

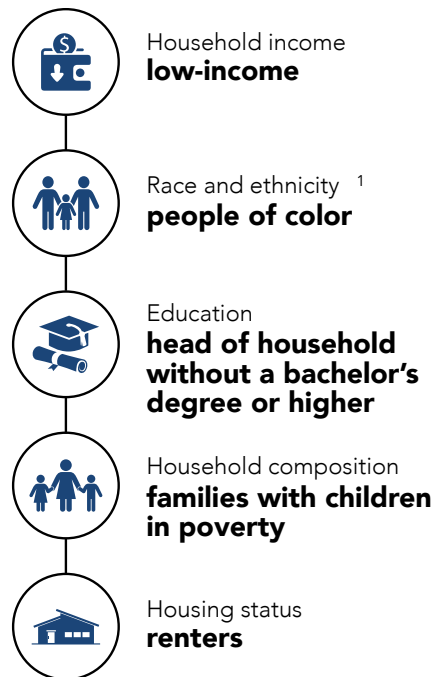
PART 2

Identifying and Mapping Gentrifying
Neighborhoods in Austin

Understanding and Identifying Vulnerability to Displacement

The first phase of our research involved identifying which neighborhoods in Austin have a concentration of residents who are the most vulnerable to displacement in the face of rising housing costs. For this analysis, we used a short list of indicators to identify residents who, according to research, are the least able to absorb rising housing costs and whose housing choices are especially limited in the wake of displacement. In this section we discuss how we arrived at these indicators.

Indicators of Vulnerability to Displacement from Rising Housing Costs



Social vulnerability refers to the differing ability of members of particular socio-demographic groups to withstand threats to their livelihoods, security, and social, economic, and political networks. Measures of social vulnerability attempt to integrate a set of characteristics of people and places that make them especially likely to be harmed by shocks such as natural disasters or redevelopment and rising housing prices.² Similarly, housing researchers have also studied how certain socioeconomic characteristics are intertwined with housing instability.³

As described in the next section, to reflect the compounding nature of these markers of vulnerability, we looked for areas where there is strong overlap between these markers. It is important to keep in mind that these indicators cannot really be divorced from each other—poverty overlaps with education, people of color are more likely to be renters than white residents, etc. We discuss the indicators separately here to explain how each impacts vulnerability to displacement, based on existing research.

➤ Income

Poverty lies at the center of research on social vulnerability and on housing insecurity. Households with incomes that are low when compared to the regional median—particularly those whose incomes fall below the poverty line—are particularly sensitive to rising housing costs. They are also

less able to find affordable options if forced to move.⁴ Those living in poverty have more debt and fewer assets than the non-poor.⁵ This leaves them with little to fall back on when faced with rising rents, often resulting in eviction. Living in a poor neighborhood compounds their vulnerability.⁶ Although wealth (how many assets a household has at a given moment) is not exactly the same thing as income (how much a household earns within a given period of time), they are highly correlated. Data on income from the U.S. Census is widely available, whereas wealth is much harder to track, and so we rely on income in our analysis.

➤ **Race and ethnicity**

Non-Hispanic Blacks, Hispanics, and Native Americans tend to have fewer resources to draw upon in case of financial shocks than whites.⁷ Structural racism in employment and segregation of housing markets result have contributed to great disparities in wealth between these groups and whites.⁸ A 2009 Pew Research Center study found the median wealth of white households to be 20 times that of Black households and 18 times that of Hispanic households: the typical Black household had \$5,677 in wealth and the typical Hispanic household had \$6,325, while the typical White household had \$113,149 in wealth. Many households of color (35% of African American and 31% of Hispanic households) had either zero assets or a negative net worth, while only 15% of white households did.⁹ This wealth gap was exacerbated by the mortgage crisis and credit crunch that began in around 2007. Hispanic homeowners were particularly hard hit: Between 2005 and 2009, Hispanic homeowners saw a 4 percent drop in homeownership and lost, on average, half of the equity in their homes.¹⁰ A 2015 study concluded that discriminatory lending practices during the financial crisis will likely widen the black-white wealth gap for the next generation.¹¹

The spatial concentration of people of color in low-income communities can have compounding effects on wealth disparities. In addition to the wealth inequities noted above, linked to publicly-shaped segregated housing markets,¹² neighborhood location can also deepen these inequities through unequal access to high performing public schools.

Despite the overturning of legally-sanctioned racial segregation in the mid-twentieth century, low-income residents of color living in predominantly non-white neighborhoods are extra vulnerable to displacement. First, the value of their neighborhoods has been depressed by past discriminatory actions, making them lucrative sites for residential investment associated with gentrification and displacement. Second, they continue to face barriers to living in more affluent, historically white neighborhoods. Once displaced, their housing choices remain limited.¹³

➤ **Education**

Households headed by workers without a college degree are less likely to be employed and more likely to be employed in jobs paying low wages or offering seasonal employment, making them particularly vulnerable to displacement from rising housing costs.¹⁴ Displacement of households without college degrees to areas outside of the city can exacerbate income disparities. Recent research finds that, as the poor move to the suburbs, they are likely to live in “job-poor” suburbs, in part because of exclusionary development patterns in more job-rich suburban areas.¹⁵

➤ **Household composition (families with children and seniors)**

The types of households present in a neighborhood can also relate to the likelihood of displacement. The presence of large numbers of elderly households or households with children, under certain circumstances, can be markers of vulnerability. On their own, however, they are not consistent predictors. For example, an elderly household can be high income with considerable assets (less vulnerable), or poor with few assets (more vulnerable). For elderly households, researchers find that being elderly, absent other markers of vulnerability (low-income, no bachelor’s degree, etc.) does not result in a significant increase in vulnerability from rising housing costs compared to non-

elderly households.¹⁶ While we did not use the presence of elderly households to identify vulnerable neighborhoods, we did map the location of elderly households in Austin, which is available on the interactive mapping website we created, at <https://sites.utexas.edu/gentrificationproject>. This information is also referenced in our discussion of options for low-income homeowners (see Part 4, goal 2, and Appendix 5).

The relationship between the presence of children and vulnerability also rests heavily on the income and housing tenure of the household. We found the strongest evidence for such a relationship for poor households with children. Matthew Desmond’s Milwaukee study of renters facing eviction found that poor families with children were more likely to face eviction than households without children, even taking into account the details of their cases and situations.¹⁷ Once displaced, households with multiple children also face considerable difficulties finding housing that can accommodate them. While the Fair Housing Act includes protections for families with children, the limited enforcement and the paucity of larger rental units undermines its effectiveness. Federal assistance for families with children is also at its lowest level in close to twenty years, further undermining options for these families.¹⁸

➤ Housing status

Urban Institute fellow Rolf Pendall and his coauthors use the phrase “precarious housing” to describe the types of housing that make residents particularly vulnerable to displacement. They examine (1) the physical conditions associated with housing (overcrowding, poor maintenance, or conditions due to age or housing type and construction quality) and (2) the ongoing ability of a household to remain in their home or to benefit in any way from rising home values. The researchers found that renters as a group are the most vulnerable to displacement from their homes. For example, as rental property owners decide to upgrade their units,¹⁹ convert them to condominiums, or replace mobile home parks with more profitable land uses, their renters will be displaced.²⁰ Homeowners may also be forced to sell due to rising property taxes or the cost of repairs—but as a group they are much less vulnerable to displacement than renters. And homeowners may also be able to capture some of the rising value of their homes to help them stay or relocate, depending on how early in the process of change they are forced to sell.

➤ Putting the indicators together

Through the overlap of these five indicators, we see that certain groups of people are more vulnerable to displacement from rising housing costs than others. Generally, the evidence is strongest for the compounding effect of being African-American or Hispanic on other dimensions of vulnerability to displacement. For example, African-Americans are more likely to have other characteristics that increase their vulnerability, such as living in poverty or being renters.²¹ Hispanics are also more likely to be renters, or have lower levels of education, or both.²²

Who is most vulnerable to displacement?



Communities of Color



People 25 and older without a Bachelor's Degree



Renters



People making at or below 80% Median Family Income



Households with children in poverty

Change Over Time

Identifying neighborhoods with high concentrations of vulnerable persons is only the starting point. Understanding whether displacement from gentrification is occurring, and identifying likely points of intervention, requires looking for signs of vulnerable residents actually leaving neighborhoods while less vulnerable residents move in, and also looking for signs of changes in the housing market both inside the neighborhood and nearby. Based on our earlier discussion of gentrification and displacement, in our research we looked for vulnerable neighborhoods where, over time, (1) residents' incomes have been increasing at a greater rate than the metro area; (2) the percentage of residents of color has been declining compared to the metro area; (3) the percentage of residents with bachelor's degrees has been increasing at a rate greater than the metro area; and (4) the homeownership rate has gone up faster than the metro area. All of these changes are considered markers of gentrification—of a neighborhood transforming through the loss of its vulnerable residents and influx of wealthier persons. To then identify whether these changes are connected to a particular stage of gentrification, we looked for signs of rising property values in the neighborhood and adjacent areas.

One word of caution on analyzing demographic changes is in order: When we measure change over time, we are effectively taking two snapshots of a neighborhood at different times and comparing them. Census data, which we rely upon in this study, does not allow us to actually track who has moved into or out of a neighborhood, let alone where they have come from or where they have gone. For example, if a neighborhood has a median household income that has increased by 50 percent in inflation-adjusted terms over 10 years, it is impossible to know from that statistic alone whether new, high-income residents have replaced low-income residents, or whether the low-income residents have simply managed to greatly boost their earning power. That is why we examine demographic change as a combination of factors: For instance, if a given neighborhood has recently experienced a sharp increase in the percentage of white, college-educated, and high-income residents, we can infer that a new group of more advantaged people has moved in.

Summary of Gentrification Mapping Methodology

This section summarizes our methodology for mapping Austin's neighborhoods as either gentrifying or not gentrifying, and for classifying the gentrifying neighborhoods according to their stage of gentrification. Our procedure is an adaptation of a method devised by Dr. Lisa Bates of Portland State University in Oregon, and first applied to Portland.²³ Note that this section provides a high-level overview; full methodological details and a step-by-step procedure can be found in Appendix 3.

What we analyzed

The basic geographic unit that we used to analyze Austin is the census tract. A census tract is an area defined by the federal government that typically contains between about 2,500 to 8,000 people. It can be thought of as roughly equivalent to a neighborhood, although census tract boundaries do not necessarily line up with neighborhood definitions commonly used in Austin. The geographic size of a tract depends on how many people it contains and how densely populated it is. As one example, Travis County census tract #15.04, which covers the Crestview neighborhood in North Central Austin, is just over a square mile in size.

We began by identifying all of the census tracts that lie either entirely or partially inside Austin's city limits. Next, we eliminated several tracts from the study because they are unusual places not subject to the typical processes of neighborhood change. These included the tracts containing Austin Bergstrom International Airport, the University of Texas (UT) main campus, and Camp Mabry, a military base. We also eliminated two tracts comprising the West Campus neighborhood

immediately west of the UT main campus, since demographic information from student-dominated neighborhoods can lead to misleading conclusions. For instance, a very high proportion of college and graduate students are represented in official data as living in poverty, even though many of them have access to opportunities and resources that are a world away from what predominates in a truly impoverished neighborhood.

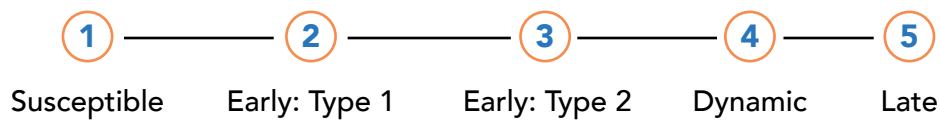
After we had eliminated several census tracts from the study, we were left with 200 of them. We assigned names to each of them, which appear on the interactive map interface that we have released alongside this report (<https://sites.utexas.edu/gentrificationproject/>). The names represent our best attempt to match the various census tracts in Austin with locally meaningful geographic descriptors.

It should be noted that the Census changes its definitions of tracts every ten years (following the release of each new decennial census). We used Census-provided “crosswalk files” to harmonize the boundaries of 1990 and 2000 tracts with 2010 tracts.

Overall procedure

Following the Bates methodology, our analysis unfolded in three steps. The ultimate goal behind the procedure was to classify every census tract in Austin as gentrifying or not, and to classify the gentrifying tracts into five categories based on the following stages:

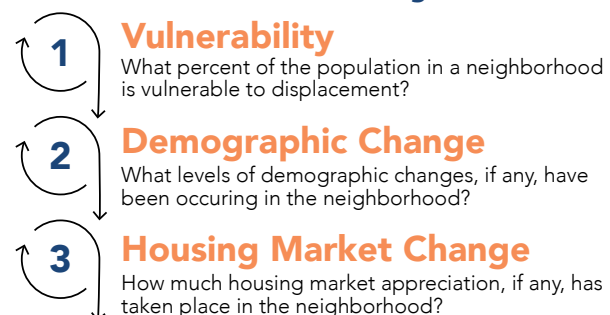
5 categories of Gentrifying Neighborhoods



To get to this classification of gentrifying neighborhoods, our first step was to classify each census tract on the basis of *vulnerability*. In general, vulnerability refers to a tract having an above-average share of vulnerable residents—classes of persons who are more likely to be displaced when housing costs rise in an area or an area is subject to increased public and private investment (see the above section for a more detailed description on vulnerability). Each tract was classified as either vulnerable or not vulnerable. The second step was to classify tracts based on *demographic change*: Between the years 2000 and 2016, had the census tract experienced an increased share of residents associated with gentrification (e.g., white, higher-income, highly-educated, homeowner residents)?

Finally, the third step examined *housing market change* from 1990 to 2016 and from 2000 to 2016. For this step, census tracts were classified according to whether they had experienced an above average amount of appreciation since either 1990 or 2000, or whether they were adjacent to a tract that had experienced such change (typically an indication, according to research, that home price appreciation will soon take place). See below, along with Appendix 3, for a more detailed discussion of these three steps.

Snapshot: 3-Part Gentrification Analysis



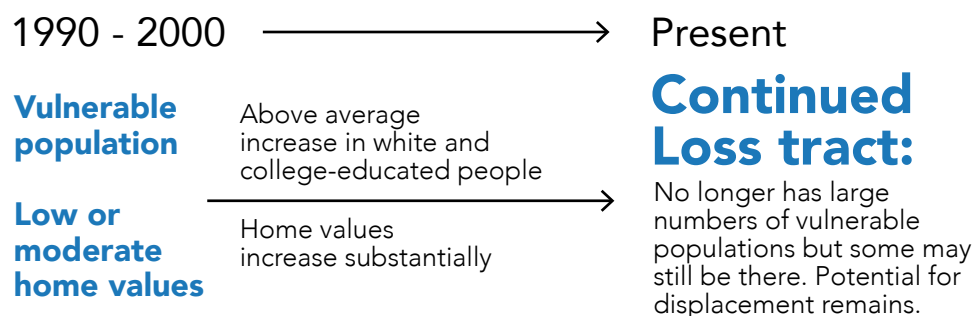
After collecting this data, we assigned one of the five gentrification stages to each gentrifying neighborhood. A neighborhood was classified as an *Early: Type 2, Dynamic,* or *Late* stage gentrifying neighborhood, if the census tract met all three of the following conditions: (1) an above-average share of vulnerable residents, (2) experienced significant demographic change, and (3) experienced significant housing market change. If a tract was vulnerable and had experienced appreciation but not yet demographic change, it was classified as *Early: Type 1*. Finally, if a tract was vulnerable and had experienced no demographic change and only moderate housing market change or none at all, but it lay adjacent to a tract with either high real estate values or high recent appreciation or both, then it was classified as *Susceptible*. In such a tract, gentrification is likely imminent (assuming that the city’s current economic boom continues), or already underway but not yet showing up in official data because of the time that has elapsed since the data was collected. This classification scheme follows the Bates method precisely. The criteria for inclusion in the five gentrification stages are summarized in the table below.

Categories of Gentrifying Neighborhoods

Gentrifying tract type	Demographic change (2000 to 2012-16)	Average current residential real estate value (2012-16)	Appreciation	Must touch tract with high value and/ or high recent appreciation
Susceptible		Low or moderate	Low or moderate recent (2000 to 2012-16)	✓
Early: Type 1		Low or moderate	High recent (2000 to 2012-16)	
Early: Type 2	✓	Low or moderate	Low or moderate recent (2000 to 2012-16)	✓
Dynamic	✓	Low or moderate	High recent (2000 to 2012-16)	
Late	✓	High	High sustained (1990 to 2012-16)	

Adapted from Lisa Bates, “Gentrification and displacement study: Implementing an equitable inclusive development strategy in the context of gentrification, 2013, Table 1, page 31, at <https://www.portlandoregon.gov/bps/article/454027>.

If a census tract was identified as not vulnerable, it was not classified as a gentrifying neighborhood. It is important to note that simply because a tract is classified as not vulnerable does not imply that it lacks vulnerable people. Rather, such a tract has a lower share of vulnerable people than average. Residential displacement can and does still occur within such areas. One further subcategory recognizes these dynamics: tracts are classified as *Continued Loss* tracts if they (1)



have experienced an above average increase in white and college-educated people from 2000 to 2016, and (2) have housing market values that increased substantially from 1990 to 2016 and are now high. These can be thought of as tracts that have passed beyond the final (Late) stage of gentrification, but that still retain remnant vulnerable populations, many of whose members likely continue to be vulnerable to displacement.

Using census data to make comparisons

To assess whether a given census tract had experienced above average vulnerability, demographic change, or housing market change, we compared it against a wider area. In the case of vulnerability and demographic change, we compared various indicators (five for vulnerability, and two for demographic change, detailed below) against the average for the entire five-county Austin-Round Rock Metropolitan Statistical Area (MSA), which consists of Bastrop, Caldwell, Hays, Travis, and Williamson counties. The City of Austin accounts for just under half of the population of this metropolitan area.

Making comparisons to the MSA is a departure from the original Bates method, which only compared census tracts in Portland to city-wide data. Our procedure intended to capture the metropolitan character of neighborhood change, which involves various populations moving to—or being displaced into—a wide variety of different locations, both inside the City of Austin and outside, within the regional job market.

In another departure from the Bates method, we used a statistical measure called Z-scores to quantify the extent to which a given indicator was above or below the MSA average. By contrast, the Bates method used thresholds: a given indicator was assumed to be above average, or not, based on whether it was above or below a certain level. Z-scores, by contrast, take into account not just whether a given indicator is above or below average, but *how much* it lies above or below the average. The details of our methodology are explained in Appendix 3.

Census data measured at the tract level is gathered over five-year intervals as part of the American Community Survey (ACS). The most recent tract-level data available at the time we conducted the analysis in this report was for the years 2012 to 2016. By contrast, earlier tract-level data is available from the 1990 and 2000 decennial censuses.

Vulnerability

To assess the vulnerability of neighborhoods to gentrification, we used five variables for measuring the socio-demographics of a given tract as of 2016 (using 2012-16 ACS data):

Vulnerability Factors



People of color

Percent of residents who identify as anything other than “non-Hispanic white alone.”



Renters

Percent of households who rent, rather than own, their homes.



Lack of higher education

Percent of residents aged 25 or greater lacking a four-year bachelor’s degree or higher.



Children in poverty

Share of children who live in households that lie below the official federal poverty line.



Low income

Percent of households with incomes below 80% of the Area Median Income (AMI) for households of the same size within the MSA.

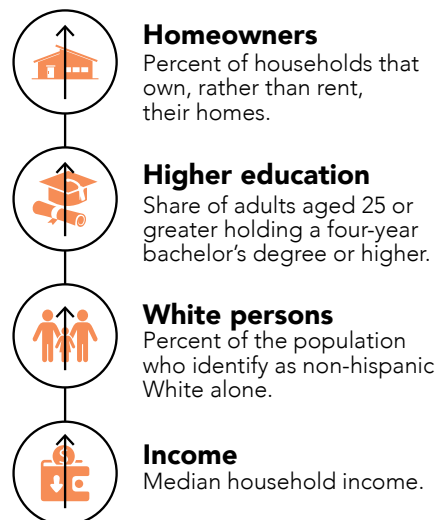
The first four vulnerability factors are used in the original Bates method. We added the fifth—children in poverty—in response to input from Austin city councilmembers and staff. We considered, but did not include, a sixth indicator: the percentage of residents over the age of 65. As discussed in the prior section, research has found that being an elderly person is not a consistent predictor of vulnerability, if not used alongside other markers of vulnerability (renter, low income, etc.).

Tracts were designated as vulnerable if the Z-score for at least three out of the five vulnerability factors exceeded +0.5. For mapping purposes, we further categorized vulnerable tracts into three subcategories, based on the average Z-scores for all five vulnerability factors: *Vulnerable* (average Z score was less than +1.0), *More Vulnerable* (between +1.0 and +1.5), and *Most Vulnerable* (more than +1.5).

Demographic change

We used four variables to assess *demographic change over time* between the years 2000 and 2016 (using 2012-16 ACS data). Specifically, we looked at whether there was an increase in the share of residents meeting one or more of three demographic factors: homeowners, higher education, and white. We also looked at changes in median income in each tract.

Demographic Change Factors



A tract was deemed to have experienced demographic change if at least two of the four demographic variables had Z-scores that exceeded +0.5, and if the average Z-score for the four factors exceeded +0.5.

Housing market change

Following the Bates methodology, we used three variables to classify tracts on the basis of housing market change. All of them involve median home values reported at the tract level. Note that home value data from the Census and from the ACS is self-reported by respondents and only applies to owner-occupied housing.

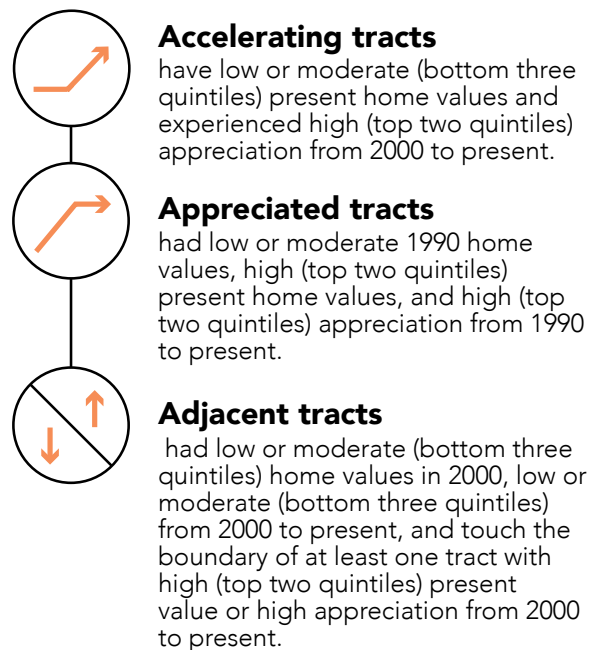
Unlike what we did with vulnerability and housing market change, for the housing market analysis we did not compare tracts against the MSA-wide average using Z-scores. Instead, we sorted the 200 tracts within Austin and grouped them into quintiles, i.e., categorized them into five “buckets:” lowest fifth, second lowest fifth, middle fifth, second highest fifth, and top fifth. Because the bulk of recent dramatic home value increases have occurred within the City of Austin, extending this analysis to the entire MSA would have dampened the variation among tracts.

Note that a small number of tracts lack reported median home value data, because they have so few owner-occupied units that the Census cannot release statistically valid estimates for them. In such cases, we benchmarked median rents, rather than median home prices, against the rest of the tracts using quintiles in the same manner.

The three variables we used to classify tracts on the basis of home values were as follows:

- **Present home value:** Median home value (ACS 2012-2016 data).
- **Home value change since 2000:** Percent change in median home value from 2000 to 2016 (using 2012-16 ACS data).
- **Home value change since 1990:** Percent change in median home value from 1990 to 2016 (using 2012-16 ACS data).

Following Bates, we used these variables to identify three types of tracts with notable housing market dynamics:



Intuitively, *accelerating* tracts are places where the housing market has picked up steam since 2000; *appreciated* tracts are where this process has already occurred; and *adjacent* tracts are where this process seems likely to happen soon. Referring back to the gentrification typology discussed earlier in this section, *Susceptible* tracts have not experienced demographic change, and are in areas adjacent to ones showing signs of housing market appreciation. *Early: Type 1* tracts have not yet experienced demographic change but are experiencing an accelerating market. *Early: Type 2* tracts are the other way around: they have experienced demographic change but are not yet accelerating and instead are next to an accelerating or appreciating tract. *Dynamic* tracts have experienced demographic change and are experiencing accelerating market conditions, whereas *Late* tracts have also experienced demographic change but are in an appreciated housing market state. Finally, among non-vulnerable tracts, *Continued Loss* tracts, in addition to having recently experienced an increase in their white and college educated populations, are in an appreciated market condition.

Findings: Where is Gentrification Taking Place in Austin?

In this section, we report the results of our mapping of gentrification in Austin. We present and discuss four maps that align with the three-step process discussed in the previous section: one for vulnerability, one for demographic change, one for housing market change, and finally the overall gentrification typology map. These maps are all included at the end of this section. Note that online versions of these maps can be viewed at <https://sites.utexas.edu/gentrificationproject>.

Vulnerability

The vulnerability map (Figure 1) reveals the tracts—drawn in varying shades of red—that are home to unusually high proportions of vulnerable people as measured by the five vulnerability factors described in the previous section (people of color, lack of higher education, low income, renters, and children in poverty). Tracts that are wholly or partially inside the city limits but that were not analyzed (University of Texas, the airport, etc.) are shown in a cross-hatched pattern. Tracts that are wholly or partially inside the city boundary that did not register as having unusually large vulnerable populations are shown in dark grey.

The tracts that are shown as vulnerable are classified as *Vulnerable* (salmon), *More Vulnerable* (pink), and *Most Vulnerable* (dark red). In general, the geographic pattern closely follows what has come to be known as the “eastern crescent.” This is an area shaped like a backward letter “C” that begins due north of downtown Austin just outside of U.S. Highway 183, and follows the highway as it heads southeast and then due south before bending to the southwest and mostly ending due south of downtown and Oltorf. The eastern crescent has come to be known as the new geographic pattern of social disadvantage in Austin, supplanting to some degree the conception of the city’s advantaged and disadvantaged areas as lying to the west and east, respectively, of Interstate 35. It is noteworthy that in spite of many years of intensive gentrification immediately east of downtown in Central East Austin, disadvantaged populations remain in these areas.

The pockets of deepest disadvantage lie in and near the Rundberg area in North Austin, Daffin Gin Park in Northeast, Rosewood in East Austin, Montopolis in inner Southeast, and Franklin Park in Southeast just south of the Ben White highway and immediately east of Interstate 35. These pockets mostly lie a considerable distance from downtown; aside from Rosewood, which is within three miles of City Hall, the next closest is Montopolis, about four miles away. These patterns show that while the process of social disadvantage in Austin moving to the outskirts is not entirely complete—vulnerable populations can still be found near downtown, to the east—it is well underway. Compared to even 20 or 30 years ago, a higher share of disadvantaged people in Austin are in locations that are distant from the various economic, cultural, and other opportunities offered by Austin’s urban core—including the University of Texas, the state capitol, and central business district.

Demographic change

The spatial pattern of demographic change that can be seen in the demographic change map below is both striking and simple. With a few scattered exceptions, the tracts that experienced demographic change vis-à-vis the MSA as a whole are overwhelmingly concentrated in a ring surrounding downtown Austin. This pattern confirms, for Austin, the “Great Inversion” thesis for the United States as a whole, discussed earlier in the report. Living in and near the urban core has become strikingly sought after by advantaged populations in Austin: homeowners, the educated, the high-income, and whites. The implications for the near future are easy to predict: It seems logical that the next ring out of census tracts, surrounding those in the urban core that have already experienced demographic change, will be next to experience such dramatic change.

Housing market change

The housing market change map below shows that housing market change in Austin has also generally followed the eastern crescent spatial pattern. Many of the same neighborhoods that are disproportionately home to vulnerable populations are experiencing or have experienced substantial housing price appreciation, or lie adjacent to a tract that already has experienced such change. In keeping with the Great Inversion thesis, the areas within the crescent that lie closest to downtown are generally likeliest to be Appreciated (i.e., to have already experienced price escalation; tracts shown in pink), while the tracts slightly further away are Accelerating (i.e., where the market is gaining steam; tracts shown in orange), and Adjacent tracts lie the furthest away (yellow).

Despite the demographic change that has occurred on all sides of downtown, including to the west, there has been little housing market appreciation vis-à-vis the rest of the city either immediately north or west of downtown. These neighborhoods, presumably, were already high value in 1990 and 2000, as reflected by their home prices, and whatever price appreciation has occurred in them since then has not altered their fundamental position in the socioeconomic hierarchy. They were elite places then, and remain so today.

Gentrification typology

The final map in this section represents the “bottom line” of our gentrification typology analysis combining vulnerability, demographic change, and housing market change. The neighborhoods shown in bright colors are those deemed to be undergoing gentrification, or Continued Loss,

under our modified version of the Bates procedure described in the last section. As with vulnerability and housing market change, the general geographical pattern follows the eastern crescent. The stages of gentrification ripple out from downtown Austin, with Continued Loss tracts lying immediately to the east and south, and with (generally)

increasingly earlier stages of gentrification as one proceeds away from downtown to the north, east, or south. The yellow, or Susceptible, tracts suggest where gentrification may occur next if it is not yet underway already.²⁵

Only two outlier communities are totally disconnected from the swath of Continued Loss and gentrifying tracts in the eastern crescent. One is Brentwood North, northwest from downtown, which registers as Continued Loss. The other is Wood Creek, further northwest from Brentwood North, which is classified as Susceptible. This area contains an unusual pocket of multifamily rental housing, with a high degree of student occupancy—so much so that the University of Texas runs shuttle buses connecting the area to the main campus—in an area otherwise mostly surrounded by high-income, single-family dominated neighborhoods. It is possible that this area resembles student enclaves such as West Campus more than other neighborhoods classified as vulnerable, but further analysis—such as a neighborhood drilldown—would be needed to make such an assessment.

Of 200 Austin neighborhoods . . .

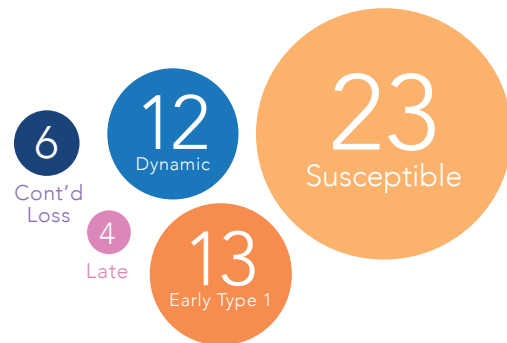
Susceptible Near high value/high appreciation areas. Not yet experiencing demographic change.

Early Type 1 Experiencing appreciation, still with low/moderate home values.

Dynamic Exhibit demographic change indicative of gentrification.

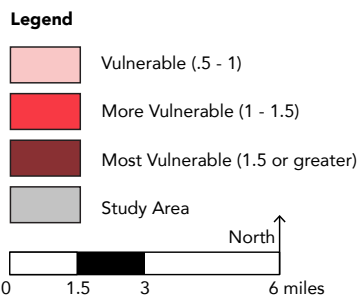
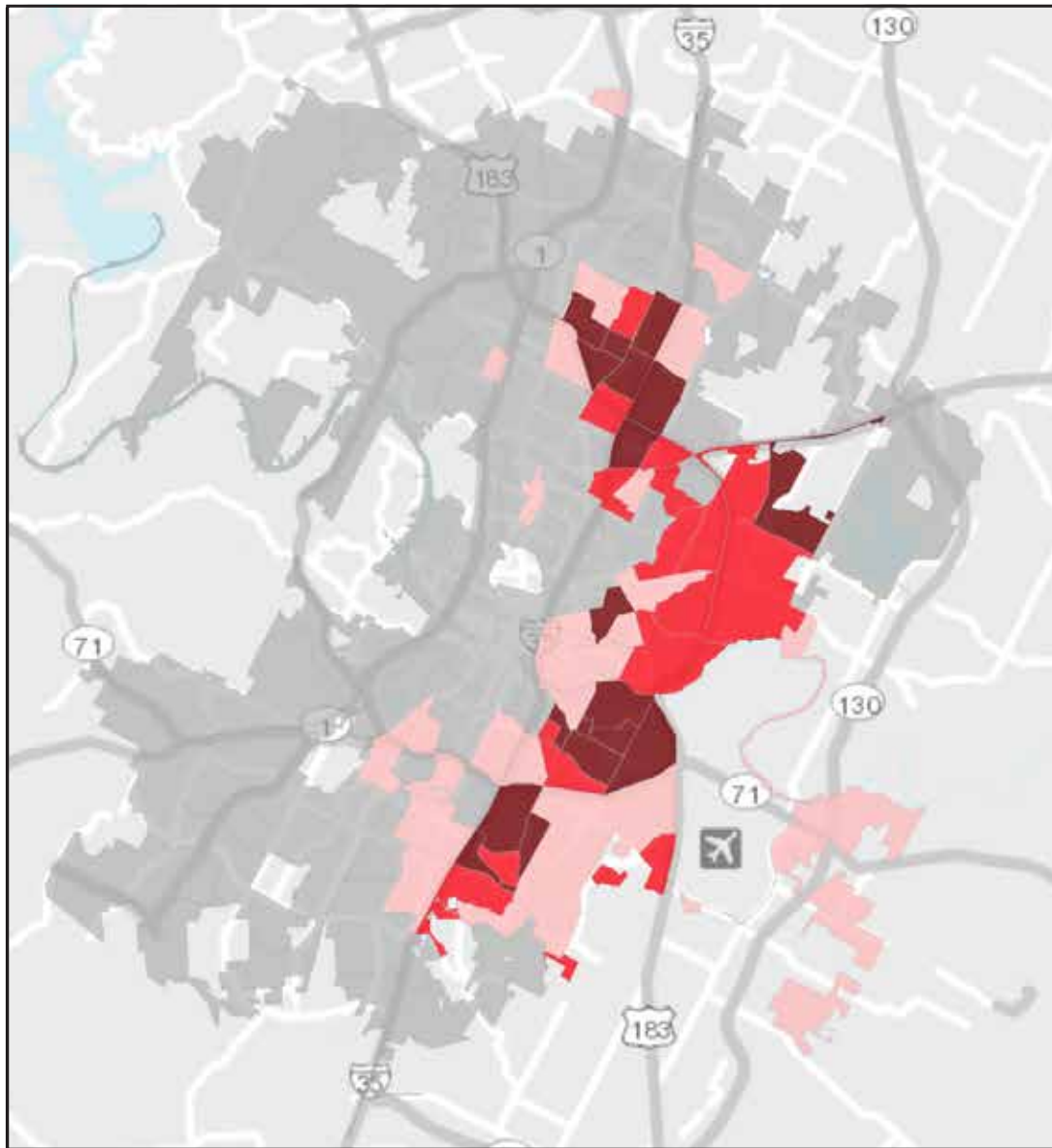
Late Newly high value areas, still with vulnerable populations

Continued Loss High value areas that have experienced demographic change



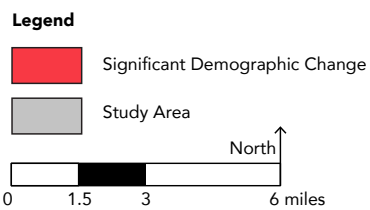
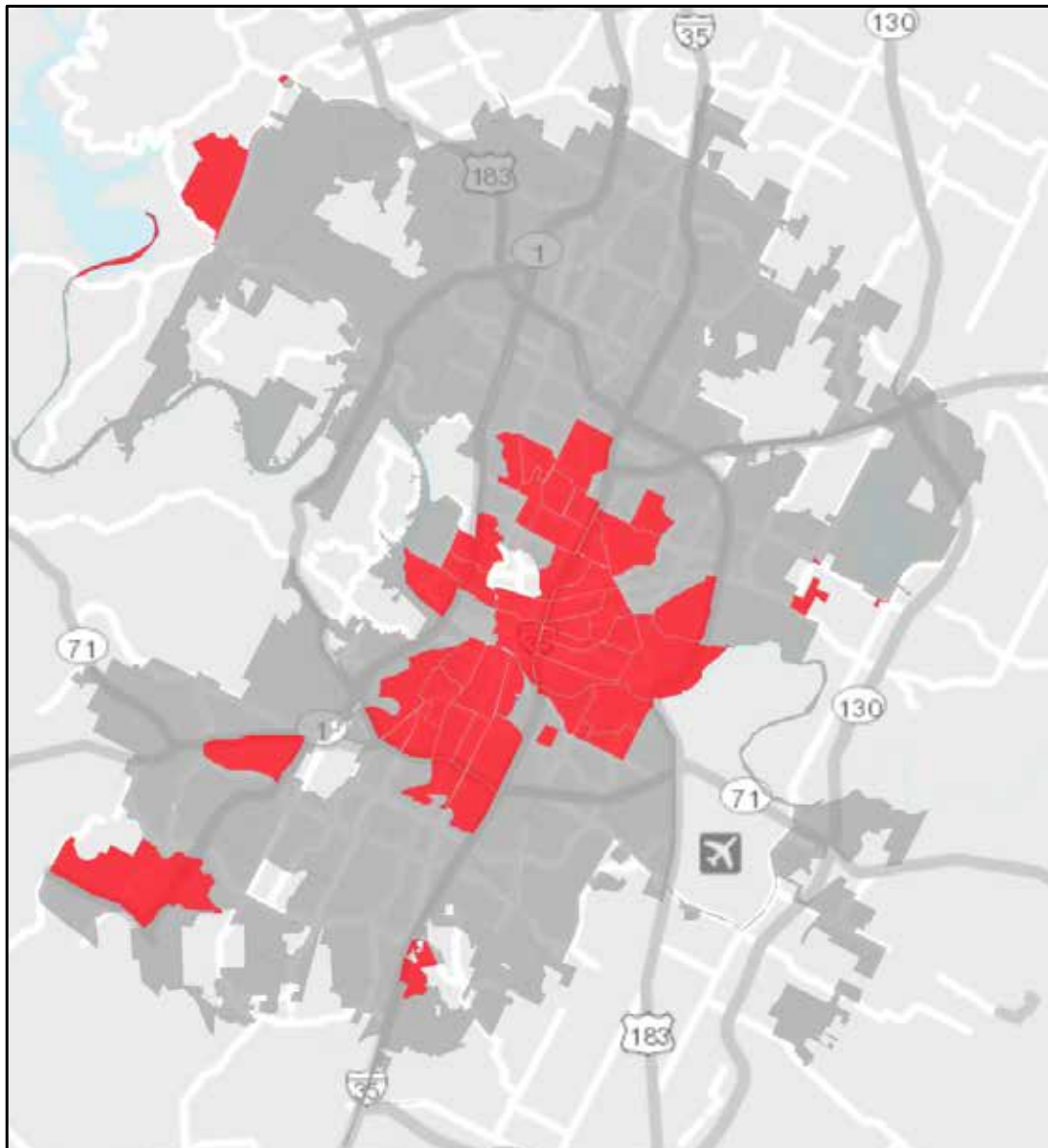
Most Vulnerable Census Tracts (2016)

Austin, Texas



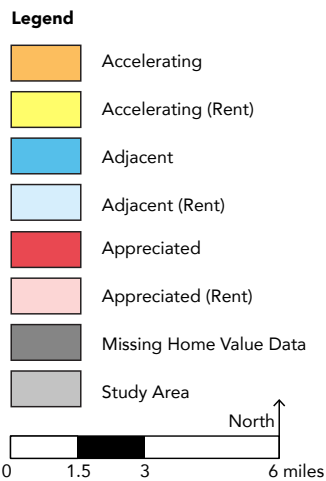
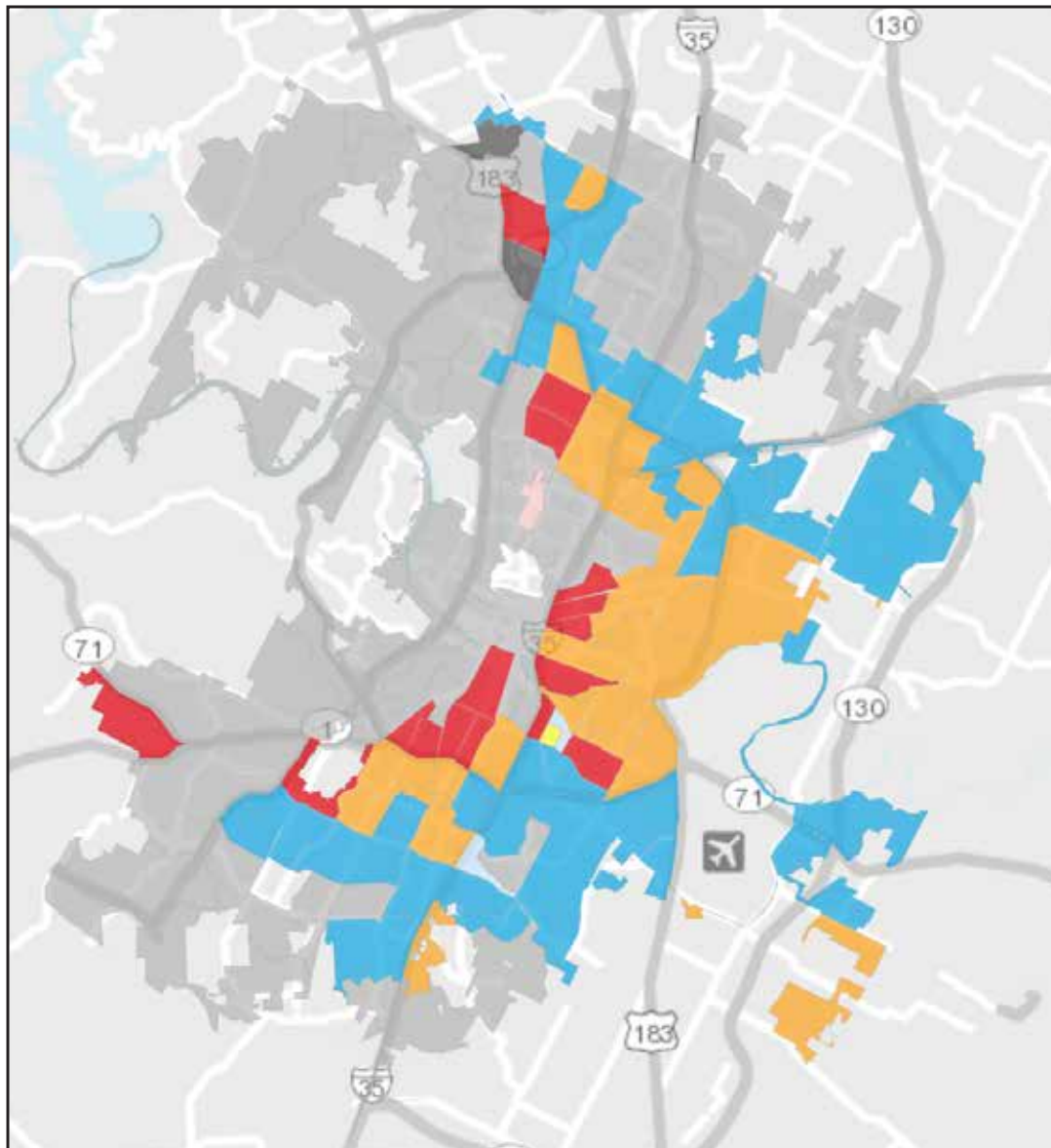
Demographic Change Tracts (2000 - 2016)

Austin, Texas



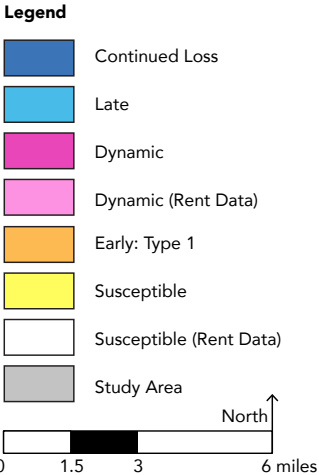
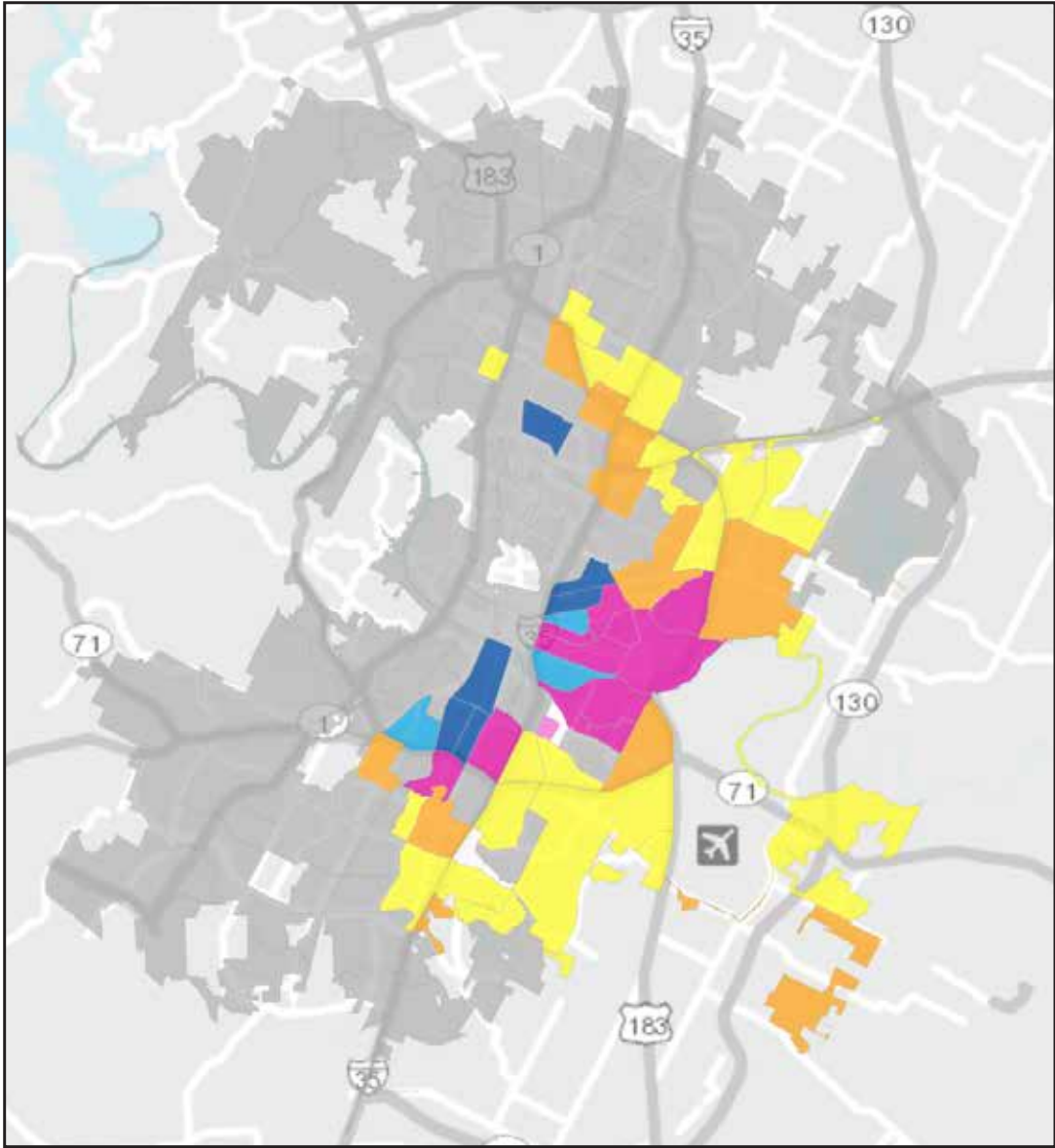
Housing Market Appreciation (2000-2016)

Austin, Texas



Neighborhood Typology (2016)

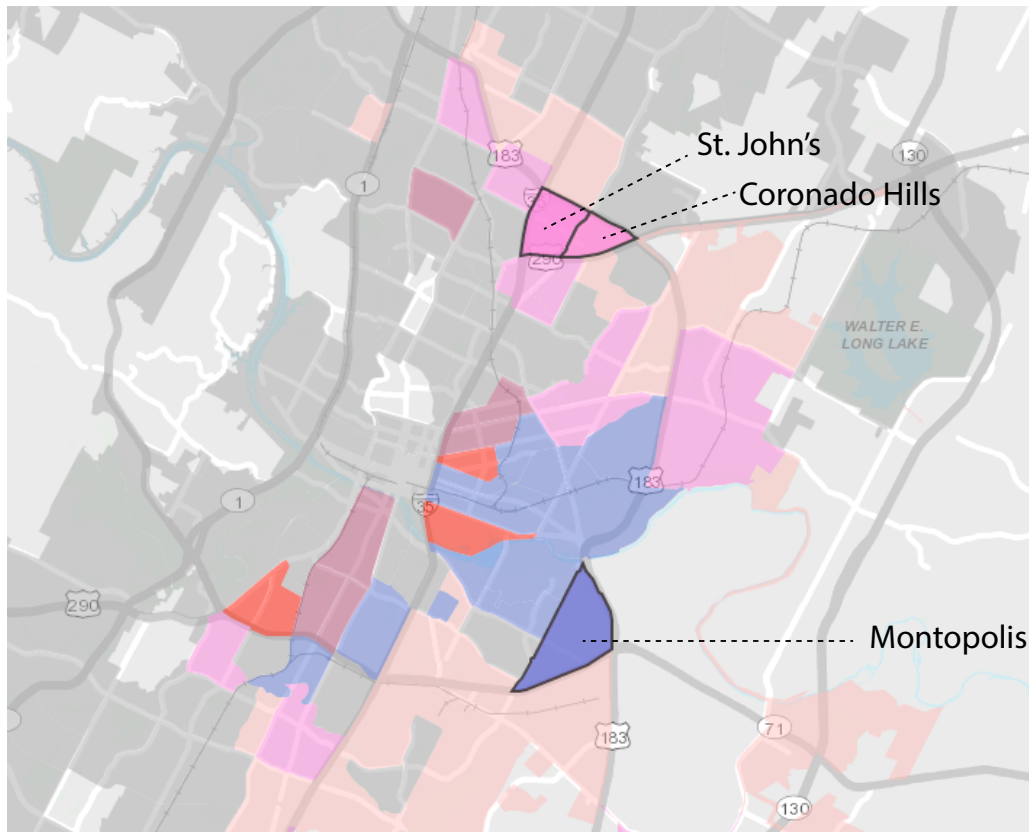
Austin, Texas



Neighborhood Drilldowns

Introduction

In this section we present *drilldown analyses* of two gentrifying areas of Austin: the Montopolis neighborhood in near-southeast Austin, and St. John's-Coronado Hills in Northeast Austin (see map below). According to our analysis, both neighborhoods are in relatively early phases of gentrifying.



A drilldown analysis is a technique introduced by Dr. Lisa Bates of Portland State University in her 2013 gentrification and displacement study of Portland. Our analyses of Montopolis and St. John's-Coronado Hills are based heavily on Bates's procedure, albeit with some modifications. A drilldown is intended to be a data-intensive examination of the relevant socioeconomic and housing market conditions affecting various vulnerable subpopulations within a given neighborhood. Whereas our citywide mapping methodology presented in the above section allows for neighborhoods across the city to be classified based on vulnerability and gentrification stage using widely-available census data, a drilldown is a more nuanced, multifaceted analysis focused on a particular census tract (typically containing between 2,500 and 8,000 residents). A drilldown is a useful first step before embarking on place-based anti-displacement advocacy or policy development. It would be relatively straightforward for the City of Austin or another interested party to replicate the drilldown analyses we present here for other tracts that stand in the path of gentrification and displacement pressures.

At this point it is useful to note what a drilldown is not: a drilldown is not a qualitative analysis that allows for deep narrative descriptions of a given neighborhood's unique history, culture, or underlying social dynamics. Both data gathering and detailed descriptions of conditions in impacted communities are valuable, useful, and complementary. The latter requires on-the-ground engagement efforts, which can include (but are not limited to) direct observations; interviews with

neighborhood leaders, residents, and business owners; review of written materials such as media articles and archival materials; and survey work. We do not claim to have conducted such work in Montopolis or St. John's-Coronado Hills; it is beyond the scope of our project. It is almost certain that our drilldown analyses have missed important "ground truths" about the neighborhoods we have examined that could only be obtained from qualitative work. It would be advisable, as time and resources permit, to engage in such studies as a complement to drilldown analyses and other data-intensive methods.

Data sources

A drilldown analysis, as we present it here, relies on several separate distinct data sources.

Neighborhood Drilldown Data Sources

- American Community Survey
- Residential sales data
- Existing affordable housing data
- Public school data
- Comprehensive Housing Affordability Strategy
- Home Mortgage Disclosure Act data
- Vacant address data

➤ American Community Survey

American Community Survey (ACS) data is published by the U.S. Census Bureau. Unless otherwise noted, all ACS figures quoted in the drilldown analyses are for 2012-2016. Since 2006, the ACS has released updated data on a yearly basis. For data collected at the level of census tracts, only five-year data (i.e., data collected over a period of five years) is available. The tract-level 2012-2016 data discussed here are the most recent data available at the writing of this report.

Even though 2016 (1-year) ACS data is available for the City of Austin and for the Austin MSA, using that data in juxtaposition with figures taken from the census tract level (which are only available as five-year data) would lead to misleading comparisons. For that reason, we use five-year (2012-2016) ACS data for all recent figures quoted here. Data from 1990 and 2000 are taken from the decennial censuses conducted in those years.

➤ Comprehensive Housing Affordability Strategy

Comprehensive Housing Affordability Strategy (CHAS) data are published by the U.S. Department of Housing and Urban Development (HUD) for every local governmental entity, including Austin, that receives federal housing subsidies. It is readily obtainable online. Some amount of effort is required to aggregate CHAS data into the categories that are reported here.

➤ Residential sales data

For calculations of residential sales volume and per-square foot prices, we relied on data provided courtesy of the Austin Board of Realtors (ABOR). Such data is not available to the general public without paying a fee to a third-party aggregator. Some amount of work is needed using Geographic Information System (GIS) software to filter sales data down to the level of particular census tracts.

➤ Home Mortgage Disclosure Act data

The Home Mortgage Disclosure Act (HMDA) is federal legislation that requires certain federally-regulated mortgage lenders to report information on the rates of mortgage approval and rejection by race and ethnicity of the borrower or would-be borrower, along with other useful information. This data is readily obtainable via the Web and is relatively easy to work with.

➤ Existing affordable housing data

Subsidized housing in the United States is delivered via a large, decentralized network of providers, funders, and other participants. A typical development will have multiple funding sources which may be local, state, federal, or philanthropic dollars. As a result, it can be difficult to track exactly what subsidized housing is in place and when its existing affordability restrictions are set to expire. Although there are useful subsidized housing registries, they often contain errors or are otherwise incomplete in their coverage. The best course of action is to review multiple data sources and attempt to resolve inconsistencies as they arise. For our analysis we relied on data provided by the City of Austin; the Texas Department and Community Affairs; National Housing Preservation Database (NHPD), available online; online searches of Travis County Appraisal District (TCAD) ownership and property tax records; internal data sets; and communications with professional contacts.

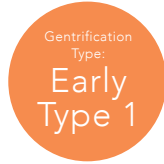
➤ Vacant address data

The United States Postal Service (USPS) makes available vacant address data, which can be a useful gauge of both housing abandonment and the level of intensity of commercial activity. Obtaining the data requires affiliation with a governmental or academic institution and making an online request to the federal government, which can take several weeks to process.

➤ Public school data

Data on public school enrollment and demographic composition for every school in Texas can be readily downloaded from School Report Cards maintained by the Texas Education Agency (TEA).

St. John's-Coronado Hills Neighborhoods Drilldown

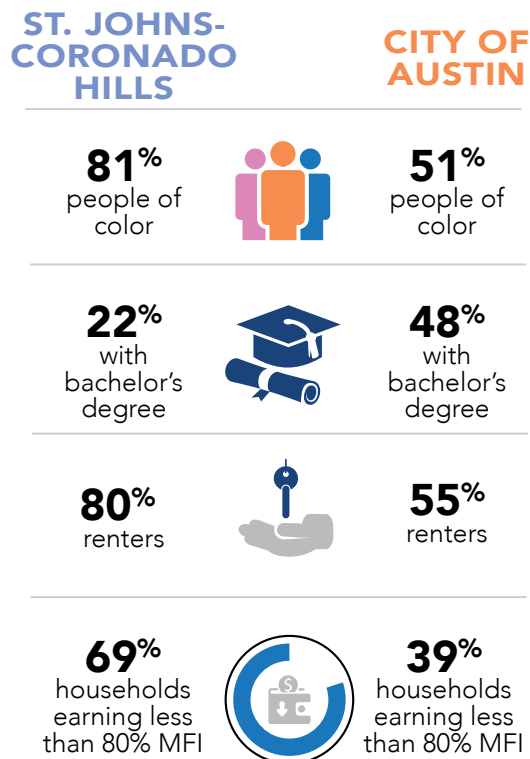


A vulnerable community with new connectivity, change close by

Summary

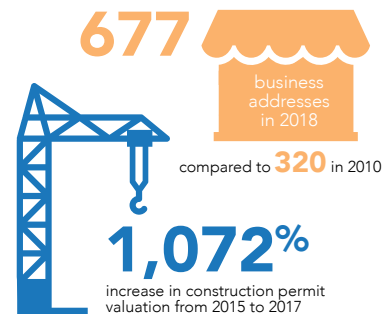
The St. John's and Coronado Hills neighborhoods are located in two adjacent census tracts (18.12 and 18.11, respectively) that we analyze together in this drilldown. St. John's lies to the west of Cameron Road, and is classified as Early Type 1 under the gentrification typology used in this report, and its real estate market is classified as Accelerating. Coronado Hills, to the east of Cameron Road, and slightly more distant from other gentrifying neighborhoods to the west, is at an earlier stage, classified as Susceptible, with real estate market conditions classified as Adjacent (i.e., not yet "hot" but located next to a tract that is).

St. John's-Coronado Hills is overwhelmingly inhabited by people of color, most of whom are Latinos, albeit with a notable African-American population, and renters. Education levels are generally low. Incomes are also low and have dropped in real terms over time. High percentages of families experience linguistic isolation. The particularly vulnerable subpopulations of elderly households and large families are both, not surprisingly, struggling with high housing costs. In short, St. John's-Coronado Hills has a high concentration of vulnerable residents. Meanwhile, although the rent-restricted affordable housing stock that exists appears to be relatively secure for the next decade or more, it represents only a scant six percent of the total housing units in St. John's-Coronado Hills.



According to the U.S. Census, property values, after dropping in the 1990s, have increased relatively modestly since 2000 by recent Austin standards. More timely residential sales data from the Multiple Listing Service does not yet show a major increase in sales volume or prices. However, there are at least three worrying signs that gentrification and accompanying displacement may soon arrive in St. John's-Coronado Hills. First, although the white population has ticked up only slightly, this increase is more notable than it appears at first glance when considered relative to the substantial percentage decrease in white population at the citywide and MSA levels. Furthermore, over half of new mortgage borrowers are white—far out of proportion to the white population's share of current residents in the two neighborhoods. Finally, over the last decade there has been a sharp intensification of commercial and construction activity, although it is unclear if this is connected to present or impending gentrification.²⁶

Commercial and Construction Activity in St. John's-Coronado-Hills



St. John's-Coronado Hills appears to lie squarely in the path of possible future gentrification emanating eastward from across I-35, and northward from the successful Mueller redevelopment. The recent rollout of a new high-frequency bus line leading to UT and downtown, as well as current tollway construction on US 183 that in several years will expand freeway accessibility to large numbers of jobs, suggest that these neighborhoods will likely only increase their appeal to homebuyers. Meanwhile, the existing population is vulnerable, and organizing current residents will likely face substantial obstacles owing to very low homeownership rates and high levels of linguistic isolation.

Note on data calculations:

All results reported below are blended from figures for the census tracts equating to the St. John's and Coronado Hills neighborhoods. They are computed as weighted averages, weighted by population, number of housing units, or number of business establishment addresses for each tract, as appropriate.

Gentrification typology assessment

Vulnerable populations:

- St. John's-Coronado Hills neighborhoods' residents are 81% people of color, compared to 51% in the City of Austin and 47% in the Austin MSA. Source: American Community Survey (ACS).
- Of St. John's-Coronado Hills households, 80% are renters, compared to 55% in the City of Austin and 42% in the Austin MSA (ACS).
- St. John's-Coronado Hills residents over age 25 are disproportionately unlikely to have a four-year postsecondary degree or higher educational attainment (22% vs. 48% citywide and 42% MSA-wide) (ACS).
- Incomes are low; most (69%) households earn 80% or less of median family income. Source: Comprehensive Housing Affordability Strategy (CHAS).

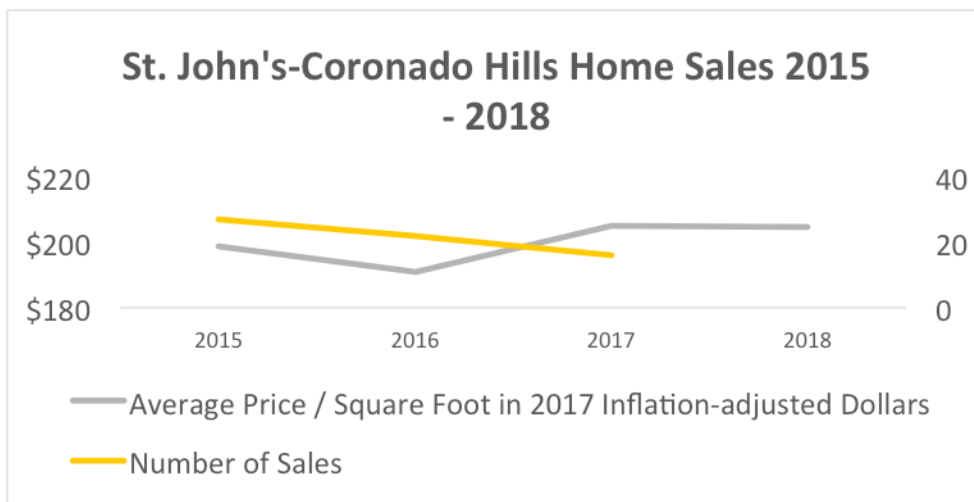
Demographic changes (2000 to 2012-2016):

- St. John's-Coronado Hills' share of non-Hispanic white residents increased +2 percentage points, an amount that is substantial when one considers that the citywide (-4 percentage points) and MSA (-7) shares have decreased to a considerable degree (ACS).
- Homeownership rates essentially remained the same in St. John's-Coronado Hills. Homeownership rates in Austin and the MSA also remained largely unchanged during that time (ACS).

- The share of college-educated residents (i.e., those with a four-year degree or higher) rose by 9 percentage points, which kept pace with Austin (+7) and surpassed the MSA (+5). (ACS).
- In real (inflation-adjusted terms), median household income in St. John's-Coronado Hills drastically decreased, by 23%, to \$31k in 2012-2016. This lags far behind Austin (\$61k) and the MSA (\$66k), which experienced drops of 1% and 6%, respectively (ACS).

Housing market conditions:

- Owner-occupants in St. John's-Coronado Hills in 2012-2016 reported home values with a median of \$168k, well below the citywide median of \$258k and the MSA median of \$224k (ACS).
- During the 1990s, reported home values in St. John's-Coronado Hills decreased in real (inflation-adjusted) terms by 14%, while they increased citywide (+31%) and in the MSA (+25%) (ACS).
- From 2000 to 2012-2016, the trend reversed—St. John's-Coronado Hills home values increased in real terms by 11%. Still, this growth lagged far behind the city (+53%) and the MSA (+31%) (ACS).
- More recent Multiple Listing Service (MLS) residential sales data suggests that home sales are slow and decreasing and that housing appreciation is flat: From 2015 to 2017, sales dropped from 27 to 16 (a 41% decrease), and per-square foot prices barely increased from \$199 to \$205 in 2017 dollars (a 3% increase in real terms). See chart below; note that sales volume data for 2018 is omitted because the year is not yet complete. Source: Multiple Listing Service (MLS) data, courtesy of Austin Board of Realtors (ABOR).



Housing highlights

Affordability:

- Of St. John's-Coronado Hills homeowner households earning less than 80% of median family income (11% of total households), 25% are cost burdened and 37% are severely cost burdened (CHAS).
- Of St. John's-Coronado Hills renter households earning less than 80% of median family income (63% of total households), 36% are cost burdened and 38% are severely cost burdened (CHAS).

Affordability for seniors and large families:

- Seniors: Among elderly households earning less than 80% of median family income (484 households, or 10% of all households in St. John's-Coronado Hills), 21% are cost burdened (spending 30% to 50% of income on housing), 39% are severely cost burdened (spending over 50% of income on housing), and 3% report either zero or negative income (CHAS).
- Large families: Of large family (5 or more person) households (304 households, or 12% of all households in St. John's-Coronado Hills) earning less than 80% of median family income, 62% are cost burdened, and 16% are severely cost burdened (CHAS).

New buyers:

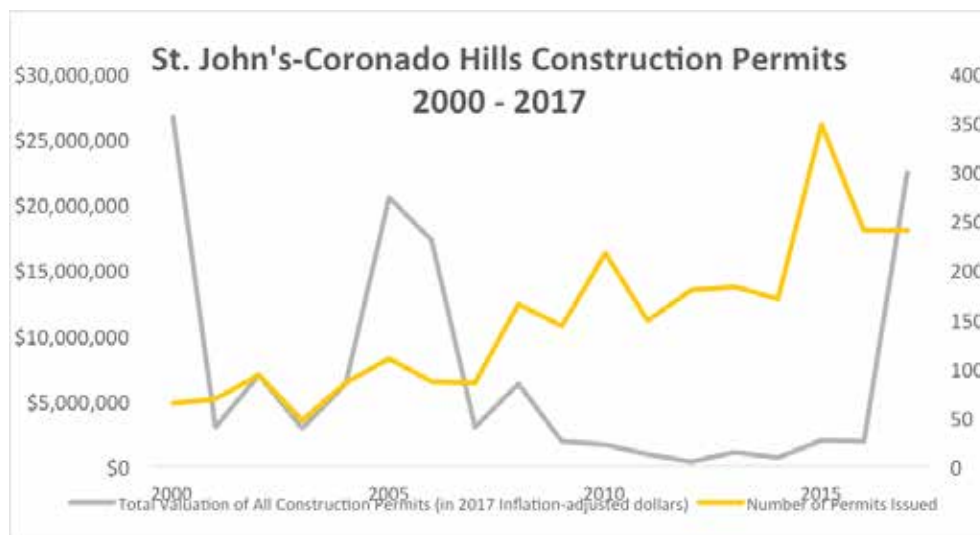
- In 2016, 89 people applied for a home purchase loan in St. John's-Coronado Hills. Of these, 53% were white non-Hispanic, 3% were Asian non-Hispanic, 13% were Hispanic, 4% were African American non-Hispanic, and 25% were of unknown race and ethnicity. Loans to whites were denied far less often (2% of applications) than loans to Hispanics (33%). Source: Home Mortgage Disclosure Act (HMDA) data.

Income-restricted affordable housing:

- There are 290 income-restricted housing units in St. John's-Coronado Hills, or 6% of the total housing stock (including vacant units), in five developments. The earliest known expiration of these assisted units will occur in 2032. Sources: City of Austin subsidized housing inventory; National Housing Preservation Database.

Development highlights

- According to U.S. Postal Service data, St. John's-Coronado Hills had 667 business addresses in early 2018, a major increase from 320 in 2010. Of these, only 6% were vacant, substantially down from 18% in 2010, at a time when the regional economy was struggling (United States Postal Service vacant address data).
- The number of construction-related permits (residential and commercial, including demolition) issued within St. John's-Coronado Hills increased mostly steadily from 2000 to 2015; as of 2017 it was somewhat below the peak but still relatively high. On the other hand, the total inflation-adjusted value of all permits increased rapidly from 2015 to 2017, exceeding the previous peak in 2005 and nearly equaling the level in 2000 (also at the end of an economic boom period). From 2015 to 2017, total permit valuation increased by 1072%, far more than the robust 81% citywide figure (City of Austin open data on building permits).



Infrastructure highlights

- Under Capital Metro's "Cap Remap" bus network redesign, implemented in early June 2018, St. John's-Coronado Hills is now served by two high-frequency bus routes: the 10 (to UT and downtown) and the 300 (connecting to the Crestview Red Line station to the west as well as east, southeast, and southwest Austin).
- The 183 South project is currently under construction and will add capacity to existing free lanes and new tolled lanes for U.S. Highway 183 from US 290 (on the edge of Coronado Hills) to Highway 71 in South Austin.

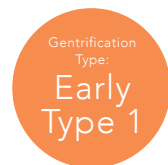
Racial-ethnic demographic highlights

- By far the dominant group in St. John's-Coronado Hills is Latinos (66% of the total). Whites (19%) and African Americans (13%) are the two other major groups (ACS).
- St. John's-Coronado Hills is highly linguistically isolated; only 36% of people ages 5 and over speak only English at home. Almost all others (61% of the total) speak Spanish (ACS).

Community institution highlights

- Two public schools are located in St. John's-Coronado Hills: Pickle Elementary (Pre-K-5) and Reagan High School, both AISD public schools. Source: Texas Education Agency (TEA) School Report Card data.
- Pickle Elementary experienced a substantial enrollment decline of 15% from the 2010-2011 to the 2015-2016 school years, while Reagan High experienced a 36% surge in enrollment (TEA).
- Pickle Elementary serves almost exclusively students of color (98%) and mostly economically disadvantaged students (90%), compared to the AISD-wide average of 53% economically disadvantaged students and the statewide average of 59%. The same general pattern holds for Reagan High, with 97% students of color and 81% economically disadvantaged students (TEA).

Montopolis Neighborhood Drilldown



A vulnerable community with homeownership in decline

Summary

Montopolis is classified as an "Early: Type 1" gentrifying neighborhood. Its population falls under the "most vulnerable" category (17 out of 200 neighborhoods citywide fall under that classification). Its housing market conditions are classified as "accelerating." Montopolis stands out in various ways that make it highly vulnerable and in need of anti-displacement intervention. It also has attributes that make intervention there uncommonly promising, if it is pursued vigorously and in a sufficiently timely fashion.

Montopolis is overwhelmingly a community of color home to predominantly Latino residents. Most of its residents have low education levels and incomes. Many Montopolis residents—above all the neighborhood's elderly and large family households—struggle with paying their housing costs.

MONTOPOLIS

CITY OF AUSTIN

91%
people of color



51%
people of color

12%
with bachelor's degree



48%
with bachelor's degree

57%
renters



55%
renters

81%
households earning less than 80% MFI



39%
households earning less than 80% MFI

In Montopolis, the absolute number of homeowners has changed little since 2000. However, there has been a steep drop in the homeownership rate due to the addition of large quantities of rental housing. In general, while organizing renters and especially low-income renters is difficult, it is particularly challenging in Montopolis owing to high levels of linguistic isolation.

U.S. Census data shows home prices that are low and increasing slowly compared to the rest of Austin. However, these figures should be interpreted with caution, as they were collected between 2012 and 2016 (the most recent data available at the time of writing). More timely Multiple Listing Service home sales data shows a considerable uptick both in the pace and price of home sales. Furthermore, a highly disproportionate share of new homebuyers in the neighborhood in 2016 were white, which is strongly suggestive of an incoming wave of gentrification pressure. This is undoubtedly being hastened by Montopolis' proximity to downtown (only 4 miles to the northwest) and by numerous mobility improvements underway or planned for the area.

Notwithstanding these challenges, one bright spot is that 53% of Montopolis' total housing stock is currently income- and rent-restricted—a share that is far higher than in most Austin neighborhoods. Opportunities for mitigating displacement of the neighborhood's vulnerable residents also comes from the still relatively low housing prices in Montopolis. The current activities of Guadalupe Neighborhood Development Corporation (GNDC) to acquire parcels for a new community land trust in the neighborhood are promising and draw on lessons from GNDC's successful activities in Central East Austin's Guadalupe neighborhood (see the case study in Part 3 and in Appendix 4).

Gentrification typology assessment

Vulnerable populations:

- The Montopolis neighborhood's residents are 91% people of color, compared to 51% in the City of Austin and 47% in the Austin MSA. Source: American Community Survey (ACS).
- Of Montopolis households, 57% are renters, compared to 55% in the City of Austin and 42% in the Austin MSA (ACS).
- Montopolis residents over age 25 are much less likely to have a four-year postsecondary degree or higher educational attainment (12% vs. 48% citywide and 42% MSA-wide) (ACS).

- Incomes are low; most (81%) households earn 80% or less of median family income. Source: Comprehensive Housing Affordability Strategy (CHAS).

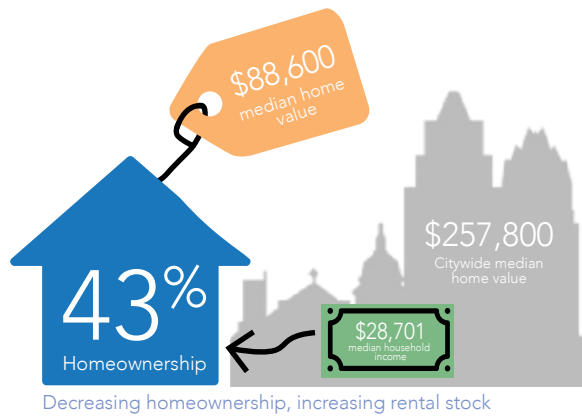
Demographic changes (2000 to 2012-2016):

- Montopolis’ share of non-Hispanic white residents has barely budged (+1 percentage point), even as the citywide (-4 percentage points) and MSA (-7) shares have decreased substantially (ACS). The slight increase in non-Hispanic white residents in Montopolis, juxtaposed with the decrease in the city and MSA, can be interpreted in relative terms as the beginnings of an influx of white residents into the neighborhood.
- Homeownership has plummeted among Montopolis households, from 67% in 2000 to 43% in 2012-2016, a decrease of fully 24 percentage points. Homeownership rates in Austin and its MSA remained essentially unchanged during that time (ACS).
- The share of college-educated residents (i.e., those with a four-year degree or higher) rose by 4 percentage points, which lagged behind Austin (+7) and the MSA (+5) (ACS).
- In real inflation-adjusted terms, median household income in Montopolis drastically decreased, by 30%, to about \$29k in 2012-2016. This lags far behind Austin (\$61k) and the MSA (\$66k), which experienced drops of 1% and 6%, respectively (ACS).

Housing market conditions :

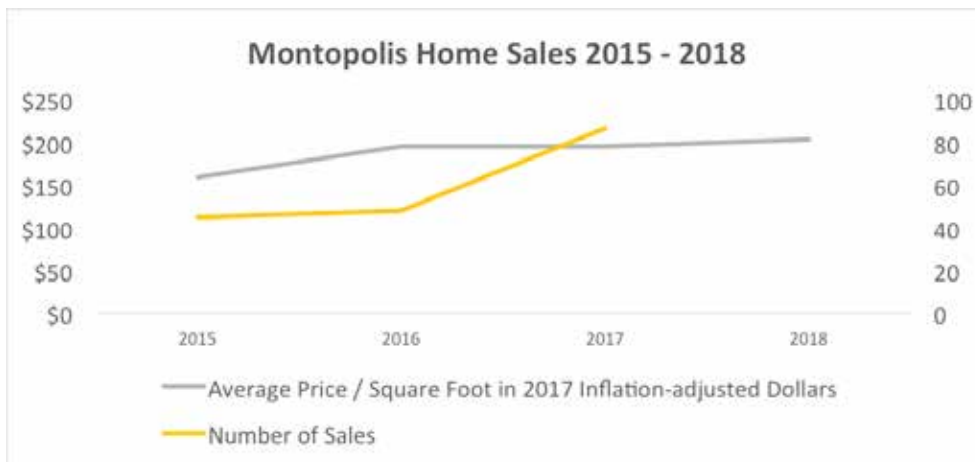
- Owner-occupants in Montopolis in 2012-2016 reported home values with a median of \$89k, far below the citywide median of \$258k and the MSA median of \$224k (ACS).
- During the 1990s, reported home values in Montopolis decreased in real (inflation-adjusted) terms by 33%, while they increased citywide (+31%) and in the MSA (+25%) (ACS).
- From 2000 to 2012-2016, the trend reversed—Montopolis home values increased in real terms by 18%. Still, this growth lagged far behind the city (+53%) and the MSA (+31%) (ACS).
- Recent residential sales data suggests that home values and sales are accelerating: From 2015 to 2017, sales increased from 45 to 87 a year (a 93% increase), and per-square foot prices increased from \$159 to \$196 in 2017 dollars (a 23% increase in real terms). See chart below; note that sales volume data for 2018 is omitted because the year is not yet complete. Source: Multiple Listing Service (MLS) data, courtesy of Austin Board of Realtors (ABOR).

Montopolis Neighborhood



	2000	2012 - 2016
Homeownership	67%	43%
Median Household Income	\$40,768*	\$28,701
Median Home Value	\$75,404	\$88,600
Citywide Median Home Value	\$168,387	\$257,800

*all values in 2016 inflation-adjusted dollars



Housing highlights

Affordability:

- Of Montopolis homeowner households earning less than 80% of median family income (32% of total households), 26% are cost burdened and 14% are severely cost burdened (CHAS).
- Of Montopolis renter households (48% of total households) earning less than 80% of median family income, 35% are cost burdened and 29% are severely cost burdened (CHAS).

Affordability for Seniors and Large Families:

- Seniors: Among elderly households earning less than 80% of median family income (255 households, or 12% of all households in Montopolis), 12% are cost burdened (spending 30% to 50% of income on housing), 29% are severely cost burdened (spending over 50% of income on housing), and 12% have either zero or negative income (CHAS).
- Large families: Of large family (5 or more person) households (300 households, or 14% of all households in Montopolis) earning less than 80% of median family income, 47% are cost burdened, and 10% are severely cost burdened (CHAS).

New buyers:

- In 2016, 123 people applied for a home purchase loan in Montopolis. Of these, 62% were white non-Hispanic, 9% were Asian non-Hispanic, 14% were Hispanic, and 15% were of unknown race and ethnicity. Loans to whites were denied considerably less often (9% of applications) than loans to Hispanics (25%). Source: Home Mortgage Disclosure Act (HMDA) data.

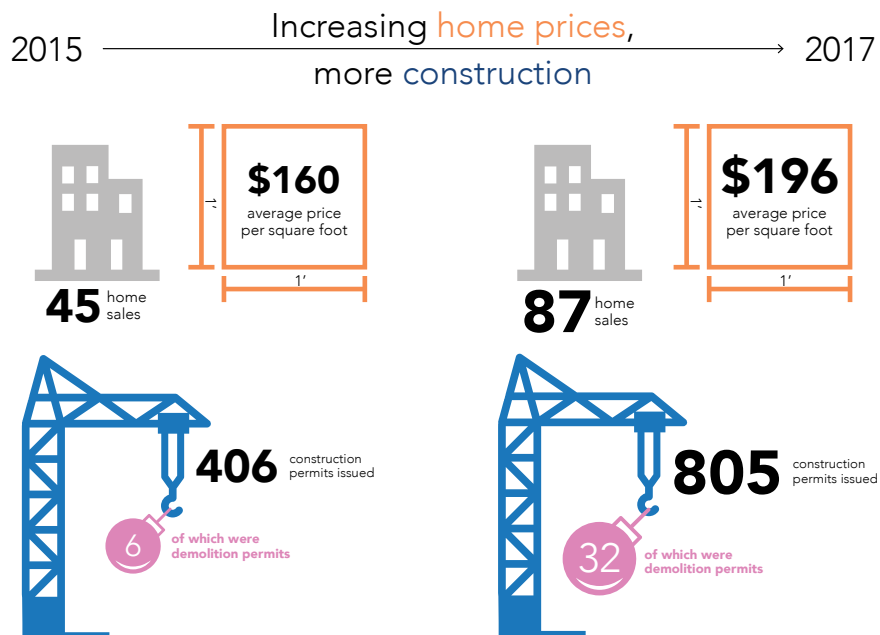
Income-restricted affordable housing:

- There are 1,280 income-restricted rental housing units in Montopolis, or 53% of the total housing stock (including vacant units). Of these, 433 units are in two city-subsidized developments, and the rest are in four non-city-subsidized developments. These six developments appear to be in no near-term danger of subsidy expiration. Sources: City of Austin subsidized housing inventory; National Housing Preservation Database; authors' professional contacts.

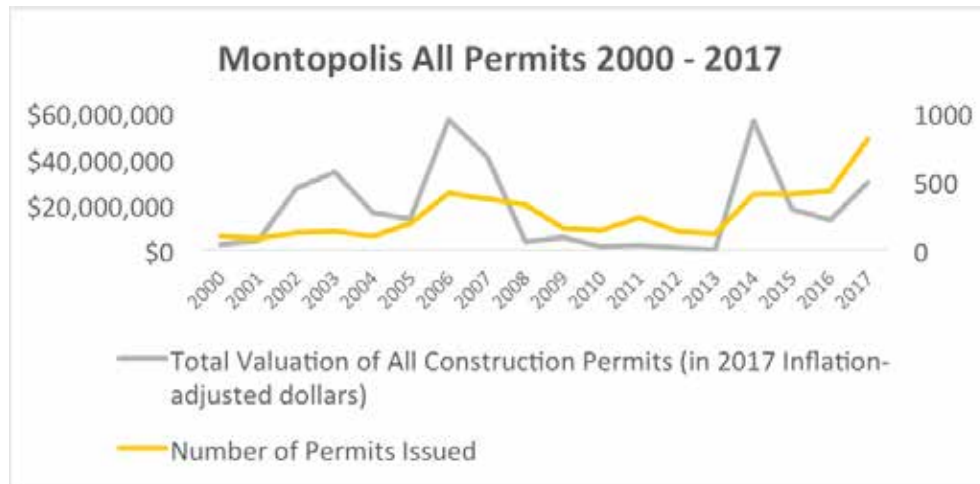
Development highlights

- According to U.S. Postal Service data, Montopolis had 157 business addresses in early 2018, down from 203 in 2010. Of these, just under 20% were vacant, up from about 8% in 2010, at a time when the regional economy was struggling (United States Postal Service vacant address data).

Montopolis Neighborhood



- The number of construction-related permits (residential and commercial, including demolition) issued within Montopolis has increased steadily since 2013 and was greater in 2017 than at any time since 2000. On the other hand, the total inflation-adjusted value of all permits issued was on an upswing in 2017, but well below peak values attained in 2006 and 2014 (see chart below). From 2015 to 2017, total permit valuation increased by a robust 68% in real terms, but less than the 81% citywide figure (City of Austin open data on building permits).



Infrastructure highlights

- The March 2018 update of the City of Austin and Capital Metro’s Project Connect plan shows a high-capacity transit line connecting downtown Austin and Austin Bergstrom International Airport passing through Montopolis with one or more stops in the neighborhood. Implementation plans and funding prospects are uncertain.
- Under Capital Metro’s “Cap Remap” bus network redesign, implemented in early June 2018, Montopolis is now served by three high-frequency bus routes: the 17 (to downtown), the 20 (to UT, downtown, and the airport), and the 311 (to southeast, south, and southwest Austin).
- The East Riverside Corridor Master Plan (adopted in February 2010) and Regulation Plan (adopted May 2013) are significantly reshaping the principal east-west roadway through Montopolis.

Racial-ethnic demographic highlights

- By far the dominant group in Montopolis is Latinos (83% of the total). Whites (9%) and African Americans (8%) are the two other major groups (ACS).
- Montopolis is highly linguistically isolated; only 27% of people ages 5 and over speak only English at home. Almost all others (73% of the total) speak Spanish (ACS).

Community institution highlights

- Two public schools are located in Montopolis: IDEA Allan College Preparatory (K-11), a charter, and Allison Elementary (Pre K-5), an AISD public school. Source: Texas Education Agency (TEA) School Report Card data.
- Allison Elementary experienced a severe enrollment decline of 21% from the 2010-2011 to the 2015-2016 school years (TEA).
- Allison Elementary serves almost exclusively students of color (99%) and mostly economically disadvantaged students (85%), compared to the AISD-wide average of 53% and the statewide average of 59% (TEA).
- Guadalupe Community Development Corporation, with the help of seed funding, is actively pursuing the creation of a community land trust in the neighborhood.

Endnotes

¹ Throughout this report, we define white people as those who identify their race to the US Census as white alone, and who also identify as non-Hispanic. We define people of color as all people who are not white under this definition. We define Hispanic people as those of any race who identify as Hispanic, and African Americans as those who select black for their race and identify as non-Hispanic. These conventions, while imperfect and disputed by many, are standard in social science research and in public policy.

² Mueller, Elizabeth J. and Dooling, Sarah, Sustainability and Vulnerability," *Journal of Urbanism*, 2011, 4, 3: 201-222.

³ Pendall, Rolf, et al., "Vulnerable people, precarious housing, and regional resilience: an exploratory analysis," *Housing Policy Debate*, 2012, 22:2, 271-296.

⁴ Pendall, Rolf, et al.

⁵ Wagmiller, R. "Debt and Assets Among Low-Income Families," NY: National Center for Children in Poverty, 2003.

⁶ Smith, Neil, "Toward a Theory of Gentrification: A back to the city movement by capital, not people," *Journal of the American Planning Association*, 1979, 45, 4: 538-548; Porter, Michael, "The Rent Gap at the Metropolitan Scale: New York City's Land-Value Valleys, 1990-2006," *Urban Geography*, 2010, 31, 3: 385-405.

⁷ Pendall, Rolf, et al., p. 274.

⁸ Wolff, Edward N. *Recent trends in the United States: Rising debt and the middle-class squeeze—an update to 2007*. Annandale-on-Hudson: Bard College.

⁹ Kochhar, Rakesh; et al., "Wealth Gaps Rise to Record Highs Between Whites, Blacks, Hispanics: Twenty-to-One," Pew Research Center, 2012.

¹⁰ Burd-Sharps, Sarah and Rasch, Rebecca, *Impact of the US Housing Crisis on the Racial Wealth Gap Across Generations*. The Social Science Research Council and the ACLU, 2015.

¹¹ Burd-Sharp, Sarah and Rasch, Rebecca, 2015.

¹² Rothstein, Richard, *The Color of Money*, 2017; Massey, Douglas, & Denton, Nancy, *American Apartheid*, 1998.

¹³ Roscigno, Vincent, et al., "The Complexities and Processes of Racial Housing Discrimination," *Social Problems*, Feb. 2009, 56, 1: 49-69; Galster, George and Godfrey, Erin, "By Words and Deeds: Racial steering by real estate agents in the U.S. in 2000," *Journal of the American Planning Association*, 2005, 71, 3: 251-268.

¹⁴ U.S. Bureau of Labor Statistics, *Profile of the Labor Force by Educational Attainment*, Aug. 2017.

¹⁵ Raphael, Stephen, and Stoll, Michael, "Job Sprawl and the Suburbanization of Poverty," *Brookings, Metropolitan Policy Program*, 2010.

¹⁶ Pendall, Rolf, et al., p. 290.

¹⁷ Desmond, Matthew, et al., "Evicting Children," *Social Forces*, 2013, 92: 303-327.

¹⁸ Mazzara, Alicia, et al., "Rental Assistance to Families at Lowest Point in Decade," *Center on Budget and Policy Priorities*, 2016.

¹⁹ Freeman, Lance, "Displacement or succession? Residential mobility in gentrifying neighborhoods," *Urban Affairs Review*, 2005, 40, 4: 463-91.

²⁰ Pendall, Rolf., et al., pp. 275-277.

²¹ Pendall, Rolf, et al., p. 279.

²² Pendall, Rolf, et al., p. 279.

²³ Bates, Lisa, "Gentrification and displacement study: Implementing an equitable inclusive development strategy in the context of gentrification," May 2013, <https://www.portlandoregon.gov/bps/article/454027>.

²⁴ Note that the Census tracks people who live in "group quarters"—facilities such as college dormitories, hospitals, jails, convents, homeless shelters, and the like—that it considers to be neither renter- nor owner-occupied housing. People in group quarters were excluded from our analysis. Our analysis also did not consider people living outdoors.

²⁵ Note that the cross-hatched tracts with color represent those that our methodology classified as gentrifying, but on the basis of rental data, rather than home price data, as a result of data availability.

²⁶ In addition, although the local high school is gaining students, the elementary school has sharply decreased in enrollment, suggesting a decrease in families with young children. However, it is unclear whether this decline has been offset by gains in enrollment in nearby charter schools.