Black Homebuying after the Crisis: Appreciation and Segregation Patterns in Fifteen Large Metropolitan Areas

Dan Immergluck
Georgia State University

Stephanie Earl
Georgia State University

Allison Powell
Georgia State University

URBAN STUDIES INSTITUTE
Georgia State University
Andrew Young School of Policy Studies

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A Working Paper

Dan Immergluck[1]

Stephanie Earl

and

Allison Powell

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Urban Studies Institute

Georgia State University

[1] Corresponding author: Dan Immergluck, Professor, Urban Studies Institute, Georgia State University. 55 Park Place, Atlanta, GA 30303 dimmergluck@gsu.edu.

Abstract

In recent years, some have questioned the financial wisdom of homeownership and, especially, Black homeownership. This skepticism, especially regarding Black homeownership, is understandable, in part because the mortgage crisis dealt particularly heavy blows to Black homeowners and neighborhoods. However, as the broader housing market has recovered, Blacks have not benefitted as much as they might have due to their relatively low rates of homebuying following the crisis. One persistent concern around the issue of Black homeownership is the notion that home values have not always appreciated as much in the places where Blacks tend to purchase homes. A second, and related, concern is the extent to which Black homebuyers are able to purchase homes outside of majority Black neighborhoods, including in predominantly white neighborhoods.

We address the potentially interrelated issues of the segregation of Black homebuying and the appreciation of homes purchased by Blacks in the wake of the crisis. First, using census-tract-level home value appreciation data, we estimate the 2012 to 2017 appreciation rates of homes purchased by 2012 buyers using mortgages, and break these out by the race and ethnicity of homebuyers in 15 large metropolitan areas. We look at how appreciation patterns vary across the 15 metros. We then examine the ethnoracial composition of census tracts where homebuyers receiving mortgages purchased homes in 2017.

We conclude with a set of policy recommendations including enforcing and strengthening consumer protection, fair lending and community reinvestment policies, maintaining and strengthening Federal Housing Administration lending, limiting the degree of risk-based pricing in the mortgage market, providing downpayment assistance, and supporting community development financial institutions.

Introduction

In the wake of the U.S. mortgage crisis, some have questioned the financial wisdom of homeownership generally and, especially, Black homeownership (Dickerson, 2012; Emmons, 2017; Shlay, 2015). This skepticism of Black homeownership is understandable, in part because the mortgage crisis dealt particularly heavy blows to Black homeowners and neighborhoods (Immergluck, 2015; Reid et al., 2017). However, as the broader housing market has recovered, Blacks have not benefitted as much as they might have due to their relatively low rates of homebuying following the crisis (Goodman et al., 2014). While the reasons for depressed homebuying rates among Blacks are beyond the scope of this study, they may involve a combination of factors, including damaged credit histories and loss of wealth from the foreclosure crisis, weak enforcement of fair lending and community reinvestment policies, weaker earnings and employment in the wake of the Great Recession, and other factors.

One persistent concern around the issue of Black homeownership is the notion that home values may not appreciate as much in the places where Blacks are likely to purchase homes, especially in predominantly Black neighborhoods. We address the potentially interrelated issues of the segregation of Black homebuying and the appreciation of homes purchased by Blacks in the wake of the crisis. First, using census-tract-level home price appreciation data, we estimate the 2012 to 2017 appreciation rates of homes purchased by 2012 buyers using mortgages, and break these out by the race and ethnicity of homebuyers in 15 large metropolitan areas. We then look at how appreciation patterns vary across the 15 metros. Given the reversal of falling home values into rising ones in most parts of the country around 2012, we suggest that the use of a small-area home price index should provide more accurate estimates of home values than the use of measures based on surveys, such as the American Community Survey, during times of rising or falling values.

A second major concern is the extent to which Black homebuyers are able to purchase homes outside of majority Black neighborhoods, including in predominantly white neighborhoods. We examine the ethnoracial composition of census tracts where homebuyers receiving mortgages purchased homes in 2017. We look at the 15 metros as a group and then break out patterns across the different metros.

We consider issues of both asset development during the 2012 to 2017 national recovery and the extent to which Black homebuying is ethnoracially segregated. We also compare Black homebuying in these metros to that of whites and Latinos.

We conclude with a set of policy recommendations that include providing down payment assistance, supporting community development financial institutions, enforcing and strengthening consumer protection, fair lending and community reinvestment policies, maintaining and strengthening Federal Housing Administration lending, and limiting the degree of risk-based pricing in the mortgage market.

Evidence on the Financial Pros and Cons of Black Homeownership

The question of Black homeownership is a complex one, dependent on time and place. In highly volatile markets, when risks of sudden declines in values and large foreclosure spikes, homebuying, especially if not carefully financed, can expose households to high risks of negative consequences. Conversely, during periods of more stable appreciation, Black homebuying may offer households with limited financial assets the opportunity to grow those assets, thereby potentially reducing racial wealth inequality over time.

Herbert et al. (2013) point to a number of ways that homeownership can help households gain wealth. These include: 1) providing a "forced savings" mechanism where a growing portion of housing payments go towards gaining equity in the home; 2) appreciation of the home; 3) the leveraging of the asset appreciation through requiring a modest downpayment while receiving the bulk of the gains from appreciation; 4) serving as a hedge against unpredictable increases in rents (and land values); and 5) potential tax advantages (although recent tax changes are likely to concentrate these benefits even more among higher-income homeowners).

Herbert et al. (2013) find that, between 1975 and 2012, the annual appreciation of house prices averaged 0.8 percentage points above inflation (that is, the real appreciation rate). (Note that this period includes the subprime bust of the late 2000s.) This may not sound like a great deal, but compounded over 30 years even this modest appreciation rate will result in a real, inflation-adjusted gain of 26 percent in home value. This is not the end of the story. The use of a modest downpayment allows for the amplification of the return on the homebuyers' own investment through leverage. Herbert et al. (2013) give the example of a homebuyer putting down 5 percent for a home that appreciates at a moderate 4 percent annual rate. After five years, the home will have appreciated nearly 22 percent. After allowing for selling costs of 6 percent, this would represent an annualized rate of return of 31 percent on the initial downpayment. (We present a more complete analysis of the return on investment of homebuying later in the paper using appreciation data.)

In addition to the benefit of leveraging appreciation, the use of smaller downpayments reduces the amount of liquid assets that the family has to invest in the home up front. Smaller downpayments allow households to invest some savings in other assets, retain some savings for the event of adverse events, and gain greater leverage of the home's appreciation. If a family does lose its home to foreclosures, it will lose a smaller investment than if it had made a larger downpayment.[2]

A substantial number of studies have examined the financial returns to homeownership to different ethnoracial groups, although most have covered periods prior to the mortgage crisis. For example, Reid (2005) used data from the Panel Study of Income Dynamics (PSID) from 1976 through 1994 and found that, while minority buyers typically built much less wealth than higher-income and white households, the amount of their housing wealth was significant and many times larger than other forms of wealth. She also found that Black renters held essentially no wealth at the end of the study period. Boehm and Schlottmann (2004) also used PSID data to study homebuying from 1984 through 1992. They found that minorities did gain wealth from homeownership but that the gains, not surprisingly, were much smaller than the gains among higher-income whites, who tend to purchase more expensive homes. Shapiro et al. (2013) employed the PSID from 1984 through 2009 and found that longer homeownership durations among whites accounted for 27 percent of the additional appreciation that they experienced as compared to Blacks. Bostic and Lee (2009)

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[2] The ability of lenders to go after borrowers' assets beyond taking the home through foreclosure (referred to as pursuing "recourse") varies according to state foreclosure law. However, even in recourse states, "restrictions on deficiency judgements render many loans effectively non-recourse" (Campbell and Cocco, 2014).

simulated the wealth accumulation arising from lower-income homebuying. They also found that the holding period was a critical factor in determining the asset-building benefits of homeownership.

The research above examined Black homeownership outcomes prior to the end of the U.S. mortgage crisis. While the crisis was of a magnitude not experienced since at least the 1930s, it is important to recognize the disproportionate effects it had on Black homeownership rates and the loss of Black wealth. Before the 2010 Dodd-Frank Act, regulation of high-risk and high-cost mortgage lending was very limited (Immergluck, 2009). Subprime home purchase lending was allowed to grow rapidly in the early 2000s. Such loans included high rates and fees and risk-inducing loan terms, and were underwritten at high payment-to-income ratios, all of which contributed to higher default and foreclosure rates. Blacks were targeted with predatory and subprime mortgages during this period (Bayer et al., 2017; Bhutta and Ringo, 2014; Reid et al., 2017; Steil et al., 2018). Bayer et al. (2017) examined racial differences in subprime lending in seven metropolitan areas from 2004 to 2007 and, after controlling for credit score and other risk factors, Blacks were 103 percent more likely to receive subprime home purchase loans than white borrowers. Reid et al. (2017) found that, after controlling for a wide variety of loan-level characteristics, Blacks paid significantly higher interest rates than whites and were significantly more likely to receive a loan with a prepayment penalty, a balloon payment, or other characteristics often associated with predatory lending.

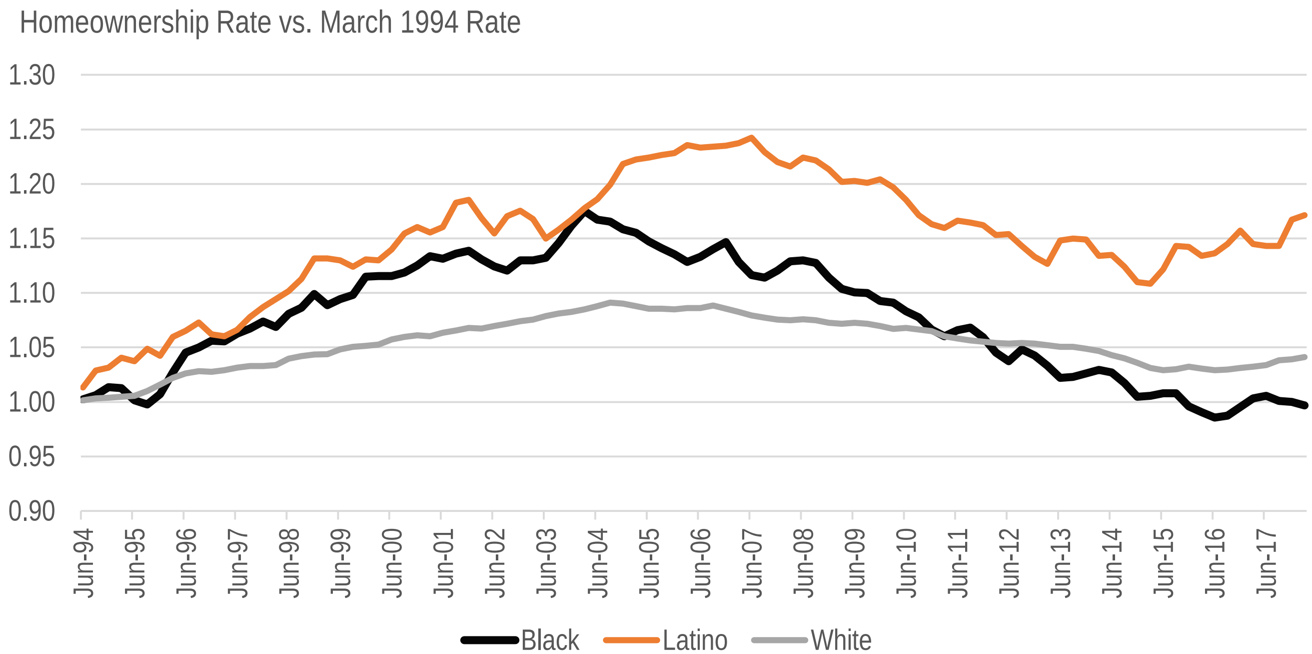
Blacks were also more likely than whites to end up in foreclosure during the crisis, losing the equity in their homes and experiencing a variety of other harms. Reid et al. (2017) found that that the predatory loan features common among subprime loans made to Blacks were strongly associated with higher levels of mortgage default. Overall, for loans originated from 2004 to 2007, 28 percent of Black homebuyers had lost their homes to foreclosure or were seriously delinquent by early 2013, more than twice the rate for white households.

Newman and Holupka (2015) used PSID survey data through to 2011 and found that, during the 2000s, Black first-time homebuyers generally lost wealth. New buyers during the peak of the subprime boom fared particularly poorly. In 2007, the median white buyer lost about $8,000 more than comparable renters, while the median Black buyer lost more than twice that amount, at $19,000.

Taking a longer view on the impact of the 2000s, Herbert et al. (2013) analyzed the Survey of Consumer Finances (SCF) to find that, despite the losses caused by the subprime crisis, average, inflation-adjusted home equity in 2010 was still higher on average than in 1995. While whites and higher-income households experienced the largest gains, Black households also experience a substantial inflation-adjusted gain of 39 percent. However, more recent research by Emmons (2017), also using the SCF, suggested that Black home equity continued to fall from 2010 to 2013, so that, while still above the 1995 level, real appreciation over the 1995 to 2013 period was more modest.

The subprime crisis dealt a heavy blow to Black homeownership. After rising during the 1990s, before the 2000s subprime boom, the national Black homeownership rate reversed course and began falling in late 2004, as shown in Figure 1. Per the Census Bureau's Housing Vacancy Survey, the rate fell from a high of just over 49 percent in mid-2004 to about 42 percent by 2016,

Figure 1. Changes in Homeownership Rates by Race compared to 1994



Source: Census HVS/CPS

where it has generally stayed since then. This means that the Black homeownership rate fell about 7 percentage points on a base of 49 percent, which amounts to about just under a 15 percent decline in the rate from its peak. Meanwhile, the Latino homeownership rate began falling in 2007 as sand state foreclosures spiked, but then began rebounding significantly beginning in 2015. The 2018 Latino homeownership rate is about 3.6 percentage points below its peak of 50 percent, or about 7 percent below that peak.

Beyond their effects on households, foreclosures hit Black neighborhoods hard, leaving vacant and abandoned properties, lower property values, and underwater homeowners (Immergluck, 2015). In many Black neighborhoods, property values recovered more slowly from the crisis than in white areas, and homeowners remained underwater for longer periods of time (Raymond, Wang, and Immergluck, 2015; Raymond, 2018).

Notwithstanding the evidence that Black neighborhoods recovered more slowly from the mortgage crisis, recent evidence suggests that gains in Black home equity began sometime around 2013, depending on the metropolitan area. The 2016 Survey of Consumer Finances (SCF) revealed that from 2013 to 2016, Black homeowners saw slightly greater appreciation than whites (13.1 vs. 11.6 percent), while Latinos saw an increase of almost 20 percent (Federal Reserve Board, 2017). One note of caution on studies using data sets such as the SCF or PSID is that they rely on owner assessments of home values and not sales-based data, such as a home price index. In a recovering market, it might be expected that owner estimates lag true market values (Bucholz et al., 2016).

Goodman & Mayer (2018) suggest that the evidence used to argue against minority homeownership is inconclusive and that, with appropriate mortgage regulation in place, more households should be able to benefit from homeownership. Along these lines, Grinstein-Weiss et al. (2013) found that, even during the calamitous period of 2005 to 2008, low- and middle-income homeowners receiving prime loans accumulated more assets than did otherwise similar renters.

Recent Research on Black Homebuying and Racial Segregation

There has been little recent research examining the ethnoracial composition of the neighborhoods in which homebuyers purchase homes. Using a national set of Home Mortgage Disclosure Act (HMDA) data from 1992 to 2010, Fisher (2013) found that Black homebuyers were less segregated from whites than Black renters. Using similar data, Fischer and Lowe (2014) found that, as Black homebuying increased in the 1990s, the racial composition of the neighborhoods in which both Blacks and whites bought homes became somewhat less white over time. However, Blacks still purchased in places that were less white than the corresponding metropolitan area, while whites purchased in places that were more white than the corresponding metro. They also found that higher income Blacks were more likely to purchase homes in whiter neighborhoods than those with lower incomes, consistent with a notion of at least limited spatial assimilation. Finally, they found that, as might be expected, in metropolitan areas with smaller white populations, the average borrower was more likely to purchase in a less white neighborhood.

Newman and Holupka (2015) examined homebuying at different time ranges within the 2000s and, using PSID survey data with tract-level geographies, found that first-time Black homebuyers purchased homes in neighborhoods with larger Black populations than those in which whites purchased homes. The mean Black neighborhood population for places where Blacks purchased homes varied from 51 to 58 percent, depending on the part of the decade in which the home was purchased. Meanwhile, the Black population for the neighborhoods in which whites purchased ranged from 5 to 11 percent over the 2000s. They also found that Blacks purchased homes in neighborhoods with somewhat lower homeownership rates, with the mean ranging from 56 to 64 percent, while whites purchased in neighborhoods where mean homeownership rates ranging from 67 to 71 percent over the decade.

Mortgage Markets and Black Homebuying

Tight mortgage markets, damaged credit histories, a flight by lenders to perceived "safety," reduced attention to fair lending and community reinvestment policies, and a weak job market in the early 2010s may have all contributed in various ways to reduce Black homebuying following the crisis. Researchers at the Urban Institute compared home purchase lending in 2012 to lending in 2001, a year they consider a relatively healthy year for home purchases that predated the subprime boom (Goodman et al., 2014). They found that total 2012 home purchase lending was down 43.6 percent compared to 2001 levels, while lending to Blacks was down 55.1 percent.

If Blacks are pushed out of the homeownership market via foreclosures, and disproportionately kept out of it by tight mortgage markets or a lack of attention to fair lending and community reinvestment policy, then they may be put in a long-term position of suffering disproportionate losses during times of foreclosure and value decline, while also not having sufficient opportunities to share in the broader market recovery. In such a system, over time, Blacks may repeatedly bear a disproportionate share of the downside of housing markets, without sharing in the upsides. This, in turn, is likely to lead to greater wealth inequality in the long term. Beyond this, being relegated to a volatile rental market will often mean having fewer choices of where to live (as rental housing is sometimes effectively excluded from many neighborhoods), being subject to rapid rent increases and eviction, and attaining limited housing and location stability, which can be especially important to families with children.

Using HMDA data and focusing on Black homebuyers, we examine the homebuying patterns of households purchasing homes with a mortgage in two different years following the crisis. We first look at homebuying in 2012, generally at the beginning of the national recovery in home values after the crisis, and then we look again at homebuying in 2017, when prices had recovered substantially in many, but not all, metropolitan areas. Using a tract-level home price index produced by the Federal Housing Finance Agency (FHFA), we are able to estimate home appreciation patterns for Black households who purchased homes in 2012 and compare those to white, Latino and Asian homebuyers. We do this for 15 large metropolitan areas where the FHFA data provide tract-level home price changes for a very large share (over 85 percent) of Black home purchase loans made in 2012.

We then look at the racial composition of the neighborhoods in which Blacks purchased homes in 2017 and compare them to neighborhoods where whites and Latino purchased. We examine variations across the 15 metros in terms of concentrations in Black homebuying and the ethnoracial composition of the neighborhoods in which Blacks purchased homes.

Data and Methods

Our principal source of data on homebuying patterns is federal HMDA data, which are submitted to federal mortgage and banking regulators annually by mortgage lenders. HMDA data include detailed information on applications for home mortgage loans, including whether the loan was originated, the race and income of the applicant, the size of the loan, the census tract in which the home is located, and other variables. HMDA covers the vast majority of home purchase lending in the U.S., excluding only some very small lenders. While a significant share of single-family home purchases is "all-cash," i.e., made without a mortgage, the bulk of such purchasers are investors and not owner-occupiers, and so are not of interest here. In addition to HMDA data, we also use data from the 2016 five-year American Community Survey (ACS) at the census tract level, and a relatively new home price index provided by the Federal Housing Finance Agency that is available at the tract level, called here the "HPI" for housing price index (Bogin et al., 2016).

Our interest is in large metropolitan areas, and so we began by examining HMDA and HPI data for the 50 largest metropolitan areas. Unfortunately, the HPI data are not available for all census tracts. This is because in some tracts there are too few transactions with which to construct the index. The index is based on repeated sales of the same properties, so if an insufficient number of properties are sold repeatedly in a tract, an index value is not provided for that tract. Of the more than 37,000 tracts in the fifty largest metropolitan areas, over 11,000 (about 30 percent) are missing tract-level HPIs. However, these tracts accounted for less than 24 percent of Black home purchase loans in 2012 and 2017.

Because this level of missing HPI data would severely limit what we could learn from our analyses, we reduced the number of the metropolitan areas, focusing on keeping those where HPI data was available for the bulk of home purchase loans.[3] We first identified five outlier metropolitan areas where the share of all home purchase loans that were located in HPI-missing tracts in 2012 and 2017 was above 35 percent. These included Houston (55 percent), Las Vegas (53 percent), San Antonio (52 percent), Miami (43 percent), and Phoenix (41 percent). However, we remained concerned that the share of loans in HPI-missing tracts, especially loans to Blacks, was too large in many of the remaining 45 metropolitan areas. We then identified 18 metropolitan areas in which the share of Black loans in HPI-missing tracts was below 15 percent. Because we found that these metros, as a group, had a smaller share of Black purchases than the larger set of metros, we eliminated three additional metros with low Black loan shares (Salt Lake City, Portland, and San Francisco). The remaining set of 15 metropolitan areas had a Black share of home purchase loans of 7.84 percent, very close to the 7.96 percent for the larger sample. We use these 15 metropolitan areas as our set of metros for examining Black homebuying more closely.

Table 1 shows that these fifteen metros are diverse geographically, demographically, and in terms of housing market appreciation. They range from economically weaker regions with lower levels of home price appreciation such as St. Louis and Birmingham to markets with very high levels of appreciation such as Riverside and Sacramento. The metros in the West tend to have larger Latino and Asian populations and smaller Black populations than the other metropolitan areas, with the metros in the South tending to have the largest Black populations. While we do not assert that these 15 metros are closely representative of large U.S. metros, they do provide a good deal of variation in demographics, housing cost levels, and housing market trajectories.

We first examine the patterns of homebuying by Blacks and other ethnoracial groups in 2012. Because we have HPI data for 2012 to 2017, we can examine the distributions of different groups' homebuying in terms of the extent to which their homes gained in estimated value over this period. We then examine homebuying patterns by the racial and ethnic composition of the neighborhood for those buying homes in 2017 using 2016 5-year ACS tract-level data.

Post-Crisis Black Homebuying and Neighborhood Value Trajectories, 2012 to 2017

We begin by examining mortgage-financed homebuying in the fifteen metropolitan areas. There were just over 386,000 home purchase loans made in the fifteen metropolitan areas in 2012. Of these, just under 349,000, or approximately 90 percent, were made on houses in tracts where a change in HPI could be calculated for the 2012 to 2017 period. Moreover, 91 percent of the loans to Blacks were made in tracts where a change in HPI could be calculated. By combining the HPI data with the HMDA data, we estimated the 2012 and 2017 values of each of these 349,000 homes.

[3] We only include first-lien home purchase loans in all analyses of HMDA data in this study.

Table 1. Housing and Demographic Characteristics for 15 Large Metropolitan Areas

Metropolitan Area	Home Price Appreciation, 2012 to 2017*	Percent Black**	Percent Latino**	Percent Asian**	Median Home Value**	Median Household Income**
Atlanta	42.4%	34.1%	9.8%	5.7%	$197,700	$62,613
Birmingham	14.4%	28.3%	4.2%	1.3%	$154,000	$52,226
Boston	26.9%	8.1%	10.0%	7.8%	$412,700	$82,380
Cincinnati	15.5%	12.3%	3.0%	2.5%	$165,200	$60,260
Columbus	26.9%	15.3%	3.8%	3.9%	$172,200	$60,294
Indianapolis	18.3%	15.1%	6.3%	3.0%	$153,500	$56,750
Los Angeles	51.1%	6.6%	44.8%	15.7%	$578,200	$65,950
Louisville	18.6%	14.3%	4.3%	2.0%	$162,100	$54,546
Minneapolis	30.6%	8.1%	5.6%	6.4%	$240,500	$73,231
Nashville	41.1%	15.3%	7.0%	2.7%	$208,900	$60,030
Raleigh	27.0%	20.1%	9.9%	5.4%	$237,700	$71,685
Richmond	19.2%	29.3%	5.6%	3.8%	$227,200	$62,929
Riverside	65.4%	7.4%	50.1%	6.5%	$318,900	$58,236
Sacramento	66.2%	7.0%	21.2%	12.7%	$363,300	$64,052
St Louis	13.8%	18.1%	3.0%	2.5%	$169,200	$59,780

*From Federal Housing Finance Agency metropolitan-level home price index, nominal (not adjusted for inflation)
**From 2016 American Community Survey, one-year sample

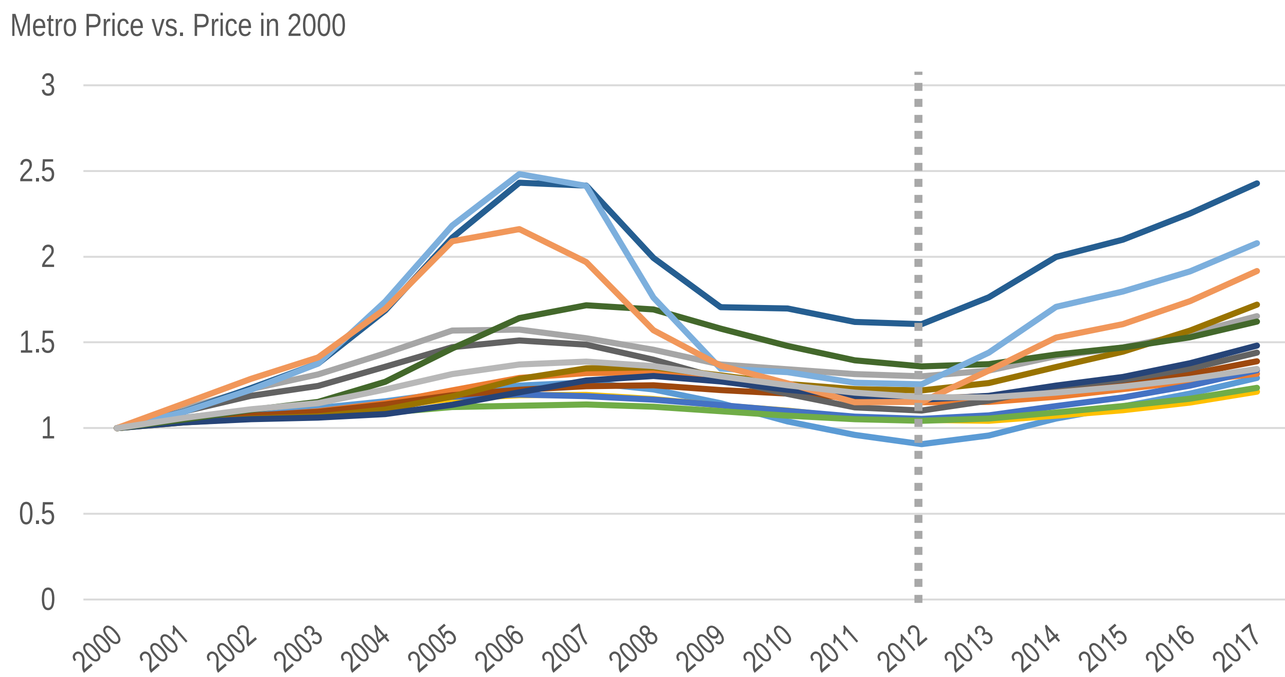
We chose 2012 as the initial year of the 5-year recovery period based on examining the trajectories of home values in the 15 metropolitan areas. Figure 2 plots the Federal Housing Finance Agency metropolitan home price index, using 2000 as a base year, from 2000 to 2017. It shows that the bottom of home values generally occurred in 2012. For twelve out of the 15 metros, 2012 was the year in which the metro HPI hit its minimum value after the mortgage crisis, and in the other three metros, the index for that year was less than one point from the minimum (which was in an adjacent year, either 2011 or 2013).

The HMDA data provide an initial loan amount and, depending on the type of loan, the purchase price of the house (and thus the initial 2012 value) was estimated. Average downpayments for different types of loans were obtained from recent studies and applied (Urban Institute, 2016; Urban Institute, 2017).[4] To estimate the 2017 value of each home purchased in 2012, the HPI change factor for the census tract in which the house was located was applied. So, for example, if the estimated purchase price of a house in 2012 was $100,000, and the 2012-to-2017 HPI change factor was 1.40, the estimated 2017 value was calculated as $140,000.[5] The HPI change factor is a nominal measure, so the gain in estimated value is not adjusted for inflation.

[4] We do not consider the presence of second-lien home purchase loans in estimating the initial purchase price. Only 2 percent of first-lien home-purchase loans in HMDA in 2012 and 2017 had associated second-lien loans.

[5] We assume that all homes in the same census tract appreciate at the same rate over the 5-year period. Much of the following analysis also assumes that 2012 homebuyers own their homes during this period.

Figure 2. Home Value Trajectories for 15 Metros, 2000 to 2017



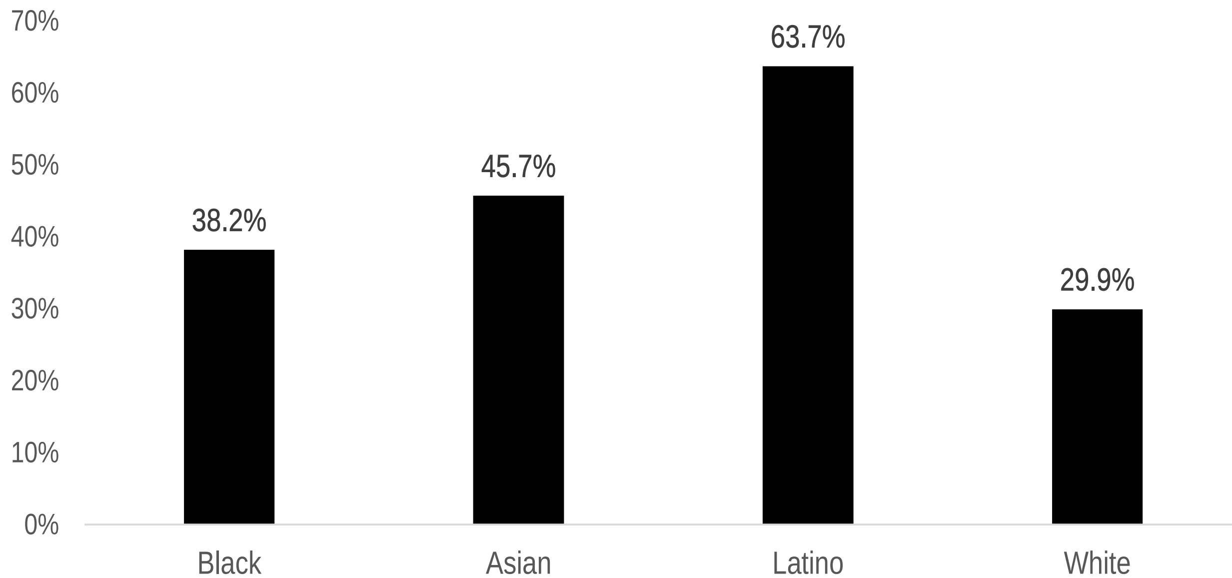
Source: Federal Housing Finance Agency Metropolitan Home Price Index

We then examined aggregate gains in value over the 2017 period by ethnoracial groups in the 15 metropolitan areas, combined. Figure 3 shows the median estimated appreciation rate in nominal value of homes purchased in 2012 by ethnoracial group. It shows that, in these 15 metros as a group, Black homeowners tended to see substantial appreciation of the homes they purchased in 2012. The median Black homebuyer in the 15 metros experienced an estimated 38.2 percent appreciation in home value over the 5-year period.

Moreover, appreciation among Black buyers tended to be significantly larger than the appreciation experienced by white buyers, who experienced median appreciation of 29.9 percent over this period. Latino buyers experienced particularly high levels of appreciation because, as will be examined more closely below, they were disproportionately located in metropolitan areas such as Riverside and Los Angeles that experienced very high appreciation rates from 2012 to 2017.

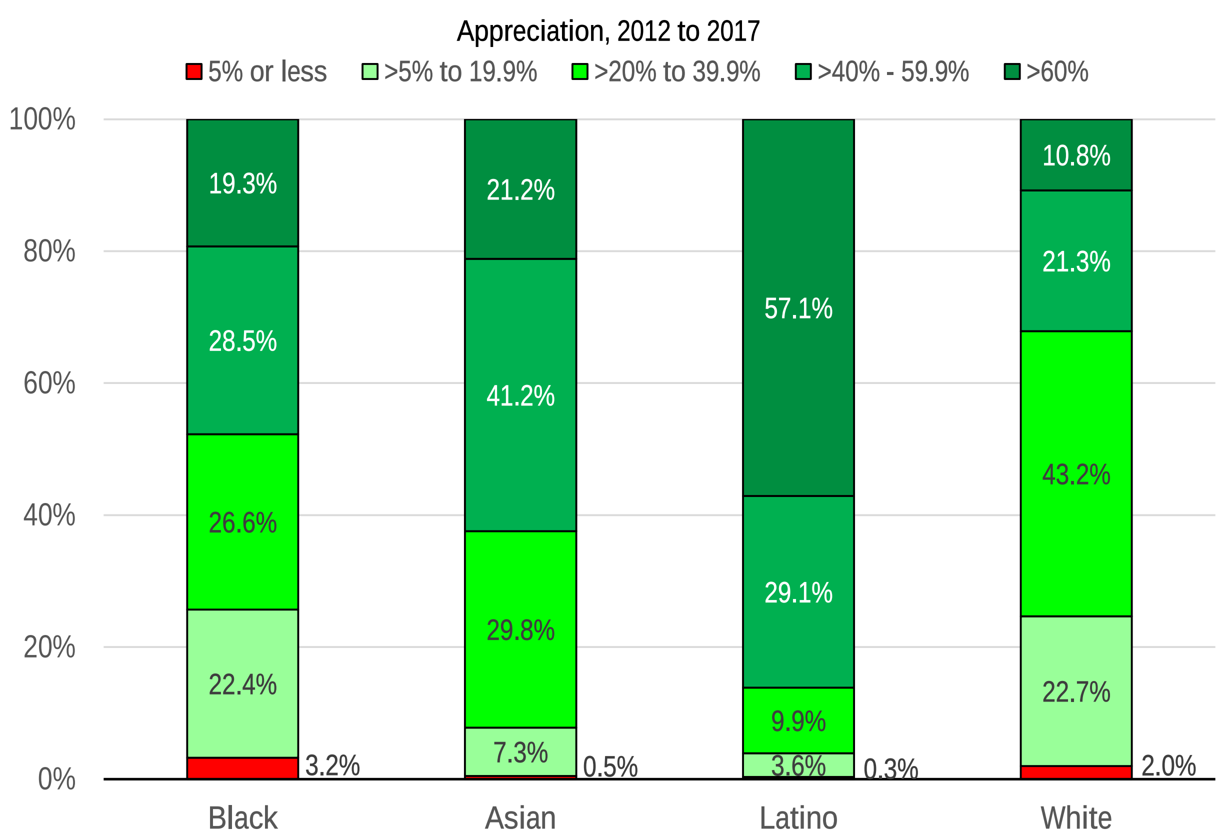
Figure 4 then shows the distribution of gains, including the share of buyers who experienced nominal appreciation of less than 5 percent (shaded in red), which is roughly the amount of a real estate agent's commission. Adding modest inflation over this period (less than 7 percent over five years), such homebuyers would end up in a financially negative position if they sold in 2017. However, given the overall gains in most markets, very few 2012 buyers of any ethnoracial group purchased in neighborhoods that did not appreciate by more than 5 percent over this period.

Figure 3. Median Estimated Appreciation Rate, 2012 to 2017, 2012 Buyers in 15 Metros*



*Nominal, not adjusted for inflation

Figure 4. Appreciation (nominal), 2012 to 2017, for 2012 Buyers in 15 Metros



Looking particularly at Black buyers in the 15 metros, almost 75 percent of homes purchase by Blacks appreciated over 20 percent from 2012 to 2017, and almost 48 percent appreciated over 40 percent during this period. Only 3.2 percent gained 5 percent in value or less, or lost value, over this period. About 32 percent of 2012 homes purchased by whites experienced estimated gains of over 40 percent over the 5-year period, substantially lower than the 48 percent of Black home purchases. It was also far below the 86 percent of homes purchased by Latinos experiencing over 40 percent appreciation. Again, this is at least partly due to the fact that many Latino buyers were located in very high-appreciation metros such as Riverside and Los Angeles.

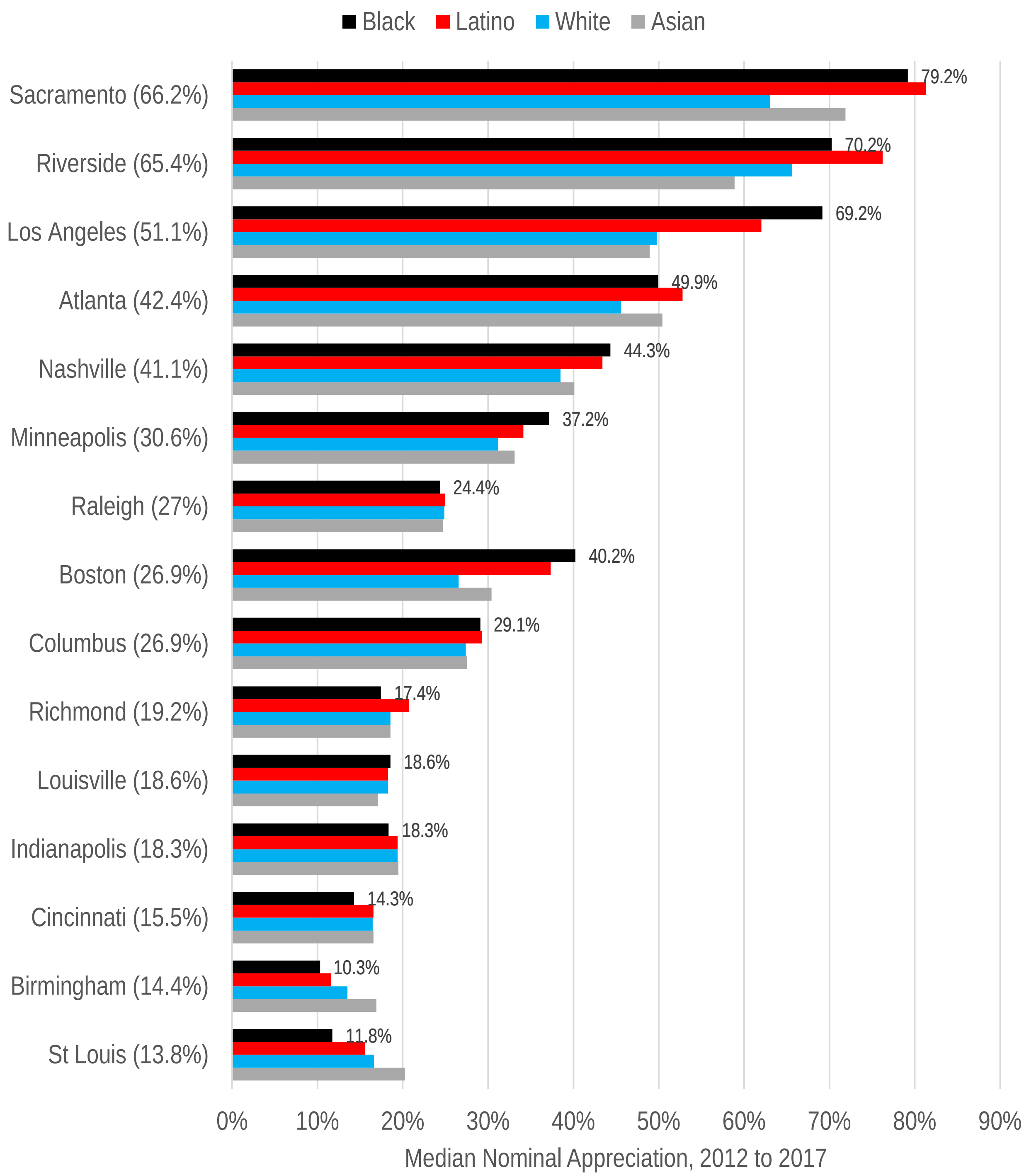
Figure 5 shows the estimated median appreciation rates for different ethnoracial groups within each of the 15 metros. Because we expect that metro-level appreciation will affect appreciation rates at the neighborhood level, the metros are ordered from lowest to highest metropolitan appreciation, from St. Louis at 13.8 percent to Sacramento at 66.2 percent.

Figure 5 indicates that metros with substantially higher overall appreciation rates drove estimated appreciation rates for all ethnoracial groups in those metros. Buyers in 2012 of any ethnoracial group in Riverside or Los Angeles, for example, tended to experience much greater gains in home values than buyers of any ethnoracial group in St. Louis or Cincinnati. Thus, metropolitan context was extremely important to the financial return on homebuying, although generally, median appreciation was still significantly positive and enough to compensate for sales commissions and inflation (15 percent or more) even in most of the weaker market metros. Cincinnati, Birmingham and St. Louis are the three metros where appreciation was weak enough over this period that some groups had median appreciation rates of less than 15 percent.

In the more strongly appreciating metros, such as Sacramento, Riverside, Los Angeles and Atlanta, the estimated median appreciation of homes purchased by Blacks, and Latinos, tended to exceed those purchased by whites. This may be partly due to localized housing market or gentrification pressures in places where they purchased homes. While not experiencing as much appreciation as these metros, Boston also stands out for estimated appreciation rates among Black and Latino buyers that were sizably greater than those among whites. In weaker market metropolitan areas, especially in St. Louis and Birmingham, estimated Black appreciation rates lagged that of whites.

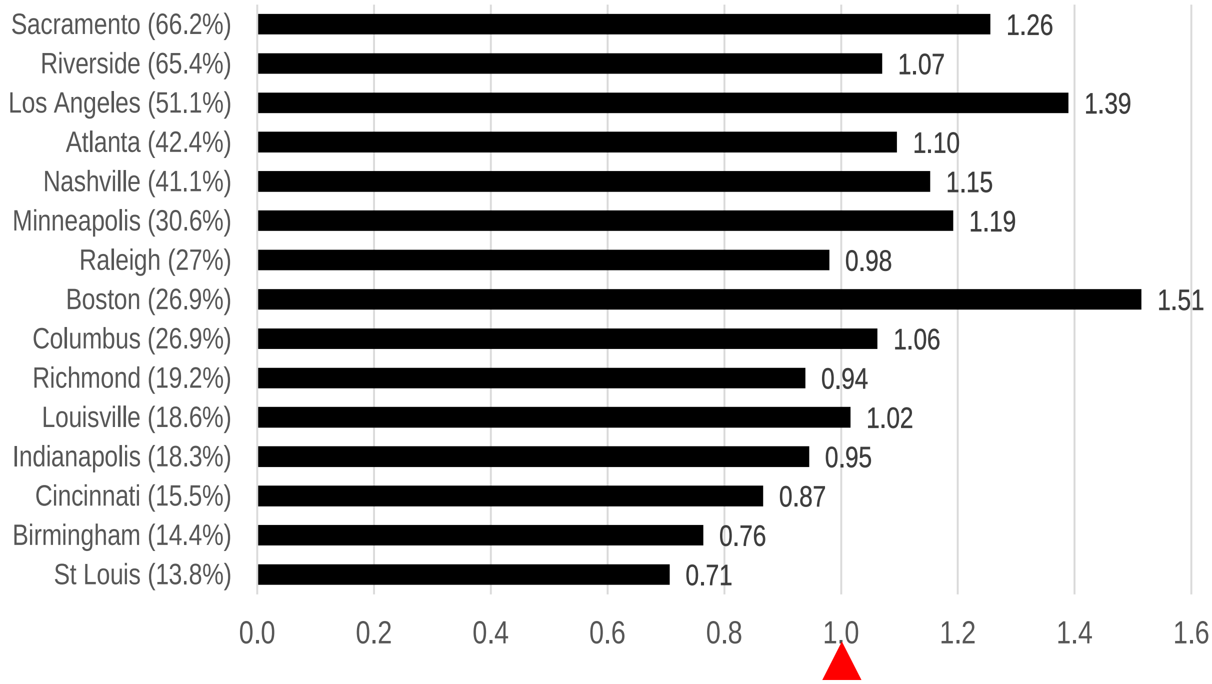
To illustrate the differences between Black and white estimated appreciation rates across the different metros, Figure 6 plots the Black-white appreciation ratio for each metropolitan area. This is the ratio of estimated median appreciation for Black 2012 buyers to the median appreciation for white 2012 buyers. If the ratio is over 1.0, then Blacks tended to experience greater estimated appreciation than white buyers.

Figure 5. 2012 to 2017 Estimated Median Home Appreciation Rates by Metro and Race /Ethnicity, 2012 Homebuyers* (Percentage for Black buyers labeled on chart)



* Metropolitan nominal appreciation rate, 2012 to 2017, next to metropolitan area name.

Figure 6. Black-White 2012-2017 Appreciation Ratios, 2012 Buyers



The Black-white appreciation ratios are generally above 1.0 in the stronger market metros. The Black-white ratio is actually the highest in the Boston metro, however, a metro that falls in the middle of the 15 metros in terms of appreciation over the 2012-2017 period.

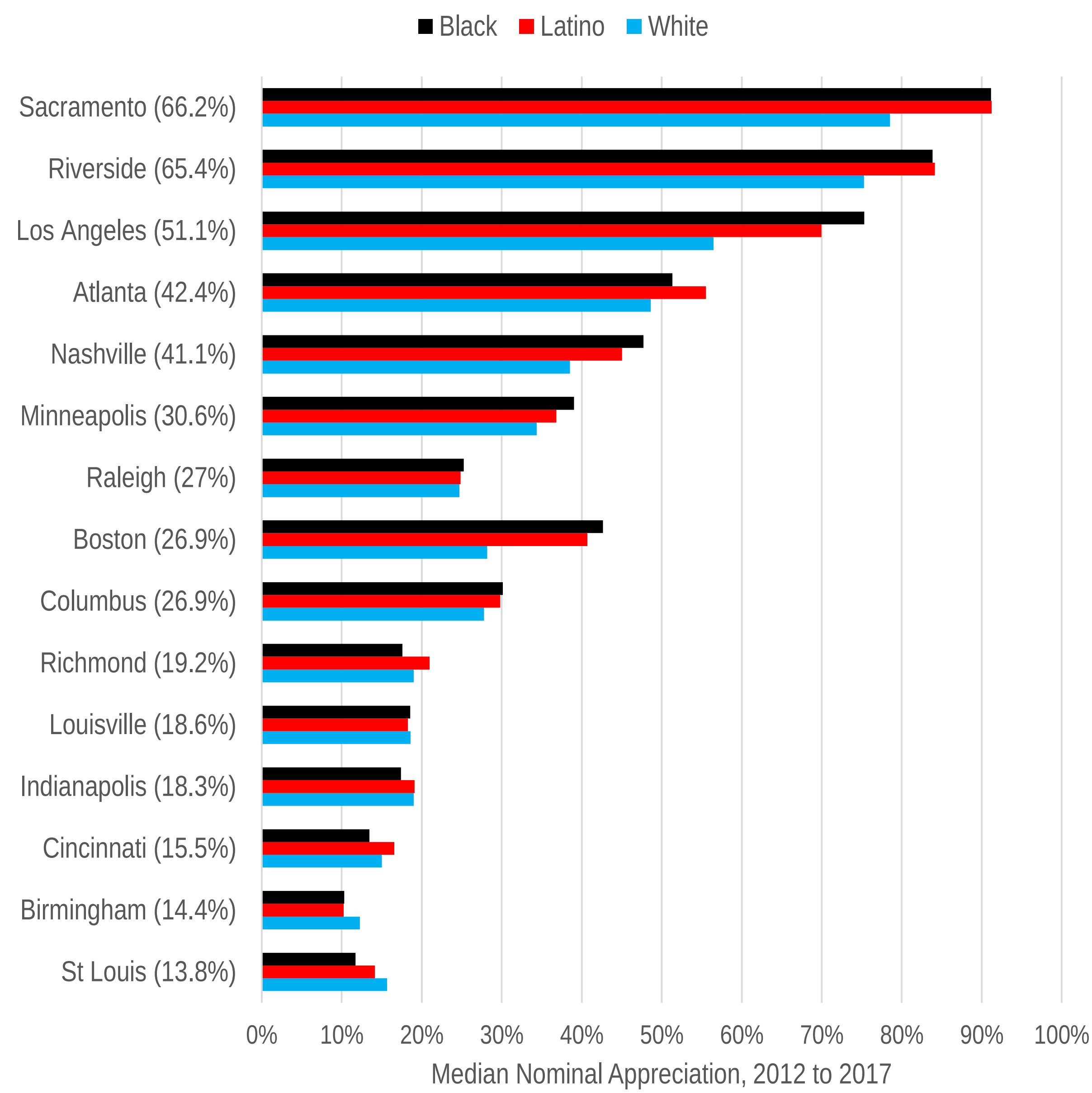
The three metros with the weakest overall appreciation rates, St. Louis, Birmingham, and Cincinnati, have the smallest Black-white appreciation ratios, with St. Louis being the lowest at 0.71. It is important to point out that the levels of Black-white segregation tend to be relatively high in these three metros (Spatial Structures in the Social Sciences, 2018).

What About Appreciation for Low- and Moderate-Income Black Homebuyers?

One part of the homeownership policy debate has focused on whether homeownership makes financial sense for low- and moderate-income (LMI) borrowers. While a full assessment of this question is beyond the scope of this paper, we are able look at the estimated appreciation of homes purchased by Black LMI homebuyers in 2012, and to compare it to that of homes purchased by Latino and white LMI buyers.

The results for Black, Latino, and white LMI appreciation in Figure 7 are similar to the results for all-income borrowers shown in Figure 5. Estimated appreciation rates over the 2012-2017 period for Black and Latino 2012 homebuyers were higher than for white LMI buyers in strong-appreciation metros. But in weak-appreciation metros, Black LMI appreciation was less than white LMI appreciation. Figure 8 shows Black-white LMI appreciation ratios for the 15 metros. This is similar to Figure 6, except that it compares appreciation for homes bought by Black LMI buyers to that for homes bought by white LMI buyers.

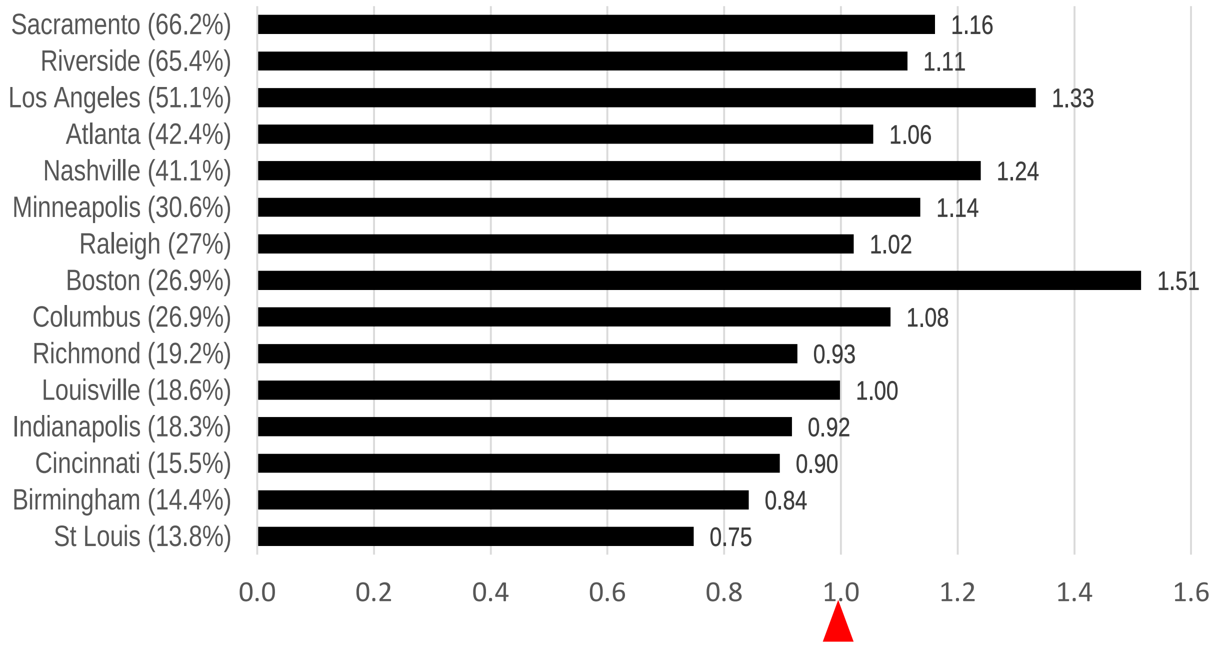
Figure 7. 2012 to 2017 Estimated Median Home Appreciation Rates by Metro and Race/Ethnicity, 2012 Low- and Moderate-Income (LMI) Homebuyers*



* Metropolitan nominal appreciation rate, 2012 to 2017, next to metropolitan are name

The results in Figures 7 and 8 suggest that the earlier results comparing Black to white and Latino buyers are quite robust after screening out middle- and upper-income buyers. Black LMI buyers in nine of the 15 metros saw appreciation rates larger than those of white LMI buyers, with all of these metros having metropolitan appreciation ratios of over 25 percent from 2012 to 2017.

Figure 8. Black-White 2012-2017 LMI Appreciation Ratios, 2012 Buyers



Looking More Closely at Homebuying by Neighborhood Appreciation Rate in Four Metros

Figures 9 through 12 illustrate the locations of Black and white 2012 homebuyers versus home value appreciation (by census tract) from 2012 to 2017 for four of the 15 metros. They illustrate the varied distributions of Black homebuyers in the different metros and the extent to which they purchased in areas experiencing higher versus lower appreciation. They also indicate the relative amount of dispersion across different parts of the metro. For example, Blacks are less spatially concentrated in Atlanta, and constitute a significant presence in many parts of the region, whereas in Los Angeles, there are very few Black buyers in most parts of the metro due in part to the small number of Black buyers in the region overall. Comparing St. Louis and Indianapolis, the maps show that Black homebuying in 2012 was somewhat more spatially concentrated in St. Louis than in Indianapolis, and that much of this concentration was in census tracts experiencing modest (less than 20 percent) appreciation over the 5-year period. White homebuying is also more spatially concentrated in St. Louis.

Also notable among these eight maps is the large portions of the Los Angeles and Atlanta metropolitan areas that experienced high 5-year appreciation rates (40 percent or more). In Los Angeles, the clusters of Black buying occurred predominantly in tracts with high appreciation rates. In Atlanta, the more dispersed pattern of Black buying occurred mostly in a mix of moderate- and high-appreciation census tracts. Far larger portions of census tracts in the St. Louis and Indianapolis metros saw 5-year appreciation rates below 20 percent, with significant parts of the St. Louis metro (especially outer counties in Illinois) experiencing appreciation rates below 5 percent.

Figure 9. Black and White Homebuying in 2012, against 2012 to 2017 Appreciation Rates, Atlanta Metropolitan Area

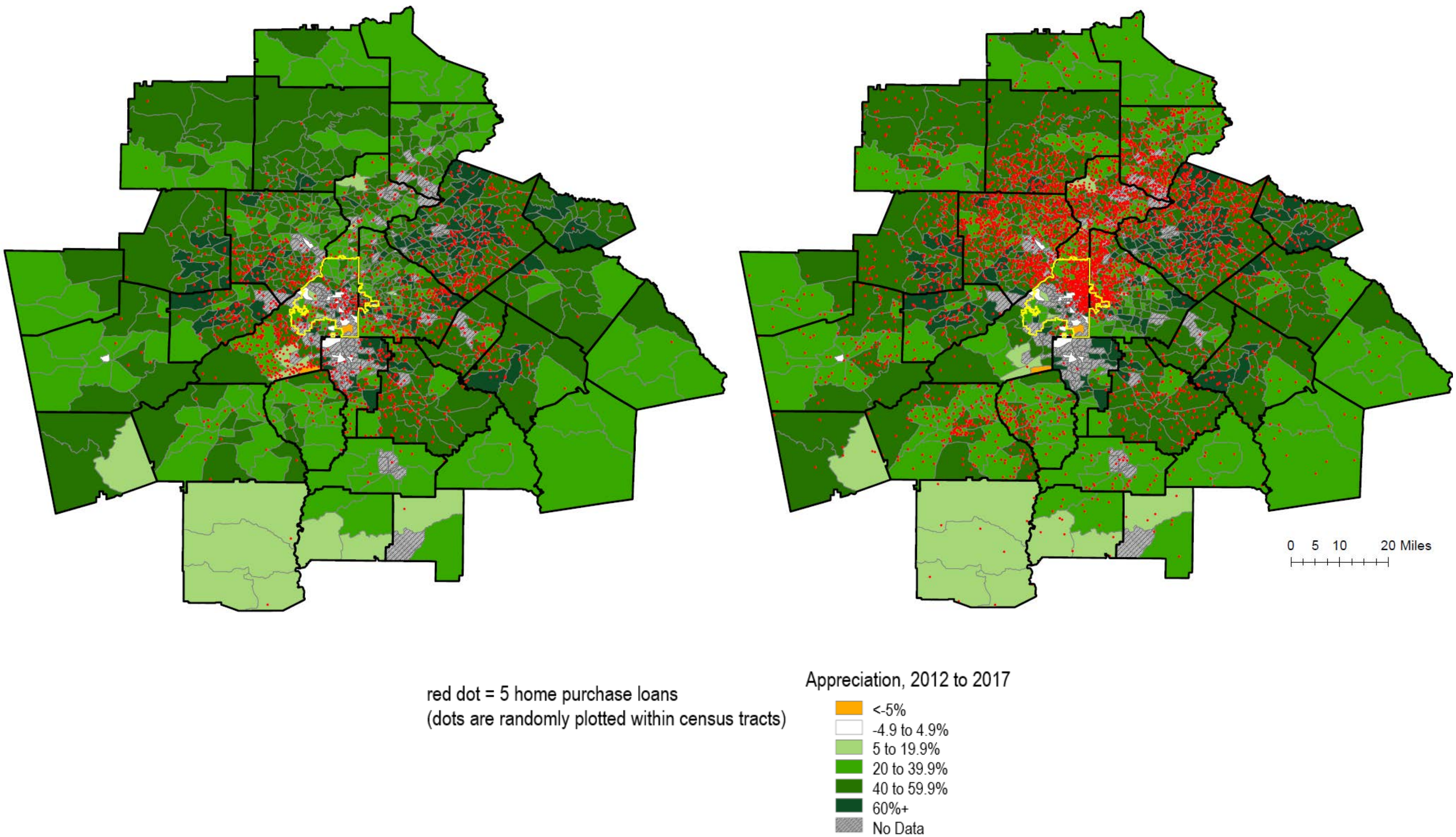


Figure 10. Black and White Homebuying in 2012, against 2012 to 2017 Appreciation Rates, Los Angeles Metropolitan Area

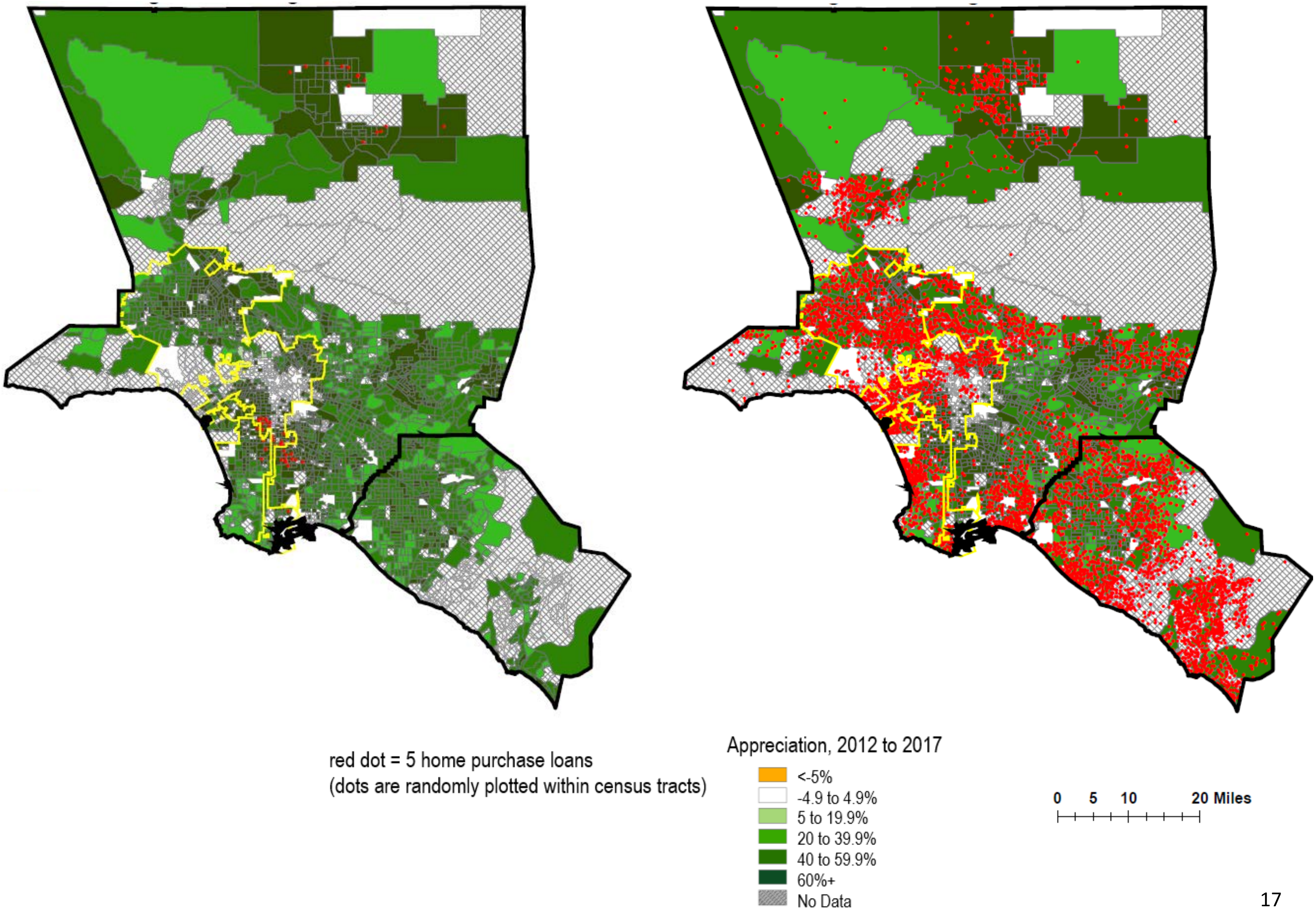


Figure 11. Black and White Homebuying in 2012, against 2012 to 2017 Appreciation Rates, St. Louis Metropolitan Area

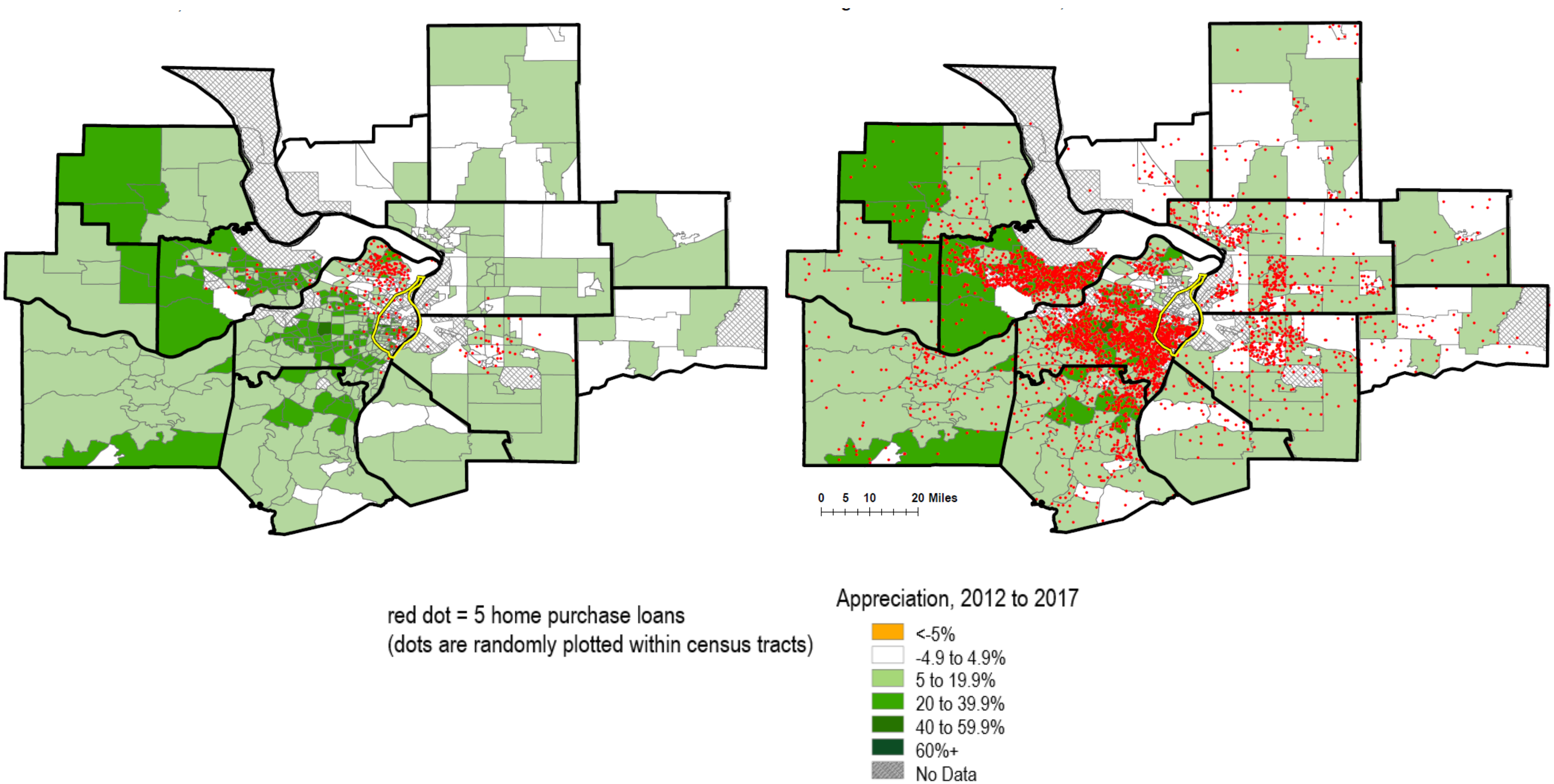
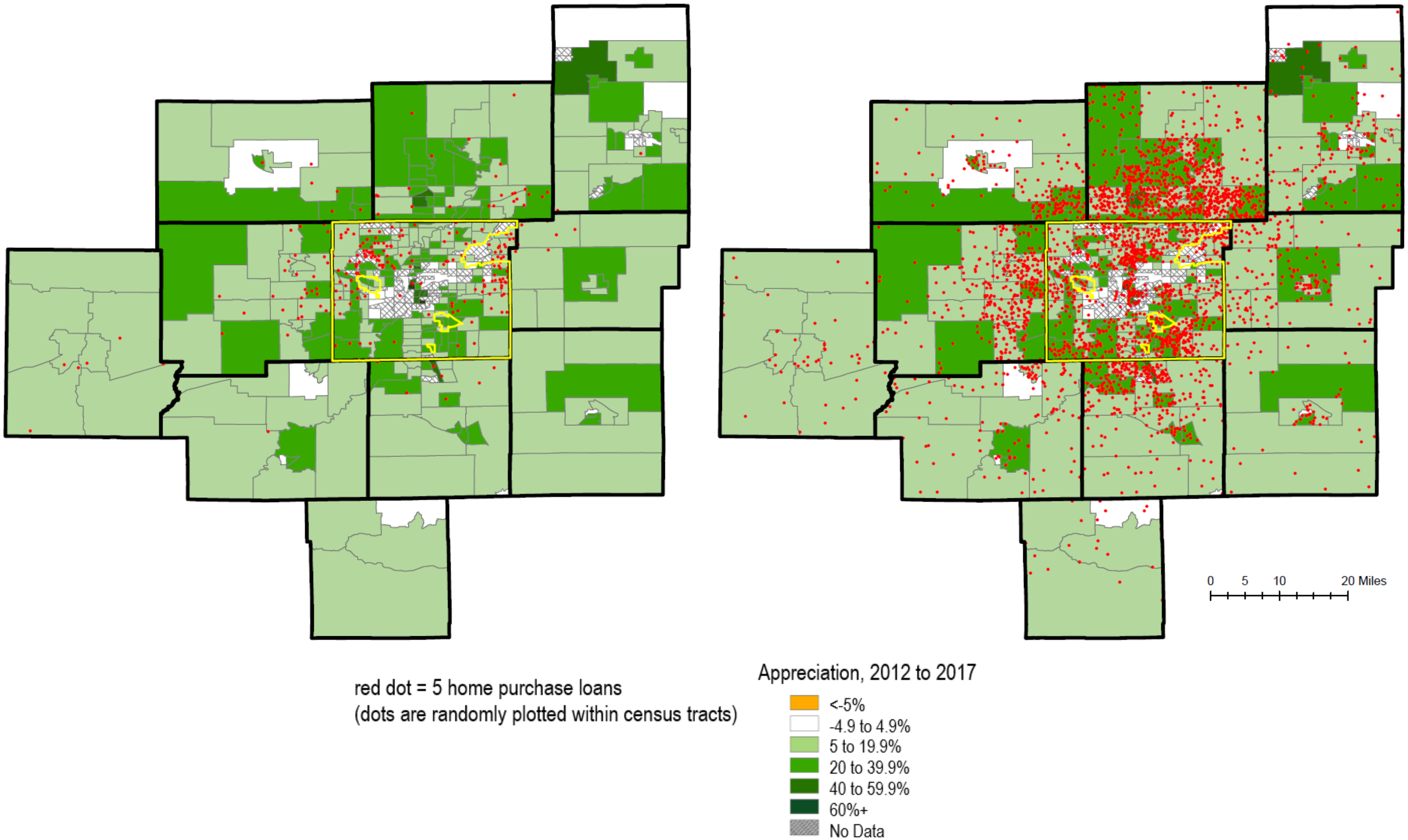


Figure 12. Black and White Homebuying in 2012, against 2012 to 2017 Appreciation Rates, Indianapolis Metropolitan Area



Examining Wealth Gains from, and Financial Returns to, 2012 Black Homebuying

Table 2 looks at the aggregate gain in home value for Black buyers across the 15 metros for the 2012 to 2017 period. The first line shows that the approximately 26,000 Black buyers saw real (inflation-adjusted) estimated appreciation of their home values of $1.71 billion in total. This works out to an average real gain in 2017 dollars of over $65,000 per homebuyer. Of course, buyers of more expensive homes and buyers in higher-appreciation metros tended to see substantially larger gains than this, and buyers of less expensive homes and those in lower-appreciation metros mostly saw lower gains than this. Nonetheless, the overall gains in Black wealth are far from trivial and allowed these homebuyers to share in at least some of the widespread wealth gains that other homeowners saw during this period.

Table 2. Estimated 5-year Gains in Real Housing Wealth for 2012 Black Homebuyers in 15 Metros, Actual and Under Increased Black Homebuying Scenarios*

	Black Share	Black Homebuyers	Total Real Gain (Billions, 2017 $)
Actual Number of Black Homebuyers in 2012	6.80%	26,093	$1.71 B
…If Increased to % Households w/Incomes >$75,000	7.50%	28,949	$1.90 B
…If Increased to % of Homeowners	9.30%	35,897	$2.36 B
…If Increased to % of Households	13.80%	53,267	$3.50 B
…If Increased by ratio of # 2001 Black Loans in US / # 2012 Black Loans in US	N/A	58,187	$3.82 B

*Assumes homebuyers own their homes for at least five years.

Table 2 also provides estimates of 5-year increases in Black housing wealth in the 15 metros under four alternative, hypothetical scenarios. The first increases Black buying to be equivalent to the share of Black households earning at least $75,000 per year (7.5 percent of households in these metros). The second alternative increases Black homebuying level so that it matches the existing percentage of homeowners in the 15 metros who are Black. The third alternative increases the Black homebuying share to match the percentage of all households in these metros who are Black. The last alternative multiplies the actual 2012 level by the ratio of national Black home purchase loans in 2001 to the level in 2012. This uses figures from Goodman et al. (2014), who estimate the number of "missing" home purchase loans in 2012. These scenarios result in real wealth gains from $1.9 to $3.8 billion.

We now turn to the financial return on the downpayment investment that Black homebuyers made in 2012 in these 15 metros. For simplicity, we look at the median Black buyer purchasing a home for a price of about $158,000 in 2012, and make some simplifying assumptions about rents, as well as maintenance and insurance costs, facing this hypothetical homebuyer. We also compare two alternative financing situations. First, we assume that an FHA mortgage is used with a 3.5 percent downpayment, which is the minimum generally required for the program. Then we look at a conventional loan with a 20 percent downpayment, so that no private mortgage insurance would be required. The large downpayment will have the effect of reducing the rate of return on the investment, as the added leverage of the FHA mortgage amplifies the return on investment. Moderating this advantage of the FHA loan, however, is the fact that the FHA charges a substantial up-front mortgage insurance fee as well as an ongoing insurance premium included in the monthly payment.

Table 3 presents the results of the financial analysis. It shows that, given the median 5-year nominal appreciation of 38.2 percent, even with quite conservative assumptions about alternative rental costs for a similar property ($800/month) and homeowner insurance and maintenance costs, both the conventional and FHA financing scenarios yield annual internal rates of return (IRR) of 14.4 and 16.7 percent, respectively. The FHA financing delivers a higher IRR due to the lower downpayment, despite higher financing costs. Raising the alternative rent has a strong effect on the

Table 3. Return on Owning vs. Renting for Median 2012 Black Buyer in 15 Metros Depending on Mortgage Type and Alternative Rental Costs, Assumes Selling after 5 years

	FHA Loan 3.5% downpayment assumed	Conventional Loan 20% downpayment assumed
Initial median price, purchased June 2012	$158,947	$158,947
Nominal appreciation	$60,689	$60,689
Appreciation rate over 5 years	38.2%	38.2%
Downpayment plus out-of-pocket closing costs	$9,653	$31,789
Initial loan including costs and fees (1)	$156,068	$130,929
Gain less selling costs at 7%	$49,563	$49,563
Annual principal + interest on mortgage, 30 year loan (2)	$9,489	$7,143
Alternative annual rent savings at $800/month (3)	$9,600	$9,600
Homeowners' property taxes, insurance, maintenance (4)	$6,302	$6,302
Balance due on sale June 2017	$142,269	$118,230
Net proceeds after mortgage payoff	$61,974	$86,032
Conservative estimate of annualized rate of return (Internal rate of return, IRR) Assumes $800/month alternative rent	16.7%	14.4%
IRR if alternative rent is $1,200 per month (3)	40.5%	25.6%

(1) Assumes 1% origination fee, 1.75% upfront FHA insurance premium
(2) Assumes 0.9% annual FHA insurance premium, 3.6% interest conventional interest rate per Freddie Mac survey, 2012
(3) Conservative assumption used for rent savings to estimate IRR, 5% escalator. IRR for initial $1,200/month also shown
(4) 1.2% of value for taxes (national average), $300/month maintenance, 0.5% for insurance, 5% escalator

estimated IRR. The bottom line in Table 3 shows the impact of increasing the assumption on alternative rent to $1,200 per month. The IRR increases to 40.5 percent for FHA financing, and 25.6 percent for conventional financing.

Black Homebuying by Neighborhood Racial Composition in 2012 and 2017

We now shift to looking at the racial and ethnic composition of the neighborhoods in which Blacks have purchased homes in the same 15 metropolitan areas. We look both at 2012 and 2017 and look for changes over this period. Figure 13 begins by examining the overall growth of homebuying by race and ethnicity. It shows that there were substantial increases in homebuying across the board over this period. The housing recovery really began in 2012 and has continued, with large increases in the volume of buying. The reasons for this are multiple and complex but include a stronger economy, increased household formation, the aging of millennials and the delaying of their homebuying activity, and a modest loosening of tight mortgage markets.

Figure 13 shows that Black buyers experienced the largest percentage increase in the number of homebuyers from 2012 to 2017 among the four ethnoracial groups. This is partly because the level of Black homebuying in 2012 was particularly low coming out of the mortgage crisis. Many Black households had their credit damaged by reckless subprime lending, and many homeowners in Black neighborhoods were in a negative equity situation and property values were slower to recover in such neighborhoods. Thus, Blacks were starting from a particularly low homebuying level in 2012, making a greater percentage increase more likely as the market improved overall. Black homebuying almost doubled from 2012 to 2017, compared to an increase for whites of just under 50 percent. The Latino increase was similar to the figure for whites, with the Asian increase somewhat stronger.

Table 4 shows the shares of each ethnoracial group in the 15 metros purchasing homes in different categories of census tracts by race and ethnicity. It does this for both 2012 and 2017. Focusing first on Black buyers, it is clear that the majority of Black buyers in the 15 metropolitan areas purchased homes in neighborhoods that are not majority Black. This is not surprising for at least two reasons. First, in some of the largest metros in this sample (e.g., Los Angeles) the Black population is small and so the share of Black neighborhoods is small. Riverside and Sacramento have no census tracts where even a simple majority of the population is Black. Second, some majority or predominantly Black tracts have lower levels of single-family or owner-occupied housing stock and, due to a variety of reasons, including historical redlining, continuing discrimination, and other factors, homebuying demand is not very strong in some of these neighborhoods.

Overall in the 15 metros, 29.9 percent of 2012 Black homebuyers purchased homes in majority-Black tracts, with the share dropping to 28.3 percent in 2017. A large share of Blacks in these metros purchase in either ethnoracially diverse tracts or in tracts that are 50-74.9 percent white. Together, these two categories accounted for 48.4 percent of Black purchases in 2012, increasing to 51.1 percent by 2017.

Only about 20 percent of Blacks in the 15 metros purchase homes in tracts that are 75 percent or more white. Blacks are the only one of the four ethnoracial groups that have not seen at least some shift towards buying in 75 percent white tracts. Asians and, especially, Latinos have seen

Figure 13. Increases in Homebuying 2012 to 2017 by Race/Ethnicity, 15 Large Metros

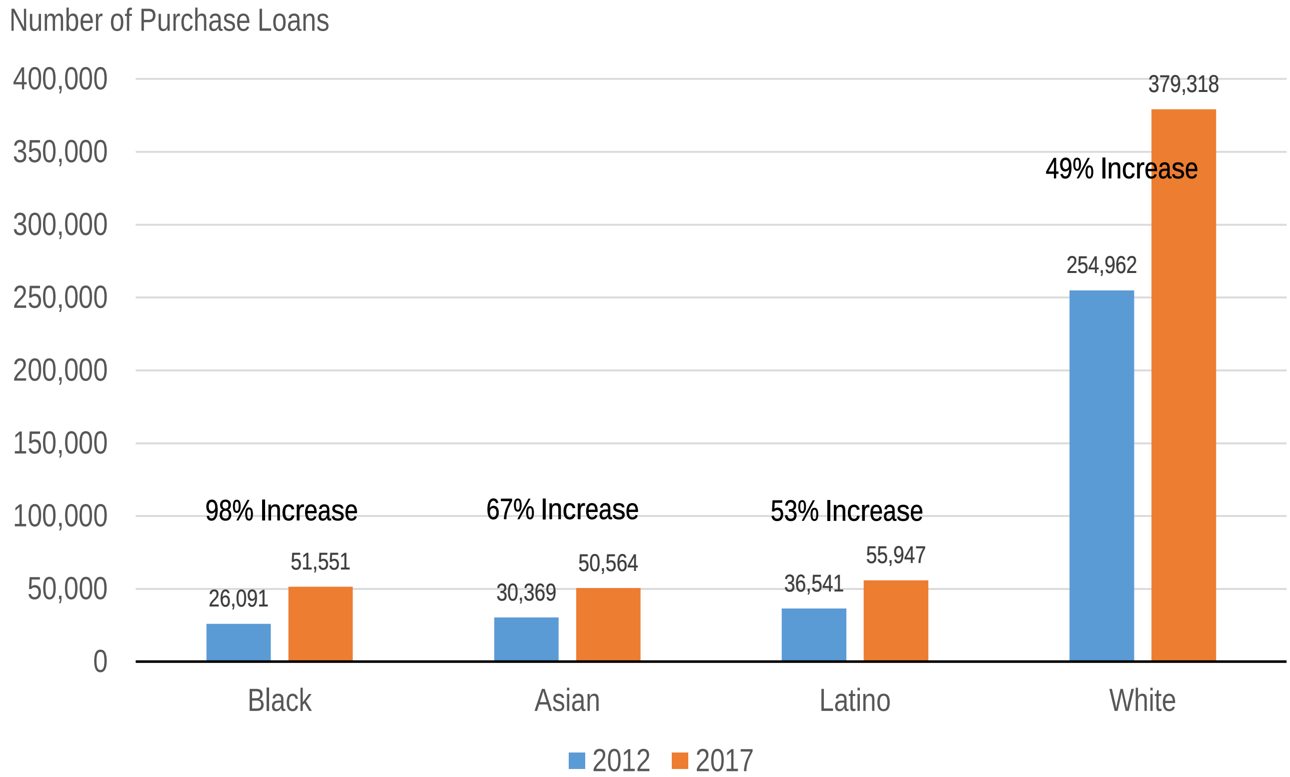


Table 4. The Neighborhood Racial and Ethnic Composition of Homes Purchased by 2012 and 2017 Black Homebuyers, 15 Large Metros

	Black		Asian		Latino		White	
Ethnicity/Race of Tract, 2016	**2012**	**2017**	**2012**	**2017**	**2012**	**2017**	**2012**	**2017**
75%+ White	21.7%	20.5%	19.5%	23.3%	9.2%	15.2%	60.6%	62.3%
50-74.9% White	23.3%	26.2%	28.0%	30.2%	16.1%	21.1%	26.0%	24.6%
Diverse or Majority Latino or Asian	25.1%	24.9%	51.4%	44.7%	72.1%	60.5%	12.0%	11.2%
50-74.9% Black	15.5%	14.0%	0.9%	1.3%	2.1%	2.5%	1.2%	1.5%
75% Black	14.4%	14.3%	0.3%	0.6%	0.5%	0.7%	0.2%	0.5%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

sizeable increases in the share of their purchases in predominantly white tracts. However, Latinos were still less likely than Blacks to purchase in such tracts in 2017, but as will be shown below, this was driven mostly by patterns in Los Angeles and Riverside. In other metros, Latinos were more likely to purchase in predominantly white tracts than Blacks.

The homebuying patterns of the other ethnoracial groups are generally not surprising. All three of the other groups generally do not frequently purchase homes in Black neighborhoods, at least when looking at all 15 metros together. Whites exhibit the strongest tendencies to avoid Black tracts, with only 2 percent purchasing homes in majority-Black tracts in 2017. The ratio is quite similar for Asians and only slightly higher for Latinos, at 3.2 percent.

There is, however, an upward trend in these numbers, especially among whites and Asians. While the percentage-point change is small, the percentage of whites buying in predominantly (over 75 percent) Black tracts more than doubled from 2012 to 2017, increasing from 0.2 percent to 0.5 percent. There was a somewhat similarly proportionate increase among Asians, and also an increase among Latinos. These trends may be concentrated in particular metros, and they may be associated with gentrification pressures, especially in strong market metros.

The significant shift by Latino buyers towards neighborhoods that were majority white as of the 2016 ACS suggests that the number of tracts that will shift into the "diverse or majority Asian or Latino" category may increase over time, and thus it may be that the short term trend of Latinos and Asians towards whiter neighborhoods may shift back towards neighborhoods that will themselves shift into the "diverse" category.

Notwithstanding the increase in the very small percentage of whites purchasing in predominantly Black neighborhoods, the trend in the other direction is also increasing. The share of whites purchasing in predominantly white neighborhoods actually increased, from 60.6 percent in 2012 to 62.3 percent in 2017. Generally, whites continue not to purchase homes in diverse and Black neighborhoods, and there is some modest movement even further in this direction.

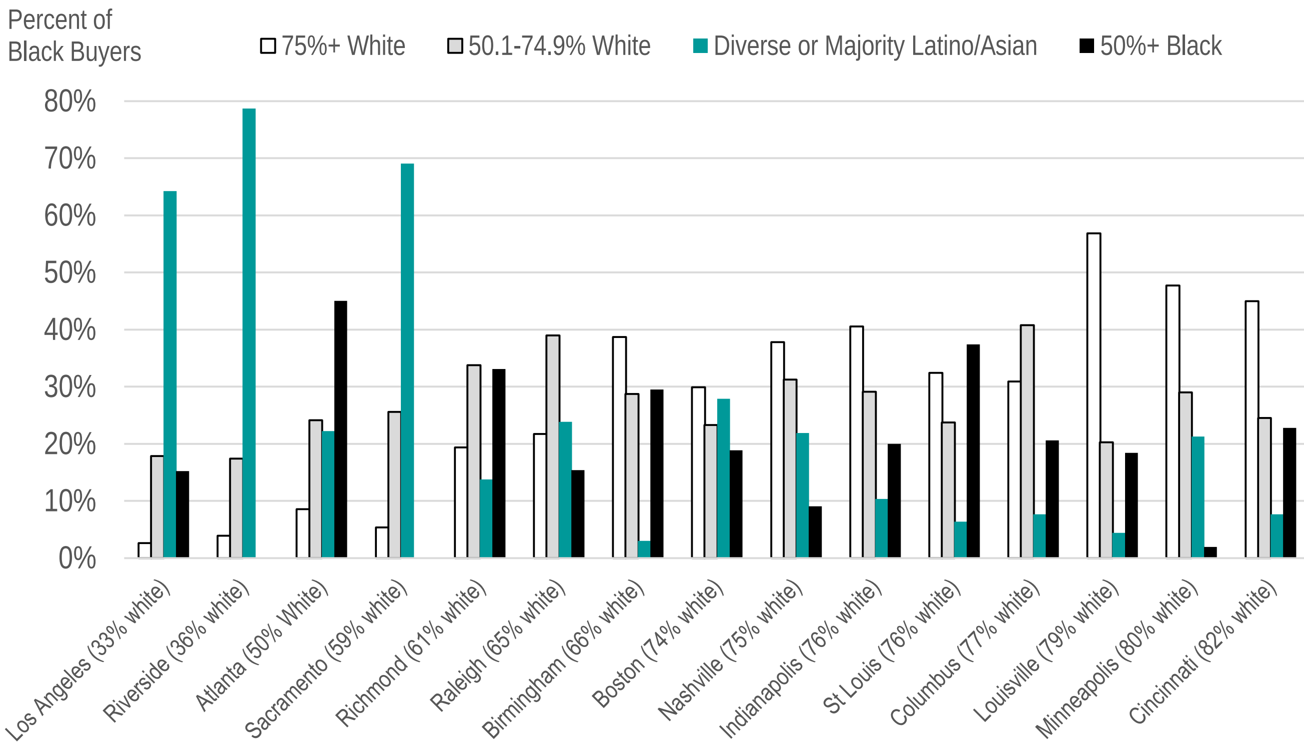
Differences in Homebuying by Neighborhood Racial/Ethnic Composition Across Metros

We now examine differences across the 15 metros in the racial and ethnic composition of the neighborhoods where Blacks buy homes. We focus on 2017, though 2012 patterns were generally similar in most metros. Figure 14 shows that the distribution of Black buyers across neighborhoods of different ethnoracial composition varies greatly among the 15 metros. In metros such as Los Angeles and Riverside where the white population is a minority of the total population, and the Latino population is large, there are fewer majority-white census tracts, so Black home purchases are often in ethnically diverse or majority Latino or Asian tracts (shown in green in Figure 14).

The Atlanta metro population has a large Black population, and the share of Black purchases in majority-Black neighborhoods is the highest (45 percent) among the 15 metros. High Black shares in majority Black neighborhoods also occur in Richmond (33 percent), Birmingham (30 percent), and St. Louis (38 percent).

Given the historic barriers to Blacks purchasing homes in white neighborhoods, we examined the extent to which Black homebuying in 2017 occurred in predominantly (75 percent or more) white census tracts and compared it to Latino and white buying in the same metros. Figure 15 shows the percent of Black, Latino and white 2017 buyers who bought homes in predominantly white tracts. (Percentages for Black buyers are labeled.) The metropolitan areas are ordered from the one with the largest white population (Cincinnati at 82 percent white) to the one with the smallest white population (Los Angeles at 33 percent white). Not surprisingly, the share of whites

Figure 14. Spatial Distribution of 2017 Black Homebuyers by Racial Composition of Tract*



*Tract race/ethnicity per 5-year 2016 American Community Survey

purchasing in predominantly white tracts is always much larger than the share of Blacks buying in such tracts, and usually substantially larger than the share of Latinos buying in such tracts as well. Of course, in metros such as Los Angeles and Riverside that are minority-white, it is not surprising that quite small shares of Black buyers purchase in predominantly white tracts, as predominantly white tracts are not a very large share of tracts.

However, in most of the metros, large shares of white buyers purchased in predominantly white tracts. In ten of the 15 metros more than half of white buyers purchased in predominantly white tracts, and in eight of the 15 metros, over 75 percent of white buyers purchased homes in such tracts. In Cincinnati, Louisville, and St. Louis, over 85 percent of white buyers purchased in predominantly white tracts.

In comparing the metros that are predominantly white, ranging from Nashville at 75 percent to Cincinnati at 82 percent white, there is substantial variation in the share of Blacks who purchased homes in predominantly white tracts, ranging from just 31 percent in Columbus to almost 57 percent in Louisville.

Figure 15. Percent of Buyers Purchasing in Predominantly (75%+) White Tracts in 2017

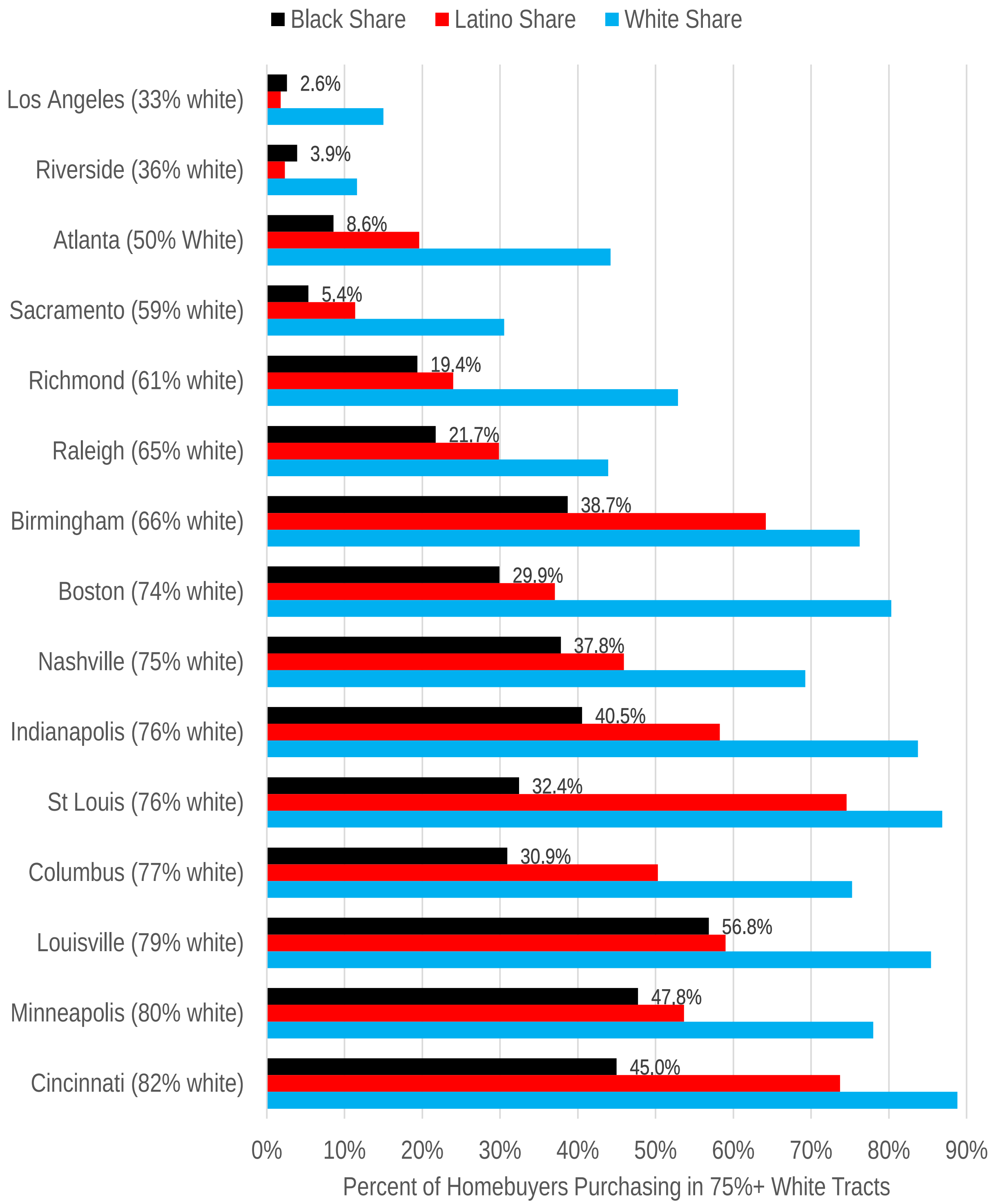


Figure 16. Black-White and Latino-White Ratios in Predominantly White Tracts, 2017

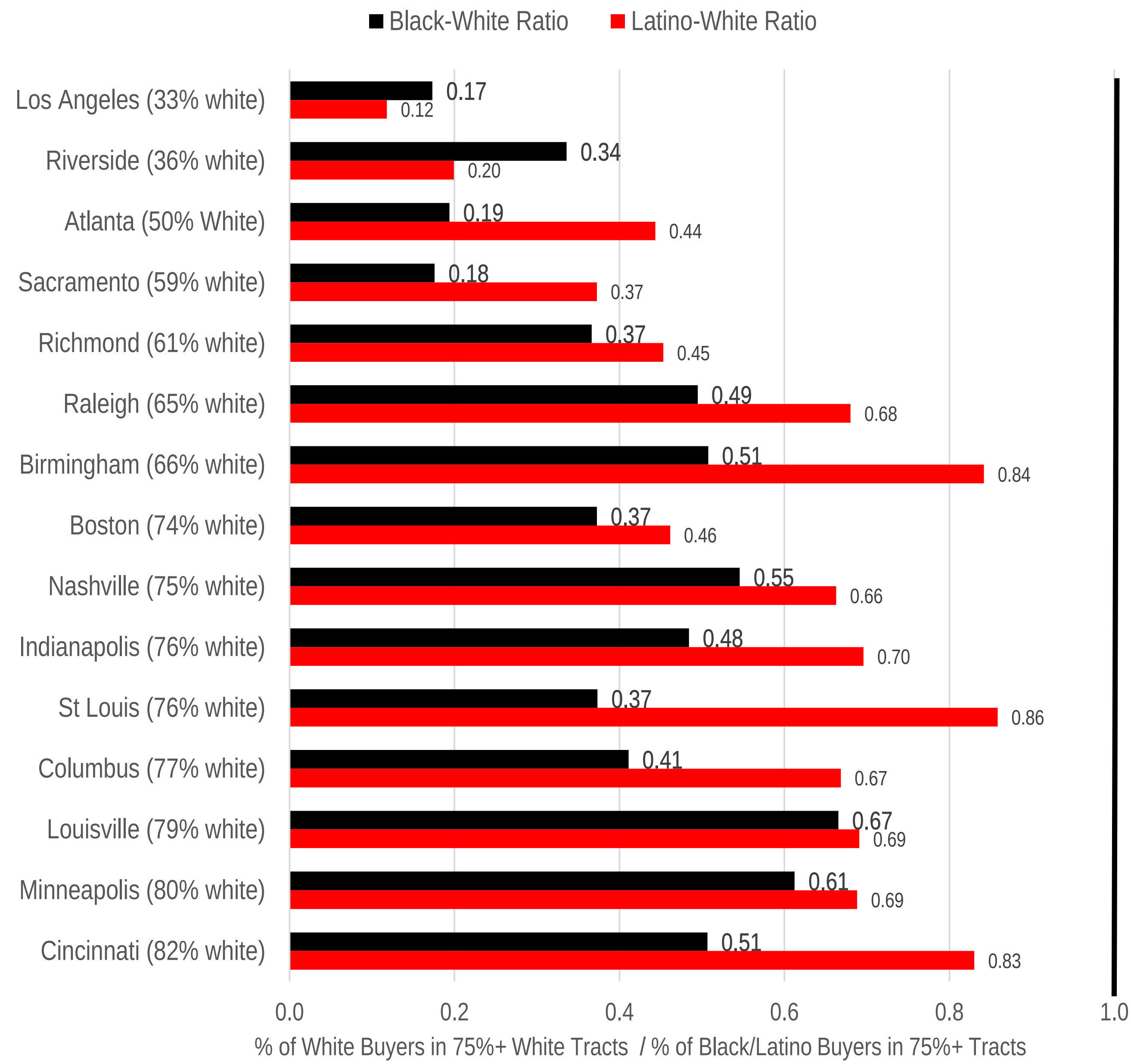


Figure 16 uses the data in Figure 15 to compare the share of Black buyers in predominantly white tracts to the share of white buyers in such tracts (the "Black-white ratio"). For comparison purposes, Figure 16 also provides a Latino-white ratio. It shows that the share of Black buyers purchasing in white tracts was less than 70 percent of the corresponding share of white buyers in all 15 metros, and below 50 percent in 10 of the metros. Black homebuyers are far less likely than whites to purchase in predominantly white neighborhoods, suggesting that Blacks continue to have limited access to such neighborhoods. The five metros that are less than 62 percent white all have Black-white ratios below 40 percent. What is more noteworthy, however, is the fact that three metros that are greater than 70 percent white had Black-white ratios that were substantially below 0.5, including Boston (0.37), St. Louis (0.37), and Columbus (0.41).

Comparing the Black-white and Latino-white ratios can also be used to identify whether Blacks buy in predominantly white neighborhoods as much as Latinos do. Black buyers were substantially less likely to end up purchasing homes in predominantly white neighborhoods compared to Latino buyers in 13 of the 15 metros. Only in Los Angeles and Riverside, the two metropolitan areas with the smallest white populations and with Latino populations exceeding 40 percent, were Latino buyers less likely to buy in white neighborhoods than Black buyers. The differences between Black and Latino locational attainment in predominantly white tracts are particularly strong in Atlanta, Sacramento, Birmingham, St. Louis, Columbus, and Cincinnati. In these metros, the Latino-white ratio is at least 50 percent greater than the Black-white ratio. The fact that Black-white ratios are substantially smaller than Latino-white ratios in most of these metros suggests that Blacks face higher levels of segregation away from predominantly white neighborhoods than Latinos.

The Geographic Concentration of Black Homebuyers within Metropolitan Areas

We next look at the degree to which Black homebuyers are concentrated in a smaller versus larger share of census tracts in a metropolitan area. To do this for each metro, we first look at the share of Black buyers who purchased a home in 2017 in the twenty percent of metro tracts that had the most Black homebuying activity that year. We also look at the share of all buyers who purchased a home in the twenty percent of tracts that had the most homebuying by all ethnoracial groups, combined. Figure 17 presents these shares for the 15 metros.

Figure 17 shows that the share of Blacks purchasing homes in the top twenty percent of tracts (when ranked by the number of Black homebuyers) ranges from 62 percent in Richmond to 82 percent in Los Angeles. However, this simple measure might be driven by the overall geographic concentration patterns of homebuyers due to zoning and other factors. Figure 18 then provides a concentration ratio, which is equal to the share of Blacks purchasing homes in the top twenty percent of tracts when ranked by the number of Black buyers divided by the share of all buyers purchasing homes in the top twenty percent of tracts when ranked by total purchases. This ratio measures the *relative* concentration of Black buyers compared to the overall concentration of homebuyers

Figure 18 shows that the Black-to-total concentration ratio ranges from 1.33 in Birmingham to 2.06 in Boston. Boston exhibits a particularly strong concentration of Black buyers, followed by St. Louis and Los Angeles.

Figure 17. Share of 2017 Black Buyers Buying in Top Black Quintile vs. Share of Total Buyers Buying in Top Total Quintile

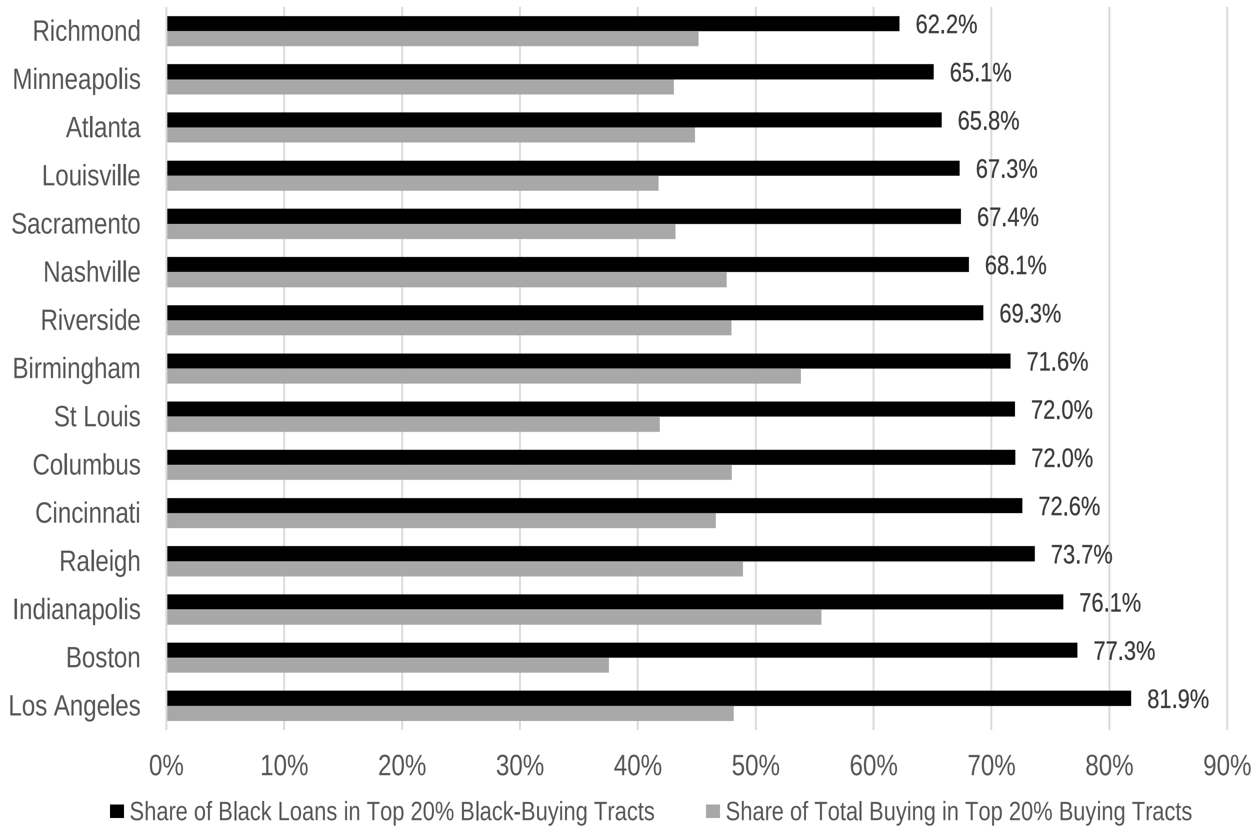
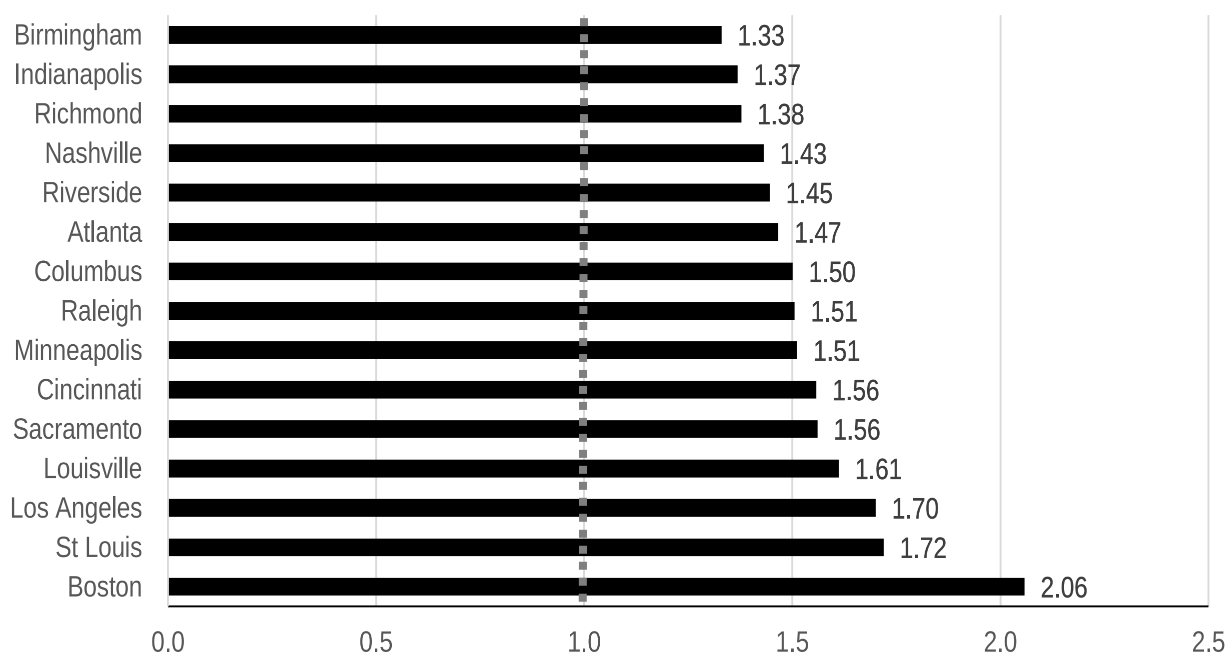


Figure 18. Black-to-Total Concentration Ratio, 2017



Looking More Closely at Homebuying Patterns by Neighborhood Racial and Ethnic Composition in Four Metros

Figures 19 through 22 illustrate Black and white homebuying in 2017 in four of the 15 metros. Figure 19 indicates that Black homebuying, while still disproportionately located in predominantly (75 percent or more) Black tracts, is quite dispersed across the more central counties of the Atlanta metropolitan area. The exception here is in the predominantly white census tracts of north Fulton and north DeKalb counties, where Black buying is scarce. There is also very little Black homebuying in the predominantly white neighborhoods in the more exurban counties.

Figure 19 also shows that white homebuying in the Atlanta metro is disproportionately concentrated in predominantly and majority white census tracts in the north-central part of the metropolitan area. These are mostly affluent, white neighborhoods. There is also generally very little white homebuying in majority and predominantly Black neighborhoods, although a closer examination of patterns within and adjacent to the City of Atlanta (a very small portion of the metro) indicates significant white homebuying in predominantly Black neighborhoods undergoing significant gentrification pressures.

Figure 20 shows that a large portion of the Los Angeles metro, unlike most of the other metros, falls in the "diverse or majority Latino/Asian" category. Recognizing the overall demographics of the metro, this is no surprise. As shown in Figure 14, over 60 percent of Black buyers purchase in these tracts, with only about 15 percent purchasing in the relatively small number of majority Black tracts. Because most homebuying in Los Angeles occurs in diverse or majority Latino/Asian tracts, Los Angeles has the second smallest (after Riverside) share of whites purchasing in predominantly White tracts, at just 15 percent.

Figure 21 shows that Black buyers are relatively concentrated in majority Black tracts in St. Louis. In fact, St. Louis is second only to Atlanta in the share of Blacks buying in majority Black tracts, but St. Louis has far fewer Black neighborhoods with significant homebuying activity (of any kind). Moreover, the St. Louis metro is far less Black (at 18 percent) compared to Atlanta (at 34 percent). The right-hand map in Figure 21 shows that white buyers overwhelmingly purchase homes in majority white neighborhoods. In fact, 87 percent of white buyers in the metro purchase in predominantly white neighborhoods. Arguably, depending on the measures used, St. Louis has the most segregated homebuying patterns of the 15 metros, in terms of Black-nonblack patterns. One illustrative statistic from Figure 16, is that while the Latino-white homebuying ratio in predominantly white tracts is 0.86 (suggesting that Latinos appear to have relatively good access to white neighborhoods), the Black-white ratio is only 0.37.

Figure 22 then shows the Black and white homebuying patterns in Indianapolis. In comparison to St. Louis, Black buyers in Indianapolis are less concentrated in majority-Black tracts. Only about 20 percent of Black buyers purchase in majority Black tracts, with about 40 percent purchasing in predominantly white tracts. Few whites in the Indianapolis metro, like most metros however, purchase in diverse or Black tracts, with 84 percent purchasing in predominantly white neighborhoods.

Figure 19. **Black and White Homebuying in 2017 versus Racial/Ethnic Composition, Atlanta Metropolitan Area**

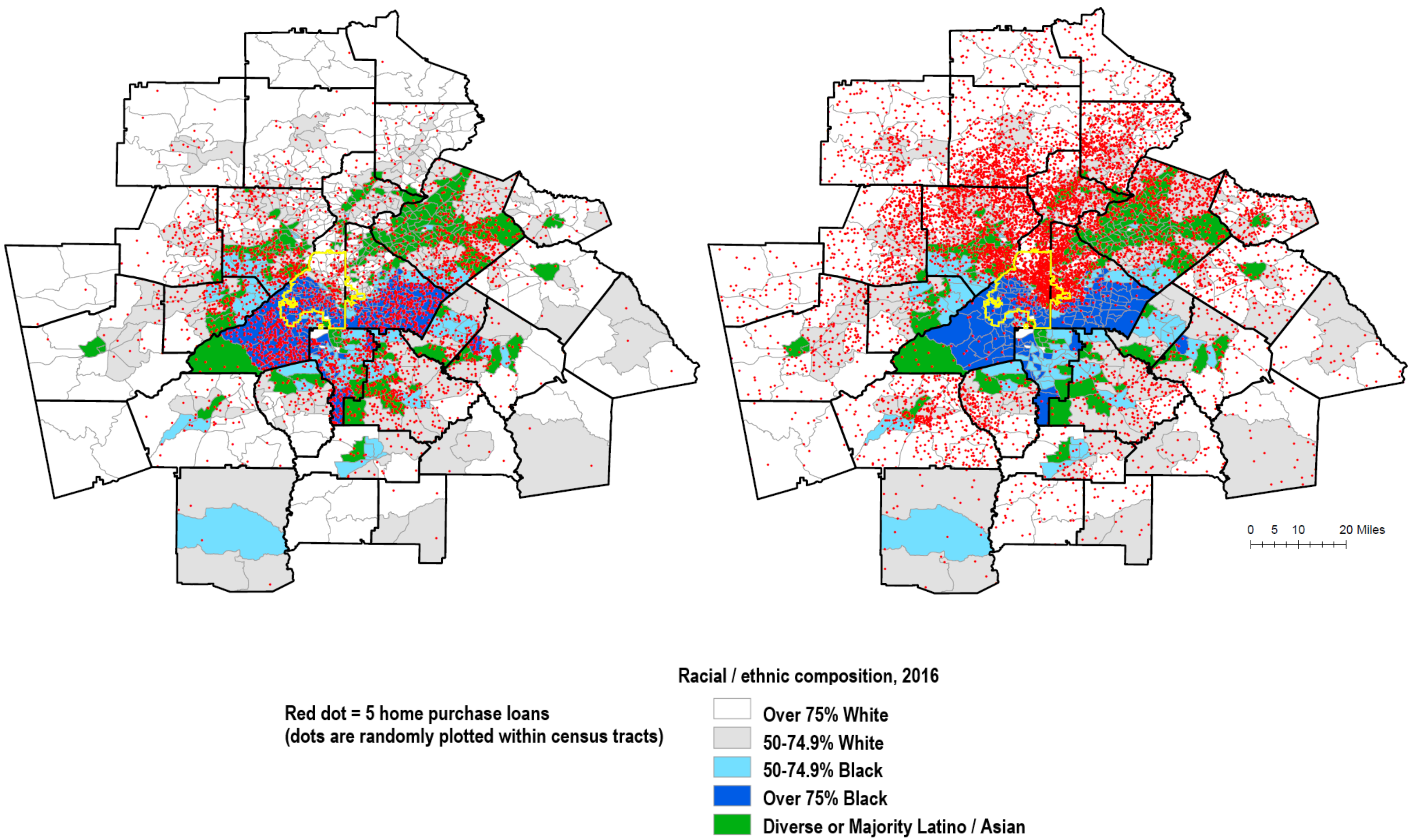


Figure 20. Black and White Homebuying in 2017 versus Racial/Ethnic Composition, Los Angeles Metropolitan Area

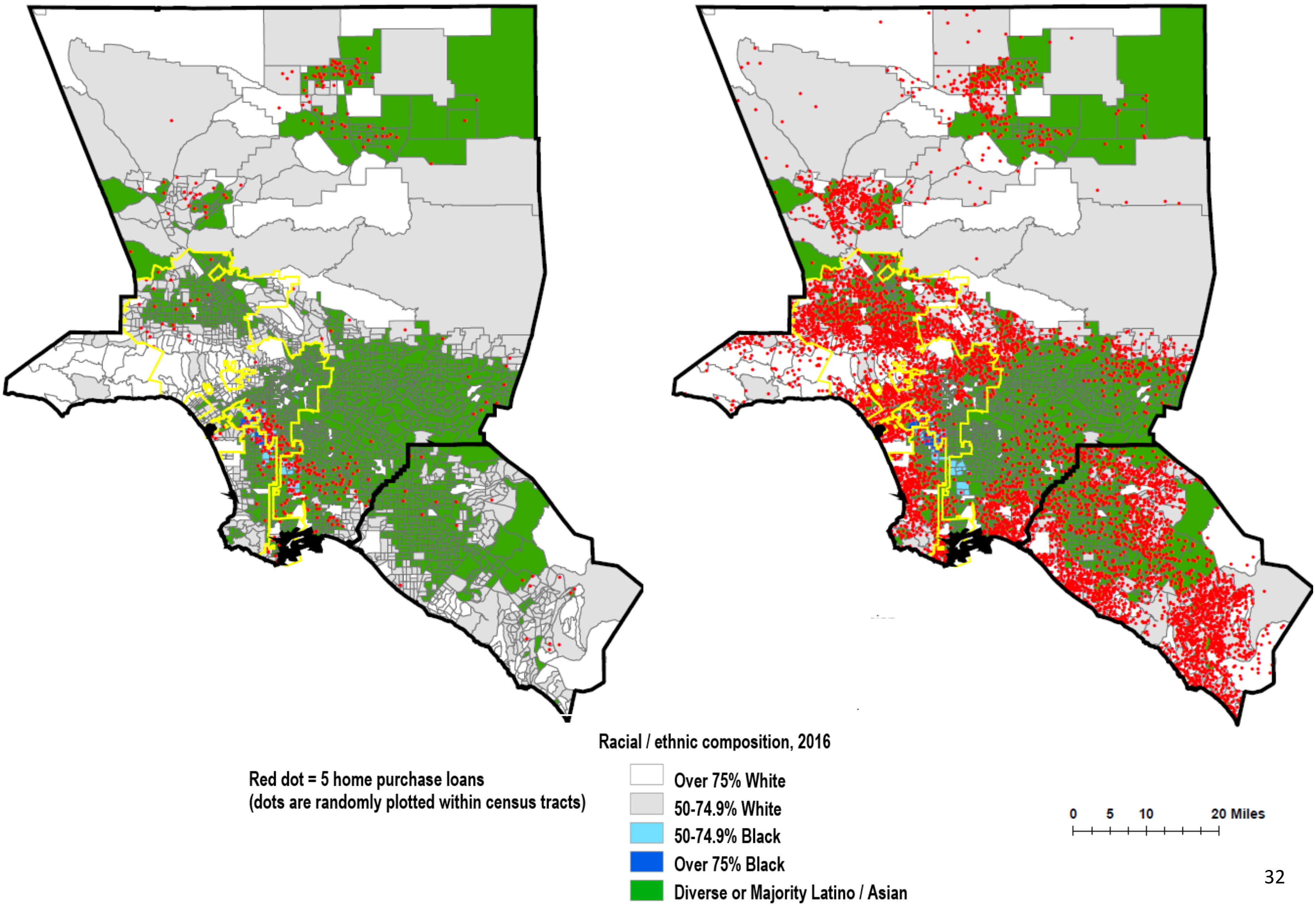


Figure 21. Black and White Homebuying in 2017 versus Racial/Ethnic Composition, St. Louis Metropolitan Area

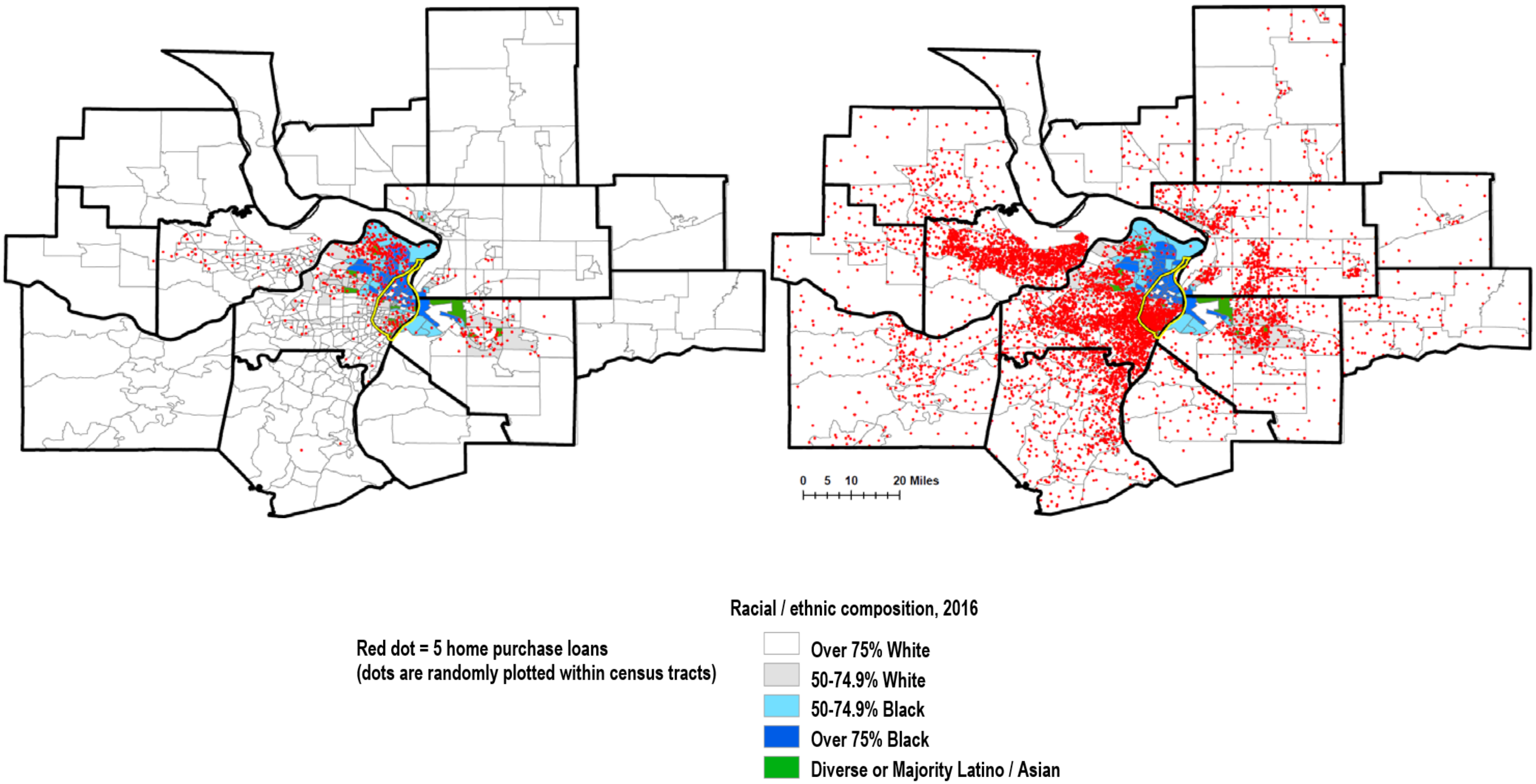
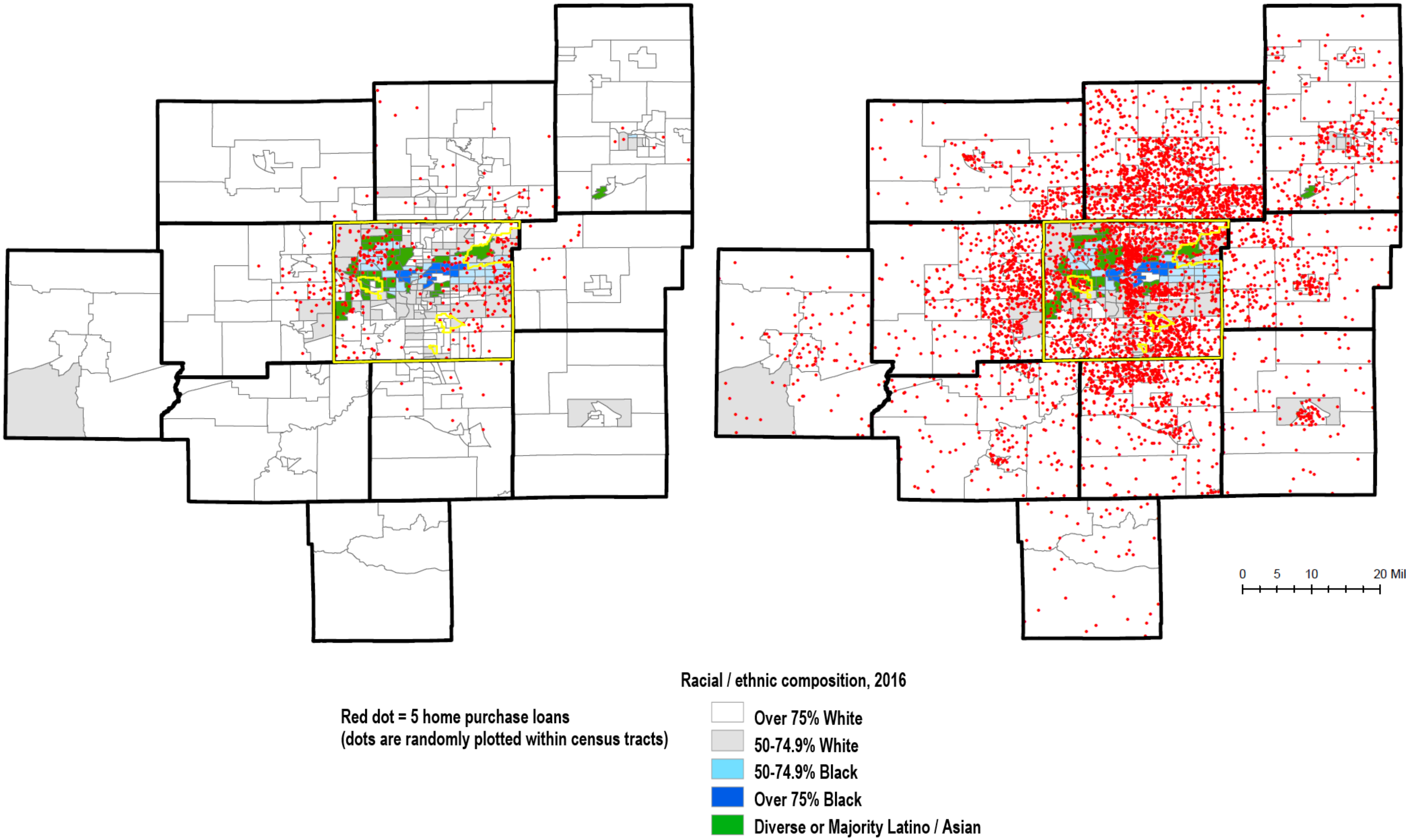


Figure 22. Black and White Homebuying in 2017 versus Racial/Ethnic Composition, Indianapolis Metropolitan Area



Conclusions and Policy Recommendations

This paper includes the following key findings:

- In the 15 metros, the median 5-year estimated appreciation for Blacks buying homes in 2012 was 38.2 percent, substantially higher than the 29.9 percent median for white buyers. Latino homebuyers saw particularly strong appreciation (63.7 percent median) because they were disproportionately located in high-appreciation metros, such as Los Angeles and Riverside.
- A very small portion of 2012 buyers of any ethnoracial group saw property values increase less than 5 percent, or decline, over the 5-year period. Only 3.2 percent of Black buyers in the 15 metros fell into this category. Almost 75 percent of homes purchase by Blacks increased over 20 percent over the five years, and over 48 percent appreciated over 40 percent. These figures compare to 75 percent of white homes appreciating at over 20 percent and 32 percent appreciating at over 40 percent.
- The strength of the metropolitan housing market is an extremely important driver of appreciation across all ethnoracial groups. In metros experiencing strong appreciation, such as Riverside, Los Angeles, and Atlanta, all ethnoracial groups saw median 5-year median appreciation rates of over 40 percent.
- In eight of the nine metros that saw 2012 to 2017 metropolitan appreciation rates above 25 percent, Black and Latino median appreciation rates were higher than white rates. In Los Angeles and Sacramento, the differences in median appreciation rates between Black and white buyers were more than ten percentage points over five years.
- Conversely, in the three metros where the 5-year metro appreciation rate was below 16 percent, median estimated appreciation of 2012 Black buyers lagged that of white buyers.
- When just looking at low- and moderate-income homebuyers in 2012, the patterns above were generally consistent with those for buyers of all income levels. Screening out middle- and upper-income buyers did not have a material impact on the results.
- Estimated 5-year gains for the roughly 26,000 Black homebuyers in 2012 in these 15 metros amounts to over $1.7 billion in 2017 dollars, assuming buyers own their homes for at least five years. This corresponds to an average of about $65,000 in real wealth gain per buyer. Under various scenarios of greater Black buying in 2012, this number increases to a level ranging from $1.9 billion to $3.8 billion.
- An analysis of the median Black buyer in these 15 metros shows that, over the five-year period, she experienced an internal rate of return estimated to range from 14.4 percent to 40.5 percent, depending on the type of financing used and, especially, the assumed amount for what it would cost to rent a similar house or apartment.
- Home purchase loans to Blacks almost doubled from 2012 to 2017 in these 15 metros, compared to a 53 percent increase for Latinos, and a 49 percent increase for whites. While serious barriers to Black homebuying remain, these figures suggest significant improvement compared to the very challenging housing market of 2012.
- The distribution of Black homebuyers across neighborhoods of different ethnoracial composition is highly dependent on the ethnoracial composition of the metro. In Los Angeles, Riverside, and Sacramento, where the Black population is relatively small and the Latino and

Asian populations are relatively large, Blacks were most likely to buy in neighborhoods that were either highly diverse or were majority Latino or Asian. In metros that are over 75 percent white, Blacks are most likely to purchase in majority- or predominantly-white neighborhoods, because there are so many of them. The one exception here is St. Louis, which is particularly segregated; over 37 percent of Blacks purchased in predominantly Black neighborhoods in 2017, a high share. Large shares of Blacks also purchased in predominantly Black neighborhoods in Atlanta, Richmond and Birmingham, partly because these metros have large Black populations and a larger number of Black neighborhoods.

- In 13 of the 15 metros (the exceptions are Los Angeles and Riverside), the share of Latino homebuyers purchasing in predominantly white neighborhoods exceeded the share of Blacks buying homes in predominantly white neighborhoods. The differentials exceeded 10 percentage points in 9 metros.
- The percentage of white buyers purchasing in predominantly white neighborhoods actually increased from 60.6 percent in 2012 to 62.3 percent in 2017, despite an overall trend of ethnoracial diversification. Overall, in most of the metros, the evidence on white preference for predominantly white neighborhoods (and avoidance, especially of predominantly Black neighborhoods) remains strong. There are exceptions in some neighborhoods where white homebuying in predominantly Black tracts is consistent with gentrification pressures.
- There is a substantial variation in the share of Blacks who purchase homes in predominantly white neighborhoods, even among metros that are more than 75 percent white. This figure ranges from 31 percent in Columbus to 57 percent in Louisville.
- The geographic concentration of Black buyers in the top quintile of neighborhoods (by the number of Black homebuyers) varies across the 15 metros. In the Boston metro, Black buyers are more than two times as concentrated as homebuyers overall. At the other end of the spectrum, Blacks in Birmingham are only about 33 percent more concentrated than overall homebuyers. The median metro exhibits a Black-to-total concentration ratio of about 1.5, meaning Blacks are 50 percent more geographically concentrated than homebuyers overall.

These findings, together with the broader evidence on minority homebuying, bring us to the following policy recommendations:

The first implication here is that "metro matters." Black homebuyers, as well as homebuyers more generally, are much more likely to fair well financially in appreciating metros. Conversely, homes in metros with modest overall appreciation carry a higher risk of losing value over time. Moreover, Blacks have done particularly well—compared to white buyers—in metros with strong housing markets, but have lagged whites in weaker metros. Housing counselors, policy makers and others should pay particular attention to metro-level housing market trends. In shrinking or declining metros, promoting homeownership should be done carefully and consider possible stagnant home value trends. Of course, there are reasons for promoting homeownership other than asset-building, but the financial aspects should be part of the decision-making and policymaking process.

Policymakers and practitioners should also pay attention to regional data that may indicate an overvaluation of housing in the metropolitan market. Purchasing a home in 2012 at the bottom of the appreciation cycle provided buyers with substantial asset-building opportunities. But as the top of a market cycle draws near, purchasing becomes risker. While a better-regulated mortgage market suggests that most metros are not due for a sudden collapse in values of the sort experienced in the late 2000s, the possibility of declines in value certainly remain. Local housing financing programs should factor the housing market cycle into their underwriting, especially focusing on moderating payment-to-income ratios when the market may be reaching the top of a cycle.

After years of weak interventions to slow foreclosures and address negative equity, it remains unclear whether federal policymakers and mortgage servicers are in a substantially better position to respond to a future, serious downturn in home values or spikes in foreclosures, either at regional or national levels. The evidence is strong that rapid interventions in the form of payment and principal reductions are the most promising way to help homeowners weather major downturns (Immergluck, 2015). State governments should be prepared to step in with principal reduction or refinancing programs if federal policymakers and loan servicers are not.

Maintaining strong consumer protections adopted under the 2010 Dodd-Frank Act may be the single-most important requirement for constraining downside risks to Black homeownership. High-risk, high-cost and frequently predatory mortgage lending results in a high propensity for failed homeownership. Even if a homeowner maintains ownership of her home, high financing costs or barriers to refinancing when mortgage rates decline will reduce the financial return on ownership, potentially making it a losing proposition. Maintaining the Qualified Mortgage and Ability to Repay regulations, and a strong and assertive Consumer Financial Protection Bureau (CFPB), are especially important here. In the event that CFPB enforcement wanes, state attorneys general and mortgage regulators should increase enforcement activities. Mortgage companies once again constitute a majority of mortgage lending in the U.S. and constitute an even larger share of FHA lending. These companies are generally regulated by the CFPB, rather than bank regulators.

Providing for robust Federal Housing Administration (FHA) lending programs, which Black buyers disproportionately rely on and which provide for smaller downpayments, is important. The FHA proved to be a critical countercyclical source of home lending during the mortgage crisis when other parts of the mortgage market pulled back severely, especially from Black neighborhoods and borrowers (Immergluck, 2011). There is the potential for the FHA to be an even stronger countercyclical force in the event of regional or national housing downturns.

It is critically important to limit the extent of risk-based loan pricing, a practice in which borrowers with lower credit scores and/or lower downpayments pay substantially higher interest rates. This has the perverse effect of increasing the housing cost burden for such households and thereby raising the risk of foreclosure and making it more difficult for them to maintain some savings in the event of an adverse event such as job loss. Proposals to privatize or partially privatize the secondary mortgage market would likely result in greater levels of risk-based pricing and could prove highly detrimental to Black homeownership and home values in Black neighborhoods (Immergluck, 2015).

Local and state policymakers should provide carefully designed downpayment assistance programs aimed at moderate-income homebuyers. These should include the ability to recapture subsidy to use for subsequent rounds of qualified homebuyers. Permanent affordability models such as community land trusts should also be considered. Policymakers should also consider providing or increasing the availability of low-downpayment, affordable mortgages through mortgage revenue bond programs. Another vehicle for policymakers and funders to provide affordable home financing is via supporting community development financial institutions (CDFIs), either those based locally, or by encouraging a national CDFI to establish operations in the area.

Finally, stronger fair lending and community reinvestment policy and enforcement are critical to better support Black homebuying and appreciation in Black and diverse neighborhoods. Fair lending enforcement is the responsibility of federal bank regulators, the U.S. Department of Housing and Urban Development (HUD), and the CFPB. A focus on large lenders and lenders active in metros with substantial Black populations will support Black homeownership. Attention to disparate impact, as well as disparate treatment, discrimination is also important. In the community reinvestment arena, maintaining attention to localized or regional assessment areas in the enforcement of the Community Reinvestment Act (CRA) is critical. In the long run, the expansion of CRA to cover all mortgage lenders, including mortgage companies, could have a significant impact on improved access to credit in Black neighborhoods and for prospective Black homebuyers.

References

Battle, J., Mancini, S., Saunders, M., and Williamson, O. 2016. Toxic transactions: how land installment contracts once again threaten communities of color. Washington, DC: National Consumer Law Center, https://www.nclc.org/issues/toxic-transactions-threaten-communities-of-color.html.

Bayer, P., Ferreira, F. and Ross, S.L., 2017. What Drives Racial and Ethnic Differences in High-Cost Mortgages? The Role of High-Risk Lenders. *The Review of Financial Studies*, *31*:175-205.

Bhutta, N., and Ringo, D. 2014. The 2013 Home Mortgage Disclosure Act data. *Federal Reserve Bulletin* 100(6): 1–37. https://www.federalreserve.gov/pubs/bulletin/2014/pdf/2013_HMDA.pdf.

Boehm, T. and Schlottmann, A. 2004. Wealth Accumulation and Homeownership. U.S. Department of Housing and Urban Development. December. https://www.huduser.gov/publications/pdf/wealthaccumulationandhomeownership.pdf.

Bostic, R. and Lee, K. 2009. Homeownership: America's Dream. In Blank, R. and Barr, M., eds. *Insufficient funds: Savings, assets, credit, and banking among low-income households*. Russell Sage Foundation, pp. 218-256.

Bogin, A., Doerner, W., Larson, W. 2016. Local house price dynamics: New indices and stylized facts. Working Paper 16-0. Federal Housing. Finance Agency. June.

Bucholz, D., Larrimore, J., and Thompson, J. 2016. Federal Reserve surveys of the economic well-being of US households: SCF and SHED. Urban Institute. January 21. https://www.urban.org/sites/default/files/urban_institute_data_talk_scf_shed_combinedv2.pdf

Campbell, J. and Cocco, J. 2014. A model of mortgage default. February. https://scholar.harvard.edu/files/campbell/files/mortdefault13022014.pdf.

Dettling, L., Hsu, J., Jacobs, L., Moore, K., and Thompson, J. 2017. Recent trends in wealth-holding by race and ethnicity: Evidence from the survey of consumer finances. Fed Notes. Federal Reserve Board of Governors. September 27. https://www.federalreserve.gov/econres/notes/feds-notes/recent-trends-in-wealth-holding-by-race-and-ethnicity-evidence-from-the-survey-of-consumer-finances-20170927.htm.

Dickerson, A.M., 2012. Public interest, public choice, and the cult of homeownership. *UC Irvine L. Rev.*, *2*: 843-869.

Emmons, W. 2017. Homeownership and the racial wealth divide. *Housing Perspectives*. Federal Reserve Bank of St. Louis. July. https://www.stlouisfed.org/~/media/Publications/Housing-Market-Perspectives/2017/Issue-5/HMP_issue5_web2.pdf.

Federal Reserve Board. 2017. SCF chartbook. Federal Reserve Board. October 17. https://www.federalreserve.gov/econres/files/BulletinCharts.pdf.

Fischer, M., 2013. Black and white homebuyer, homeowner, and household segregation in the United States, 1990–2010. *Social science research*, *42*: 1726-1736.

Fischer, M. and Lowe, T. 2015. Homebuyer neighborhood attainment in black and white housing outcomes during the housing boom and bust. *Social Forces* 93: 1481-1512.

Goodman, L., Zhu, J. and George, T. 2014. Where Have all the loans gone? The impact of credit availability on mortgage volume," *Journal of Structured Finance* 20, No. 2: 45-53. DOI: https://doi.org/10.3905/jsf.2014.20.2.045.

Goodman, L. and Mayer, C., 2018. Homeownership and the American Dream. *Journal of Economic Perspectives*, *32*: 31-58.

Grinstein-Weiss, M., Key, C., Guo, S., Yeo, Y.H. and Holub, K., 2013. Homeownership and wealth among low-and moderate-income households. *Housing Policy Debate*, *23*: 259-279.

Herbert, C., McCue, D., and Sanchez-Moyano, R. 2013. Is homeownership still an effective means of building wealth for low-income and minority households? (Was it ever?). Harvard Joint Center for Housing Studies. HBTL-06. September. http://www.jchs.harvard.edu/sites/default/files/hbtl-06.pdf.

Immergluck, D. 2009. *Foreclosed: High-risk lending, deregulation, and the undermining of America's mortgage market.* Ithaca: Cornell University Press.

Immergluck, D. 2011. From minor to major player: The geography of FHA lending during the US mortgage crisis. *Journal of Urban Affairs*, *33*:1-20.

Immergluck, D. 2015. *Preventing the next mortgage crisis: The meltdown, the federal response, and the future of housing in America*. Rowman and Littlefield.

Newman, S. and Holupka, C.S. 2016. Is timing everything? Race, homeownership and net worth in the tumultuous 2000s. *Real Estate Economics* 44: 307-354.

Raymond, E., 2018. Race, uneven recovery and persistent negative equity in the southeastern United States. *Journal of Urban Affairs*, *40*: 824-837.

Raymond, E., Wang, K. and Immergluck, D., 2016. Race and uneven recovery: Neighborhood home value trajectories in Atlanta before and after the housing crisis. *Housing Studies*, *31*: 324-339.

Reid, C.K. 2005. Achieving the American dream? A longitudinal analysis of the homeownership experiences of low-income families. Center for Social Development Working Paper 05-20. https://csd.wustl.edu/Publications/Documents/WP05-20.pdf.

Reid, C.K., Bocian, D., Li, W. and Quercia, R.G., 2017. Revisiting the subprime crisis: The dual mortgage market and mortgage defaults by race and ethnicity. *Journal of Urban Affairs*, *39*: 469-487.

Seidman, E. and Bai, B. 2016. Where have all the small loans gone? Urban Institute. April 18. https://www.urban.org/urban-wire/where-have-all-small-loans-gone.

Shapiro, T., Meschede, T., and Osoro, S. 2013. The roots of the widening racial wealth gap: Explaining the Black-white economic divide. Waltham, MA: Institute on Assets and Social Policy, Brandeis University. https://iasp.brandeis.edu/pdfs/Author/shapiro-thomas-m/racialwealthgapbrief.pdf.

Shlay, A. 2015. Life and liberty in the pursuit of housing: Rethinking renting and owning in post-crisis America. *Housing Studies*, *30*: 560-579.

Spatial Structures in the Social Sciences. 2018. Diversity and disparities. Brown University. https://s4.ad.brown.edu/projects/diversity/SegSorting/Default.aspx.

Steil, J.P., Albright, L., Rugh, J.S. and Massey, D.S., 2018. The social structure of mortgage discrimination. *Housing Studies*, *33*: 759-776.

Urban Institute. 2016. Housing finance at a glance: Monthly chartbook. June. https://www.urban.org/sites/default/files/publication/81726/2000832-Housing-Finance-at-a-Glance-A-Monthly-Chartbook-June-2016.pdf

Urban Institute. 2017. Mortgage insurance data at a glance. https://www.urban.org/sites/default/files/publication/92681/mortgage_insurance_data_at_a_glance_chartbook_4.pdf