Executive Summary

The intent of this report is to create and visualize a set of metrics that the City of Madison and interested stakeholders can reference to track the progress that City programs and initiatives are making toward overcoming barriers and impediments to fair housing choice. The figures in this report show economic and demographic trends and growth rates of Madison's diverse population. As is further elaborated in the text, the City has grown at a rapid pace since the Great Recession began in 2008, but much of this growth has been among renter households and those earning very high or very low incomes. The expansion in the number of new households added to Madison each year puts pressure on Madison's housing market, which has not grown at a fast enough rate to accommodate this growth, and this is evidenced by the low rental and homeowner vacancy rates in the City.

While between 1,500 and 2,300 new dwelling units have been permitted in Madison annually over the past six years, this has not been enough to keep up with the City's growth rate. Because of demand exceeding available supply, most of the new rental units are not affordable to the median renter household. Similarly, most new dwelling units built for ownership are not only not affordable to the median renter household, but to the median household in Madison. This trend has created a supply-demand mismatch between the number of dwelling units that are available at the most affordable levels and the number of households that can afford to live in those units. Conversely, there are many more households able to afford more expensive units than there are such units available in Madison, indicating these households may rent or own homes that are less expensive than they otherwise afford.

The housing market and low vacancy rate have especially cost burdened low-income renter households who pay rents that have escalated quicker than that of their incomes. Nearly half of renter households and one-fifth of homeowners are housing cost burdened, which means that more than 30% of their income is spent on housing costs. As a disproportionate number of low-income households in Madison are Persons of Color, this housing market has led to economic segregation that have reinforced patterns of racial and ethnic segregation. This creates a need to build more housing units for low-income households to promote the economic stability that is associated with stable permanent housing. However, this income-restricted housing supply is not evenly distributed throughout the City, and many housing units financed with some form of public subsidy are largely concentrated on Madison's north and south sides, perpetuating patterns of economic segregation. The maps showing the distribution of subsidized housing in Madison show the Census block groups and aldermanic districts that can absorb additional income-restricted housing units without having a substantial concentration of this type of housing. However, most of the new development occurring in the block groups and districts that can absorb additional low-income housing are single-family developments, while the majority of new multifamily development occurs as infill development in the central areas of the city.

Figure 1: Growth of Madison, 2000-2018

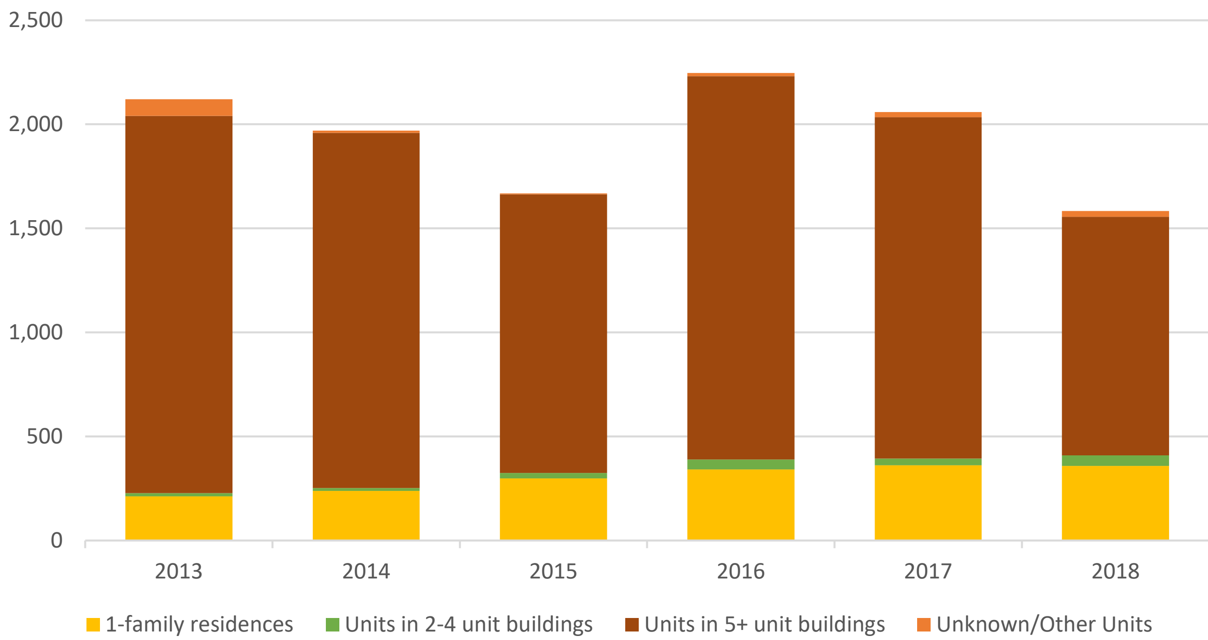
	2000-2008		2008-2018	
	CAGR*	Total Growth	CAGR*	Total Growth
Population	1%	7%	1.5%	15%
Households	1%	7.5%	1.8%	19.5%
Renter Households	-0.5%	-3%	3.5%	38%
Owner Households	2%	18%	0.5%	3.5%
HHs <$30,000	-2.5%	-19.5%	2.5%	28.5%
HHs $30-50,000	-2.5%	-18.5%	-2%	-17.5%
HHs $50-75,000	0.5%	2.5%	0.5%	4%
HHs $75-100,000	3.5%	29.5%	2%	20.5%
HHs >$100,000	8%	86.5%	5.5%	72%

There has been tremendous growth in the City of Madison since 2008, but most of the growth is largely attributable to households earning very low or very high incomes. Compared to the start of the 2000s, there has been a reversal in the growth trend of Madison's lowest income population; however, this growth may be a combination of downward mobility of Madison's existing population as well as new arrivals to the City since 2008. Since the Great Recession, the growth in renter households has exploded while owner-occupied households has stagnated. What is still to be seen is if this will be a trend in Madison's housing demand or a sign of a lack of supply to meet the current demand for for-sale residential properties. Note that the impact of student households on the growth of Madison's lowest-income households is negligible as the number of students moving into and out of Madison are roughly equal.

Methodology: These figures are based on data provided by the US Census Bureau (2000) and American Community Survey 5-Year Estimates. The numbers for total population was retrieved from table DP05. The number of total households and breakdown of households by income were retrieved from table DP03. The number of households bv tenure was retrieved from table B25118.

**CAGR: Compound Annual Growth Rate*
Source: American Community Survey 2014-2018 5-Year Estimates

Figure 2: New Housing Inventory by Year, 2013-2018

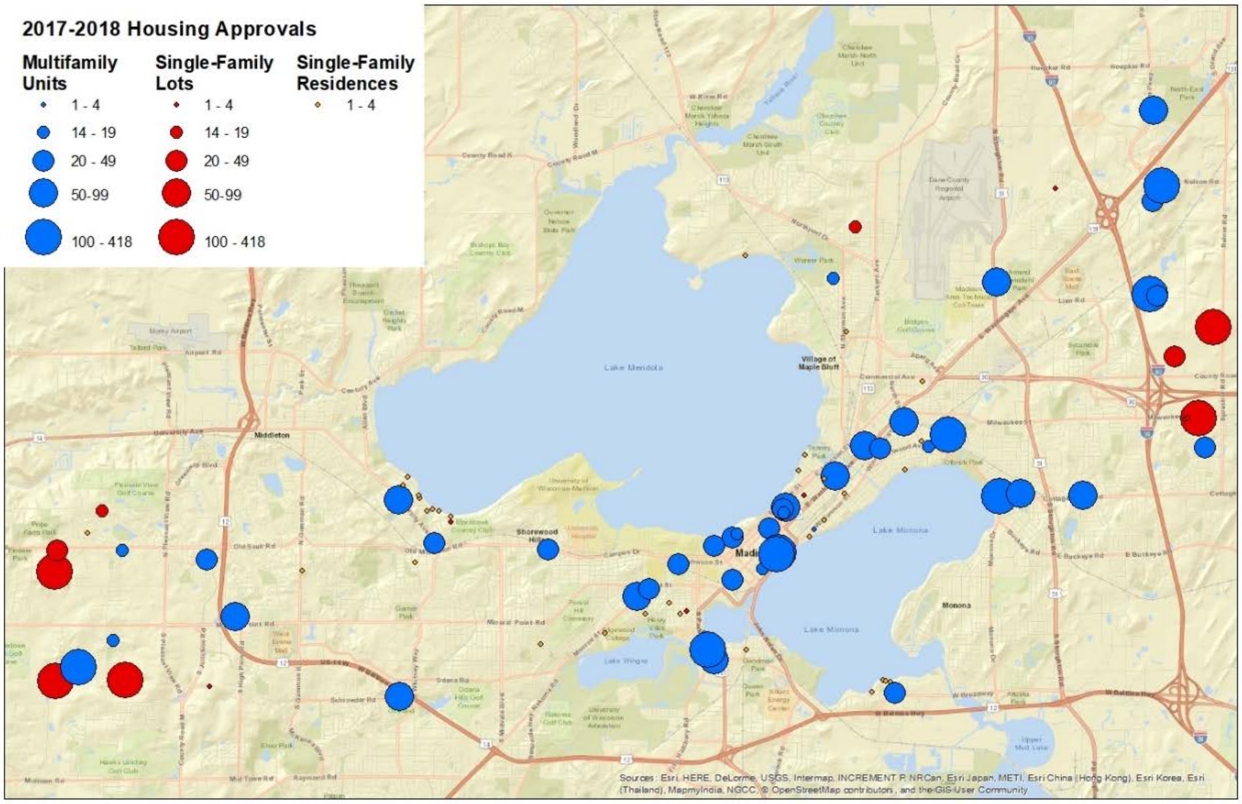


The vast majority of new dwelling units built in the last several years have been in multifamily buildings. However, the number of single-family homes and small multi-unit buildings added each year is growing and gradually making up a larger proportion of total new units built. While the total number of dwelling units built has declined in the last two years, the number has fluctuated greatly over the past five years.

Methodology: Information reported from Building Inspection Division's "New Construction Permits" report. "Unknown/Other Units" include all new dwellings not contained in the other three categories.

Source: City of Madison Building Inspection Division

Figure 3: Dispersion of New Housing Approvals, 2017-2018

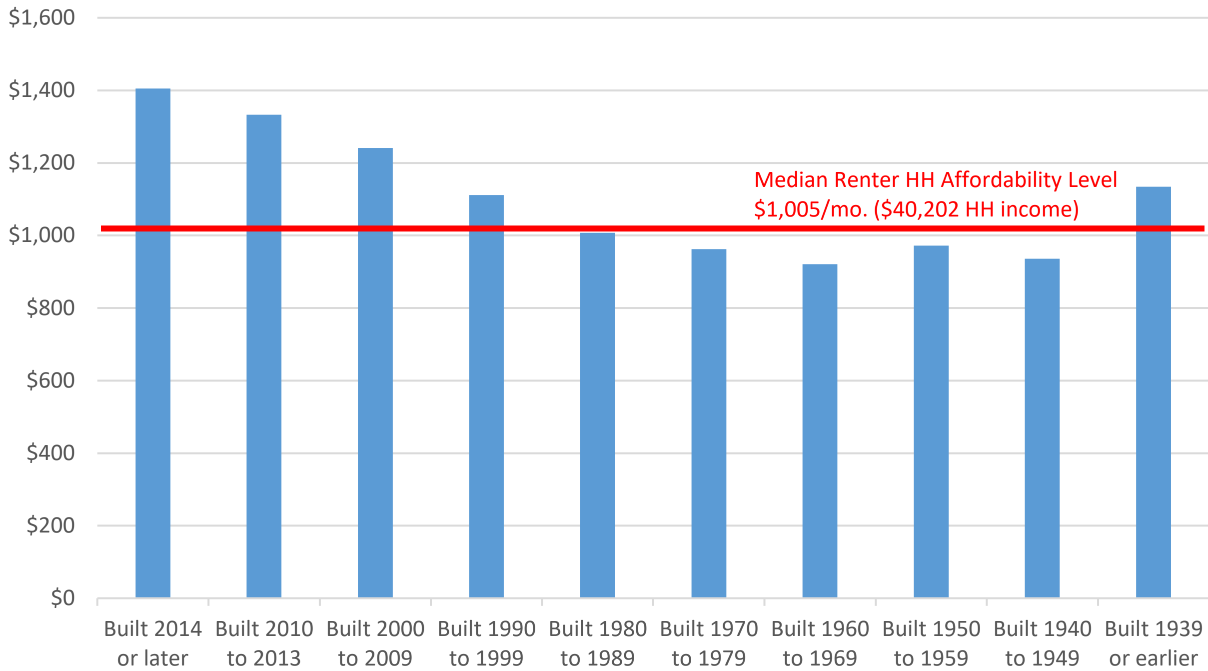


Madison has seen strong multifamily growth on infill and redevelopment sites, particularly downtown and on the isthmus. Much of the other multifamily development has been on major transportation corridors within the built-up areas of the city. Developing peripheral areas have seen a mix of multi-family development with larger plats of single-family lots.

<u>**Methodology**</u>: Information tracked and derived from Planning Division's spatial database, which tracks land use applications reviewed by Plan Commission. As such, all plats and most multifamily buildings are captured as of 2020, though changes to ordinances may affect what is tracked. Most new permitted single-family residences are not captured in this data, but new single-family lots are.

Source: City of Madison Planning Division

Figure 4: Median Gross Rental Rates by Age of Housing

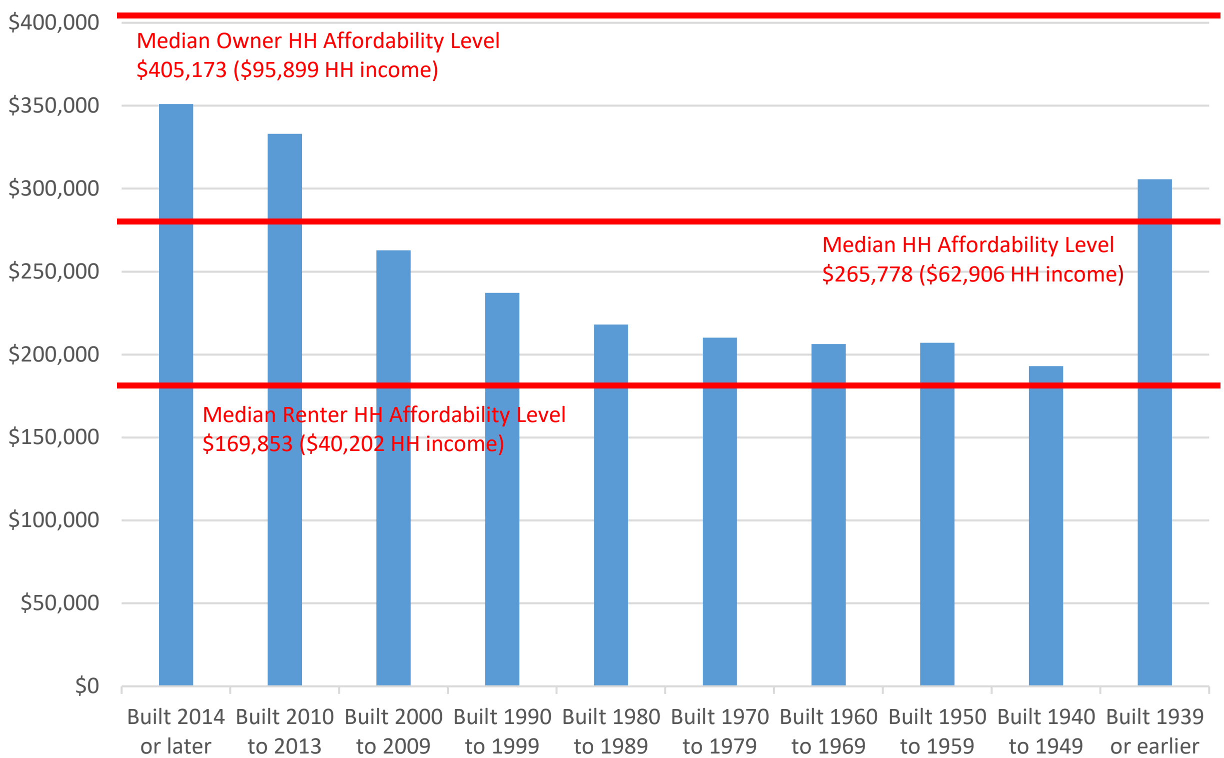


The median renter household with a household income of approximately $40,200, can afford rent of $1,005 per month, and cannot afford the typical new unit coming online in Madison. The median rent for units built after 2013 is over $1,400. Similarly, the median rents of units built in the 1980s, 1990s, 2000s, and 2010s, as well as prior to 1940, are all greater than $1,005. A typical renter could afford a unit built between 1940 to 1979 as the median rent of those units are less than $1,005. It is important to note that the location of where these units are located and are being built plays a major role in the rental rates. The majority of new units built since 2000 have been on the Isthmus, as are units built before World War II.

Methodology: This information was summarized using data from the American Community Survey tables B25111 and B25119, which report median gross rent by year structure built and median household income by tenure, respectively.

Source: American Community Survey 2014-2018 5-Year Estimates

Figure 5: Median Housing Cost by Age of Housing

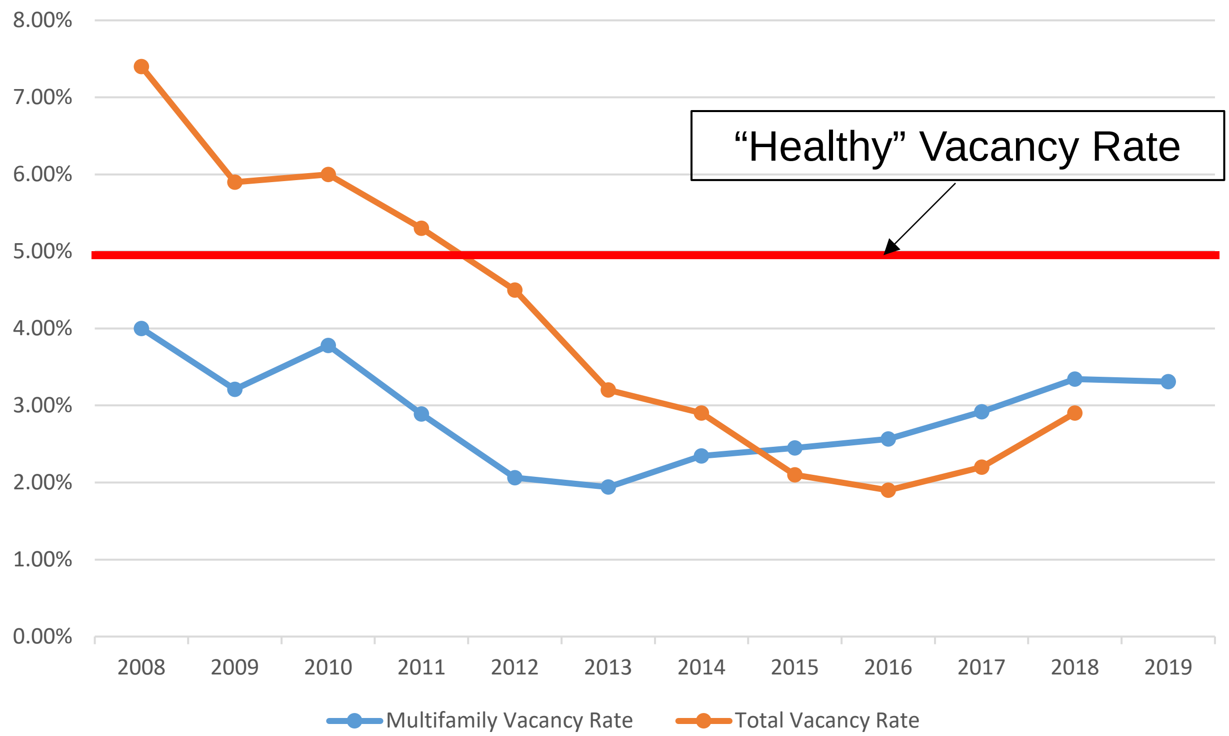


According to the American Community Survey, the median Madison household, which can afford a dwelling up to $265,778, cannot afford to buy the typical new unit coming online in the market. The median value for units built between 1940 and 2009 is below $265,000, whereas the median value for new units built after 2013 is over $350,000. The median renter household, which can afford a dwelling up to $169,853, cannot afford the median unit built in any time range measured by the US Census Bureau. Conversely, the median homeowner can afford the median home built during any period in the figure.

Methodology: This information was summarized using data from the American Community Survey tables B25107 and B25119, which report median home value by year structure built and median household income by tenure, respectively.

Source: American Community Survey 2014-2018 5-Year Estimates

Figure 6: Rental Vacancy Rate, 2008-2019

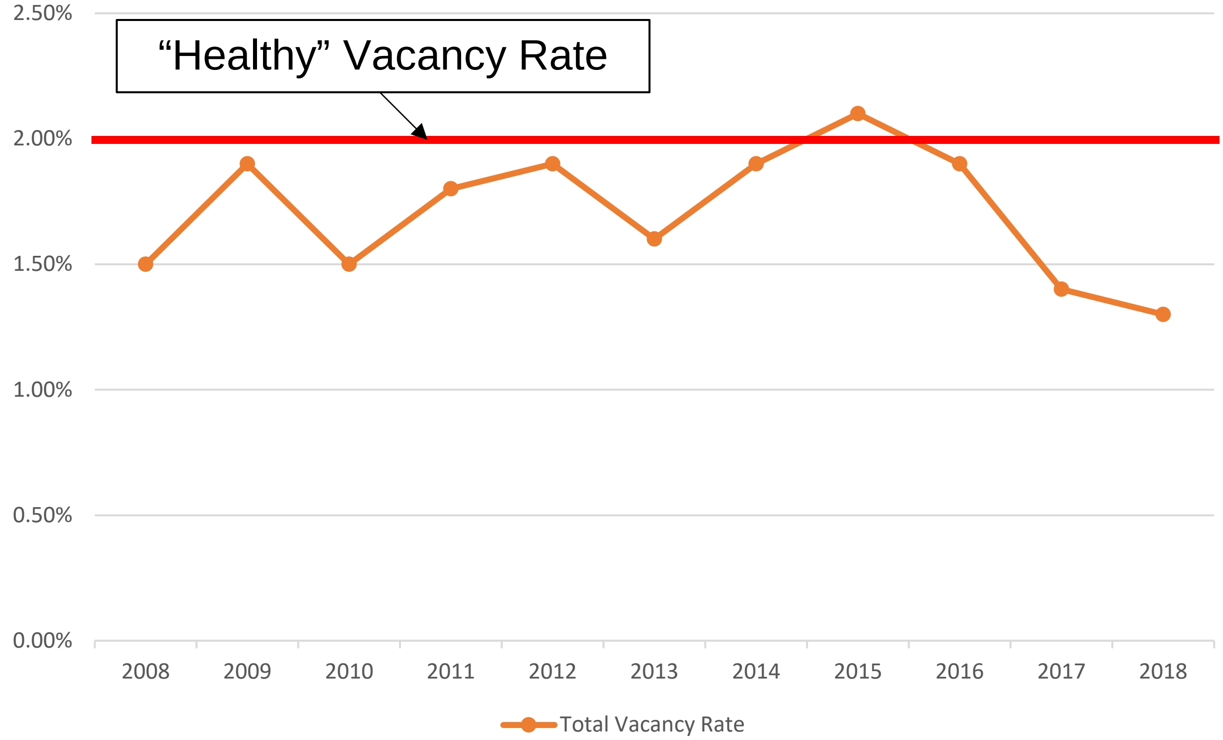


There has been a substantial undersupply in rental housing units in the Madison housing market since the Great Recession, and developers have not constructed nearly enough rental housing units to meet existing demand and the City's rapidly growing population. Although some progress has been made in raising the vacancy rate since 2016, that rate is still approximately 1.5% below what is considered a healthy vacancy rate.

Methodology: These figures are based on data provided by the American Community Survey 5-Year Estimates and Madison Gas & Electric's multifamily vacancy rate data published each quarter. The total rental vacancy rate was retrieved from table DP04. Total rental vacancy includes all rental properties, including single-family homes. For the MG&E vacancy rate, the rates are published by zip code and a weighted average is taken based on the rental population by zip code. For zip codes that overlap with other municipalities, a pro rata share of that figure is taken into account when calculating the overall multifamily vacancy rate for the City of Madison, in addition to the weighted average calculation.

Source: American Community Survey 2014-2018 5-Year Estimates; MG&E

Figure 7: Homeowner Vacancy Rate, 2008-2018



Like the rental vacancy rate, the homeowner vacancy rate has hovered below the healthy vacancy rate since the Great Recession, but has decreased since 2008. This indicates that the slow growth in owner-occupied housing added to Madison since the Recession, highlighted in Figure 1, is partly due to the overall undersupply of available inventory. The tight housing market also drives up sales and listing prices, further excluding many Madisonians from purchasing a home as the undersupply, paired with Madison's growing share of high-income earners looking to buy a home, has priced out lower-income households from the housing market.

<u>Methodology</u>: This figure is based on data provided by the American Community Survey 5-Year Estimates, and is based on the proportion of residential properties that are for sale and vacant. The total homeowner vacancy rate was retrieved from table DP04. The baseline for a "healthy" homeowner vacancy rate of 2% is frequently cited by housing researchers, including the Lincoln Institute of Land Policy.

Source: American Community Survey 2014-2018 5-Year Estimates

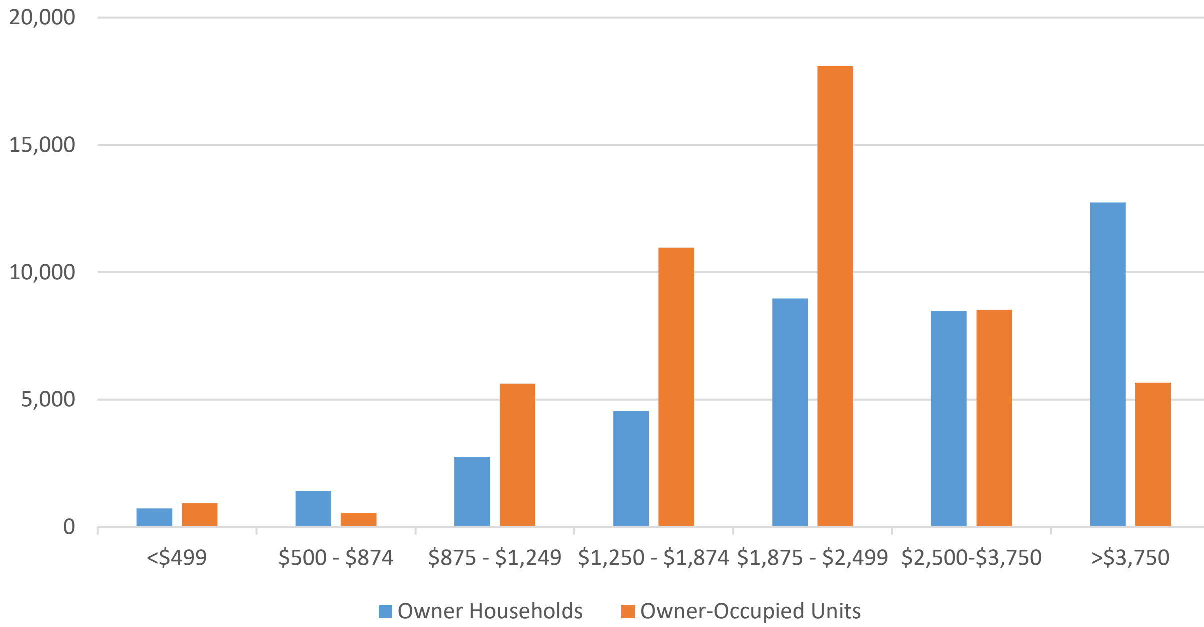
Figure 8: Rental Housing Supply-Demand Mismatch, 2018

There is a significant shortage of units for the lowest-income renter households; however, a large number of renters in the lowest bracket are students who have exacerbated this mismatch. Even when considering the next cost bracket, there are nearly 10,000 more renter households than there are dwelling units rented for less than $875. This is exacerbated by households "renting down" for more affordable units, as there are more than three renter households able to afford more than $1,875 than there are rental units at that rate, indicating those households are renting units more affordable to them and thereby removing those units from the pool of units affordable to less affluent households. Further study may be required to understand better the impact that the student population has on the rental housing mismatch.

Methodology: This figure is based on data provided by the American Community Survey 5-Year Estimates table B25074, which reports what percentage of income a household spends on gross rent, broken down by household incomes. The figure uses rent ranges from table B25063 to illustrate the housing mismatch.

Source: American Community Survey 2014-2018 5-Year Estimates

Figure 9: Owner-Occupied Housing Supply-Demand Mismatch, 2018

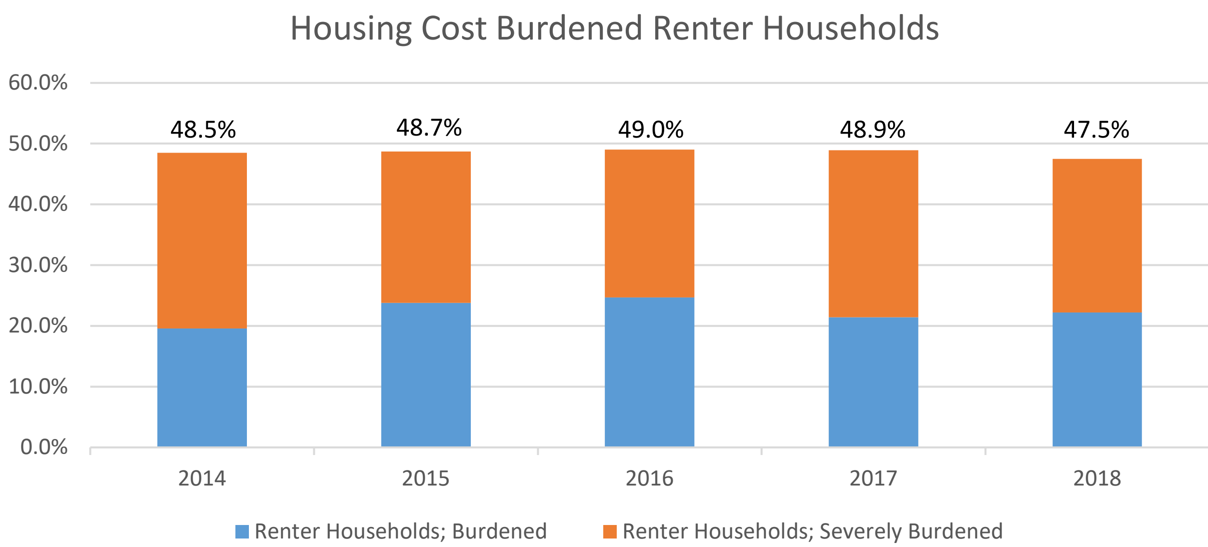


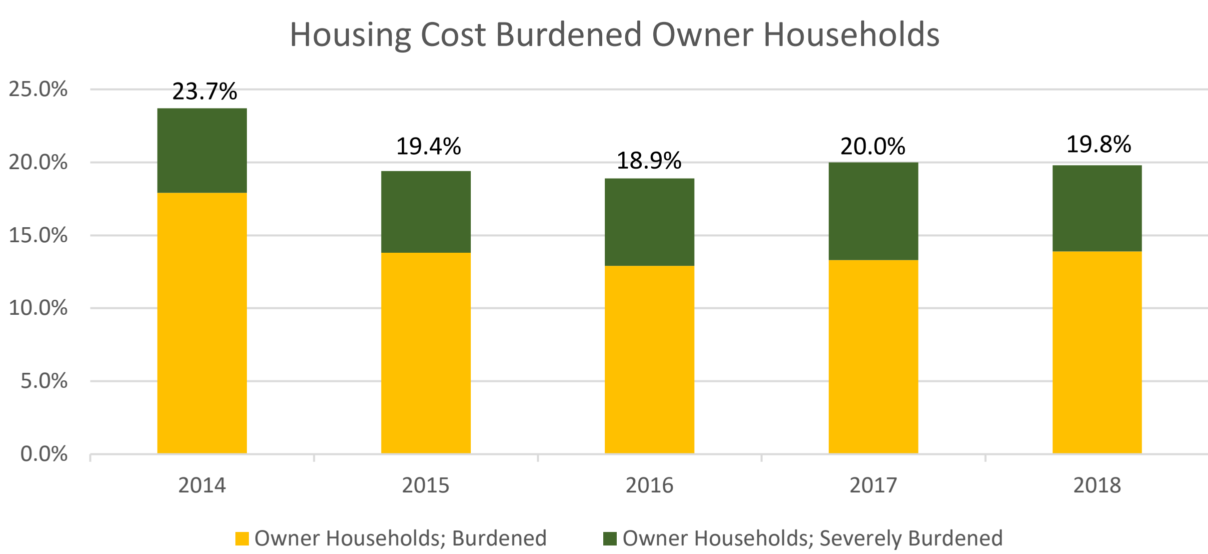
This figure illustrates that there is a shortage of units affordable to Madison's lowest-income owners. As with the rental market there are more households able to afford more than $2,500 in monthly housing costs than there are units available at that level, indicating those households are buying units more affordable to them and thereby limiting the number of available units that are affordable to less affluent households. This housing affordability mismatch analysis does not take into account renters who want to purchase a home, but are unable to find units affordable to them.

Methodology: This figure is based on data provided by the American Community Survey 5-Year Estimates reporting household incomes of owner-occupied units and owner-occupied housing unit counts and values. Housing cost categories were selected from table B25075 to correspond with the income brackets reported in table B25095. Monthly affordable housing cost assumptions were calculated assuming a mortgage for 80% of home's value at a 4% interest rate over a term of 15 years. Due to data reporting limitations, the resulting cost ranges are near, but not identical to the payments available from income (table B25095) or gross rent (table B25063) data.

Source: American Community Survey 2014-2018 5-Year Estimates

Figure 10: Rates of Housing Cost Burden by Tenure, 2014-2018



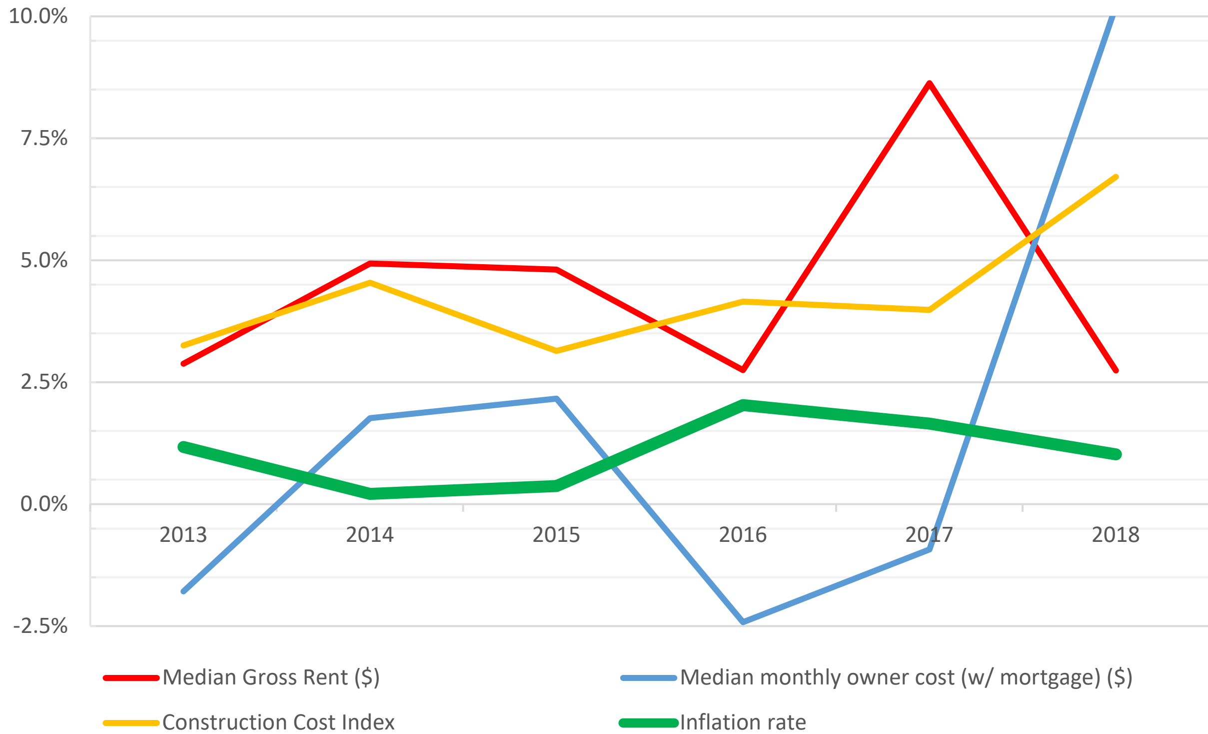


Housing costs are generally considered affordable if they represent 30% of household income or less. Households contributing more than 30% of their income to housing costs are considered "housing cost burdened," and those contributing more than half of their income are considered "severely housing cost burdened." Nearly half of renter households and approximately one-fifth of home owning households are cost burdened to some degree, with approximately a quarter of renters spending half of their income on rent.

Methodology: This figure is based on data provided by the American Community Survey 1-Year Estimates tables B25074 and B25095 reporting gross rent and selected homeowner costs as a percentage of household income, respectively. Figures are broken by the Census Bureau in numerous income brackets and cost burden ranges, which were combined as appropriate to provide the reported total numbers for renter and owner-occupied households.

Source: American Community Survey 2014-2018 1-Year Estimates

Figure 10: Rates of Change of Housing and Construction Costs versus Inflation, 2013-2018

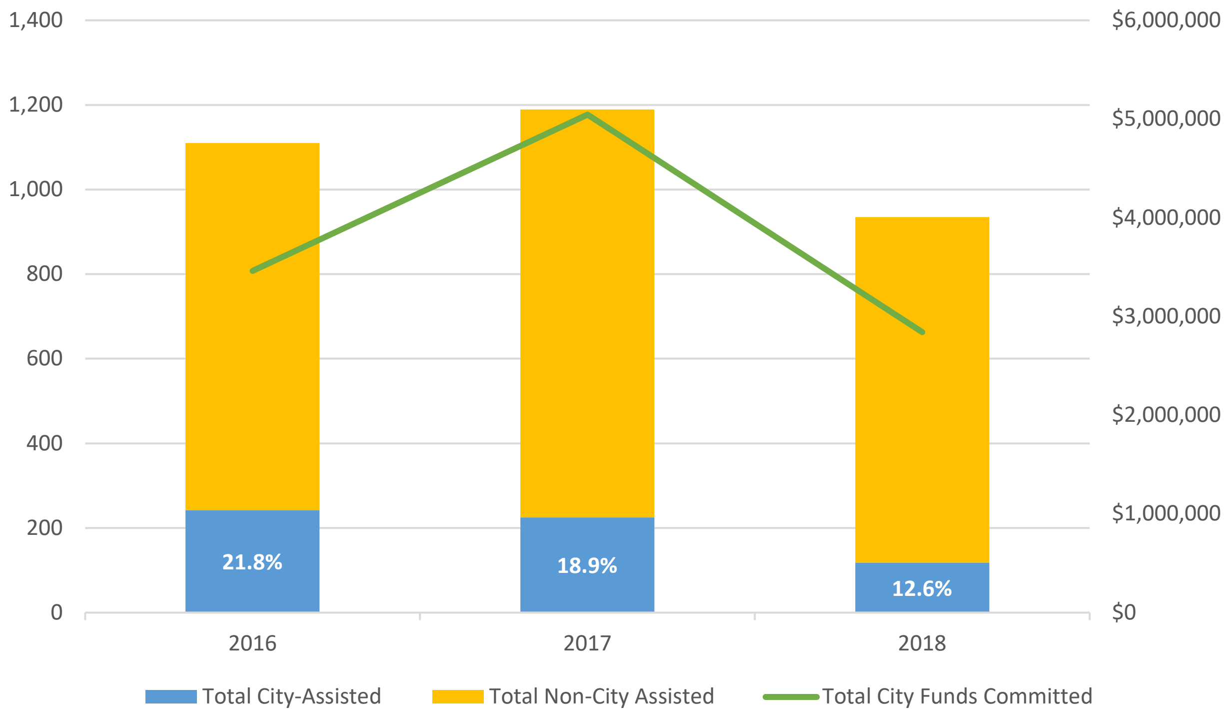


Housing costs are influenced by a number of factors, and two of the most significant are inflation and construction costs. Over the past several years, inflation has averaged slightly more than 1% per year. Meanwhile, construction costs in the Midwest have risen much faster than the rate of inflation, at nearly 4% in recent years, on average. The median gross rent in Madison has risen faster still, with rates increasing at a rate of nearly 5% per year. The significant increase in median monthly owner costs (for those with mortgages) in 2018 may be a correction after several years that averaged out to almost no change.

Methodology: Renter and homeowner housing cost rates of change are year-over-year increases derived from American Community Survey tables B25111 and B25119, for median gross rent and selected monthly owner costs for those with mortgages. Construction Costs index is a weighted average of the year-over-year change of the Turner Building Cost Index (50%) and the Mortenson Construction Cost Indices for Milwaukee (25%) and Minneapolis (25%). Inflation rate is the year-over-year change in the Consumer Price Index for the Midwest region reported by the Bureau of Labor Statistics. The average US 30-year mortgage interest rate increased from 3.35% in May 2013 to 4.58% by August, slowly declining to 3.41% by July 2016 before reaching 4.32% before the end of 2016. The changes in mortgage interest rates appear to have a direct impact on median monthly owner costs.

Source: American Community Survey 2014-2018 1-Year Estimates, Midwest Consumer Price Index, Bureau of Labor Statistics, Turner Building Cost Index, Mortenson Construction Cost Index, Federal Reserve Bank of St. Louis

Figure 11: Impact of City Funding on Rental Housing Supply, 2016-2018

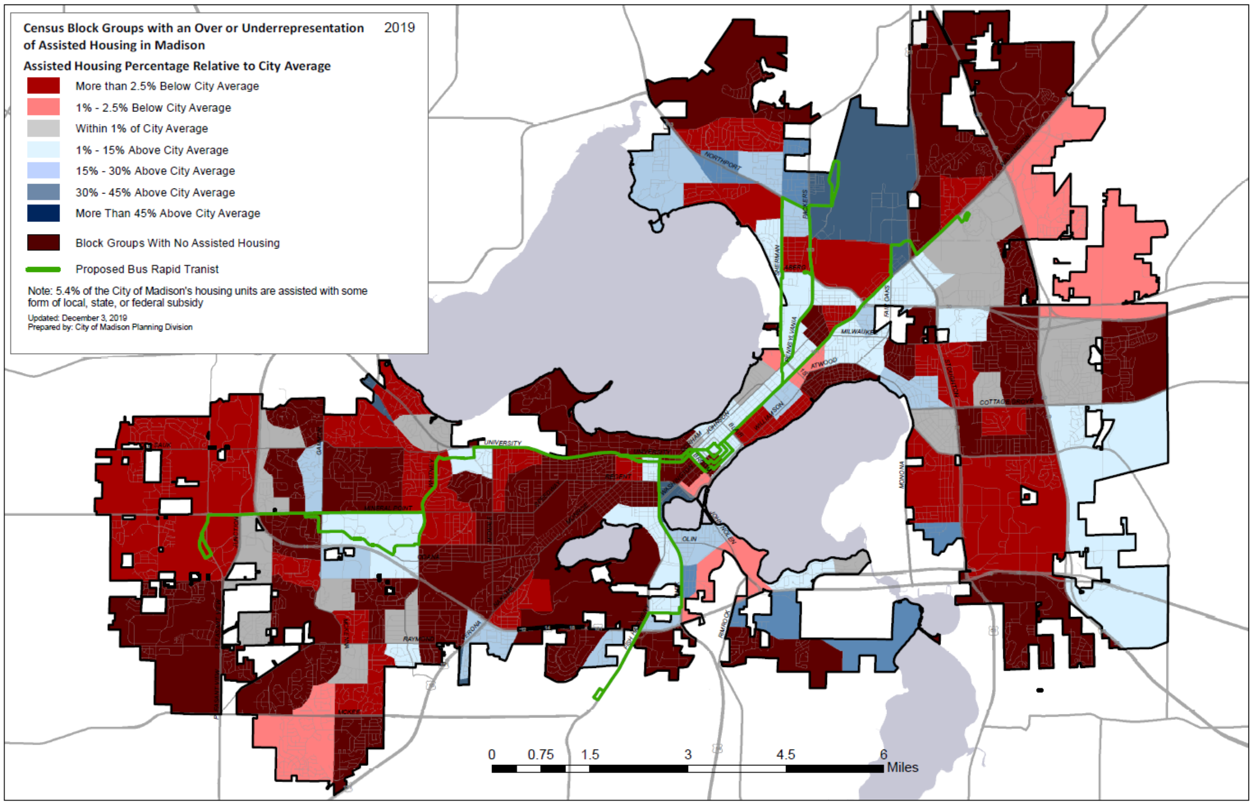


This figure demonstrates what impact that City funds, such as Affordable Housing Funds and TIF Financing, have on adding supply to the rental housing market. Fluctuations in the total amount of City funds committed to City-assisted housing starts reflect changes in land costs, construction costs, and other external factors. The sharp decline in funds committed and units started from 2017 to 2018 can be explained, in part, due to the 2016 election and the then-prospect of tax reform, and this figure is expected to rebound for 2019. Over the last three years, the City has helped create approximately one-sixth of new rental housing starts, indicating that the City has helped incentivize the creation of a large proportion of all rental units since 2016.

Methodology: Data for total housing units created was provided by the City of Madison Office of the City Assessor and represents housing that began construction in that respective year. The number of those housing units started for each year assisted with City funds (e.g. TIF, AHF, federal funds, etc.) was informed by data maintained by the City of Madison Community Development Division. The City-assisted units do not include housing units subsidized by another federal, state, or county program that is not also financed by City dollars. City funding relates to funds committed for the pertinent housing developments started in a given year.

Source: City of Madison Community Development Division; City of Madison Assessor's Office

Figure 12: Distribution Analysis Demonstrating Concentrations of Subsidized Housing, 2019

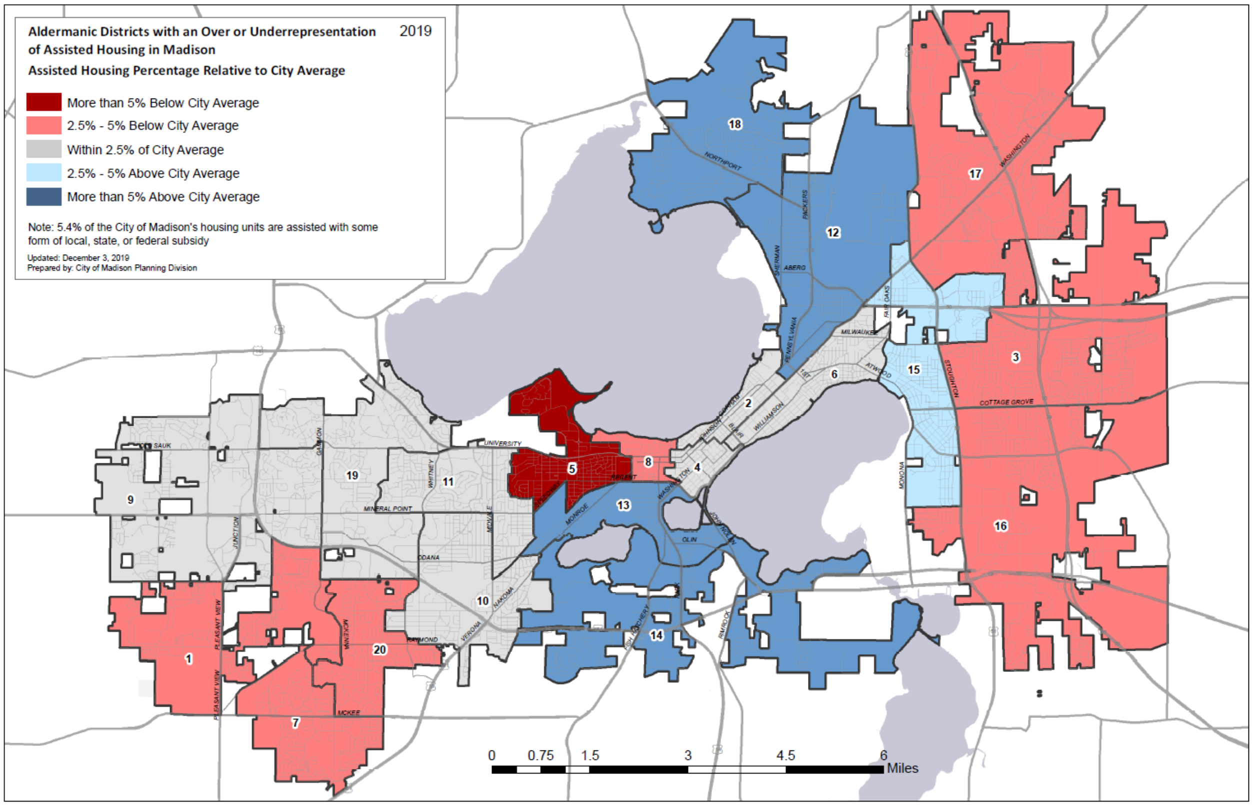


The map shows each City block group's over- or underrepresentation of income-restricted housing relative to the City's average of 5.4%. This spatial analysis is intended to demonstrate that subsidized housing is not evenly distributed throughout the City, and is instead concentrated in certain areas and neighborhoods. The goal is not to make this map uniform, but as a means of highlighting areas proximate to the proposed Bus Rapid Transit (BRT) route where low-income housing development should be incentivized.

Methodology: The distribution map was informed with data maintained by the City of Madison Community Development Division for all housing units assisted with some form of public subsidy that restricts the rents and/or incomes of a unit. The total number of units assisted with public funds was divided by the total number of housing units in the City of Madison to calculate the percentage of the City's housing stock that is income- and/or rent-restricted. The degree to which a certain block group was above or below that share was generated using ArcMap and produced by the Planning Division.

Source: City of Madison Community Development Division; City of Madison Planning Division

Figure 13: Aldermanic Districts with an Over- or Underrepresentation of Subsidized Housing, 2019

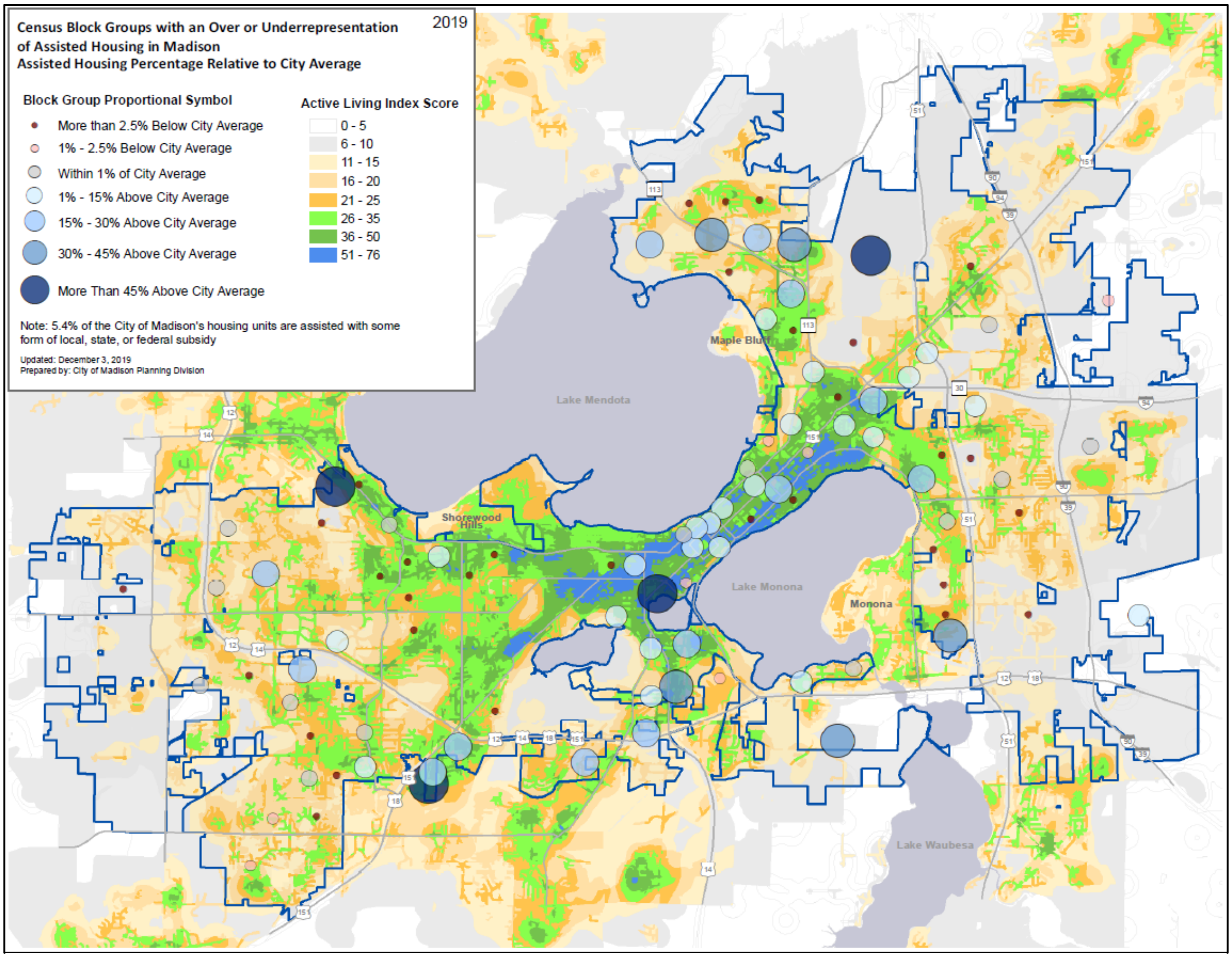


Similar to Figure 5, this map shows the over- and underrepresentation of subsidized housing relative to the City's average of 5.4%, but partitioned by aldermanic district. This analysis shows the districts that may be able to absorb additional units of income-restricted housing to better economically integrate the City. Shown in this manner, the map highlights the aldermanic districts that currently absorb the bulk of this housing type.

Methodology: The distribution map was informed with data maintained by the City of Madison Community Development Division for all housing units assisted with some form of public subsidy that restricts the rents and/or incomes of a unit. The total number of units assisted with public funds was divided by the total number of housing units in the City of Madison to calculate the percentage of the City's housing stock that is income- and/or rent-restricted. The degree to which a certain aldermanic district was above or below that share was generated using ArcMap and produced by the Planning Division.

Source: City of Madison Community Development Division; City of Madison Planning Division

Figure 14: Active Living Index Overlaid with Low-Income Housing Distribution Analysis, 2019

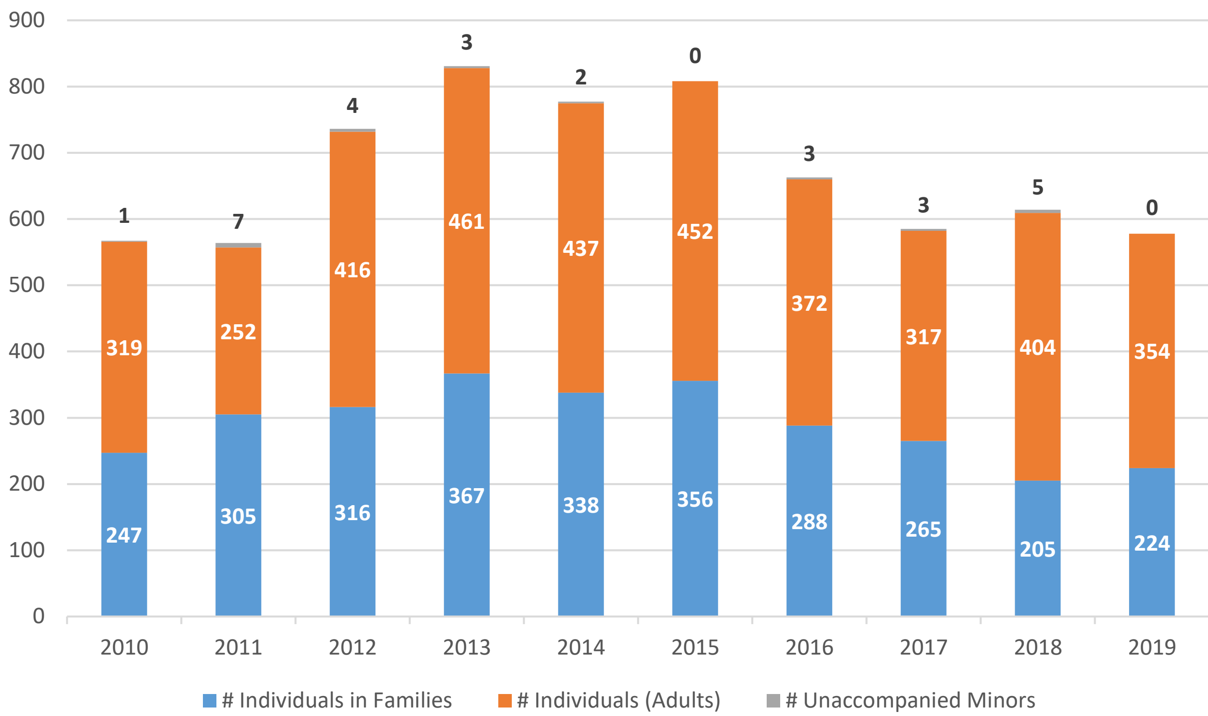


This analysis demonstrates where subsidized housing is concentrated as it relates to areas with higher Active Living Index scores. The Active Living Index is intended to measure the accessibility of a location based on three components: walkability, accessibility to bikeways and bike lanes, and transit accessibility. Ideally, the largest share of income-restricted housing would be in areas shaded darker green and blue on the map, as those areas have greater access to frequent transit service and are within walking distance to several amenities. The map also demonstrates, in an alternative way, a lack of subsidized housing units on the fringes of the City (where there is very low transit accessibility) and on the Near West Side.

Methodology: This distribution map was calculated using the same methodology from the prior two figures, but with concentrations of assisted housing displayed as circles instead of shaded block groups. This is intended to highlight where assisted housing is relative to areas with high Active Living Index scores. The Madison Area Transportation Planning Board developed this index based on the following factors: intersection, destination, and population density to measure walkability; density of bicycle facilities; suitability of roadways for bicycling; availability and frequency of transit service; and density of jobs accessible by transit within 45 minutes.

Source: City of Madison Community Development Division; City of Madison Planning Division

Figure 15: Number of Homeless Individuals in Madison and Dane County, 2010-2019



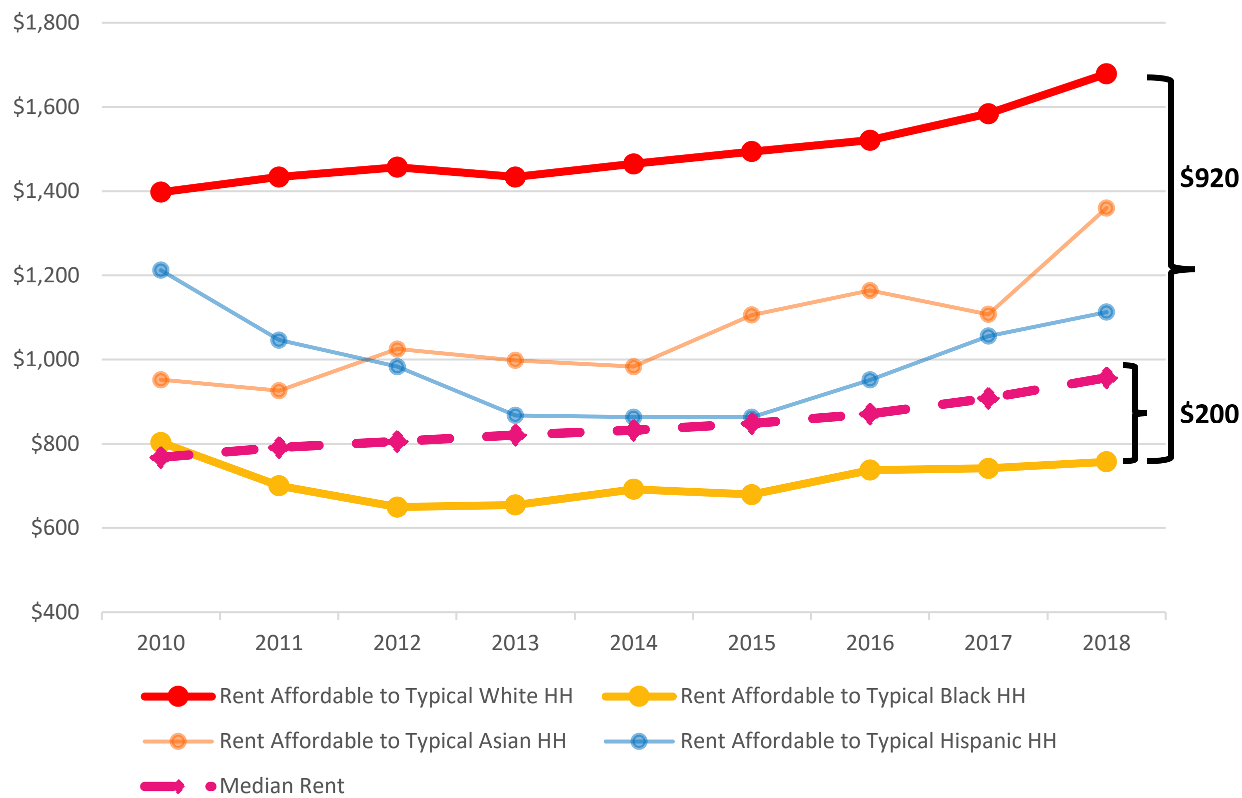
After peaking in number between 2013 and 2015, the number of homeless individuals in Madison and Dane County has decreased over the last five years. Relative to the overall growth of the County, the share of the population that is homeless has decreased during that same period despite the total number of homeless individuals remaining stable since 2017. This count is conducted every January as a requirement of receiving federal funds to combat homelessness.

Methodology: The Point-in-Time Count is an annual count of all homeless individuals in Madison and Dane County that are unsheltered or residing in shelters on a particular night in January. Members of the public and those affiliated with the Dane County Homeless Services Consortium survey individuals that they encounter during the night and note certain demographic information about the person. Members typically organize the count by known areas throughout the County where homeless individuals have historically been found to sleep.

Source: Dane County Homeless Services Consortium

Figure 16: Total Eviction Judgments Resulting in Removal in Madison and Dane County, 2016-2018

Figure 17: Racial and Ethnic Disparities in Rental Affordability, 2010-2018

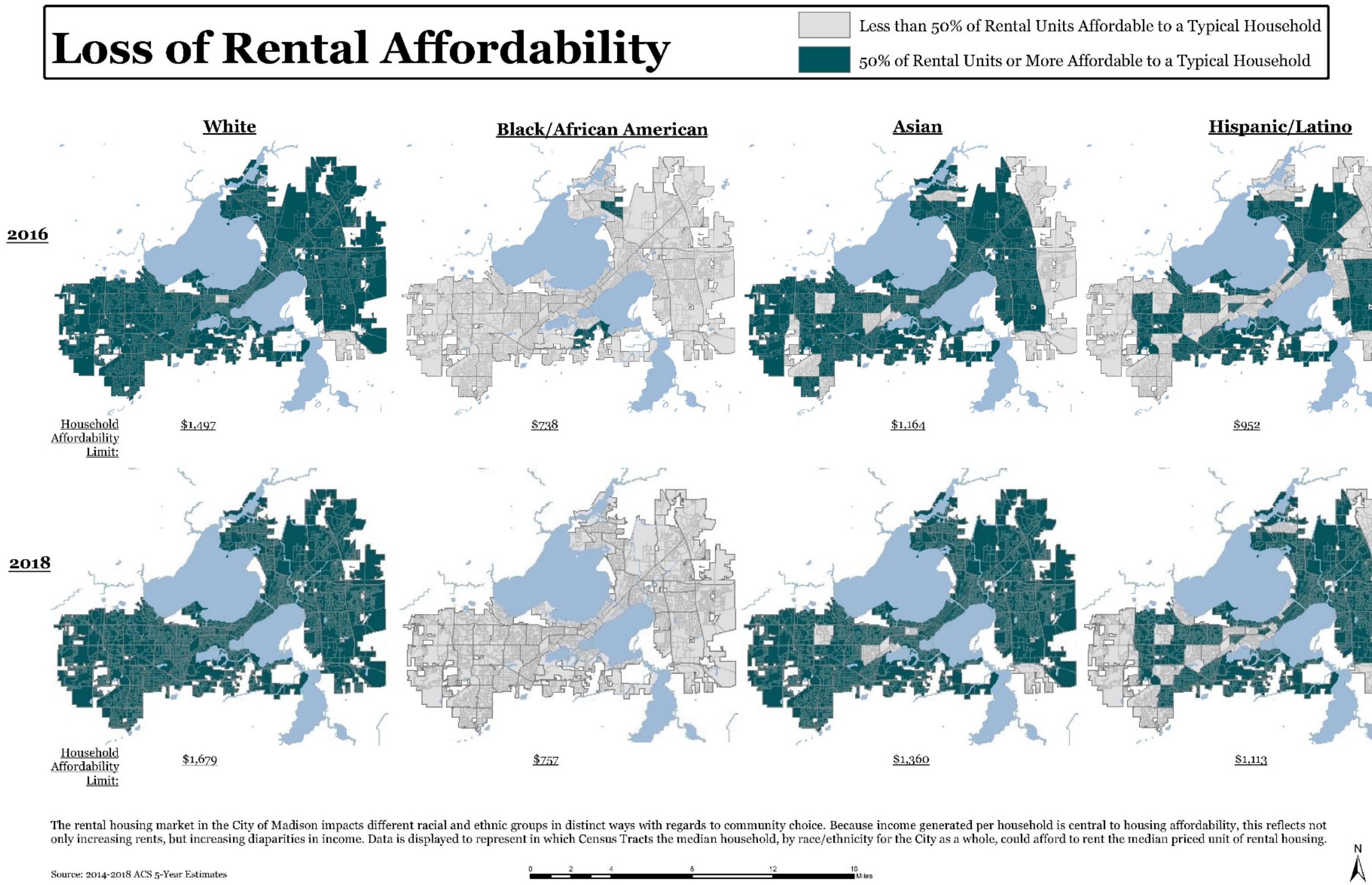


This figure demonstrates the economic disparities that exist in Madison between the City's two largest racial groups: white households and black/African American households. The median white household in Madison can afford to pay approximately $920 more per month in rent than can the median black household. Additionally, black households are the only major racial or ethnic group in the City where the median household cannot afford the median rent. Put differently, the majority of black households cannot afford the typical rent in the City of Madison, by a margin of $200 per month.

Methodology: Affordable rent is calculated for each major racial and ethnic group displayed in the above figure by multiplying the median income for each demographic by 30%. Due to the limitations of American Community Survey data, the figure cannot be filtered by housing tenure, so the affordable monthly rent payment represents incomes of both homeowners and renters. Figures are based on data provided by the American Community Survey 5-Year Estimates and retrieved from table S1903. Median rent is found in table B25058.

Source: American Community Survey 2014-2018 5-Year Estimates
Note: Affordable rent is calculated based on the incomes of all households in each demographic group.

Figure 18 Racial and Ethnic Segregation of Housing Access, 2016-2018



Methodology: Using ArcMap, median rent for each block group is compared to the median affordable rent for each racial and ethnic group displayed in the figure. If the median rent of one of the demographic groups matches or exceeds the median rent in the block group, it is considered "affordable" to the median/typical renter belonging to that race or ethnicity.