



## Research Brief: Mortgage Financing in Detroit Neighborhoods, 2009 to 2019

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### Introduction

Most homes purchased in the U.S. use some form of [mortgage financing](#). Whether it be 30-year, 15-year, conventional, or through the FHA or VA, [most buyers](#) in the U.S. need some form of financing to pay for the cost of purchasing a home. A confluence of factors means that the Detroit housing market works differently from the rest of the U.S. ([Cassidy, 2019](#) ; [Poethig et al., 2017](#)). Most buyers in Detroit do not use mortgage financing to purchase a home ([Eisen, 2021](#)). This represents a challenge to [making homeownership more accessible](#) to residents (see also [Asante-Muhammad, Buell, & Devine, 2021](#)).

In the decade after the Great Recession, Detroit has both declared bankruptcy, and seen investment in its downtown core and elsewhere, including the redevelopment of its [Michigan Central Station](#) and the construction of a [new international crossing](#). Accordingly, a [2018 NCRC](#) report on the mortgage market within the city found considerable variation in the use of mortgage financing.

Detroit has historic and well-understood neighborhoods whose fortunes have mirrored those of the city in the last decade. Residents of Detroit's neighborhoods deserve to know if mortgage financing is available in their communities. Higher rates of homeownership can rebuild wealth in these neighborhoods, preserve their unique character, and attract additional investment for future families.

To better understand how mortgage financing varies within the city—in terms of how many mortgages were originated, and in what proportion to residential property transfers—this project overlaid data from the Home Mortgage Database (HMDA) with that of the City Assessor's Office from 2009 to 2019. In addition to cataloguing each individual loan originated and residential property transferred, respectively, these data sources shared geographic information that allowed our research team to aggregate information at the neighborhood level. We find that while neighborhoods along the Detroit River (e.g. Indian Village, Corktown, Central Business District) and the city's north side (e.g. Palmer Park) have a high proportion of homes purchased using mortgage financing, most neighborhoods do not, and most mortgage financing occurs in neighborhoods with fewer residential property transfers.

### Methods

Data from the Detroit City Assessor's Office used in this project included all property transfers within the city from 2009 to 2019. Each property transfer included the property's address, parcel ID, geographic ID, sale date, sale price, sale terms, sale instrument, and property class. Numerous properties in the data were sold more than once between 2009 and 2019. Our analysis included the information for the property's most recent sale. Our analysis excluded all properties identified as non-residential, based on the property's property class (i.e. property class values <400 and >500). A total of 92,612 residential property transfers were included in our analysis.



The geographic ID identified the property's census tract (based on the 2010 U.S. Census). By overlaying a [map of Detroit's neighborhoods](#) with a map of [Detroit's census tracts](#), our research team created a key that identified neighborhood by census tract. Each property in the Assessor's data was assigned its corresponding neighborhood based on its census tract. The total number of residential property transfers was then aggregated at the neighborhood level for each year.

Mortgage data used in this project came from the Home Mortgage Disclosure Act, in two batches. The first batch was pulled from the public use data available on the [CFPB website](#). The public use data was mortgage-level data from 2007 to 2017. It included the mortgage's purpose (i.e. refinance, home renovation, or home purchase), action taken (i.e. originated, denied, etc.), amount, census tract, and additional information. Our analysis included mortgages for home purchases that were originated, and were filtered on Detroit's census tracts. Using the census tract-neighborhood key from the Assessor data, each mortgage in the first batch of data was assigned its corresponding neighborhood. The total number of originated mortgages was then aggregated at the neighborhood level.

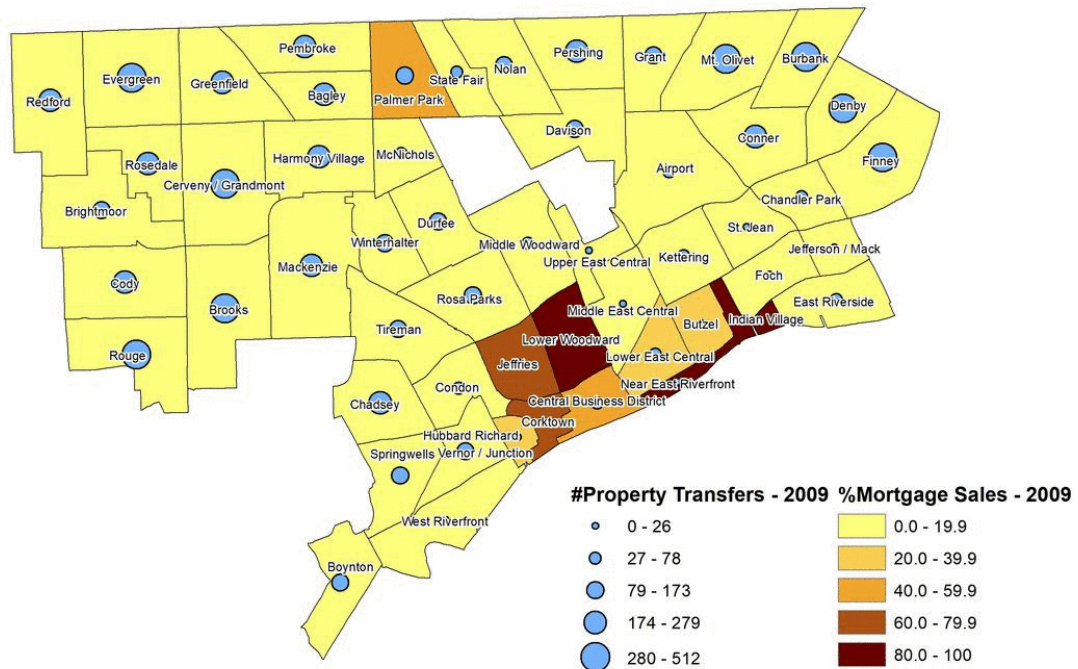
The second batch of mortgage data also came from the [CFPB website](#), but from 2018 and 2019. These years were not part of the public use data file, and were not at the mortgage level. They were instead at the census tract level. However, they were similarly organized to include the mortgage's purpose, action taken, and loan amount. Instead of aggregating from the mortgage level to the neighborhood level, the total number of originated mortgages in the second batch were aggregated from the census tract level to the neighborhood level. A total of 8,900 originated home purchase mortgages were included in our analysis.

With aggregate totals of residential property transfers *and* mortgages originated for home purchases, the proportion of mortgage sales could be calculated from the total residential property transfers for each neighborhood from 2009 to 2019.



Figure 1

Detroit Mortgage Sales as a Percentage of All Residential Property Transfers, 2009



Sources: City Assessor's Office data on residential property transfers; HMDA data on home purchase loans originated, 2009

## Findings

Maps of each neighborhood's mortgage sale proportion provided the best visualization of neighborhood-level disparities in Detroit. For additional context, each map also records a graduated symbol based on the total number of residential property transfers in each neighborhood. Figure 1 is a gif of each of these maps, allowing them to be viewed in sequence.

Although Figure 1 shows growth in the number of neighborhoods with a high proportion of mortgage sales, particularly in 2019, overall most neighborhoods have fewer than 20 percent of their residential property transfers financed through mortgages. Moreover, the proportion of mortgage sales is often lowest in neighborhoods with the most residential property transfers. For example, Denby, on Detroit's east side, and Evergreen, on the city's northwest side, are consistently neighborhoods with a high number of property transfers but a low proportion of mortgage sales. The Central Business District and Indian Village, respectively, are neighborhoods with a very low number of property transfers but a high proportion of mortgage sales. In other words, of the few residences that were purchased in these neighborhoods, almost all of them used mortgage financing.



## Implications

Although mortgage lending is critical to homeownership across much of the U.S., our research shows that most homes purchased in Detroit over the last ten years did not use it. Additionally, the city appears to have discrete neighborhoods where mortgage lending is more common, even if residential property transfers in these neighborhoods are not.

Mortgage lending is an individualized process that depends on the qualifications of the borrower, but also on the condition of the [property](#). Mortgage applications can be denied because the value of the home is [too low](#) for the lender to make a profit. According to the Assessor data, the median sale price of a home purchased in Detroit was \$32,000 in 2019. This figure is well below what lenders typically finance for a home purchase. Similarly, mortgage applications can be denied because the home needs [repairs](#) before it can be occupied. Detroit, it must be said, has a surfeit of homes in need of [repair](#).

These factors have not necessarily limited the amount of residential property changing hands. Most of the home buying activity in Detroit is occurring not because of mortgage lending, but despite it. However, with a median household income of [\\$33,965 in 2019](#), even a home valued at \$32,000 is likely beyond the means of most Detroiters to pay in cash. What is happening on the ground in Detroit's neighborhoods and who is buying homes in cash merits further investigation because our research suggests that the buyers are not residents.

## Conclusions

Improving mortgage lending to make it more available to Detroit residents begins by recognizing variation within the city. Our research used ten years of data to identify the neighborhood-level proportion of residential property transfers that used mortgage financing. The overwhelming majority of neighborhoods in the city see less than 20 percent of their homes purchased with mortgages. Policymakers and financial institutions would do well to strategize ways to address the absence of mortgage lending in these neighborhoods specifically.

### **Recommended Citation:**

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