%	34.8%
Baxter	136.5%	64.2%
Black Hills	320.3%	79.9%
Garfield Park	131.1%	73.1%
Roosevelt Park	210.8%	86.2%
Southeast Community	171.6%	73%
West Grand	68.9%	36.5%

**Figure 5.** In Grand Rapids, high-unemployment neighborhoods tend to correlate with communities of color; **Source:** U.S. Census Bureau. (2017). American Community Survey. Maps retrieved from: <https://data.johnsoncenter.org/DyerIvesEnd/#>

**OPPORTUNITIES FOR PEOPLE OF COLOR OWNED BUSINESSES:** Self-employment and business ownership are also factors influencing economic prosperity. According to statistics from The Right Place, an economic development organization in West Michigan, approximately 6% of the businesses in the Grand Rapids-Wyoming metropolitan statistical area are owned by people of color. This highlights another inequity as Black and Latinx community members combined make up about 35% of the population in Grand Rapids.

### 3. Gentrification and Displacement

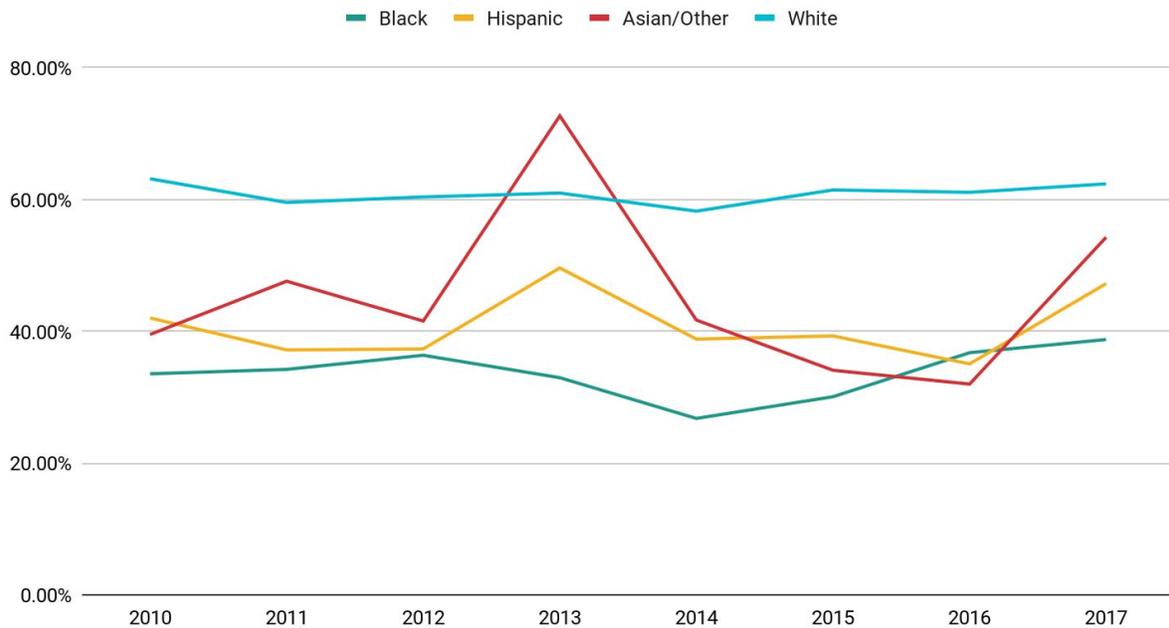
**RENT AND VACANCY RATES:** Similar to the national trend depicted in the Zero Cities assessment tool, the 2019 rental vacancy rate (6.5%) in Grand Rapids was lower than it was in 2010 (11.2%), but the number of renters has remained pretty steady. As described in Zero Cities report, lower rental vacancies rates “put pressure on rental markets, often squeezing out lower-income renters who are disproportionately People of Color.”



**Figure 6.** Rental vacancy rates and growth of renter households in Grand Rapids, MI (2010-2019); **Source:** U.S. Census Bureau, American Community Survey (1-year estimates) Table DP04, Retrieved from: <https://data.census.gov/cedsci/table?q=housing&g=1600000US2634000&tid=ACSDP1Y2010.DP04&hidePreview=true>

**HOMEOWNERSHIP:** According to a report from the Urban Institute, Grand Rapids-Wyoming, MI ranked 5th among Metropolitan Statistical Areas (MSAs) with the largest Black-White homeownership gap. In 2017, the Black-White homeownership gap was 44.7% in the Grand Rapids-Wyoming, MI area. The present day homeownership gap is the result of racist policies and practices that have limited access to the housing market.

## Homeownership Rate in Grand Rapids, Michigan



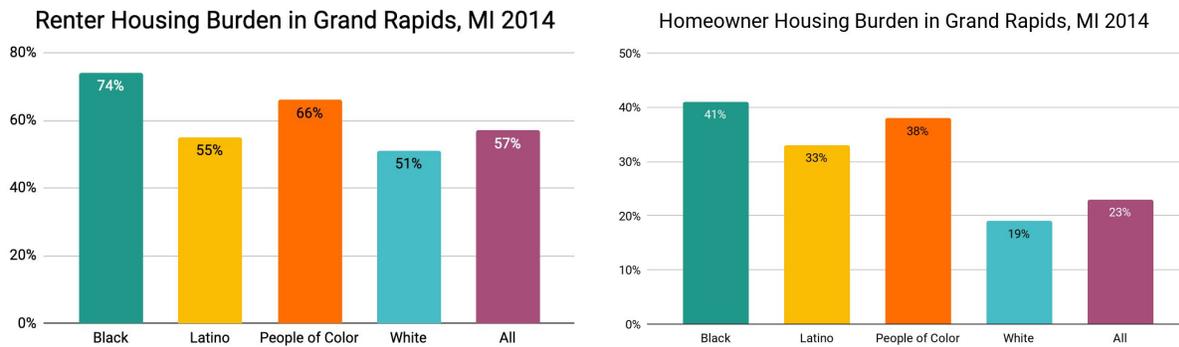
**Figure 7.** Homeownership Rate in Grand Rapids, MI (2010-2017); **Source:** U.S. Census Bureau, American Community Survey (1-year estimates) Table S2502, Retrieved from: <https://data.census.gov/cedsci/table?q=Ho&g=1600000US2634000&tid=ACSST1Y2017.S2502&hidePreview=true>

In Grand Rapids, Black, Latinx and Asian residents are more likely to reside in renter-occupied dwellings than owner-occupied homes. Such disparities have implications for communities of color ability to build wealth.

Racial/Ethnic Group	Percent owner-occupied housing units	Percent renter-occupied housing units
White alone, not Hispanic or Latino	77.1%	51.3%
Black or African American	10.5%	28.4%
Hispanic or Latino origin	9.2%	15.3%
Asian	1.5%	1.8%

**Figure 8.** Owner and Renter Occupied Housing Units in Grand Rapids, MI in 2019. **Source:** U.S. Census Bureau, American Community Survey (2019) 1-year estimates. Table S2502, Retrieved from: <https://data.census.gov/cedsci/table?q=housing&g=1600000US2634000&d=ACS%201-Year%20Estimates%20Subject%20Tables&tid=ACSST1Y2019.S2502&hidePreview=true>

In 2014, Grand Rapids ranked #19 among the largest 100 cities for highest renter-burdened households with 57% of the households classified as spending more than 30% of household income on rent (PolicyLink and PERE, 2017). Among renters and homeowners, Black community members experience the highest housing burden.



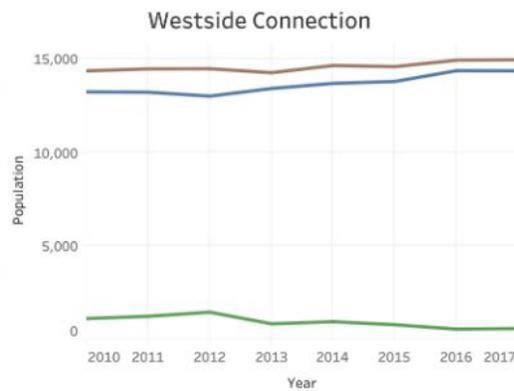
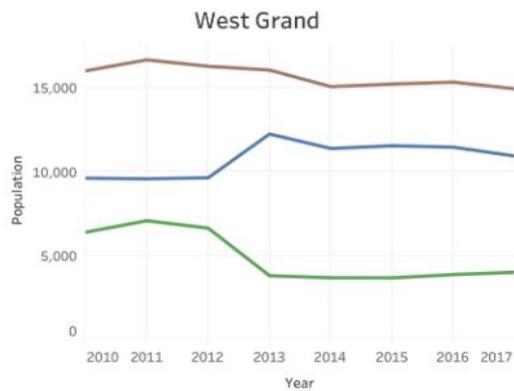
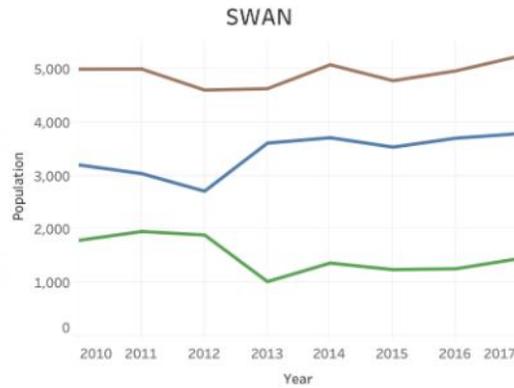
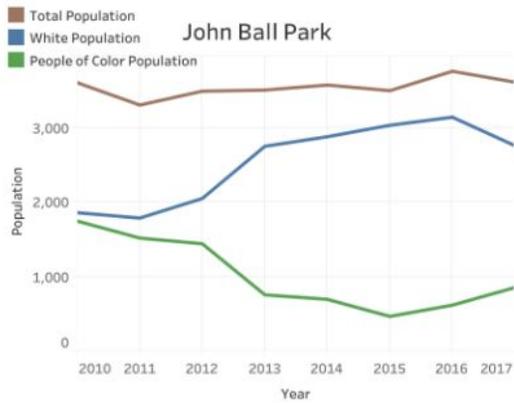
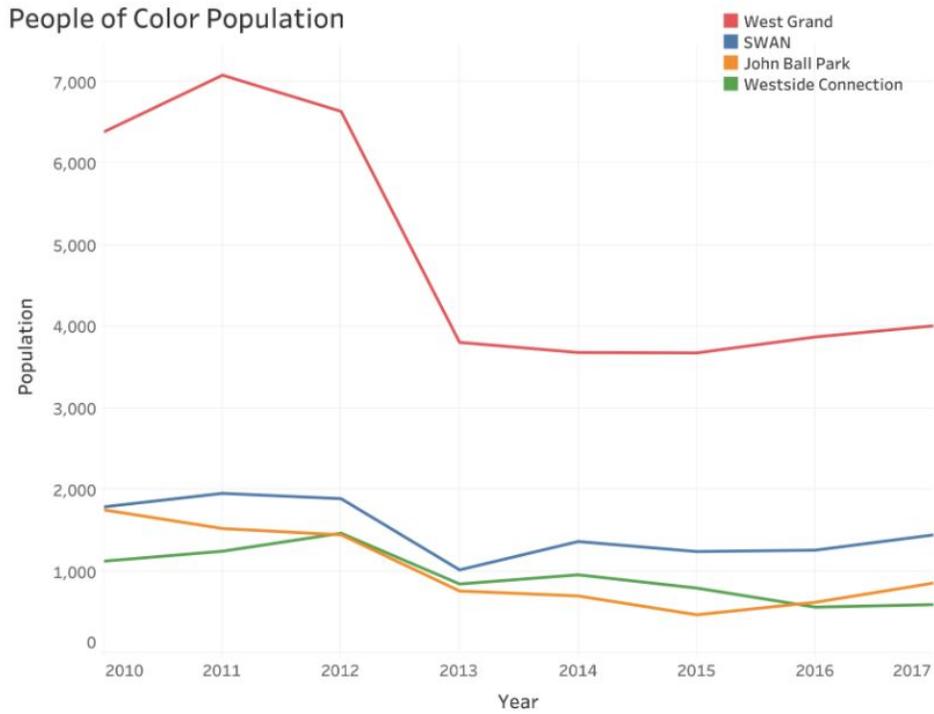
**Figure 9.** Renter and Homeowner Housing Burden in Grand Rapids, MI 2014; **Source:** PolicyLink and USC Program for Environmental and Regional Equity (PERE) (2017). An Equity Profile of Grand Rapids. Retrieved from <https://www.policylink.org/resources-tools/equity-profile-of-grand-rapids>

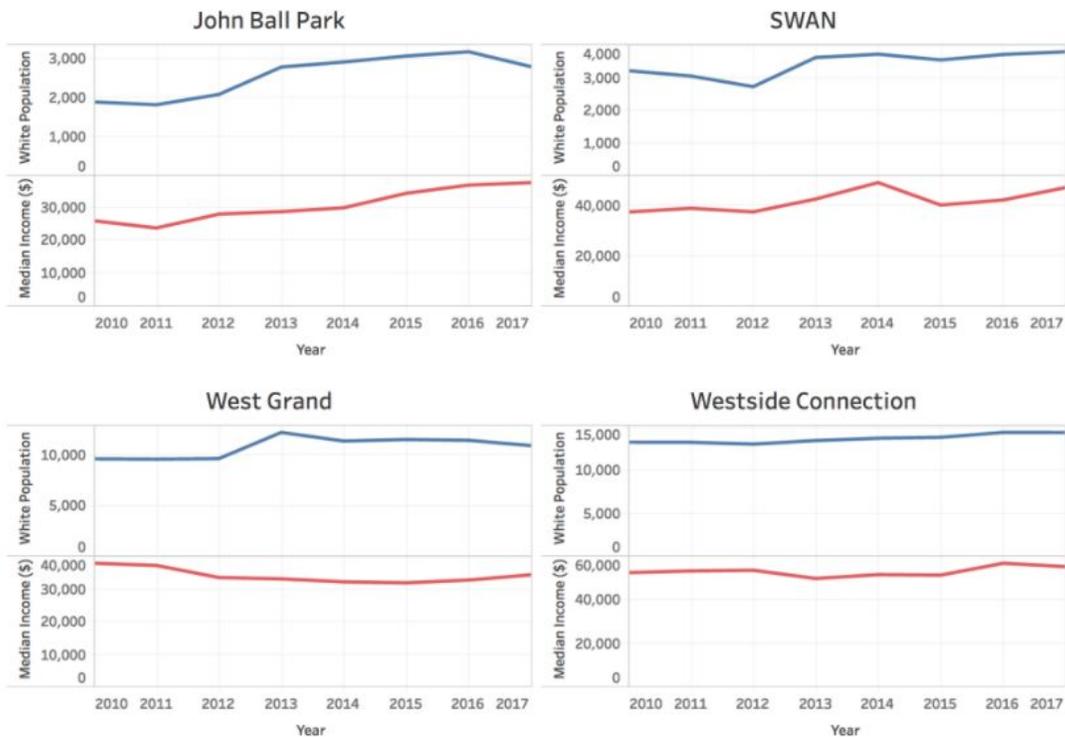
**MAPPING DISPLACEMENT RISK:** As development continues to boom in Grand Rapids, it’s also been a site of displacement for people of color. In a report titled, “Understanding impacts of development on the cost of living”, local researchers investigated displacement in four neighborhoods (John Ball Park, Southwest Area Neighbors (SWAN), West Grand and Westside Connection) located on the westside of Grand Rapids.

The following excerpts from the report illuminate the impact of development that fails to center racial equity:

- *One such sudden change seen in the demographic data is that the population of people of color in all four neighborhoods sharply decreased from 2012 to 2013. During this time period, 40-50% of people of color moved out of their neighborhoods. Such a large number of people moving out of their neighborhood in a single year suggests that there were circumstances that forced them to leave rather than voluntarily choosing to move out. In the years following this sharp decrease, the populations of people of color have not recovered to the numbers seen in 2012.*
- *Rent as a percent of monthly income in the neighborhoods of West Grand and SWAN in particular increased significantly from 2013 to 2017. In West Grand, rent went from 30.9% of monthly income in 2013 to 41.6% in 2017. In SWAN, rent went from 22.2% of monthly income in 2013 to 30.4% in 2017. For residents who were displaced from their neighborhood because they could no longer afford to live there, it is unlikely that they will be able move back since rent has only been increasing since 2013.*
- *Another finding with correlations was the positive correlation between a neighborhood’s white population and median income. As white people are moving into these neighborhoods, the median income goes up as well. Coupled with the fact that people of color are moving out of all four neighborhoods, this indicates that there may be a strong*

economic reason behind the displacement [of] people of color and that there is a disparity between the income of people of color and the income of white people.



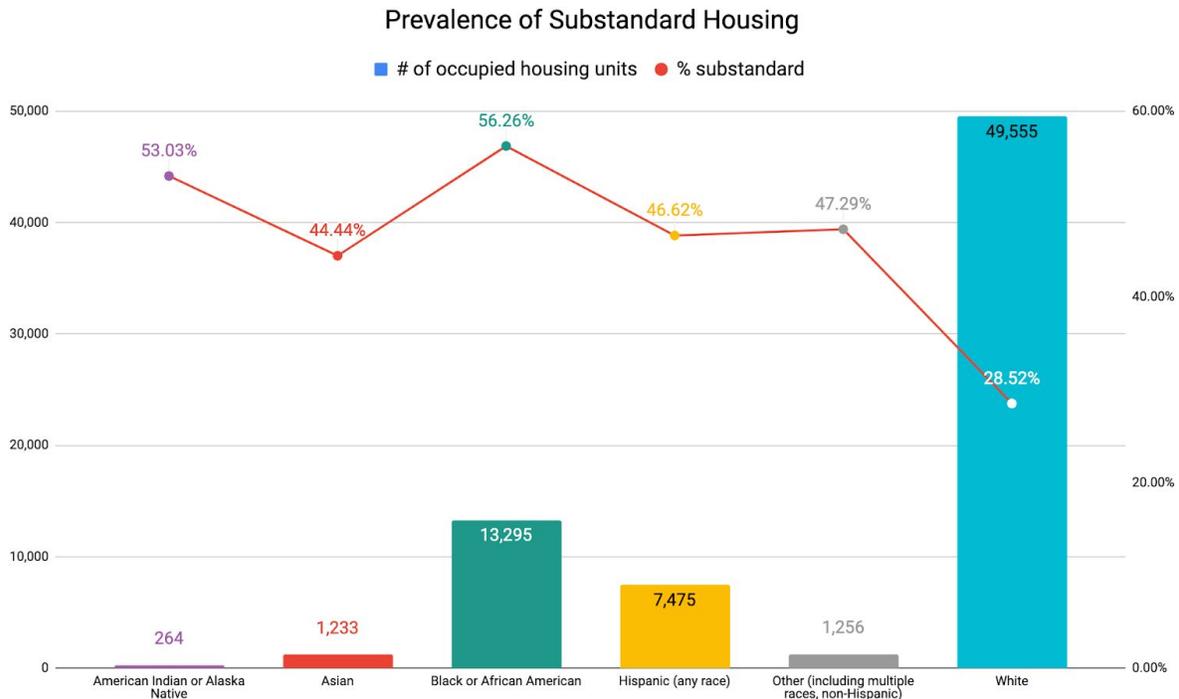


**Figure 10.** Displacement in Grand Rapids Neighborhoods; **Source:** Austin, D., Bibb, M., Boelkins, E., Dozeman, M., Jonauskas, A., and Miller, M. Understanding impacts of development on the cost of living. Retrieved from: <https://grandrapids.maps.arcgis.com/apps/MapJournal/index.html?appid=156b6dadd5c84530bb7d05e5ecf7c1af>

On the other side of income inequity, lack of affordable housing and displacement is unhoused populations. According to an analysis conducted by KConnect (2019), 11% (1 in 9) of Black or African American residents in Kent County experienced homelessness in 2018, as well as 1.6% (1 in 61) of Latinx residents and 0.7% (1 in 153) of white residents. For children the rates of homelessness are even higher. In 2018, 1 in 7 or 14% of Black/African American children were homeless and 1 in 54 (1.9%) and 1 in 160 (0.6%) among Latinx and White children, respectively. Based on the analysis, approximately 1 in 5 (20.5%) of Black infants, toddlers and preschoolers are homeless as well as 1 in 39 Latinx and 1 in 119 (0.8%) white infants, toddlers and preschoolers.

#### 4. Substandard Housing and Exposure to Health Risks

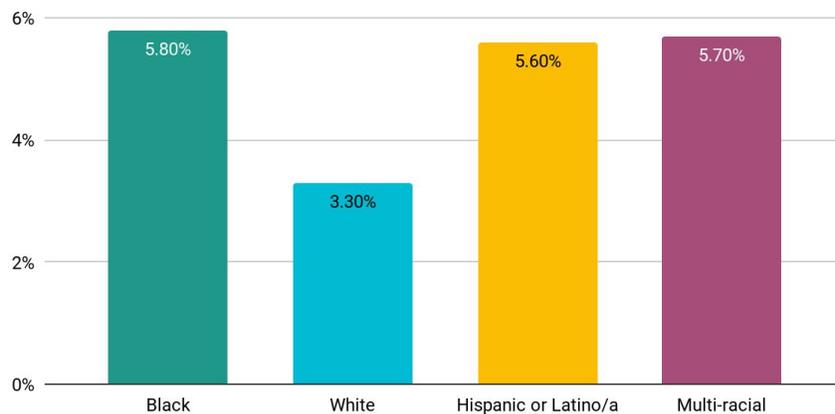
**SUBSTANDARD HOUSING:** Access to housing is but one factor to consider as housing quality has implications for health and safety. Substandard housing is defined as having one or more of the following problems: lacks kitchen or plumbing, more than 1 person per room, or cost burden greater than 30%. According to the Department of Housing and Urban Development more than half (56.26%) of the housing units occupied by Black or African Americans in Grand Rapids are considered substandard.



**Figure 11.** Prevalence of substandard housing units (owner-and renter-occupied) in Grand Rapids, MI by race/ethnicity of householder, 2012-2016 (5-year averages); **Source:** Department of Housing and Urban Development. (2019). Comprehensive Housing Affordability Strategy (CHAS) data, 2012-2016. Retrieved from [https://www.huduser.gov/portal/datasets/cp.html#2006-2016\\_data](https://www.huduser.gov/portal/datasets/cp.html#2006-2016_data).

**EXPOSURE TO HEALTH RISKS:** Among parents participating in the 2017 Kent County Community Health Needs Assessment, Black parents reported the highest prevalence of children diagnosed with asthma, followed by multi-racial and Hispanic or Latino/a parents. The asthma hospitalization rate among Black residents is more than four times the rate among White residents in Kent county.

### Percent of Respondents with Children Diagnosed with Asthma, by Parent Race/Ethnicity, 2017

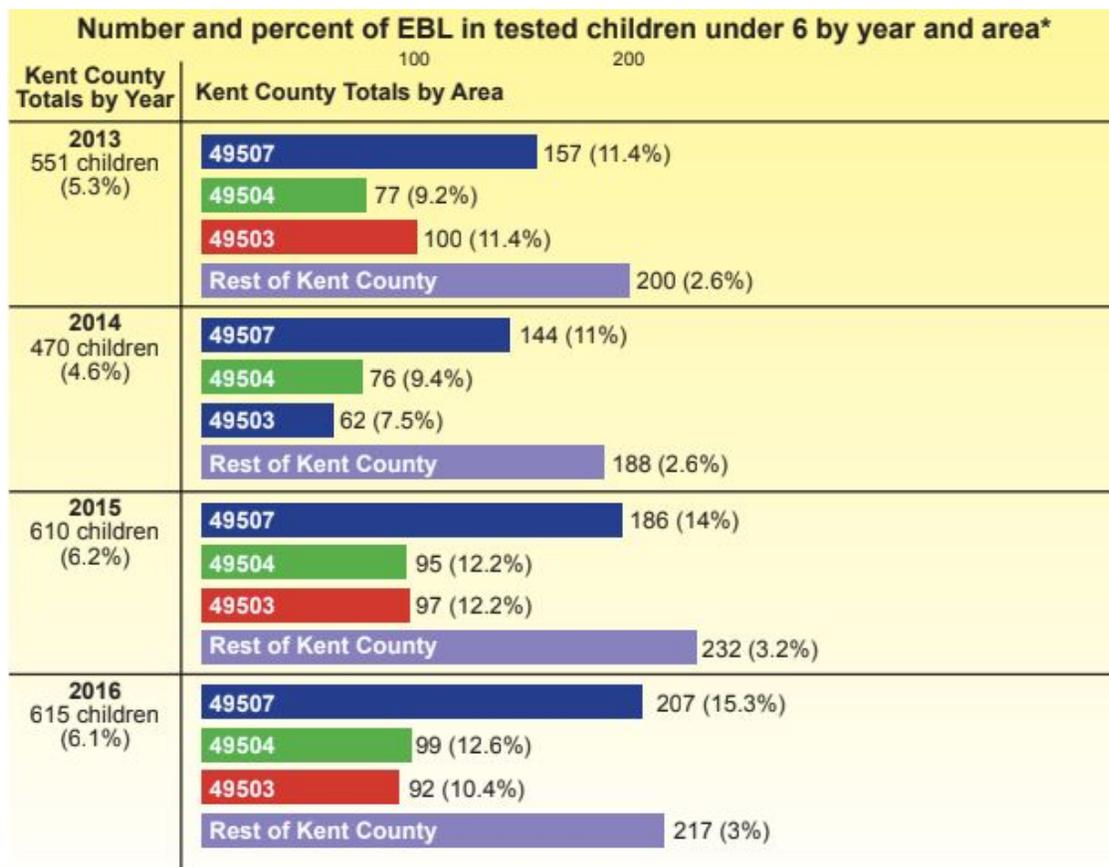


**Figure 12.** Children Diagnosed with Asthma by Parent Race/Ethnicity, 2017; **Source:** Kent County Health Department (2017). Kent County Community Health Needs Assessment. Retrieved from: [https://accesskent.com/Health/pdf/2017KC\\_CHNA.pdf](https://accesskent.com/Health/pdf/2017KC_CHNA.pdf)

Demographic Characteristics	Asthma hospitalization rate per 10,000 people	
	Kent County	Michigan
<b>Sex</b>		
Male	3.6	5.2
Female	5.5	7.6
<b>Race</b>		
White	2.9	3.7
Black	12.1	20.1
<b>Age</b>		
0-17	8.8	10.5
18 and older	3.6	6.2

**Figure 13.** Asthma Hospitalization Rate 2016-2017; **Source:** Asthma Initiative of Michigan, Kent County asthma statistics. Retrieved from <https://getastmahelp.org/current-michigan-county-asthma-statistics.aspx?ctyID=41>

In 2015 and 2016, Grand Rapids' 49507 ZIP code had the highest number of lead poisoned children in the state of Michigan. In Kent County, lead-based paint and lead dust in homes and soil is the primary source of lead poisoning. According to the Michigan Department of Health and Human Services, African American children were lead-poisoned at twice the rate of white children in Grand Rapids in 2015.



Source: MHHSD data and Healthy Homes Coalition of West Michigan

**Figure 14.** Elevated Blood Level in Test Children; **Source:** Kent County Lead Task Force (2018). Ending Child Lead Exposure in Kent County. Retrieved from [http://media.mlive.com/grpress/news\\_impact/other/Kent%20County%20Lead%20Task%20Force%20Report%20\(Final\).pdf](http://media.mlive.com/grpress/news_impact/other/Kent%20County%20Lead%20Task%20Force%20Report%20(Final).pdf)

## 5. Geographic Location and Exposure to Environmental Risk

**DISPROPORTIONATE EXPOSURE TO POLLUTION AND TOXINS:** A recent crisis demonstrates environmental injustice impacting communities of color throughout Grand Rapids. In 2016, the Michigan Department of Environmental Quality (MDEQ) detected toxic chemicals—tetrachloroethylene (PCE) and trichloroethylene (TCE)—via air samples in the Madison Square neighborhood (LINC Up and Detroiters Working for Environmental Justice, 2019). Due to systemic failures, residents in the predominantly Black and Latinx neighborhood were not informed of the chemical presence until four months after the MDEQ’s initial vapor test at the site.

## 6. Urban Heat Island Effects

**HEAT RISK:** While there were no deaths reported from floods, heat, hurricanes, lightning, or tornadoes in Kent County, Michigan between 1986-2016, nine injuries were reported as a result of tornadoes during the time period.

**Weather-related deaths and injuries in Kent County, MI (January 1986-June 2020)**

Weather event	Direct deaths from the event	Direct injuries from event
Lightning	0	0
Tornado	0	9
Flood	0	0
Hurricane	0	0
Heat	0	0

**Figure 15.** Weather-related deaths and injuries January 1986-June 2020; **Source:** National Centers for Environmental Information. (2019). Storm events database. Retrieved from <https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=26%2CMICHIGAN#>

According to Kenward et. al (2014), the city of Grand Rapids is up to 22 degrees hotter than nearby rural areas. Compared to rural areas, Grand Rapids summers are 1.3 degrees hotter, on average, and the city has five more days above 90 degrees each year than in rural areas (Kenward et. al, 2014).

As stated in the Zero Cities Equity Assessment tool, heat risk-related land cover is exacerbated by high impervious surfaces and low urban tree canopy (UTC). Plan-It Geo's (2015) assessment of the urban tree canopy in Grand Rapids, Michigan revealed that new development was one of the contributing factors to the net loss of 203 acres in tree canopy between 2005 and 2008. The City set a goal of 40% average tree canopy cover in 2011. In 2015, the urban canopy level was 6% below the City's goal. Outside of the downtown area, the following neighborhoods—many of which are made up of predominantly people of color—had the lowest urban tree canopy in 2015: Grandville (#20) - 18%, Black Hills (#21) - 22%, Roosevelt Park (#26) - 24%, West Grand (#5) - 25%, Belknap Lookout (#8) - 26%, Southeast Community (#22) - 26% and Midtown (#12) - 26%.

The following excerpts from the report illuminate the connection between urban tree canopy and neighborhood demographics:

- *A comparison of tree canopy and census data shows that in Grand Rapids, as in many U.S. cities, residents of many lower-income neighborhoods (i.e., neighborhoods with lower educational attainment, lower median incomes, lower median home values, and lower rates of owner occupancy) have less access to the benefits that trees provide than residents of higher-income neighborhoods. This data can inform prioritization of tree planting efforts to address equity issues. Results include:*

- ◆ As the percentage of UTC increases, median income also increases.
  - ◆ As the percentage of UTC increases, median home value also increases.
  - ◆ The rate of owner occupancy is greater in areas with a higher percentage of UTC.
- Analysis of Urban Tree Canopy distribution by census block groups (shown in the figure below) against detailed census data reveals a clear relationship between tree canopy and economic vitality of households, as seen in income levels, home values, educational attainment, and rates of owner occupancy. In addition, areas with the highest levels of tree canopy also tend to have smaller minority populations.
- ◆ As the percentage of urban tree canopy increases in census block groups, median income also increases.
  - ◆ As the percentage of urban tree canopy increases in census block groups, median home value also increases.
  - ◆ The rate of owner occupancy is greater in areas with a higher percentage of UTC. This indicator generally reflects the stability of a given area or neighborhood, as it is believed that there is more of a vested interest in personal property.

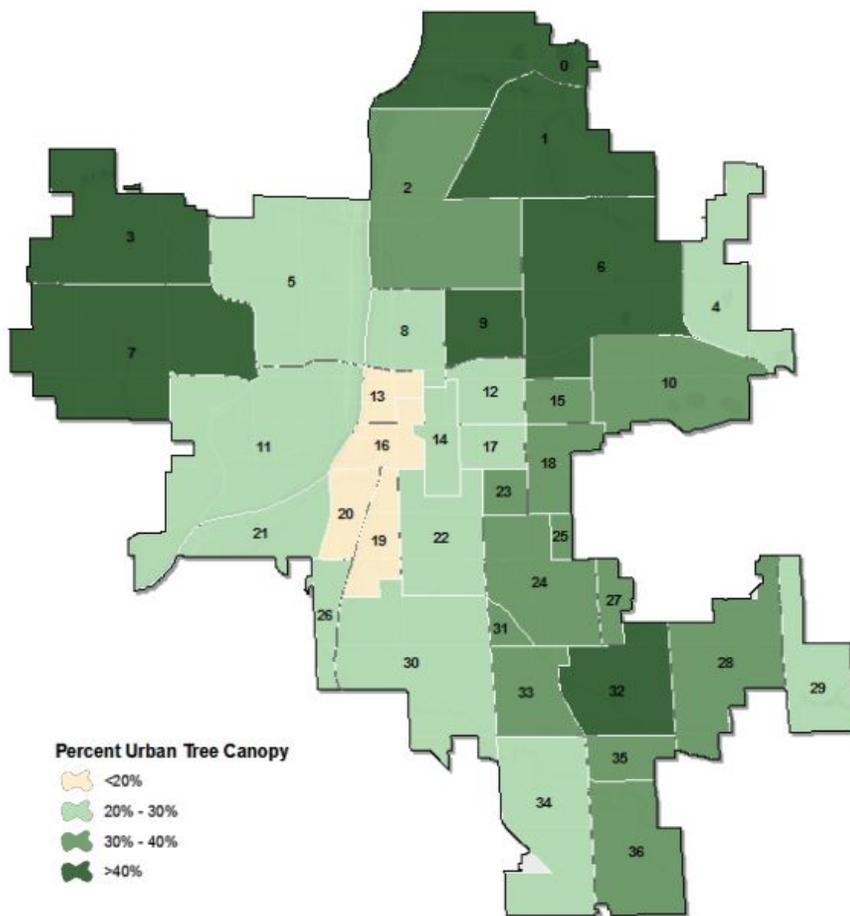


Figure 10: Percent UTC by neighborhood in Grand Rapids, MI.

**Figure 16.** Percent UTC by neighborhood in Grand Rapids, MI; **Source:** Plan-It Geo. (2015). An Assessment of Urban Tree Canopy in Grand Rapids, Michigan. <https://www.friendsofgrparks.org/wp-content/uploads/2018/10/Urban-Tree-Canopy-Assessment-2015.pdf>

# Conclusion

Deemed “A City Within a City”, Grand Rapids, Michigan is often experienced differently by community members based on racial/ethnic background and socioeconomic status. Within the city, experiences and outcomes pertaining to the physical and built environment are no exception. Through exploring the racial equity metrics presented in the Zero Cities Equity Assessment Tool, we call attention to inequities impacting communities of color in Grand Rapids. The data highlights ways in which racism is pervasive and embedded in systems. In order to create an environment that serves all of our neighbors, the road to becoming a “Zero City” must center racial equity.

# References

1. Kenward, A., Yawitz, D., Sanford T., & Wang, R. (2014). Summer in the city. *Climate Central*. Retrieved from <http://assets.climatecentral.org/pdfs/UrbanHeatIsland.pdf>.
2. LINC Up and Detroiters Working for Environmental Justice. (2019). Neighborhood Environmental Action Report: Health, Environment and Race in Grand Rapids. Retrieved from: [https://drive.google.com/file/d/0B\\_Lg9FTje0NzeFdDa3dEUDlaU0FsN1cxmJKUIhJdG1HZVNF/view](https://drive.google.com/file/d/0B_Lg9FTje0NzeFdDa3dEUDlaU0FsN1cxmJKUIhJdG1HZVNF/view)