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# Affordability Challenges and Barriers to Homeownership in Philadelphia

COMMUNITY DEVELOPMENT & REGIONAL OUTREACH



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Homeownership is more than a financial milestone — it is a cornerstone of economic security, a pathway to intergenerational wealth, and a foundation for stable communities. For decades, Philadelphia has been considered a relatively affordable housing market compared with other large cities. But for many low- and moderate-income families, the dream of homeownership is slipping further out of reach. Unlike many metro areas that experienced a rise in homeownership during the COVID-19 pandemic, Philadelphia did not see similar gains. Structural challenges and economic pressures have hindered progress in expanding opportunities to own a home.

These trends mirror broader national concerns about an escalating homeownership affordability crisis, in which housing costs outpace income growth and systemic barriers limit access to ownership. Focusing on Philadelphia's experience from 2005 to 2024, a period encompassing economic booms, the Great Recession, pandemic disruptions, and recent inflation pressures, this brief examines the shifting landscape of homeownership and how rising costs together with other factors create significant barriers to homeownership. By synthesizing home sales data, mortgage records, and demographic measures in Philadelphia, three crucial patterns are identified. These findings not only contribute to ongoing debates on housing affordability issues but also highlight urgent policy challenges in preserving homeownership opportunities.

- **Declining homeownership rates:** Over the past two decades, Philadelphia's homeownership rate has declined more than that of the nation and those of

many large cities. From 2005 to 2023, Philadelphia experienced a decline in its homeownership rate, dropping from 57.5 percent to 52.4 percent, whereas the nation's rate saw a more modest decrease from 66.9 percent to 65.3 percent.

- **Deteriorating homeownership affordability.** Since the mid-2010s, rising home prices, property taxes, and home insurance premiums have driven up homeownership costs. Homeownership affordability has deteriorated significantly, especially for Black/Hispanic or non-dual-earner households. By 2022–2024, fewer than 40 percent of arm's-length home sales in Philadelphia were affordable to households earning at the median income, a steep decline from over 60 percent in 2013–2015.
- **Higher debt burdens.** A high debt-to-income (DTI) ratio has increasingly become a major reason for mortgage denials since 2010, as borrowers have been shouldering higher debt burdens in recent years.

**Philadelphia's homeownership rate declined over the past two decades, much more so than that of the nation or those of many large cities.**

 **FINDING 1**

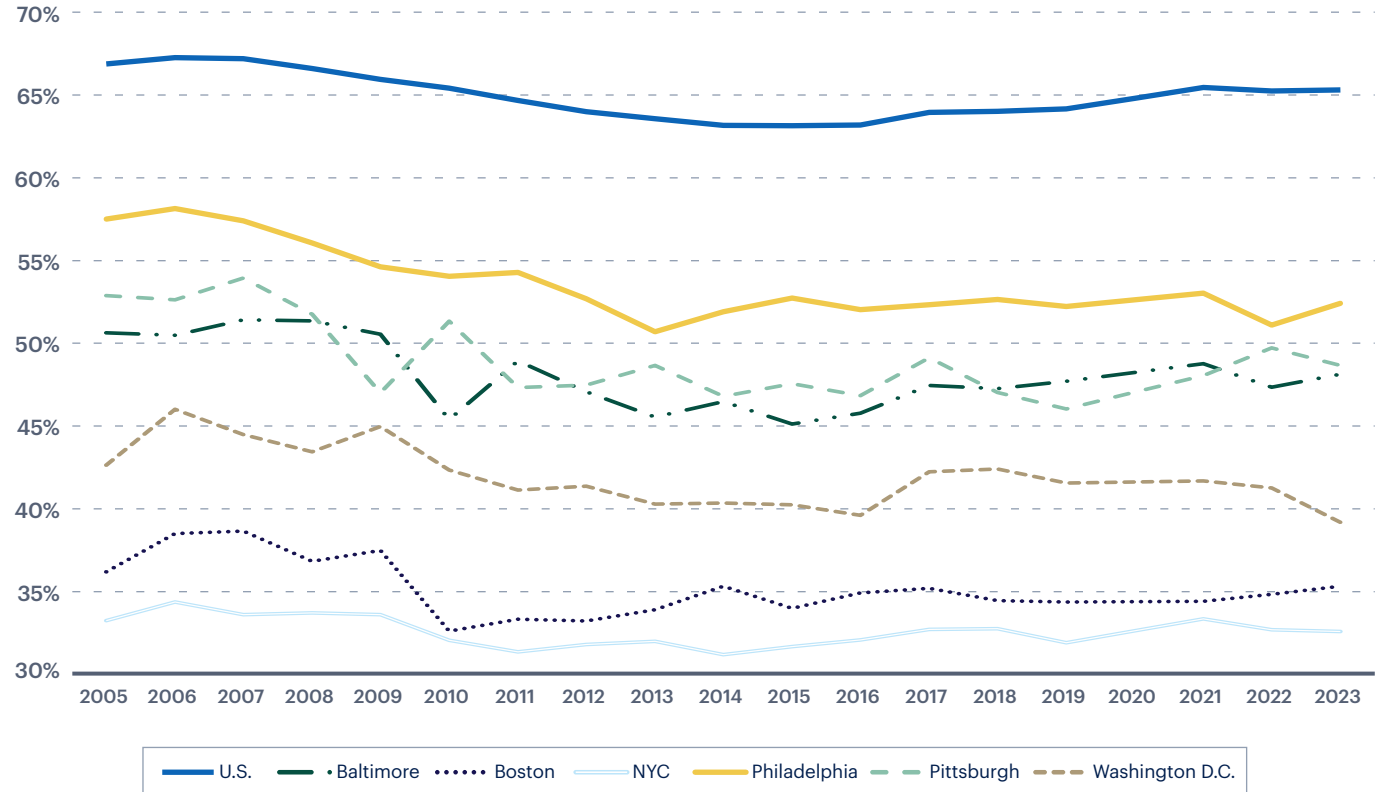
Philadelphia has long been recognized for its relatively high homeownership rate among major U.S. cities. Yet over the past two decades, the city has experienced a significant decline in homeownership — one that outpaces the national trend and the trend in many major East Coast cities. From 2005 to 2023, the homeownership rate in Philadelphia declined from 57.5 percent to 52.4 percent, a drop of 5.1 percentage points. As a comparison, the national average homeownership rate declined only slightly from 66.9 percent to 65.3 percent during the same period (1.6 percentage points). Boston saw a decrease from 36.2 percent to 35.3 percent (0.9 percentage point), New York City from 33.2 percent to 32.6 percent (0.6 percentage point), Baltimore from 50.6 percent to 48.1 percent (2.5 percentage points).

A nationwide increase in ownership of primary residences during the COVID-19 pandemic period is documented in census data as well as other national representative surveys (e.g., Aladangady et al. 2023). The homeownership rate

in the U.S. increased from 64.2 percent in 2019 to 65.3 percent in 2022 (1.1 percentage points), according to the one-year American Community Survey (ACS) data. Figure 1 suggests that homeownership rates in Boston, New York, and Pittsburgh also increased during the same period. In contrast, Philadelphia’s rate declined from 52.2 percent to 51.1 percent during 2019–2022 (1.1 percentage points). This trend suggests that Philadelphia’s housing market faces unique challenges that have hindered growth even during periods of national expansion.

Racial gaps in Philadelphia’s homeownership rates persist as well. In 2023, the homeownership rate for Black households was 47.4 percent, which lagged significantly behind the homeownership rate for White households at 57.4 percent. Based on the five-year ACS data in Figure 2, Hispanic and Asian households have made some progress in closing the gap with White households since the mid-2010s. However, homeownership rates for both Black and White households have trended down. The Black

**FIGURE 1**  
**Homeownership Rates for the U.S. and Select Major Cities, 2005–2023**

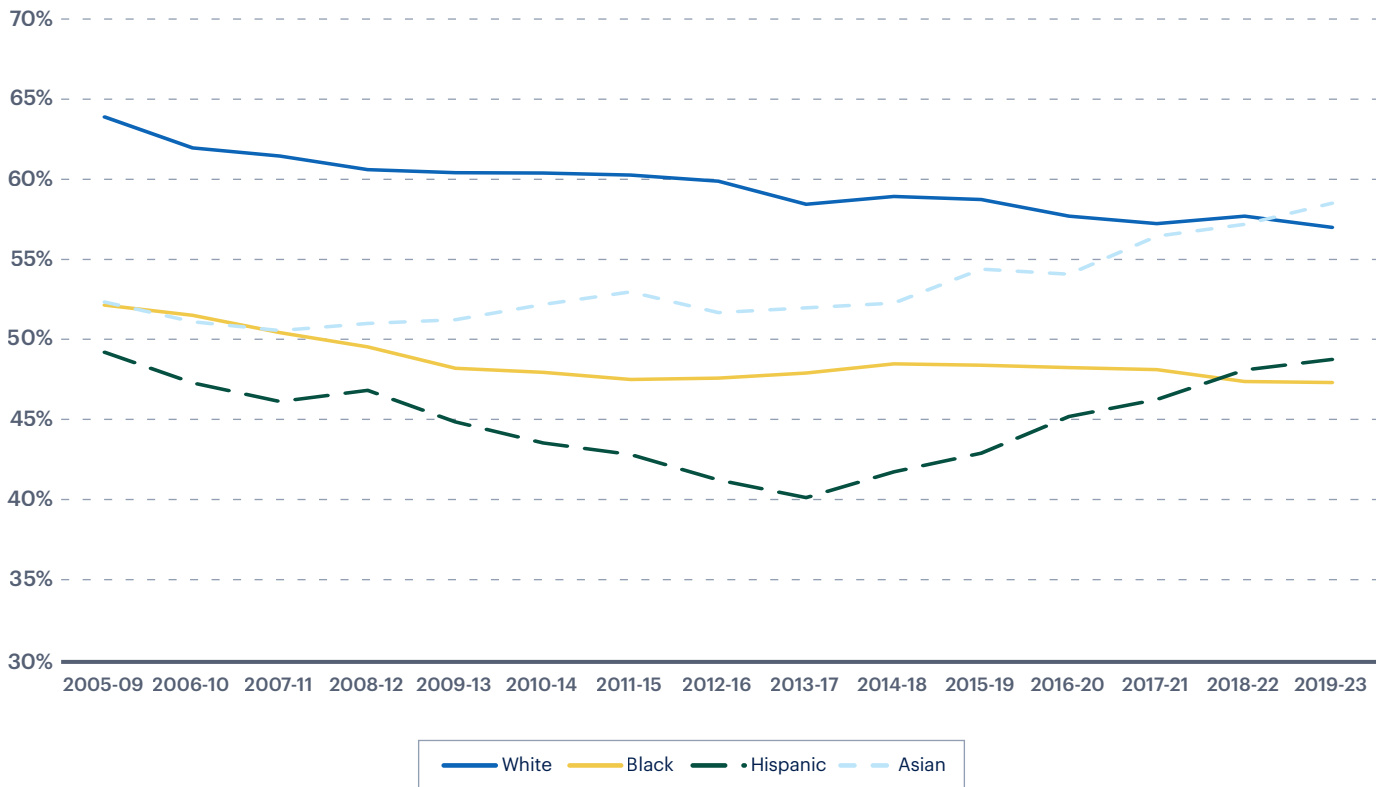


**Sources**

Authors’ calculations using 2005–2023 decennial Census and one-year ACS microdata samples from IPUMS USA, University of Minnesota, [www.ipums.org](http://www.ipums.org)

**FIGURE 2**

## Homeownership Rate by Race and Ethnicity in Philadelphia, 2009–2023



**Notes**

Each data point represents the average homeownership rate over a five-year period.

**Sources**

Authors' calculations using five-year ACS data.

homeownership rate was 52.1 percent on average during the 2005–2009 period and declined to 47.3 percent during the most recent period, 2019–2023.

One of the most significant changes in Philadelphia’s housing market over the past decade has been the sharp increase in homeownership costs. Homeownership costs are calculated here as the sum of mortgage payments (including principal and interest), property taxes, and property insurance premiums, as described in the methodology section. From 2014 to 2024, the nominal median annual cost of owning a home surged by 163 percent, rising from \$7,991 to \$21,033. As a comparison, the Consumer Price Index (CPI)<sup>1</sup> increased by 28.7 percent during the same period.

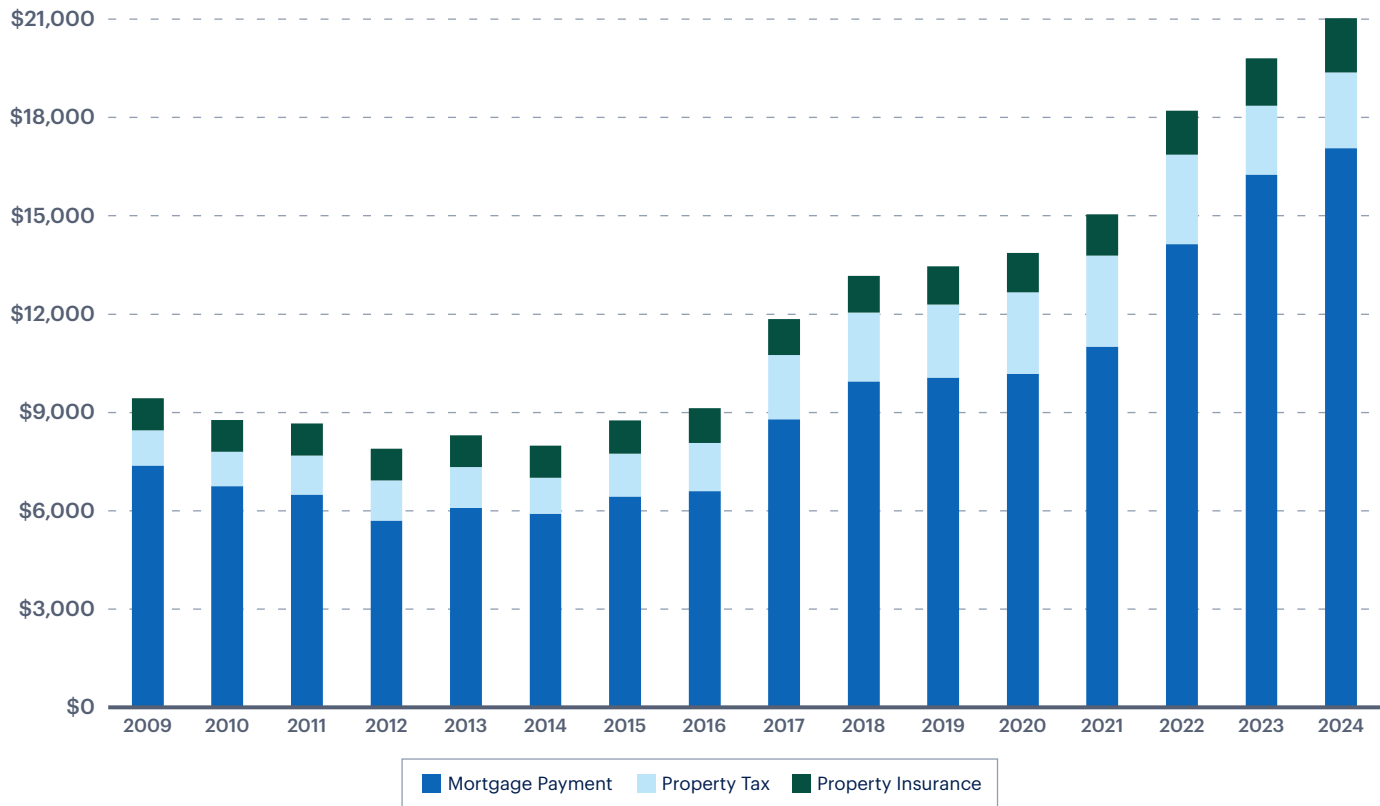
**Homeownership costs have more than doubled over the past decade and affordability is deteriorating: Less than 40 percent of the arm’s-length home sales in Philadelphia were affordable to households with incomes at the median during 2022–2024, compared with over 60 percent during 2013–2015.**

**FINDING 2**

<sup>1</sup> CPI refers to the U.S. Bureau of Labor Statistics Consumer Price Index for All Urban Consumers (CPI-U), Philadelphia-Camden-Wilmington, PA-NJ-DE-MD, all items, not seasonally adjusted ([www.bls.gov/cpi/](http://www.bls.gov/cpi/)).

**FIGURE 3**

## Median Homeownership Costs, 2009–2024



**Notes**

Median nominal value of estimated annual costs is reported for arm’s-length sales of residential properties in Philadelphia.

**Sources**

Authors’ calculations using CoreLogic owner transfer data and historical basic property data, ICE, McDash property insurance data, and Freddie Mac Primary Mortgage Market Survey (PMMS) data.

This growth is a result of the rise of all three components: a 189 percent rise in mortgage payments, a 110 percent increase in property taxes, and a 68 percent jump in home insurance premiums. One significant contributing factor to the rising costs is soaring home prices, which began to increase from around 2014 and surged during the COVID-19 pandemic period. Additionally, mortgage interest rates had risen steadily before the pandemic and have risen more sharply since 2022, further straining potential homebuyers. By contrast, homeownership costs declined modestly in the earlier period (2009–2013), primarily owing to falling mortgage interest rates. During that period, median annual costs decreased from \$9,438 to \$8,301.

As expected, mortgage payments make up the largest share of total homeownership costs. However, other components are also significant: in 2024, home insurance premiums made up 7.9 percent of the total costs, and property taxes accounted for 11.0 percent. While Philadelphia’s Homestead Exemption provides some relief, property tax burdens remain a concern for long-term affordability.

As a result of rising costs, the affordability of homes has declined. Using a common affordability guideline — that housing costs should not exceed 28 percent of the gross household income<sup>2</sup> — less than 40 percent of arm’s-

<sup>2</sup> For example, see [www.bankrate.com/mortgages/what-percent-of-income-should-go-to-mortgage/](http://www.bankrate.com/mortgages/what-percent-of-income-should-go-to-mortgage/).

length home sales in Philadelphia during 2022–2024 were affordable to households earning the city’s median income. This marks a steep decline from over 60 percent during the 2013–2015 period.

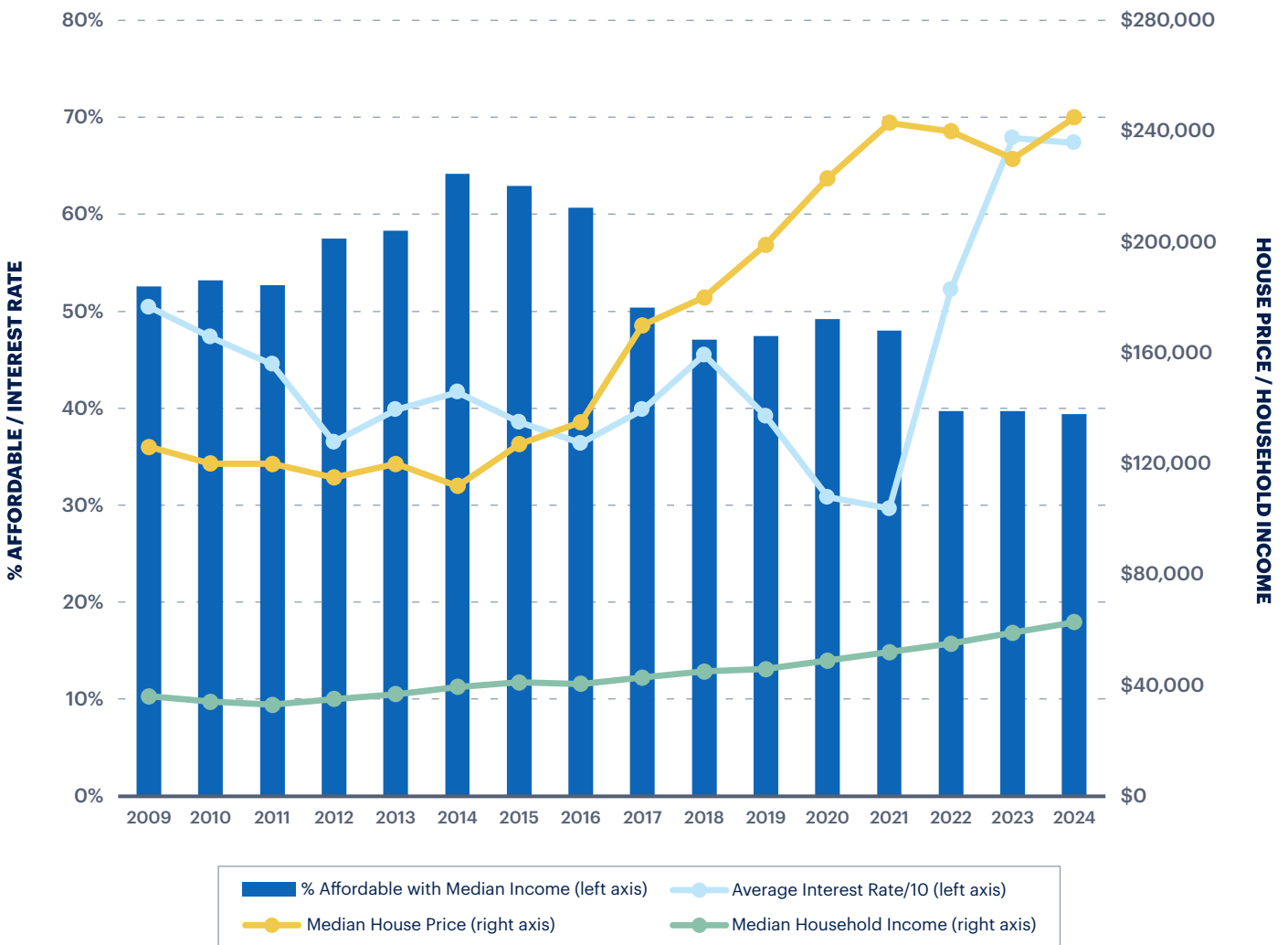
Household income in Philadelphia has historically been low, and although its growth rate is slightly higher than the national average in recent years, it has not kept pace with

escalating home prices. The nominal median household income increased by 63.9 percent between 2009 and 2023, surpassing the 52.4 percent increase for the United States as a whole, but it lagged far behind the 94.4 percent increase in median home prices.

The affordability challenge has disproportionately impacted communities of color. By 2023, a typical White household

**FIGURE 4**

**Percent of Arm’s-Length Sales Affordable to Households with Median Income, 2009–2024**



**Notes**

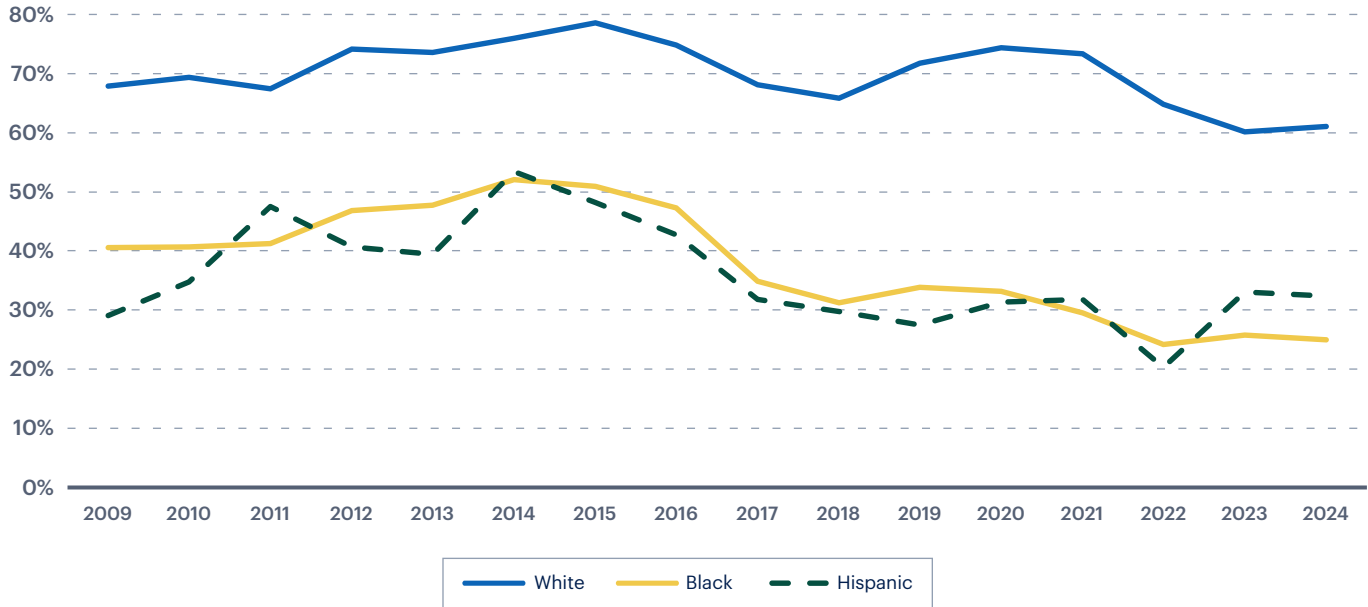
The left axis shows percent of arm’s-length sales affordable to households with median household income in Philadelphia, and the average interest rate (rescaled by 10) for 30-year fixed rate mortgage from PMMS. The right axis shows the median house price and median household income in the city of Philadelphia; both are nominal values.

**Sources**

Authors’ calculations using CoreLogic owner transfer data and historical basic property data, ICE, McDash property insurance data, PMMS data, and one-year ACS-IPUMS data.

**FIGURE 5**

## Percent of Arm’s-Length Sales Affordable to Households with Median Income by Race and Ethnicity, 2009–2024



**Notes**

Affordability is calculated separately for non-Hispanic White, non-Hispanic Black, and Hispanic householders, based on each group’s respective median household income.

**Sources**

Authors’ calculations using CoreLogic owner transfer data and historical basic property data, ICE, McDash property insurance data, PMMS data, and one-year ACS-IPUMS data.

(i.e., earning the median income among White households in Philadelphia) could afford up to 60.2 percent of arm’s-length home sales. A typical Black household could afford only up to 25.7 percent, and a typical Hispanic household could afford up to 32.4 percent. Moreover, the disparity in the percentage of homes affordable to median income households between the White and Black populations has widened over time.<sup>3</sup>

One significant consequence of increasing homeownership costs is the heightened difficulty faced by non-dual-earner households in affording a home. This is evidenced by a considerable widening of the home affordability gap between dual-earner and non-dual-earner households since

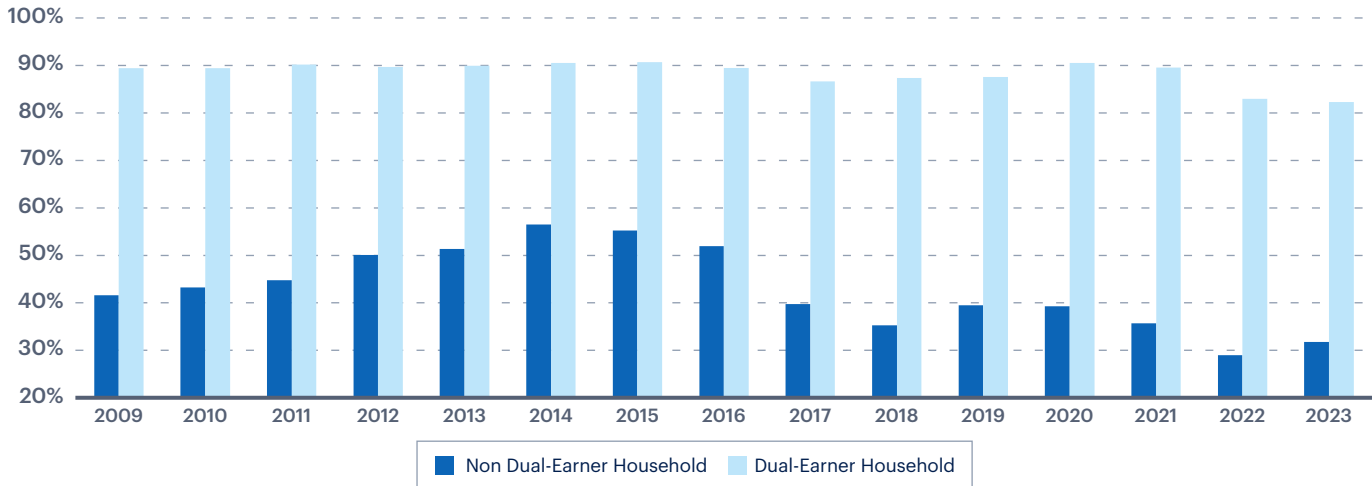
the mid-2010s. While dual-earner households can afford up to 80 percent of home sales, non-dual-earner households have been able afford fewer than 40 percent since 2017. This represents a significant deterioration compared with the 2009–2014 period, during which a typical non-dual-earner could afford 56.5 percent of home sales versus 90.5 percent for a dual-earner household. This widening disparity is primarily attributable to a growing earnings gap and demographic shifts within the dual-earner population.

Constraints on the supply side could also help explain the deteriorating affordability of homeownership. A significant share of single-family homes sold in recent years were purchased by investors (Ding, Zhang, and

<sup>3</sup> The actual gap could be even larger. Minority borrowers may face higher mortgage interest rates than the reported average market rate, which further increase their borrowing costs.

**FIGURE 6**

## Percent of Arm’s-Length Sales Affordable to Households with Median Income by Household Type, 2009–2024



**Notes**

Dual-earner households are defined as those in which both the householder and their spouse report positive earned income. All other households, including single-earner and no-earner households, are classified as non-dual-earner households.

**Sources**

Authors’ calculations using CoreLogic owner transfer data and historical basic property data, ICE, McDash property insurance data, PMMS data, and one-year ACS-IPUMS data.

Diep 2025; Howell 2024),<sup>4</sup> which could have restricted the supply of properties available for potential homebuyers. Furthermore, the surge in national and regional construction costs in recent years, coupled with local governments’ financial constraints, has eroded developers’ incentives to initiate new housing projects. National construction costs increased by about one-third during the past two decades (Glaeser and Gyourko, 2025). A local study by the Philadelphia Controller’s Office reported that in 2017, building a 1,300-square-foot single-family home cost \$167 per

square foot in Philadelphia, significantly higher than the national average (\$135) and higher than in cities like Washington, D.C. (\$141), Baltimore (\$135), and Pittsburgh (\$145). Regulation and other supply constraints may have also made it difficult to expand the housing stock in a timely manner, thereby driving up prices (Paciorek 2013; Been, Ellen, and O’Regan 2025). Previous research such as Choi et al. (2019) summarized some of these affordability issues, and further exploration and research are needed to fully understand the complexities and additional contributing factors to this ongoing issue.

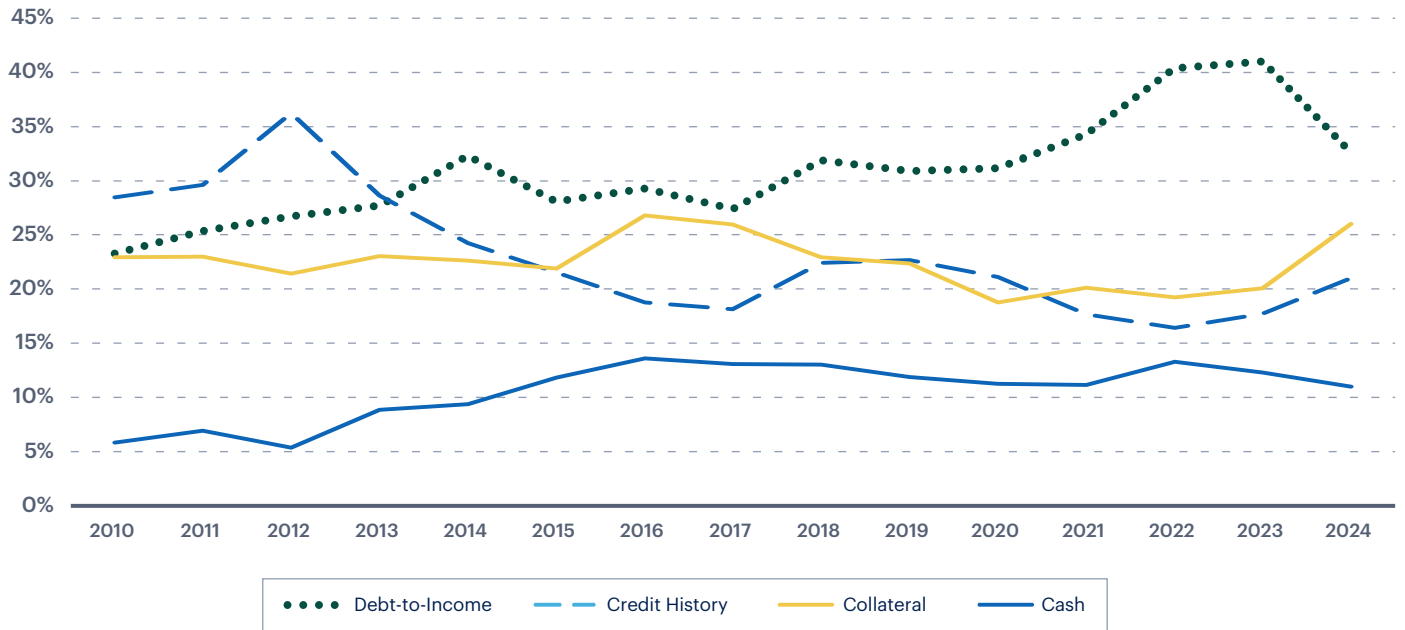
**In Philadelphia, the debt-to-income ratio has increasingly become the most common reason for mortgage denials since 2010. Concurrently, originated mortgages are carrying higher DTI ratios. In 2024, there was an increase in mortgage denials based on collateral and credit history.**

**FINDING 3**

<sup>4</sup> Ding, Zhang, and Diep (2025) suggest about 40 percent of recently sold (2020–2023) single-family homes were sold to investors, while Howell (2024) indicates that nearly half of all homes sold in arm’s-length transactions in Philadelphia in 2021 were cash transactions, which are likely to have been purchases by investors.

**FIGURE 7**

## Mortgage Denial Reasons Among Denied Loan Applications in Philadelphia, 2010–2024



**Notes**

The sample includes denied loan applications for principal residence home purchases involving first-lien single-family properties.

**Sources**

Authors' calculations using public HMDA data, 2010–2024

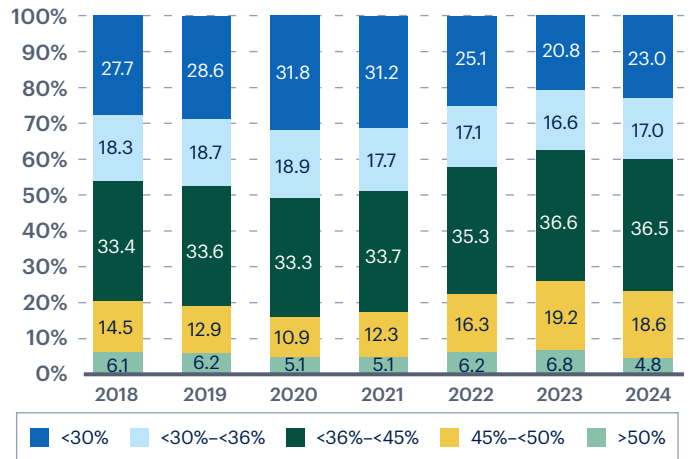
Whiton, Singleton, and Ding (2021) identified high DTI ratios as the most common reason for mortgage denial in 2020. This has grown progressively more common through 2023, with DTI ratios accounting for approximately 23 percent of denials in 2013, rising to over 40 percent by 2023. While that rate decreased slightly to 33 percent, DTI is the still most common reason for mortgage denials in 2024.

Even approved loans show signs of borrower financial strain: The share of originated loans with DTIs between 45 percent and 50 percent increased by 4.1 percentage points from 2018 to 2024. This trend aligns with national patterns. A Consumer Financial Protection Bureau (CFPB) report (Liu, 2022) shows that the average DTI ratio rose significantly and were nearly back to or slightly exceeded their 2018 levels by 2022, for all racial and ethnic groups.<sup>5</sup>

<sup>5</sup> The public HMDA data only provide categories of DTI instead of the actual DTI ratio for each loan.

**FIGURE 8**

## Debt-to-Income Ratio for Originated Loans in Philadelphia, 2018–2024



**Notes**

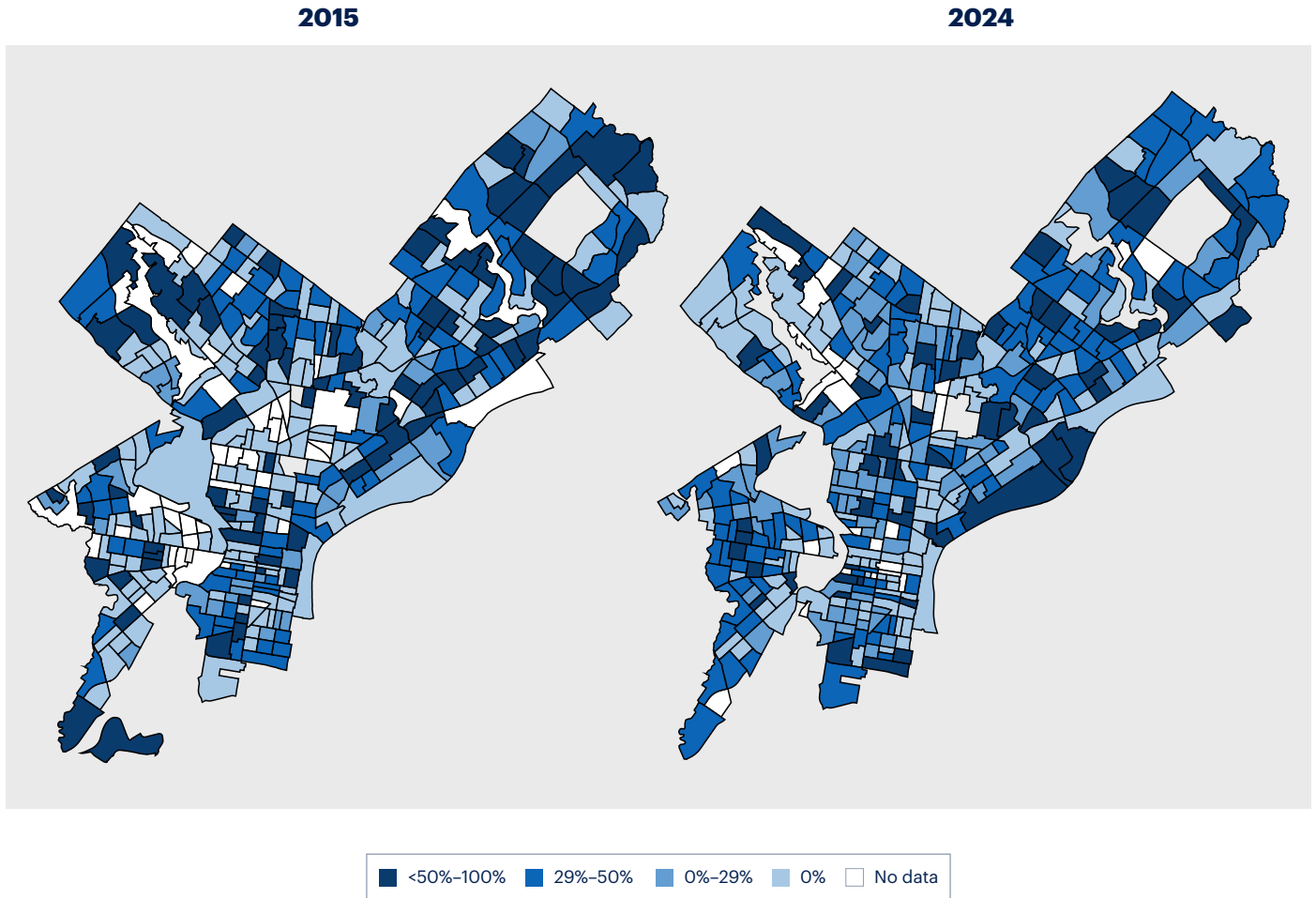
The sample includes loan applications for principal residence home purchases involving first-lien single-family properties, without a missing DTI. Only applications that originated are included in the analysis.

**Sources**

Authors' calculations using public HMDA data, 2018–2024.

FIGURE 9

## Percentage of Denied Loan Applications with DTI as One Reason for Denial in Philadelphia, by Census Tract



### Notes

The sample includes denied loan applications for principal residence home purchases involving first-lien single-family properties.

### Sources

Authors' calculations using public HMDA data, 2015 and 2024.

The likelihood of DTI being one of the primary reasons for mortgage denial has not only increased over the last decade but also geographically shifted over time. In 2015, denials due to high DTI ratios were concentrated on the outskirts of Philadelphia. In contrast, DTI denials were heavily concentrated in North Philadelphia, Kensington, and Southwest Philadelphia in 2024.

## Concluding Remarks

Philadelphia has experienced a pronounced decline in homeownership rates over the past two decades, outpacing national trends and many peer cities.

This decline has been accompanied by a significant deterioration in housing affordability since the mid-2010s, with homeownership costs more than doubling. By 2022–2024, fewer than 40 percent of home sales were affordable to households earning the median income, a significant drop from over 60 percent in 2013–2015. Additionally, rising DTI ratios have become a key barrier to mortgage access since 2018, and borrowers increasingly face higher debt burdens even when they can secure mortgages. These trends suggest growing financial pressures on potential and actual homebuyers, particularly low- to moderate-income families.

Several interconnected forces — economic, financial, and regulatory — are all contributing to Philadelphia’s deteriorating homeownership opportunities. The cost of labor and materials has surged, and the supply of housing for potential homebuyers, especially affordable units, has not kept up with demand. Restrictive zoning and land use policies, along with stringent building codes and a lack of funding, can constrain the housing supply, helping explain the observed trends. Although Philadelphia has launched new affordable housing initiatives and down payment assistance programs, their scale remains limited relative to need.

Addressing the affordability challenges for potential Philadelphia homeowners requires a multifaceted approach that tackles supply constraints, improves access to credit, and develops innovative housing policies. Targeted interventions — such as means-tested down payment assistance programs for first-time homebuyers, tax credits and grants to developers who commit to build or renovate affordable housing units, or collaboration with private investors to fund and construct affordable housing projects — could help reverse these trends and promote more affordable and sustainable homeownership opportunities for Philadelphians.

## Data and Methodology

### Data

#### **Census Data**

The one-year and five-year American Community Survey (ACS) microdata from the Integrated Public Use Microdata Series (IPUMS-USA) at the University of Minnesota are used to analyze homeownership rates, income trends, and household characteristics.<sup>6</sup>

#### **CoreLogic Real Estate Database**

CoreLogic provides property-level public records data for residential and commercial properties. The Owner Transfer data include deed transactions and sales prices and are

used to estimate mortgage payments. The Property Basic and Historical Property Basic data include assessed values and historical property tax amounts. The sample used in this report includes residential property arm’s-length sales, including single-family properties and condos. An arm’s-length sale is defined as real estate transaction in which the buyer and seller are unrelated and act independently, without any special relationship influencing the sale price.<sup>7</sup>

#### **ICE, McDash Database**

ICE, McDash provides servicing data from major mortgage servicers, covering about two-thirds of the U.S. residential mortgage market. The ICE, McDash property insurance module includes insurance amounts for a large share of mortgages. We used the ICE, McDash property insurance data to estimate insurance costs for properties in the CoreLogic data.

#### **HMDA Data**

The public Home Mortgage Disclosure Act (HMDA) data provide comprehensive information on residential mortgage lending activities by covered depository institutions and certain nondepository institutions (such as mortgage companies) in the United States.

#### **Freddie Mac Primary Mortgage Market Survey (PMMS)**

Mortgage interest rates are drawn from Freddie Mac’s PMMS, which reports weekly average rates for 30-year, fixed-rate, conforming mortgages with an 80 percent loan-to-value ratio. Weekly rates are aggregated to monthly and annual averages to calculate estimated mortgage payments.

### Methodology

#### **Homeownership Costs**

Homeownership costs are defined as the sum of annual mortgage payments, property taxes, and property insurance premiums. Mortgage payments are

<sup>6</sup> The 2024 ACS-PUMS data were not available by the time of this report; thus, a projected income with a growth rate of 6 percent is used in the affordability analysis (the average income growth rate was about 6 percent in 2021 and 2022).

<sup>7</sup> The indicator of an arm’s-length sale in the CoreLogic data includes all short sales but not real estate owned (REO) sales, and our analysis sample added REO sales.

calculated based on the assumption of a 10 percent down payment and a 30-year fixed-rate loan. The monthly amount is calculated using the standard mortgage formula:  $M = P [i(1 + i)^n] / [(1 + i)^n - 1]$ , where  $P$  is the loan principal,  $n=360$  (for 30 years), and  $i$  is monthly mortgage interest rate (from PMMS).

For 2009–2013, property tax amounts reported in CoreLogic are used. For 2014–2024, because CoreLogic data are limited in their coverage of exemptions programs in Philadelphia, taxes are estimated by applying tax rates to assessed values, adjusting for the Homestead Exemption, the most extensive residential assistance program introduced in conjunction with the Actual Value Initiative (AVI) in 2013.<sup>8</sup> The Homestead Exemption reduces the taxable assessed value by \$30,000 (2014–2018), \$40,000 (2019), \$45,000 (2020–2022), and \$80,000 (2023–2024). The tax rates applied are 1.34 percent (2014–2015) and 1.3998 percent (2016–2024).<sup>9</sup>

Insurance premiums are predicted using regression-based estimates from 2013–2024 ICE, McDash data.<sup>10</sup> A linear regression of log insurance amount on the fifth polynomial of the log appraisal amount is used.<sup>11</sup> The estimated coefficient is then applied to CoreLogic Owner Transfer data sales amount to predict the property insurance premium for each sold residential property, excluding condos.<sup>12</sup>

### **Measure of Affordable Homeownership**

A home is deemed affordable if its annual homeownership costs do not exceed 28 percent of a household’s annual gross income — a standard underwriting threshold. Income is measured as median of the annual household income in Philadelphia, overall, by race and ethnicity, and by whether it is a dual-earner household. Affordability is determined over the sample of arm’s-length residential home sales from CoreLogic data (including both single-family properties and condos). A home sale is considered affordable if the sum of mortgage payment, property tax, and property insurance is below 28 percent of the median gross household income in Philadelphia.

### **HMDA Analysis**

The denial rate is calculated as the number of denied mortgage applications divided by the sum of the number of originations, approvals that were not originated, and denied applications. Denial reasons are calculated as the number of mortgage applications denied for a particular reason divided by the number of denied applications with any reason given. Figures are provided for four common reasons given: a high debt-to-income ratio, poor or insufficient credit history, insufficient collateral, and insufficient downpayment or closing cost. A lender can choose to report up to four reasons, with no single reason taking precedence.

<sup>8</sup> There was no Homestead Exemption before 2014. The primary goal of the AVI was to bring property assessments comparable with actual market values, to ensure fair and accurate valuations. Under the AVI, the city conducted a comprehensive reassessment of all properties in Philadelphia for the first time since the 1980s.

<sup>9</sup> The tax schedule can be found at [www.phila.gov/media/20250422110017/Philadelphia-Historic-Tax-Rate-April-2025.pdf](http://www.phila.gov/media/20250422110017/Philadelphia-Historic-Tax-Rate-April-2025.pdf)

<sup>10</sup> ICE, McDash property insurance data started in 2013; the coefficient in 2013 is used to estimate property insurance during 2009–2012.

<sup>11</sup> The ICE, McDash reports up to four insurance premiums: primary insurance, flood insurance, earthquake insurance, and any other additional one. Only primary insurance is used to estimate insurance costs because the other three types of insurance are not common in Philadelphia.

<sup>12</sup> Because condos are parts of larger buildings that include other condo units and common areas, the condo/homeowner’s association often has a master insurance policy that covers the condominium building, and the reported coverage in ICE, McDash is only the amount that a condo owner must have.

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