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## Home Purchase Loans are Denied More Often for African American Applicants than White Applicants in Northeast Ohio

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## Focus on Facts

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# Home Purchase Loans Are Denied More Often For African American Applicants Than White Applicants In Northeast Ohio

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- Housing condition and neighborhood vitality depend on investments by institutions that make purchase loans to home buyers. Without access to such credit prospective homebuyers are fewer and the value of property declines.
- The Home Mortgage Disclosure Act (HMDA)<sup>1</sup> provides census tract level data on the number of loan applications that are submitted and the number of home purchase loans that are finalized. Data are reported by the race (and gender) of individual applicants. HMDA data on denials for conventional (1-4 unit) loan applications in 2016 are analyzed here for White and African American applicants in the 12-county Northeast Ohio area.
- Figure 1 and Figure 2 show the loan denial rates for individuals in 2016 by race. The rate for African American applicants (22.7%) was more than twice that of White applicants (8.3%) in Northeast Ohio.<sup>2</sup>

### Conventional Home Purchase Loan Denial Rates by Race, 2016

Figure One: All Northeast Ohio

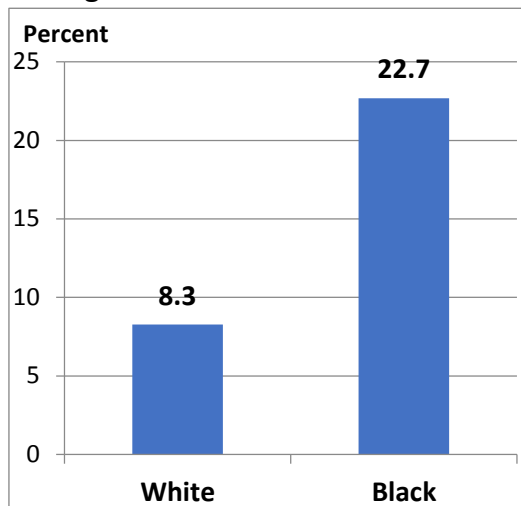
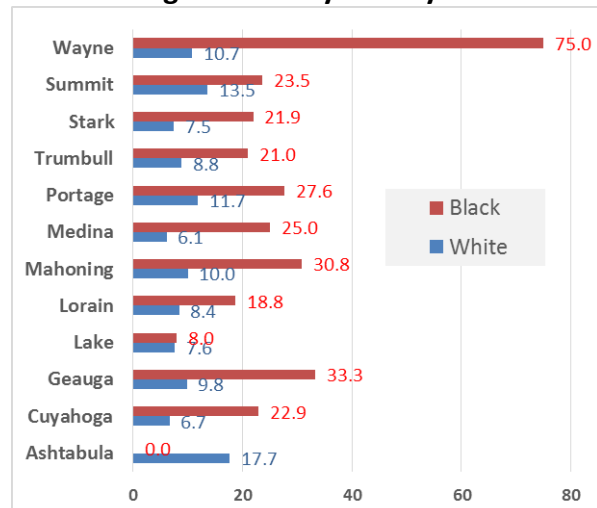


Figure Two: By County



<sup>1</sup> For more information on the data see <https://www.ffiec.gov/hmda/>

<sup>2</sup> Though statistically different at the 95% level of confidence, denial rates for women and men applicants in the region are similar (28.3% versus 27.6%, respectively).

- The gap is largest in Mahoning County (Youngstown) at 20.8% and is 16.2% in Cuyahoga County (with Cleveland) and 10.0% in Summit (Akron). Smaller counties, with fewer African American applicants, also have significant gaps between White and Black denial rates.
- Explanations for racial gaps in loan denial rates are complex and can be found in the research literature on the subject.<sup>3</sup> “Redlining” is the term that describes geographic discrimination in denial rates based on a neighborhood’s racial concentration and income characteristics rather than the credit underwriting factors of each individual loan applicant.<sup>4</sup> Correlations of these factors with White and African American denial rates are seen in Table 1.

**Table 1: Correlations (r) of Conventional (1-4 unit) Home Loan Rates with Census Tract Characteristics, Northeast Ohio Counties, 2016**

	Census tract composition	
	Median Family Income	Percent White
<b>White denial rate</b>	-0.295	-0.169
<b>African American denial rate</b>	-0.122	-0.138

- The correlations coefficients (Pearson’s r) generally indicate that loan applicants of all races have lower denial rates if the home they seek to finance is in a census tract that has higher median family income. In 2016, a census tract’s higher median family income reduces the loan denial rate for both White (r= -0.295) and African American (r= -0.122) applicants.<sup>5</sup> However, that reduction is much less for African American applicants, thus revealing that African Americans experience higher denial rates even in higher income census tracts.<sup>6</sup>
- Similarly, if a census tract has a higher percentage of White residents, all applicants have lower mortgage loan denial rates. Though not statistically different with much confidence, the reduction in denial rates for White applicants (r= -0.169) is larger than for African American applicants (r= -0.138).<sup>7</sup>
- The geographic pattern of denial rates for White and African American applicants can be explored further by using an interactive map at <http://arcg.is/0arfii>.<sup>8</sup>


<sup>3</sup> For example see Hiller, Amy E. (2003). “Spatial Analysis of Historical Redlining, A Methodological Explanation” **Journal of Housing Research**, Volume 14, Issue 1, pages 137-168.  
[<http://www.fanniemae.foundation.org/programs/jhr>]

<sup>4</sup> Census tract data obtained from the 2012-2016 American Community Survey, U.S. Census Bureau.

<sup>5</sup> Positive correlations indicate that as one characteristic’s value increases so does the other characteristic’s values; negative correlations show that as one increases the other decreases. All correlations in the table are statistically significant at the 99 percent confidence level.

<sup>6</sup> These two correlation coefficients are statistically different at the 99 percent confidence level.

<sup>7</sup> It should also be pointed out that there are very few loan applications in neighborhoods with high concentrations of African Americans, indicating that there are few qualified applicants who are interested in purchasing homes there and possibly that potential applicants are discouraged from applying in such neighborhoods.

<sup>8</sup> Once at this web page, one can change the display from the White denial rate to the African American rate by right clicking on the middle symbol in the set of 3 symbols seen here  and changing the checked layer from “Percent of applications by Whites denied” to “Percent of applications by African Americans denied.” One can zoom in and out and click on a census tract to get the data for the tract.