

# Trends in Allegheny County Home Lending: 2018–2022

## 10 Things to Know

By Matt Klesta, Senior Policy Analyst

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# Introduction

This series of chartbooks examines home mortgages and refinances from 2018 through 2022 for seven large counties in Kentucky, Ohio, and Pennsylvania:

- Allegheny County, Pennsylvania (Pittsburgh); Cuyahoga County, Ohio (Cleveland); Fayette County, Kentucky (Lexington); Franklin County, Ohio (Columbus); Hamilton County, Ohio (Cincinnati); Lucas County, Ohio (Toledo); and Montgomery County, Ohio (Dayton)

These charts are derived from the Home Mortgage Disclosure Act (HMDA) data set. Signed into law in 1975 by President Ford, the HMDA requires most financial institutions to disclose information on their mortgage lending. Annually, this information creates a publicly accessible data set that includes millions of records and covers about 90 percent of mortgage lending in the United States ([Gerardi, Willen, and Zhang, 2020](#)). More information on the HMDA can be found in this summary: [What is HMDA and why is it important?](#)

## Notes

- Home purchases and refinances refer to first-lien, owner-occupied, one- to four-family units.
- This analysis only includes home purchases for which the borrower took out a mortgage loan.
- Low- and moderate-income (LMI) is defined as less than 80 percent of the Metropolitan Statistical Area's estimated median family income, while middle- and upper-income (MUI) is defined as greater than or equal to 80 percent.
- This analysis compares Black (non-Hispanic) and white (non-Hispanic) applications, which make up the majority of home purchase and refinance applications in the Fourth District's largest counties (79 percent in 2022).

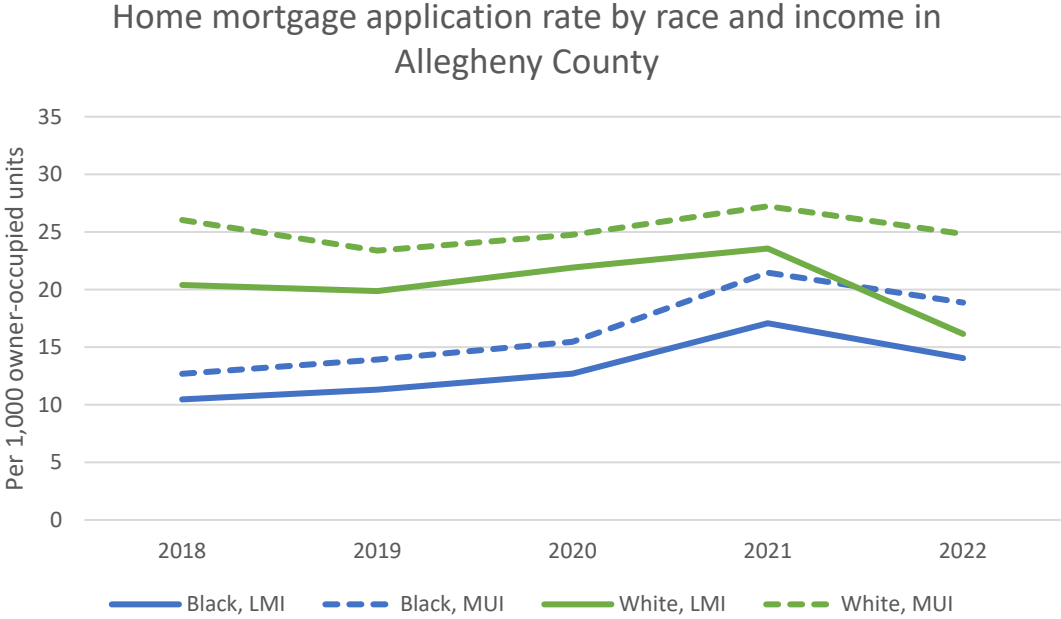
# Lending environment at the time

From 2018 through 2019, the mortgage lending environment was functioning in a relatively normal way. However, since then, several events have greatly impacted it: the COVID-19 pandemic and interest rates hitting a record low, followed by a rise.

By the end of 2020, the average interest rate for 30-year, fixed-rate mortgages reached 2.65 percent. That is the lowest rate recorded, with data going back to 1971 ([Freddie Mac, 2022](#)). The result was a surge in refinances and a general increase in home purchases ([Newton and Vickery, 2022](#)). Along with low interest rates, millennials, currently the largest adult population in the United States, were entering their peak homebuying years as the COVID-19 pandemic was causing people to rethink their housing situations ([Friedman, 2020](#)). Stimulus checks, student loan forbearance, and less spending on travel and entertainment during the COVID-19 lockdowns allowed many households to save for down payments ([Friedman, 2021](#)). However, decades of underbuilding combined with homeowners' moving less frequently and living in the same homes longer contributed to low inventory ([Khater, Kiefer, and Yanamandra, 2021](#); [Friedman, 2021](#)).

Things began to shift again in 2022, as interest rates doubled during the year, which had never happened before ([Freddie Mac, 2022](#)). This increased the cost to borrow, causing mortgage lending activity, particularly refinances, to decline. This decrease was most noticeable for LMI households, which saw the greatest declines in home purchases from 2021 through 2022 ([Choi and Walsh, 2023](#)). At the same time, existing homeowners were experiencing the “lock-in effect.” This refers to homeowners with low-interest-rate mortgages who are reluctant to sell in a high-interest-rate environment and potentially incur higher housing costs ([Boesel, 2022](#)).

# 1. Home mortgage applications decreased for all race and income groups in 2022, particularly for LMI households



Black households applied for home mortgages (blue lines) at lower rates than white households (green lines) from 2018 through 2021, but the gap narrowed in 2022. LMI households (solid lines) generally saw larger declines in application rates in 2022, with total applications declining by 24 percent for Black LMI households and by 26 percent for white LMI households.

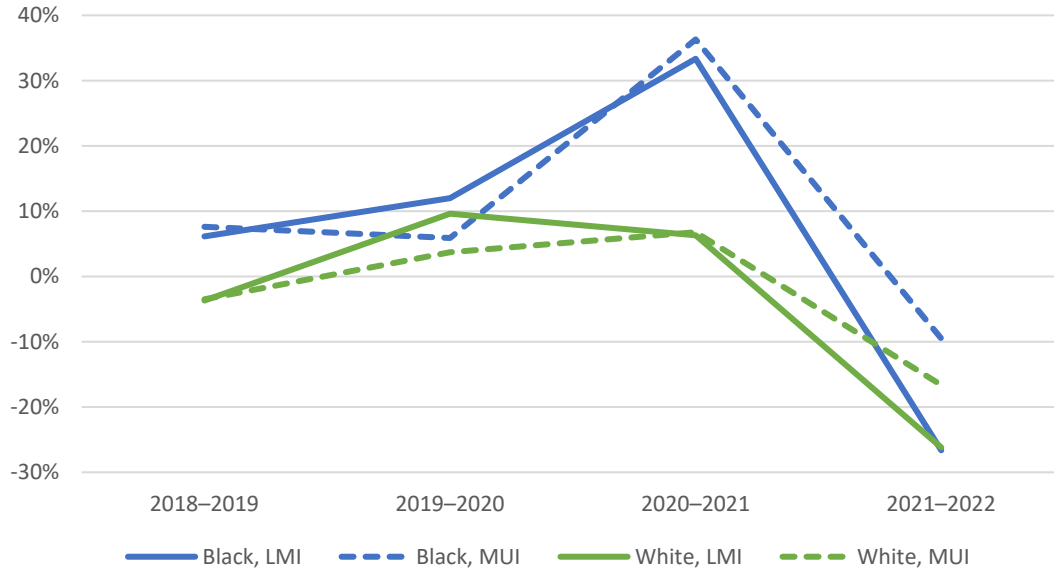
Note: Calculated as applications by race per 1,000 owner-occupied units by race

4 Sources: Author's calculation using HMDA data and census microdata from Steven Ruggles, Sarah Flood, Matthew Sobek, Daniel Backman, Annie Chen, Grace Cooper, Stephanie Richards, Renae Rogers, and Megan Schouweiler. IPUMS USA: Version 14.0 [dataset]. Minneapolis, Minnesota: IPUMS, 2023. <https://doi.org/10.18128/D010.V14.0>



## 2. Across-the-board declines in home purchase originations occurred in 2022 and were greatest for LMI borrowers

Percent change in home mortgage originations by race and income in Allegheny County

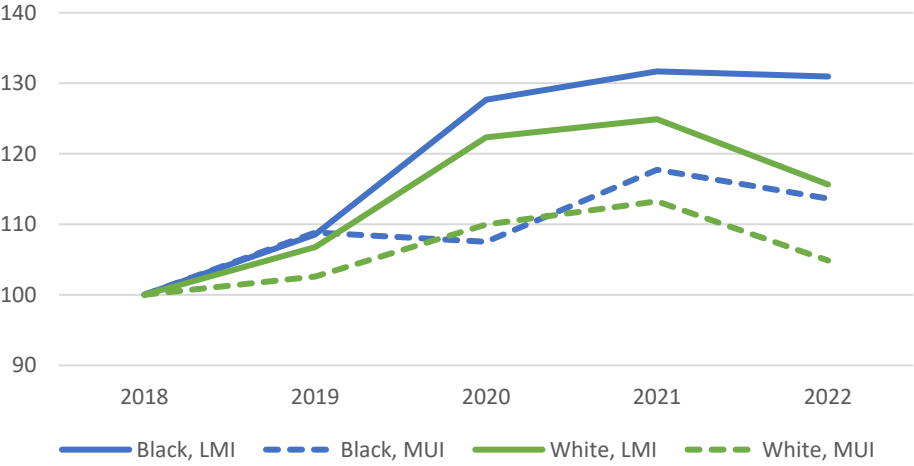


From 2018 through 2021, home purchases in Allegheny County increased for all race and income groups. These increases were particularly large for Black borrowers in 2021 (blue lines). In 2022, originations declined across all race and income groups, and these declines were greatest for LMI borrowers (solid lines).

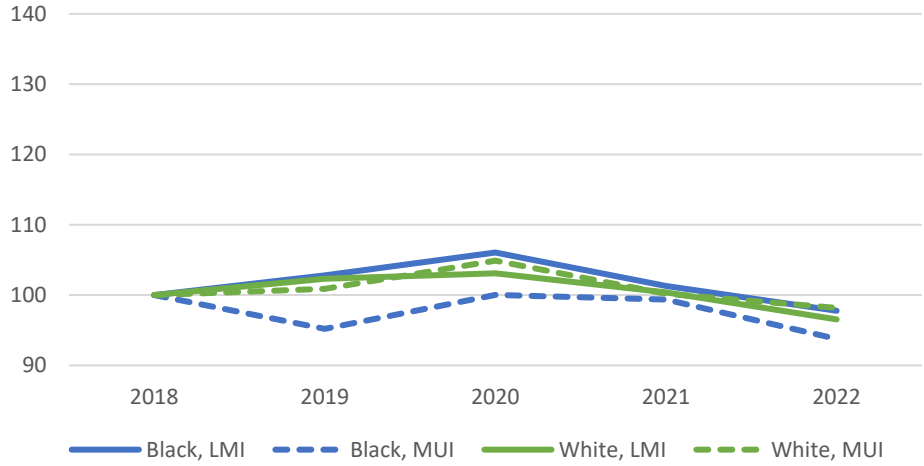
Increases in Black home purchases led to a rising Black homeownership rate in Allegheny County, which reached 35 percent in 2022 (up 3 percentage points from 2018). The white homeownership rate decreased by 0.4 percentage points during that same period. However, the gap between Black and white homeownership rates remained wide at 37 percentage points.

### 3. Median loan amounts increased faster than median incomes

Median loan amount index for Allegheny County



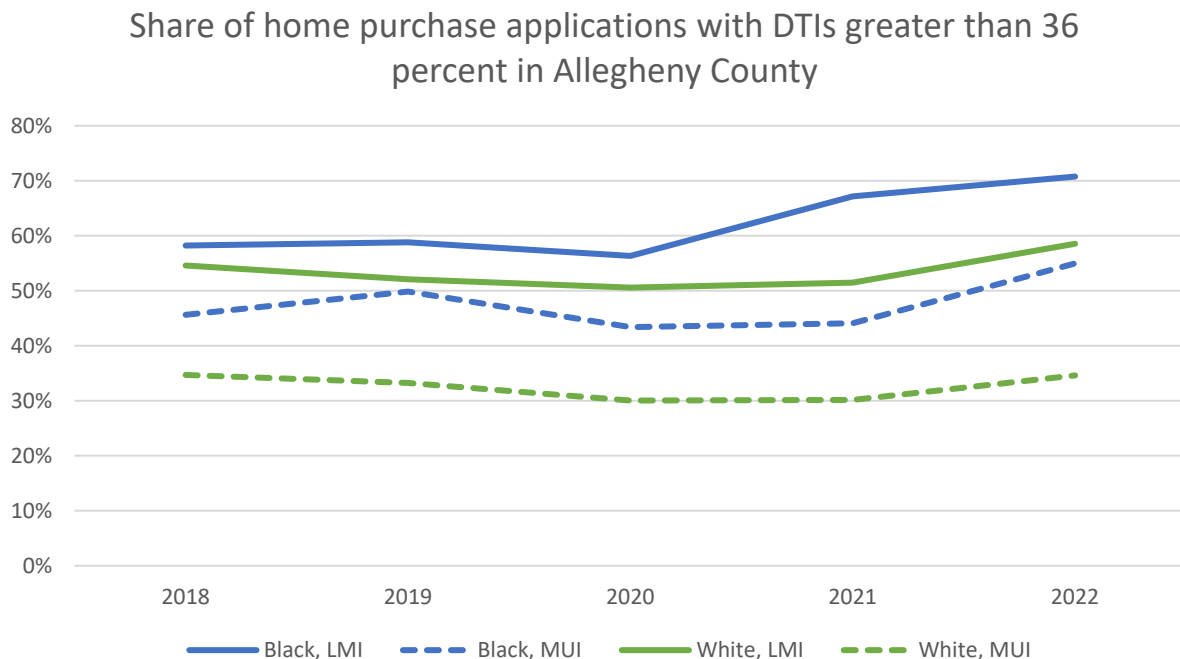
Median income index for Allegheny County



From 2018 through 2021, median loan amounts in Allegheny County increased, while in 2022, they leveled out or even declined slightly. However, median incomes increased markedly slower and even declined for some groups from 2018 through 2022.

Note: Median loan amounts and incomes in 2022 adjusted US dollars.  
Source: HMDA data

## 4. Shares of debt-to-income ratios that were greater than 36 percent increased for all borrower groups



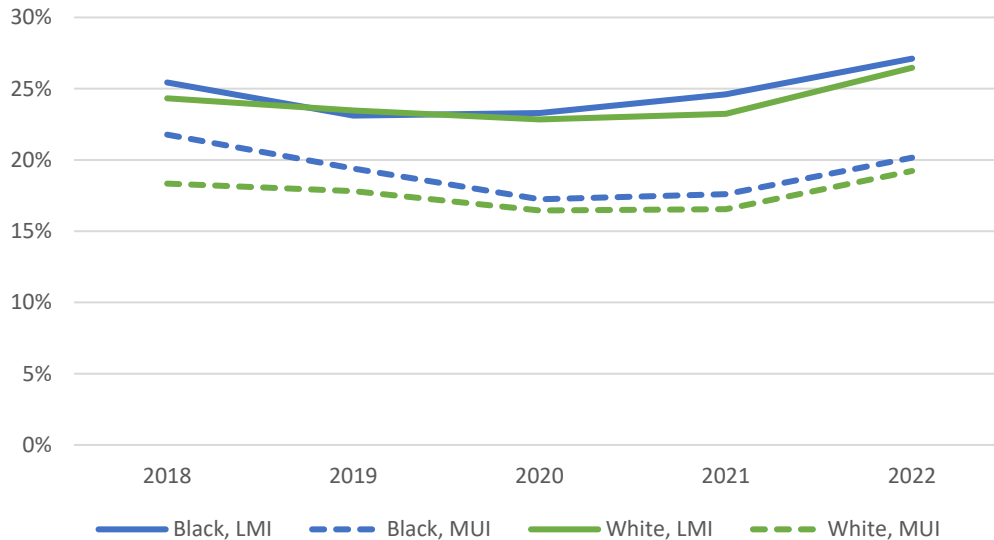
A general rule of thumb is that banks prefer a debt-to-income (DTI) ratio of 36 percent or less to signal a healthy amount of income. Since 2021, the share of home purchase applicants in Allegheny County with a DTI of greater than 36 percent has been increasing across all race and income groups. This increase began one year earlier for Black LMI borrowers (solid blue line).

Source: HMDA data

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## 5. Since 2020, home purchasers have become increasingly cost-burdened

Monthly housing costs as share of income for Allegheny County



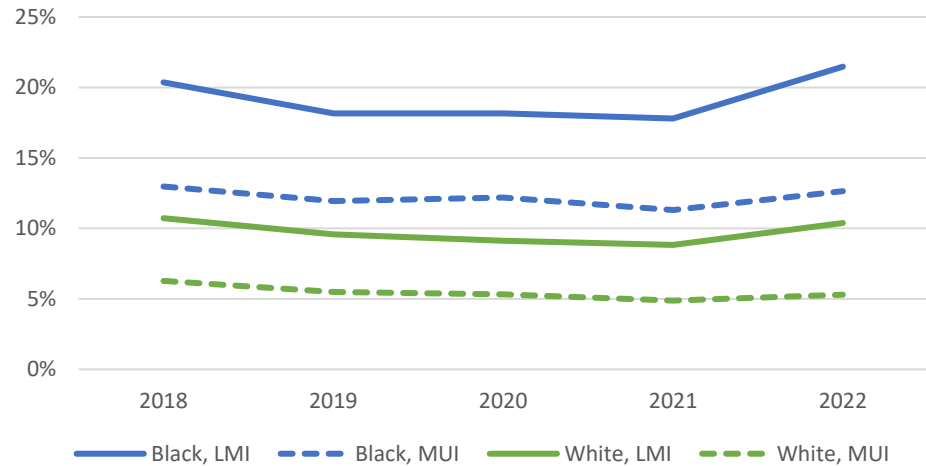
Since 2020, the median borrower across all race and income groups in Allegheny County has seen an increase in the share of income spent on mortgage payments, real estate taxes, homeowners' insurance, and utilities. This increase has been largest for LMI borrowers (solid lines). Black LMI borrowers have seen an increase of 3.8 percentage points from 2020 through 2022, while white LMI borrowers have seen an increase of 3.6 percentage points (solid lines). In 2022, LMI shares were greater than 2018 levels (solid lines).

Note: Cost-burden is the sum of the borrower's monthly mortgage payment (computed using the reported loan amount, interest rate, and loan term) and estimated taxes, insurance, and utility payments (estimated as a fraction of the property value using census microdata), divided by the borrower's stated income.

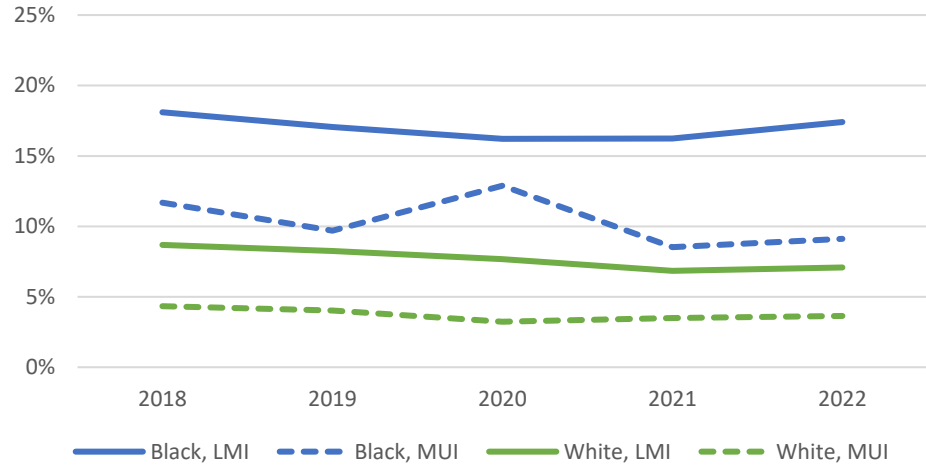


## 6. Home purchase denial rates increased slightly across all race and income groups in 2022

United States



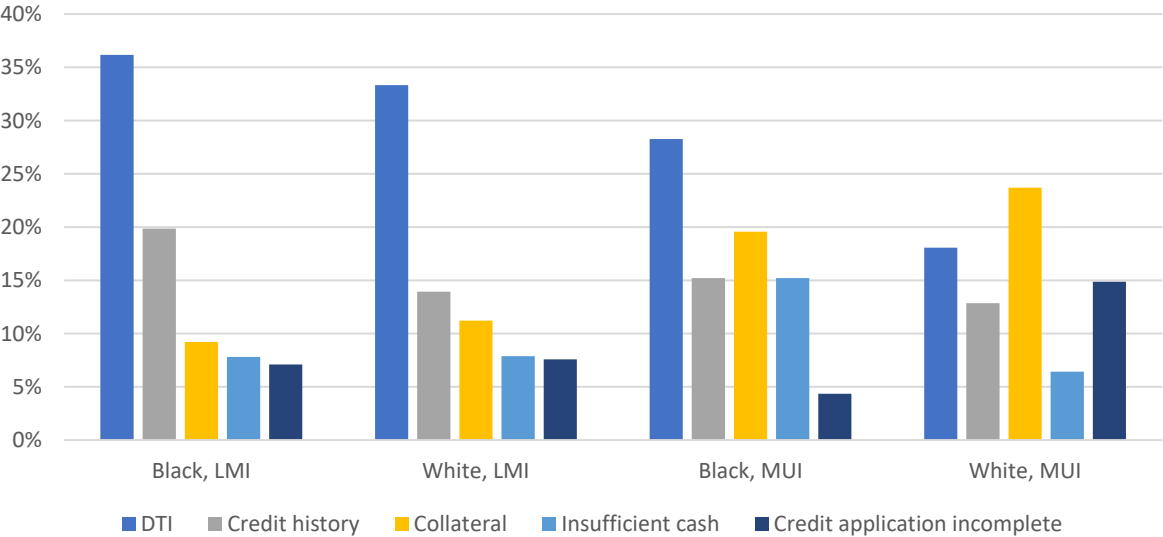
Allegheny County



In Allegheny County, home purchase denial rates have increased slightly for all race and income groups since 2021 but have remained below 2018 rates for all categories. This increase has been largest for Black LMI applicants, who have seen an increase of 1.2 percentage points since 2021 (solid blue line). The gap between Black and white denial rates remains stubbornly wide in Allegheny County, averaging 9 percentage points for LMI applicants (solid lines) and 7 percentage points for MUI applicants (dashed lines) during 2018–2022. In fact, denial rates for Black MUI applicants (dashed blue lines) were greater than for white LMI applicants (solid green lines) during the entire period.

# 7. In 2022, DTI was the top denial reason for all race and income groups except white MUI

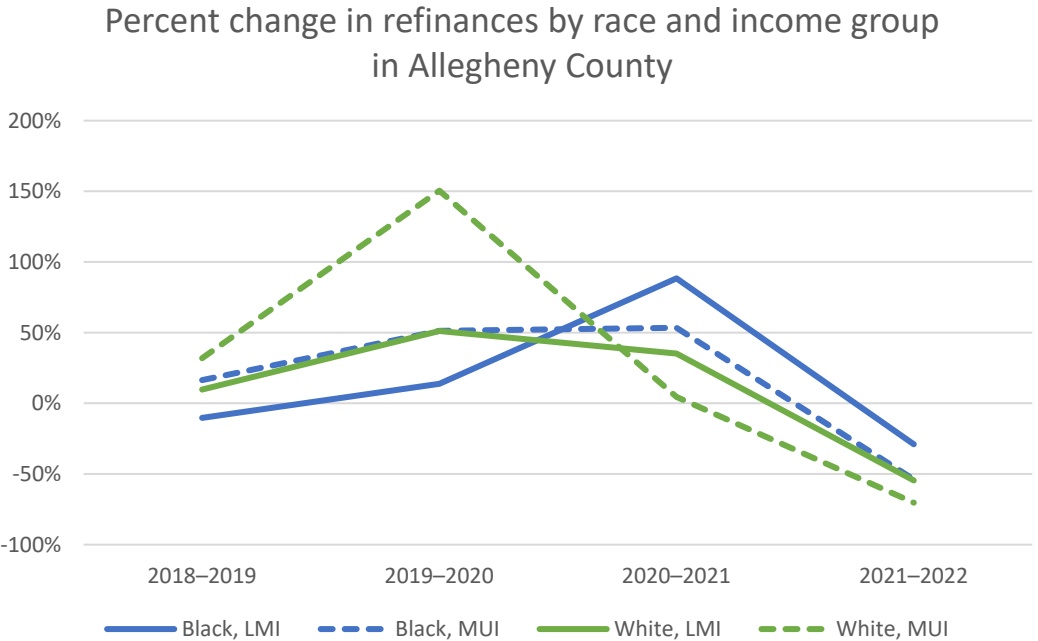
Top home purchase denial reasons by race and income group in Allegheny County, 2022



In 2022, DTI was a more prevalent denial reason for LMI home purchase applicants, while collateral, which refers to a home’s appraised value being too low to support the required loan-to-value ratio, was more common for MUI applicants. Notably, incomplete credit applications were a particularly common denial reason for white MUI applicants.

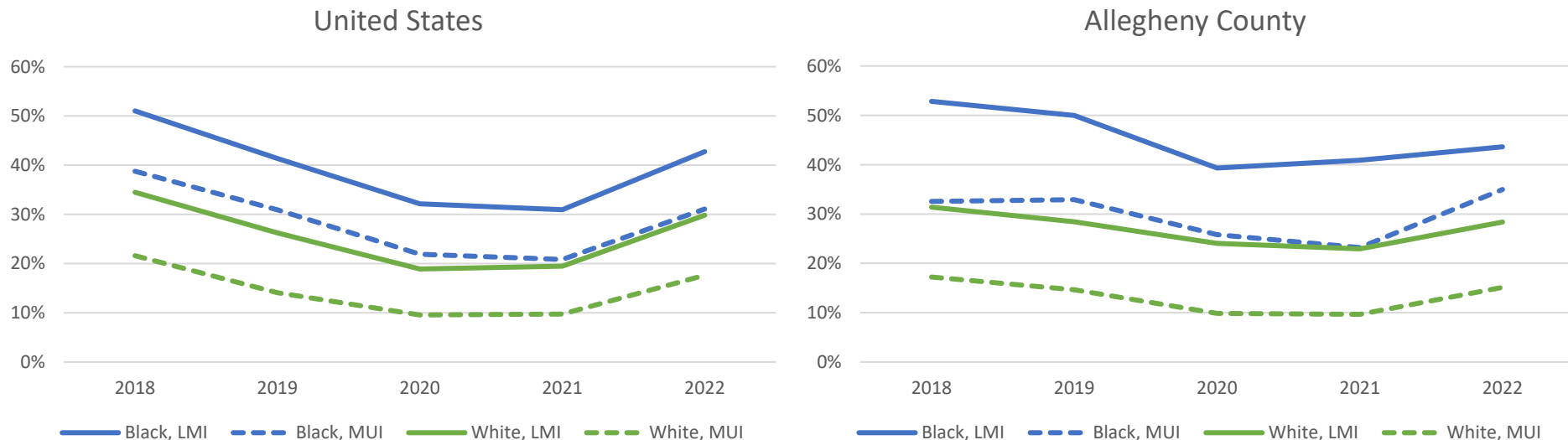
Notes: Top denial reasons differ by race and income group. There are eight possible denial reasons (DTI ratio, employment history, credit history, insufficient cash for the down payment and closing costs, unverifiable information, credit application incomplete, mortgage insurance denied, and other).  
 Source: HMDA data

# 8. Rising interest rates led to a dramatic decrease in refinances across all race and income groups in 2022



Refinances in Allegheny County increased from 2018 through 2021, particularly for white MUI homeowners in 2020 and Black LMI homeowners in 2021. Refinances across all race and income groups declined precipitously in 2022 as interest rates rose.

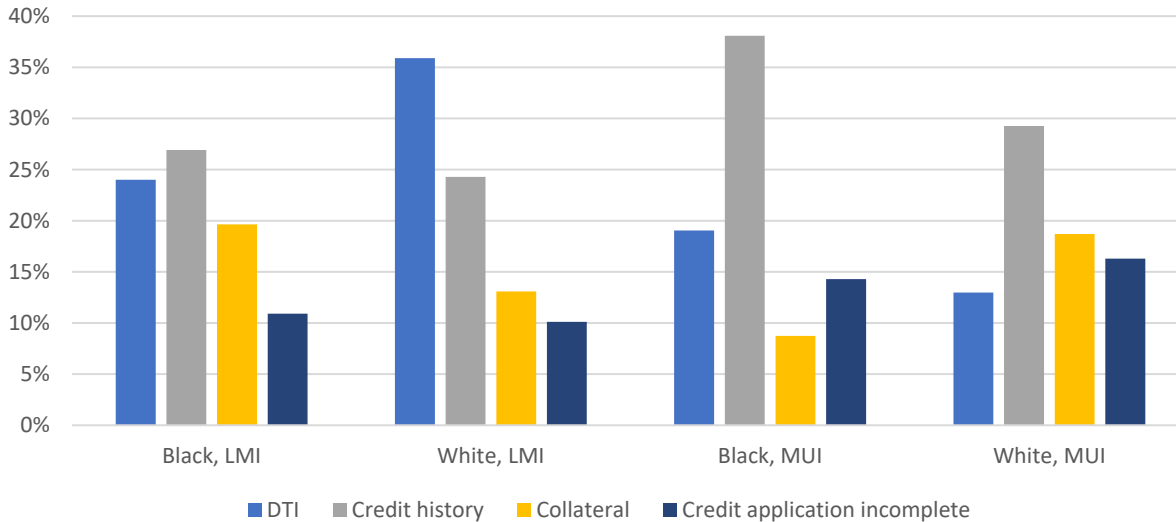
## 9. Refinance denial rates increased for all race and income groups in 2022



Refinance denial rates in Allegheny County increased in 2022, but all groups except Black MUI (dashed blue line) remained below 2018 rates. While the gap between Black LMI and white LMI denial rates has narrowed by 6 percentage points from 2018 through 2022, the gap between Black MUI and white MUI denial rates has widened by 5 percentage points over the same period.

## 10. In 2022, DTI and credit history were the most common denial reasons for LMI refinance applicants, while credit history was most common for MUI applicants

Top denial reasons for each race and income group in Allegheny County, 2022



In 2022, DTI and credit history were more common denial reasons for LMI applicants, while credit history was more prevalent for MUI applicants. Collateral refers to a home's appraised value being too low to support the required loan-to-value ratio.

Notes: Top denial reasons differ by race and income group. There are eight possible denial reasons (DTI ratio, employment history, credit history, insufficient cash for the down payment and closing costs, unverifiable information, credit application incomplete, mortgage insurance denied, and other).

Source: HMDA data

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