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#### TENNESSEE HOUSING TRENDS

In 2018, the focus of the housing markets across many parts of Tennessee shifted to affordability from recovery after the housing market crash in 2008. Home prices both in Tennessee and the nation have been on an increasing trajectory since the first quarter of 2012. Annual house price appreciation of nearly eight percent in Tennessee in the second quarter of 2018 surpassed national house price appreciation rates by one percentage point. Tennessee reached the peak annual price appreciation (since 1992) in the fourth quarter of 2017 with a nearly 10 percent increase in home prices. The Nashville MSA's house price appreciation cooled down slightly in the second quarter of 2018. In the same quarter last year, the annual price appreciation in the Nashville MSA was over 10 percent and it was ranked as 28th highest among 254 MSAs, compared to the more recent 9.7 percent and a ranking of 39th highest in the nation.

According to Market Trends data from Corelogic, in June 2010, after the housing market crash, more than six percent of borrowers in Tennessee were 90 days or more behind on their mortgages. In the past eight years, increasing home values across the state and the nation improved homeowners' equity position. An improving economy and declining unemployment rates in Tennessee further strengthened the housing markets. In June 2018, all counties across Tennessee had delinquency rates lower than June 2010. In the state, the delinquency rate of June 2018 was more than four percentage points lower than the delinquency rate eight years ago.

From 2011-2016, building permit issuance increased annually in the state at a consistent pace of more than 10 percent each year. A relatively smaller increase in permits issued in 2017, five percent, could be a sign of slowing construction activity in the future. Another sign of a softening housing market is that the permits for large multi-family buildings (five or more units) actually declined year over year. Housing construction has varied considerably by region. In the Nashville MSA, for example, the trend of increases in building permits that started in 2010 continued into 2017, albeit at a slower pace than during 2011 – 2016. In contrast, total building permits issued in the Memphis MSA declined by 11 percent from 2016 to 2017, following the statewide pattern. Directionally consistent across the state and the Nashville and Memphis MSAs, the number of permits issued for five or more units declined from 2016 to 2017. However, the decline had a marked difference in magnitude across the two MSAs, with a six percent decline in the Nashville MSA compared to a 56 percent decline in the Memphis MSA.

Although the rental vacancy rate increased in Tennessee in 2017, the homeowner vacancy rate declined. Both Nashville and Memphis MSAs experienced increasing rental vacancy in 2017, a directional change from the previous few years. Both MSAs had rental vacancy rate higher than the nationwide average for inside metro areas. For the Nashville MSA, this was a first since 2005. This is another sign of a softening rental housing market in Tennessee, particularly in the Nashville MSA.

Tennessee's 2016 homeownership rate of 66.3 percent was still higher than the nation and the South. In 78 counties, the 2016 homeownership rate was lower than the rate in 2009. Davidson County had the lowest homeownership rate in 2016 followed by Shelby County.

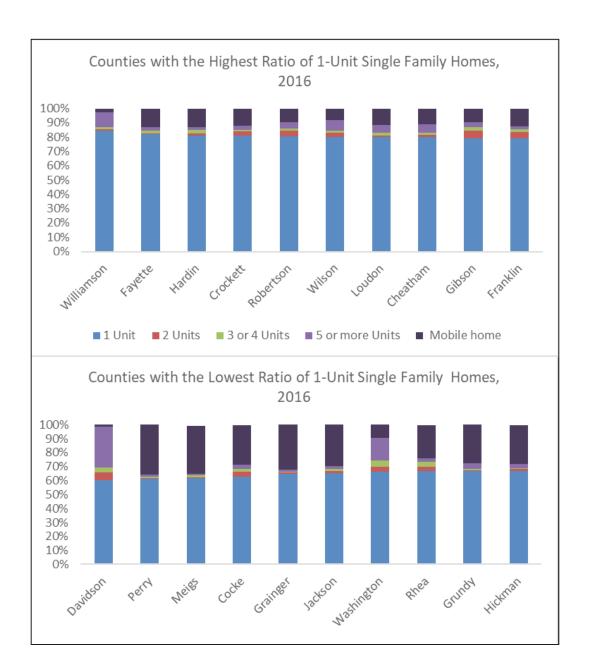
#### **HOUSING TYPES**

Single family homes are the most common housing units in Tennessee. According to the 2012-2016 American Community Survey (ACS), 69 percent of housing units in Tennessee were 1-unit single family detached homes. When attached dwellings are also added, 1-unit single family housing comprised 72 percent of total housing units in Tennessee. The percentage of single family detached and attached homes in Tennessee was higher than the nation (62 percent 1-unit detached and six percent 1-unit attached) and the Southern region (62 percent 1-unit detached and five percent 1-unit attached). In Tennessee and the South, the percent of mobile homes in the total housing stock (9.3 and 9.6 percent, respectively) was higher than the nation (6.3 percent). In terms of housing with five or more units, Tennessee (12.5 percent) was behind the Southern region (16.8 percent) and the nation (18 percent).

The housing landscape in Tennessee varies considerably by county. The ratio of single family homes (both detached and attached) compared with total housing units ranged from a low of 60 percent in Davidson County to a high of 84 percent in Williamson County. Meigs, Perry and Cocke Counties also had low ratios of single family homes, similar to Davidson County, but the housing stock makeup was completely different in in these more rural counties than in Davidson County. Davidson County's balance of housing units consists primarily of housing with three or more units (33 percent of total housing stock). In contrast, Meigs, Perry and Cocke Counties' balance of housing units were predominantly mobile homes: 36 percent of Perry County, 34 percent of Meigs County, and 28 percent of Cocke County.

Davidson County ranked number one in the state for the highest percentage of housing units in multifamily buildings with 20 or more units, followed by Knox County. Twelve percent of the total housing units in Davidson County were in large multifamily buildings, well above the state average of four percent. Interestingly, even though Davidson County's percent of single family detached homes was lowest in the state, with 7.4 percent of total housing stock, Davidson County had the highest percent of single family attached homes followed by Knox, Rutherford, Williamson and Shelby Counties. In Lewis, Hancock, Perry and Rhea Counties there were no buildings with 20 or more housing units.

The following chart shows the ratio of various housing types compared to the total housing units in the 10 counties with the highest ratio of 1-unit single family homes (detached and attached combined) and in the 10 counties with the lowest ratio of 1-unit single family homes. More county level data for different housing types is available in Appendix A.



Source: American Community Survey (ACS), 5-Year Estimates, 2012-2016, U.S. Census Bureau

# **AGE OF HOUSING**

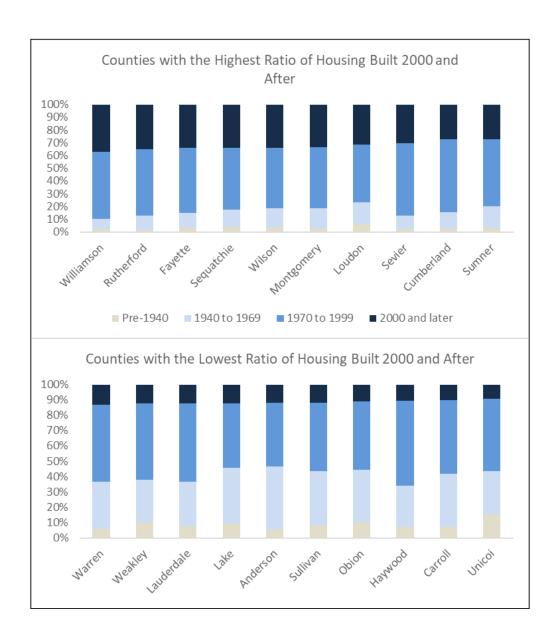
Compared to the nation, in Tennessee, older housing units constitute a relatively smaller percentage of the total housing units. Six percent of housing units were built before 1940 in Tennessee, while nationally, the percentage was just over 13 percent. Twenty percent of existing housing units in Tennessee and 17 percent nationally have been built since the year 2000. The median year built for Tennessee's occupied housing units was 1983, which was close to the South region (1984). In the nation, the median year built for occupied housing units was 1977.

The age of housing units varied by county in the state. Williamson County has the largest percent of young housing stock, with more than 37 percent of total housing units built after 2000, followed by Rutherford and Fayette Counties. Unlike Williamson and Rutherford Counties, in Davidson<sup>2</sup>, Knox and Shelby Counties, the percent of housing unit built after 2000 was either lower than the state average or at the state level (18 percent, 20 percent and 14 percent, respectively).

Unicoi County has both the lowest percent of total housing units built after 2000 (nine percent) and the highest percent built before 1940 (15 percent) in the state. Giles and Hancock Counties followed Unicoi County with in the older housing percentage ranking with 12 percent and 11 percent, respectively.

The following charts show the ratio of housing units built by decade compared to the total housing units in the 10 counties with the highest ratio of housing built in the 2000s and in the 10 counties with the lowest ratio of housing built in 2000s. More county level data is available in Appendix B.

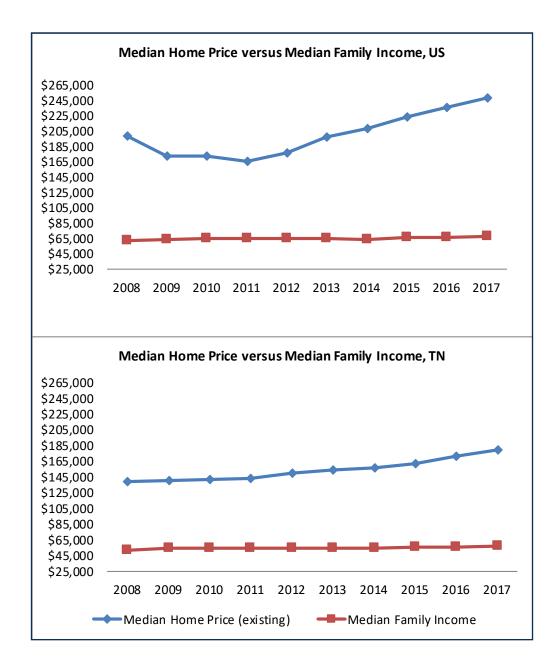
<sup>&</sup>lt;sup>2</sup> This is based on U.S. Census Bureau's American Community Survey (ACS) 5-Year Estimates ending in 2016, prior to the current building boom in Davidson County. ACS 1-year estimates capture more recent changes, but they are not available for all counties.



Source: American Community Survey (ACS), 5-Year Estimates, 2012-2016, U.S. Census Bureau

# MEDIAN HOME PRICE (EXISTING) VS. MEDIAN INCOME

In 2017, the median existing home price<sup>3</sup> in Tennessee increased by 5.1 percent compared to 2016. In the same period, the median family income of Tennesseans, \$57,300, increased by 2.1 percent. Nationwide, the median existing home price increased by 5.6 percent compared to 2016, while the median family income increased by 3.5 percent. Both in the nation and in Tennessee, family income did not keep up with the home price appreciation.



Source: U.S. median (existing) home price – National Association of Realtors ®. Median Family Income, Tennessee median (existing) home price – THDA tabulations of data obtained from the Property Assessment Division, Comptroller's Office. Median Family Income (U.S. and Tennessee) – U.S. Department of Housing and Urban Development (HUD).

 $<sup>^3</sup>$  In this analysis, both home price and median income are in current dollars. They are not inflation adjusted.

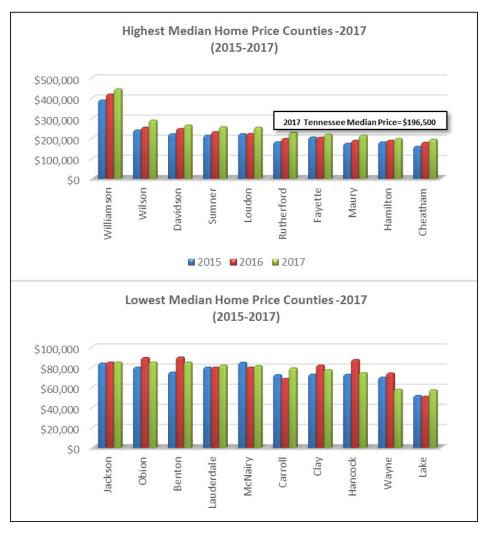
# 2017 SINGLE-FAMILY MEDIAN HOME PRICES (NEW AND EXISTING) IN TENNESSEE COUNTIES

The median price of all homes sold (new and existing) in Tennessee was \$196,500 in 2017. The state's \$196,500 median price was the highest in the history of THDA's tabulations of sales price<sup>4</sup> and volume data (since 1995).

In 23 counties, median home sale prices declined from 2016. In 11 of those counties, the decline in the median home prices was less than five percent. Wayne County experienced the largest annual home price depreciation, with 22 percent, followed by Johnson and Hancock Counties, with 21 percent and 15 percent depreciation, respectively.

The largest percentage increases in median price were found in rural counties with small population. The largest increase was in Perry County, where the median price of all homes increased from \$71,621 in 2016 to \$92,500 in 2017 (nearly 30 percent annual price appreciation), followed by Meigs and Pickett Counties, with 26 percent and 25 percent, respectively. The 2017 median sales price was a 10-year peak in 35 counties.

At \$445,000, Williamson County had the highest median price in the state, which was six percent higher compared to 2016. Even though Perry County had the highest price appreciation among Tennessee counties in 2017, the county ranked 80<sup>th</sup> among the counties based on median sales prices in 2017.



Source: THDA tabulations of home sales based on data obtained from the Property Assessment Division, Comptroller's Office, State of Tennessee. To find median home sales volume and prices for other counties, MSAs and previous years, go to: <a href="https://thda.org/research-planning/home-sales-price-by-county">https://thda.org/research-planning/home-sales-price-by-county</a>.

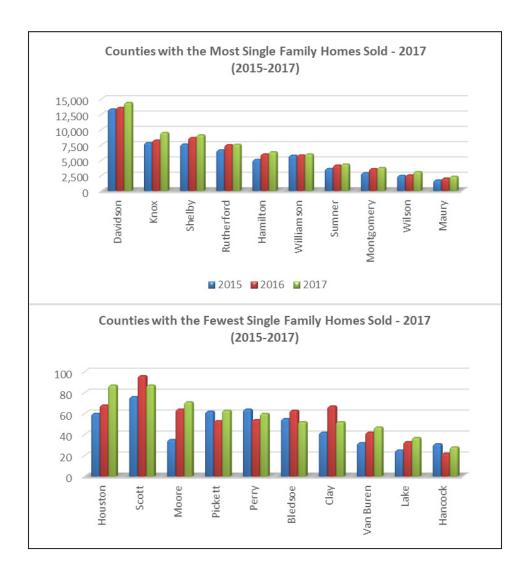
<sup>4</sup> Inflation adjusted, in 2017 real dollars.

## **2017 SINGLE-FAMILY HOME SALE VOLUMES IN** TENNESSEE COUNTIES

In 2017, single-family home sales in Tennessee increased by 8.5 percent compared to 2016. Including both new and existing homes, 105,335 homes were sold in 2017. This made 2017 the highest year for home sales volume since 2005, at height of the housing boom, when sales totaled 105,693.

In nine counties across the state, home sales declined from the previous year. The county with the largest percentage year-over-year decline in home sales was Hickman County, in which the home sales declined from 198 in 2016 to 153 in 2017, a 23 percent annual decline.

Hancock County, with 28 sales, had the fewest homes sold in 2017. However, this still represented an increase in sales volume from the 22 sold in 2016. Davidson County had the most homes sold in the state, with 14,404 homes sold during 2017, a six percent increase from the previous year.



Source: THDA tabulations of home sales based on data obtained from the Property Assessment Division, Comptroller's Office, State of Tennessee. To find median home sales volume and prices for other counties, MSAs and previous years, go to: http://thda.org/research-planning/home-sales-price-by-county

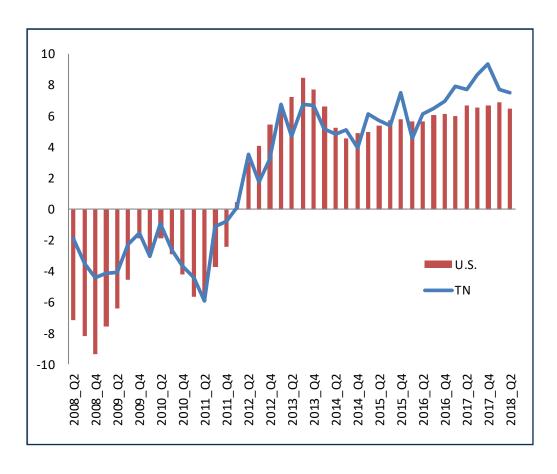
# HOUSE PRICE INDEX (HPI) - TENNESSEE VS. UNITED STATES

The House Price Index (HPI) is a measure of single-family home prices. The index shows the average price change in repeat sales on the same properties for various geographic levels and captures roughly 85 percent of all U.S. sales.<sup>5</sup>

In Tennessee, home prices increased by 7.52 percent in the second quarter of 2018 compared to the second quarter of 2017, outpacing the U.S. price increase of 6.49 percent. For more than six years, home prices both in Tennessee and the nation are on an increasing trajectory (since first quarter 2012).

Price appreciation in Tennessee is outpacing the nation. In the second quarter of 2018 Tennessee's price appreciation surpassed the nation's by one percentage point. Tennessee price appreciation peaked during the fourth quarter of 2017 when the house prices increased nearly 10 percent annually.

# Annual Percentage Change in House Price Index, United States vs. Tennessee, 2008-2018



Source: Federal Housing Finance Agency's seasonally adjusted, purchase-only House Price Index (HPI)

These include homes with repeated sales whose mortgages have been purchased or securitized by Fannie Mae or Freddie Mac since January 1975.

# HOUSE PRICE INDEX (HPI) - TENNESSEE COMPARED TO THE HIGHEST AND LOWEST PERFORMING STATES **AND TO NEIGHBORS**

The house prices increased in all 50 states and in the District of Columbia during the second quarter of 2018 compared to the previous year. Nevada had the highest annual home price appreciation in the nation. In addition to higher house prices in all states, price appreciation accelerated in some states. For example, Nevada's annual price appreciation went from 7.79 percent in the second quarter of 2017 to 17.04 percent in the second quarter of 2018. In the District of Columbia, in the second quarter of 2017, house prices increased by only 2.31 percent while in the second quarter of 2018 annual increase in the house prices was nearly 12 percent, third highest in the nation behind Nevada and Idaho.

Tennessee's annual home price appreciation of 7.52 percent was quite substantial. Home prices in Tennessee appreciated compared to both the same quarter last year and the previous quarter in 2018. Based on second quarter 2018 figures, Tennessee ranked as 15th in the nation among the states in annual price appreciation. Among the neighboring states, Georgia had the highest annual price appreciation with 8.05 percent in the second quarter of 2018, 11th in the nation.

# **ANNUAL AND QUARTERLY PERCENTAGE CHANGES IN HOME PRICES**

State	National Rank*	Annual Percentage Change (2017 Q2-2018 Q2) Quarterly Percentage Change (2018 Q1-2018						
STATES WITH THE HIGHEST ANNUAL PRICE INCREASE								
Nevada	1	17.04%	4.31%					
Idaho	2	13.05%	3.64%					
District of Columbia	3	11.80%	2.83%					
TENNESSEE AND ITS NEIG	HBORS							
Georgia	11	8.05%	1.90%					
Tennessee	15	7.52%	1.33%					
North Carolina	23	6.23%	1.09%					
Alabama	24	6.08%	2.38%					
Missouri	30	5.70%	1.09%					
Kentucky	33	5.19%	0.66%					
Virginia	39	4.32%	0.10%					
Arkansas	44	3.70%	0.58%					
Mississippi	46	3.21%	1.39%					
STATES WITH THE LOWES	ST ANNUAL PRIC	CE INCREASE						
West Virginia	49	2.32%	0.78%					
Louisiana	50	2.29%	0.25%					
North Dakota	51	2.12%	1.01%					
U.S. Average		6.49%	1.11%					

<sup>\*</sup>Based on annual price change. Including the District of Columbia (DC)  $\,$ 

Source: Federal Housing Finance Agency (FHFA)'s seasonally adjusted, purchase only House Price Index (HPI)

#### **HOME PRICES**

# House Price Index (HPI) – Metropolitan Statistical Areas (MSAs), Tennessee

In the second quarter of 2018, home prices appreciated in all Tennessee metro areas. The Nashville MSA<sup>6</sup> had a significant change in the House Price Index compared to the same quarter of the previous year. With 9.7 percent annual price appreciation in the second quarter of 2018, the Nashville MSA ranked as the 39<sup>th</sup> highest in the nation among 245 MSAs. The MSA with the highest price appreciation in the nation, Las Vegas-Henderson-Paradise, NV MSA, had a 16.6 percent home price increase in the same period.

The Nashville MSAs house price appreciation slightly cooled down in the second quarter of 2018. In the same quarter last year, the annual price appreciation in the Nashville MSA was over 10 percent and it was ranked as 28th highest among 254 MSAs. Among the Tennessee metro areas, the Clarksville MSA led the pack with 9.8 percent. Considering that, in the second quarter of 2017, the Clarksville MSA had 1.7 percent annual home price appreciation and that was the lowest in the state among metro areas, the price house price appreciation in Clarksville accelerated substantially. The Cleveland and Knoxville MSAs followed with 8.1 percent and 7.5 percent, respectively.

# Annual and Quarterly Percentage Changes in Home Prices for Tennessee MSAs

MSAs	National Rank <sup>a</sup>	Annual Percentage Change (2017 Q2-2018 Q2)	Quarterly Percentage Change (2018 Q1-2018 Q2)
Chattanooga	104	7.0%	4.4%
Clarksville*		9.8%	
Cleveland*		8.1%	
Jackson*		4.8%	
Johnson City*		3.1%	
Kingsport-Bristol*		1.0%	
Knoxville	87	7.5%	3.2%
Memphis	131	6.3%	3.5%
Morristown*			
Nashville	39	9.7%	3.5%

<sup>\*</sup>Federal Housing Finance Agency (FHFA) publishes rankings and quarterly, annual, and five-year rates of changes for the MSAs and Metropolitan Divisions that have at least 15,000 transactions over the prior 10 years. For the remaining areas, MSAs and Divisions, one-year rates of change are provided. Estimates use all-transaction HPI, which includes both purchase and refinance mortgages.

Source: Federal Housing Finance Agency (FHFA) all-transactions House Price Index (HPI)

<sup>&</sup>lt;sup>a</sup>Rankings based on annual percentage change, for all (245) MSAs containing at least 15,000 transactions over the last 10 years.

 $<sup>m ^{6}</sup>$  Throughout this document, Nashville MSA refers to Nashville/Davidson-Murfreesboro-Franklin MSA

Ranking and quarterly percentage change are only provided for the MSAs with 15,000 or more transactions in the last 10 years.

### **DELINQUENCY**

In recent years, increasing home prices across the state and the nation improved homeowners' equity position. An improving economy and declining unemployment rates in Tennessee further strengthened the housing markets. According to Market Trends data from Corelogic, in June 2018, all counties across Tennessee had delinquency rates lower than June 20108. In the state, the delinquency rate of June 2018 was more than four percentage points lower than the delinquency rate in June 2010. The largest decline in the delinquency rates with over eight percentage points was in Lauderdale County, followed by Crockett and Haywood Counties. The number of delinquent borrowers in Shelby County in June 2018 was less than one third of the delinquent borrowers in June 2010. Delinquency rate declined nearly by five percentage points in Davidson County. The county with the highest delinquency rate in June 2018 was Hardeman County, followed by Haywood and Grundy Counties.

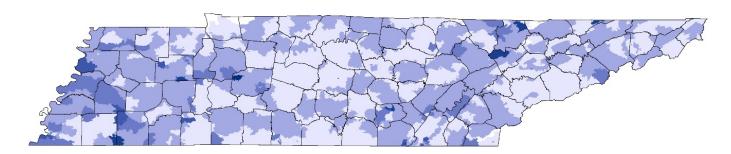
When the housing market crashed, many homeowners in the nation and Tennessee were not able to make their mortgage payments on time, and, consequently, the number of seriously delinquent borrowers increased afterward. While some of the delinquent borrowers sold their homes and got out of their mortgage debt, those delinquent homeowners with negative equity (who owed more than the value of their home) could not sell their homes, which led to widespread foreclosures and often to additional declines in home values and ruining of many borrowers' credit scores.

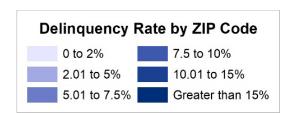
In June 2010, more than six percent of borrowers in Tennessee were 90 days or more behind on their mortgages. A quarter of all seriously delinquent borrowers in the state were residing in Shelby County; and Davidson County, the next in line in terms of seriously delinquent loans, had less than half of Shelby County's seriously delinquent borrowers.

The maps on the following page provides a better visual for the change in 90 or more day delinquency rate between 2010 and 2018 in Tennessee.

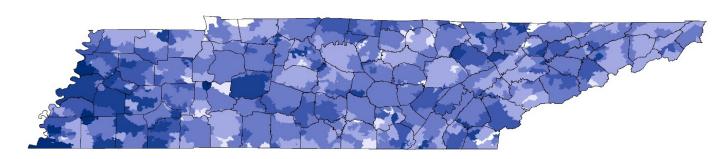
# PERCENT OF MORTGAGES 90 OR MORE DAYS DELINQUENT

#### June 2018





#### June 2010



Source: Market Trends, Corelogic

# **Housing Opportunity Index**

The National Association of Home Builders (NAHB) developed the Housing Opportunity Index (HOI), a measure of the share of homes sold in an area over a certain time that would have been affordable to a family earning the median family income of the area (county), based on standard mortgage underwriting criteria.<sup>9</sup>

We calculated a housing opportunity index for Tennessee counties in 2016 and 2017<sup>10</sup> similar to the NAHB/Wells Fargo HOI. The index ranges from zero to 100. The higher the index is, the more homes sold in the area are affordable to a family earning the median income. In 2017, the index values ranged from 18 percent in Williamson County to 100 percent in Lake County.

On average, 71 percent of homes sold in Tennessee would have been affordable to a family earning the median income in 2017, decreasing from 76 percent in 2016.

In 2017, the housing opportunity index declined in 72 counties compared to 2016. The highest deterioration in affordability among the counties with 500 or more home sales was in Wilson County where the housing opportunity index declined from 71 percent in 2016 to 53 in 2017, an 18 percentage point decline. Putnam County was the county with over 500 home sales in 2017 with the largest improvement in the housing opportunity index. The increasing median family income in the county contributed to the improvement in the opportunity index in 2017.

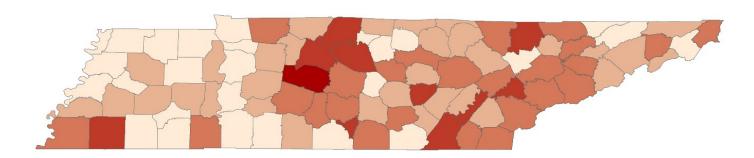
The maps on the following page show the housing opportunity index in Tennessee counties and the change in affordability from 2016 to 2017. The county level housing opportunity index values for 2016 and 2017 can be found in Appendix C.

<sup>9</sup> More information about NAHB/Wells Fargo Housing Opportunity Index (HOI) and historical HOI for metropolitan areas can be found at http://www.nahb.org/en/research/housing-economics/housing-indexes/housing-opportunity-index.aspx

<sup>10</sup> We used the sales price and volume data from the Property Assessment Division, Comptroller's Office for the prices of homes purchased during the year. We assumed 10 percent downpayment and average fixed interest rate for a 30-year mortgage as reported by Freddie Mac Primary Mortgage Market Survey <a href="http://www.freddiemac.com/pmms/pmms\_archives.html">http://www.freddiemac.com/pmms/pmms\_archives.html</a>. We added insurance and property tax payments to find monthly principal, interest, tax and insurance (PIT) payments. We compared the monthly PITI for each homes purchased to the monthly area median family income (following NAHB methodology, we assumed that a family paying 28 percent of its income for PITI will not be cost burdened). Median family income is from U.S. Department of Housing and Urban Development (HUD).

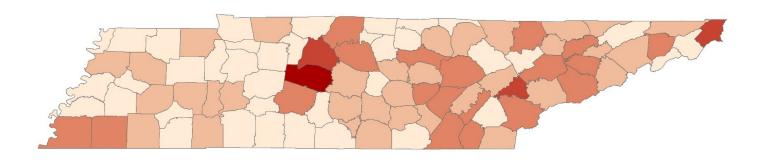
# **HOUSING OPPORTUNITY INDEX**

#### 2017



#### **Opportunity Index** Less than 50% 50 to 70% 70 to 80% 80 to 90% Greater than 90%

#### 2016



Source: Tennessee home prices - THDA tabulations of data obtained from the Property Assessment Division, Comptroller's Office. Median Family Income - U.S. Department of Housing and Urban Development (HUD)

#### **Housing Cost Burden**

According to the U.S. Department of Housing and Urban Development (HUD), households that spend more than 30 percent of their income on housing are considered cost burdened. In Tennessee, 35 percent of all households (renters and homeowners with a mortgage) were cost burdened (2012-2016, ACS). In the nation, 38 percent of all households were cost burdened.<sup>11</sup>

Statewide, more renter households were cost burdened than owner-occupied households, with 44 percent compared to 28 percent. In the nation, 47 percent of renter households and 31 percent of homeowners were cost burdened. Similarly, in a majority of Tennessee counties, more renters than homeowners were cost burdened. In 14 counties, the percent of cost burdened homeowners was higher than the percent of cost burdened renter households. Especially in Jackson, Lake, Clay, Johnson, Cannon, Moore and Grundy Counties, the percent of cost burdened homeowners was more than five percentage points higher than the percent of cost burdened renters.

Among the counties, the cost burden for all households varied from a low of 20 percent in Moore County to a high of 43 percent in Hardeman County. Marshall County had the highest renter cost burden rate with 52 percent, followed by Shelby and Putnam Counties, 51 percent and 49 percent, respectively. Moore County, with 16 percent, had the lowest renter cost burden rate in the state.

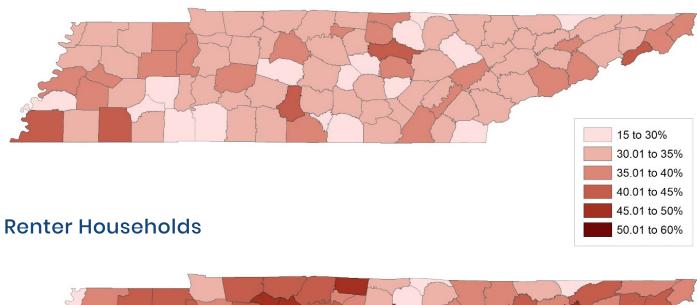
The county with the highest rate of homeowners who were cost burdened is Johnson County, 43 percent. Chester County had the lowest percent of owner households who are cost burdened, 19 percent.

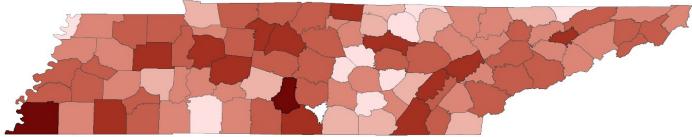
The maps on the following page show the housing cost burden for renters, homeowners and all households. The percentages of renter and homeowner households that are cost burdened by county can be found in Appendix D.

<sup>11</sup> To calculate cost burdened homeowners as well as overall households, we used only homeowners with a mortgage. The inclusion of homeowners without a mortgage may lead to misrepresenting affordability challenges for households looking to become homeowners. Homeowners who have owned their homes for a long time and no longer have a mortgage payment could still be cost burdened due to increases in  $property taxes \ and \ insurance. However, this is \ a \ fundamentally \ different \ cost \ equation \ than \ that \ of \ a \ household \ looking \ to \ purchase \ a \ home \ with \ a \ mortgage. \\ In \ Tennessee, II \ percent \ of \ home \ owners \ without \ a \ different \ cost \ equation \ than \ that \ of \ a \ home \ owners \ without \ a \ home \ owners \ without \ a \ home \ owners \ owne$ mortgage were cost burdened, while 28 percent of homeowners with a mortgage are cost burdened. For example, if we include the homeowners who do not have a mortgage payment, the percentage of overall cost burdened households (renter and owner) in the state declines from 35 percent to 29 percent

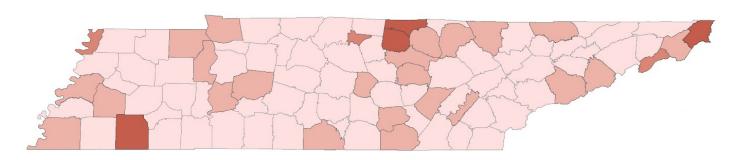
# PERCENT OF HOUSEHOLD THAT ARE COST BURDENED

All Household (Homeowners and Renters)





#### **Owner Households**



Source: American Community Survey (ACS), 5-Year Estimates, 2012-2016, U.S. Census Bureau

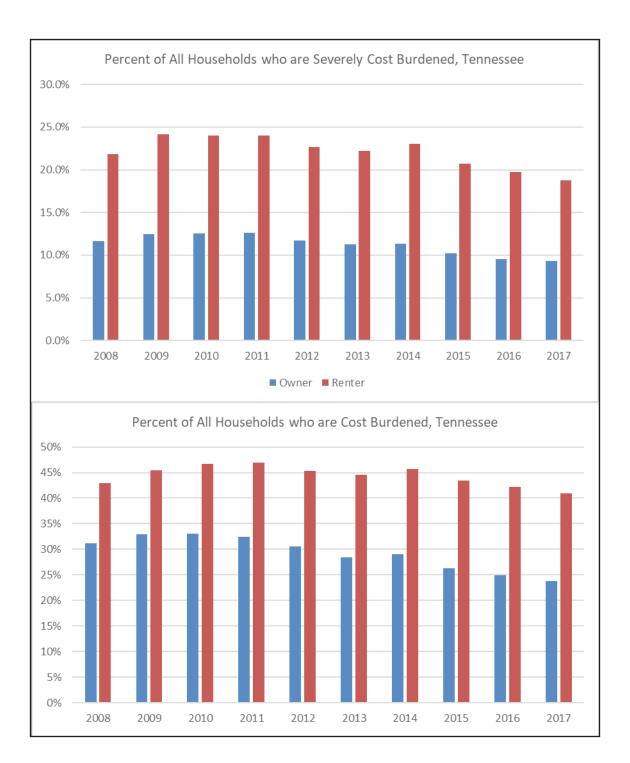
#### **Housing Cost Burden, Severity**

As mentioned earlier, housing cost burden is defined as paying more than 30 percent of income on housing. Severely cost-burdened households pay more than half of their income for housing costs. In 2017<sup>12</sup>, the percent of severely cost-burdened households (both renters and owners paying more than 50 percent of their incomes) declined statewide.

The following figure shows the percent of severely cost burdened owner and renter households in Tennessee. Both renter and owner households experienced improvements in their housing cost burden (both severe cost burden and total cost burden – paying more than 30 percent of income for housing) in recent years. In 2010, the percent of severely cost burdened for both owner and renter households increased to their highest level in 10 years (24 percent of renter households and 13 percent of renter households were paying more than 50 percent of their income for housing).

Severe cost burden incidence for renter households among Tennessee Counties ranged from 6.7 percent in Lewis County to 30 percent in Madison County, and for owner households with a mortgage ranged from 6.7 percent in Rhea County to 19.6 percent in Jackson County. Rural counties such as Lewis, Hancock, Lake and Van Buren Counties had generally lower percentages of severely cost burdened renters than more populated areas of the state (severely cost burdened renter households were 10 percent or less of the county's total renter households). These counties were also among those with the highest homeownership rate. For example, Van Buren County's 88 percent homeownership rate was the highest in the state in 2016

 $<sup>12</sup>_{\rm American\,Community\,Survey\,(ACS),\,1-Year\,Estimate,\,U.S.\,Census\,Bureau}$ 



Source: American Community Survey (ACS), 1-Year Estimates, U.S. Census Bureau

#### Housing Cost Burden and Income

Worsening housing cost burden is driven by increases in housing costs and/or declines in incomes. The median renter income in Tennessee was just 53 percent of median owner household income in 2017. Between 2007 and 2014, median renter income was consistently less than 50 percent of the median owner income in Tennessee.

The following figures compare the median household incomes and housing cost by tenure (owner and renter households). Incomes of renter households did not keep pace with increases in rent costs. In **real terms**, from 2008 to 2015, median renter income was lower than 2007 level (inflation adjusted in 2017 dollars) and rent growth exceeded the renter income growth. Median gross rent, in real dollar terms, increased steadily compared to 2007 while median renter income just recovered (surpassed the 2007 level) in 2015. Increasing cost burden of renter households in those years was a result of both increases in housing costs and the deterioration in renter incomes.

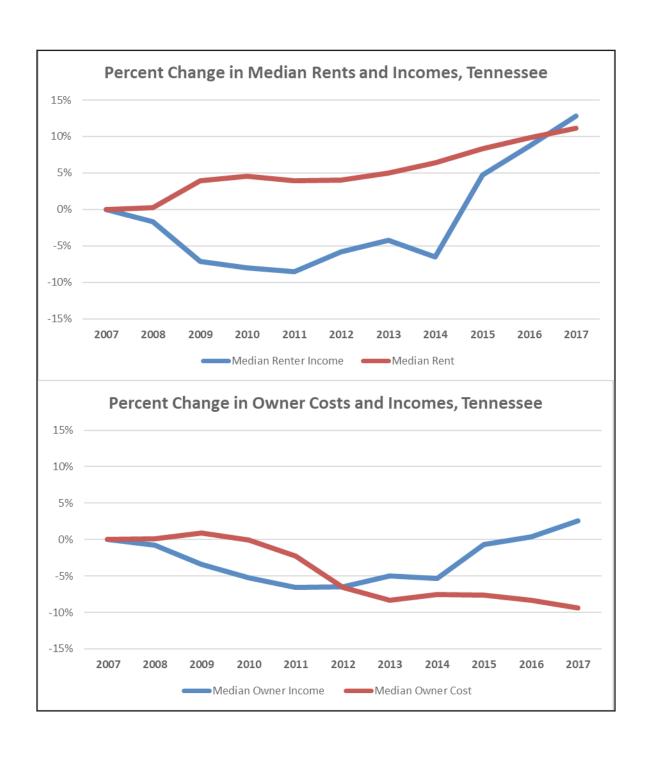
In 2017, median income of Tennessee homeowners was three percent higher than it was in 2007 (in real terms), while the median cost of homeownership (for those with a mortgage) declined by nine percent from 2007. With the increasing interest rates and higher home prices, probably, in the coming years the cost of owning a home will increase both in the state and in the nation.

Even though owner households had higher incomes than renter households, only in 2016, owner households' real incomes reached to the same house buying power in 2007. Interestingly, after 2009, there was a decline in median ownership cost, and the declining ownership costs continued in 2017.

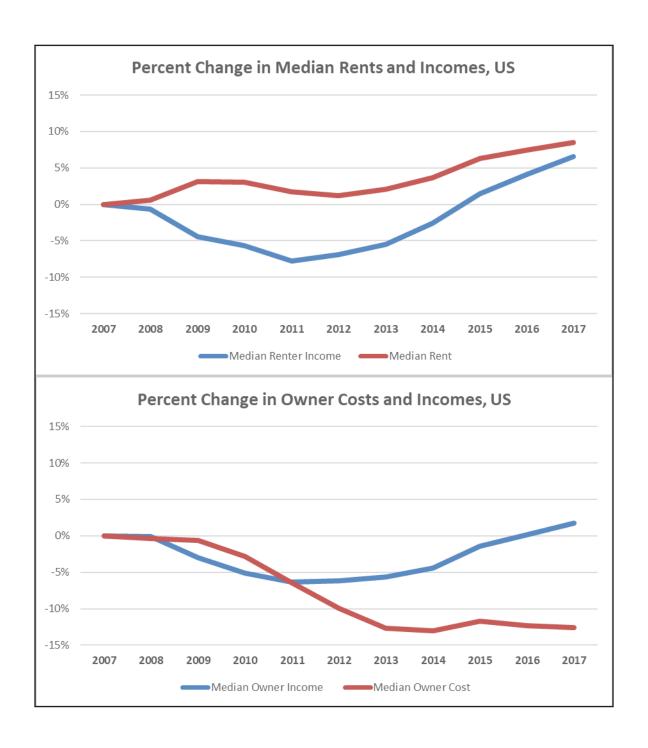
Tennessee homeowners and renters resemble the nation in its evolution of incomes and housing costs since 2007. Nationwide, the median household incomes of homeowners has grown faster than median monthly costs of homeownership during this time period.

<sup>13</sup> The figures are based on the U.S. Census Bureau's American Community Survey (ACS) I-year estimates of median household income by tenure (renter or homeowner), median monthly cost of owning a home and median gross rent. The dollar figures are in 2017 figures and they represent percent change from their level in 2007 (right before the housing market crash and the year earliest ACS data available for all variables measured). Negative percent change represents that the variable (income, gross rent or owner cost) is less than 2007 level and positive percent change shows that they surpassed their level in 2007.

# Housing Cost Burden and Income, Tennessee



# Housing Cost Burden and Income, Nation



#### OTHER HOUSING PROBLEMS

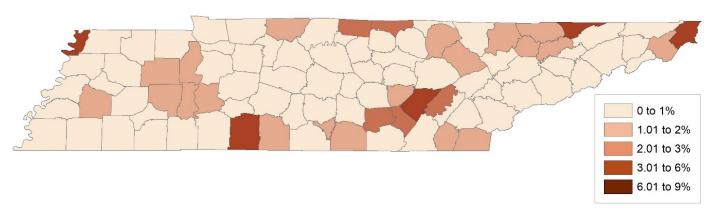
### Housing Units Lacking Complete Kitchen and Plumbing

Owner-occupied and renter-occupied housing units varied in terms of the incidence of housing problems. Nationally, statewide and in a majority of Tennessee counties (65 counties), a relatively higher percentage of renter-occupied housing units were lacking kitchen and/or plumbing than owner-occupied housing units. Two percent of renters and less than one percent of homeowners were lacking kitchen and/ or plumbing. More than eight percent of Hancock County's rental-occupied housing units were lacking complete kitchen and/or plumbing facilities, the highest in the state and 3.4 percent of owner-occupied units lacked complete facilities (fourth after Lawrence, Lake and Bledsoe Counties).

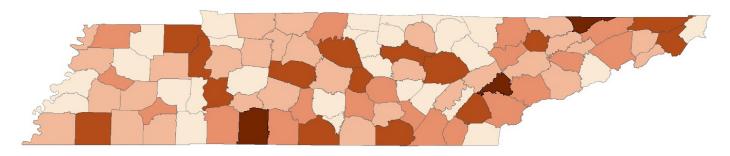
Even though rural counties had higher percentage of homes without kitchen and/or plumbing, more populous counties were also affected by this housing problem. For example, 1.4 percent of all housing units in Wilson County in 2016 did not have adequate kitchen and/or plumbing facilities. In the state, similar to the nation, just over one percent of all occupied homes were without adequate kitchen and/or plumbing facilities.

Percentages of housing units lacking complete plumbing and kitchen facilities in Tennessee, by county, can be found in Appendix E.

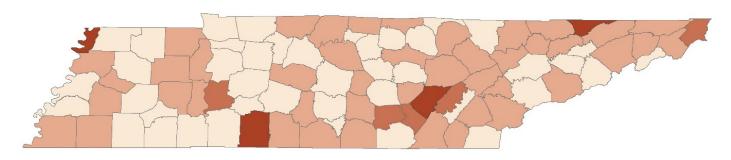
## Owner-Occupied Housing Units Lacking Complete Plumbing and/or Kitchen Facilities



# Renter-Occupied Housing Units Lacking Complete Plumbing and/or Kitchen Facilities



## All Housing Units Lacking Complete Plumbing and/or Kitchen Facilities



Source: American Community Survey (ACS), 5-Year Estimates, 2012-2016, U.S. Census Bureau

#### OTHER HOUSING PROBLEMS

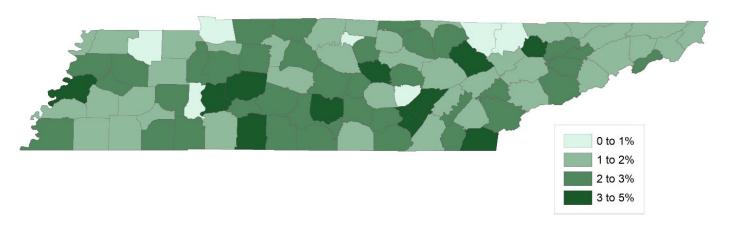
#### Overcrowding

Housing units with more than one person per room are considered overcrowded. Overcrowding has important implications for the health and education of residents.<sup>14</sup> In 2016, 2.05 percent of occupied housing units in Tennessee had more than one occupant per room. Overcrowding was occurred more in the Southern region and in the nation than in Tennessee. More than three percent of all occupied housing units in the nation and 2.88 percent in the South were overcrowded.

The percent of overcrowded households in Tennessee varied from a low of 0.14 percent in Trousdale County to a high of 4.5 percent in Sequatchie County. Big urban counties like Davidson, Shelby, and Rutherford all had higher rates of overcrowding compared to the state average. Of the total occupied housing units in Davidson County, 2.77 percent had more than one person per room.

County percentages of households with more than one occupant per bedroom in Tennessee can be found in Appendix F.

#### Percent of Housing Units Overcrowded 2012-2016



Source: American Community Survey (ACS), 5-Year Estimates, 2012-2016, U.S. Census Bureau

<sup>14</sup> The United Kingdom Office of the Deputy Prime Minister (2004). "The Impact of Overcrowding on Health & Education: A Review of Evidence and Literature." Office of the Deputy Prime Minister Publications. Retrieved from http://dera.ioe.ac.uk/5073/h/138631.pdf. In a longitudinal study, Solari and Mare (2012) explore the effects of living in a crowded home on child wellbeing in Los Angeles. Their findings suggest that the negative effects of growing up in crowded homes can persist throughout life and influence children's future socioeconomic status and adult wellbeing. See: Solari, C. D. and Mare, R.D., 2012, Housing Crowding Effects On Children's Wellbeing, Soc Sci Res., 41(2): 464-476. Retrieved from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3805127/ THDA HOUSING MARKET AT A GLANCE 2018

#### **WORKFORCE HOUSING AFFORDABILITY –2016 AND 2017**

### Housing Affordability for Home Buyers and Renters with Selected Occupations in Tennessee and Metropolitan Statistical Areas (MSAs)

The supply of affordable housing can perhaps be best understood when examined with certain occupations in mind. With two MSA exceptions, single-wage earner registered nurses, police officers and educators were able to rent or buy a median priced home without being cost burdened. Educators in the Nashville MSA and police officers in the Chattanooga and Nashville MSAs were able to rent a home without being cost burdened but were not able to buy a median priced home. In 2017, the median priced home was out of reach for police officers in the state, a change from 2016.

Clarksville and Memphis MSAs saw some improved affordability in median priced housing. Higher median hourly wages for "All Occupations" and declining rents in the Clarksville MSA helped make renting a median priced home affordable, in contrast to 2016, when both purchasing and renting were out of reach. In the Memphis MSA, a slight increase in rent in 2017 was mitigated by higher median wages, resulting in an affordable median rent for a single wage earner.

The wage needed to buy a home without being cost burdened increased in all MSAs and in Tennessee overall. Because of Nashville MSA's eight percent increase in median home price, the median hourly wage needed to buy a home increased more than other MSAs and the state. Single wage earners in service industry occupations (wait staff, cashiers, and retail sales persons) remained unable to afford to buy or rent a median-priced home in any MSA or in the state.

#### 2017

#### **Median Hourly Wage by Occupation 2017**

Metropolitan Statistical Areas (MSAs)	Median Home Price	Wage Needed to Buy	2-BDRM Aptmnt Monthly Rent	Wage Needed to Rent	Education**	Registered Nurse	Police	Wait Person	Cashier	Retail Salesperson	All Occupations
Chattanooga	\$194,600	\$21.19	\$822	\$15.81	\$24.41	\$27.01	\$19.34	\$8.87	\$9.11	\$11.06	\$16.03
Clarksville^^	\$181,500	\$19.76	\$768	\$14.77	\$25.45	\$28.93	\$20.99	\$8.73	\$8.75	\$10.40	\$14.95
Cleveland~	\$164,000	\$17.86	\$745	\$14.33	\$19.83	\$24.82	\$17.94	\$8.91	\$9.33	\$12.58	\$14.30
Jackson	\$128,900	\$14.04	\$687	\$13.21	\$19.63	\$27.28	\$21.98	\$9.17	\$8.79	\$9.61	\$15.21
Johnson City^	\$152,500	\$16.61	\$668	\$12.85	\$22.23	\$25.62	\$19.91	\$8.67	\$8.84	\$10.09	\$14.79
Kingsport-Bristol	\$131,500	\$14.32	\$636	\$12.23	\$20.92	\$24.35	\$20.31	\$9.06	\$8.84	\$10.32	\$15.67
Knoxville	\$179,838	\$19.58	\$811	\$15.60	\$21.68	\$27.01	\$19.75	\$8.74	\$9.00	\$10.10	\$16.09
Memphis	\$185,000	\$20.15	\$835	\$16.06	\$23.98	\$31.23	\$25.92	\$8.76	\$9.18	\$10.70	\$16.26
Morristown	\$140,000	\$15.25	\$667	\$12.83	\$21.70	\$25.24	\$16.59	\$8.95	\$8.92	\$11.06	\$14.65
Nashville	\$260,000	\$28.31	\$959	\$18.44	\$21.70	\$29.68	\$22.72	\$8.72	\$9.62	\$10.75	\$17.67
TENNESSEE*	\$196,500	\$21.40	\$798	\$15.35	\$21.81	\$28.41	\$20.97	\$8.74	\$9.15	\$10.62	\$16.28

#### 2016

#### Median Hourly Wage by Occupation 2016

Metropolitan Statistical Areas (MSAs)	Median Home Price	Wage Needed to Buy	2-BDRM Aptmnt Monthly Rent	Wage Needed to Rent	Education**	Registered Nurse	Police	Wait Person	Cashier	Retail Salesperson	All Occupations
Chattanooga	\$186,000	\$19.43	\$767	\$14.75	\$21.87	\$26.46	\$18.77	\$8.95	\$9.06	\$11.10	\$15.73
Clarksville^^	\$174,500	\$18.23	\$797	\$15.33	\$24.53	\$27.42	\$20.21	\$8.72	\$8.77	\$10.25	\$14.65
Cleveland	\$153,903	\$16.08	\$765	\$14.71	\$20.06	\$26.08	\$18.40	\$8.89	\$9.55	\$11.81	\$14.28
Jackson	\$125,000	\$13.06	\$738	\$14.19	\$22.00	\$24.93	\$22.08	\$8.82	\$8.79	\$9.93	\$14.82
Johnson City^	\$150,000	\$15.67	\$658	\$12.65	\$21.89	\$23.99	\$20.19	\$8.53	\$8.81	\$9.80	\$14.47
Kingsport-Bristol	\$131,250	\$13.71	\$660	\$12.69	\$20.70	\$23.73	\$20.19	\$9.08	\$8.85	\$10.03	\$15.27
Knoxville	\$175,000	\$18.28	\$807	\$15.52	\$21.00	\$26.57	\$20.06	\$8.86	\$9.02	\$10.08	\$15.56
Memphis	\$185,000	\$19.33	\$827	\$15.90	\$23.02	\$30.30	\$25.29	\$8.72	\$9.13	\$10.52	\$15.87
Morristown	\$136,448	\$14.25	\$629	\$12.10	\$20.05	\$25.43	\$16.26	\$8.83	\$8.85	\$10.14	\$14.21
Nashville	\$239,900	\$25.06	\$925	\$17.79	\$22.04	\$28.94	\$22.15	\$8.78	\$9.23	\$10.87	\$17.13
TENNESSEE*	\$185,000	\$19.33	\$779	\$14.98	\$21.54	\$27.69	\$20.76	\$8.78	\$9.05	\$10.56	\$15.77

<sup>\*</sup>Tennessee represents the whole state, not the balance of the state.

^ For education in Johnson City MSA, both in 2016 and 2017, "Librarians" is used instead of major "education" category.

^^For police in Clarksville MSA both in 2016 and 2017, "First-Line Supervisors of Police and Detectives" is used

~ For "Registered Nurse" occupation in Cleveland MSA in 2017, "Healthcare Practitioners and Technical Occupations" major category is used.



can afford to buy and rent can afford to rent, but not buy cannot afford to buy or rent

Source: "Median Home Price" is THDA calculations based on data from the Property Assessment Division, Comptroller's Office, State of Tennessee, "2-bedroom Apartment Rent" is Fair Market Rent (FMR) by room size from US Department of Housing and Urban Development (HUD). "Median Hourly Wages" are from Bureau of Labor Statistics (BLS) Occupational Employment Statistics.

<sup>\*\*&</sup>quot;Education" represents education, training and library occupations.

#### **WORKFORCE HOUSING AFFORDABILITY –2016 AND 2017**

#### **Housing Opportunity in Selected Occupations**

As the previous analysis showed, both renting and owning a home were challenging across the state for a single wage earner restaurant worker (waiter) and a worker in the retail sector (both cashier or retail salesperson). Single wage earner educator, police and registered nurse (RN) households were better able to purchase or rent affordably. Above, homeownership affordability was measured based on a "median priced home" in the MSA. Homeownership affordability can also be examined by applying the Housing Opportunity Index methodology<sup>15</sup> for a specific occupation. The Index measures the percent of actual homes sold during the year that would be affordable for the single wage earner household earning the median hourly wage for the selected occupation in the region.

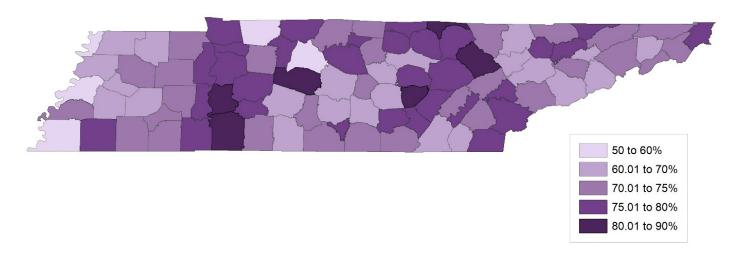
This analysis of homeownership affordability revealed some noteworthy differences among the counties and occupations. Previous analysis showed that educators, RNs and police officers were able to purchase a median priced home in most metro areas, except teachers in the Nashville MSA and police officers in the Nashville and Chattanooga MSAs. Among the counties, Williamson and Wilson Counties of the Nashville MSA had the lowest percentage of homes sold that would be affordable for single wage earner educators or police officers. None of the homes purchased in 2017 in Williamson County would be affordable for a single earner restaurant worker or cashier. The Opportunity Index for single wage earners in service industries (waiters/waitresses, cashiers and retail sales persons) was highest in Lake County followed by other rural counties with small number of home sales and relatively lower home prices.

The more detailed data by county in each occupation listed here can be found in Appendix G and Appendix H (2017 and 2016).

<sup>15</sup> We used the same methodology described earlier (page 16), which is similar to NAHB/Wells Fargo Housing Opportunity Index. Instead of the median family income, we used the median hourly wages for educators, RNs, Police Officers, waiters/waitresses, cashiers and retail sales persons. Occupational wage data from Bureau of Labor Statistics (BLS) is available for the MSAs and for the balance of the state (BOS), which is divided in to four geographic regions. We assumed the median hourly wage was same for all counties located in the MSA or the region. This analysis compares what percent of all homes sold in the county during the year would be "affordable" for single wage earner waiter/waitress household. A list of counties included under each metropolitan and nonmetropolitan area can be found at BLS website: https://www.bls.gov/oes/current/msa\_def.htm#4700001.

#### **HOUSING TENURE**

#### Tennessee Homeownership Rates



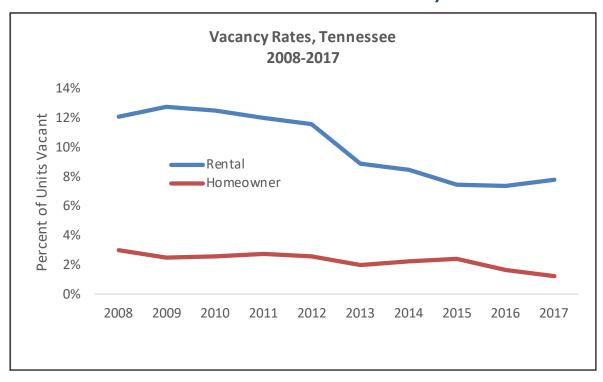
Source: American Community Survey (ACS), 5-Year Estimates, 2012-2016, U.S. Census Bureau

In 2016, Tennessee's homeownership rate of 66.3 percent was higher than the homeownership rate in the nation and in the south, 63.6 percent and 64.8 percent, respectively, while still lower than its near-term peak of 69.7 percent in 2009. In 2016, homeownership rates in Tennessee ranged from 54 percent in Davidson County to 88 percent in Van Buren County. Seven counties in the state had homeownership rates of 80 percent or higher. Consistent with the national trend, the four largest urban counties (Davidson, Hamilton, Knox, and Shelby) had relatively lower homeownership rates compared to smaller counties and the state average. In 78 counties, the homeownership rate of 2016 was lower than the rate in 2009.

Homeownership rates by county can be found in Appendix I.

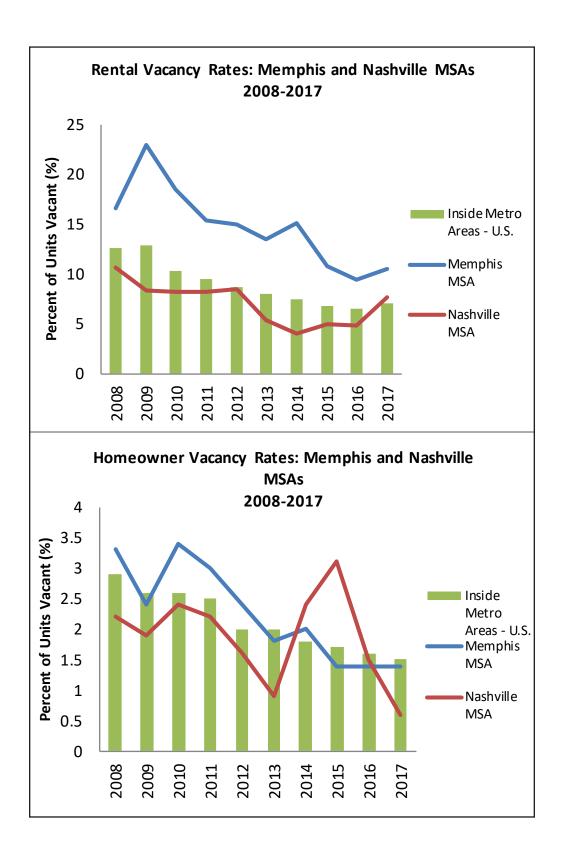
#### **VACANCY RATES**

#### Homeowner and Rental Vacancy Rates



In 2017, statewide vacancy rates 16 were 7.8 percent for rental housing and 1.3 percent for homeowner housing according to the Census Bureau. Tennessee's rental vacancy rate was higher than nation's 7.2 percent, while owner vacancy rate was slightly lower than the US rate of 1.6 percent. In Tennessee, 2017 rental vacancy rate was higher than it was last year, but it was still much lower than the rates hovering around 12 percent between 2008 and 2011. The homeowner vacancy rate declined from the previous year. This suggests that both rental housing market was softening in Tennessee, although the owner vacancy rate remains quite low.

Tennessee's two largest MSAs have quite different patterns with regards to rental and homeowner vacancy. Memphis consistently experiences higher rental vacancy rates. While vacancy rates in both MSAs were trending downward in previous years, both experienced increasing rental vacancy in 2017. The increase in the rental vacancy rate in the Nashville MSA was remarkable. From 2016 to 2017, in the Nashville MSA, the rental vacancy rate increased from 4.8 percent to 7.6 percent, while the Memphis MSA's rental vacancy rates increased from 9.4 percent to 10.5 percent. Both rental vacancy rates were higher than the nationwide average for inside metro areas, a departure for the Nashville MSA. This is another sign of a softening rental housing market in Tennessee and especially in the Nashville MSA. Both metro areas had owner vacancy rates lower than rental rates and, while Memphis MSAs rate did not change from the previous year, declining homeowner vacancy trends in the Nashville MSA continued.



Source: Census Bureau, Housing Vacancies and Homeownership (CPS/HVS), Not Seasonally Adjusted (NSA), https://www.census.gov/housing/hvs/data/ann16ind.html

#### HOUSING CONSTRUCTION

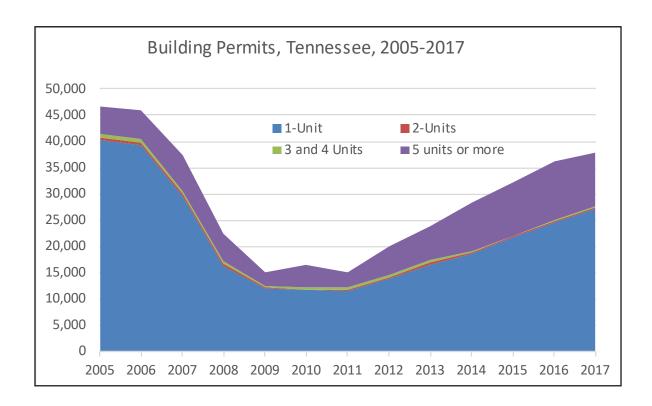
#### **Building Permits, Tennessee**

Privately-owned housing units authorized by building permits in 2017<sup>17</sup> increased by five percent in the state, compared to 2016. This was a much smaller increase than experienced in the last several years. Since 2011, the building permits in Tennessee were increasing annually at the pace of more than 10 percent every year. This relatively smaller increase in total number of building permits in 2017 could be a sign of slowing construction activity in the state.

Another important difference from the previous years is the change in the type of building for permits issued. Especially after the housing market crash, builders in Tennessee increased their multifamily construction while reducing the one- and two-unit single-family construction. In 2017, even though there was an increase in the total number of building permits in the state, the permits for buildings with five or more units (large multi-family) actually declined from the previous year. In 2017, multifamily building permits made up 27 percent of total permits issued compared to 33 percent in 2014 (the highest between 2004 and 2017). Time will show if the number of permits issued for three or more units reached to the highest level in 2016 and if the rental housing market in Tennessee is softening.

Even with a five percent increase, the total number of building permits issued has not returned to its peak level of 46,615 in 2005. Builders are bringing more inventory to the market to meet the greater demand for both single family and multifamily, however; in recent years this building pace is slowing down compared to the years right after the housing market crash. Building permits are still increasing but at a slower rate.

The following chart shows the building permits issued by the number of units between 2005 and 2017. The data are from the Census Bureau, and are not seasonally adjusted.



Source: Census Bureau, Building Permits Survey, New Privately Owned Housing Units Authorized, Not Seasonally Adjusted, https://www.census.gov/construction/bps/

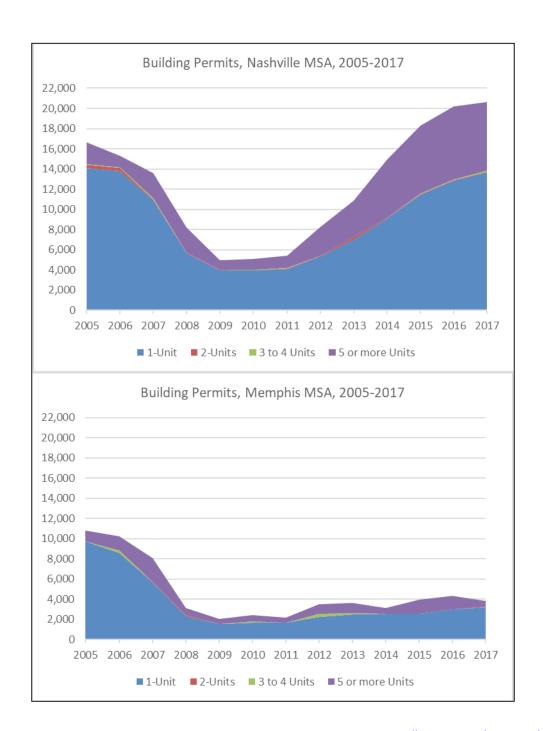
#### HOUSING CONSTRUCTION

#### Building Permits, Nashville and Memphis MSAs

The number of building permits issued over the years and the nature of housing built varied by region. In every MSA, with the exception of the Memphis and Kingsport MSAs, there was an annual increase in the total number of building permits in 2017. The largest increase was in the Jackson MSA, where the total number of permits issued increased by 58 percent, from 278 to 440.

Total number of building permits issued in the Memphis MSA declined by 11 percent from 2016. In the Nashville MSA, building permits increased by only 3 percent in 2017 while in 2016 there was 13 percent year-over-year increase. Until 2017, in both MSAs, construction activity of multifamily units was increasing compared to the years right after the housing market crash. Through years, the proportion of total permits issued for five or more units increased while the proportion of 1-2 unit single family building permits in the total permits issued declined. This trend changed in 2017 in both MSAs. In fact, both in the Nashville MSA and the Memphis MSA, the number of permits issued for five or more units declined compared to 2016, six percent in the Nashville MSA and 56 percent in the Memphis MSA.

The following chart provides the total number of building permits issued by different building types in the Nashville and Memphis MSAs.



Source: Census Bureau, Building Permits Survey, New Privately Owned Housing Units Authorized, Not Seasonally Adjusted, https://www.census.gov/construction/bps/

## **APPENDIX A**

## **Housing Types**

GEOGRAPHY	TOTAL HOUSING UNITS	1-UNIT, DETACHED	1-UNIT, ATTACHED	2 UNITS	3 OR 4 UNITS	5 TO 9 UNITS	10 TO 19 UNITS	20 OR MORE UNITS	MOBILE HOME	BOAT, RV, VAN, ETC.
Anderson	34,781	24,443	647	987	1,306	1,157	1,034	1,279	3,928	0
Bedford	18,622	13,502	163	662	281	669	402	181	2,734	28
Benton	8,981	5,999	71	145	31	123	35	76	2,430	71
Bledsoe	5,690	3,808	8	16	73	115	19	24	1,595	32
Blount	56,080	41,178	1,605	830	1,271	1,846	1,243	1,046	7,026	35
Bradley	42,556	29,871	756	2,382	1,985	1,818	595	858	4,291	0
Campbell	20,336	14,635	58	396	705	495	494	327	3,193	33
Cannon	6,070	4,350	30	111	106	71	88	62	1,238	14
Carroll	13,187	9,656	121	399	123	184	24	132	2,548	0
Carter	27,791	19,257	289	564	1,036	1,343	405	218	4,650	29
Cheatham	15,834	12,415	230	279	199	354	258	317	1,782	0
Chester	7,023	5,249	39	213	109	78	8	70	1,220	37
Claiborne	15,054	10,354	102	462	211	251	165	89	3,380	40
Clay	4,257	2,855	29	68	20	54	78	17	1,136	0
Cocke	17,372	10,769	104	605	415	252	147	80	4,948	52
Coffee	23,582	17,203	371	1,013	402	617	409	333	3,224	10
Crockett	6,395	5,139	33	196	52	101	93	23	757	1
Cumberland	28,650	20,452	458	627	1,398	491	202	159	4,761	102
Davidson	294,794	155,813	21,854	16,304	11,059	21,267	29,086	35,128	4,119	164
Decatur	6,849	5,236	22	49	43	27	8	140	1,314	10
DeKalb	9,432	7,267	52	421	185	78	29	72	1,328	0
Dickson	21,146	15,693	336	512	257	746	510	182	2,877	33
Dyer	16,784	12,708	229	651	682	542	258	250	1,457	7
Fayette	16,250	13,137	156	138	299	221	71	112	2,116	0
Fentress	8,918	6,583	99	120	118	163	57	26	1,730	22
Franklin	18,965	14,792	212	842	381	216	90	88	2,298	46
Gibson	22,362	17,461	273	1,134	589	420	129	254	2,064	38
Giles	13,853	9,909	134	411	461	241	249	100	2,348	0
Grainger	10,853	6,972	66	90	56	142	11	33	3,478	5
Greene	32,149	22,250	299	483	710	823	379	196	7,009	0
Grundy	6,394	4,238	24	38	73	193	22	48	1,755	3
Hamblen	27,023	19,499	658	1,531	787	917	556	386	2,673	16
Hamilton	154,903	106,701	4,744	9,287	4,852	7,128	6,857	9,101	6,200	33
Hancock	3,608	2,571	7	39	97	40	30	0	824	0
Hardeman	10,869	7,733	11	295	256	132	44	49	2,331	18

## **APPENDIX A**

## **Housing Types**

GEOGRAPHY	TOTAL HOUSING UNITS	1-UNIT, DETACHED	1-UNIT, ATTACHED	2 UNITS	3 OR 4 UNITS	5 TO 9 UNITS	10 TO 19 UNITS	20 OR MORE UNITS	MOBILE HOME	BOAT, RV, VAN, ETC.
Hardin	13,967	11,198	143	210	295	148	45	92	1,798	38
Hawkins	26,838	18,005	142	402	462	922	595	303	6,000	7
Haywood	8,390	6,436	162	449	233	242	184	104	576	4
Henderson	12,813	8,666	157	361	279	98	44	75	3,104	29
Henry	17,015	11,515	60	416	212	520	46	91	4,088	67
Hickman	10,289	6,792	69	195	49	205	17	86	2,846	30
Houston	4,166	3,009	3	63	33	0	59	6	989	4
Humphreys	8,874	6,601	81	95	115	244	28	22	1,672	16
Jackson	5,820	3,793	13	78	85	60	42	33	1,709	7
Jefferson	23,667	15,999	142	370	713	521	365	152	5,392	13
Johnson	8,926	6,597	39	102	195	130	142	54	1,667	0
Knox	199,213	131,968	11,551	3,473	6,245	9,801	12,707	14,079	9,255	134
Lake	2,602	1,896	13	135	107	112	30	70	239	0
Lauderdale	11,286	7,958	71	688	354	466	43	50	1,648	8
Lawrence	18,149	13,882	296	342	282	477	197	168	2,505	0
Lewis	5,468	3,964	61	130	168	61	0	0	1,084	0
Lincoln	15,355	11,320	96	403	414	474	35	111	2,479	23
Loudon	22,281	17,248	586	215	452	400	242	561	2,552	25
Macon	9,971	6,746	104	251	112	189	98	99	2,372	0
Madison	42,647	31,860	648	1,763	2,047	2,310	730	942	2,339	8
Marion	13,032	9,346	98	420	102	220	57	138	2,651	0
Marshall	13,269	9,798	118	284	314	484	36	272	1,963	0
Maury	35,980	25,662	1,129	1,679	1,157	782	867	766	3,932	6
McMinn	23,268	16,449	194	609	679	768	108	177	4,266	18
McNairy	11,992	9,216	45	86	127	58	0	117	2,256	87
Meigs	5,671	3,478	13	40	100	35	2	3	1,948	52
Monroe	20,831	14,408	41	295	404	431	139	106	4,978	29
Montgomery	76,771	54,792	1,601	2,833	4,444	4,511	2,127	2,339	4,019	105
Moore	2,974	2,307	0	13	19	64	12	15	544	0
Morgan	8,896	5,910	34	77	41	64	26	18	2,724	2
Obion	14,608	10,828	163	417	715	558	162	208	1,540	17
Overton	10,263	7,545	85	129	117	146	79	20	2,142	0
Perry	4,588	2,762	41	22	49	71	7	0	1,636	0
Pickett	3,452	2,371	25	56	17	52	15	37	879	0
Polk	8,378	6,127	7	30	125	84	6	7	1,986	6

## **APPENDIX A**

## **Housing Types**

GEOGRAPHY	TOTAL HOUSING UNITS	1-UNIT, DETACHED	1-UNIT, ATTACHED	2 UNITS	3 OR 4 UNITS	5 TO 9 UNITS	10 TO 19 UNITS	20 OR MORE UNITS	MOBILE HOME	BOAT, RV, VAN, ETC.
Putnam	32,947	22,164	449	1,396	2,102	2,767	1,106	586	2,320	57
Rhea	14,415	9,467	138	467	515	293	67	0	3,406	62
Roane	25,591	17,862	310	781	748	558	257	480	4,582	13
Robertson	26,530	20,938	438	981	411	649	498	132	2,483	0
Rutherford	109,726	76,944	5,171	2,010	3,001	7,669	6,128	4,373	4,391	39
Scott	9,876	6,774	80	138	335	87	108	49	2,305	0
Sequatchie	6,389	4,488	100	136	159	57	24	47	1,366	12
Sevier	56,274	38,055	1,037	1,209	1,324	1,975	1,804	3,442	7,330	98
Shelby	403,101	270,390	15,837	10,072	21,968	35,645	21,963	23,042	4,071	113
Smith	8,610	6,063	68	136	234	311	60	12	1,723	3
Stewart	6,768	4,868	77	121	28	31	71	10	1,556	6
Sullivan	74,154	52,247	1,880	1,619	1,906	3,114	2,369	1,936	9,016	67
Sumner	68,156	51,108	2,257	1,243	1,268	2,031	2,952	2,782	4,497	18
Tipton	23,435	18,211	191	603	645	472	66	241	3,006	0
Trousdale	3,425	2,472	8	46	36	77	51	108	627	0
Unicoi	8,837	6,564	49	34	167	231	105	156	1,531	0
Union	9,078	6,088	57	72	57	282	168	123	2,190	41
Van Buren	2,654	1,961	1	15	16	42	9	2	599	9
Warren	17,834	13,059	112	961	245	1,021	118	171	2,147	0
Washington	58,890	37,421	1,519	2,123	2,613	4,515	2,231	2,824	5,622	22
Wayne	7,264	5,271	70	47	91	159	11	35	1,580	0
Weakley	15,529	11,209	121	808	616	551	352	119	1,747	6
White	11,607	9,006	103	127	130	148	43	81	1,969	0
Williamson	74,188	59,510	3,138	787	1,239	2,403	2,757	2,510	1,844	0
Wilson	49,077	38,300	1,026	1,335	905	1,214	1,120	1,097	4,018	62
Tennessee	2,873,478	1,976,590	86,558	86,698	92,649	135,325	107,815	117,135	268,466	2,242
South	51,255,114	32,259,897	2,598,992	1,146,493	1,665,237	2,372,794	2,577,130	3,679,780	4,905,301	49,490
United States	134,054,899	82,631,864	7,812,612	4,961,792	5,927,797	6,417,429	6,027,469	11,712,558	8,454,133	109,245

Source: American Community Survey (ACS), 5-Year Estimates, 2012-2016, U.S. Census Bureau

## **APPENDIX B**

### **Year Structure Built**

GEOGRAPHY	TOTAL HOUSING UNITS	BUILT 2000 OR LATER	BUILT 1990 TO 1999	BUILT 1980 TO 1989	BUILT 1970 TO 1979	BUILT 1960 TO 1969	BUILT 1950 TO 1959	BUILT 1940 TO 1949	BUILT BEFORE 1940
Anderson	34,781	4,180	4,264	4,723	5,469	3,911	4,262	6,098	1,874
Bedford	18,622	4,070	3,221	2,880	2,545	2,309	1,835	618	1,144
Benton	8,981	1,307	2,046	1,341	1,539	1,155	912	345	336
Bledsoe	5,690	1,355	1,642	870	686	407	298	113	319
Blount	56,080	12,620	11,296	8,252	8,056	4,870	4,385	2,973	3,628
Bradley	42,556	8,678	7,448	6,742	8,523	5,049	2,803	1,056	2,257
Campbell	20,336	3,577	4,356	3,017	3,313	1,658	1,886	964	1,565
Cannon	6,070	1,431	1,021	755	935	826	508	166	428
Carroll	13,187	1,341	2,499	1,349	2,509	2,248	1,454	842	945
Carter	27,791	3,708	4,538	4,063	4,265	3,216	2,606	2,414	2,981
Cheatham	15,834	3,353	3,985	2,545	2,693	1,611	875	265	507
Chester	7,023	1,821	1,379	1,130	1,112	544	565	252	220
Claiborne	15,054	3,141	2,833	2,174	2,561	1,210	1,008	731	1,396
Clay	4,257	925	993	549	637	441	216	129	367
Cocke	17,372	2,854	3,871	2,923	2,720	2,020	1,116	771	1,097
Coffee	23,582	4,140	4,625	3,077	3,677	3,423	2,728	1,049	863
Crockett	6,395	1,056	1,349	624	965	964	578	295	564
Cumberland	28,650	7,880	7,063	4,993	4,224	2,203	1,113	372	802
Davidson	294,794	54,011	35,353	48,640	47,116	39,978	36,012	14,563	19,121
Decatur	6,849	1,028	1,272	1,047	1,193	1,196	457	331	325
DeKalb	9,432	1,594	1,933	1,269	1,735	841	967	377	716
Dickson	21,146	4,336	4,716	3,227	3,901	1,752	1,330	648	1,236
Dyer	16,784	2,266	2,659	2,334	3,239	2,241	1,604	1,283	1,158
Fayette	16,250	5,549	3,675	2,112	2,501	973	609	255	576
Fentress	8,918	2,195	1,341	1,474	1,579	874	520	493	442
Franklin	18,965	3,012	3,608	2,925	3,238	2,503	1,320	917	1,442
Gibson	22,362	3,664	3,121	2,273	3,962	3,177	2,648	1,342	2,175
Giles	13,853	1,869	2,800	2,101	2,219	1,583	944	673	1,664
Grainger	10,853	2,385	2,095	1,647	1,927	870	671	505	753
Greene	32,149	5,783	5,779	4,614	4,668	4,193	3,146	1,265	2,701
Grundy	6,394	1,047	1,464	764	1,291	636	413	247	532
Hamblen	27,023	3,665	4,511	3,650	5,695	4,245	2,472	1,219	1,566
Hamilton	154,903	25,567	20,401	21,341	26,170	19,067	18,443	10,111	13,803
Hancock	3,608	645	653	478	667	292	244	215	414
Hardeman	10,869	1,574	2,119	1,919	1,925	1,186	1,108	397	641

## **APPENDIX B**

## **Year Structure Built**

GEOGRAPHY	TOTAL HOUSING UNITS	BUILT 2000 OR LATER	BUILT 1990 TO 1999	BUILT 1980 TO 1989	BUILT 1970 TO 1979	BUILT 1960 TO 1969	BUILT 1950 TO 1959	BUILT 1940 TO 1949	BUILT BEFORE 1940
Hardin	13,967	2,418	2,999	1,845	2,691	1,840	1,131	423	620
Hawkins	26,838	4,442	5,267	4,682	4,916	2,201	1,798	1,186	2,346
Haywood	8,390	878	1,608	1,038	2,024	1,094	759	373	616
Henderson	12,813	1,808	3,412	1,904	2,137	1,916	917	364	355
Henry	17,015	2,388	3,815	2,523	2,810	1,843	1,379	852	1,405
Hickman	10,289	1,846	2,440	1,499	1,671	853	651	688	641
Houston	4,166	804	733	498	757	503	359	197	315
Humphreys	8,874	1,439	1,532	1,139	1,804	1,127	1,085	397	351
Jackson	5,820	1,017	1,305	941	892	508	328	255	574
Jefferson	23,667	5,697	5,199	3,844	3,079	1,954	1,718	659	1,517
Johnson	8,926	1,567	1,911	1,139	1,709	758	662	402	778
Knox	199,213	39,479	33,865	28,376	34,114	21,914	18,369	9,757	13,339
Lake	2,602	317	417	281	396	371	293	284	243
Lauderdale	11,286	1,407	1,985	1,735	2,033	1,805	939	501	881
Lawrence	18,149	3,056	3,736	2,314	3,144	2,318	1,422	831	1,328
Lewis	5,468	968	1,290	860	812	510	601	189	238
Lincoln	15,355	3,159	2,292	2,143	2,587	1,889	1,245	574	1,466
Loudon	22,281	7,028	4,174	3,086	2,756	1,414	1,538	904	1,381
Macon	9,971	2,215	2,523	1,275	1,402	920	580	341	715
Madison	42,647	7,136	8,878	6,508	7,172	4,375	3,800	2,059	2,719
Marion	13,032	2,144	2,812	2,021	2,495	1,224	983	525	828
Marshall	13,269	3,064	2,642	1,762	1,834	1,167	1,156	595	1,049
Maury	35,980	8,125	8,994	4,391	4,135	3,291	2,827	1,695	2,522
McMinn	23,268	3,118	4,951	3,350	4,475	2,369	1,707	1,577	1,721
McNairy	11,992	1,705	2,117	1,981	2,597	1,578	902	514	598
Meigs	5,671	1,240	1,429	1,035	1,076	352	254	135	150
Monroe	20,831	4,184	4,610	3,218	3,964	1,422	1,417	937	1,079
Montgomery	76,771	25,939	16,730	9,746	9,963	6,841	3,669	1,647	2,236
Moore	2,974	754	483	542	410	239	215	70	261
Morgan	8,896	2,082	1,608	1,558	1,514	675	674	325	460
Obion	14,608	1,639	2,186	1,561	2,713	2,209	1,823	991	1,486
Overton	10,263	2,015	1,980	1,499	1,931	922	692	459	765
Perry	4,588	1,181	930	680	638	499	339	64	257
Pickett	3,452	532	769	594	693	290	256	35	283
Polk	8,378	1,530	1,633	1,225	1,563	722	631	501	573

## **APPENDIX B**

### **Year Structure Built**

GEOGRAPHY	TOTAL HOUSING UNITS	BUILT 2000 OR LATER	BUILT 1990 TO 1999	BUILT 1980 TO 1989	BUILT 1970 TO 1979	BUILT 1960 TO 1969	BUILT 1950 TO 1959	BUILT 1940 TO 1949	BUILT BEFORE 1940
Putnam	32,947	7,204	6,862	5,066	5,731	3,556	2,083	624	1,821
Rhea	14,415	2,890	2,760	2,573	2,996	1,072	1,016	550	558
Roane	25,591	3,594	4,777	3,824	4,237	2,871	3,205	1,434	1,649
Robertson	26,530	6,592	6,166	3,879	3,642	2,341	1,213	789	1,908
Rutherford	109,726	38,513	28,610	16,272	11,919	6,565	4,297	1,466	2,084
Scott	9,876	2,003	2,052	1,950	1,608	834	602	339	488
Sequatchie	6,389	2,179	1,486	590	1,020	398	279	185	252
Sevier	56,274	17,057	15,405	9,888	6,545	3,124	1,892	1,099	1,264
Shelby	403,101	58,438	59,395	53,686	68,806	49,827	58,979	27,696	26,274
Smith	8,610	1,567	2,134	1,038	1,097	932	625	396	821
Stewart	6,768	1,501	1,743	1,114	985	388	419	118	500
Sullivan	74,154	8,686	10,362	9,896	12,891	10,253	9,862	6,091	6,113
Sumner	68,156	18,638	13,412	11,044	11,377	7,284	3,126	1,211	2,064
Tipton	23,435	6,068	5,595	3,375	3,246	1,938	1,321	761	1,131
Trousdale	3,425	808	511	401	597	330	296	157	325
Unicoi	8,837	811	1,673	1,165	1,328	809	1,061	635	1,355
Union	9,078	2,091	2,422	1,399	1,254	738	498	225	451
Van Buren	2,654	685	493	291	564	285	167	48	121
Warren	17,834	2,357	3,268	1,929	3,732	2,513	2,222	792	1,021
Washington	58,890	13,290	10,653	7,523	8,493	6,809	4,725	2,603	4,794
Wayne	7,264	1,293	1,109	1,409	1,160	1,014	461	384	434
Weakley	15,529	1,945	3,037	1,716	2,964	2,179	1,308	837	1,543
White	11,607	2,001	2,154	1,741	1,733	1,247	871	898	962
Williamson	74,188	27,771	18,733	11,023	8,968	3,692	1,517	526	1,958
Wilson	49,077	16,639	9,779	7,150	6,283	3,682	2,519	1,161	1,864
Tennessee	2,873,478	580,569	523,775	416,557	461,538	312,266	263,739	136,625	178,409
South	51,255,114	11,246,927	8,726,646	8,561,304	8,412,409	5,218,154	4,258,504	1,961,230	2,869,940
United States	134,054,899	22,803,400	18,762,073	18,355,676	20,901,765	14,563,783	14,255,447	6,954,604	17,458,151

Source: American Community Survey (ACS), 5-Year Estimates, 2012-2016, U.S. Census Bureau

### **APPENDIX C**

# Total Home Sales Affordable to a Median Income Earning Family by County

	2	2016	2	2017
GEOGRAPHY	TOTAL NUMBER OF HOMES SOLD	HOUSING OPPORTUNITY INDEX	TOTAL NUMBER OF HOMES SOLD	HOUSING OPPORTUNITY INDEX
Anderson	924	91.13%	977	90.17%
Bedford	725	88.69%	769	79.32%
Benton	139	90.65%	160	86.88%
Bledsoe	63	77.78%	52	84.62%
Blount	1,889	83.01%	2,278	79.81%
Bradley	1,328	79.89%	1,407	75.34%
Campbell	398	74.87%	409	68.70%
Cannon	146	97.95%	178	97.75%
Carroll	232	96.12%	257	93.39%
Carter	500	92.40%	610	91.31%
Cheatham	623	91.65%	637	89.01%
Chester	166	95.78%	188	95.21%
Claiborne	212	84.43%	264	79.92%
Clay	67	91.04%	52	88.46%
Cocke	231	87.01%	252	81.35%
Coffee	874	85.35%	872	83.94%
Crockett	116	94.83%	125	94.40%
Cumberland	891	73.96%	1,127	71.16%
Davidson	13,599	66.28%	14,404	59.28%
Decatur	114	87.72%	117	85.47%
DeKalb	228	81.14%	296	77.36%
Dickson	797	94.48%	803	88.92%
Dyer	406	88.42%	448	91.74%
Fayette	655	74.66%	743	67.16%
Fentress	160	86.25%	182	80.77%
Franklin	514	80.54%	553	76.31%
Gibson	535	88.97%	652	88.65%
Giles	234	91.45%	282	89.72%
Grainger	105	76.19%	145	76.55%
Greene	627	85.81%	651	85.71%
Grundy	66	87.88%	91	79.12%
Hamblen	685	88.91%	731	85.23%
Hamilton	6,010	74.99%	6,355	68.31%
Hancock	22	86.36%	28	96.43%

### **APPENDIX C**

# Total Home Sales Affordable to a Median Income Earning Family by County

	2	016	2	2017
GEOGRAPHY	TOTAL NUMBER OF HOMES SOLD	HOUSING OPPORTUNITY INDEX	TOTAL NUMBER OF HOMES SOLD	HOUSING OPPORTUNITY INDEX
Hardeman	133	87.97%	146	96.58%
Hardin	334	82.34%	390	75.38%
Hawkins	442	91.18%	550	91.64%
Haywood	105	93.33%	95	86.32%
Henderson	226	88.05%	249	85.94%
Henry	306	89.54%	365	90.68%
Hickman	198	93.43%	153	88.89%
Houston	68	94.12%	87	91.95%
Humphreys	187	94.65%	191	91.10%
Jackson	99	94.95%	117	92.31%
Jefferson	625	77.92%	686	73.47%
Johnson	76	69.74%	117	76.92%
Knox	8,272	77.17%	9,512	76.70%
Lake	33	96.97%	37	100.00%
Lauderdale	144	95.14%	159	91.82%
Lawrence	486	94.03%	489	92.02%
Lewis	91	94.51%	100	88.00%
Lincoln	373	95.17%	438	92.24%
Loudon	909	67.88%	971	55.30%
Macon	300	90.67%	321	85.98%
Madison	1,305	87.89%	1,450	83.66%
Marion	188	93.62%	243	90.12%
Marshall	518	93.05%	659	79.82%
Maury	2,067	79.83%	2,361	79.50%
McMinn	498	90.16%	539	86.27%
McNairy	170	94.71%	211	94.79%
Meigs	68	77.94%	102	51.96%
Monroe	445	79.55%	517	78.34%
Montgomery	3,613	86.11%	3,793	79.78%
Moore	64	81.25%	71	69.01%
Morgan	96	92.71%	103	87.38%
Obion	281	93.24%	267	90.64%
Overton	184	88.59%	227	82.38%
Perry	54	81.48%	60	93.33%

### **APPENDIX C**

# Total Home Sales Affordable to a Median Income Earning Family by County

	2	016	2	017
GEOGRAPHY	TOTAL NUMBER OF HOMES SOLD	HOUSING OPPORTUNITY INDEX	TOTAL NUMBER OF HOMES SOLD	HOUSING OPPORTUNITY INDEX
Pickett	53	90.57%	63	82.54%
Polk	116	87.07%	128	79.69%
Putnam	979	70.38%	1,056	72.25%
Rhea	292	84.25%	288	84.72%
Roane	505	80.79%	561	78.07%
Robertson	1,138	90.77%	1,250	86.80%
Rutherford	7,507	86.29%	7,579	77.58%
Scott	96	88.54%	87	78.16%
Sequatchie	138	89.86%	123	85.37%
Sevier	1,323	78.53%	1,508	72.61%
Shelby	8,692	73.62%	9,125	70.96%
Smith	240	95.00%	281	93.24%
Stewart	106	90.57%	144	91.67%
Sullivan	1,978	82.76%	2,254	83.54%
Sumner	4,189	74.43%	4,353	63.89%
Tipton	739	90.93%	807	85.38%
Trousdale	93	96.77%	149	96.64%
Unicoi	161	92.55%	175	89.14%
Union	156	84.62%	204	85.29%
Van Buren	42	73.81%	47	65.96%
Warren	390	89.74%	443	87.13%
Washington	1,915	72.38%	2,051	71.09%
Wayne	80	100.00%	91	94.51%
Weakley	270	95.19%	292	93.15%
White	280	88.57%	295	86.44%
Williamson	5,830	24.49%	5,997	18.03%
Wilson	2,563	70.89%	3,113	52.81%
TENNESSEE	97,110	75.56%	105,335	70.75%

### **APPENDIX D**

# Percentage of Tennessee Households that are Cost-Burdened by County

GEOGRAPHY	HOMEOWNERS SEVERELY COST BURDENED	HOMEOWNERS COST BURDENED	RENTERS SEVERELY COST BURDENED	RENTERS COST BURDENED	ALL COST-BURDENED HOUSEHOLDS
Anderson	9.9%	25.1%	22.2%	39.9%	32.3%
Bedford	12.6%	28.7%	20.3%	41.3%	34.2%
Benton	16.6%	33.5%	18.4%	40.1%	36.2%
Bledsoe	15.0%	31.2%	15.9%	33.6%	32.2%
Blount	12.1%	28.4%	21.8%	40.4%	32.7%
Bradley	11.5%	26.2%	20.1%	42.4%	33.7%
Campbell	13.4%	28.3%	19.8%	38.4%	33.4%
Cannon	9.2%	31.6%	11.9%	25.2%	28.9%
Carroll	12.3%	25.6%	26.2%	48.1%	35.6%
Carter	15.0%	34.9%	20.7%	43.7%	39.0%
Cheatham	8.5%	28.2%	23.5%	47.5%	33.6%
Chester	8.0%	19.3%	26.3%	42.8%	29.2%
Claiborne	15.8%	30.4%	17.8%	33.0%	31.6%
Clay	13.2%	43.2%	18.0%	34.5%	39.2%
Cocke	15.5%	34.5%	20.8%	38.6%	36.6%
Coffee	9.2%	25.7%	18.1%	37.4%	31.1%
Crockett	11.9%	28.1%	21.0%	45.0%	35.7%
Cumberland	12.7%	28.1%	16.3%	42.5%	33.1%
Davidson	10.8%	29.2%	21.2%	45.8%	38.3%
Decatur	7.8%	26.7%	22.6%	37.5%	31.2%
DeKalb	10.7%	24.2%	12.0%	28.4%	26.2%
Dickson	9.9%	26.3%	18.5%	40.5%	31.8%
Dyer	7.8%	23.8%	16.2%	39.5%	31.7%
Fayette	12.4%	28.1%	16.6%	36.2%	30.4%
Fentress	12.1%	34.3%	16.3%	32.1%	33.3%
Franklin	10.5%	27.7%	17.0%	31.9%	29.4%
Gibson	11.3%	29.7%	20.0%	39.4%	33.8%
Giles	7.9%	28.1%	17.2%	40.3%	33.8%
Grainger	10.9%	28.6%	16.7%	36.1%	31.4%
Greene	11.6%	28.0%	15.7%	36.2%	31.7%
Grundy	16.4%	34.7%	16.2%	29.2%	32.4%
Hamblen	13.1%	26.9%	23.9%	45.1%	35.5%
Hamilton	9.8%	25.6%	22.2%	45.6%	35.0%
Hancock	12.6%	30.0%	8.6%	29.4%	29.7%

### **APPENDIX D**

# Percentage of Tennessee Households that are Cost-Burdened by County

GEOGRAPHY	HOMEOWNERS SEVERELY COST BURDENED	HOMEOWNERS COST BURDENED	RENTERS SEVERELY COST BURDENED	RENTERS COST BURDENED	ALL COST-BURDENED HOUSEHOLDS
Hardeman	14.7%	41.5%	26.3%	46.7%	43.8%
Hardin	12.2%	26.1%	20.7%	35.8%	29.8%
Hawkins	10.7%	25.1%	19.7%	42.9%	32.6%
Haywood	10.8%	33.0%	21.3%	42.8%	38.3%
Henderson	7.0%	19.8%	17.4%	33.7%	26.2%
Henry	10.8%	32.3%	18.7%	42.6%	36.5%
Hickman	11.2%	32.6%	26.0%	47.9%	38.0%
Houston	12.7%	30.0%	19.8%	36.5%	32.3%
Humphreys	9.1%	26.9%	25.5%	45.2%	33.4%
Jackson	19.6%	41.7%	15.6%	31.1%	37.5%
Jefferson	11.2%	28.1%	18.4%	37.2%	31.7%
Johnson	14.6%	43.5%	17.2%	35.1%	39.7%
Knox	8.8%	23.4%	21.6%	43.7%	33.0%
Lake	14.6%	37.9%	13.1%	29.1%	32.9%
Lauderdale	12.2%	31.8%	27.6%	44.6%	39.2%
Lawrence	11.2%	24.7%	20.4%	39.5%	30.5%
Lewis	9.0%	29.7%	6.7%	38.6%	33.2%
Lincoln	10.3%	33.0%	22.7%	47.3%	39.1%
Loudon	9.4%	26.9%	16.3%	37.9%	30.7%
Macon	13.6%	26.3%	26.5%	47.1%	35.0%
Madison	13.3%	28.6%	18.9%	37.0%	32.3%
Marion	13.5%	34.9%	12.7%	32.1%	33.8%
Marshall	10.6%	29.1%	30.0%	51.7%	40.2%
Maury	13.3%	29.1%	17.4%	34.6%	31.4%
McMinn	9.6%	27.0%	15.8%	36.7%	30.9%
McNairy	11.1%	27.7%	19.3%	42.9%	34.2%
Meigs	15.3%	32.4%	26.4%	42.2%	36.1%
Monroe	13.1%	28.5%	20.0%	40.6%	33.4%
Montgomery	8.8%	27.0%	17.2%	42.7%	34.6%
Moore	11.9%	21.5%	11.1%	16.0%	19.6%
Morgan	12.7%	24.7%	21.1%	36.6%	28.5%
Obion	10.5%	25.5%	18.6%	39.5%	32.2%
Overton	12.3%	30.7%	13.5%	27.0%	29.3%
Perry	16.6%	30.4%	15.8%	35.7%	32.3%
Pickett	8.5%	26.0%	15.3%	22.1%	24.8%

### **APPENDIX D**

# Percentage of Tennessee Households that are Cost-Burdened by County

GEOGRAPHY	HOMEOWNERS SEVERELY COST BURDENED	HOMEOWNERS COST BURDENED	RENTERS SEVERELY COST BURDENED	RENTERS COST BURDENED	ALL COST-BURDENED HOUSEHOLDS
Polk	10.2%	24.8%	21.3%	34.4%	28.7%
Putnam	14.3%	32.4%	25.7%	48.8%	40.8%
Rhea	6.7%	23.7%	18.4%	47.3%	34.6%
Roane	10.0%	28.7%	22.9%	46.0%	36.0%
Robertson	9.2%	26.3%	18.1%	40.3%	31.0%
Rutherford	7.6%	23.5%	22.1%	44.2%	32.2%
Scott	13.2%	31.2%	23.6%	38.4%	34.5%
Sequatchie	12.2%	29.4%	13.1%	38.3%	32.9%
Sevier	10.9%	32.6%	17.9%	42.9%	37.2%
Shelby	13.5%	31.4%	27.2%	50.8%	41.7%
Smith	9.9%	26.6%	17.3%	37.5%	31.0%
Stewart	15.7%	30.9%	15.7%	31.8%	31.2%
Sullivan	9.5%	24.4%	17.7%	39.6%	30.8%
Sumner	8.6%	27.7%	20.4%	44.3%	33.5%
Tipton	7.2%	23.0%	21.7%	40.6%	29.7%
Trousdale	18.9%	36.7%	16.2%	38.5%	37.3%
Unicoi	13.6%	36.6%	19.1%	44.3%	40.3%
Union	9.6%	25.6%	17.6%	41.9%	32.2%
Van Buren	14.9%	28.7%	10.0%	25.5%	27.9%
Warren	11.4%	26.4%	13.9%	35.7%	30.9%
Washington	8.9%	25.0%	22.9%	42.9%	33.4%
Wayne	16.0%	29.9%	14.2%	29.6%	29.8%
Weakley	7.0%	21.4%	21.7%	42.1%	31.4%
White	10.8%	34.0%	20.2%	44.1%	37.7%
Williamson	7.8%	21.5%	18.4%	41.9%	26.6%
Wilson	10.8%	27.6%	19.1%	42.2%	32.1%
TENNESSEE	10.7%	27.6%	21.8%	44.2%	35.2%
UNITED STATES	12.1%	30.6%	24.1%	47.3%	38.5%

### **APPENDIX E**

# Occupied Housing Units Lacking Plumbing and/or Kitchen Facilities

GEOGRAPHY	OWNER OCCUPIED	RENTER OCCUPIED	ALL OCCUPIED HOUSING UNITS
Anderson	0.7%	2.3%	1.3%
Bedford	0.7%	0.4%	0.6%
Benton	1.2%	4.8%	2.0%
Bledsoe	3.9%	0.8%	3.1%
Blount	0.4%	2.4%	0.9%
Bradley	1.0%	2.4%	1.5%
Campbell	1.0%	2.2%	1.4%
Cannon	0.8%	3.4%	1.5%
Carroll	1.0%	1.2%	1.1%
Carter	1.1%	3.5%	1.8%
Cheatham	0.1%	1.4%	0.4%
Chester	0.3%	2.1%	0.8%
Claiborne	1.8%	1.8%	1.8%
Clay	2.4%	0.0%	1.8%
Cocke	0.4%	0.4%	0.4%
Coffee	0.8%	2.6%	1.4%
Crockett	0.9%	2.3%	1.3%
Cumberland	0.5%	3.9%	1.2%
Davidson	0.5%	1.4%	0.9%
Decatur	1.1%	0.9%	1.0%
DeKalb	0.1%	0.3%	0.2%
Dickson	0.4%	1.5%	0.7%
Dyer	1.0%	1.7%	1.2%
Fayette	0.2%	4.4%	1.1%
Fentress	1.2%	0.6%	1.0%
Franklin	1.2%	1.4%	1.2%
Gibson	0.5%	0.9%	0.6%
Giles	1.0%	3.0%	1.6%
Grainger	1.7%	1.4%	1.6%
Greene	0.8%	2.1%	1.1%
Grundy	2.3%	1.5%	2.1%
Hamblen	0.2%	2.0%	0.8%
Hamilton	0.6%	2.1%	1.1%
Hancock	3.4%	8.4%	4.6%
Hardeman	0.6%	1.0%	0.7%
Hardin	1.0%	0.7%	0.9%

### **APPENDIX E**

## Occupied Housing Units Lacking Plumbing and/or Kitchen Facilities

GEOGRAPHY	OWNER OCCUPIED	RENTER OCCUPIED	ALL OCCUPIED HOUSING UNITS
Hawkins	0.9%	2.7%	1.3%
Haywood	1.7%	1.5%	1.6%
Henderson	1.7%	0.9%	1.5%
Henry	1.0%	3.6%	1.7%
Hickman	1.0%	0.7%	0.9%
Houston	0.7%	0.0%	0.5%
Humphreys	0.4%	1.9%	0.7%
Jackson	0.8%	0.5%	0.7%
Jefferson	0.2%	2.1%	0.7%
Johnson	3.2%	0.7%	2.5%
Knox	0.4%	1.8%	0.9%
Lake	4.4%	2.0%	3.4%
Lauderdale	0.6%	0.5%	0.6%
Lawrence	5.1%	6.5%	5.5%
Lewis	0.6%	1.3%	0.7%
Lincoln	0.4%	4.7%	1.6%
Loudon	0.4%	6.1%	1.7%
Macon	2.0%	0.3%	1.6%
Madison	0.4%	1.7%	0.9%
Marion	0.1%	3.2%	1.0%
Marshall	0.5%	2.4%	1.0%
Maury	0.3%	1.5%	0.7%
McMinn	0.2%	3.4%	1.0%
McNairy	0.7%	1.2%	0.9%
Meigs	0.5%	0.0%	0.4%
Monroe	0.8%	2.1%	1.1%
Montgomery	0.2%	1.5%	0.7%
Moore	1.2%	0.0%	0.9%
Morgan	1.2%	0.7%	1.1%
Obion	0.3%	2.1%	0.9%
Overton	0.3%	1.6%	0.6%
Perry	1.9%	4.3%	2.3%
Pickett	0.8%	0.0%	0.7%
Polk	1.1%	0.0%	0.9%
Putnam	0.8%	3.5%	1.8%
Rhea	2.4%	1.8%	2.2%

### **APPENDIX E**

# Occupied Housing Units Lacking Plumbing and/or Kitchen Facilities

GEOGRAPHY	OWNER OCCUPIED	RENTER OCCUPIED	ALL OCCUPIED HOUSING UNITS
Roane	1.0%	1.8%	1.2%
Robertson	1.5%	1.3%	1.5%
Rutherford	0.6%	1.5%	0.9%
Scott	0.7%	0.6%	0.7%
Sequatchie	2.9%	2.7%	2.9%
Sevier	1.0%	1.6%	1.2%
Shelby	0.4%	1.9%	1.1%
Smith	0.4%	0.0%	0.3%
Stewart	0.4%	0.0%	0.3%
Sullivan	0.5%	3.9%	1.4%
Sumner	0.5%	2.9%	1.2%
Tipton	0.1%	0.9%	0.3%
Trousdale	0.2%	0.0%	0.1%
Unicoi	0.9%	1.3%	1.0%
Union	1.3%	3.1%	1.7%
Van Buren	1.9%	0.0%	1.7%
Warren	0.2%	2.2%	0.8%
Washington	0.7%	1.9%	1.1%
Wayne	0.2%	2.7%	0.7%
Weakley	0.5%	0.8%	0.6%
White	0.7%	1.9%	0.9%
Williamson	0.3%	5.6%	1.3%
Wilson	0.6%	4.2%	1.4%
TENNESSEE	0.66%	2.02%	1.12%
UNITED STATES	0.66%	2.17%	1.21%

### **APPENDIX F**

## Occupied Housing Units with More than One Person Per Room

GEOGRAPHY	OCCUPIED HOUSING UNITS	1.00 OR LESS	1.01 TO 1.50	1.51 OR MORE	PERCENT MORE THAN 1 PERSON PER ROOM
Anderson	30,660	30,220	294	146	1.44%
Bedford	17,053	16,501	458	94	3.24%
Benton	6,786	6,589	125	72	2.90%
Bledsoe	4,635	4,452	94	89	3.95%
Blount	49,379	48,772	439	168	1.23%
Bradley	39,178	38,129	773	276	2.68%
Campbell	15,902	15,791	97	14	0.70%
Cannon	5,392	5,272	89	31	2.23%
Carroll	11,363	11,168	148	47	1.72%
Carter	23,772	23,436	190	146	1.41%
Cheatham	14,543	14,296	223	24	1.70%
Chester	6,001	5,913	88	0	1.47%
Claiborne	12,783	12,633	120	30	1.17%
Clay	3,151	3,078	34	39	2.32%
Cocke	14,564	14,336	170	58	1.57%
Coffee	21,412	20,845	511	56	2.65%
Crockett	5,446	5,309	133	4	2.52%
Cumberland	24,500	24,181	209	110	1.30%
Davidson	269,078	261,637	5,749	1,692	2.77%
Decatur	4,792	4,775	17	0	0.35%
DeKalb	7,163	6,939	162	62	3.13%
Dickson	18,876	18,361	441	74	2.73%
Dyer	15,036	14,585	373	78	3.00%
Fayette	14,919	14,706	163	50	1.43%
Fentress	7,390	7,225	165	0	2.23%
Franklin	16,345	16,126	159	60	1.34%
Gibson	19,406	18,989	373	44	2.15%
Giles	11,478	11,246	148	84	2.02%
Grainger	8,865	8,675	179	11	2.14%
Greene	27,461	27,040	344	77	1.53%
Grundy	5,012	4,865	126	21	2.93%
Hamblen	24,442	23,852	459	131	2.41%
Hamilton	137,309	135,482	1,361	466	1.33%
Hancock	2,751	2,705	30	16	1.67%
Hardeman	8,592	8,475	82	35	1.36%

### **APPENDIX F**

## Occupied Housing Units with More than One Person Per Room

GEOGRAPHY	OCCUPIED HOUSING UNITS	1.00 OR LESS	1.01 TO 1.50	1.51 OR MORE	PERCENT MORE THAN 1 PERSON PER ROOM
Hardin	9,940	9,673	191	76	2.69%
Hawkins	23,001	22,638	199	164	1.58%
Haywood	7,056	6,975	44	37	1.15%
Henderson	10,695	10,385	223	87	2.90%
Henry	13,503	13,293	193	17	1.56%
Hickman	8,855	8,580	260	15	3.11%
Houston	3,106	3,053	30	23	1.71%
Humphreys	6,936	6,788	123	25	2.13%
Jackson	4,522	4,450	72	0	1.59%
Jefferson	19,767	19,311	378	78	2.31%
Johnson	6,915	6,796	46	73	1.72%
Knox	181,336	178,500	2,151	685	1.56%
Lake	2,145	2,110	35	0	1.63%
Lauderdale	9,745	9,413	224	108	3.41%
Lawrence	16,106	15,535	305	266	3.55%
Lewis	4,687	4,585	95	7	2.18%
Lincoln	13,620	13,251	293	76	2.71%
Loudon	20,060	19,609	360	91	2.25%
Macon	8,977	8,834	83	60	1.59%
Madison	37,189	36,799	325	65	1.05%
Marion	11,219	10,976	169	74	2.17%
Marshall	12,044	11,794	213	37	2.08%
Maury	32,889	32,086	555	248	2.44%
McMinn	20,016	19,689	229	98	1.63%
McNairy	9,839	9,639	161	39	2.03%
Meigs	4,675	4,548	115	12	2.72%
Monroe	17,311	16,898	267	146	2.39%
Montgomery	67,090	65,423	1,286	381	2.48%
Moore	2,560	2,504	48	8	2.19%
Morgan	7,221	6,978	215	28	3.37%
Obion	12,719	12,519	120	80	1.57%
Overton	8,881	8,640	203	38	2.71%
Perry	3,209	3,085	56	68	3.86%
Pickett	2,128	2,088	35	5	1.88%
Polk	6,766	6,560	153	53	3.04%

### **APPENDIX F**

## Occupied Housing Units with More than One Person Per Room

GEOGRAPHY	OCCUPIED HOUSING UNITS	1.00 OR LESS	1.01 TO 1.50	1.51 OR MORE	PERCENT MORE THAN 1 PERSON PER ROOM
Putnam	30,100	29,561	462	77	1.79%
Rhea	12,408	12,176	160	72	1.87%
Roane	21,532	21,195	246	91	1.57%
Robertson	24,730	24,225	365	140	2.04%
Rutherford	103,562	100,926	1,926	710	2.55%
Scott	8,368	8,319	30	19	0.59%
Sequatchie	5,549	5,298	144	107	4.52%
Sevier	36,982	35,997	685	300	2.66%
Shelby	349,956	340,745	7,165	2,046	2.63%
Smith	7,555	7,375	144	36	2.38%
Stewart	5,187	5,151	36	0	0.69%
Sullivan	65,896	64,867	688	341	1.56%
Sumner	63,240	62,428	580	232	1.28%
Tipton	21,355	20,968	325	62	1.81%
Trousdale	2,958	2,954	4	0	0.14%
Unicoi	7,628	7,467	111	50	2.11%
Union	7,271	7,021	177	73	3.44%
Van Buren	2,141	2,120	14	7	0.98%
Warren	15,584	15,356	166	62	1.46%
Washington	52,409	51,772	570	67	1.22%
Wayne	6,020	5,939	81	0	1.35%
Weakley	13,459	13,372	35	52	0.65%
White	9,677	9,478	171	28	2.06%
Williamson	71,043	70,233	610	200	1.14%
Wilson	45,431	44,885	411	135	1.20%
Tennessee	2,522,204	2,470,437	39,287	12,480	2.05%
South Region	44,105,282	42,834,938	920,818	349,526	2.88%
United States	117,716,237	113,783,631	2,732,978	1,199,628	3.34%

Source: American Community Survey (ACS), 5-Year Estimates, 2012-2016, U.S. Census Bureau

### **APPENDIX G**

# Total Home Sales Affordable to a Single Wage Earner Household in various Occupations by County, 2017

GEOGRAPHY	EDUCATOR	RN	POLICE	WAITER	CASHIER	RETAIL	ALL OCCUPATIONS
Anderson	75.8%	84.5%	69.8%	16.5%	17.3%	25.0%	55.7%
Bedford	71.0%	86.2%	55.8%	12.6%	13.5%	18.6%	38.8%
Benton	85.0%	92.5%	81.9%	46.9%	47.5%	56.9%	76.3%
Bledsoe	82.7%	90.4%	78.8%	36.5%	38.5%	44.2%	67.3%
Blount	54.8%	71.9%	43.3%	3.3%	3.7%	5.4%	25.3%
Bradley	57.0%	73.6%	48.0%	6.3%	7.0%	19.0%	28.8%
Campbell	73.3%	79.5%	68.7%	20.5%	22.5%	28.9%	56.0%
Cannon	77.5%	93.3%	79.8%	10.7%	15.7%	21.3%	57.3%
Carroll	92.2%	97.3%	87.9%	49.0%	49.4%	61.1%	78.2%
Carter	89.2%	91.8%	82.8%	22.6%	23.8%	31.8%	60.7%
Cheatham	50.4%	83.0%	53.7%	3.0%	3.9%	4.7%	28.3%
Chester	81.9%	97.3%	87.2%	24.5%	22.9%	29.3%	67.6%
Claiborne	75.0%	87.5%	70.8%	29.2%	27.7%	36.0%	53.8%
Clay	92.3%	98.1%	88.5%	53.8%	51.9%	76.9%	80.8%
Cocke	82.5%	90.1%	73.8%	20.6%	27.0%	34.9%	52.8%
Coffee	74.7%	87.0%	63.2%	14.9%	16.4%	26.6%	46.2%
Crockett	89.6%	96.8%	93.6%	39.2%	36.8%	41.6%	80.0%
Cumberland	58.9%	81.2%	53.0%	14.6%	13.3%	20.2%	36.8%
Davidson	26.0%	50.8%	29.5%	0.5%	0.9%	1.6%	12.6%
Decatur	81.2%	91.5%	75.2%	41.9%	42.7%	52.1%	65.0%
DeKalb	69.3%	81.4%	65.5%	21.6%	19.6%	31.4%	48.0%
Dickson	60.4%	83.8%	65.0%	6.7%	9.2%	11.8%	37.6%
Dyer	78.8%	90.2%	69.4%	33.9%	34.4%	40.2%	58.5%
Fayette	48.6%	72.9%	55.0%	4.4%	4.7%	7.1%	17.6%
Fentress	83.5%	95.1%	78.0%	31.3%	29.7%	41.8%	61.5%
Franklin	67.6%	78.1%	57.9%	15.4%	16.5%	24.2%	43.6%
Gibson	81.0%	91.9%	72.7%	36.5%	37.4%	44.3%	62.3%
Giles	85.5%	94.0%	79.4%	30.5%	32.6%	46.1%	68.8%
Grainger	76.6%	90.3%	71.7%	18.6%	19.3%	29.0%	53.1%
Greene	81.9%	89.9%	73.1%	20.7%	27.6%	33.0%	52.8%
Grundy	84.6%	90.1%	79.1%	39.6%	41.8%	54.9%	69.2%
Hamblen	80.0%	87.8%	61.1%	16.0%	16.0%	24.6%	46.9%
Hamilton	56.6%	63.9%	41.2%	7.8%	8.0%	11.9%	28.7%
Hancock	100.0%	100.0%	96.4%	57.1%	57.1%	60.7%	78.6%
Hardeman	97.9%	99.3%	89.0%	42.5%	43.8%	58.2%	82.2%

### **APPENDIX G**

# Total Home Sales Affordable to a Single Wage Earner Household in various Occupations by County, 2017

GEOGRAPHY	EDUCATOR	RN	POLICE	WAITER	CASHIER	RETAIL	ALL OCCUPATIONS
Hardin	73.3%	80.8%	62.8%	30.3%	30.8%	36.7%	52.8%
Hawkins	84.2%	90.4%	82.2%	18.9%	18.4%	25.5%	60.0%
Haywood	84.2%	94.7%	74.7%	25.3%	25.3%	37.9%	62.1%
Henderson	80.7%	87.6%	70.3%	28.5%	29.3%	38.6%	59.8%
Henry	88.2%	93.2%	80.5%	37.3%	37.5%	48.8%	70.1%
Hickman	86.9%	96.1%	88.9%	20.3%	30.7%	37.3%	77.8%
Houston	89.7%	93.1%	77.0%	36.8%	39.1%	54.0%	70.1%
Humphreys	85.3%	90.1%	75.9%	28.8%	28.8%	39.8%	60.2%
Jackson	88.9%	98.3%	86.3%	44.4%	41.9%	57.3%	72.6%
Jefferson	69.5%	76.7%	51.6%	9.2%	9.2%	18.2%	41.1%
Johnson	76.9%	86.3%	73.5%	32.5%	35.0%	43.6%	59.8%
Knox	55.3%	69.5%	48.5%	8.9%	9.5%	12.2%	33.6%
Lake	100.0%	100.0%	97.3%	78.4%	78.4%	86.5%	94.6%
Lauderdale	96.2%	99.4%	88.7%	43.4%	44.0%	61.0%	79.2%
Lawrence	85.7%	95.5%	77.3%	31.5%	33.5%	46.0%	64.6%
Lewis	87.0%	96.0%	76.0%	38.0%	40.0%	48.0%	65.0%
Lincoln	83.1%	92.9%	73.3%	23.3%	24.9%	41.3%	59.8%
Loudon	34.6%	46.5%	29.4%	4.7%	5.3%	6.8%	18.8%
Macon	86.9%	96.3%	88.8%	21.8%	26.8%	34.9%	77.3%
Madison	70.6%	85.7%	77.5%	19.6%	17.7%	21.8%	51.3%
Marion	84.4%	88.9%	75.3%	16.9%	17.3%	32.9%	61.7%
Marshall	64.3%	85.4%	51.9%	14.7%	15.2%	20.2%	35.4%
Maury	40.9%	72.1%	45.7%	6.3%	8.0%	9.2%	26.4%
McMinn	80.0%	87.0%	69.2%	24.5%	28.2%	32.1%	50.6%
McNairy	94.8%	98.1%	89.1%	45.0%	47.9%	61.6%	78.7%
Meigs	52.0%	64.7%	49.0%	14.7%	15.7%	19.6%	34.3%
Monroe	71.8%	82.6%	61.5%	16.1%	19.7%	24.6%	43.1%
Montgomery	76.0%	84.5%	55.0%	2.2%	2.3%	5.3%	23.1%
Moore	59.2%	69.0%	50.7%	9.9%	9.9%	21.1%	42.3%
Morgan	85.4%	92.2%	81.6%	32.0%	33.0%	37.9%	68.9%
Obion	86.9%	93.6%	79.8%	45.7%	45.7%	55.4%	73.0%
Overton	77.1%	91.2%	67.8%	21.6%	21.1%	31.7%	50.2%
Perry	93.3%	96.7%	88.3%	40.0%	40.0%	56.7%	70.0%
Pickett	73.0%	88.9%	68.3%	17.5%	14.3%	27.0%	47.6%
Polk	69.5%	78.1%	60.9%	28.9%	29.7%	41.4%	48.4%

### **APPENDIX G**

# Total Home Sales Affordable to a Single Wage Earner Household in various Occupations by County, 2017

GEOGRAPHY	EDUCATOR	RN	POLICE	WAITER	CASHIER	RETAIL	ALL OCCUPATIONS
Putnam	52.3%	79.5%	45.1%	8.0%	7.4%	13.5%	26.6%
Rhea	76.0%	87.5%	63.5%	11.8%	14.2%	17.7%	33.7%
Roane	67.0%	79.3%	62.6%	11.9%	12.8%	15.9%	46.3%
Robertson	52.1%	80.2%	56.3%	4.6%	5.7%	7.2%	28.2%
Rutherford	34.6%	66.8%	39.3%	0.3%	0.3%	0.6%	13.3%
Scott	79.3%	93.1%	69.0%	39.1%	36.8%	50.6%	60.9%
Sequatchie	79.7%	84.6%	63.4%	14.6%	14.6%	22.0%	52.0%
Sevier	53.5%	74.5%	37.4%	4.2%	5.4%	7.3%	17.9%
Shelby	59.3%	75.5%	64.0%	12.0%	13.3%	17.0%	35.6%
Smith	85.8%	96.1%	89.0%	22.4%	26.7%	35.2%	71.9%
Stewart	77.8%	91.7%	58.3%	21.5%	22.2%	31.3%	48.6%
Sullivan	73.2%	80.2%	71.3%	22.2%	20.5%	28.8%	54.6%
Sumner	30.0%	54.2%	33.1%	1.2%	2.0%	2.6%	16.3%
Tipton	74.1%	91.8%	78.9%	14.0%	14.5%	18.5%	43.4%
Trousdale	75.2%	91.3%	76.5%	11.4%	16.8%	20.8%	50.3%
Unicoi	85.1%	90.3%	78.3%	24.6%	24.6%	33.1%	60.0%
Union	77.0%	83.8%	71.6%	14.7%	14.7%	18.6%	56.9%
Van Buren	66.0%	74.5%	61.7%	23.4%	23.4%	27.7%	46.8%
Warren	80.1%	93.0%	77.0%	28.9%	27.8%	42.4%	60.7%
Washington	64.3%	72.7%	56.3%	7.8%	8.1%	12.8%	32.1%
Wayne	94.5%	96.7%	90.1%	67.0%	68.1%	73.6%	84.6%
Weakley	89.0%	94.5%	80.8%	37.7%	38.0%	51.0%	68.8%
White	82.4%	93.6%	72.9%	20.0%	19.0%	30.8%	53.2%
Williamson	2.7%	13.0%	3.7%	0.0%	0.0%	0.0%	1.1%
Wilson	14.5%	41.4%	17.6%	1.0%	1.2%	1.4%	6.2%
STATE	50.7%	67.8%	47.7%	9.0%	9.5%	13.1%	29.5%

### **APPENDIX H**

# Total Home Sales Affordable to a Single Wage Earner Household in various Occupations by County, 2016

GEOGRAPHY	EDUCATORS	RN	POLICE	WAITER	CASHIER	RETAIL	ALL OCCUPATIONS
Anderson	76.1%	86.7%	73.7%	18.6%	19.8%	26.6%	53.0%
Bedford	81.0%	91.7%	68.0%	20.3%	20.7%	27.3%	53.7%
Benton	90.6%	93.5%	87.8%	41.7%	42.4%	53.2%	72.7%
Bledsoe	79.4%	90.5%	73.0%	47.6%	47.6%	49.2%	65.1%
Blount	59.7%	77.2%	55.3%	5.2%	5.6%	8.3%	28.7%
Bradley	65.3%	83.6%	59.3%	7.2%	10.4%	19.2%	35.4%
Campbell	77.1%	83.9%	76.1%	25.6%	27.1%	32.4%	62.1%
Cannon	85.6%	95.9%	85.6%	17.8%	19.9%	24.7%	58.9%
Carroll	92.2%	97.8%	90.1%	59.9%	60.3%	67.2%	79.7%
Carter	90.0%	92.4%	87.0%	25.6%	27.2%	33.0%	63.6%
Cheatham	62.6%	84.1%	62.6%	4.0%	4.3%	8.8%	39.6%
Chester	91.0%	94.0%	91.0%	27.1%	25.3%	36.7%	68.1%
Claiborne	81.6%	91.0%	73.1%	27.8%	28.8%	36.8%	53.8%
Clay	91.0%	97.0%	91.0%	50.7%	53.7%	62.7%	74.6%
Cocke	88.7%	95.7%	84.0%	30.3%	34.6%	39.0%	59.3%
Coffee	77.0%	87.1%	65.0%	18.1%	18.3%	26.3%	53.9%
Crockett	94.8%	98.3%	94.8%	50.0%	50.0%	56.9%	82.8%
Cumberland	64.2%	86.4%	58.1%	12.0%	12.6%	19.9%	39.2%
Davidson	36.3%	57.6%	36.5%	1.2%	1.5%	2.9%	18.8%
Decatur	81.6%	91.2%	77.2%	50.0%	50.0%	62.3%	71.1%
DeKalb	75.0%	89.5%	70.2%	21.9%	21.9%	31.1%	51.3%
Dickson	73.1%	90.3%	73.3%	8.7%	9.7%	16.3%	51.7%
Dyer	85.0%	94.8%	76.8%	32.5%	32.8%	37.4%	59.6%
Fayette	55.0%	78.2%	61.7%	4.1%	4.4%	6.1%	21.8%
Fentress	86.9%	95.6%	81.9%	35.6%	36.3%	45.6%	64.4%
Franklin	73.7%	83.5%	60.9%	22.0%	22.6%	30.4%	51.0%
Gibson	80.6%	91.8%	73.5%	35.5%	35.9%	41.1%	57.2%
Giles	87.6%	94.9%	77.8%	30.3%	30.3%	42.7%	68.8%
Grainger	77.1%	90.5%	76.2%	20.0%	21.9%	28.6%	53.3%
Greene	82.5%	89.8%	75.0%	28.7%	33.7%	38.0%	54.9%
Grundy	89.4%	93.9%	83.3%	34.8%	34.8%	54.5%	78.8%
Hamblen	79.7%	89.9%	63.8%	16.5%	16.5%	25.0%	52.0%
Hamilton	55.0%	67.5%	44.8%	7.5%	7.9%	12.2%	31.2%
Hancock	95.5%	100.0%	90.9%	45.5%	45.5%	59.1%	81.8%
Hardeman	88.0%	95.5%	82.0%	39.8%	41.4%	49.6%	68.4%

### **APPENDIX H**

# Total Home Sales Affordable to a Single Wage Earner Household in various Occupations by County, 2016

GEOGRAPHY	EDUCATORS	RN	POLICE	WAITER	CASHIER	RETAIL	ALL OCCUPATIONS
Hardin	81.7%	88.0%	73.7%	29.6%	29.9%	35.9%	55.4%
Hawkins	84.8%	90.7%	84.2%	22.2%	20.1%	27.1%	64.7%
Haywood	89.5%	97.1%	85.7%	33.3%	34.3%	43.8%	68.6%
Henderson	81.9%	91.6%	74.8%	31.0%	31.0%	38.1%	61.5%
Henry	85.3%	92.2%	79.7%	37.9%	38.2%	47.7%	65.7%
Hickman	91.9%	98.5%	91.9%	24.2%	25.8%	38.9%	79.3%
Houston	92.6%	98.5%	86.8%	30.9%	30.9%	45.6%	70.6%
Humphreys	87.2%	94.7%	81.8%	32.1%	32.6%	38.0%	65.2%
Jackson	91.9%	97.0%	88.9%	49.5%	49.5%	62.6%	77.8%
Jefferson	68.2%	79.4%	55.2%	13.4%	13.4%	19.8%	44.0%
Johnson	73.7%	88.2%	67.1%	26.3%	27.6%	28.9%	42.1%
Knox	56.2%	71.0%	52.7%	8.4%	9.2%	12.0%	33.7%
Lake	97.0%	100.0%	93.9%	72.7%	75.8%	87.9%	93.9%
Lauderdale	95.1%	97.9%	94.4%	53.5%	53.5%	59.0%	79.2%
Lawrence	88.5%	95.7%	80.0%	36.4%	36.6%	47.7%	72.4%
Lewis	92.3%	97.8%	82.4%	36.3%	36.3%	48.4%	75.8%
Lincoln	85.3%	96.0%	75.3%	24.7%	25.7%	41.6%	66.0%
Loudon	43.5%	58.2%	39.2%	7.3%	8.1%	10.0%	23.4%
Macon	91.7%	97.3%	91.7%	35.3%	38.0%	47.7%	81.7%
Madison	81.7%	86.5%	81.9%	22.5%	22.1%	27.6%	55.6%
Marion	79.8%	89.4%	75.0%	23.9%	25.0%	33.5%	62.8%
Marshall	77.2%	93.1%	63.3%	18.0%	18.1%	24.3%	51.0%
Maury	59.3%	82.9%	59.5%	9.7%	10.9%	13.8%	37.0%
McMinn	81.9%	91.8%	73.9%	25.9%	30.5%	33.9%	50.0%
McNairy	93.5%	98.8%	88.2%	51.2%	51.8%	58.8%	74.7%
Meigs	70.6%	80.9%	58.8%	20.6%	22.1%	26.5%	41.2%
Monroe	76.4%	86.1%	64.9%	19.3%	22.7%	23.6%	42.9%
Montgomery	77.9%	85.9%	59.4%	2.6%	2.6%	5.7%	25.8%
Moore	59.4%	73.4%	46.9%	7.8%	7.8%	10.9%	37.5%
Morgan	92.7%	97.9%	92.7%	31.3%	33.3%	49.0%	74.0%
Obion	91.5%	95.0%	85.4%	43.4%	44.5%	54.8%	73.0%
Overton	85.9%	94.6%	79.3%	32.6%	32.6%	40.2%	54.9%
Perry	81.5%	92.6%	81.5%	59.3%	59.3%	72.2%	79.6%
Pickett	83.0%	94.3%	77.4%	30.2%	30.2%	41.5%	60.4%
Polk	75.0%	87.1%	72.4%	31.9%	38.8%	45.7%	58.6%

### **APPENDIX H**

# Total Home Sales Affordable to a Single Wage Earner Household in various Occupations by County, 2016

GEOGRAPHY	EDUCATORS	RN	POLICE	WAITER	CASHIER	RETAIL	ALL OCCUPATIONS
Putnam	65.8%	87.8%	57.1%	11.7%	12.1%	16.5%	35.8%
Rhea	79.8%	86.6%	73.3%	18.8%	20.9%	22.6%	42.8%
Roane	70.3%	81.6%	68.1%	15.4%	17.2%	22.2%	50.1%
Robertson	60.9%	84.3%	61.0%	4.7%	5.5%	8.3%	36.5%
Rutherford	53.1%	77.2%	53.3%	0.7%	0.8%	2.2%	29.6%
Scott	91.7%	96.9%	87.5%	47.9%	47.9%	58.3%	80.2%
Sequatchie	79.0%	86.2%	71.0%	18.8%	20.3%	30.4%	55.1%
Sevier	59.7%	81.8%	44.7%	4.2%	5.8%	7.5%	19.6%
Shelby	59.1%	76.7%	65.2%	10.4%	11.9%	15.9%	35.0%
Smith	87.1%	97.5%	87.1%	24.6%	28.3%	38.8%	73.8%
Stewart	82.1%	90.6%	76.4%	24.5%	24.5%	35.8%	55.7%
Sullivan	75.5%	81.7%	74.4%	24.0%	22.2%	28.0%	56.4%
Sumner	40.2%	64.8%	40.3%	2.0%	2.3%	4.0%	22.2%
Tipton	76.2%	93.2%	83.8%	12.9%	13.8%	16.9%	48.8%
Trousdale	83.9%	96.8%	83.9%	15.1%	18.3%	23.7%	68.8%
Unicoi	89.4%	92.5%	86.3%	23.0%	24.2%	30.4%	60.9%
Union	75.0%	79.5%	73.7%	14.7%	15.4%	21.2%	55.1%
Van Buren	73.8%	85.7%	71.4%	38.1%	38.1%	38.1%	52.4%
Warren	85.9%	95.9%	80.8%	35.4%	35.6%	46.7%	65.1%
Washington	67.0%	72.4%	62.3%	11.7%	12.9%	16.5%	36.9%
Wayne	97.5%	100.0%	88.8%	60.0%	60.0%	68.8%	81.3%
Weakley	91.9%	96.3%	86.3%	44.4%	45.9%	51.5%	64.8%
White	83.6%	96.4%	80.7%	27.9%	29.3%	41.1%	63.2%
Williamson	6.4%	17.2%	6.6%	0.1%	0.1%	0.2%	1.7%
Wilson	29.7%	58.3%	29.8%	1.6%	1.9%	2.7%	13.8%
STATE	56.4%	72.3%	53.5%	9.8%	10.4%	14.0%	33.8%

### **APPENDIX I**

# Percentage of Tennessee Households that are Owner-Occupied, by County

COUNTY	HOMEOWNERSHIP RATE (ACS, 2005-2009)	HOMEOWNERSHIP RATE (ACS, 2012-2016)
Anderson	71.60%	67.04%
Bedford	67.36%	67.23%
Benton	81.24%	76.81%
Bledsoe	77.38%	75.08%
Blount	76.76%	74.72%
Bradley	67.61%	65.32%
Campbell	72.89%	69.16%
Cannon	75.77%	72.51%
Carroll	77.17%	72.62%
Carter	72.65%	71.05%
Cheatham	79.73%	79.10%
Chester	74.72%	72.79%
Claiborne	78.41%	70.88%
Clay	77.56%	75.79%
Cocke	73.95%	68.55%
Coffee	72.13%	67.90%
Crockett	70.74%	69.87%
Cumberland	79.77%	78.29%
Davidson	59.03%	53.96%
Decatur	73.35%	75.67%
DeKalb	75.40%	67.54%
Dickson	74.90%	72.75%
Dyer	64.75%	63.53%
Fayette	81.00%	79.31%
Fentress	76.59%	75.55%
Franklin	77.00%	73.70%
Gibson	70.38%	71.09%
Giles	75.58%	69.71%
Grainger	83.06%	78.77%
Greene	73.87%	71.78%
Grundy	80.20%	76.50%
Hamblen	70.56%	66.25%
Hamilton	66.96%	64.58%
Hancock	70.04%	77.10%
Hardeman	74.09%	71.31%

### **APPENDIX I**

# Percentage of Tennessee Households that are Owner-Occupied, by County

COUNTY	HOMEOWNERSHIP RATE (ACS, 2005-2009)	HOMEOWNERSHIP RATE (ACS, 2012-2016)
Hardin	76.50%	77.40%
Hawkins	76.34%	74.50%
Haywood	64.91%	60.98%
Henderson	76.20%	71.45%
Henry	77.20%	73.36%
Hickman	77.39%	76.27%
Houston	74.91%	76.53%
Humphreys	77.00%	76.80%
Jackson	75.33%	76.34%
Jefferson	76.45%	73.45%
Johnson	77.16%	75.13%
Knox	67.21%	64.00%
Lake	58.54%	59.91%
Lauderdale	66.42%	58.47%
Lawrence	77.85%	74.94%
Lewis	75.38%	76.91%
Lincoln	77.50%	72.33%
Loudon	79.06%	77.02%
Macon	75.28%	73.50%
Madison	66.81%	63.54%
Marion	75.46%	72.05%
Marshall	74.16%	71.16%
Maury	72.80%	67.67%
McMinn	73.96%	73.04%
McNairy	80.79%	73.87%
Meigs	76.80%	78.35%
Monroe	76.30%	75.78%
Montgomery	64.93%	59.07%
Moore	84.56%	80.00%
Morgan	82.81%	81.14%
Obion	69.07%	66.71%
Overton	79.56%	78.22%
Perry	78.84%	82.02%
Pickett	72.09%	84.92%
Polk	75.82%	76.10%

### **APPENDIX I**

# Percentage of Tennessee Households that are Owner-Occupied, by County

COUNTY	HOMEOWNERSHIP RATE (ACS, 2005-2009)	HOMEOWNERSHIP RATE (ACS, 2012-2016)
Putnam	64.50%	61.77%
Rhea	74.17%	70.16%
Roane	77.43%	74.59%
Robertson	76.11%	75.16%
Rutherford	69.15%	65.36%
Scott	69.62%	70.46%
Sequatchie	80.08%	75.27%
Sevier	70.48%	67.70%
Shelby	61.72%	56.19%
Smith	79.34%	73.61%
Stewart	80.08%	76.00%
Sullivan	74.96%	72.93%
Sumner	74.79%	72.96%
Tipton	75.11%	70.41%
Trousdale	80.97%	76.57%
Unicoi	74.15%	72.98%
Union	79.53%	75.67%
Van Buren	80.13%	88.28%
Warren	72.29%	69.22%
Washington	68.64%	65.67%
Wayne	81.59%	83.04%
Weakley	67.72%	68.02%
White	77.18%	77.65%
Williamson	83.25%	80.54%
Wilson	81.72%	77.00%
Tennessee	69.72%	66.33%
South Region	68.24%	64.81%
United States	66.89%	63.61%

Source: American Community Survey (ACS), 5-Year Estimates, U.S. Census Bureau