

# Tennessee Home Loan Trends in 2019

Analysis from Home Mortgage Disclosure Act (HMDA) Data

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## TABLE OF CONTENTS

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<b>Key Findings</b> .....	4
 <b>2019 Mortgage Loan Activity in Tennessee</b>	
1. Mortgage Applications and Originations .....	6
2. Loan Purpose .....	8
3. Conventional versus Government Insured Loans .....	15
4. Mortgage Loans For Non-Owner-Occupied Homes .....	17
5. Applicant Incomes and Loan Amounts.....	21
6. Analysis by Demographic Groups and Income Levels .....	24
7. Denial Rates and Denial Reasons .....	31
8. Higher-Priced Loans .....	43
10. Manufactured Home Loans.....	46
 <b>THDA SHARE OF HOME PURCHASE LOAN MARKET</b>	
1. FHA-Insured Home Loan Purchase Market Share of THDA.....	49
 <b>APPENDIX</b>	
Appendix A - L .....	53-97

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## FIGURES, MAPS AND TABLES

---

Figure 1	The Number of Mortgage Loans Originated, 1-4 Family Dwellings, 2010-2019.....	8
Figure 2	The Percent of Home Purchase and Refinance Mortgage Loan Originations in Total Loan Originations, 1-4 Family Dwellings, 2010–2019 .....	9
Figure 3	Share of Conventional Loans in Total Loans Originated, 2010-2019.....	16
Figure 4	First-Lien Home Purchase Loans Originated for Non-Owner-Occupied Homes, 2004-2019.....	18
Figure 5	Median Income and Loan Amount by Insurer, in Thousands 2019\$, 2010-2019.....	22
Figure 6	Home Purchase Loans Originated, Nominal Loan Amount, 2010-2019 .....	23
Figure 7	2019 Racial Lending Patterns and Household Racial Composition, 10 Counties with the Highest Share of Black Households, Home Purchase Loans .....	26
Figure 8	The Percent of Home Purchase Loans Originated, Borrower Income, 2010-2019.....	27
Figure 9	The Percent of Refinance Loans Originated, Borrower Income, 2010-2019 .....	27
Figure 10	Average Income by Race, Home Purchase Borrowers, 2019.....	28
Figure 11	Non-Conventional Share of Home Purchase Loans, by Race, 2010-2019 .....	30
Figure 12	Denial Rates, Purchase, African-American and White Applicants, 2010-2019.....	33
Figure 13	Denial Rates by Applicant Income and Race, Home Purchase Loans, Tennessee, 2019 ..	41
Figure 14	Denial Rates by Race and Income of Applicant, Home Purchase Loans, 2019 .....	42
Figure 15	Denial Rates by Race and Income of Applicant, Conventional Home Purchase Loans, 2019 .....	42
Figure 16	Denial Rates by Applicant DTI Ratio and Race, Home Purchase Loans, 2019 .....	43
Figure 17	Percent of Borrowers with Higher-Priced Loans by Race and Income Level, 2019 .....	45
Figure 18	Denial Rates, Chattel and Non-Chattel Loans, African-American and White Applicants, 2019 .....	48

Map 1	Percent Change in Originations, First-lien, Owner-Occupied, One- to Four-Family, Site-Built Home Purchase Loans, 2018 to 2019 .....	13
Map 2	Share of Conventional Loans Originated, 2019 .....	16
Map 3	Share of FHA-Insured Loans Originated, 2019 .....	16
Map 4	Share of VA-Insured Loans Originated, 2019 .....	17
Map 5	Share of RHS-Insured Loans Originated, 2019 .....	17
Map 6	Loans Originated for Investment Properties as Percent of Total Home Purchase Loans, 2019 .....	20
Map 7	Loans Originated for Second Homes as Percent of Total Home Purchase Loans, 2019 ...	20
Map 8	Home Purchase Loan Denial Rates, Black Applicants, 2015-2019, Census Tracts with 10 or More Black Applicants .....	34
Map 9	Home Purchase Loan Denial Rates, Hispanic Applicants, 2015-2019, Census Tracts with 10 or More Hispanic Applicants .....	35
Map 10	Home Purchase Loan Denial Rates, White Applicants, 2015-2019, Census Tracts with 10 or More White Applicants .....	36
Map 11	Home Purchase Loan Denial Rate Disparity, White versus Black Applicants, 2015-2019, Census Tracts with at least 10 Applicants from Both Races .....	37
Map 12	Home Purchase Loan Denial Rates, White versus Hispanic Applicants, 2015-2019, Census Tracts with at least 10 Applicants from Both Races .....	38
Map 13	Manufactured Home Purchase Loans, Percent of Total Home Purchase Loans, 2019 ....	47
Map 14	THDA's Share in FHA-Insured Home Loans Market, 2019 .....	51
Table 1	Reporting Institutions, Applications and Originations and \$ Value, 2010-2019 .....	7
Table 2	Total Loan Applications and Action Taken by the Financial Institutions, 2010-2019 .....	10
Table 3	First-Lien Home Purchase Loans Originated for Owner-Occupied 1-4 Family Dwellings, 2010-2019, MSA and State .....	11
Table 4	First-Lien Refinance Loans Originated for Owner-Occupied 1-4 Family Dwellings, 2010-2019, MSA and State .....	14
Table 5	First-Lien Loans Originated for Owner-Occupied 1-4 Family Dwellings, 2010-2019 .....	15
Table 6	First Lien, Single Family Site-Built Loans Originated by Purpose and Occupancy, 2019 ..	18
Table 7	Borrower Characteristics and Purpose of the Loan, 2010-2019 .....	25
Table 8	Borrower Characteristics and Loan Purpose, Nonconventional Loans, 2010-2019 .....	29
Table 9	Denial Rates, Home Purchase Loans, Loan Type, 2010-2019 .....	32
Table 10	Denial Rates, Refinance Loans, Loan Type, 2010-2019 .....	39
Table 11	Denial Reason, <i>Home Purchase</i> Loans, 2019 .....	40
Table 12	Higher-Priced Loans, <i>Home Purchase</i> Loans, 2010-2019 .....	44
Table 13	Manufactured Home Loan Applications by Action and Loan Purpose .....	46
Table 14	Loan Amount and Income, Site-Built and Manufactured Home Purchase Loans Originated, 2019 .....	47
Table 15	THDA's Market Share by Race, FHA-Insured Loans, 2014-2019 .....	50

## Key Findings

**In 2019, mortgage activity (all applications regardless of outcome; including home purchase, refinancing and home improvement) in Tennessee increased, similar to national trends.** Nearly 350,000 applications for home purchase, refinancing and home improvement loans in Tennessee led to 180,048 loan originations, which represented a 22 percent increase from 2018. In the nation, the total number of originated loans of all types and purposes increased by 26 percent.

<b>Originations by Loan Type (First Lien, 1-4 family, site-built)</b>	<b>2019</b>	<b>2018</b>	<b>Percent Change</b>
All Loans Originated	169,767	138,952	22%
Home Purchase Loans	102,933	96,075	7%
Home Purchase Loans, for Owner Occupancy	89,813	84,275	7%
Home Purchase Loans, for Second Residences	3,844	3,273	17%
Home Purchase Loans, for Investment Properties	9,276	8,527	9%
Refinance Loans, regardless of occupancy	64,691	40,826	58%
Traditional Refinances	35,737	17,665	102%
Cash-Out Refinances	28,954	23,161	25%
Home Improvement Loans, regardless of occupancy	2,143	2,051	4%

**Increasing refinance loan origination made the bulk of the mortgage origination increase.** In 2019, the number of refinance loans originated for site-built one- to four-family dwellings increased by 58 percent from the previous year, while home purchase loan originations increased only by seven percent.

**Home purchase loan originations for second residences increased by 17 percent in 2019.** Although a majority of non-owner occupied home purchase loan originations were for investment purpose, the rate of increase was greater for second residences. Shelby County had the highest number of loans originated for investment properties, while Sevier County ranked number one with the highest number of single family site-built home loans originated for second residence.

**Davidson County led with 10,759 home purchase loan originations in 2019, representing a ten percent increase from its 2018 total.** Shelby and Knox Counties followed Davidson County. Davidson County also led refinance loan originations, followed by Shelby and Rutherford Counties.

**Conventional mortgages have continued increasing their market share and hit their highest percent of total purchase loan volume of the past decade, at nearly 61 percent of originations in 2019.** FHA loans, which represented just under 10 percent of the market pre-crisis and reached as high as 42 percent after the crash, fell from 22.2 percent in 2018 to 21.5 percent in 2019. However, VA-insured loans remained near all-time highs in terms of market share in 2018 at around 13 percent (from around five percent in 2007) of all owner-occupied home purchase loans originated.

**Average home purchase borrower in 2019 had higher income than an average borrower in 2018.** The average income of a borrower who had a first-lien home purchase loan originated for an owner-occupied, site-built, one- to four-family home had nearly \$56,000 in 2019, while in 2018, average income of a similar borrower was approximately \$93,000.

**Minority borrowers were more likely to use nonconventional loan products.** Compared to white borrowers, a higher percentage of both African-American and Hispanic/Latino borrowers received FHA-, VA- or USDA-insured home mortgage loans.

**In 2019, African-American borrowers made up a slightly lower percentage of total borrowers, decreasing from 7.5 percent in 2018 to 7.3 percent.** The percentage of white borrowers also slightly declined, from 80.9 percent to 80.1 percent. Borrowers with no race information increased from the previous year. Low-income borrowers' share of home purchase loan originations also slightly declined in 2019 from the previous year.

**Denial rates for all home purchase loan applicants declined compared to 2018.** However, denial rates for minorities were still higher than for white borrowers, and Hispanic applicants experienced an increase in their denial rates.

## 2019 Mortgage Loan Activity in Tennessee

This report provides an overview of mortgage market activity and lending patterns in Tennessee using the Home Mortgage Disclosure Act (HMDA) data<sup>1</sup> from 2010 until 2019 and compares different borrower demographic attributes and lender types. All the information provided in this report is related to the mortgage loan applications and mortgages originated in Tennessee, unless noted otherwise.

Starting in 2018, new and expanded fields were added, and the definitions of some data fields changed, which made the HMDA data collected in 2018 and after different from previous years. This report uses the Consumer Financial Protection Bureau's (CFPB) methodology to make the data as comparable as possible to the previous years.<sup>2</sup>

In this report, we also looked at Tennessee Housing Development Agency's (THDA's) share in the Tennessee home loans market in 2019. THDA does not report to HMDA because THDA is not the direct lender, but most lenders that originate THDA loans do report to HMDA. We compared the home purchase loans reported in HMDA data files in Tennessee in 2019 with the THDA loan portfolio.

### 1. MORTGAGE APPLICATIONS AND ORIGINATIONS

In 2019, 1,185 institutions reported data on 335,525 closed-end home mortgage loan applications and purchased loans in Tennessee.<sup>3</sup>

These loan applications, in 2019, led to 180,048 loan originations (regardless of occupancy or construction type or lien status, including both single family and multifamily), in the amount of nearly \$44 billion. Both the number of applications and originations in 2019 were higher than they were in 2018. As shown in Table 1, 2019 saw a 22 percent increase in the number of loans originated from 2018. Similarly, the total dollar value of loans originated increased by nearly 33 percent compared to 2018. Tennessee is roughly on track with national trends<sup>4</sup>, where the total number of originated loans of all types and purposes increased by 26 percent.

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<sup>1</sup> For more information about what HMDA data is and what are the new and revised data elements in 2019 HMDA data, please check Appendix A at the end of the report.

<sup>2</sup> Regarding 2019 data, CFPB published two articles; one for analyzing trends in mortgage applications and originations in the nation and another one for introducing the new and/or revised data points in 2019 HMDA data. These articles provide detailed explanations about the new data points and changes to the existing data points. Both articles can be downloaded at <https://www.consumerfinance.gov/data-research/hmda/>.

<sup>3</sup> The 2015 HMDA rule required institutions that originated at least 100 open-end line of credits (LOCs) in each of the two preceding calendar years to report data on open-end LOCs beginning with data collected in 2018. However, in 2017, the Bureau temporarily increased the open-end reporting threshold to 500 open-end LOCs for calendar years 2018 and 2019. To make this data comparable to the data reported in previous years, we excluded all open-end LOCs, except those open-end LOCs that are reverse mortgages, and applications for a loan purpose other than home purchase, home improvement, or refinance. To put in context; in 2019, in Tennessee, there were 41,721 open-end LOCs applications that were not reverse mortgage. We excluded these applications.

<sup>4</sup> A short synopsis of nationwide observations from 2019 HMDA can be found in this [press release](#).

**Table 1. Reporting Institutions, Applications and Originations and \$ Value, 2010-2019**

<b>Activity Year</b>	<b>Number of Reporting Institutions</b>	<b>Number of Loan Records Reported</b>	<b>Number of Loans Originated</b>	<b>Dollar Value of Loans Originated (Billions of Current \$)</b>
2010	1,034	335,917	153,282	\$24.10
2011	983	304,377	137,943	\$21.73
2012	1,012	373,362	180,686	\$29.93
2013	1,053	358,454	172,612	\$28.10
2014	1,032	262,821	130,220	\$22.21
2015	1,060	305,114	155,616	\$29.04
2016	1,105	350,490	174,965	\$34.00
2017	1,106	326,416	164,577	\$32.90
2018	1,132	286,805	148,214	\$33.20
2019 <sup>5</sup>	1,185	335,525	180,048	\$44.03

In 2019, close to 50 percent of all loans in the state were originated by 30 financial institutions. With nearly 11,000 originated loans statewide, Quicken Loans ranked number one with the highest number of loans followed by Mortgage Investors Group (MIG), Regions Bank and Pinnacle Bank. Combined, these four institutions originated 15 percent of all loans originated in Tennessee in 2019. Quicken Loans is not a THDA approved lender, but MIG, Regions Bank and Pinnacle Bank are all THDA approved lenders. In 2019, these three lenders originated 19 percent of the nearly 5,000 THDA loans funded during the year.

Of 1,185 institutions reporting to HMDA, 104 institutions did not have any loans originated. It is possible that the institution had applications, but they were denied by the institution or withdrawn by the applicants. In other cases, the institution purchased the loans originated by other banks or the institution originated loans in other states even though it did not have any loan origination in Tennessee. Wells Fargo reported the second highest number of loans in 2019 just behind Quicken Loans, but only 17 percent of those reported loans were originated in 2019 and 67 percent of reported loan applications by Wells Fargo were originated previously and purchased in 2019. Another financial institution with large volume of loans reported and high loan purchase portfolio was PennyMac Loan Services.

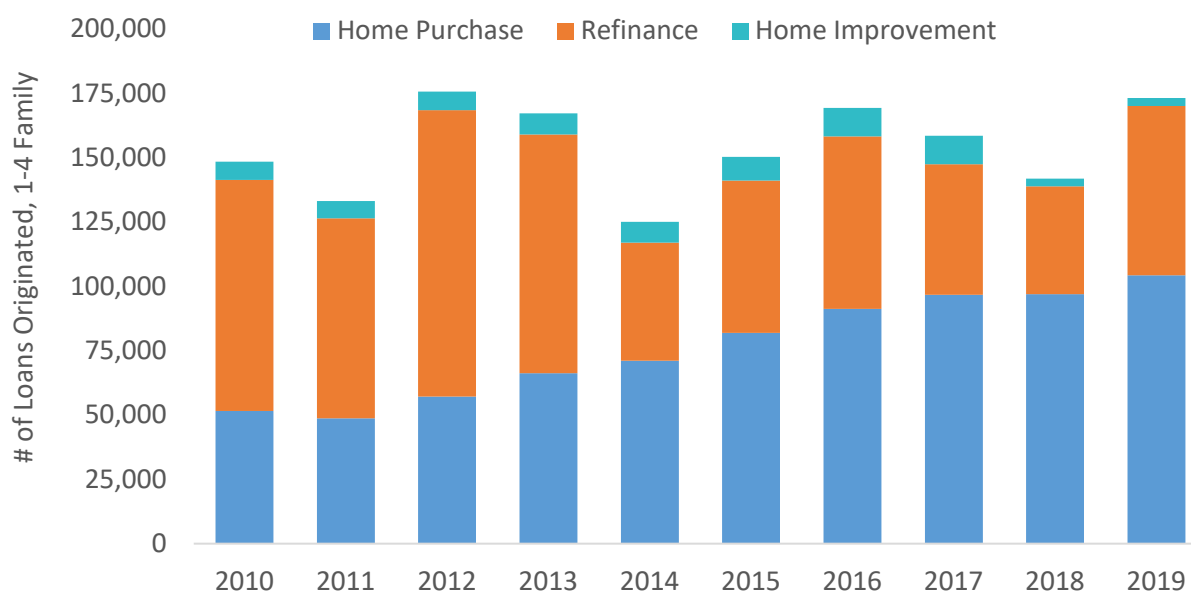
<sup>5</sup> 2015 HMDA rule required institutions that originated at least 100 open-end line-of credits (LOCs) in each of the two preceding calendar years to report data on open-end LOCs beginning with data collected in 2018. To make the data reported here as consistent as possible with historical HMDA data, following the Bureau, we excluded all open-end LOCs, except those open-end LOCs that are reverse mortgages, and applications for a loan purpose other than purchase, home improvement, or refinance. For more detailed explanation about the data and reporting changes, please see: Jo, Y., Liu, F., Skhirtladze, and Barriere L. (2020), "Data Point: 2019 Mortgage Market Activity and Trends.

## 2. LOAN PURPOSE<sup>6</sup>

According to HMDA data, in 2019, financial institutions reported 313,995 home purchase, refinancing and home improvement loans for one- to four-family site-built dwellings.<sup>7</sup> In the same year, there were an additional 1,090 reported loan applications for site-built multifamily dwellings and 20,440 applications for manufactured homes (both one- to four-family and multi-family dwellings).

In 2019, refinance loans originated for one- to four-family dwellings increased by 57 percent year over year, and accounted for 38 percent of all loans originated for one- to four-family dwellings during the year. During the same period, home purchase loan originations for 1-4 family site-built homes increased by eight percent, and accounted for 60 percent of all loans originated.

**Figure 1. The Number of Mortgage Loans Originated, 1-4 Family Dwellings, 2010-2019**

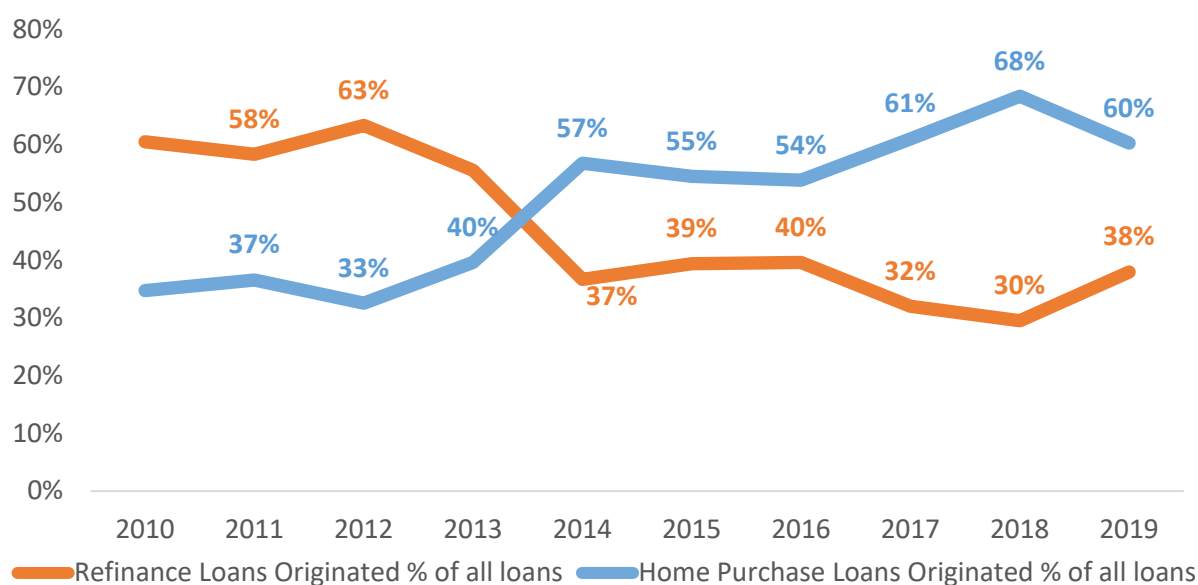


<sup>6</sup> First lien owner-occupied, one- to four-family, site-built home mortgage loans originated for home purchase and refinance purposes in 2018 and 2019 by county can be found in Appendix B.

<sup>7</sup> That number also includes the loans originated in the previous years and purchased by the financial institutions during the year, and preapproval requests. As it is explained in Appendix A in more detail, there were some significant changes in data reported in 2018 and forward. One of those issues related to discussion here is the property type. In the past the reporting financial institutions only reported whether the loans were for one- to four-family, manufactured or multifamily homes. In 2018, this characteristic was represented by two variables: construction type and number of units. That allowed us to separate manufactured home construction for single family and multifamily types.



**Figure 2. The Percent of Home Purchase and Refinance Mortgage Loan Originations in Total Loan Originations, 1-4 Family Dwellings, 2010–2019**



In Table 2, the number of loans reported to HMDA and various types of action taken by the financial institutions are separated for one- to four-family, manufactured and multifamily dwellings<sup>8</sup>. The loans for one- to four-family dwellings are further separated based on the loan purpose (purchase, refinance and home improvement).

As Table 2 indicates, home purchase loans originated for one- to four-family dwellings increased by eight percent from the previous year, and accounted for 60 percent of all loans originated for one- to four-family dwellings. Refinancing volume is generally dictated by available interest rates. Annual average mortgage interest rates declined to 3.94<sup>9</sup> in 2019 from 4.54 in 2018. Consequently, the volume of refinance loan applications and originations increased from the previous year. Home improvement loan originations in 2019 increased by six percent compared to 2018.<sup>10</sup> The volume of multifamily loan originations increased by 11 percent compared to the previous year.

<sup>8</sup> A multifamily property consists of five or more units.

<sup>9</sup> See [http://www.freddiemac.com/pmms/pmms\\_archives.html](http://www.freddiemac.com/pmms/pmms_archives.html)

<sup>10</sup> Reporting rule changes caused a substantial drop in 2018. The 2015 HMDA rule excluded unsecured home improvement loans starting with the data collected for 2018, while the prior years included those unsecured loans, and it is not possible to separate previous years' data that would be compatible with 2018.

**Table 2. Total Loan Applications and Action Taken by the Financial Institutions, 2010-2019**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>1-4 Family</b>										
<i>Home Purchase</i>										
Applications*	103,839	98,742	113,508	128,899	126,868	140,447	156,869	167,874	167,232	176,369
Originated	51,531	48,691	57,175	66,207	71,069	81,942	91,226	96,705	97,018	104,355
Denied	8,794	8,746	10,815	11,663	10,178	10,138	10,806	10,892	10,342	9,903
Purchased**	32,500	30,869	33,452	36,210	31,450	33,186	36,767	39,566	36,873	36,440
Other***	11,014	10,436	12,066	14,819	14,171	15,181	18,070	20,711	22,999	25,671
<i>Refinancing</i>										
Applications*	204,643	174,109	226,436	194,628	101,059	128,792	152,857	115,079	92,295	131,056
Originated	89,818	77,683	111,247	92,850	45,902	59,199	67,098	50,724	41,861	65,694
Denied	34,880	30,917	35,426	36,566	24,410	28,075	36,261	21,343	18,747	18,388
Purchased**	42,693	30,675	36,017	25,970	9,681	12,843	13,869	11,831	8,797	14,994
Other***	37,252	34,834	43,746	39,242	21,066	28,675	35,629	31,181	22,890	31,980
<i>Home Improvement</i>										
Applications*	14,056	14,064	16,029	16,806	18,008	18,592	21,383	22,296	6,338	6,570
Originated	7,080	6,793	7,241	8,126	8,145	9,196	11,055	11,126	2,972	3,148
Denied	4,944	5,393	6,584	6,674	7,490	7,267	7,580	7,713	1,843	2,195
Purchased**	685	600	720	547	465	392	481	563	494	164
Other***	1,347	1,278	1,484	1,459	1,908	1,737	2,267	2,894	1,029	1,063
<b>Multifamily</b>										
Applications*	363	436	585	593	601	683	633	652	982	1,090
Originated	296	354	489	478	493	574	512	479	796	888
Denied	29	36	42	40	42	44	42	45	75	78
Purchased**	9	13	7	9	3	12	17	41	1	3
Other***	29	33	47	66	63	53	62	87	110	121
<b>Manufactured</b>										
Applications*	13,016	17,026	16,804	17,528	16,285	16,600	18,748	20,515	19,958	20,440
Originated	4,557	4,422	4,534	4,951	4,611	4,705	5,074	5,543	5,567	5,963
Denied	5,618	7,898	8,214	8,166	7,302	6,618	7,268	8,411	8,118	7,079
Purchased**	272	252	211	224	286	479	633	648	458	770
Other***	2,569	4,454	3,845	4,187	4,086	4,798	5,773	5,913	5,815	6,628

\*Applications includes all the loans Applications by financial institutions to HMDA during the year regardless of the action taken.

\*\*Purchased includes loans purchased by the financial institution during the year.

\*\*\*Other includes: Applications that were approved but not accepted by the applicant, applications withdrawn by the applicant, and files closed for incompleteness in addition to Preapproval Requests that were denied and Preapproval Requests that were approved but not accepted by the applicant.

## Trends in First-Lien Mortgage loans on Owner-occupied, 1-4 Family Dwellings<sup>11</sup> Metropolitan Statistical Areas (MSAs)<sup>12</sup>, 2010-2019

Home purchase loan originations for first-lien, owner occupied, one- to four-family site-built homes in the state increased by seven percent compared to 2018. After a slight decline in 2018, the increase in originations during 2019 returned to the upward trend of the last decade.

Table 3 provides the number of home purchase loans originated by the MSAs<sup>13</sup> between 2010 and 2019.

**Table 3. First-Lien *Home Purchase* Loans Originated for Owner-Occupied 1-4 Family Dwellings, 2010-2019, MSA and State**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Chattanooga	2,842	2,632	3,166	3,837	4,010	4,529	5,137	5,304	5,037	5,699
Clarksville	2,515	2,952	3,042	2,912	3,183	3,228	3,877	4,442	4,867	5,264
Cleveland	663	682	747	934	964	1,102	1,288	1,267	1,378	1,429
Jackson	811	782	836	982	934	1,072	1,211	1,328	1,359	1,914
Johnson City	1,271	1,246	1,417	1,503	1,538	1,874	2,049	2,225	2,087	2,282
Kingsport	1,309	1,176	1,390	1,533	1,588	1,916	2,003	2,230	2,188	2,489
Knoxville	6,295	5,672	6,532	7,770	8,294	9,779	11,245	11,968	12,103	12,569
Memphis	6,687	5,745	6,463	6,999	7,124	7,908	9,029	9,461	9,841	9,911
Morristown	577	551	600	691	807	972	1,043	1,126	1,246	1,405
Nashville	16,237	15,462	19,243	23,333	25,228	29,950	32,349	33,146	31,560	33,706
TENNESSEE	45,433	42,716	50,279	58,613	61,998	72,172	80,282	84,515	84,275	89,813

Home purchase loan originations increased in all MSAs. The largest annual percentage increase in 2019 was in the Jackson MSA, followed by the Kingsport MSA, at 41 and 14 percent, respectively. All ten of the state's MSAs finished 2019 at a 10-year high for home purchase loan originations.

Thirty-eight percent of all home purchase loans originated in the state were in the Nashville MSA during 2019. While this is a large proportion, the Nashville metro's share of loan origination has trended downward in recent years, falling gradually from a high of 41.5 percent in 2015. In total, Tennessee's four largest metro areas accounted for 68 percent of the state's owner-occupied home purchase mortgages. In 2019, home purchase loans originated in the Nashville MSA increased by seven percent compared to 2018. In the Memphis MSA, home purchase loan originations increased for the eighth consecutive year. However, home purchase loan origination in the Memphis MSA was still nearly 23 percent less than the metro region's 2007 level, at the onset of housing market crash. This is unique to

<sup>11</sup> The discussion in the following sections is based on first-lien mortgage loans on owner-occupied one- to four-family, site-built dwellings, unless otherwise specified.

<sup>12</sup> Data for the Metropolitan Statistical Areas (MSAs), which include counties from other neighboring states, are only for the counties in Tennessee. "Kingsport" refers to the Kingsport-Bristol-Bristol MSA and Nashville refers to the Nashville-Davidson-Murfreesboro-Franklin MSA.

<sup>13</sup> Office of Management and Budget (OMB) released the revised delineations of Metropolitan Statistical Areas in February 28, 2013, which affected the HMDA data collected on or after January 1, 2014. After the change in 2013, Maury County was added to the Nashville MSA; Stewart County was excluded from the Clarksville MSA; Campbell, Morgan and Roane Counties were added to the Knoxville MSA; Grainger County was removed from the Morristown MSA and added to the Knoxville MSA; and Crockett County was added to the Jackson MSA. To accurately compare the loan originations in 2017 to previous years, we used the 2013 MSA delineations for all years between 2007 and 2017. This way, the change between two different time periods will be the result of change in the mortgage activity rather than the change in geography.

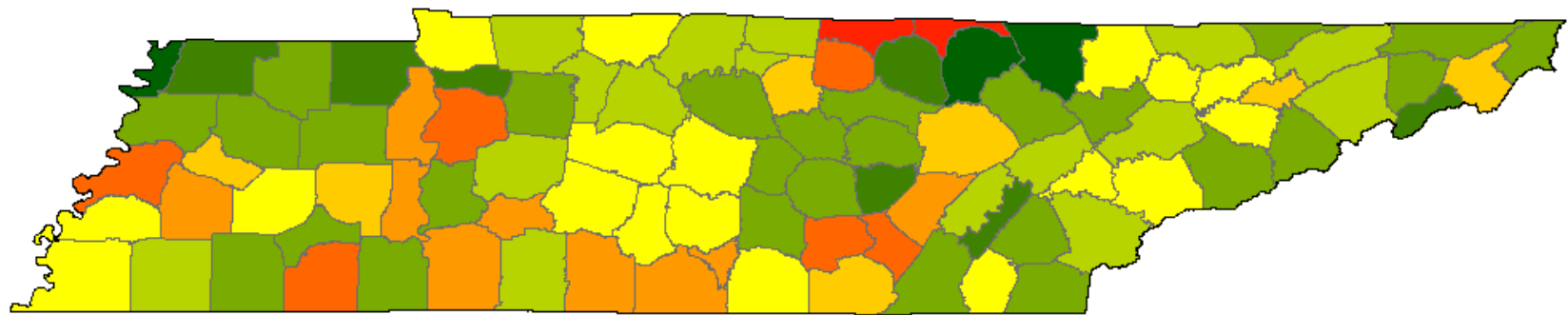
Memphis; the state's nine other MSAs all reached home purchase loan origination levels in 2019 that surpassed 2007.

Seventy of the state's 95 counties experienced an increase in home purchase loan origination during 2019 compared to 2018. The largest volume increase in home purchase loans among the counties with 1,000 or more originations was in Sullivan County, followed by Hamilton County (a 16 percent and a 15 percent annual increase, respectively). In Sullivan County home purchase loans increased from 1,729 in 2018 to 2,002 in 2019, and, in Hamilton County, loan originations increased from 4,674 to 5,358.

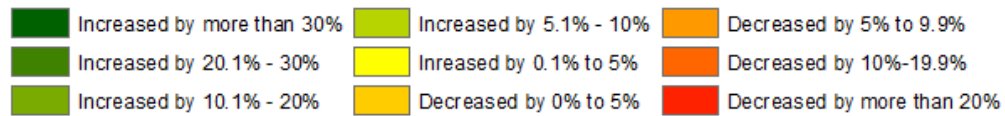
In 2019, nearly 11,000 home purchase loans that were originated in Davidson County, a 10 percent annual increase, represented 12 percent of all home purchase loans originated in the state. Shelby County followed Davidson with nine percent and Knox County with eight percent. Shelby County's home purchase loan originations remained unchanged from 2018 to 2019.

The following map shows the percentage change in the home purchase loan originations for single family site-built homes from 2018 to 2019.

**Map 1: Percent Change in Originations, First-lien, Owner-Occupied, One- to Four-Family, Site-Built Home Purchase Loans, 2018 to 2019**



**Percent Change in Origination Volume**



In all metro areas, the number of refinance loans originated increased from 2018. Refinance activity, while important to track in terms of mortgage activity, is a different type of indicator because it is, as mentioned earlier, often a function of interest rates and not the other factors that influence overall sales volume. In 2019, the median interest rate reported for first-lien refinance loans originated for owner-occupied, one- to four-family, site-built properties declined from 4.5 percent to 3.875 percent.

**Table 4. First-Lien Refinance Loans Originated for Owner-Occupied 1-4 Family Dwellings, 2010-2019, MSA and State**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Chattanooga	4,548	3,948	5,841	4,936	2,425	3,067	3,498	2,511	2,198	3,467
Clarksville	2,134	2,493	3,727	2,580	1,371	1,818	2,157	1,404	1,027	2,229
Cleveland	1,549	1,239	1,733	1,310	663	856	929	658	575	875
Jackson	1,341	1,032	1,549	1,359	674	756	868	656	465	883
Johnson City	2,304	1,971	2,646	2,146	940	1,283	1,421	1,023	866	1,217
Kingsport	2,284	1,953	2,574	2,089	1,048	1,384	1,398	1,126	989	1,290
Knoxville	13,201	10,271	14,940	11,763	5,398	7,162	8,111	5,745	4,730	7,499
Memphis	10,326	8,256	13,151	10,633	4,891	6,101	7,150	5,006	3,718	6,151
Morristown	1,302	1,076	1,404	1,216	660	799	878	678	568	997
Nashville	29,531	24,996	35,387	29,281	14,094	20,247	24,582	18,233	14,744	26,283
TENNESSEE	80,768	68,283	98,720	79,463	37,793	51,603	60,096	44,564	36,430	59,727

Refinance loan originations declined in just nine of the state's 95 counties; counties that experienced this decrease tended to be smaller, with low refinance loan volume to begin with. Williamson County experienced the largest percentage increase in 2019 with 133 percent, followed by Fayette and Montgomery Counties, where refinance loan originations more than doubled in both counties. There were nearly 7,500 originations in Davidson County, 58 percent more than the previous year. The county received 12 percent of all refinance loans originated in the state.

New with the data released in 2018, refinance loans were separated to "refinance<sup>14</sup>" and "cash-out refinance<sup>15</sup>," which were not available in previous years. In 2019, 45 percent of all refinance loan originations for one- to four-family site-built homes were cash-out refinances, a decline from 56 percent in 2018. Cash-out refinance borrowers were using the equity in their homes for other purposes, while borrowers for other refinance purpose was for possibly taking advantage of lower rates. Borrowers who used cash-out refinances also benefitted from lower interest rates than in years past as median interest rate reported for cash-out refinance loan originations also declined.

See Appendix B for the home purchase and refinance loans originated in 2015 through 2019 by county.

<sup>14</sup> A refinancing is a closed-end mortgage loan or open-end line of credit in which a new dwelling-secured debt obligation satisfies and replaces an existing dwelling-secured debt obligation by the same borrower. See [2018 Guide to HMDA Reporting](#) (page 58) for more detail.

<sup>15</sup> A financial institution reports a covered loan or an application as a cash-out refinancing if it is a refinancing and the financial institution considered it to be a cash-out refinancing when processing the application or setting the terms under its or an investor's guidelines. One of the reasons could be the amount of cash received by the borrower at closing or account opening. If a financial institution does not distinguish between a cash-out refinancing and a refinancing under its own guidelines, sets the terms of all refinancing without regard to the amount of cash received by the borrower at loan closing or account opening, and does not offer loan products under investor guidelines, it reports all refinancing as refinancing, not cash-out refinancing. See [2018 Guide to HMDA Reporting](#) (page 59) for more detail.

### 3. CONVENTIONAL VERSUS GOVERNMENT-INSURED LOANS<sup>16</sup>

In 2019, conventional loans hit their highest percent of total purchase loan volume of the past decade, at nearly 61 percent of originations. In 2019, conventional first-lien, owner occupied, one- to four-family, site-built home purchase loan originations increased by nine percent from 2018, while government-insured (FHA-, VA- and USDA-insured) loans increased only by three percent annually. In the big picture, this is a continuation of a decade long trend in the aftermath of the housing market crash.

**Table 5. First-Lien Loans Originated for Owner-Occupied 1-4 Family Dwellings, 2010-2019**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>Home Purchase</b>										
Conventional	41.3%	44.2%	49.1%	54.7%	56.8%	53.9%	54.7%	56.5%	59.4%	60.6%
FHA	41.8%	34.1%	30.0%	24.3%	20.5%	25.3%	25.4%	23.8%	22.2%	21.5%
VA	9.9%	12.4%	11.5%	11.7%	12.6%	12.0%	12.3%	12.3%	12.3%	12.7%
FSA/RHS	7.0%	9.3%	9.4%	9.3%	10.2%	8.7%	7.6%	7.4%	6.1%	5.3%
<b>Refinance</b>										
Conventional	78.2%	77.9%	75.5%	75.9%	73.7%	69.2%	67.5%	68.3%	69.6%	65.9%
FHA	17.9%	14.1%	14.9%	15.1%	12.8%	17.1%	15.3%	16.6%	16.7%	15.7%
VA	3.8%	7.9%	9.2%	8.5%	13.4%	13.7%	17.1%	14.7%	13.5%	18.2%
FSA/RHS	0.1%	0.2%	0.4%	0.4%	0.1%	0.1%	0.2%	0.3%	0.1%	0.2%

In nearly all counties, the majority of home purchase loans originated during the year were conventional. The only exceptions were Montgomery, Hardin, Haywood, Lake, Lauderdale and Stewart Counties. In Montgomery and Stewart Counties, VA-insured loans dominated the home purchase loan originations. In fact, in Montgomery County, 60 percent of all home purchase loans originated during the year were VA-insured, the highest in the state. In Lauderdale and Haywood Counties, a higher percentage of loans were FHA-insured loans, while in Lake and Hardin Counties, FSA/RHS loans' share was higher than conventional and other government insured loans.

Refinance loans were almost exclusively conventional before the housing market crisis (higher than 90 percent). When the housing market crisis began, this share declined, but remained higher than home purchase loans. In 2019, the conventional loan share among all refinance loan originations declined to 66 percent from 70 percent in 2018. While both conventional and FHA-insured loans' share in all refinance loan originations declined, the share of VA-insured refinance loans increased in 2019.

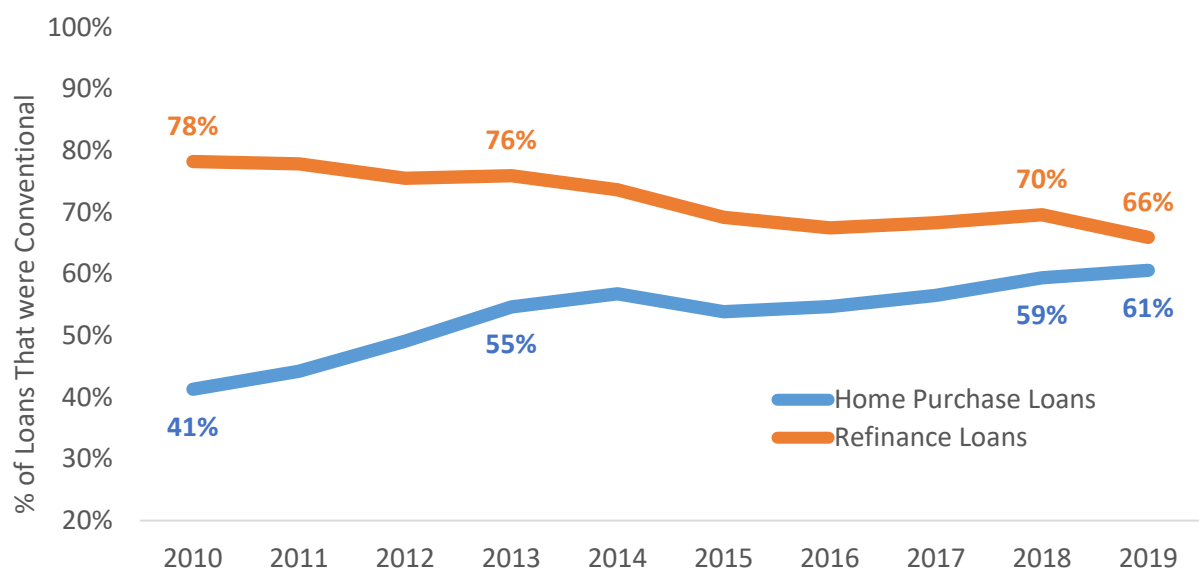
The national nonconventional loan share among first-lien, home-purchase loans for one- to four-family, owner-occupied, site-built slightly increased from 33 percent in 2018 to 33.4 percent in 2019.<sup>17</sup>

Figure below shows that conventional loans have gained market share among home purchase loans, even as they have lost ground among refinances.

<sup>16</sup> First lien, owner-occupied, home purchase loans for one- to four-family dwellings separated by insurer (conventional, FHA-, VA- and FSA/RHS-insured) and by county can be found at Appendix B.

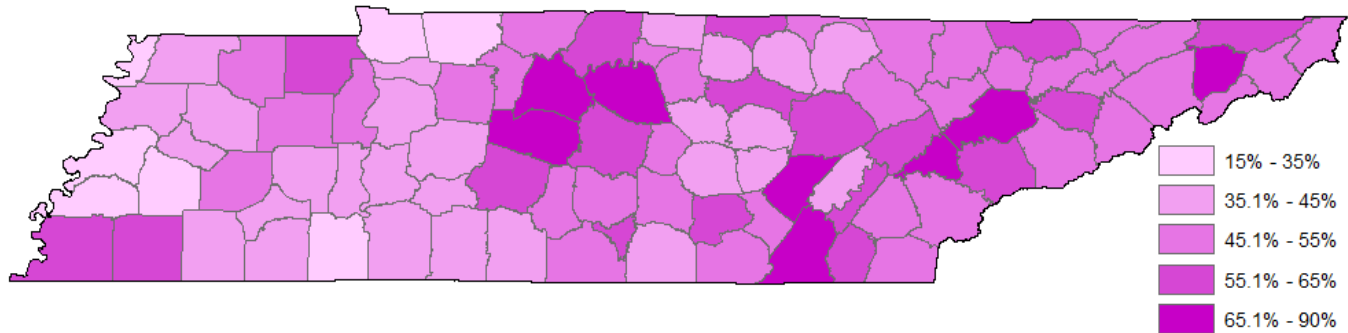
<sup>17</sup> Jo, Y., Liu, F., Skhirtladze, A., and Barriere L. (2020), "Data Point: 2019 Mortgage Market Activity and Trends," Page 17.

**Figure 3. Share of Conventional Loans in Total Loans Originated, 2010-2019**

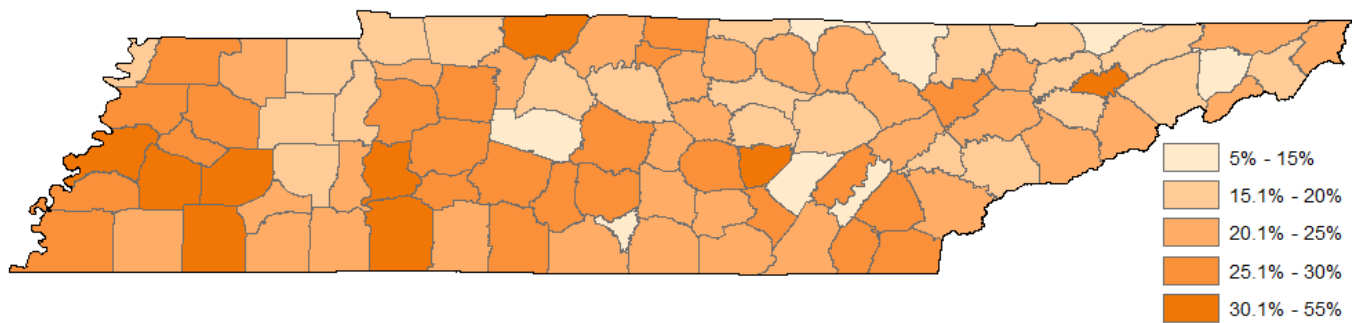


The following maps show the share of first-lien, owner-occupied, one- to four-family, site-built home purchase loans originated in each county by type of insurer (conventional, FHA-, VA- or RHS-Insured).

**Map 2: Share of Conventional Loans Originated, 2019**

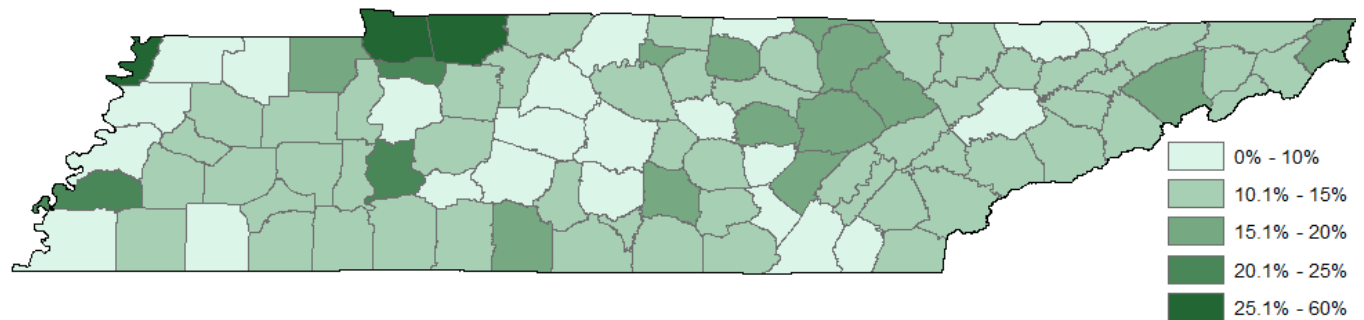


**Map 3: Share of FHA-Insured Loans Originated, 2019**

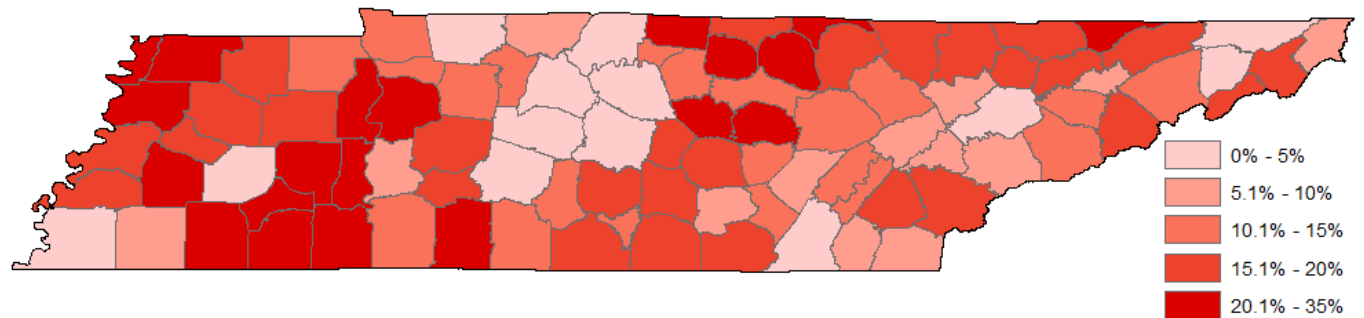




**Map 4: Share of VA-Insured Loans Originated, 2019**



**Map 5: Share of RHS-Insured Loans Originated, 2019**

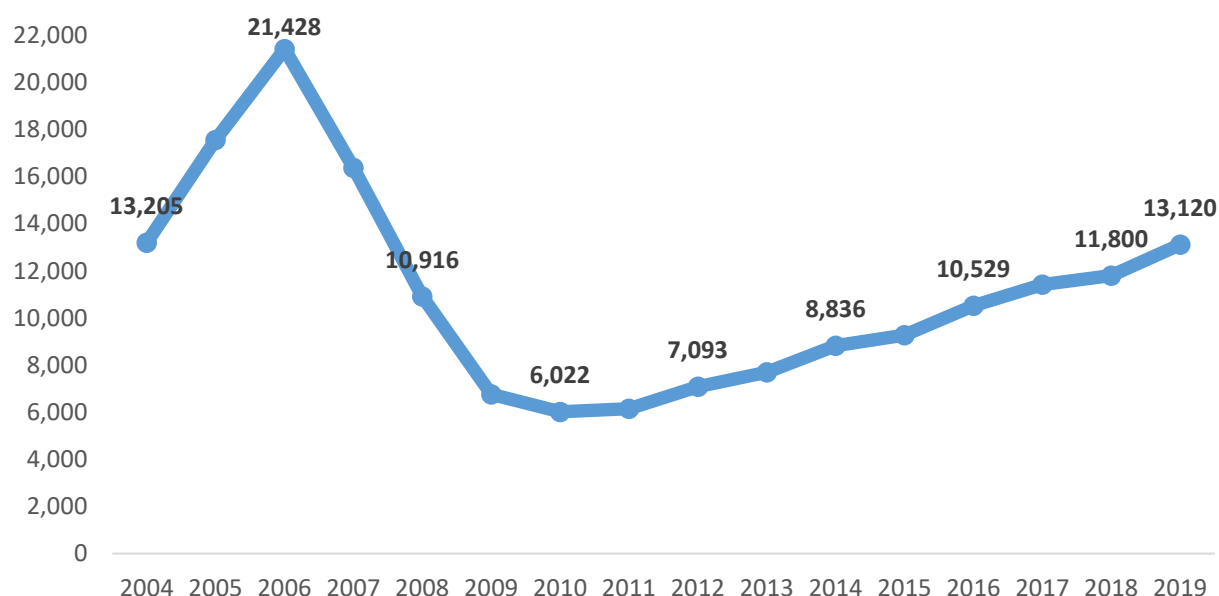


#### **4. MORTGAGE LOANS FOR NON-OWNER-OCCUPIED HOMES**

Financial institutions also report the loan applications and originations for non-owner-occupied homes: rental properties, second homes and/or vacation homes. For the data collected in 2018 and after, the “occupancy type” variable is more detailed.

As Figure 4 shows, the non-owner-occupied home purchase loan originations reached its 16-year peak in 2006 and started declining in the subsequent years, bottoming out in 2011. Non-owner-occupied home purchase loans have been trending upward since that time. In 2019, over 13,000 non-owner-occupied *home purchase* loan originations comprised 13 percent of all home purchase loans originated during the year. Even with an 11 percent year-over-year increase, non-owner-occupied home purchase loan originations were still 39 percent less than the 2006 peak.

**Figure 4. First-Lien Home Purchase Loans Originated for Non-Owner-Occupied Homes, 2004-2019**



While the HMDA data reported before 2018 only classified applications as owner-occupied, non-owner-occupied and not applicable, the 2015 HMDA Rule revised the reporting of occupancy type to include Principal Residence, Second Residence and Investment Property. Of more than 13,000 home purchase loans originated for properties that are not principal residences, only 29 percent were for second homes, while the remaining 71 percent were for an investment property. Although, home purchase loans for investment properties made up a larger percentage of non-principal residence loans, originations for second residences increased by 17 percent in 2019 while loans originated for investment properties increased by nine percent. For the refinance loans originated, the percent of investment property loans was even higher, at 87 percent.

**Table 6. First Lien, Single Family Site-Built Loans Originated by Purpose and Occupancy, 2019**

	Home Purchase	Refinancing	Home Improvement	Other Purposes	TOTAL by Occupancy
Principal Residence	89,813	59,727	1,613	1,491	152,708
Second Residence	3,844	634	34	79	4,591
Investment Property	9,276	4,330	496	243	14,353
<b>TOTAL by Loan Purpose</b>	<b>102,933</b>	<b>64,691</b>	<b>2,143</b>	<b>1,813</b>	<b>171,652</b>

Shelby County had the highest number of single family site-built home loans originated for investment properties followed by Davidson County. The list of the 10 counties with the highest number of loans originated included mostly large urban counties, and loan origination in those counties made 71 percent of total origination in the state for this purpose. More than 2,000 home purchase loans originated for investment properties, in Shelby County, represented 19 percent of nearly 11,000 total home purchase loan originations in the county, regardless of occupancy type.

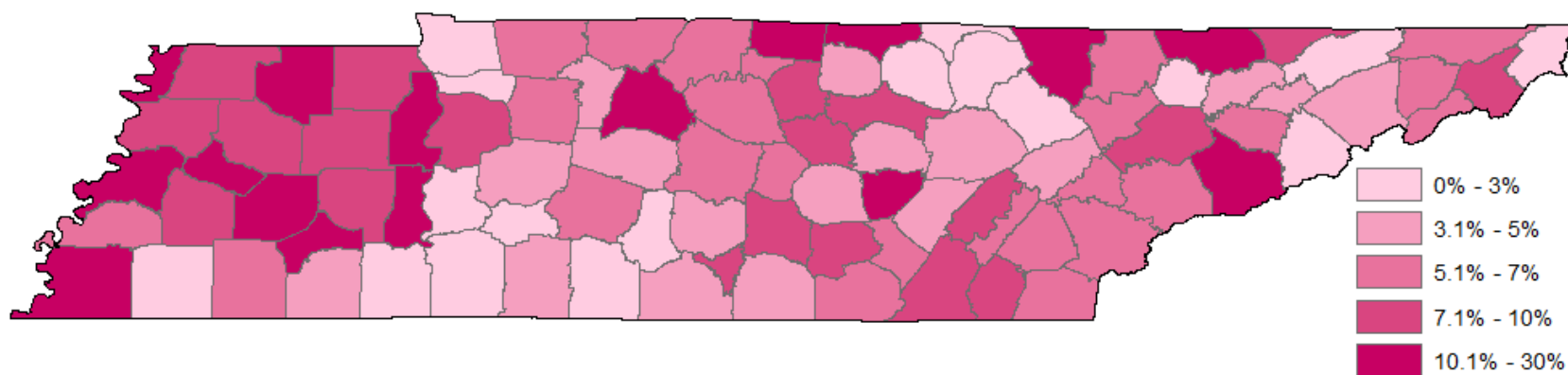
Sevier County ranked number one with the highest number of single family site-built home loans originated for *second residences* followed by Davidson County. The top 10 list of counties for single family home loan originations for second residences also included smaller counties like Campbell and Cumberland, and the loans originated in those 10 counties comprised 57 percent of similar loans in the overall state.

In Sevier County, more than 600 loans originated for second homes (such as vacation properties) represented 27 percent of all home purchase loans originated in the county. Pickett County, although it had only 15 second home loans originated, had the highest second home loans originated as percent of total home purchase loans with 48 percent. Although over 2,000 loans originated for investment properties in Shelby County was, by far, the highest among all counties in 2019, Sevier County had the highest percent of loans originated for investment properties.

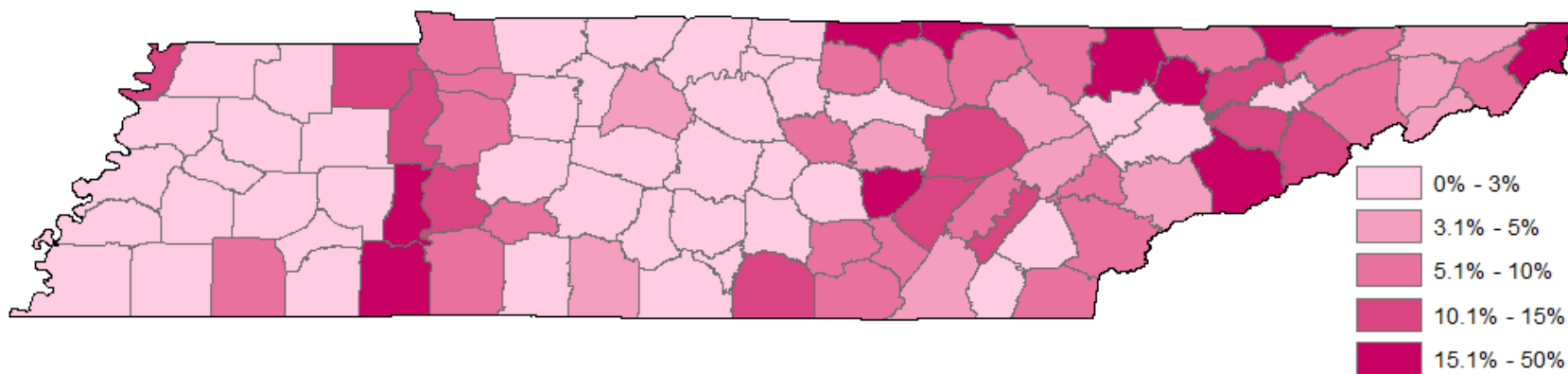
The data on investment property and second residence patterns show some familiar storylines. Memphis, which has recently seen an influx of single family rental properties, tops the state in terms of investment properties. However, the top tourist destination, Gatlinburg, is in the county that tops the list for second residence purchase loans.

The following maps show the home purchase loans originated for investment properties and second residences as percent of total home purchase loans.

**Map 6: Loans Originated for Investment Properties as Percent of Total Home Purchase Loans, 2019**



**Map 7: Loans Originated for Second Homes as Percent of Total Home Purchase Loans, 2019**



Nearly all home purchase loans originated for non-owner-occupied single family site-built properties were conventional. FHA and VA insured a small number of refinance loans for investment properties, but, especially in the second residence loan market, government-insured loans were nonexistent.

Regardless of loan purpose, the denial rates were lower for applicants of investment properties than for principal and second residences. Less than seven percent of home purchase investment property loan applicants were denied while the denial rate for loans involving principal residences and second residences were over eight percent.

## 5. APPLICANT INCOMES AND LOAN AMOUNTS<sup>18</sup>

Financial institutions reporting HMDA data report the loan amounts requested and the applicant incomes considered in making the underwriting decision. The income information is not always required.<sup>19</sup> In 2019, the median income of home purchase loan borrowers<sup>20</sup> was \$72,000 in the state. Williamson County borrowers had the highest median income among counties with \$130,000, followed by Wilson County.

Figure 5 compares the inflation-adjusted median income and loan amount for each loan type. Applicants who applied for FSA/RHS-insured loans had the lowest median income and, adjusted for inflation, their income was nearly flat. For each of the four loan types, the gap between the loan amount and income is increasing in the recent years.

In 2019, the median income of conventional loan applicants was \$80,000, six percent higher than the previous year (adjusted for inflation), while for FSA/RHS insured loan applicants, median income was \$49,000. In between the two, the median income of FHA-insured loan applicants was \$57,000. Median loan amounts for VA-insured loans were higher than median conventional loan amounts. In 2019, inflation-adjusted median income and median loan amount increased from 2018 for all loan types.

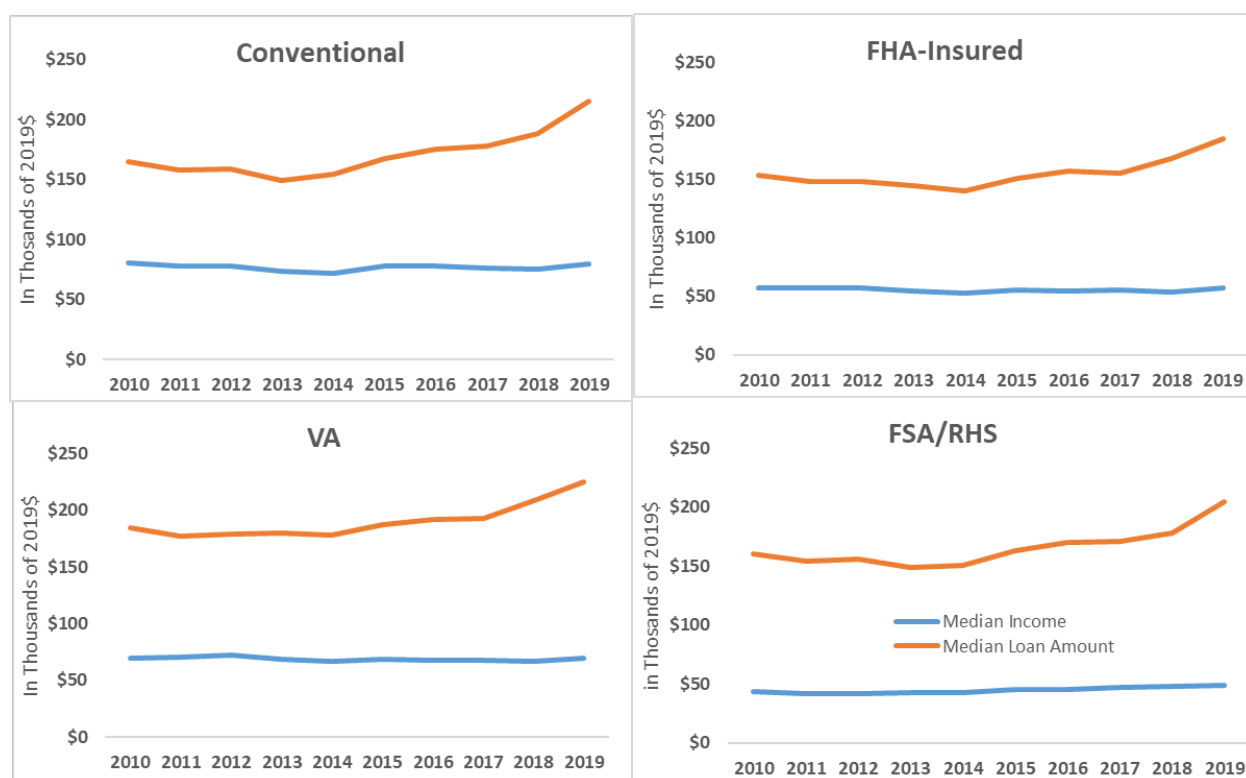
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<sup>18</sup> Discussion in this section forward includes exclusively the home purchase loan applications and originations.

<sup>19</sup> In some occasions financial institutions reporting HMDA data may mark the “applicant’s income” field as “not applicable (NA).” Some of these reasons: the institution does not take the applicant’s income into account when making underwriting decisions, the loan or application is for a multifamily dwelling, the transaction is a loan purchase and the institution chooses not to collect the information, the transaction is a loan to an employee of the institution and the institution seeks to protect the employee’s privacy, even though institution relied on his or her income, or the borrower or applicant is a corporation, partnership, or other entity that is not a natural person. For more information about HMDA data fields see: A Guide to HMDA Reporting: Getting it Right (Edition effective January, 1, 2018), Federal Financial Institutions Examination Council, at <https://www.ffiec.gov/hmda/pdf/2018guide.pdf>

<sup>20</sup> First-lien, owner-occupied, home purchase loans for one- to four-family site-built homes.

**Figure 5. Median Income and Loan Amount by Insurer, in Thousands 2019\$, 2010-2019**



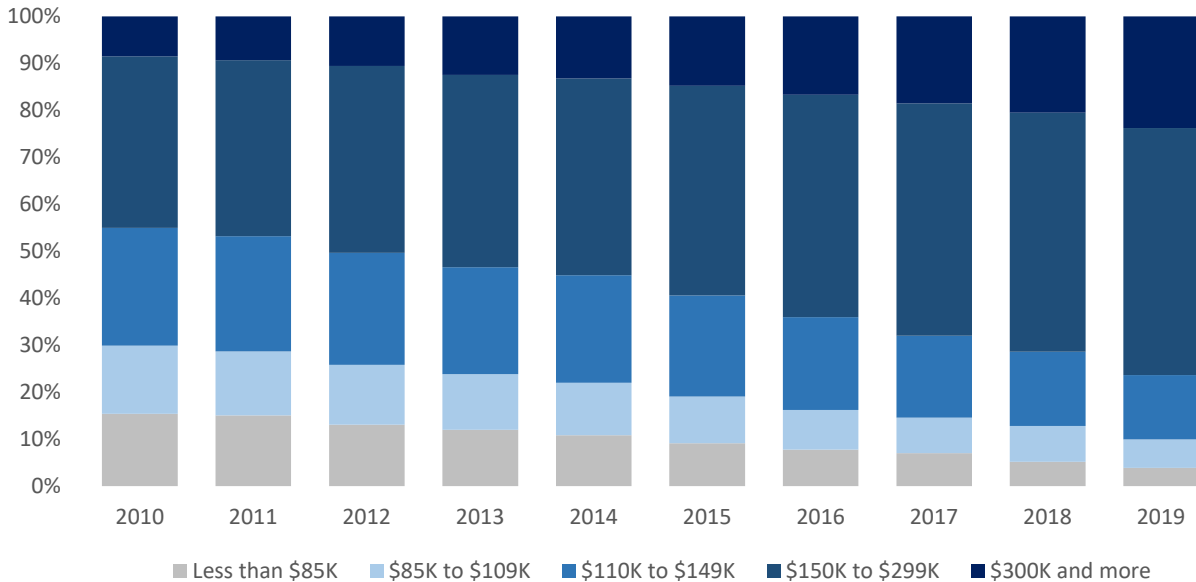
In 2019, six percent of home purchase loans and five percent of similar refinance loans originated had loan amounts<sup>21</sup> above the national conforming loan limit of \$484,350<sup>22</sup>. In the following figure, we looked at the distribution of home purchase loans that were originated between 2010 and 2019 by loan amount<sup>23</sup>. While more than half of the home purchase loans originated in 2010 were less than \$150,000, by 2019, these loans constituted less than 25 percent of all loans originated in the year. Declining shares of lower priced home purchases in the total of home purchase loan origination is a sign of eroding affordability in the housing markets.

<sup>21</sup> For the publicly available HMDA data, both the loan amount and property values are disclosed at the mid-point of \$10,000 intervals. See Liu, F., Jo, Y., Skhirtladze, and Barriere L. (2020), "An Updated Review of New and Revised Data Points in HMDA: Further Observations Using the 2019 HMDA Data," 2020, p. 54.

<sup>22</sup> For the loans originated in 2019, the conforming loan limit (the maximum mortgage loan amount that Fannie Mae and Freddie Mac will guarantee) was \$534,750 for the counties in the Nashville MSA and \$484,350 for the rest of the state.

<sup>23</sup> Loan amounts are non-inflation adjusted nominal values.

**Figure 6. Home Purchase Loans Originated, Nominal Loan Amount, 2010-2019**



In 2019, the average loan amount for home purchase loans originated was highest in Williamson County, over \$450,000, followed by Davidson County. At the other end of the distribution, the average loan amount in Lauderdale County was less than \$110,000.

The 2015 HMDA Rule added combined loan-to-value ratio (CLTV) as one of the new discretionary data points starting in the 2018 HMDA data. Financial institutions, except the exempt ones, are required to report the ratio of the total debt amount to the value of the property, which was relied when making the credit decisions. In 2019, the median CLTV for conventional home purchase loans originated was 85 percent. For similar refinance loans, including cash-out refinances, median CLTV was 72 percent.

## 6. ANALYSIS BY DEMOGRAPHIC GROUPS AND INCOME LEVELS<sup>24</sup>

HMDA data allow for an examination of loan applications, originations and denials based on various demographics. HMDA data report race, ethnicity and gender for both the applicant and co-applicant, if available.<sup>25</sup>

We also looked at the applicants' income compared to the estimated area median family income<sup>26</sup> (AMFI) of the census tract where they applied to identify the percent of loan applications, originations and denials for low-income applicants<sup>27</sup> and to examine loan terms that may vary based on income.

Since 2013, the share of total home purchase and total refinance loans originated for black or African-American borrowers has been increasing (Table 8), reversing a trend of decline in the years prior to 2013. 2019 saw a return to the pre-2013 trend, with a slight decrease in the share of home purchase loan originations going to African-American borrowers, and a decline in the African-American borrower share of refinances. The share of home purchase loans to white and Asian borrowers also declined compared to 2018. While the share for each of these race categories in total home purchase loans originated during the year declined, the volume of loans for each race category was higher than previous year.

The percent of home purchase loans to Hispanic or Latino<sup>28</sup> borrowers were the highest they have been in the past 10 years.<sup>29</sup> Table 7, below, provides more detailed data for the last 10 years.

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<sup>24</sup> For the analysis from this point on, unless otherwise specified, we will consider first-lien loans for owner-occupied, site-built, one- to four-family dwellings.

<sup>25</sup> For the loans that are purchased, the institutions do not have to collect or report race. If the borrower or applicant is not an actual person (for example, a corporation or a partnership), race will be "not applicable." Each applicant can report belonging to up to five racial groups. In this report, we defined combined race categories. The methodology for determining and defining those combined race categories is explained in Appendix D.

<sup>26</sup> The MFI reported in HMDA data files and used in these calculations is the estimated Tract MFI, which is the census tract's estimated MFI for each year, based on the HUD estimate for the Metropolitan Statistical Area (MSA)/Metro Division (MD) or non-MSA/MD area where the tract is located. For tracts located outside of an MSA/MD, the MFI is the statewide non-MSA/MD MFI.

<sup>27</sup> A low- to moderate-income (LMI) applicant is defined as someone who earns less than 80 percent of area median family income. A middle-income applicant earns more than 80 percent but less than 120 percent of the estimated AMFI. If the applicant's income is more than 120 percent of the estimated AMFI, then the applicant is labeled as a high-income applicant.

<sup>28</sup> Ethnicity is also combined for applicant and co-applicant. If either one (applicant or co-applicant) is reported as "Hispanic and Latino," that application is classified as "Hispanic or Latino."

<sup>29</sup> First-lien, owner-occupied, 1-4 family, site-built, home purchase and refinance loan originations by race and by county in 2018 can be found at Appendices E and F.



**Table 7. Borrower Characteristics and Purpose of the Loan, 2010-2019**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<i>I. Home Purchase Loans</i>										
<b>Borrower Race</b>										
American Indian	0.5%	0.5%	0.3%	0.3%	0.4%	0.4%	0.4%	0.2%	0.2%	0.3%
Asian	1.5%	1.5%	1.6%	1.8%	1.8%	1.8%	2.0%	2.2%	2.3%	2.2%
African American	8.6%	7.4%	7.2%	6.2%	6.4%	6.5%	6.8%	7.2%	7.5%	7.3%
Native Hawaiian	0.1%	0.2%	0.1%	0.1%	0.2%	0.1%	0.1%	0.2%	0.1%	0.1%
White	82.8%	83.5%	83.8%	84.6%	84.4%	84.7%	83.5%	82.4%	80.9%	80.1%
Joint	0.7%	0.9%	0.9%	1.0%	1.1%	1.2%	1.2%	1.3%	1.4%	1.5%
Race Not Available	5.8%	5.9%	5.9%	5.9%	5.7%	5.2%	5.9%	6.4%	7.5%	8.5%
<b>Borrower Ethnicity</b>										
Hispanic or Latino	2.5%	2.7%	2.7%	3.0%	3.2%	3.4%	3.8%	3.9%	4.3%	4.7%
<b>Borrower Income</b>										
Low to Moderate										
Income	38.4%	35.7%	34.8%	30.2%	30.0%	30.2%	28.3%	26.4%	28.0%	26.3%
Middle Income	25.3%	25.5%	25.5%	25.8%	26.4%	26.5%	26.4%	27.7%	27.4%	28.0%
High Income	35.2%	37.8%	38.7%	43.0%	42.9%	42.5%	44.7%	45.3%	43.7%	44.9%
Missing	1.0%	1.0%	0.9%	1.1%	0.7%	0.8%	0.7%	0.7%	0.9%	0.8%
<i>II. Refinance Loans</i>										
<b>Borrower Race</b>										
American Indian	0.3%	0.3%	0.3%	0.3%	0.4%	0.4%	0.4%	0.3%	0.3%	0.3%
Asian	1.0%	1.2%	1.2%	1.2%	1.0%	1.1%	1.3%	1.0%	0.8%	1.2%
African American	4.3%	4.7%	5.4%	6.9%	8.0%	7.8%	8.1%	8.7%	8.7%	7.7%
Native Hawaiian	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.2%	0.1%	0.1%
White	85.3%	84.9%	84.6%	82.7%	80.2%	79.9%	78.4%	76.9%	77.4%	75.5%
Joint	0.8%	0.8%	0.9%	0.9%	1.2%	1.0%	1.0%	1.1%	0.9%	1.1%
Race Not Available	8.2%	7.9%	7.6%	7.8%	8.9%	9.7%	10.7%	11.8%	11.7%	14.0%
<b>Borrower Ethnicity</b>										
Hispanic or Latino	1.6%	1.8%	1.8%	2.1%	2.3%	2.2%	2.3%	2.6%	2.4%	2.5%
<b>Borrower Income</b>										
Low to Moderate										
Income	21.7%	21.3%	20.7%	21.2%	24.7%	21.1%	19.2%	24.5%	32.4%	25.2%
Middle Income	22.5%	21.7%	20.9%	21.4%	21.9%	20.4%	19.5%	23.2%	24.7%	21.2%
High Income	46.7%	44.5%	44.5%	43.0%	39.6%	39.9%	41.8%	41.0%	38.4%	40.3%
Missing	9.1%	12.5%	13.8%	14.3%	13.8%	18.5%	19.5%	11.3%	4.5%	13.3%
<b># of Purchase Loans</b>	45,433	42,716	50,279	58,613	61,998	72,172	80,282	84,515	84,275	89,813
<b># of Refinance Loans</b>	80,768	68,283	98,720	79,463	37,793	51,603	60,096	44,564	36,430	59,727

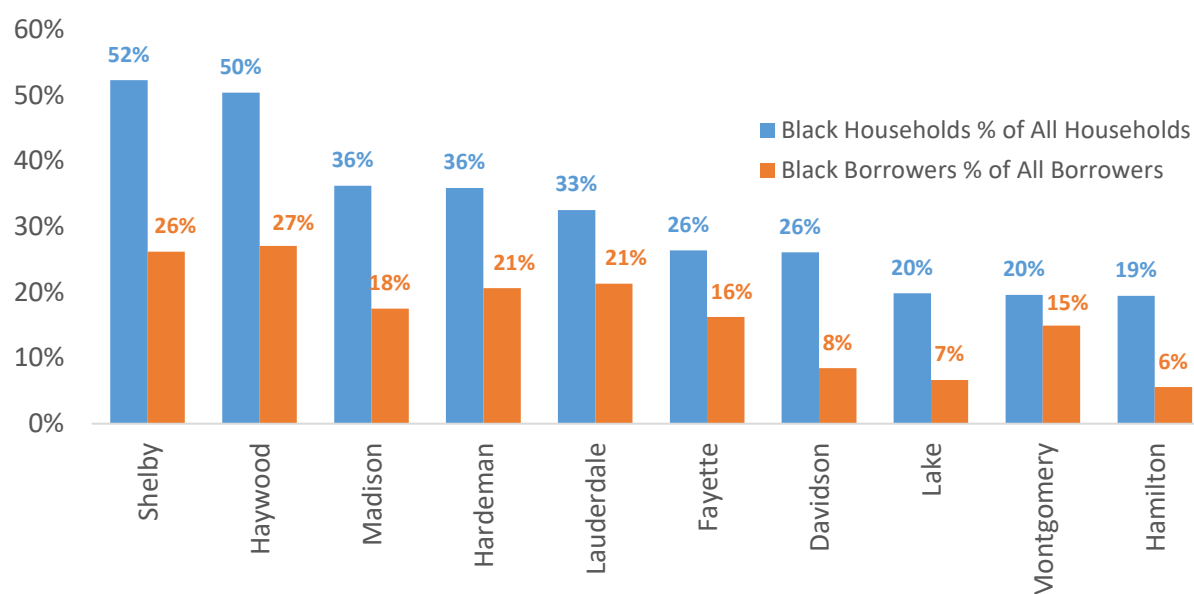
NOTE: First lien mortgage loans originated for one-to-four family owner-occupied homes.

With 27 percent of total borrowers, Haywood County had the highest percent of home purchase loan borrowers who were black followed by Shelby County with 26 percent and Lauderdale County with 21 percent. These counties have been at the top of the list for African-American borrower share since 2016. This undoubtedly correlates strongly with each county's existing population; more than 50 percent of all households were black in Haywood and Shelby Counties and in Lauderdale County 33 percent of all households were black in 2018.<sup>30</sup> Especially among the counties with a high percentage of home

<sup>30</sup> American Community Survey (ACS), 5-year estimates, 2014-2018.

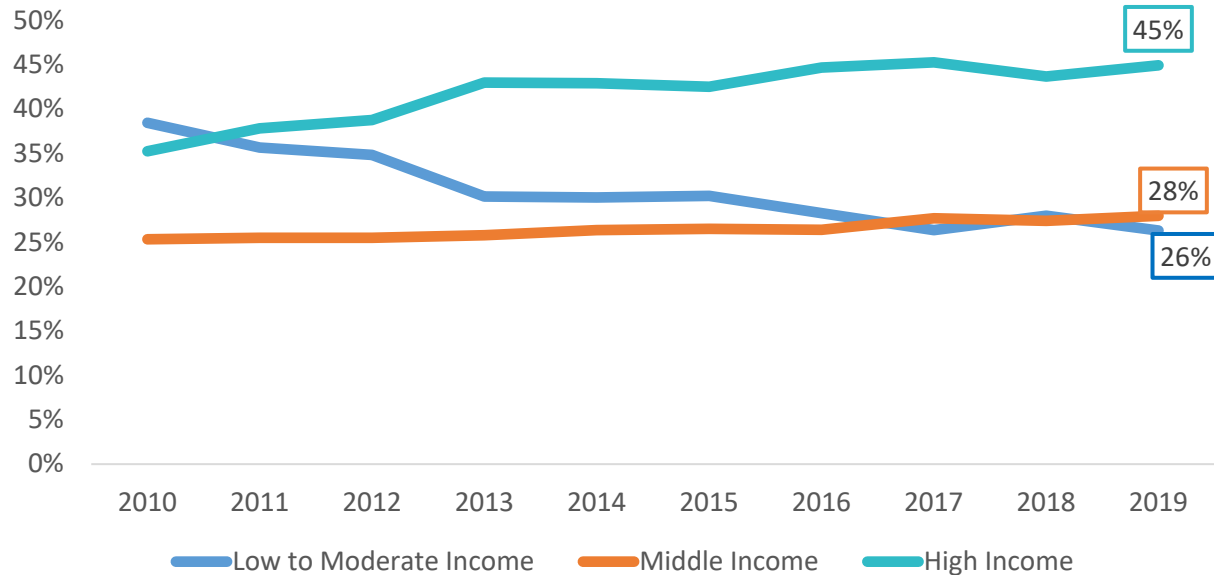
purchase loans originated for black borrowers, the lending pattern follows the racial distribution of households in the county, meaning that, compared to the rest of the counties in the state, counties that have a high percentage of black households also have a relatively higher percentage of all loans are originated for black borrowers. However, there is still a large discrepancy between the black households share in total households and their share in total home purchase loan originations. The following figure compares these two for the ten counties with the highest percent of black households in the state according to 2018 American Community Survey (ACS) five-year estimates.

**Figure 7. 2019 Racial Lending Patterns and Household Racial Composition, 10 Counties with the Highest Share of Black Households, Home Purchase Loans**



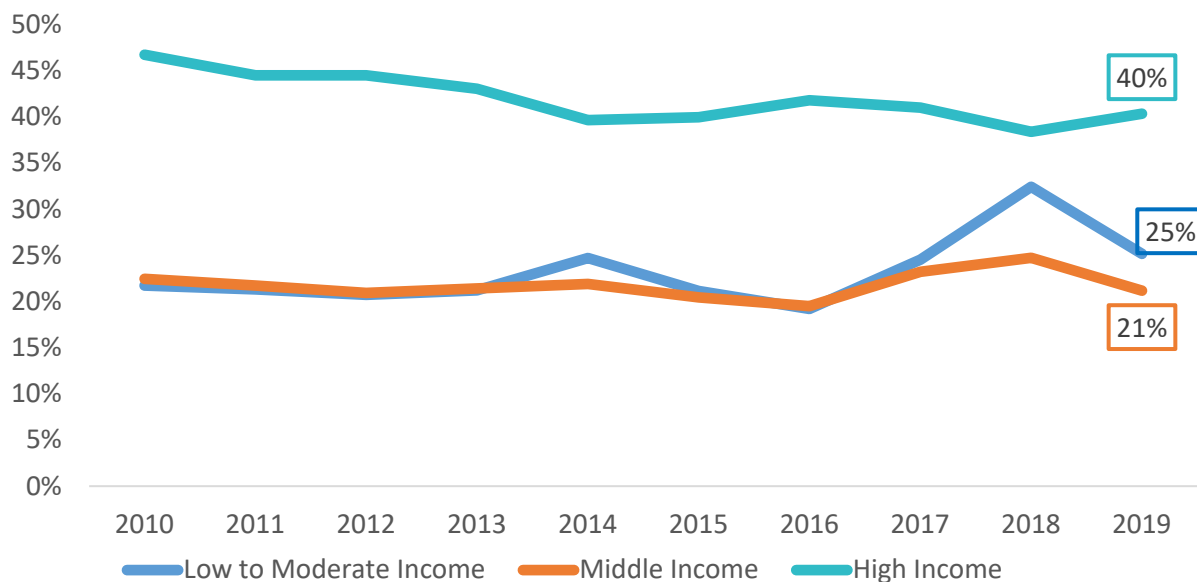
Borrower income is an important factor in determination of mortgage origination. Except 2010, low- to moderate income (LMI) borrowers accounted for a lower percentage of home purchase loans than high-income borrowers. Since 2012, the distance between the percentage of high-income borrowers and LMI borrowers has gotten larger. In 2019, 26 percent of all home purchase loans originated were for LMI borrowers, down from 28 percent in 2018. The percentage of loans originated for middle-income borrowers has remained steady over the years, but always lower than the LMI and high-income borrowers. In 2017, this shifted to where nearly 28 percent of total originations were from middle-income borrowers, exceeding the share of LMI borrowers. In 2018, with the slight increase in the share of LMI borrowers, the long-term trend returned. However, in 2019, with the decline in LMI share of home purchase loan originations, again, LMI borrowers accounted for the lowest share in home purchase loan originations.

**Figure 8. The Percent of *Home Purchase* Loans Originated, Borrower Income, 2010-2019**



The picture is somewhat different for the *refinance* loans originated. As the following figures<sup>31</sup> show, high-income borrowers have consistently accounted for a higher percentage of refinance loans originated than other income categories. In 2019, 40 percent of all refinance loans originated were for high-income borrowers compared to 38 percent in the previous year.

**Figure 9. The Percent of *Refinance* Loans Originated, Borrower Income, 2010-2019**

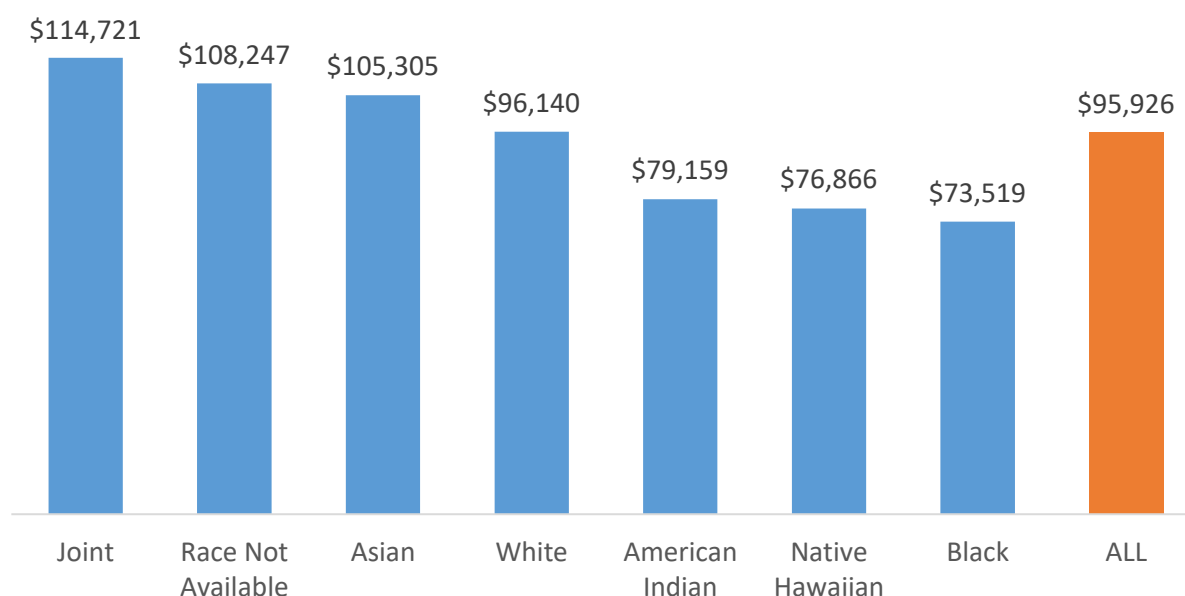


<sup>31</sup> Not included in the figures is the borrowers whose income information that was not provided. Especially for the refinance loan originations, the borrowers without income information is a relatively higher portion of all refinance loan borrowers. For example, in the last three years of this study (2016-2018), 14 percent or more of all refinance loan borrowers did not have income information.

Twenty-two percent of black borrowers purchased homes that were located in LMI neighborhoods, compared to 15 percent of white home purchase loan borrowers. This difference was even more pronounced among refinance borrowers. Twenty-four percent of black refinance loan borrowers were in LMI neighborhoods compared to 12 percent of white borrowers.

In 2019, among the home purchase loan borrowers with race and income information provided, black borrowers had the lowest average and median income followed by Native Hawaiian borrowers. Thirty-six percent of black borrowers had incomes at or below 80 percent of Area Median Income (AMI, meaning that they were “low-to moderate-income (LMI),” while 26 percent of all borrowers were LMI in 2019.

**Figure 10. Average Income by Race, Home Purchase Borrowers, 2019**



Racial patterns in lending extend to what types of loans different racial groups tend to use. African-American and Hispanic borrowers have historically and presently use nonconventional loans (FHA-, VA-, RHS- and FSA-insured loans) at higher rates than white borrowers. Non-conventional loans usually have lower downpayment requirements, which may be more attractive to households with lower incomes, such as African American and Hispanic households<sup>32</sup> on average in relation to white households.

The following table displays the nonconventional, first-lien mortgage loans originated for site-built, one-to four-family owner-occupied homes separated by borrower demographics and loan purpose.<sup>33</sup> The percentages given in the table represent the nonconventional loans made to borrowers in a race category as a percent of all loans made to borrowers in that racial group (including conventional and nonconventional loans). For example, in 2019, 17 percent of all loans made for Asian borrowers were nonconventional loan products.

<sup>32</sup> [Recent Trends in Wealth-Holding by Race and Ethnicity: Evidence from the Survey of Consumer Finances](#), Board of Governors of Federal Reserve System.

<sup>33</sup> The number of first-lien home purchase and refinance loans originated for owner-occupied, one- to four-family dwellings separated by race and county is provided in Appendices E and F.

**Table 8. Borrower Characteristics and Loan Purpose, Nonconventional Loans, 2010-2019**

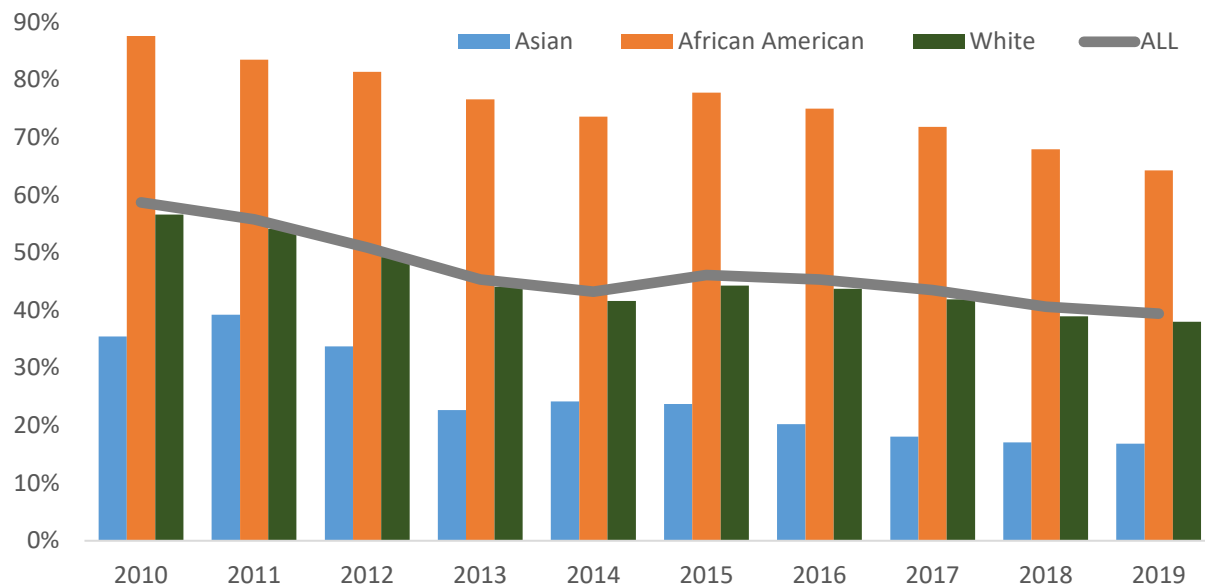
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<i>I. Home Purchase Loans (Nonconventional Loan Utilization)</i>										
<b>Borrower Race</b>										
Asian	35.4%	39.2%	33.7%	22.6%	24.1%	23.7%	20.2%	18.1%	17.1%	16.8%
African American	87.6%	83.5%	81.3%	76.6%	73.6%	77.7%	75.0%	71.8%	67.9%	64.3%
White	56.6%	54.1%	49.2%	44.0%	41.6%	44.2%	43.7%	41.9%	38.9%	38.0%
Joint	58.4%	58.8%	54.8%	52.5%	53.4%	54.3%	51.9%	51.8%	46.3%	43.7%
Race Not Available	54.7%	50.7%	43.1%	37.8%	38.1%	43.6%	41.1%	38.2%	36.7%	35.8%
Other Minority	33.1%	39.9%	37.6%	35.5%	33.9%	37.4%	39.9%	56.1%	53.3%	52.2%
<b>Borrower Ethnicity</b>										
Hispanic or Latino	75.1%	72.6%	65.5%	61.5%	60.8%	60.6%	58.7%	56.1%	49.9%	47.1%
Not Hispanic or Latino	58.8%	56.0%	51.2%	45.5%	43.0%	45.8%	45.2%	43.4%	40.5%	39.3%
Not provided	50.2%	45.6%	39.4%	35.3%	36.7%	42.1%	38.5%	36.6%	36.5%	36.6%
<b>Borrower Income</b>										
Low to moderate income	73.0%	70.0%	65.8%	60.9%	58.2%	61.4%	58.7%	55.0%	50.3%	48.2%
Middle income	65.2%	64.2%	58.3%	55.1%	53.4%	55.7%	56.5%	54.0%	50.6%	49.6%
High Income	39.4%	37.5%	33.2%	29.2%	26.9%	29.6%	30.6%	30.7%	28.5%	28.2%
<i>All Borrowers</i>	<i>58.7%</i>	<i>55.8%</i>	<i>50.9%</i>	<i>45.3%</i>	<i>43.2%</i>	<i>46.1%</i>	<i>45.3%</i>	<i>43.5%</i>	<i>40.6%</i>	<i>39.4%</i>
<i>II. Refinance Loans (Nonconventional Loan Utilization)</i>										
<b>Borrower Race</b>										
Asian	11.8%	11.3%	12.4%	13.1%	20.7%	14.9%	11.0%	12.6%	14.4%	18.1%
Black or African American	48.3%	50.6%	48.8%	46.0%	47.6%	54.2%	56.9%	52.6%	49.1%	57.0%
White	20.5%	20.6%	22.8%	22.0%	23.0%	27.6%	29.2%	28.3%	27.5%	30.7%
Joint	26.1%	29.0%	35.6%	34.5%	57.2%	40.8%	43.1%	38.3%	41.2%	41.3%
Race Not Available	22.0%	23.0%	26.9%	27.1%	33.7%	38.7%	39.7%	38.4%	35.1%	39.8%
Other Minority	17.2%	20.2%	27.3%	23.6%	24.5%	31.3%	40.4%	41.9%	48.6%	50.0%
<b>Borrower Ethnicity</b>										
Hispanic or Latino	29.9%	33.6%	24.3%	36.5%	25.4%	37.7%	40.5%	35.7%	33.6%	43.5%
Not Hispanic or Latino	21.8%	21.9%	23.8%	23.7%	33.4%	30.0%	31.6%	30.9%	29.8%	33.0%
Information not provided	20.6%	21.9%	20.0%	25.4%	32.5%	37.3%	39.2%	36.7%	34.4%	39.3%
<b>Borrower Income</b>										
Low to moderate income	24.4%	20.6%	18.4%	15.0%	17.0%	21.0%	23.5%	28.9%	33.7%	37.8%
Middle income	22.1%	20.9%	17.6%	15.6%	19.4%	20.8%	22.1%	28.7%	31.9%	26.5%
High Income	12.1%	11.8%	10.0%	9.7%	12.2%	13.4%	13.2%	19.0%	22.3%	16.8%
<i>All Borrowers</i>	<i>21.8%</i>	<i>22.1%</i>	<i>48.5%</i>	<i>24.1%</i>	<i>52.5%</i>	<i>30.8%</i>	<i>32.5%</i>	<i>31.7%</i>	<i>30.4%</i>	<i>34.1%</i>

Table 8 reveals that, in 2019, nonconventional loan utilization among home purchase loan borrowers declined for all race, ethnicity and income categories. Sixty-four percent of African-American borrowers used nonconventional government-insured (FHA, VA and/or FSA/RHS insured) loans for home purchase, while in the same year, only 40 percent of all home purchase loans were nonconventional. The data also show that, among various race and income categories, the share of nonconventional loans is in a declining trajectory since 2010, except a sudden uptick in 2015 coinciding with a decline in mortgage

insurance premium (MIP) for most FHA-insured loan borrowers. In 2019, in all race categories and for all borrowers, the share of nonconventional loans was lower than in 2018. This is a sign that conventional loan products are returning to the market.

The following figure displays that African-American borrowers are more likely to use nonconventional loans than borrowers of other racial categories.

**Figure 11. Non-Conventional Share of Home Purchase Loans, by Race, 2010-2019**



A comparison of borrowers who received nonconventional (FHA, VA or FSA/RHS insured) first lien home purchase loans for owner-occupied one- to four-family dwellings with race and county loan totals is given in Appendix G.

## 7. DENIAL RATES AND DENIAL REASONS

We calculated denial rates by dividing the number of loans denied by the financial institution by the total number of loan applications, excluding the number of applications withdrawn by applicant, applications closed for incompleteness and the loans that were originated previously and purchased by financial institutions during the reporting calendar year.

In the following table, denial rates are separated by race and loan type, i.e. conventional versus nonconventional. The table shows variations in denial rates across different race categories. However, the denial rates data in the absence of other important borrower and loan characteristics such as the applicants' credit scores and loan to value (LTV) ratios should be considered carefully. Starting in 2018, variables such as credit score, debt-to-income (DTI) ratio and combined loan-to-value (CLTV) ratios were reported as part of the HMDA data; however, to protect the applicant and borrower privacy, credit score was not included in the 2018 and 2019 publicly available loan-level HMDA data file and DTI was disclosed only in ranges.<sup>34</sup>

Additionally, looking back to the housing crisis years captures a range of issues that make the comparison of denial rates across time tricky. For example, in the years prior to the housing market crash, looser underwriting standards brought riskier borrowers with weaker credit profiles to the market, increasing the demand for loans. After the crisis, it is possible that some borrowers with blemished credit histories or with lower income might self-select not to apply for a loan.

In Tennessee, the denial rate of all applicants in different race categories (including conventional and nonconventional loans) who applied for a home purchase loan declined from 9.4 percent in 2018 to 8.4 percent in 2019. In fact, for all race categories, the denial rates in 2019 were lower than the previous year, which is a continuation of the trend in the last several years in the state and the nation. Nationwide, denial rates continued a downward trend.<sup>35</sup>

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<sup>34</sup> Jo, Y., Liu, F., Skhirtladze, A., and Barriere L. (2020), "Data Point: 2019 Mortgage Market Activity and Trends," p. 36.

<sup>35</sup> Ibid, p. 38.

**Table 9. Denial Rates, Home Purchase Loans, Loan Type, 2010-2019**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<i>I. Home Purchase Loans</i>										
Conventional and Nonconventional										
All Applicants	14.0%	14.7%	15.6%	14.6%	12.4%	10.9%	10.5%	10.0%	9.4%	8.4%
Race										
Asian	15.5%	16.9%	16.2%	16.2%	13.3%	12.1%	11.5%	9.3%	10.9%	10.3%
African American	21.2%	22.6%	24.7%	24.5%	20.5%	18.3%	17.4%	17.4%	15.8%	15.2%
White	12.7%	13.3%	14.4%	13.3%	11.2%	9.8%	9.4%	8.8%	8.3%	7.3%
Joint	15.6%	13.6%	15.5%	16.6%	11.9%	8.7%	10.4%	10.0%	9.2%	7.1%
Other Minority	15.5%	13.4%	19.0%	21.7%	14.3%	14.7%	15.2%	13.7%	14.6%	11.5%
Race NA	19.5%	21.1%	19.9%	19.2%	18.9%	17.2%	15.7%	15.3%	12.7%	11.9%
Ethnicity										
Hispanic	16.9%	16.1%	19.0%	19.6%	17.1%	14.9%	12.6%	12.2%	11.4%	12.2%
Not Hispanic	13.5%	14.0%	15.1%	14.1%	11.8%	10.4%	10.0%	9.5%	8.9%	8.0%
Conventional Only										
All Applicants	15.1%	15.6%	15.5%	12.9%	10.9%	9.7%	9.1%	8.6%	7.7%	7.1%
Race										
Asian	13.8%	17.5%	15.9%	13.7%	13.3%	11.7%	10.8%	8.4%	9.9%	9.9%
African American	35.4%	31.4%	32.0%	27.7%	22.4%	21.6%	19.1%	18.1%	15.2%	14.8%
White	13.9%	14.5%	14.6%	11.9%	9.8%	8.8%	8.2%	7.7%	6.8%	6.2%
Joint	19.1%	12.2%	13.8%	15.0%	11.4%	7.3%	9.5%	9.4%	7.8%	6.4%
Other Minority	15.6%	14.4%	20.6%	21.6%	11.5%	14.6%	14.4%	14.6%	14.5%	13.1%
Race NA	19.6%	21.4%	17.4%	17.7%	16.7%	15.9%	14.0%	13.6%	11.4%	10.4%
Ethnicity										
Hispanic	20.7%	18.8%	20.6%	17.3%	17.4%	14.2%	11.3%	12.3%	10.1%	10.7%
Not Hispanic	14.6%	14.7%	14.9%	12.4%	10.2%	9.1%	8.6%	8.1%	7.2%	6.7%

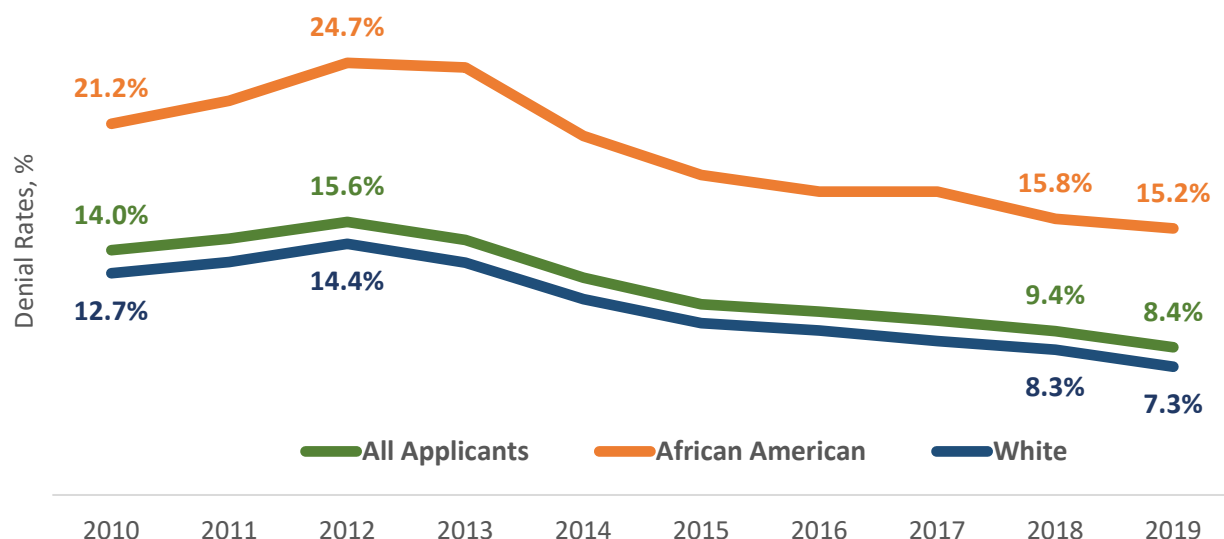
NOTE: First lien home purchase loans for site-built one-to-four family owner-occupied homes.

At 15.2 percent, African-American applicants had the highest denial rate in 2019, albeit a decline from 15.8 percent in 2018. With an 11.9 percent denial rate, applicants who did not report any race followed African-American applicants. Among the nonwhite race categories, Joint race applicants had the lowest denial rates, which declined from 9.2 percent in 2018 to seven percent in 2019. Hispanic applicants who applied for a conventional home purchase loan also had higher denial rates than the non-Hispanic applicants who applied for a similar home purchase loan, and the Hispanic applicants had a denial rate higher than the previous year. Conventional loan applicants, on average, experienced lower denial rates than conventional and non-conventional loan applicants combined, although differences among various racial categories persisted in similar proportions. The denial rate for African-American borrowers applying for a conventional loan has fallen dramatically from 2010 to 2019. The African-American applicant conventional loan denial rate in 2010 was 2.4 times what it was in 2019.

The following figure compares the denial rates of home purchase loans for all, white and African-American applicants.



**Figure 12. Denial Rates<sup>36</sup>, Purchase, African-American and White Applicants, 2010-2019**



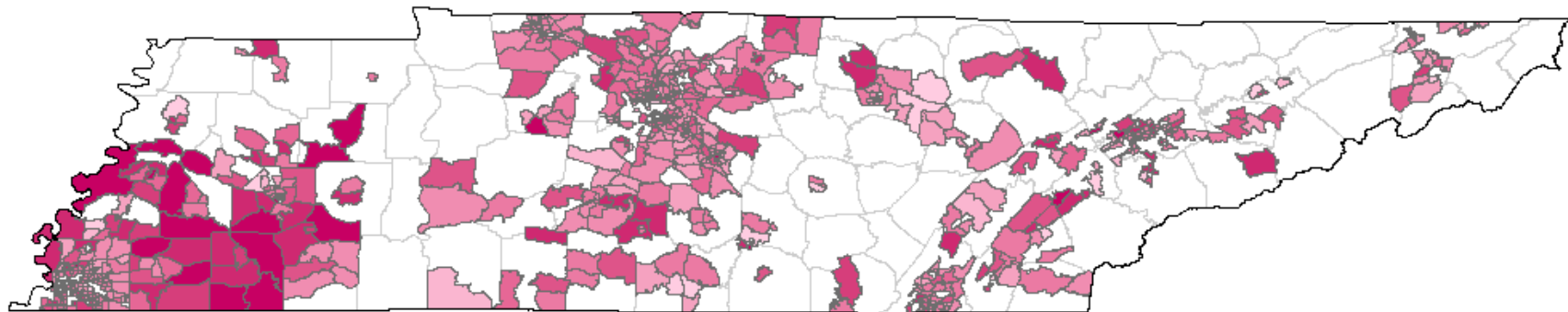
African-American applicants were consistently denied more often than white and all other applicants. This difference was more pronounced before the housing market crash with a large dip in 2009. Since 2012, the denial rates for home purchase loan applicants of all races have been declining. Although, from 2018 to 2019, denial rates on home-purchase loan applications declined for all racial groups, the rate of decline varied. For example, for all home purchase loans including conventional and nonconventional applications, denial rates for Whites declined from 8.3 percent in 2018 to 7.3 percent in 2019 compared to a decline from 15.8 percent to 15.2 percent for African-American applicants.

The following maps display the denial rates for black and white applicants between 2014 and 2019. The denial rates are calculated only for the census tracts with 10 or more applicants in each race category between 2014 and 2019 by dividing the total number of denied applicants in the census tract for each race category by the total number of applicants<sup>37</sup> in each race category. The first three maps are denial rates for black, Hispanic and white applicants and the next two maps show the difference between white and black and white and Hispanic denial rates in each census tract.

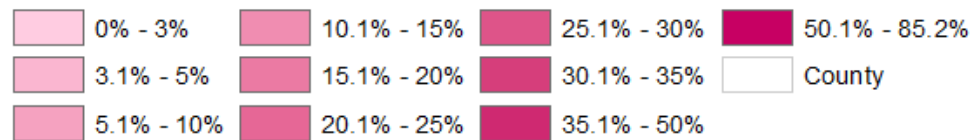
<sup>36</sup> Calculated as the number of denied loan applications divided by the total number of applications, excluding withdrawn applications and applications closed for incompleteness for first lien conventional and nonconventional *home purchase* loans for one- to four-family, site-built, owner-occupied homes.

<sup>37</sup> Excluding the applicants who withdrew their applications, applications closed because of incomplete documents and loans purchased by financial institution.

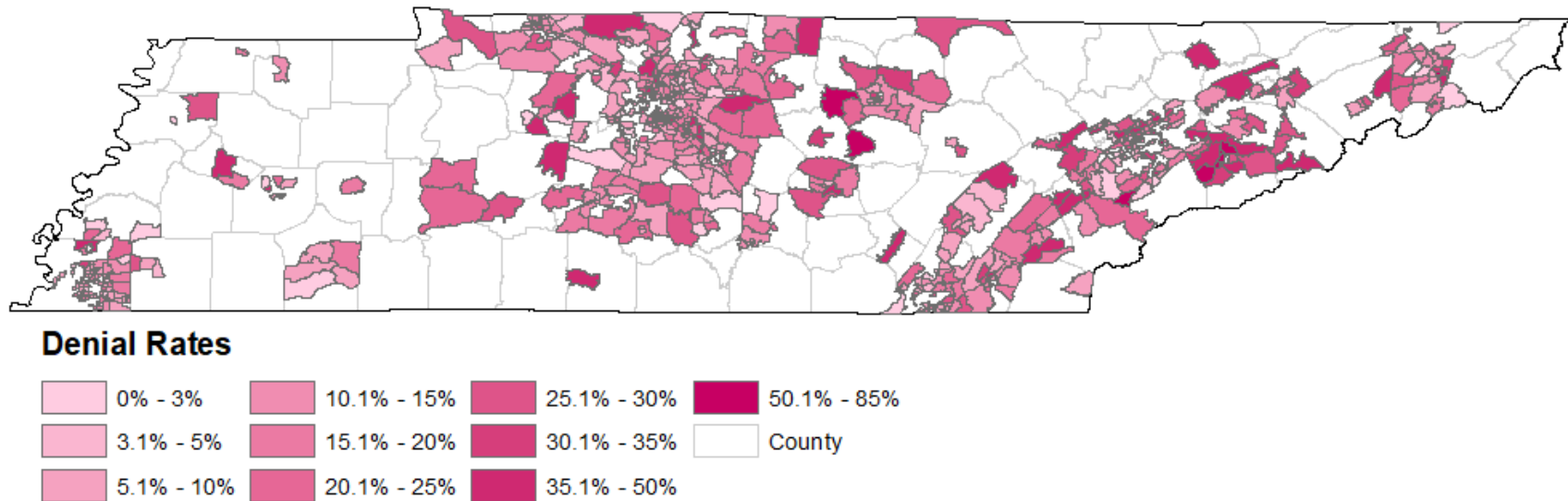
**Map 8: Home Purchase Loan Denial Rates, Black Applicants, 2015-2019, Census Tracts with 10 or More Black Applicants**



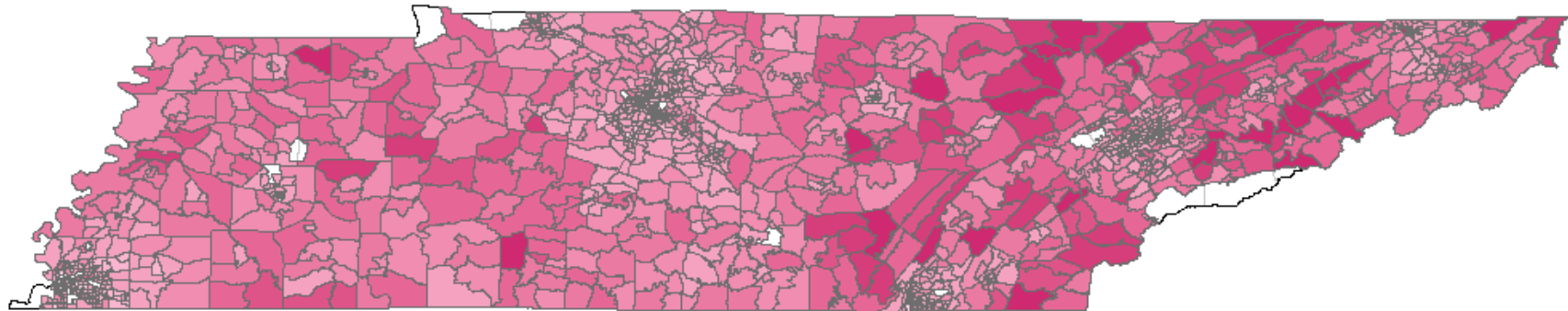
**Denial Rates**



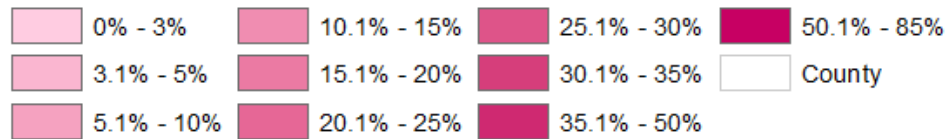
**Map 9: Home Purchase Loan Denial Rates, Hispanic Applicants, 2015-2019, Census Tracts with 10 or More Hispanic Applicants**



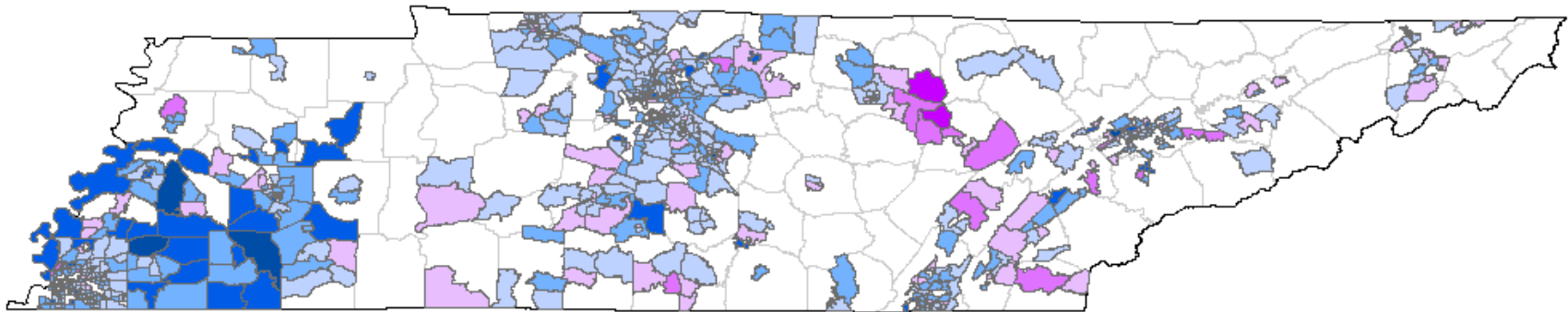
**Map 10: Home Purchase Loan Denial Rates, White Applicants, 2015-2019, Census Tracts with 10 or More White Applicants**



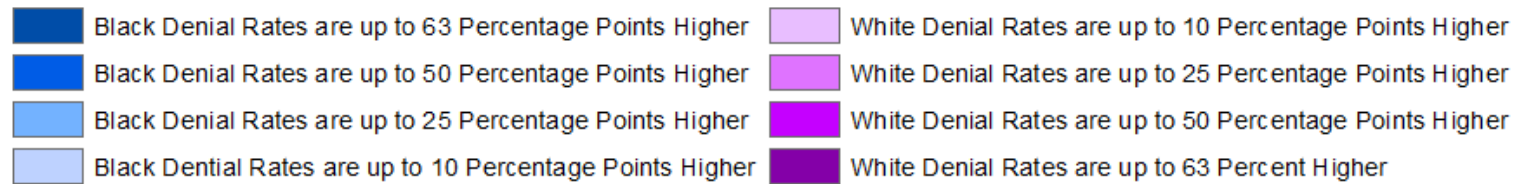
**Denial Rates**



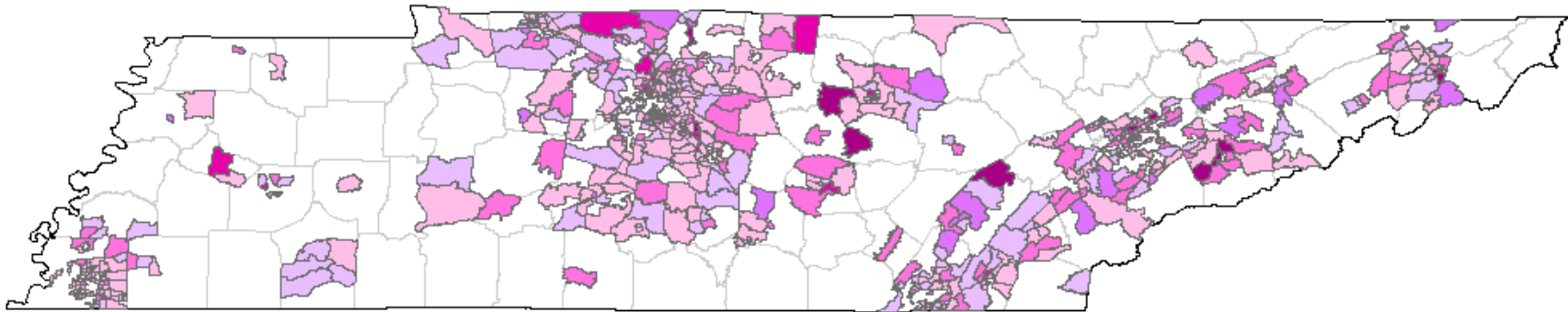
**Map 11: Home Purchase Loan Denial Rate Disparity, White versus Black Applicants, 2015-2019, Census Tracts with at least 10 Applicants from Both Races**



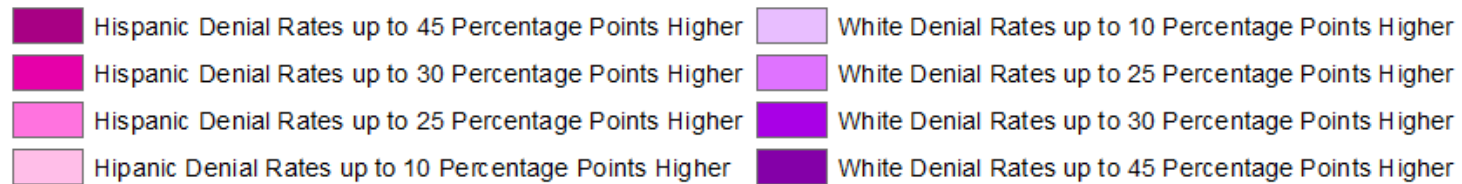
**Percentage Point Difference of White and Black Denial Rates**



**Map 12: Home Purchase Loan Denial Rates, White versus Hispanic Applicants, 2015-2019, Census Tracts with at least 10 Applicants from Both Races**



**Percentage Point Difference of White and Hispanic Denial Rates**



Denial rates for refinance loans, in general, were higher than home purchase loans. Similar to home purchase loans, denial rates on refinance applications also decreased from 2018 to 2019, but at a much faster rate. Regardless of race, denial rates on refinance loans applications for conventional and nonconventional combined decreased from 31 percent in 2018 to 21.3 percent in 2019. The decline in refinance denial rates was particularly pronounced among other minority applicants. White refinance loan applicants consistently experienced the lowest denial rate in each of the 10 years covered with this study.

The following table displays the denial rates for refinance loans separated by loan type and applicant race.

**Table 10. Denial Rates, Refinance Loans, Loan Type, 2010-2019**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<i>II. Refinance Loans</i>										
<b>Conventional and Nonconventional</b>										
All Applicants	26.4%	26.8%	22.6%	26.8%	34.2%	30.7%	33.6%	28.0%	31.0%	21.3%
Race										
Asian	26.8%	25.7%	27.0%	30.1%	39.2%	36.1%	35.3%	31.0%	37.1%	23.1%
African American	45.7%	43.1%	34.7%	39.0%	48.6%	45.9%	47.5%	40.9%	45.5%	34.6%
White	23.1%	23.7%	20.3%	23.7%	30.4%	27.4%	30.6%	24.6%	27.5%	18.6%
Joint	26.1%	25.5%	20.9%	24.8%	29.1%	30.9%	34.5%	29.5%	33.5%	20.7%
Other Minority	37.8%	28.4%	32.6%	32.6%	43.2%	40.9%	51.6%	42.1%	50.3%	33.2%
Race NA	39.4%	41.4%	33.9%	40.0%	45.3%	38.5%	39.1%	34.5%	36.4%	25.3%
Ethnicity										
Hispanic	35.6%	31.6%	26.5%	25.9%	36.0%	34.7%	35.7%	32.0%	46.7%	28.1%
Not Hispanic	33.5%	30.8%	22.4%	26.7%	37.2%	31.0%	33.9%	31.3%	39.5%	20.4%
<b>Conventional Only</b>										
All Applicants	22.9%	24.7%	22.2%	26.4%	32.8%	30.2%	33.1%	25.5%	25.8%	17.9%
Race										
Asian	24.2%	24.4%	26.8%	30.7%	39.5%	35.9%	34.1%	29.0%	32.7%	23.3%
African American	44.1%	44.9%	37.7%	43.1%	51.8%	51.9%	55.5%	44.1%	41.9%	35.6%
White	20.7%	22.2%	20.1%	23.4%	29.0%	26.8%	29.8%	22.4%	23.1%	15.8%
Joint	21.3%	22.3%	20.8%	24.9%	37.3%	29.7%	36.2%	24.6%	27.9%	15.3%
Other Minority	35.4%	27.6%	35.3%	32.3%	40.6%	38.8%	52.1%	41.6%	48.4%	30.8%
Race NA	32.3%	36.8%	32.7%	39.2%	44.1%	38.5%	39.0%	31.1%	31.1%	21.0%
Ethnicity										
Hispanic	30.2%	31.8%	30.1%	34.6%	43.1%	43.1%	42.1%	32.0%	38.6%	27.9%
Not Hispanic	21.9%	23.3%	21.1%	25.1%	31.5%	29.1%	32.2%	24.7%	24.7%	17.2%

*NOTE: First lien refinance loans for site-built one-to-four family owner-occupied homes.*

Until 2018 HMDA data release, for the applicants they denied, the financial institutions could report up to three denial reasons<sup>38</sup>, but this was not mandatory. The 2015 HMDA rule made the denial reason a

<sup>38</sup> Selecting from nine potential denial reasons including Debt-to-Income Ratio, Employment History, Credit History, Collateral, Insufficient Cash (for downpayment and/or closing costs), Unverifiable Information, Credit Application Incomplete, Mortgage Insurance Denied and Other.

mandatory field. Therefore, starting in 2018, except the applicants who were denied by those financial institutions, which were exempt<sup>39</sup> from reporting any of the mandated data points other than age and any of the discretionary data points, all denied applicants had at least one denial reason provided. While in 2017, of nearly 10,000 denied home purchase loan applicants, 32 percent were not provided any denial reason, in 2019, of nearly 9,000 denied home purchase loans, except for 425 applications reported by exempt institutions, *all* had at least one denial reason reported.

In 2019, debt-to-income ratio (DTI) was the denial reason most reported reason for home purchase applicants followed by credit history and collateral. For refinance mortgage applicants, credit history was cited more often than other reasons for denial, followed by high DTI and incomplete credit application.

Table 12 shows the variation among racial categories by denial reason. Asian applicants were not denied for credit history as much as applicants in other racial categories, but they had a higher presence of denial for DTI and denial for incomplete credit application compared to all borrowers. African-American applicants were also denied mostly for high DTI, but compared to borrowers in other race categories, credit history was reported as a denial reason more often than other applicants.

**Table 11. Denial Reason, *Home Purchase Loans*, 2019**

<b>ALL DENIAL REASONS COMBINED</b>	<b>Asian</b>	<b>African American</b>	<b>White</b>	<b>Joint</b>	<b>Other Minority</b>	<b>Race NA</b>	<b>ALL APPLICANTS</b>
Debt-to-Income Ratio	37%	31%	29%	36%	36%	31%	30%
Credit History	13%	32%	22%	19%	27%	21%	23%
Collateral	8%	10%	16%	13%	20%	18%	15%
Other	11%	13%	12%	12%	7%	11%	12%
Insufficient Cash (downpayment, closing costs)	11%	11%	11%	12%	11%	15%	12%
Credit Application Incomplete	21%	8%	11%	8%	11%	13%	11%
Unverifiable Information	9%	6%	7%	3%	9%	7%	7%
Employment History	5%	5%	6%	11%	4%	5%	6%
Mortgage Insurance Denied	0%	0%	0%	0%	2%	0%	0%

Of all denied *home purchase* loan applicants, 44 percent had DTI less than 43 percent, which is the highest ratio a borrower can have and still get a qualified mortgage. Forty percent of denied African-American applicants had DTI less than 43 percent, while 45 percent of denied white applicants had DTI less than 43 percent.

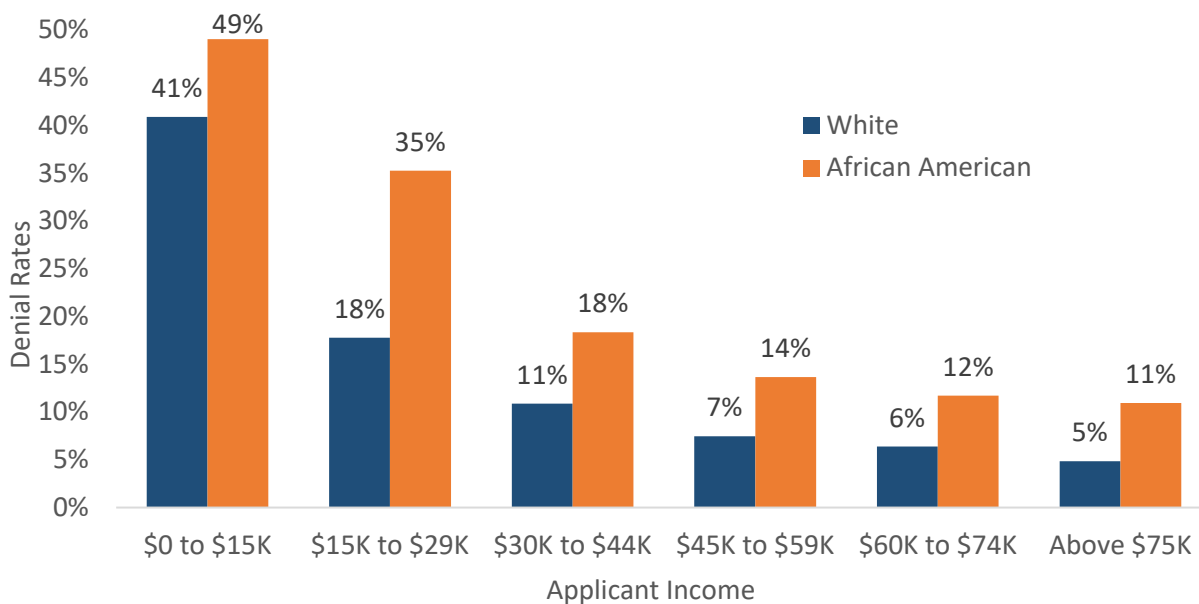
Even after controlling for income levels and DTI, denial rates between white and African-American applicants varied significantly. Every income range and DTI, African-American applicants were denied at higher rates than white applicants. There was at least six percentage points difference between denial

<sup>39</sup> HMDA reporters that are insured depository institutions or insured credit unions and that originated fewer than 500 closed-end mortgages in each of the two preceding years qualify for this partial exemption with respect to reporting their closed-end transactions. HMDA reporters that are insured depository institutions or insured credit unions that originated fewer than 500 open-end lines of credit in each of the two preceding years also qualify for this partial exemption with respect to reporting their open-end transactions.



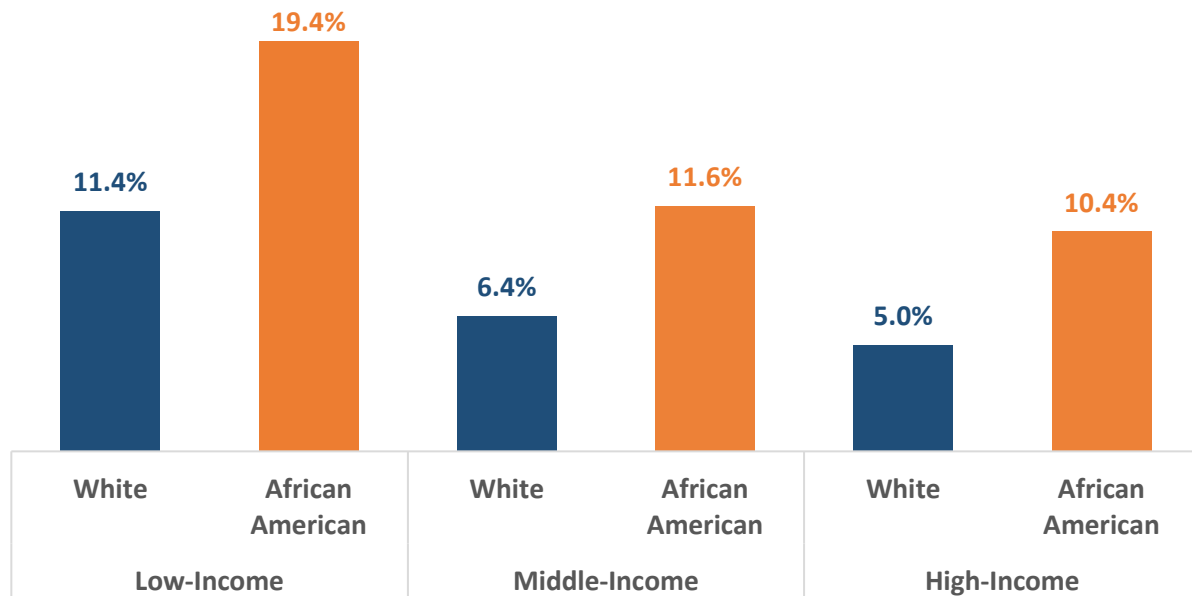
rates of African-American and white applicants at each income range. The following figure shows the denial rates of white and African-American home purchase loan applicants by income ranges.

**Figure 13: Denial Rates by Applicant Income and Race, Home Purchase Loans, Tennessee, 2019**



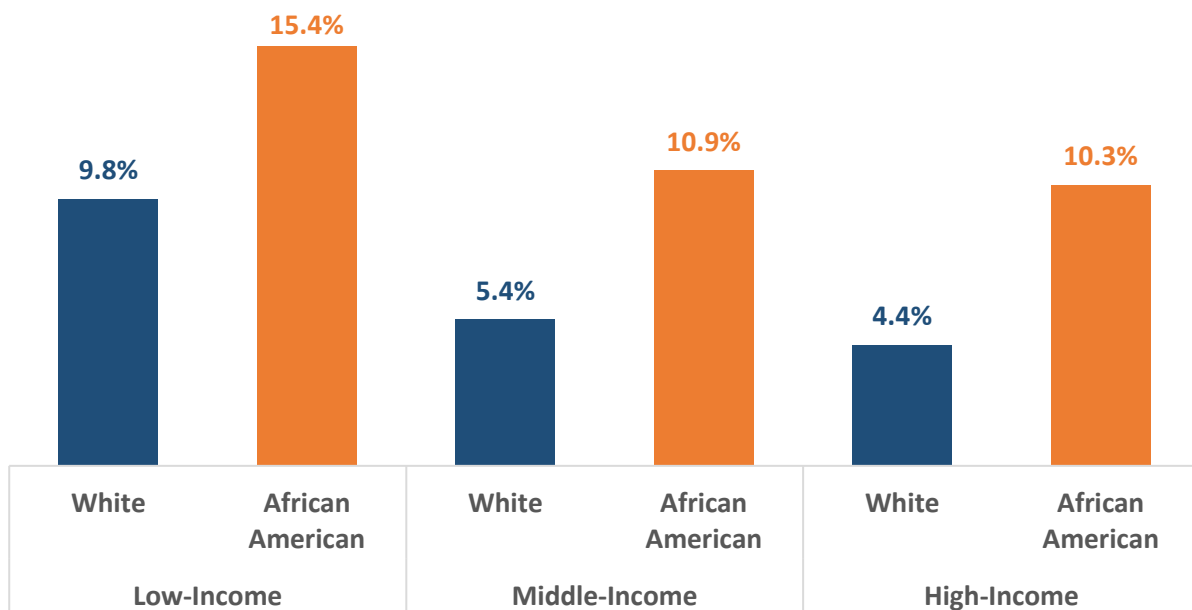
Especially when the applicant income is considered in the context of the median family income of the metro area they are applying, the differences in denial rates of white and African-American applicants become more pronounced. In 2019, only five percent of high-income white applicants were denied for a home purchase loan, while more than 10 percent of high-income African-American applicants were denied. The difference between the denial rates of white and African-American applicants continues for low- and middle income borrowers. Low-income African-American borrowers had eight percentage point higher denial rates than low-income white applicants. The following figure shows the denial rates of white and African-American applicants separated by their income level.

**Figure 14. Denial Rates by Race and Income of Applicant, Home Purchase Loans, 2019**



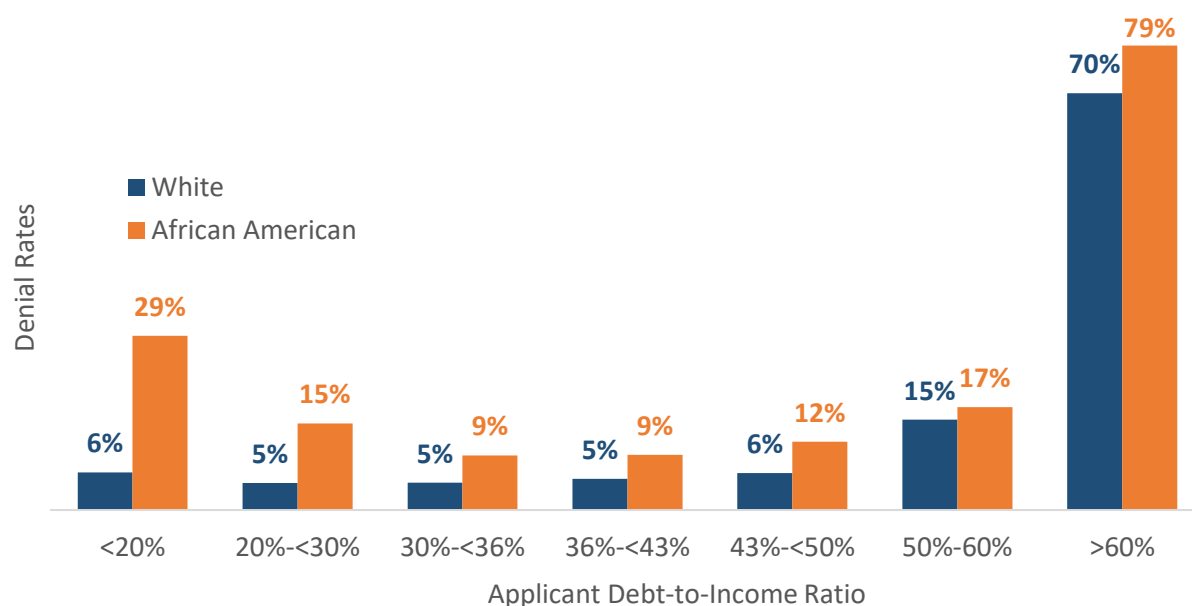
The difference between the denial rates of African-American and white applicants separated by race is more pronounced when only conventional home purchase loan applications are included. In 2019, less than 10 percent of low-income white applicants were denied for a conventional home purchase loan while nearly 15 percent of low-income African-American borrowers were denied. This is consistent with the trend of relatively higher portion of nonwhite applicants receiving nonconventional loans.

**Figure 15. Denial Rates by Race and Income of Applicant, *Conventional* Home Purchase Loans, 2019**



Differences in denial rates between white and African-American applicants persisted when their DTI were compared. Although this information should be taken cautiously without knowing credit scores and other variables that determine the loan approval and denial decisions, even for the applicants with less than 20 percent DTI, there was over 20 percentage point difference between the denial rates of white and African-American applicants.

**Figure 16: Denial Rates by Applicant DTI Ratio and Race, Home Purchase Loans, 2019**



The denial rates for home purchase loans and refinance loans in 2019 separated by county and race are provided in Appendices H and I.

## 8. HIGHER-PRICED LOANS

Before 2018, Regulation C required financial institutions to report rate spread data only on higher-priced mortgage loans.<sup>40</sup> The 2015 HMDA rule concerning the collection of data, which first applied to data collected in 2018, made the rate spread reporting required for most originations, regardless of rate. Rate spread reporting is not required for purchased loans, reverse mortgages, assumptions, and loans that are not subject to Regulation Z.<sup>41</sup> Since the rate spread has to be reported regardless of loan price, Regulation C no longer specifies a threshold for defining higher-priced loans. To compare 2019 data to data from earlier years, following the Consumer Financial Protection Bureau researchers, we are using the post-2009 classification, which defines the higher-priced loans as first-lien loans with an APR<sup>42</sup> of at least 1.5 percentage points above the average prime offer rate (APOR) for a similar type loan. For a

<sup>40</sup> Until October 2009, loans were classified as higher-priced if the spread between the Annual Percentage Rate (APR) and the rate on a Treasury bond of comparable term exceeded three percentage points for first-lien loans or five percentage points for junior-lien loans. After a change in regulations in October 2009, loans were classified as higher-priced if the APR exceeded the average prime offer rate (APOR) for loans of a similar type by at least 1.5 percentage points for first-lien loans or 3.5 percentage points for junior-lien loans.

<sup>41</sup> 12 CFR Part 1026 - Truth in Lending (Regulation Z)

<sup>42</sup> The APR for a mortgage loan is different than the interest rate on the loan, and it is a function of the costs of the mortgage loan added to the interest rate and re-amortized based on the size of the loan borrower is requesting.

junior-lien loan to be considered as higher priced, the spread between APR on the loan and APOR for a similar type loan must be at least 3.5 percentage points.

The following table compares the occurrence of higher-priced loans for the first-lien home purchase loans for site-built one- to four-family owner-occupied homes by race and ethnicity of the applicants.

**Table 12. Higher-Priced Loans, Home Purchase Loans, 2010-2019**

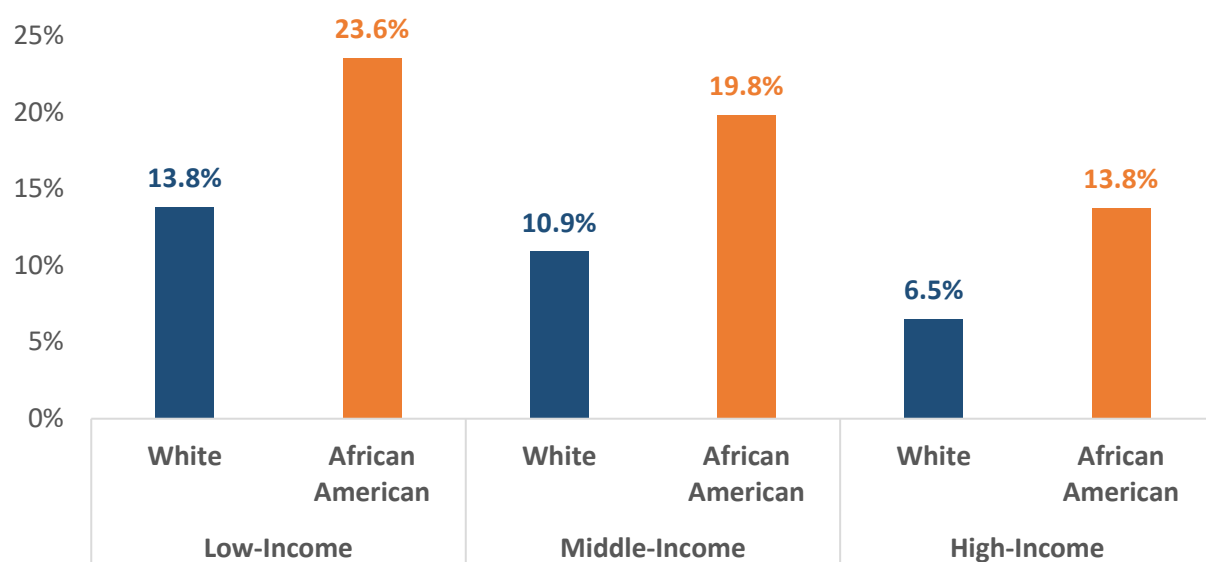
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<i>I. Home Purchase Loans</i>										
	Conventional and Nonconventional									
All Borrowers	3.8%	5.2%	6.8%	8.9%	9.7%	6.4%	6.7%	8.4%	8.3%	10.1%
Race										
American Indian	2.9%	5.5%	5.4%	10.4%	15.8%	8.6%	5.2%	9.2%	8.8%	10.7%
Asian	2.3%	3.6%	4.2%	5.8%	7.6%	3.2%	3.0%	2.8%	4.1%	3.7%
Black or African American	3.6%	9.0%	11.5%	17.6%	22.3%	10.8%	12.6%	18.2%	15.7%	19.3%
Native Hawaiian	3.2%	3.6%	5.3%	10.3%	8.4%	2.4%	6.1%	10.8%	13.1%	8.1%
White	4.0%	5.0%	6.6%	8.5%	9.0%	6.3%	6.5%	7.8%	7.9%	9.6%
Joint	3.6%	4.6%	5.5%	9.5%	10.1%	7.1%	6.1%	7.7%	6.0%	9.3%
Race Not Available	1.5%	3.3%	5.3%	6.3%	6.0%	3.7%	4.1%	5.9%	7.7%	8.4%
Ethnicity										
Hispanic or Latino	3.4%	6.3%	7.8%	11.4%	12.6%	8.3%	8.6%	12.0%	12.8%	18.1%
Not Hispanic or Latino	3.9%	5.3%	6.9%	8.9%	9.8%	6.4%	6.8%	8.4%	8.2%	9.9%
	Conventional Only									
All Borrowers	8.0%	7.3%	7.6%	7.1%	5.7%	5.8%	5.2%	4.9%	4.2%	4.6%
Race										
American Indian	3.7%	5.7%	5.4%	10.4%	13.0%	8.9%	5.8%	8.0%	6.0%	7.8%
Asian	3.0%	3.3%	3.6%	3.6%	3.6%	2.3%	2.3%	1.1%	1.6%	1.6%
Black or African American	16.2%	14.7%	8.0%	10.6%	8.8%	7.9%	7.4%	8.9%	9.7%	8.4%
Native Hawaiian	10.5%	0.0%	9.1%	11.1%	8.7%	0.0%	6.1%	4.0%	7.8%	2.5%
White	8.4%	7.7%	8.1%	7.5%	5.8%	6.1%	5.5%	5.0%	4.1%	4.7%
Joint	8.0%	4.6%	6.9%	6.3%	5.4%	3.8%	5.0%	3.4%	3.4%	3.8%
Race Not Available	1.9%	1.5%	2.9%	2.1%	2.0%	2.3%	2.1%	2.4%	3.1%	3.3%
Ethnicity										
Hispanic or Latino	12.4%	9.8%	11.5%	11.2%	8.9%	9.3%	9.4%	7.6%	9.6%	16.0%
Not Hispanic or Latino	8.4%	7.6%	7.9%	7.3%	5.8%	5.9%	5.2%	4.9%	4.0%	4.3%
	Nonconventional Only									
All Borrowers	0.8%	3.5%	6.0%	11.1%	15.0%	7.1%	8.5%	12.9%	14.4%	18.5%
Race										
American Indian	0.0%	4.9%	5.3%	10.5%	23.2%	7.8%	3.8%	10.3%	11.2%	13.6%
Asian	0.9%	4.0%	5.4%	13.1%	19.8%	6.3%	5.8%	10.4%	16.4%	14.4%
Black or African American	1.8%	7.8%	12.3%	19.7%	27.2%	11.6%	14.4%	21.8%	18.6%	25.4%
Native Hawaiian	0.0%	5.0%	3.8%	9.5%	8.2%	3.9%	6.2%	15.8%	17.9%	11.9%
White	0.6%	2.8%	5.0%	9.8%	13.4%	6.6%	7.9%	11.7%	13.7%	17.7%
Joint	0.5%	4.6%	4.5%	12.5%	14.1%	9.9%	7.1%	11.6%	9.1%	16.5%
Race Not Available	1.2%	5.0%	8.5%	13.2%	12.5%	5.5%	7.0%	11.5%	15.5%	17.5%
Ethnicity										
Hispanic or Latino	0.5%	5.0%	5.8%	11.5%	15.0%	7.6%	8.1%	15.4%	15.9%	20.4%
Not Hispanic or Latino	0.8%	3.4%	6.0%	11.0%	15.1%	7.1%	8.6%	12.9%	14.3%	18.6%

According to the table, in 2019, the proportion of all higher-priced home purchase loans (conventional and nonconventional with interest rates above the threshold) increased from the previous year for almost all race groups, except for Asian and Native Hawaiian borrowers. In 2019, more than ten percent of all borrowers received higher-priced loans compared to 8.3 percent in 2018. The largest increase in higher-priced loans percentage was among African-American borrowers. Since 2011, African-American borrowers received the highest percentage of higher-priced loans, across all race categories. Nearly four percent of home purchase loans originated for Asian borrowers in 2019 were considered higher priced, which was the lowest among all race categories.

Starting in 2014, for almost all race categories, the borrowers who used conventional home purchase loans had a lower proportion of loans with interest rates higher than the spread threshold compared to the borrowers who used non-conventional loans (including FHA, VA and FSA/RHS insured loans). The trend continued in 2019. For example, in 2019, 25.4 percent of African-American borrowers who received nonconventional mortgage loans (FHA-, VA- or RD-insured) had higher-priced loans while 8.4 percent of African-American borrowers with conventional mortgage loans received higher-priced loans. Although, the proportion of higher-priced home conventional purchase loans increased from the previous year, except for black and native Hawaiian borrowers, the rate of increase was smaller.

The proportion of African-American borrowers who received higher-priced home purchase loans was higher than white borrowers, even among borrowers within the same income group. The difference between white and African-American borrowers with higher-priced loans was greatest among the low-income borrowers. Nearly 24 percent of low-income African-American borrowers paid interest rates higher than the threshold level in 2019, while less than 14 percent of low-income white borrowers' home purchase loans were considered higher priced. The occurrence of higher-priced loans declined with the income for both white and African-American borrowers.

**Figure 17. Percent of Borrowers with Higher-Priced Loans by Race and Income Level, 2019**



## 10. MANUFACTURED HOME LOANS

In previous years, mortgage loans were separated based on the property type as one- to four-family, manufactured and multifamily. The 2015 HMDA rule changed this reporting by replacing the property type with construction type as “Site-built” or “Manufactured” and adding total number of units to determine whether it was for a single family (up to four units) or multifamily housing. Furthermore, two new variables related to manufactured home loans were added: “Manufactured Home Secured Property Type” and “Manufactured Home Land Property Interest.” If the loan is secured only by manufactured home, but not the land, then these are known as “chattel loans,” which are personal property loans. Unfortunately, since we do not have prior data to compare, we cannot discuss trends. In time, as this kind of data are reported in coming years, these details will help us better understand the manufactured home financing trends. At this point, we can compare manufactured home lending to site-built home purchase loans and also we can compare the lending practices and borrowers using chattel loans to real property (loans secured by both manufactured home and land).

In 2019, there were nearly 20,500<sup>43</sup> manufactured home loans reported, of which nearly 6,000 were originated. Seventy-three percent of the originated manufactured home loans were for home purchase purpose, 25 percent for refinancing and the remaining were for home improvement and other purposes. More than half of the originated manufactured home purchase loans and two thirds of the refinance loans were for both the home and the land.

**Table 13: Manufactured Home Loan Applications by Action and Loan Purpose**

	Home Purchase	Refinance	Home Improvement	Total
Loan originated	4,381	1,491	91	5,963
Application approved but not accepted	1,003	111	4	1,118
Application denied by financial institution	6,393	605	81	7,079
Application withdrawn by applicant	920	445	25	1,390
File closed for incompleteness	3,970	124	8	4,102
Loan purchased by the institution	643	126	1	770
Preapproval request denied by financial institution	7	0	0	7
Preapproval request approved but not accepted	11	0	0	11
<b>Total Manufactured Home Loan Applications</b>	<b>17,328</b>	<b>2,902</b>	<b>210</b>	<b>20,440</b>
Denial Rate	54%	27%	46%	50%
Distribution of Originated Loans by Purpose	73%	25%	2%	

On average, the manufactured home purchase loan borrowers had lower income and borrowed less than borrowers purchasing site-built home purchase loans. In 2019, average loan amount for a first-lien, owner-occupied, one- to four-family site-built home purchase mortgage was nearly \$245,000, while an average loan amount for manufactured home was less than \$100,000. An average manufactured home borrower’s income was nearly half of the average site-built home purchase loan borrower’s income. The

<sup>43</sup> This number is regardless of lien status, occupancy type, loan purpose or one- to four-family versus multifamily housing. However, to make it comparable to previous years, open-end line-of-credits and the loans for purposes other than home purchase, refinance or home improvement are excluded.

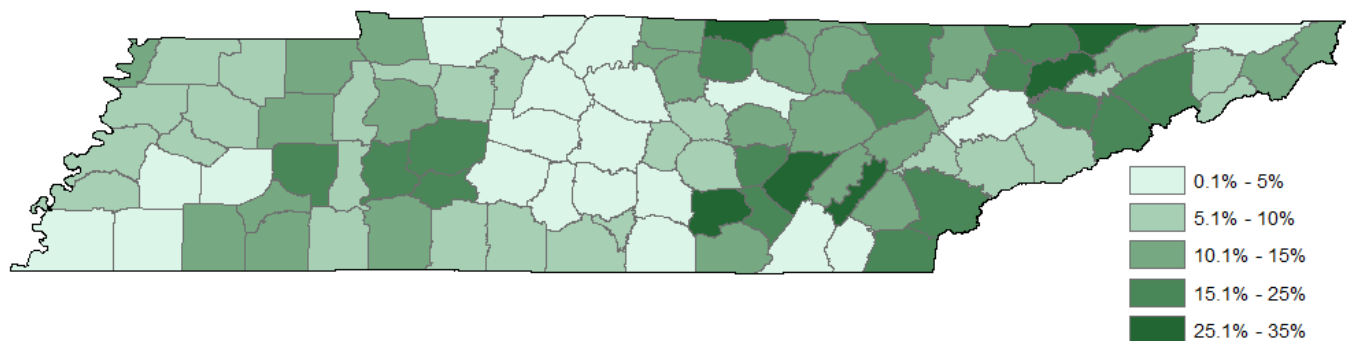
average income of borrowers purchasing manufactured homes in 2019 was \$51,732, compared with \$95,759 for those borrowing to buy a site-built home.

**Table 14: Loan Amount and Income, Site-Built and Manufactured Home Purchase Loans Originated, 2019**

	Loan Amount		Applicant Income	
	Site-Built	Manufactured	Site-Built	Manufactured
Mean	\$244,377	\$96,506	\$95,759	\$51,732
Median	\$215,000	\$95,000	\$72,000	\$45,500

East Tennessee counties such as Knox, Jefferson, Greene and Sevier had the highest number of first-lien, owner-occupied, one- to four-family manufactured home purchase loans originated in 2019. More than 150 manufactured home purchase loans originated in Knox County was the highest in the state, but it represented only two percent of total home purchase loan originations in the county. The following map shows the manufactured home purchase loans originated in 2019 as a percent of all home purchase loans.

**Map 13: Manufactured Home Purchase Loans, Percent of Total Home Purchase Loans, 2019**

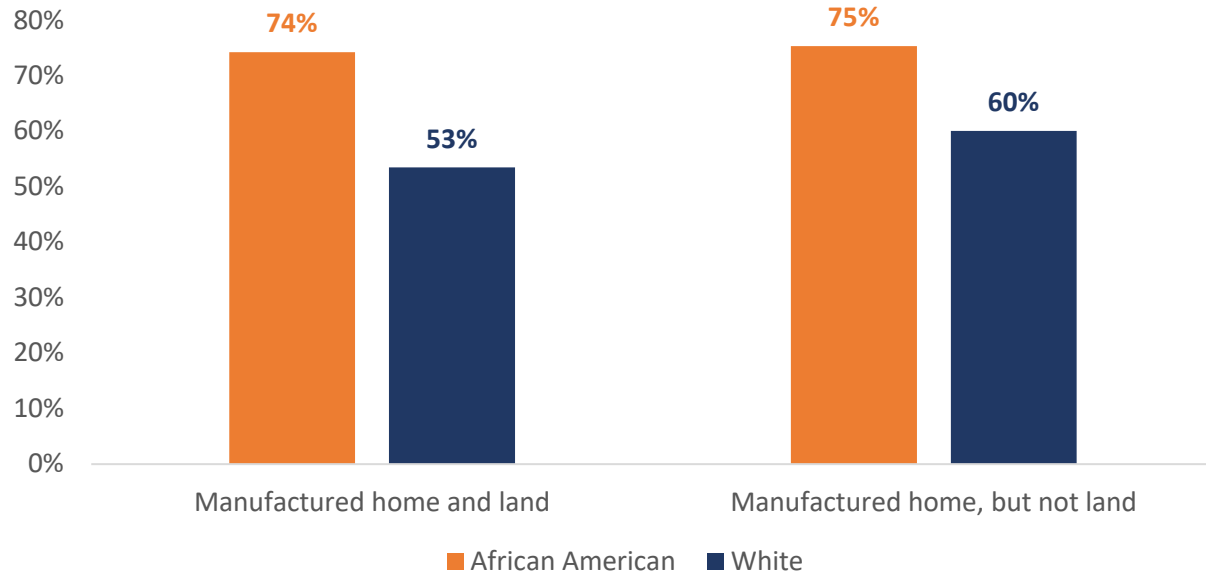


The majority of manufactured home purchase loans were for both land and home (non-chattel). Only 31 percent of manufactured home purchase loan originations were “chattel loans,” not secured by land. Median interest rate on originated *chattel* loans was nearly eight percent compared to 5.13 percent interest rate paid by *non-chattel* loan borrowers.

The manufactured home purchase loan applicants who were purchasing only the home, not the land (chattel loans), were more likely to be denied than the applicants who requested the loan for purchasing both the home and the land (61 percent versus 55 percent).

As the following figure demonstrates, African-American manufactured home loan applicants were denied more often than white applicants, 74 percent and 53 percent, respectively. The difference between the denial rates of African-American and white applicants continued, but was less pronounced for the applicants of loans for manufactured homes only, not secured by land (chattel).

**Figure 18: Denial Rates, Chattel and Non-Chattel Loans, African-American and White Applicants, 2019**



Almost all of the chattel loans were conventional, while government-insured loans comprised nearly half of the originations for both the manufactured home and the land.

In the state, manufactured home purchase loans originations were only four percent of the total first-lien, owner-occupied home purchase loan originations for single family homes. In rural counties like Meigs, Bledsoe, Grainger, Clay, Hancock, Grundy and Perry, manufactured home purchase loan originations made up 25 percent or more of the total home purchase loan originations. In Davidson, Williamson and Shelby Counties, the manufactured home purchase loans were one percent or less of all home purchase loan originations in the county. Site-built and manufactured home purchase originations by county are provided in Appendix J.



# THDA SHARE OF HOME PURCHASE LOAN MARKET

## 1. FHA-Insured Home Loan Purchase Market Share of THDA

### Key Findings

- THDA's share in FHA-insured loans market was 37.1 percent in 2019, an increase from 29.3 percent the previous year.
- Market share increased from the previous year in all race categories, except for Asian borrowers.
- A higher share of African-American borrowers shows that THDA offers a distinct product to help underserved demographic groups access to homeownership.
- Of the largest counties (counties with 100 or more THDA loans), THDA's highest market share was in Madison County followed by Montgomery County.
- THDA's biggest market share increase (among the counties with 100 or more THDA loans) was in Montgomery County, followed by Shelby County.

In this section, we measured THDA's share in the home purchase loan market. Market share refers to the proportion of loans funded by THDA to all home purchase loans originated by financial institutions and reported in Tennessee. Knowing THDA's share in the home loan market is important in determining how competitive THDA loan products are compared to similar loan products available in the market. Knowledge of where THDA's business is relative to the market is also useful when making decisions around marketing and planning to fill unmet need. Methodology for calculating THDA's market share is explained in Appendix K.

Using HMDA data to measure THDA's share in the home loan market presents some limitations because of the nature of the HMDA data and THDA's loan program eligibility requirements. Keeping these limitations in mind, we estimated the market share based on THDA's income limits and on the maximum purchase price a THDA borrower paid in 2019 for each county. For counties without a THDA loan in the year, we used the county median sales price.<sup>44</sup> Because the majority of THDA loans are FHA-insured, we compared THDA FHA-insured mortgage loans to FHA-insured loans in the market. First-time homebuyer data is not readily available through HMDA so we used FHA estimates of first time homebuyers to help us estimate the market share. While there are some estimation issues to be found in these assumptions, the estimates serve as a good overall barometer.

In 2019, THDA funded 4,062 FHA-insured loans for first-time homebuyers, which represented 37.1 percent of 13,226 FHA-insured first lien home purchase loans originated for first-time homebuyers who met THDA's income limit requirements and purchased homes that were priced less than or equal to the maximum price THDA borrowers paid in each county. This share was up from the 29.3 percent in 2018, due to the increasing number of THDA borrowers in 2019 and decreasing number of THDA-eligible FHA-insured loans in the market. THDA funded FHA-insured loans for first-time homebuyers increased by five percent in 2019 compared to 2018, while in the market, all lenders reporting to HMDA originated 17

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<sup>44</sup> Residential, single-family all home sales in by county for calendar year 2019 based on a comprehensive database maintained by the Division of Property Assessment (Comptroller's Office, State of Tennessee).

percent fewer FHA-insured loans compared to the previous year for borrowers estimated to be THDA-eligible.

Among the counties with 100 or more THDA funded FHA-insured loans, Madison County's 51.1 percent market share was the highest. THDA was able to attract 33 percent or more of the potential FHA borrowers in each of Davidson, Hamilton, Knox, Madison, Rutherford and Shelby Counties, while THDA's market share was relatively low in Williamson County. THDA funded FHA-insured loans were 33.3 percent of comparable FHA-insured loans reported in Rutherford County and 34.3 percent in Davidson County, an increase in both counties from 2018. In Davidson County, the number of FHA-insured THDA loans funded did not change significantly while the comparable FHA-insured loans originated in the market declined compared to the previous year, so THDA's market share in the county increased by nearly six percentage points. In Rutherford County, the number of FHA-insured THDA loans increased by 12 percent while the comparable FHA-insured loans originated in the market decreased by 14 percent from 2018, leading to nearly eight percentage points increase in market share in the county.

THDA's largest annual market share gains were primarily in small rural counties with relatively small mortgage loan markets. In all of the Nashville MSA counties, except Trousdale County, THDA's reach to the potential FHA-insured mortgage loan borrowers increased in 2019 compared to the previous year, and the largest year-over-year increase was in Cannon County, in which THDA's FHA-insured loan originations more than tripled from the previous year while the number of comparable FHA-insured loans in the market increased by 14 percent (FHA lending market in Cannon County is small). As a result, THDA's market share in Cannon County increased from 22 percent in 2018 to 49 percent in 2019. In Williamson County, FHA-insured loans originated by THDA lenders increased, while the number of comparable FHA-insured loans in the market declined, leading to 13 percentage points increase in THDA's market share in 2019.

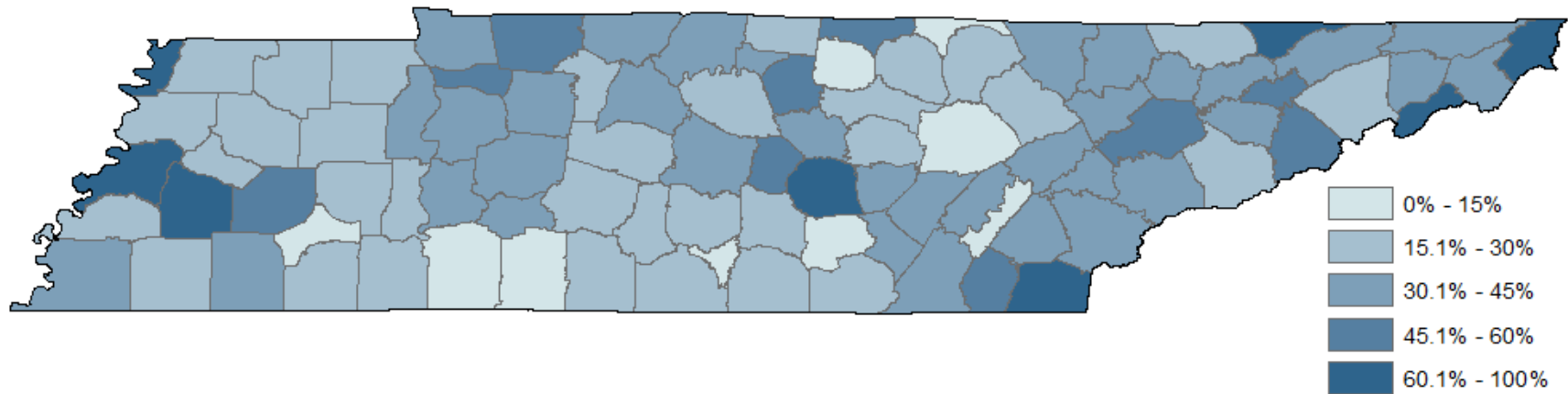
THDA's share in FHA-insured loans market also varied by race. In 2019, THDA served nearly 50 percent of African-American first time homebuyers who were income and purchase price eligible for THDA programs, while this same market share among white borrowers was 37 percent. In all race categories, except Asian borrowers, THDA's market share in 2019 increased from 2018.

**Table 15. THDA's Market Share by Race, FHA-Insured Loans, 2014-2019**

<b>RACE</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>
Asian	23.3%	24.9%	14.9%	6.2%	12.3%	18.5%
Black or African American	49.5%	42.9%	37.7%	25.7%	31.3%	30.1%
White	37.3%	28.6%	25.1%	18.0%	22.1%	22.7%
Other Minority	43.9%	36.8%	26.3%	12.7%	19.3%	5.9%
Multi-Racial	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Missing	16.0%	9.5%	7.9%	0.7%	3.2%	4.8%
<b>ALL BORROWERS</b>	<b>37.1%</b>	<b>29.3%</b>	<b>25.8%</b>	<b>17.9%</b>	<b>22.3%</b>	<b>22.8%</b>

THDA's shares in FHA-insured mortgage loans market in 2018 and 2019 by county can be found in Appendix L. The following map displays THDA's share in the FHA-insured loans market in 2019.

**Map 14: THDA's Share in FHA-Insured Home Loans Market, 2019<sup>45</sup>**



<sup>45</sup> The FHA-insured home loan market refers to the first-lien home purchase loans for owner-occupied 1-4 family dwellings that are originated in 2019 by financial institutions and reported in HMDA data. Only the FHA-insured loans to the borrowers who would be eligible to receive FHA-insured THDA loans based on their income, which was less than or equal to the small family (households with 1 to 2 people) income limit of the county they purchased their homes, and purchased homes that are less than or equal to the maximum price THDA borrowers paid (estimated by adding a four percent downpayment amount to the loan amount) are included. THDA changed the income limits in mid-2019. Publicly available HMDA data do not have full loan origination dates other than the year of origination. Therefore, for all loans in 2019, we used the income limits started in mid-2019. We also assumed 82.84 percent of FHA-insured loan borrowers were first time homebuyers.

## REFERENCES

- Agarwal, S., Amromin, G., Ben-David, I., and Evanoff, D. D.. "Loan Product Steering in Mortgage Markets," NBER Working Paper No. 22696, September 2016, available at <http://www.nber.org/papers/w22696>
- Avery, R.B., Neil Bhutta, Kenneth P. Brevoort, Glenn B. Canner, and Christa N. Gibbs. 2010. "The 2008 HMDA Data: The Mortgage Market during a Turbulent Year." *Federal Reserve Bulletin* 101 (14). Retrieved from <http://www.federalreserve.gov/pubs/bulletin/2010/pdf/hmda08final.pdf>
- Bhutta, N., Jack Popper, and Daniel R. Ringo. 2015. "The 2014 Home Mortgage Disclosure Act Data." *Federal Reserve Bulletin* 101 (14).
- Jo, Y., Liu, F., Skhirtladze, A. and Barriere L. (2020), "Data Point: 2018 Mortgage Market Activity and Trends." Retrieved from [https://files.consumerfinance.gov/f/documents/cfpb\\_2019-mortgage-market-activity-trends\\_report.pdf](https://files.consumerfinance.gov/f/documents/cfpb_2019-mortgage-market-activity-trends_report.pdf)
- Liu, F., Dietrich, J., Jo, Y., Skhirtladze, A., Davies, M., and Candilis C. (2019), "Introducing New and Revised Data Points in HMDA: Initial Observations from New and Revised Data Points in 2018 HMDA." Retrieved from [https://files.consumerfinance.gov/f/documents/cfpb\\_new-revised-data-points-in-hmda\\_report.pdf](https://files.consumerfinance.gov/f/documents/cfpb_new-revised-data-points-in-hmda_report.pdf)

## **APPENDIX**

## APPENDIX A

### What is Home Mortgage Disclosure Act or HMDA Data? And Changes to HMDA Reporting Requirements in the data Collected in 2019<sup>46</sup>

The HMDA data are the most comprehensive source of publicly available information on the mortgage market. The HMDA data are useful in determining whether financial institutions are serving the housing needs in their communities and in identifying possible discriminatory lending patterns. HMDA data can be used in identifying overall market trends in residential financing. However, it does not include all residential loan applications because some institutions are exempt from HMDA reporting requirements.<sup>47</sup>

The HMDA requires many depository and non-depository lenders to collect and disclose information about housing-related loans (including home purchase, home improvement, refinancing and other) and applications for those loans in addition to applicants' and borrowers' income, race, ethnicity and gender. The law governing HMDA was enacted in 1975, initially falling within the regulatory authority of the Federal Reserve Board. In 2011, regulatory authority was transferred to the Consumer Financial Protection Bureau.<sup>48</sup> Whether an institution is required to report depends on its asset size, its location, and whether it is in the business of residential mortgage lending.<sup>49</sup>

The HMDA data reported by financial institutions in 2018 are different than data reported in previous years. As part of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (DFA), Congress amended HMDA. One of those changes was to expand the number of data points required to be collected and reported, and give the Bureau authority to require additional data points to be collected and reported. In October 2015, the Bureau issued a final rule implementing these and other changes, which affected data to be collected starting in 2018.

While majority of the changes resulting from the Congress's amendment after Dodd-Frank Act in 2010 took effect with the data collected in 2018 and after, two changes were effective in 2017 and they have impacted 2017 HMDA data. The first one reduced the number of depository institutions, which were required to report HMDA data. While before this change any depository institution that originated at least one home purchase loan in the preceding year was required to report, in 2017, depository

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<sup>46</sup> Some parts of this Appendix related to new and revised data in 2018 is directly from CFPB article: Introducing New and Revised Data Points in HMDA – Initial Observations from New and Revised Data Points in 2018 HMDA ([https://files.consumerfinance.gov/f/documents/cfpb\\_new-revised-data-points-in-hmda\\_report.pdf](https://files.consumerfinance.gov/f/documents/cfpb_new-revised-data-points-in-hmda_report.pdf)).

<sup>47</sup> Dietrich, Liu, and et al, (2019) estimated the universe of mortgage lenders and the number of loans originated regardless of whether they were required to report to HMDA. Their analysis revealed that, in 2018, approximately 12,000 institutions originated at least one mortgage loan, with a total origination volume of approximately 7.3 million loans. In 2018, 6.4 million loans originated by HMDA reporting institutions represent approximately 90 percent of the estimated total number of closed-end originations in the United States. For more detail about their methodology of estimating "universe," see Dietrich, J., Liu, F., Skhirtladze, A., Davies, M., Jo, Y., and Candilis C. (2019), "Data Point: 2018 Mortgage Market Activity and Trends. A First Look at the 2018 HMDA Data," [https://s3.amazonaws.com/files.consumerfinance.gov/f/documents/bcfd\\_hmda\\_2017-mortgage-market-activity-trends\\_report.pdf](https://s3.amazonaws.com/files.consumerfinance.gov/f/documents/bcfd_hmda_2017-mortgage-market-activity-trends_report.pdf)

<sup>48</sup> History of HMDA, <http://www.ffiec.gov/hmda/history2.htm>

<sup>49</sup> Reporting institutions are those banks, credit unions or saving associations (institutions) with a home or branch office in a Metropolitan Statistical Area (MSA); whose total assets exceeded the coverage threshold on the preceding December 31; and that originated at least 25 home purchase loan or refinancing of a home purchase loan secured by a first lien on a one- to four-family dwelling, in each of two preceding calendar years (for 2017 reporting, they need to originate at least 25 home purchase loans in 2015 and 2016). The asset exemption threshold for depository and non-depository institutions did not change from the previous year, \$44 million and \$10 million, respectively. The institutions that are not federally insured or regulated are exempt from reporting. Also, the originated loans that are not insured, guaranteed or supplemented by a federal agency are not reported. For more information who reports HMDA data, see: <https://www.ffiec.gov/hmda/pdf/2017letter.pdf>

institutions that originated fewer than 25 covered closed-end mortgages in either of the preceding two years were exempt from HMDA reporting.

The 2015 HMDA Rule included 14 additional data points (Discretionary Data Points)<sup>50</sup> in addition to 13 new Mandated Data Points<sup>51</sup>. The 2015 HMDA Rule also made revisions to several preexisting data points. The **Property Type** was replaced with “Construction Type” and “Total Units,”<sup>52</sup> **Loan Purpose** was expanded with the addition of “cash-out refinance” and “other purpose,” and under **Occupancy Type** category “non-owner occupied” category was split into “second residence” and “investment property.” In addition, under the 2015 HMDA Rule, applicants have the option to self-identify their race/ethnicity in disaggregated sub-categories (for example, Indian or Chinese are sub-categories under Asian) and financial institutions must report such detail, where applicable. Financial institutions must also report, where applicable, whether the race, ethnicity, and sex of applicants were collected based on visual observation or surname. Finally, the 2015 HMDA Rule made changes in Regulation C’s coverage requirements. First, reporting of open-end lines of credit became mandatory for reporters that meet certain loan volume thresholds. Second, the transactional-coverage definition eliminated the previous requirement to report unsecured loans made for home improvement purposes and now requires reporting of consumer purpose-loans secured by a dwelling even if not made for one of the previously-enumerated purposes.

In May 2017, Congress passed the Economic Growth, Regulatory Relief, and Consumer Protection Act (EGRRCPA) that granted certain HMDA reporters partial exemptions from HMDA reporting. Under the partial exemptions, these institutions are not required to report any of the Mandated Data Points other than age and are not required to report any of the Discretionary Data Points for eligible transactions. Specifically, HMDA reporters that are insured depository institutions or insured credit unions and that originated fewer than 500 closed-end mortgages in each of the two preceding years qualify for this partial exemption with respect to reporting their closed-end transactions. HMDA reporters that are insured depository institutions or insured credit unions that originated fewer than 500 open-end lines of credit in each of the two preceding years also qualify for this partial exemption with respect to reporting their open-end transactions. The insured depository institutions must also not have received certain less than satisfactory examination ratings under the Community Reinvestment Act of 1977 (CRA) ratings to qualify for the partial exemptions. The Bureau issued an interpretive rule in 2018 to clarify which institutions and which data points are covered by the partial exemption.

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<sup>50</sup> 13 new Mandated Data Points: Age; Total Points and Fees; Rate Spread for all loans; Prepayment Penalty Term; Property Value; Introductory Rate Period; Non-Amortizing Features; Loan Term; Application Channel; Credit Score; Mortgage Loan Originator Identifier; Universal Loan Identifier; and Property Address.

<sup>51</sup> Discount Points; Lender Credits; Mandatorily Reported Reasons for Denial; Interest Rate; Debt-to-Income Ratio; Combined Loan-to-Value Ratio; Manufactured Home Secured Property Type; Manufactured Home Land Property Interest; Multifamily Affordable Units; Automated Underwriting System; Reverse Mortgage Flag; Open-End Line of Credit Flag; and Business or Commercial Purpose Flag.

<sup>52</sup> Before 2018 data collection under this category, financial institutions reported whether the property was one-to-four-family, manufactured home, or multi-family.

**APPENDIX B**  
**First-Lien, Owner-Occupied, 1-4 Family, Site-Built Loans**  
**Originated, by Purpose, 2015-2019**



# HOME PURCHASE LOANS ORIGINATED

COUNTY	2019	2018	2017	2016	2015	% of State Total (2019)	% Change from 2018	Rank in 2019
Anderson	1,000	895	832	784	664	1%	12%	18
Bedford	643	628	607	555	465	1%	2%	27
Benton	105	116	104	70	65	0%	-9%	78
Bledsoe	66	71	60	61	55	0%	-7%	87
Blount	1,984	1,943	1,909	1,701	1,502	2%	2%	11
Bradley	1,300	1,269	1,165	1,192	1,020	1%	2%	14
Campbell	351	348	318	290	222	0%	1%	42
Cannon	161	144	161	114	115	0%	12%	67
Carroll	215	194	166	158	147	0%	11%	57
Carter	437	447	459	413	367	0%	-2%	36
Cheatham	640	590	609	595	517	1%	8%	28
Chester	184	155	158	162	146	0%	19%	62
Claiborne	233	221	206	192	196	0%	5%	50
Clay	25	39	30	34	27	0%	-36%	94
Cocke	199	176	168	134	138	0%	13%	59
Coffee	708	637	572	560	471	1%	11%	24
Crockett	107	112	102	84	101	0%	-4%	77
Cumberland	602	624	639	515	440	1%	-4%	29
Davidson	10,759	9,784	10,622	10,398	10,052	12%	10%	1
Decatur	67	74	73	75	64	0%	-9%	86
DeKalb	259	227	209	186	138	0%	14%	49
Dickson	834	716	706	698	617	1%	16%	19
Dyer	348	295	309	295	280	0%	18%	43
Fayette	739	700	661	622	526	1%	6%	23
Fentress	166	120	112	95	87	0%	38%	64
Franklin	403	388	358	328	297	0%	4%	38
Gibson	503	451	445	431	366	1%	12%	34
Giles	288	306	238	204	215	0%	-6%	44
Grainger	159	154	151	126	122	0%	3%	68
Greene	551	502	463	481	426	1%	10%	32
Grundy	72	83	88	71	70	0%	-13%	85
Hamblen	690	696	608	600	512	1%	-1%	25
Hamilton	5,358	4,674	4,951	4,839	4,262	6%	15%	5
Hancock	31	28	30	21	27	0%	11%	93
Hardeman	126	110	122	131	83	0%	15%	74
Hardin	230	198	217	159	174	0%	16%	52
Hawkins	487	459	486	411	386	1%	6%	35
Haywood	96	106	84	91	80	0%	-9%	81
Henderson	193	195	201	188	164	0%	-1%	61
Henry	229	187	220	198	205	0%	22%	53
Hickman	223	210	192	192	185	0%	6%	56
Houston	66	53	75	66	47	0%	25%	87
Humphreys	164	194	141	152	121	0%	-15%	65

# HOME PURCHASE LOANS ORIGINATED

COUNTY	2019	2018	2017	2016	2015	% of State Total (2019)	% Change from 2018	Rank in 2019
Jackson	74	84	82	63	52	0%	-12%	84
Jefferson	556	551	519	443	462	1%	1%	31
Johnson	101	90	48	66	51	0%	12%	80
Knox	7,433	7,063	7,160	6,870	6,003	8%	5%	3
Lake	15	11	19	17	11	0%	36%	95
Lauderdale	122	144	133	111	112	0%	-15%	75
Lawrence	381	356	343	337	270	0%	7%	39
Lewis	87	96	89	62	51	0%	-9%	82
Lincoln	381	410	311	313	248	0%	-7%	39
Loudon	812	789	774	742	622	1%	3%	20
Macon	269	250	258	226	183	0%	8%	46
Madison	1,120	1,093	1,068	965	829	1%	2%	15
Marion	226	236	229	175	166	0%	-4%	55
Marshall	583	574	522	441	393	1%	2%	30
Maury	1,929	1,868	1,838	1,717	1,430	2%	3%	12
McMinn	550	460	463	459	381	1%	20%	33
McNairy	159	185	180	169	152	0%	-14%	68
Meigs	79	65	87	63	77	0%	22%	83
Monroe	423	394	384	344	278	0%	7%	37
Montgomery	5,133	4,886	4,444	3,877	3,237	6%	5%	6
Moore	60	66	62	53	37	0%	-9%	89
Morgan	142	126	105	90	110	0%	13%	70
Obion	231	178	178	163	156	0%	30%	51
Overton	164	132	121	91	90	0%	24%	65
Perry	33	28	31	17	12	0%	18%	92
Pickett	15	20	17	7	12	0%	-25%	95
Polk	129	109	103	96	82	0%	18%	72
Putnam	769	646	688	625	623	1%	19%	21
Rhea	261	246	248	237	208	0%	6%	48
Roane	649	594	525	495	407	1%	9%	26
Robertson	1,119	1,077	1,147	1,092	954	1%	4%	16
Rutherford	6,150	5,871	5,969	6,054	5,199	7%	5%	4
Scott	105	76	97	133	97	0%	38%	78
Sequatchie	115	130	125	124	108	0%	-12%	76
Sevier	1,043	922	1,024	984	846	1%	13%	17
Shelby	8,419	8,393	8,158	7,817	6,901	9%	0%	2
Smith	229	234	229	186	168	0%	-2%	53
Stewart	131	125	126	85	89	0%	5%	71
Sullivan	2,002	1,729	1,744	1,592	1,530	2%	16%	10
Sumner	3,515	3,226	3,597	3,409	3,077	4%	9%	8
Tipton	753	748	659	590	485	1%	1%	22
Trousdale	127	119	118	87	84	0%	7%	73
Unicoi	169	133	142	137	99	0%	27%	63

### HOME PURCHASE LOANS ORIGINATED

COUNTY	2019	2018	2017	2016	2015	% of State Total (2019)	% Change from 2018	Rank in 2019
Union	198	197	196	149	134	0%	1%	60
Van Buren	40	32	33	35	23	0%	25%	91
Warren	354	301	272	250	215	0%	18%	41
Washington	1,676	1,508	1,624	1,499	1,408	2%	11%	13
Wayne	56	62	53	55	42	0%	-10%	90
Weakley	212	192	205	166	178	0%	10%	58
White	270	236	222	204	200	0%	14%	45
Williamson	5,051	4,918	4,990	5,123	5,010	6%	3%	7
Wilson	2,923	2,585	2,710	2,464	2,391	3%	13%	9
NA	269	192	19	41	25	0%	40%	46
TENNESSEE	89,813	84,275	84,515	80,282	72,172	100%	7%	

# REFINANCE LOANS ORIGINATED

COUNTY	2019	2018	2017	2016	2015	% of State Total (2019)	% Change from 2018	Rank in 2019
Anderson	544	398	449	606	548	1%	37%	20
Bedford	478	314	321	349	275	1%	52%	23
Benton	101	56	75	82	88	0%	80%	67
Bledsoe	65	71	69	94	57	0%	-8%	82
Blount	1,283	790	946	1,333	1,138	2%	62%	11
Bradley	784	494	586	830	747	1%	59%	15
Campbell	254	211	210	239	223	0%	20%	38
Cannon	132	95	106	116	99	0%	39%	58
Carroll	171	94	124	151	129	0%	82%	47
Carter	290	231	209	313	312	0%	26%	37
Cheatham	549	344	412	473	391	1%	60%	18
Chester	96	77	76	117	99	0%	25%	69
Claiborne	153	115	117	124	115	0%	33%	50
Clay	21	23	23	21	21	0%	-9%	93
Cocke	133	85	131	151	134	0%	56%	57
Coffee	467	304	332	350	326	1%	54%	25
Crockett	57	38	59	80	72	0%	50%	87
Cumberland	448	276	335	468	414	1%	62%	27
Davidson	7,446	4,707	5,889	8,019	6,615	12%	58%	1
Decatur	51	41	66	75	65	0%	24%	89
DeKalb	147	81	99	103	106	0%	81%	53
Dickson	657	412	437	474	432	1%	59%	17
Dyer	160	112	151	209	193	0%	43%	49
Fayette	478	222	327	459	378	1%	115%	23
Fentress	91	69	57	91	77	0%	32%	71
Franklin	342	228	314	323	300	1%	50%	33
Gibson	215	159	209	259	266	0%	35%	42
Giles	204	134	127	188	139	0%	52%	44
Grainger	149	103	107	147	129	0%	45%	52
Greene	377	317	381	444	373	1%	19%	32
Grundy	100	100	106	79	75	0%	0%	68
Hamblen	442	283	410	482	423	1%	56%	28
Hamilton	3,105	1,914	2,154	3,129	2,773	5%	62%	6
Hancock	10	12	27	16	21	0%	-17%	95
Hardeman	84	84	87	98	92	0%	0%	78
Hardin	111	91	117	150	129	0%	22%	65
Hawkins	314	264	308	354	361	1%	19%	35
Haywood	58	90	103	91	82	0%	-36%	86
Henderson	132	106	161	183	145	0%	25%	58
Henry	153	111	137	171	159	0%	38%	50
Hickman	188	111	117	129	119	0%	69%	45
Houston	60	38	36	55	46	0%	58%	85
Humphreys	114	96	100	105	115	0%	19%	63
Jackson	49	38	43	56	55	0%	29%	90

# REFINANCE LOANS ORIGINATED

COUNTY	2019	2018	2017	2016	2015	% of State Total (2019)	% Change from 2018	Rank in 2019
Jefferson	406	285	269	396	376	1%	42%	30
Johnson	67	52	54	83	62	0%	29%	81
Knox	4,191	2,422	3,090	4,517	4,045	7%	73%	5
Lake	10	12	25	20	26	0%	-17%	95
Lauderdale	61	66	77	129	113	0%	-8%	84
Lawrence	227	191	179	238	201	0%	19%	41
Lewis	87	58	53	72	74	0%	50%	76
Lincoln	230	166	167	260	218	0%	39%	40
Loudon	545	326	400	579	464	1%	67%	19
Macon	169	117	135	132	105	0%	44%	48
Madison	515	350	521	671	585	1%	47%	21
Marion	237	186	233	210	191	0%	27%	39
Marshall	384	232	259	267	200	1%	66%	31
Maury	1,373	773	852	998	803	2%	78%	10
McMinn	327	219	256	343	294	1%	49%	34
McNairy	91	95	129	161	157	0%	-4%	71
Meigs	74	51	62	73	66	0%	45%	80
Monroe	299	199	228	288	261	1%	50%	36
Montgomery	2,137	1,027	1,404	2,157	1,820	4%	108%	9
Moore	65	41	56	43	45	0%	59%	82
Morgan	118	78	97	131	106	0%	51%	62
Obion	106	111	141	143	153	0%	-5%	66
Overton	75	43	61	71	59	0%	74%	79
Perry	22	18	25	26	28	0%	22%	92
Pickett	18	12	17	20	26	0%	50%	94
Polk	91	81	72	100	109	0%	12%	71
Putnam	466	323	350	471	429	1%	44%	26
Rhea	176	145	172	218	196	0%	21%	46
Roane	436	314	348	461	395	1%	39%	29
Robertson	1,030	587	746	800	684	2%	75%	12
Rutherford	5,021	2,702	3,299	3,995	3,338	8%	86%	3
Scott	91	52	91	92	105	0%	75%	71
Sequatchie	125	98	124	159	103	0%	28%	61
Sevier	781	496	583	807	710	1%	57%	16
Shelby	5,159	3,198	4,260	6,107	5,204	9%	61%	2
Smith	140	104	118	116	117	0%	35%	56
Stewart	91	60	82	99	91	0%	52%	71
Sullivan	976	724	818	1,044	1,023	2%	35%	13
Sumner	2,918	1,649	1,867	2,585	2,107	5%	77%	7
Tipton	514	298	419	584	520	1%	72%	22
Trousdale	87	55	62	58	44	0%	58%	76
Unicoi	92	80	90	102	93	0%	15%	70
Union	128	89	99	98	115	0%	44%	60
Van Buren	39	32	47	34	37	0%	22%	91

# REFINANCE LOANS ORIGINATED

COUNTY	2019	2018	2017	2016	2015	% of State Total (2019)	% Change from 2018	Rank in 2019
Warren	212	164	181	216	210	0%	29%	43
Washington	835	555	725	1,006	878	1%	50%	14
Wayne	57	48	55	77	48	0%	19%	87
Weakley	112	128	150	181	169	0%	-13%	64
White	146	118	161	145	130	0%	24%	54
Williamson	4,414	1,896	2,696	4,604	3,668	7%	133%	4
Wilson	2,347	1,193	1,497	2,084	1,729	4%	97%	8
NA	146	172	12	39	17	0%	-15%	54
TENNESSEE	59,727	36,430	44,564	60,096	51,603	100%	64%	

## **APPENDIX C**

**First Lien, Owner-Occupied, Home Purchase Loans Originated for 1-4  
Family, Site-Built Dwellings by Loan Type, 2019**

**Owner-Occupied, Home Purchase Loans Originated, by County, 2019**

<b>County</b>	<b>Conventional</b>	<b>FHA</b>	<b>VA</b>	<b>FSA/RHS</b>	<b>ALL</b>
Anderson	535	263	131	71	1,000
Bedford	299	163	63	118	643
Benton	49	19	11	26	105
Bledsoe	43	7	11	5	66
Blount	1,186	358	280	160	1,984
Bradley	722	382	122	74	1,300
Campbell	180	69	43	59	351
Cannon	78	40	18	25	161
Carroll	110	40	28	37	215
Carter	233	72	53	79	437
Cheatham	345	142	88	65	640
Chester	82	43	19	40	184
Claiborne	134	43	17	39	233
Clay	15	4	1	5	25
Cocke	91	48	29	31	199
Coffee	319	160	112	117	708
Crockett	44	31	13	19	107
Cumberland	340	105	91	66	602
Davidson	8,623	1,651	481	4	10,759
Decatur	25	15	9	18	67
DeKalb	113	61	25	60	259
Dickson	426	229	92	87	834
Dyer	137	89	27	95	348
Fayette	433	151	95	60	739
Fentress	71	40	27	28	166
Franklin	179	100	50	74	403
Gibson	223	133	55	92	503
Giles	120	80	46	42	288
Grainger	85	29	19	26	159
Greene	290	103	85	73	551
Grundy	43	15	8	6	72
Hamblen	317	231	78	64	690
Hamilton	3,696	1,095	467	100	5,358
Hancock	16	3	3	9	31
Hardeman	48	39	8	31	126
Hardin	74	55	25	76	230
Hawkins	248	92	73	74	487
Haywood	18	46	12	20	96
Henderson	80	35	21	57	193
Henry	126	43	37	23	229
Hickman	93	66	28	36	223
Houston	29	15	15	7	66



**Owner-Occupied, Home Purchase Loans Originated, by County, 2019**

<b>County</b>	<b>Conventional</b>	<b>FHA</b>	<b>VA</b>	<b>FSA/RHS</b>	<b>ALL</b>
Humphreys	70	44	16	34	164
Jackson	31	16	12	15	74
Jefferson	328	102	59	67	556
Johnson	51	23	19	8	101
Knox	5,081	1,513	639	200	7,433
Lake	3	3	4	5	15
Lauderdale	26	67	7	22	122
Lawrence	165	89	43	84	381
Lewis	39	26	8	14	87
Lincoln	188	78	54	61	381
Loudon	544	122	87	59	812
Macon	105	72	28	64	269
Madison	558	377	140	45	1,120
Marion	103	50	31	42	226
Marshall	272	156	71	84	583
Maury	1,223	505	169	32	1,929
McMinn	248	145	63	94	550
McNairy	64	37	17	41	159
Meigs	47	11	11	10	79
Monroe	205	98	56	64	423
Montgomery	1,026	1,007	3,070	30	5,133
Moore	36	9	8	7	60
Morgan	65	35	22	20	142
Obion	103	59	20	49	231
Overton	72	34	24	34	164
Perry	13	11	7	2	33
Pickett	7	1	3	4	15
Polk	68	36	16	9	129
Putnam	444	148	95	82	769
Rhea	111	77	38	35	261
Roane	368	140	81	60	649
Robertson	531	354	155	79	1,119
Rutherford	3,634	1,815	603	98	6,150
Scott	56	13	15	21	105
Sequatchie	60	32	9	14	115
Sevier	561	232	142	108	1,043
Shelby	5,391	2,155	833	40	8,419
Smith	121	50	33	25	229
Stewart	43	24	49	15	131
Sullivan	1,279	466	224	33	2,002
Sumner	2,171	876	329	139	3,515
Tipton	222	202	181	148	753

**Owner-Occupied, Home Purchase Loans Originated, by County, 2019**

<b>County</b>	<b>Conventional</b>	<b>FHA</b>	<b>VA</b>	<b>FSA/RHS</b>	<b>ALL</b>
Trousdale	58	32	20	17	127
Unicoi	88	38	17	26	169
Union	99	43	24	32	198
Van Buren	17	15	3	5	40
Warren	145	100	41	68	354
Washington	1,176	233	195	72	1,676
Wayne	24	17	8	7	56
Weakley	103	49	20	40	212
White	112	54	46	58	270
Williamson	4,384	391	264	12	5,051
Wilson	2,008	548	301	66	2,923
NA	148	64	26	31	269
TENNESSEE	54,413	19,299	11,372	4,729	89,813

## APPENDIX D

### Methodology for Determining Combined Race Categories

The 2015 HMDA Rule gave applicants the option to self-identify their race/ethnicity in disaggregated sub-categories and required financial institutions report this detail, where applicable. Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese and Other Asian are sub-categories under “Asian” race category. “Native Hawaiian and Pacific Islander” race category is disaggregated as Native Hawaiian, Guamanian or Chamorro, Samoan and Other Pacific Islander. “Hispanic or Latino” applicants can identify their ethnicity as Mexican, Puerto Rican, Cuban or Other Hispanic or Latino origin.

In this report, we identified and defined the racial groups in the following way using the syntax<sup>53</sup> provided for “derived race category” in reported data (these are combined race categories considering both applicant and co-applicant, if any, and all the racial groups, up to five, reported):

- White – Both applicant and co-applicant are white and no other race is reported, or the applicant is white and there is no co-applicant
- Minority Races (including American Indian, African-American, Asian and Native Hawaiian and Pacific Islander) – An applicant reports one of the minority races and the co-applicant is not White; or an applicant reports two races and one of them is one of the minority races and the other is White, that applicant is categorized under the minority race
- Two or more minorities (or multi-racial) – If applicant has more than one minority race in more than one of five data fields, and none of the co-applicant reported races is white
- Joint – If applicant has one or more minority race and co-applicant is White or if co-applicant has one or more minority race and applicant is White
- Race Not Available (Missing) – Race information for both applicant and co-applicant, if any, is reported as either “information not provided” or “not applicable.”

We treated the borrower’s ethnicity separately rather than combining as “race and ethnicity.” According to our classification, a borrower is Hispanic or Latino if the applicant or co applicant is identified as Hispanic or Latino. If neither the applicant nor the co-applicant is Hispanic or Latino, then the borrower is categorized as not Hispanic or Latino. The information is missing if ethnicity is not provided or not applicable for both applicant and co-applicant, if there is any.

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<sup>53</sup> <https://github.com/cfpb/hmda-platform/wiki/Derived-Fields-Categorization>

## **APPENDIX E**

**First-Lien, Owner-Occupied, 1-4 Family, Site-Built, Home Purchase Loans  
Originated by Race and County, 2019**

**First-lien, Owner-Occupied, 1-4 Family, Home Purchase Loan Originations by Race, 2019**

<b>County</b>	<b>White</b>	<b>Black</b>	<b>Asian</b>	<b>Other</b>	<b>Joint</b>	<b>Race NA</b>	<b>TOTAL</b>
Anderson	890	15	15	1	12	67	1,000
Bedford	547	31	8	2	8	47	643
Benton	99	0	0	0	0	6	105
Bledsoe	58	0	0	0	2	6	66
Blount	1,742	21	19	7	24	170	1,983
Bradley	1,159	36	9	4	17	75	1,300
Campbell	328	1	1	1	3	17	351
Cannon	142	1	0	0	0	18	161
Carroll	192	8	0	1	3	11	215
Carter	414	3	1	1	4	14	437
Cheatham	537	21	1	5	9	67	640
Chester	166	7	0	1	1	9	184
Claiborne	214	0	0	1	1	17	233
Clay	23	1	0	0	0	1	25
Cocke	181	0	0	0	2	16	199
Coffee	592	19	11	4	21	60	707
Crockett	98	4	0	0	2	3	107
Cumberland	539	3	5	3	4	48	602
Davidson	7,967	908	388	39	163	1,282	10,747
Decatur	62	1	0	0	0	4	67
DeKalb	226	2	2	2	1	25	258
Dickson	729	9	2	4	11	79	834
Dyer	314	14	2	0	2	16	348
Fayette	559	120	4	4	8	44	739
Fentress	147	0	2	0	1	16	166
Franklin	355	6	6	1	2	33	403
Gibson	424	36	7	2	3	31	503
Giles	248	14	0	0	5	21	288
Grainger	143	1	0	0	1	14	159
Greene	497	8	2	1	3	40	551
Grundy	64	0	1	2	0	5	72
Hamblen	629	13	6	4	6	31	689
Hamilton	4,398	299	119	22	81	438	5,357
Hancock	29	0	0	0	0	2	31
Hardeman	94	26	1	0	0	5	126
Hardin	199	11	1	1	5	13	230
Hawkins	440	4	4	3	6	30	487
Haywood	65	26	0	0	1	4	96
Henderson	173	6	0	0	5	9	193
Henry	200	2	0	1	2	24	229
Hickman	201	0	0	0	4	17	222
Houston	55	1	0	1	2	7	66
Humphreys	146	3	1	1	0	13	164
Jackson	69	0	0	0	0	5	74
Jefferson	507	3	3	0	1	42	556

**First-lien, Owner-Occupied, 1-4 Family, Home Purchase Loan Originations by Race, 2019**

<b>County</b>	<b>White</b>	<b>Black</b>	<b>Asian</b>	<b>Other</b>	<b>Joint</b>	<b>Race NA</b>	<b>TOTAL</b>
Johnson	94	0	0	1	0	6	101
Knox	6,368	251	164	22	124	501	7,430
Lake	12	1	0	0	0	2	15
Lauderdale	86	26	1	1	2	6	122
Lawrence	351	4	2	1	1	22	381
Lewis	78	2	0	1	0	6	87
Lincoln	341	6	1	1	4	28	381
Loudon	734	9	4	1	11	52	811
Macon	253	0	1	0	4	11	269
Madison	819	196	14	3	9	77	1,118
Marion	202	4	2	2	5	10	225
Marshall	510	21	2	3	5	42	583
Maury	1,584	98	13	5	21	207	1,928
McMinn	494	8	2	1	9	36	550
McNairy	142	6	2	0	1	8	159
Meigs	71	0	1	0	0	7	79
Monroe	386	4	0	4	4	25	423
Montgomery	3,558	763	99	38	117	541	5,116
Moore	53	0	1	0	0	6	60
Morgan	138	0	0	0	0	4	142
Obion	222	3	2	0	1	3	231
Overton	150	2	0	2	0	10	164
Perry	31	0	0	0	0	2	33
Pickett	14	0	0	0	0	1	15
Polk	115	0	1	1	0	12	129
Putnam	691	7	13	3	10	45	769
Rhea	243	0	1	1	1	15	261
Roane	581	9	7	2	8	41	648
Robertson	962	47	9	2	13	85	1,118
Rutherford	4,443	653	220	25	125	677	6,143
Scott	95	0	0	0	1	9	105
Sequatchie	103	0	0	0	0	12	115
Sevier	943	4	14	4	13	65	1,043
Shelby	5,045	2,198	335	30	154	636	8,398
Smith	207	3	1	2	1	15	229
Stewart	124	0	0	2	0	5	131
Sullivan	1,835	29	11	6	26	94	2,001
Sumner	2,971	134	46	9	52	300	3,512
Tipton	606	79	4	4	18	42	753
Trousdale	110	4	0	0	1	12	127
Unicoi	158	0	2	1	1	7	169
Union	183	1	0	2	0	12	198
Van Buren	37	0	0	0	0	3	40
Warren	325	7	2	2	1	17	354
Washington	1,487	32	21	4	25	106	1,675

**First-lien, Owner-Occupied, 1-4 Family, Home Purchase Loan Originations by Race, 2019**

<b>County</b>	<b>White</b>	<b>Black</b>	<b>Asian</b>	<b>Other</b>	<b>Joint</b>	<b>Race NA</b>	<b>TOTAL</b>
Wayne	48	2	0	0	1	5	56
Weakley	194	6	1	1	0	10	212
White	253	0	1	2	4	10	270
Williamson	4,007	98	268	11	77	587	5,048
Wilson	2,390	131	83	4	40	274	2,922
NA	237	8	6	1	3	13	268
TENNESSEE	71,945	6,540	1,978	324	1,319	7,624	89,730

## **APPENDIX F**

**First-Lien, Owner-Occupied, 1-4 Family, Site-Built, Refinance Loans  
Originated by Race and County, 2019**



**First-lien, Owner-Occupied, 1-4 Family, Site-Built *Refinance* Loan Originations by Race, 2019**

<b>County</b>	<b>White</b>	<b>Black</b>	<b>Asian</b>	<b>Other</b>	<b>Joint</b>	<b>Race NA</b>	<b>TOTAL</b>
Anderson	463	8	5	2	9	57	544
Bedford	397	18	0	2	9	52	478
Benton	83	3	0	0	1	14	101
Bledsoe	58	1	0	0	0	6	65
Blount	1,091	17	5	5	15	148	1,281
Bradley	651	22	1	3	4	102	783
Campbell	230	0	0	1	1	22	254
Cannon	114	1	0	0	0	17	132
Carroll	154	6	0	0	1	10	171
Carter	253	1	0	3	3	30	290
Cheatham	459	8	1	1	4	76	549
Chester	82	2	0	0	0	12	96
Claiborne	132	0	0	1	1	18	152
Clay	19	0	0	0	0	2	21
Cocke	110	1	0	0	0	22	133
Coffee	392	9	1	2	5	58	467
Crockett	46	1	0	0	0	10	57
Cumberland	389	0	0	0	2	57	448
Davidson	4,808	1,163	114	33	80	1,241	7,439
Decatur	45	0	0	0	1	5	51
DeKalb	123	1	0	0	1	22	147
Dickson	549	15	2	5	5	81	657
Dyer	133	10	2	1	0	14	160
Fayette	330	71	4	2	2	69	478
Fentress	72	0	0	0	0	19	91
Franklin	287	7	0	1	5	42	342
Gibson	182	12	1	0	1	19	215
Giles	148	12	1	2	0	41	204
Grainger	122	1	0	2	2	22	149
Greene	304	2	2	1	3	65	377
Grundy	87	0	0	0	0	13	100
Hamblen	381	14	1	2	4	38	440
Hamilton	2,408	242	40	13	43	358	3,104
Hancock	8	0	0	0	0	2	10
Hardeman	55	13	1	0	1	13	83
Hardin	93	1	0	0	0	17	111
Hawkins	268	3	1	3	1	38	314
Haywood	28	22	0	0	0	8	58
Henderson	107	4	0	0	0	21	132
Henry	126	4	0	0	0	23	153
Hickman	153	1	1	1	3	29	188
Houston	53	0	0	1	0	6	60

Humphreys	94	2	0	0	0	18	114
Jackson	42	0	0	0	0	7	49
Jefferson	361	6	0	1	3	35	406
Johnson	57	0	0	0	2	8	67
Knox	3,452	172	44	14	53	454	4,189
Lake	7	1	0	0	0	2	10
Lauderdale	40	12	0	0	1	8	61
Lawrence	186	1	0	0	1	39	227
Lewis	72	2	0	0	1	12	87
Lincoln	190	1	0	2	5	32	230
Loudon	468	4	2	0	4	66	544
Macon	151	2	0	0	0	16	169
Madison	355	89	5	1	8	57	515
Marion	207	6	0	1	1	22	237
Marshall	322	7	0	2	2	51	384
Maury	1,025	86	2	8	14	237	1,372
McMinn	273	4	1	1	2	46	327
McNairy	83	1	0	1	0	6	91
Meigs	65	0	0	0	0	9	74
Monroe	263	3	0	1	2	30	299
Montgomery	1,326	342	22	29	51	365	2,135
Moore	55	1	0	1	0	8	65
Morgan	102	1	0	0	3	12	118
Obion	92	2	1	0	0	11	106
Overton	59	0	0	1	0	15	75
Perry	19	1	0	0	0	2	22
Pickett	15	0	0	0	0	3	18
Polk	76	1	0	0	1	13	91
Putnam	393	3	1	1	8	60	466
Rhea	148	4	1	1	0	22	176
Roane	373	9	4	1	5	44	436
Robertson	845	29	3	3	15	135	1,030
Rutherford	3,569	490	92	27	67	773	5,018
Scott	83	0	0	0	1	7	91
Sequatchie	110	0	0	1	1	13	125
Sevier	673	1	2	3	4	98	781
Shelby	2,880	1,256	121	14	49	833	5,153
Smith	118	3	0	1	1	17	140
Stewart	79	0	0	0	1	11	91
Sullivan	839	12	5	3	8	108	975
Sumner	2,346	111	20	7	33	401	2,918
Tipton	373	48	1	3	3	86	514
Trousdale	70	4	1	1	1	10	87
Unicoi	77	0	0	0	0	15	92
Union	112	0	0	0	2	14	128

Van Buren	35	0	0	0	1	3	39
Warren	185	2	1	3	0	21	212
Washington	718	10	2	2	6	97	835
Wayne	50	1	0	0	0	6	57
Weakley	87	6	2	0	0	17	112
White	124	1	0	2	1	18	146
Williamson	3,380	95	157	9	54	716	4,411
Wilson	1,854	90	44	8	31	319	2,346
NA	131	5	2	0	0	8	146
TENNESSEE	45,102	4,623	719	240	653	8,355	59,692

## **APPENDIX G**

### **Ratio of Non-Conventional Purchase Loan Borrowers in Total Borrowers by Race, 2019**

**Ratio Of Non-Conventional Purchase Loan Borrowers In Total Borrowers, by Race, 2019**

<b>County</b>	<b>White</b>	<b>Black</b>	<b>Asian</b>	<b>Joint</b>	<b>Race NA</b>	<b>Other Minority</b>	<b>ALL</b>
Anderson	45.8%	80.0%	20.0%	25.0%	56.7%	100.0%	46.5%
Bedford	51.9%	87.1%	12.5%	87.5%	53.2%	0.0%	53.5%
Benton	54.5%	--	--	--	33.3%	--	53.3%
Bledsoe	36.2%	--	--	50.0%	16.7%	--	34.8%
Blount	40.2%	71.4%	10.5%	50.0%	38.8%	28.6%	40.2%
Bradley	43.4%	75.0%	11.1%	58.8%	45.3%	75.0%	44.5%
Campbell	47.6%	100.0%	0.0%	66.7%	64.7%	100.0%	48.7%
Cannon	52.1%	0.0%	--	--	50.0%	--	51.6%
Carroll	46.9%	62.5%	--	66.7%	63.6%	100.0%	48.8%
Carter	47.3%	33.3%	0.0%	50.0%	28.6%	100.0%	46.7%
Cheatham	46.0%	76.2%	0.0%	55.6%	34.3%	80.0%	46.1%
Chester	53.6%	71.4%	--	100.0%	66.7%	100.0%	55.4%
Claiborne	42.1%	--	--	0.0%	52.9%	0.0%	42.5%
Clay	39.1%	100.0%	--	--	0.0%	--	40.0%
Cocke	54.1%	--	--	50.0%	56.3%	--	54.3%
Coffee	54.2%	52.6%	36.4%	71.4%	60.0%	75.0%	55.0%
Crockett	58.2%	75.0%	--	100.0%	33.3%	--	58.9%
Cumberland	44.9%	100.0%	40.0%	50.0%	20.8%	100.0%	43.5%
Davidson	16.9%	49.3%	9.8%	22.7%	19.7%	25.6%	19.8%
Decatur	62.9%	100.0%	--	--	50.0%	--	62.7%
DeKalb	56.2%	100.0%	50.0%	100.0%	48.0%	100.0%	56.2%
Dickson	48.8%	77.8%	100.0%	54.5%	44.3%	50.0%	48.9%
Dyer	61.8%	64.3%	0.0%	0.0%	50.0%	--	60.6%
Fayette	36.0%	73.3%	25.0%	37.5%	25.0%	50.0%	41.4%
Fentress	61.2%	--	50.0%	100.0%	18.8%	--	57.2%
Franklin	55.8%	66.7%	50.0%	50.0%	51.5%	100.0%	55.6%
Gibson	53.8%	88.9%	0.0%	100.0%	54.8%	0.0%	55.7%
Giles	57.3%	92.9%	--	100.0%	38.1%	--	58.3%
Grainger	48.3%	100.0%	--	0.0%	28.6%	--	46.5%
Greene	47.9%	75.0%	50.0%	66.7%	32.5%	100.0%	47.4%
Grundy	42.2%	--	0.0%	--	40.0%	0.0%	40.3%
Hamblen	54.7%	76.9%	33.3%	50.0%	35.5%	50.0%	54.0%
Hamilton	29.3%	63.9%	11.8%	33.3%	29.9%	40.9%	31.0%
Hancock	48.3%	--	--	--	50.0%	--	48.4%
Hardeman	54.3%	88.5%	0.0%	--	80.0%	--	61.9%
Hardin	67.8%	100.0%	0.0%	40.0%	53.8%	100.0%	67.8%
Hawkins	48.4%	75.0%	25.0%	66.7%	50.0%	100.0%	49.1%
Haywood	78.5%	88.5%	--	100.0%	75.0%	--	81.3%
Henderson	56.1%	100.0%	--	80.0%	66.7%	--	58.5%
Henry	43.5%	100.0%	--	100.0%	45.8%	100.0%	45.0%
Hickman	62.2%	--	--	0.0%	29.4%	--	58.6%
Houston	56.4%	100.0%	--	100.0%	42.9%	0.0%	56.1%

**Ratio Of Non-Conventional Purchase Loan Borrowers In Total Borrowers, by Race, 2019**

<b>County</b>	<b>White</b>	<b>Black</b>	<b>Asian</b>	<b>Joint</b>	<b>Race NA</b>	<b>Other Minority</b>	<b>ALL</b>
Humphreys	58.9%	100.0%	100.0%	--	23.1%	100.0%	57.3%
Jackson	60.9%	--	--	--	20.0%	--	58.1%
Jefferson	42.4%	66.7%	66.7%	100.0%	19.0%	--	41.0%
Johnson	48.9%	--	--	--	50.0%	100.0%	49.5%
Knox	31.3%	47.8%	11.6%	33.9%	33.1%	36.4%	31.6%
Lake	83.3%	100.0%	--	--	50.0%	--	80.0%
Lauderdale	74.4%	88.5%	100.0%	100.0%	83.3%	100.0%	78.7%
Lawrence	57.3%	100.0%	0.0%	100.0%	40.9%	100.0%	56.7%
Lewis	59.0%	50.0%	--	--	0.0%	100.0%	55.2%
Lincoln	51.9%	83.3%	0.0%	25.0%	32.1%	100.0%	50.7%
Loudon	32.8%	55.6%	0.0%	18.2%	36.5%	100.0%	33.0%
Macon	60.9%	--	100.0%	75.0%	54.5%	--	61.0%
Madison	43.2%	81.6%	42.9%	55.6%	45.5%	0.0%	50.1%
Marion	55.4%	75.0%	0.0%	40.0%	40.0%	50.0%	54.2%
Marshall	52.4%	66.7%	100.0%	40.0%	54.8%	100.0%	53.3%
Mauzy	34.2%	71.4%	53.8%	66.7%	34.8%	40.0%	36.6%
McMinn	54.9%	75.0%	0.0%	77.8%	50.0%	0.0%	54.9%
McNairy	59.9%	66.7%	0.0%	100.0%	62.5%	--	59.7%
Meigs	43.7%	--	0.0%	--	14.3%	--	40.5%
Monroe	52.1%	75.0%	--	50.0%	40.0%	50.0%	51.5%
Montgomery	78.4%	89.0%	67.7%	85.5%	78.7%	86.8%	80.0%
Moore	45.3%	--	0.0%	--	0.0%	--	40.0%
Morgan	54.3%	--	--	--	50.0%	--	54.2%
Obion	55.4%	100.0%	0.0%	100.0%	33.3%	--	55.4%
Overton	58.7%	50.0%	--	--	30.0%	0.0%	56.1%
Perry	64.5%	--	--	--	0.0%	--	60.6%
Pickett	50.0%	--	--	--	100.0%	--	53.3%
Polk	47.8%	--	100.0%	--	33.3%	100.0%	47.3%
Putnam	42.8%	85.7%	23.1%	30.0%	35.6%	33.3%	42.3%
Rhea	57.2%	--	100.0%	100.0%	53.3%	100.0%	57.5%
Roane	43.2%	33.3%	14.3%	50.0%	46.3%	100.0%	43.2%
Robertson	52.2%	74.5%	33.3%	61.5%	45.9%	0.0%	52.5%
Rutherford	37.7%	60.6%	30.9%	46.4%	44.8%	56.0%	40.9%
Scott	46.3%	--	--	100.0%	44.4%	--	46.7%
Sequatchie	51.5%	--	--	--	16.7%	--	47.8%
Sevier	45.9%	100.0%	14.3%	53.8%	50.8%	75.0%	46.2%
Shelby	27.6%	60.2%	10.7%	37.0%	30.3%	43.3%	35.9%
Smith	48.3%	100.0%	0.0%	100.0%	26.7%	0.0%	47.2%
Stewart	65.3%	--	--	--	100.0%	100.0%	67.2%
Sullivan	35.5%	79.3%	18.2%	30.8%	37.2%	33.3%	36.1%
Sumner	37.8%	68.7%	15.2%	38.5%	31.7%	77.8%	38.2%
Tipton	68.2%	82.3%	25.0%	83.3%	78.6%	100.0%	70.5%

**Ratio Of Non-Conventional Purchase Loan Borrowers In Total Borrowers, by Race, 2019**

<b>County</b>	<b>White</b>	<b>Black</b>	<b>Asian</b>	<b>Joint</b>	<b>Race NA</b>	<b>Other Minority</b>	<b>ALL</b>
Trousdale	56.4%	75.0%	--	0.0%	33.3%	--	54.3%
Unicoi	48.1%	--	50.0%	0.0%	42.9%	100.0%	47.9%
Union	49.2%	100.0%	--	--	50.0%	100.0%	50.0%
Van Buren	62.2%	--	--	--	0.0%	--	57.5%
Warren	60.3%	85.7%	0.0%	0.0%	41.2%	0.0%	59.0%
Washington	29.6%	59.4%	9.5%	48.0%	25.5%	0.0%	29.9%
Wayne	58.3%	50.0%	--	100.0%	40.0%	--	57.1%
Weakley	50.5%	83.3%	0.0%	--	50.0%	100.0%	51.4%
White	59.3%	--	0.0%	50.0%	50.0%	50.0%	58.5%
Williamson	13.5%	27.6%	3.4%	15.6%	13.1%	9.1%	13.2%
Wilson	30.5%	52.7%	14.5%	27.5%	33.2%	50.0%	31.3%
NA	43.9%	87.5%	16.7%	33.3%	46.2%	100.0%	44.8%
<b>TENNESSEE</b>	<b>38.0%</b>	<b>64.3%</b>	<b>16.8%</b>	<b>43.7%</b>	<b>35.8%</b>	<b>52.2%</b>	<b>39.4%</b>

## **APPENDIX H**

### **Home Purchase Loan Denial Rates, By County and Race, 2019**



### Home Purchase Loans Denial Rates by Race, 2019

County	Asian	Black	White	Other Minority	Multi- Racial	Missing	ALL APPLICANTS
Anderson	6.3%	25.0%	7.6%	0.0%	25.0%	9.6%	8.2%
Bedford	0.0%	11.4%	8.3%	33.3%	0.0%	14.8%	8.9%
Benton	--	100.0%	19.2%	--	0.0%	25.0%	20.0%
Bledsoe	--	--	15.1%	--	0.0%	14.3%	14.6%
Blount	8.7%	7.7%	7.1%	0.0%	13.3%	8.2%	7.3%
Bradley	16.7%	11.6%	7.1%	0.0%	10.0%	14.9%	7.8%
Campbell	0.0%	0.0%	11.3%	50.0%	0.0%	40.6%	13.6%
Cannon	--	0.0%	9.3%	--	--	12.0%	9.6%
Carroll	--	11.1%	15.4%	50.0%	25.0%	0.0%	14.9%
Carter	50.0%	20.0%	7.4%	50.0%	16.7%	26.3%	8.7%
Cheatham	50.0%	16.0%	6.0%	0.0%	10.0%	11.4%	7.1%
Chester	--	30.0%	6.1%	0.0%	0.0%	25.0%	8.3%
Claiborne	--	100.0%	9.5%	0.0%	0.0%	9.5%	10.1%
Clay	--	0.0%	8.0%	--	--	50.0%	10.7%
Cocke	--	100.0%	14.3%	--	0.0%	22.7%	15.3%
Coffee	31.3%	9.1%	10.1%	0.0%	4.5%	10.0%	10.3%
Crockett	--	33.3%	13.2%	--	0.0%	25.0%	14.3%
Cumberland	16.7%	0.0%	10.0%	0.0%	20.0%	12.9%	10.3%
Davidson	10.7%	14.2%	6.1%	6.5%	3.5%	10.6%	7.5%
Decatur	--	0.0%	13.2%	--	--	0.0%	12.2%
DeKalb	0.0%	33.3%	9.1%	0.0%	0.0%	7.1%	9.0%
Dickson	0.0%	9.1%	6.3%	0.0%	7.7%	4.6%	6.2%
Dyer	0.0%	20.0%	10.5%	--	0.0%	22.7%	11.5%
Fayette	20.0%	8.8%	6.7%	33.3%	11.1%	13.2%	7.8%
Fentress	0.0%	--	12.3%	--	0.0%	10.0%	11.9%
Franklin	0.0%	33.3%	9.8%	0.0%	0.0%	17.1%	10.7%
Gibson	0.0%	21.7%	10.9%	0.0%	0.0%	8.6%	11.4%
Giles	0.0%	0.0%	10.7%	--	0.0%	15.4%	10.4%
Grainger	--	0.0%	11.0%	--	0.0%	16.7%	11.4%
Greene	33.3%	11.1%	9.9%	0.0%	40.0%	28.3%	11.9%
Grundy	0.0%	--	14.8%	0.0%	--	41.7%	17.5%
Hamblen	14.3%	13.3%	7.6%	20.0%	25.0%	26.0%	9.1%
Hamilton	6.9%	12.4%	6.1%	14.8%	3.4%	8.4%	6.7%
Hancock	--	--	16.7%	--	--	0.0%	15.0%
Hardeman	0.0%	12.9%	12.5%	--	--	37.5%	13.8%
Hardin	0.0%	8.3%	7.7%	0.0%	0.0%	13.3%	7.8%
Hawkins	20.0%	0.0%	8.3%	0.0%	33.3%	11.1%	8.9%
Haywood	--	45.8%	15.0%	0.0%	50.0%	25.0%	26.6%
Henderson	--	14.3%	10.1%	--	0.0%	9.1%	9.9%
Henry	--	33.3%	14.2%	0.0%	0.0%	10.7%	13.9%
Hickman	--	0.0%	10.5%	--	0.0%	13.0%	10.5%

### Home Purchase Loans Denial Rates by Race, 2019

County	Asian	Black	White	Other Minority	Multi- Racial	Missing	ALL APPLICANTS
Houston	--	0.0%	18.7%	0.0%	0.0%	20.0%	18.0%
Humphreys	0.0%	40.0%	7.3%	0.0%	--	23.5%	9.6%
Jackson	--	--	12.5%	--	--	16.7%	12.8%
Jefferson	40.0%	40.0%	11.3%	100.0%	0.0%	22.6%	13.1%
Johnson	--	--	9.9%	0.0%	--	0.0%	9.3%
Knox	8.1%	14.3%	6.3%	7.7%	5.8%	9.8%	6.8%
Lake	--	0.0%	41.7%	--	--	33.3%	39.3%
Lauderdale	0.0%	55.7%	30.4%	0.0%	0.0%	12.5%	36.9%
Lawrence	0.0%	20.0%	8.7%	0.0%	50.0%	10.7%	9.1%
Lewis	--	33.3%	13.8%	50.0%	--	33.3%	16.7%
Lincoln	0.0%	22.2%	10.0%	50.0%	20.0%	6.1%	10.2%
Loudon	0.0%	0.0%	9.0%	50.0%	0.0%	15.9%	9.3%
Macon	0.0%	0.0%	10.1%	100.0%	20.0%	25.0%	11.2%
Madison	16.7%	16.3%	7.6%	0.0%	0.0%	9.2%	9.4%
Marion	0.0%	0.0%	13.7%	0.0%	0.0%	6.3%	12.5%
Marshall	33.3%	12.5%	8.9%	0.0%	28.6%	8.3%	9.3%
Maury	27.8%	17.4%	6.6%	14.3%	8.7%	12.8%	8.1%
McMinn	33.3%	0.0%	11.5%	50.0%	0.0%	22.4%	12.2%
McNairy	0.0%	14.3%	10.5%	--	0.0%	16.7%	10.9%
Meigs	0.0%	--	16.3%	--	--	0.0%	14.7%
Monroe	100.0%	0.0%	11.0%	20.0%	20.0%	19.4%	11.9%
Montgomery	9.9%	11.7%	6.7%	17.0%	8.5%	8.6%	7.8%
Moore	0.0%	--	9.8%	--	--	12.5%	10.0%
Morgan	0.0%	--	10.2%	--	--	30.0%	11.2%
Obion	0.0%	33.3%	15.7%	--	0.0%	0.0%	15.8%
Overton	--	0.0%	10.1%	0.0%	--	9.1%	9.8%
Perry	--	--	11.1%	--	--	0.0%	10.3%
Pickett	--	--	22.2%	--	--	0.0%	21.1%
Polk	0.0%	100.0%	10.5%	0.0%	--	7.1%	10.7%
Putnam	7.1%	0.0%	4.7%	0.0%	0.0%	10.0%	4.9%
Rhea	0.0%	--	10.4%	0.0%	0.0%	15.0%	10.5%
Roane	0.0%	21.4%	8.0%	0.0%	10.0%	13.5%	8.5%
Robertson	10.0%	11.1%	5.9%	0.0%	13.3%	12.3%	6.7%
Rutherford	8.1%	13.1%	6.4%	0.0%	5.3%	12.3%	7.8%
Scott	--	--	18.6%	100.0%	0.0%	10.0%	18.4%
Sequatchie	--	--	15.2%	--	--	21.1%	16.0%
Sevier	12.5%	33.3%	9.8%	20.0%	31.6%	29.2%	11.8%
Shelby	7.8%	14.5%	4.3%	9.1%	4.3%	11.9%	8.0%
Smith	0.0%	0.0%	5.9%	0.0%	0.0%	0.0%	5.4%
Stewart	--	--	14.1%	0.0%	--	50.0%	16.6%
Sullivan	20.0%	8.8%	7.4%	0.0%	3.3%	16.0%	7.9%

**Home Purchase Loans Denial Rates by Race, 2019**

<b>County</b>	<b>Asian</b>	<b>Black</b>	<b>White</b>	<b>Other Minority</b>	<b>Multi- Racial</b>	<b>Missing</b>	<b>ALL APPLICANTS</b>
Sumner	14.8%	14.5%	6.3%	0.0%	10.0%	9.2%	7.1%
Tipton	0.0%	19.4%	6.6%	33.3%	5.3%	15.4%	8.8%
Trousdale	--	0.0%	11.2%	--	50.0%	13.3%	11.6%
Unicoi	0.0%	--	7.8%	0.0%	0.0%	33.3%	9.2%
Union	--	0.0%	12.6%	0.0%	100.0%	18.8%	13.2%
Van Buren	--	--	8.9%	--	--	25.0%	10.2%
Warren	33.3%	20.0%	6.2%	0.0%	0.0%	14.8%	7.3%
Washington	12.5%	13.5%	7.9%	28.6%	7.1%	12.0%	8.4%
Wayne	--	0.0%	10.2%	--	0.0%	25.0%	11.4%
Weakley	0.0%	25.0%	13.2%	0.0%	100.0%	15.4%	13.9%
White	0.0%	100.0%	6.9%	0.0%	0.0%	28.6%	8.4%
Williamson	11.7%	12.3%	5.3%	0.0%	5.8%	10.0%	6.4%
Wilson	11.1%	12.1%	5.6%	16.7%	4.7%	6.8%	6.2%
NA	27.8%	68.3%	26.2%	33.3%	0.0%	39.7%	34.0%
TENNESSEE	10.3%	15.2%	7.3%	11.5%	7.1%	11.9%	8.4%

## **APPENDIX I**

### **Refinance Loan Denial Rates, By County and Race, 2019**

**Refinance Loans Denial Rates by Race, 2019**

<b>County</b>	<b>Asian</b>	<b>Black</b>	<b>White</b>	<b>Other Minority</b>	<b>Multi- Racial</b>	<b>Missing</b>	<b>ALL APPLICANTS</b>
Anderson	25.0%	61.9%	20.0%	33.3%	23.1%	22.2%	21.6%
Bedford	--	25.9%	23.1%	0.0%	9.1%	26.4%	23.3%
Benton	--	0.0%	16.2%	100.0%	50.0%	36.4%	20.5%
Bledsoe	--	0.0%	30.2%	--	100.0%	30.0%	30.6%
Blount	0.0%	35.5%	19.1%	40.0%	34.8%	18.8%	19.7%
Bradley	33.3%	42.1%	21.4%	50.0%	0.0%	25.2%	22.8%
Campbell	--	--	20.7%	50.0%	0.0%	37.1%	22.6%
Cannon	--	50.0%	18.4%	--	--	26.9%	20.0%
Carroll	--	45.5%	20.5%	--	0.0%	26.7%	22.0%
Carter	--	0.0%	22.4%	0.0%	25.0%	39.6%	24.4%
Cheatham	50.0%	38.5%	21.0%	0.0%	16.7%	26.2%	22.0%
Chester	--	0.0%	24.6%	--	--	40.0%	26.4%
Claiborne	--	--	22.8%	0.0%	0.0%	29.6%	23.4%
Clay	--	--	16.0%	--	--	50.0%	20.7%
Cocke	--	80.0%	24.7%	--	--	29.0%	26.9%
Coffee	0.0%	41.2%	20.8%	0.0%	37.5%	25.3%	22.0%
Crockett	--	66.7%	27.7%	--	--	8.3%	26.3%
Cumberland	100.0%	50.0%	20.0%	100.0%	0.0%	26.6%	21.3%
Davidson	36.7%	28.6%	15.7%	32.7%	14.4%	23.0%	19.8%
Decatur	--	--	14.3%	--	0.0%	36.4%	17.6%
DeKalb	--	0.0%	22.6%	--	0.0%	38.9%	25.2%
Dickson	0.0%	29.2%	18.8%	0.0%	37.5%	18.3%	19.0%
Dyer	33.3%	35.3%	18.8%	0.0%	0.0%	21.1%	20.4%
Fayette	0.0%	32.4%	15.9%	0.0%	33.3%	22.8%	19.8%
Fentress	--	--	26.4%	--	100.0%	20.8%	25.9%
Franklin	--	50.0%	20.2%	50.0%	36.4%	31.3%	23.2%
Gibson	0.0%	53.6%	24.4%	100.0%	0.0%	32.1%	28.1%
Giles	0.0%	45.5%	23.5%	33.3%	--	21.4%	24.8%
Grainger	100.0%	50.0%	24.6%	0.0%	33.3%	19.4%	24.3%
Greene	0.0%	60.0%	25.9%	0.0%	0.0%	18.3%	24.7%
Grundy	--	--	19.6%	--	--	17.6%	19.4%
Hamblen	0.0%	44.4%	24.5%	33.3%	20.0%	35.9%	26.5%
Hamilton	27.3%	39.0%	18.0%	33.3%	14.8%	29.3%	21.8%
Hancock	--	--	42.9%	--	--	0.0%	37.5%
Hardeman	0.0%	62.9%	24.3%	--	50.0%	23.5%	34.9%
Hardin	--	66.7%	25.6%	100.0%	0.0%	22.7%	26.3%
Hawkins	0.0%	33.3%	29.2%	40.0%	0.0%	28.3%	29.1%
Haywood	--	38.1%	32.6%	--	--	50.0%	37.7%
Henderson	--	55.6%	19.1%	--	--	22.2%	21.5%
Henry	--	44.4%	25.3%	80.0%	--	41.5%	30.1%
Hickman	0.0%	0.0%	21.6%	50.0%	0.0%	27.5%	22.3%

**Refinance Loans Denial Rates by Race, 2019**

<b>County</b>	<b>Asian</b>	<b>Black</b>	<b>White</b>	<b>Other Minority</b>	<b>Multi- Racial</b>	<b>Missing</b>	<b>ALL APPLICANTS</b>
Houston	--	--	26.0%	0.0%	--	36.4%	27.1%
Humphreys	--	33.3%	21.3%	--	--	28.0%	22.7%
Jackson	--	--	22.0%	--	--	27.3%	22.9%
Jefferson	--	50.0%	23.2%	50.0%	25.0%	36.8%	25.4%
Johnson	--	--	27.5%	--	0.0%	42.9%	29.2%
Knox	18.3%	26.1%	17.9%	31.8%	21.7%	28.7%	19.7%
Lake	--	50.0%	46.2%	--	--	50.0%	47.4%
Lauderdale	0.0%	48.1%	31.3%	--	0.0%	42.9%	36.4%
Lawrence	--	50.0%	21.9%	100.0%	50.0%	23.1%	22.7%
Lewis	100.0%	33.3%	14.9%	100.0%	66.7%	7.1%	18.2%
Lincoln	--	83.3%	23.0%	0.0%	37.5%	37.3%	26.5%
Loudon	33.3%	0.0%	15.9%	--	33.3%	25.0%	17.2%
Macon	--	0.0%	19.5%	100.0%	--	32.0%	21.1%
Madison	28.6%	38.4%	21.7%	0.0%	11.1%	31.0%	26.2%
Marion	--	12.5%	21.2%	0.0%	50.0%	34.3%	22.5%
Marshall	--	42.9%	18.6%	0.0%	0.0%	19.7%	19.3%
Maurry	25.0%	27.3%	15.9%	20.0%	6.7%	19.5%	17.3%
McMinn	66.7%	33.3%	24.5%	66.7%	33.3%	34.2%	26.8%
McNairy	--	66.7%	28.9%	50.0%	--	52.6%	33.1%
Meigs	--	--	20.7%	--	--	18.2%	20.4%
Monroe	--	16.7%	23.2%	0.0%	0.0%	24.4%	23.0%
Montgomery	36.1%	30.5%	23.3%	31.1%	26.4%	27.9%	25.7%
Moore	100.0%	0.0%	12.5%	0.0%	100.0%	27.3%	17.5%
Morgan	--	0.0%	28.7%	--	0.0%	6.7%	25.9%
Obion	0.0%	62.5%	31.4%	--	--	40.0%	33.7%
Overton	--	--	17.5%	0.0%	--	20.0%	17.8%
Perry	--	50.0%	28.6%	--	--	0.0%	28.1%
Pickett	--	--	24.0%	--	--	40.0%	26.7%
Polk	--	0.0%	32.2%	--	0.0%	27.8%	31.1%
Putnam	0.0%	72.7%	20.0%	50.0%	20.0%	21.8%	21.4%
Rhea	50.0%	0.0%	25.8%	0.0%	--	26.7%	25.6%
Roane	20.0%	30.8%	23.0%	50.0%	16.7%	26.6%	23.5%
Robertson	0.0%	31.8%	16.2%	40.0%	16.7%	19.9%	17.3%
Rutherford	22.6%	26.6%	15.6%	32.5%	23.3%	21.7%	18.2%
Scott	--	--	26.0%	--	0.0%	55.6%	29.6%
Sequatchie	--	100.0%	22.1%	0.0%	0.0%	41.7%	25.0%
Sevier	0.0%	60.0%	22.5%	57.1%	37.5%	31.6%	24.3%
Shelby	20.4%	40.7%	16.8%	21.1%	19.7%	30.4%	26.6%
Smith	--	42.9%	29.9%	0.0%	0.0%	21.7%	29.1%
Stewart	--	--	29.7%	--	50.0%	36.8%	30.9%
Sullivan	37.5%	27.8%	22.9%	25.0%	35.7%	31.9%	24.3%

**Refinance Loans Denial Rates by Race, 2019**

<b>County</b>	<b>Asian</b>	<b>Black</b>	<b>White</b>	<b>Other Minority</b>	<b>Multi- Racial</b>	<b>Missing</b>	<b>ALL APPLICANTS</b>
Sumner	24.1%	31.7%	15.2%	42.9%	15.0%	22.3%	17.2%
Tipton	50.0%	30.1%	21.6%	40.0%	0.0%	23.0%	22.9%
Trousdale	50.0%	42.9%	19.1%	0.0%	50.0%	26.7%	22.4%
Unicoi	--	--	20.2%	--	--	6.3%	18.3%
Union	--	--	25.8%	--	0.0%	37.5%	27.0%
Van Buren	--	--	15.6%	--	0.0%	33.3%	17.3%
Warren	0.0%	50.0%	23.7%	40.0%	66.7%	23.3%	24.7%
Washington	25.0%	38.9%	23.7%	33.3%	12.5%	28.1%	24.4%
Wayne	--	0.0%	22.5%	--	--	40.0%	24.4%
Weakley	0.0%	12.5%	21.6%	--	--	10.5%	19.3%
White	--	66.7%	26.8%	50.0%	50.0%	24.0%	27.7%
Williamson	10.1%	22.3%	11.8%	10.0%	15.4%	15.1%	12.6%
Wilson	13.7%	28.7%	15.1%	38.5%	16.2%	21.5%	16.7%
NA	25.0%	85.7%	34.9%	100.0%	--	81.4%	51.3%
TENNESSEE	23.1%	34.6%	18.6%	33.2%	20.7%	25.3%	21.3%

## **Appendix J**

**Construction Type: First-Lien, Owner-Occupied, Home Purchase Loans  
Originations for 1-4 Family Homes, 2019**



**First-lien, owner occupied, 1-4 family, home purchase loans originated, 2019**

<b>County</b>	<b>Site-built</b>	<b>Manufactured</b>	<b>Total Home Purchase</b>	<b>Manufactured % of All Purchase</b>
Anderson	1,000	75	1,075	7.0%
Bedford	643	26	669	3.9%
Benton	105	11	116	9.5%
Bledsoe	66	25	91	27.5%
Blount	1,984	105	2,089	5.0%
Bradley	1,300	57	1,357	4.2%
Campbell	351	44	395	11.1%
Cannon	161	13	174	7.5%
Carroll	215	32	247	13.0%
Carter	437	57	494	11.5%
Cheatham	640	38	678	5.6%
Chester	184	22	206	10.7%
Claiborne	233	65	298	21.8%
Clay	25	9	34	26.5%
Cocke	199	53	252	21.0%
Coffee	708	31	739	4.2%
Crockett	107	9	116	7.8%
Cumberland	602	82	684	12.0%
Davidson	10,759	56	10,815	0.5%
Decatur	67	6	73	8.2%
DeKalb	259	24	283	8.5%
Dickson	834	63	897	7.0%
Dyer	348	20	368	5.4%
Fayette	739	20	759	2.6%
Fentress	166	21	187	11.2%
Franklin	403	14	417	3.4%
Gibson	503	29	532	5.5%
Giles	288	24	312	7.7%
Grainger	159	58	217	26.7%
Greene	551	127	678	18.7%
Grundy	72	25	97	25.8%
Hamblen	690	39	729	5.3%
Hamilton	5,358	93	5,451	1.7%
Hancock	31	11	42	26.2%
Hardeman	126	19	145	13.1%
Hardin	230	19	249	7.6%
Hawkins	487	78	565	13.8%
Haywood	96	5	101	5.0%
Henderson	193	41	234	17.5%
Henry	229	40	269	14.9%
Hickman	223	51	274	18.6%
Houston	66	5	71	7.0%
Humphreys	164	22	186	11.8%
Jackson	74	20	94	21.3%

**First-lien, owner occupied, 1-4 family, home purchase loans originated, 2019**

<b>County</b>	<b>Site-built</b>	<b>Manufactured</b>	<b>Total Home Purchase</b>	<b>Manufactured % of All Purchase</b>
Jefferson	556	122	678	18.0%
Johnson	101	16	117	13.7%
Knox	7,433	152	7,585	2.0%
Lake	15	2	17	11.8%
Lauderdale	122	12	134	9.0%
Lawrence	381	33	414	8.0%
Lewis	87	16	103	15.5%
Lincoln	381	24	405	5.9%
Loudon	812	75	887	8.5%
Macon	269	40	309	12.9%
Madison	1,120	16	1,136	1.4%
Marion	226	38	264	14.4%
Marshall	583	20	603	3.3%
Maury	1,929	71	2,000	3.6%
McMinn	550	92	642	14.3%
McNairy	159	27	186	14.5%
Meigs	79	42	121	34.7%
Monroe	423	92	515	17.9%
Montgomery	5,133	36	5,169	0.7%
Moore	60	5	65	7.7%
Morgan	142	29	171	17.0%
Obion	231	17	248	6.9%
Overton	164	21	185	11.4%
Perry	33	11	44	25.0%
Pickett	15	2	17	11.8%
Polk	129	38	167	22.8%
Putnam	769	29	798	3.6%
Rhea	261	31	292	10.6%
Roane	649	76	725	10.5%
Robertson	1,119	47	1,166	4.0%
Rutherford	6,150	79	6,229	1.3%
Scott	105	25	130	19.2%
Sequatchie	115	28	143	19.6%
Sevier	1,043	114	1,157	9.9%
Shelby	8,419	15	8,434	0.2%
Smith	229	35	264	13.3%
Stewart	131	19	150	12.7%
Sullivan	2,002	79	2,081	3.8%
Sumner	3,515	75	3,590	2.1%
Tipton	753	47	800	5.9%
Trousdale	127	19	146	13.0%
Unicoi	169	13	182	7.1%
Union	198	41	239	17.2%
Van Buren	40	12	52	23.1%

**First-lien, owner occupied, 1-4 family, home purchase loans originated, 2019**

<b>County</b>	<b>Site-built</b>	<b>Manufactured</b>	<b>Total Home Purchase</b>	<b>Manufactured % of All Purchase</b>
Warren	354	34	388	8.8%
Washington	1,676	108	1,784	6.1%
Wayne	56	8	64	12.5%
Weakley	212	22	234	9.4%
White	270	37	307	12.1%
Williamson	5,051	6	5,057	0.1%
Wilson	2,923	77	3,000	2.6%
NA	269	49	318	15.4%
Tennessee	89,813	3,858	93,671	4.1%

## APPENDIX K

### Methodology for Estimating THDA Eligible Borrowers to calculate THDA's Market Share

To compare similar loan products between THDA and those within the HMDA data set, we limited the HMDA loans to those with borrowers meeting the income limits and the maximum purchase price THDA borrowers paid. HMDA does not require all lenders to report mortgage information, so the data may not represent a complete inventory of loans made, especially in small rural counties. Additionally, THDA loan eligibility is subject to income and purchase price limits, and in more than half of the state's counties, loan eligibility is limited to first time homebuyers.<sup>54</sup> Therefore, some assumptions are made.

THDA eligible borrowers are defined as first time homebuyers with income less than or equal to THDA's income limit for the county they are purchasing their homes with a price less than or equal to the maximum price THDA borrowers paid in the county. Since majority of THDA loans funded in the recent years are FHA-insured, only FHA-insured THDA loans are compared to FHA-insured loans originated in the market.

In the HMDA data, institutions report the loan amounts rather than the purchase prices. This complicates determining the mortgage borrowers who could be eligible for THDA loans. Therefore, in this version, the purchase price of the homes was estimated by assuming that borrowers paid four percent of the reported loan amount as downpayment. A four percent downpayment may be considered low, especially for conventional loans, but considering there are zero or low downpayment loan products such as FSA/RHS and FHA insured loans and borrowers may use private mortgage insurance (PMI) and pay less than 20 percent downpayment, four percent is a good average for an estimated downpayment. We compared this estimated purchase price to the maximum price THDA borrowers paid during the year in each county. In the counties where THDA did not fund any loan, we used the median sales price in the county for all sales during year from Comptroller's.

To determine the eligibility based on the income limits, THDA's income limits for a small family (households with one to two people) were used. HMDA data do not include the number of people in the household. This might underestimate number of THDA eligible borrowers.

HMDA data do not indicate whether or not a borrower was a first-time homebuyer. Since majority of THDA borrowers are first-time homebuyers, we used the estimates provided in the US Department of Housing and Urban Development's Annual reports to Congress on financial status of FHA mortgage insurance fund<sup>55</sup>. For example, in 2019, the report estimates 82.84 percent of borrowers who used FHA-insured loans were first-time homebuyers.

All told, this means that the loan counts used are likely to under/overestimate THDA's participation in the market. Despite these limitations, this is a useful comparison to examine our loan market participation.

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<sup>54</sup> First-time homeownership requirement is waived in the fully targeted economically distressed counties and qualified census tracts in addition to the Veterans who are using THDA loan products.

<sup>55</sup> Annual reports for various fiscal years can be found at <https://www.hud.gov/fhammif rpt>

In the previous years, we excluded the manufactured home loans originated from the pool of eligible loans. However, the borrowers who purchased a manufactured home are part of THDA's portfolio of originated loans. To make our comparison more realistic, we changed our calculations to include the manufactured home purchase loans in the eligible loan portfolio. THDA only finances manufactured homes that are considered real property, which are loans secured by both home and land. Manufactured home loans secured by *only* manufactured homes and *not* secured by land are known as "chattel" loans, which were not possible to identify until the 2018 HMDA data. The 2015 HMDA Rule made it possible to differentiate them. Therefore, since 2018, our THDA eligible loans include manufactured homes, but excludes the chattel loans.

## **Appendix L**

### **THDA's Market Share in Single Family FHA-Insured Loan Originations, 2019**

County	THDA Eligible FHA-Insured Loans		FHA-Insured First Time THDA Borrowers		THDA's Market Share in FHA-Insured Loans Market	
	2019	2018	2019	2018	2019	2018
Anderson	222	229	73	69	39.7%	36.4%
Bedford	98	130	24	17	29.6%	15.8%
Benton	6	1	2	1	40.2%	100.0%
Bledsoe	4	16	1	0	30.2%	0.0%
Blount	203	325	61	52	36.3%	19.3%
Bradley	265	327	100	134	45.6%	49.6%
Campbell	55	86	17	12	37.3%	16.9%
Cannon	32	28	13	5	49.0%	21.6%
Carroll	29	37	7	6	29.1%	19.6%
Carter	68	79	20	15	35.5%	23.0%
Cheatham	117	96	26	19	26.8%	23.9%
Chester	19	36	2	6	12.7%	20.2%
Claiborne	38	41	6	2	19.1%	5.9%
Clay	5	1	2	0	48.3%	0.0%
Cocke	43	54	17	19	47.7%	42.6%
Coffee	114	117	24	16	25.4%	16.5%
Crockett	17	30	3	6	21.3%	24.2%
Cumberland	83	74	10	10	14.5%	16.3%
Davidson	1,244	1,494	353	352	34.3%	28.5%
Decatur	10	16	2	2	24.1%	15.1%
DeKalb	53	60	18	14	41.0%	28.2%
Dickson	205	127	58	23	34.2%	21.9%
Dyer	44	29	8	1	21.9%	4.2%
Fayette	35	96	8	10	27.6%	12.6%
Fentress	28	7	5	0	21.6%	0.0%
Franklin	67	40	12	8	21.6%	24.2%
Gibson	92	120	21	11	27.6%	11.1%
Giles	46	19	7	2	18.4%	12.7%
Grainger	41	25	11	6	32.4%	29.0%
Greene	113	97	26	25	27.8%	31.2%
Grundy	7	2	0	0	0.0%	0.0%
Hamblen	183	168	87	72	57.4%	51.8%
Hamilton	624	787	187	192	36.2%	29.5%
Hancock	2	1	1	0	60.4%	0.0%
Hardeman	23	10	7	1	36.7%	12.1%
Hardin	28	8	4	1	17.2%	15.1%
Hawkins	68	68	23	13	40.8%	23.1%
Haywood	36	50	21	19	70.4%	46.0%
Henderson	16	27	3	2	22.6%	9.0%
Henry	33	13	7	6	25.6%	55.8%
Hickman	51	27	18	8	42.6%	35.8%
Houston	9	3	4	1	53.7%	40.3%
Humphreys	28	32	10	9	43.1%	34.0%

Jackson	10	21	1	2	12.1%	11.5%
Jefferson	111	155	37	33	40.2%	25.7%
Johnson	2	2	3	1	100.0%	60.5%
Knox	1,043	1,367	407	472	47.1%	41.8%
Lake	1	0	1	0	100.0%	NA
Lauderdale	56	66	30	35	64.7%	64.1%
Lawrence	82	82	10	3	14.7%	4.4%
Lewis	18	8	6	0	40.2%	0.0%
Lincoln	47	41	9	3	23.1%	8.8%
Loudon	80	87	28	22	42.3%	30.6%
Macon	61	75	15	14	29.7%	22.6%
Madison	281	379	119	161	51.1%	51.4%
Marion	29	40	6	10	25.0%	30.2%
Marshall	81	88	20	12	29.8%	16.5%
Maury	341	448	77	71	27.3%	19.2%
McMinn	100	93	30	16	36.2%	20.8%
McNairy	21	27	3	2	17.2%	9.0%
Meigs	15	11	1	3	8.0%	33.0%
Monroe	97	70	28	24	34.8%	41.5%
Montgomery	722	1,034	305	329	51.0%	38.5%
Moore	3	6	0	0	0.0%	0.0%
Morgan	22	19	4	3	21.9%	19.1%
Obion	34	21	8	3	28.4%	17.3%
Overton	18	18	3	1	20.1%	6.7%
Perry	7	2	2	0	34.5%	0.0%
Pickett	0	2	0	1	NA	60.5%
Polk	5	22	3	5	72.4%	27.5%
Putnam	81	55	16	2	23.8%	4.4%
Rhea	68	36	23	18	40.8%	60.5%
Roane	86	127	31	15	43.5%	14.3%
Robertson	295	301	85	80	34.8%	32.1%
Rutherford	1,434	1,676	395	354	33.3%	25.5%
Scott	6	4	2	1	40.2%	30.2%
Sequatchie	14	2	4	2	34.5%	100.0%
Sevier	153	174	34	25	26.8%	17.4%
Shelby	1,250	2,095	432	526	41.7%	30.4%
Smith	46	54	20	16	52.5%	35.8%
Stewart	19	14	7	4	44.5%	34.6%
Sullivan	354	327	129	94	44.0%	34.8%
Sumner	642	743	165	159	31.0%	25.9%
Tipton	108	200	20	19	22.4%	11.5%
Trousdale	22	22	7	7	38.4%	38.5%
Unicoi	24	29	12	15	60.4%	62.6%
Union	46	12	16	3	42.0%	30.2%
Van Buren	8	5	2	2	30.2%	48.4%
Warren	63	77	40	29	76.6%	45.5%
Washington	157	147	50	31	38.4%	25.5%



Wayne	9	1	1	0	13.4%	0.0%
Weakley	34	28	7	3	24.9%	13.0%
White	40	39	5	7	15.1%	21.7%
Williamson	136	225	24	15	21.3%	8.1%
Wilson	340	415	70	58	24.9%	16.9%
TENNESSEE	13,226	16,025	4,062	3,878	37.1%	29.3%