

# 2020 HOUSING INDICATORS: COMPARING TN'S CITIES

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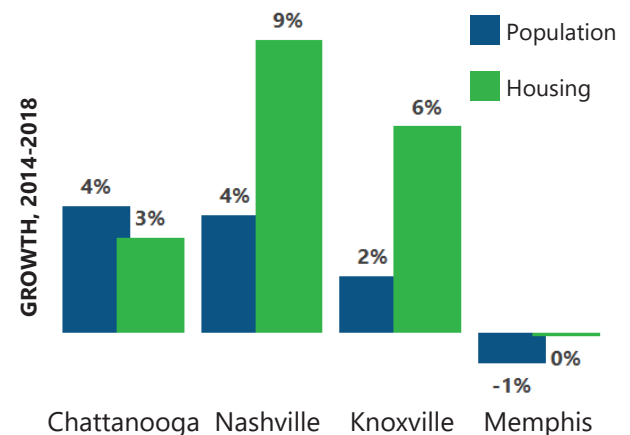
## INTRODUCTION

This report explores housing markets in Tennessee's four largest cities. The data reflect the state of the market pre-COVID-19. This baseline will inform future evaluation of the pandemic's impact on the housing markets of these cities. Using mostly 2018 and 2019 data, Nashville appears consistently as a high-growth, high-demand and high-income city, pulling away from the other three cities in these categories. Chattanooga stands out as having the lowest levels of housing cost burden, due to its relative balance of household incomes, property values, and rents. Knoxville and Memphis stand out as having the most affordable housing opportunities, particularly in the homeownership context.

## HOUSING & POPULATION

	Population	5 Year Change*	Housing Units	5 Year Change*
Nashville	692,587	+4%	319,508	+9%
Memphis	650,632	-1%	300,305	-0.1%
Knoxville	187,514	+2%	93,937	+6%
Chattanooga	180,551	+4%	85,059	+3%

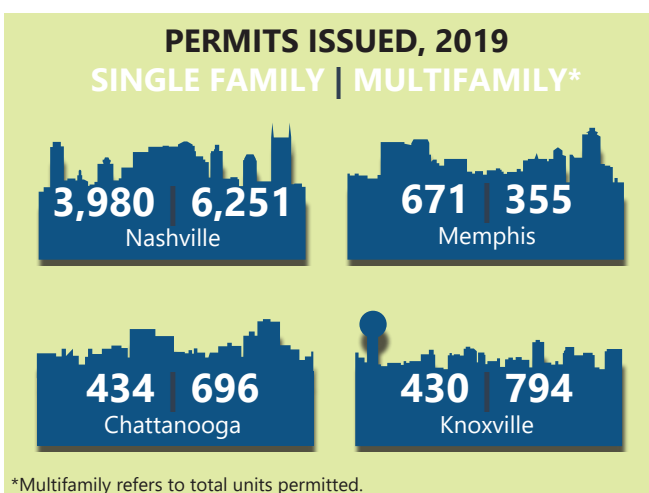
\*Change from 2014-2018



### Both Nashville and Knoxville have added housing much faster than population.

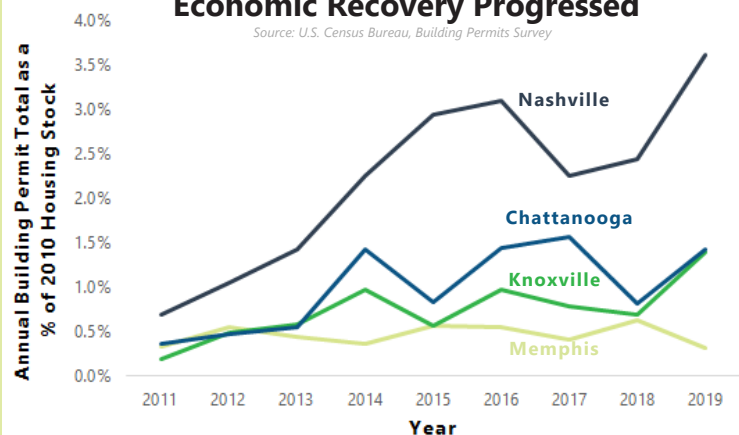
Tennessee's four largest cities accounted for 28% of the state's growth in housing stock, but just 13% of the state's population growth from 2014 through 2018. However, as shown above, market dynamics in the four cities vary. Housing expanded at a faster rate than population in both Nashville and Knoxville. The additional housing may relieve existing pressure on affordability in these markets.

## NEW HOUSING CONSTRUCTION



### Building Activity Increased as the Economic Recovery Progressed

Source: U.S. Census Bureau, Building Permits Survey



Changes in housing stock, shown in the prior section, differ from new housing being built. Changes in a city's housing stock are also impacted by demolitions of existing housing, as well as existing buildings being converted to, or away from, housing. This makes new residential construction permits a useful indicator.

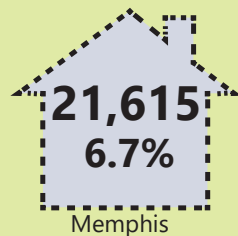
With the exception of Memphis, new housing construction has picked up across the four cities as economic conditions improved. Even so, Nashville's rate of new construction has been considerable, with building activity from 2011-2019 totaling 20% of its 2010 housing stock.

## THDA HOUSING INDICATORS: **COMPARING TN'S CITIES**

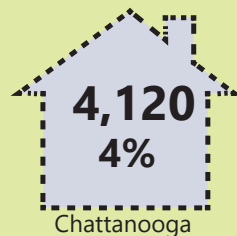


### VACANT HOUSING

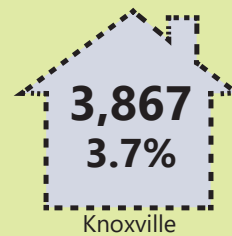
**Memphis Has Highest Rate of Vacant Housing**



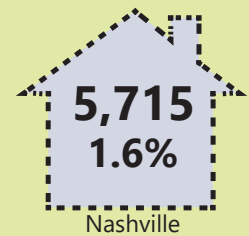
Memphis



Chattanooga



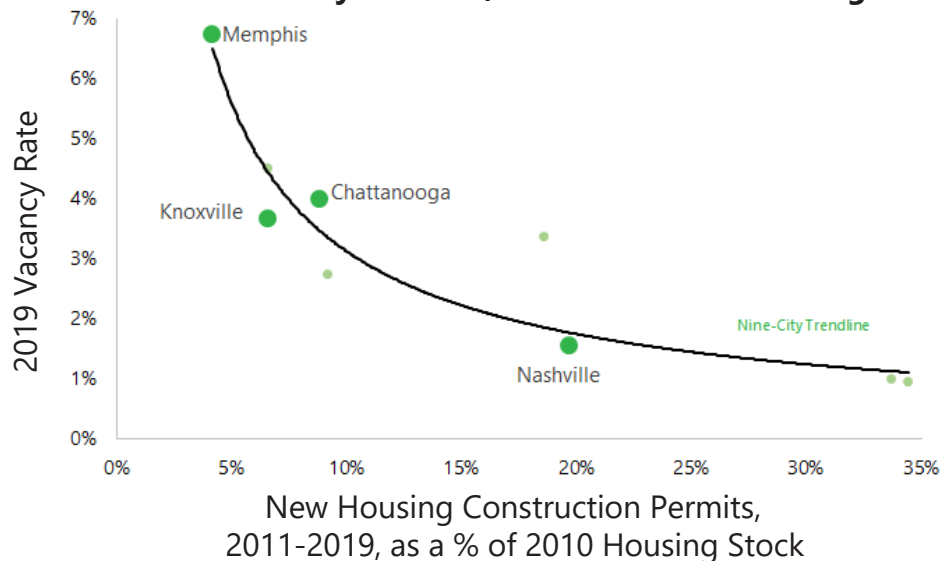
Knoxville



Nashville

**Roughly 1 in 15 housing units in Memphis were vacant during 2019.** Source: U.S. Postal Service

### Where Vacancy is Lower, New Construction is Higher



Low vacancies are characteristic of supply-constrained markets. A lack of available units often puts upward pressure on rents and home prices, signaling the need for additional housing. Conversely, high rates of housing vacancy are often characteristic of markets with surplus housing stock.

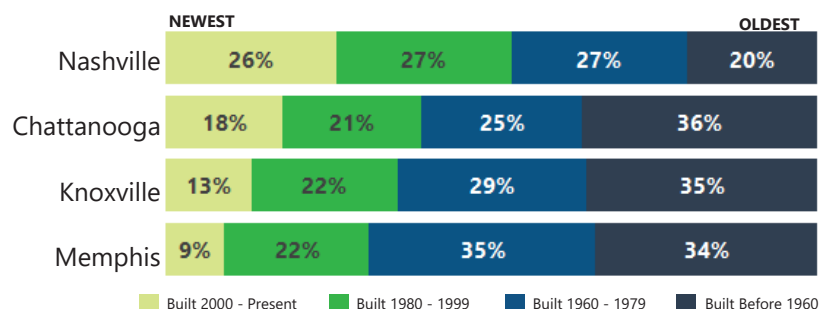
Nashville has a low rate of vacancy (and a higher rates of newly issued building permits), while Memphis, which is experiencing slight population loss, has the highest rate of vacancy of the four cities and the lowest construction levels.

Note: the above nine-city trendline includes data for the four cities of this report, and the 5 next largest cities which are the focus of a companion indicators brief. They are: Murfreesboro, Clarksville, Jackson, Franklin, and Johnson City.

Source: U.S. Postal Service & Census Bureau Building Permits Survey

### AGE OF HOUSING STOCK

#### HOUSING STOCK, BY YEAR BUILT



The age of a city's housing stock can signal future housing needs. Nashville, with its construction boom, has the newest housing stock overall.

Tennessee's other three major cities have much higher proportions of their housing stock that was built before 1960 (over 1 in 3).

Cities with an aging housing stock can face higher rates of demolition and higher needs of housing repair. Conversely, older, depreciated housing can also be more affordable to rent or own.

**Roughly 2/3 of housing units in Memphis and Knoxville were built before 1980.**

However, older housing is not necessarily depreciated; cities with stable population totals can rely heavily on renovation of existing units.

## THDA HOUSING INDICATORS: COMPARING TN'S CITIES



### HOMEOWNERSHIP RATES

**66%** of Tennessee households are homeowners, while rates of homeownership are much lower in its largest four cities.

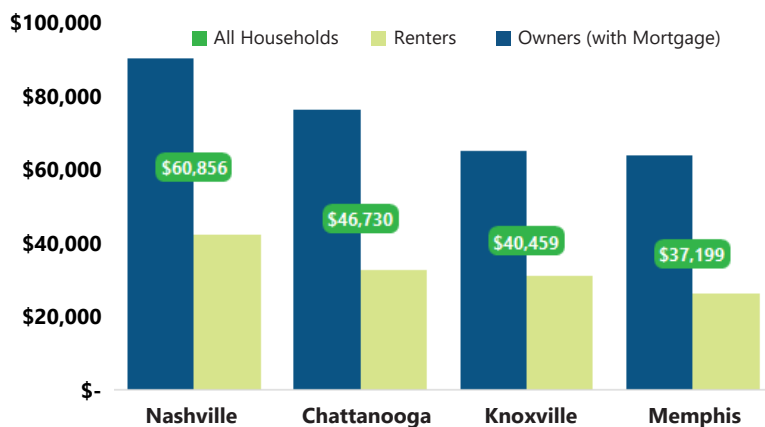
Knoxville and Memphis's homeownership rates have ticked upward slightly in the past two years, while Nashville's rate has inched above Chattanooga's over the same time frame.



<b>54%</b>	<b>53%</b>
Nashville	Chattanooga
<b>47%</b>	<b>46%</b>
Memphis	Knoxville

### HOUSEHOLD INCOMES

#### MEDIAN HOUSEHOLD INCOME, BY OCCUPANCY



There are meaningful differences in household incomes between the four cities. While median household income in Nashville, Chattanooga, and Knoxville has increased by 10 percent or more over the last 2 years, it has declined in Memphis during this same time period (not adjusting for inflation).

Across all four cities, median income for homeowners with a mortgage is at least twice as high as that of renter households. The biggest gaps are present in Memphis and Chattanooga, where the median homeowner with a mortgage earns 2.4 times the median renter household.

### HOUSING COST & COST BURDEN

#### RENTER COST BURDEN

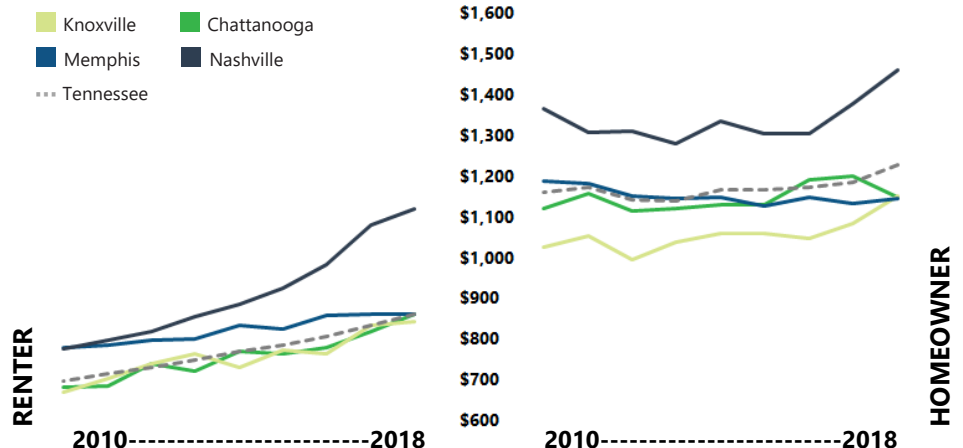
	30-49%	50%+	Total
Memphis	26%	29%	55%
Nashville	26%	21%	47%
Knoxville	23%	23%	46%
Chattanooga*	22%	22%	43%

#### HOMEOWNER COST BURDEN

	30-49%	50%+	Total
Knoxville	21%	10%	31%
Memphis	18%	13%	31%
Nashville	16%	11%	27%
Chattanooga	14%	12%	26%

\*Totals may not add up due to rounding.

#### MEDIAN MONTHLY HOUSING COSTS



While housing costs are lower among renters, household incomes are substantially lower, and renter households, on average, have far higher rates of housing cost burden. Data on cost burden show Chattanooga households to have the best match of housing costs to incomes.

The progression of housing costs data over the past decade shows a changing landscape, particularly in Nashville. In 2010, Memphis was estimated to have a slightly higher median gross rent (MGR) than Nashville. Since then, Nashville's MGR has grown by 44 percent, compared to just 10 percent in Memphis. As a result, the median cost of renting a housing unit in Nashville is nearly equivalent to the median cost of owning a home in the other three cities.

## THDA HOUSING INDICATORS: COMPARING TN'S CITIES

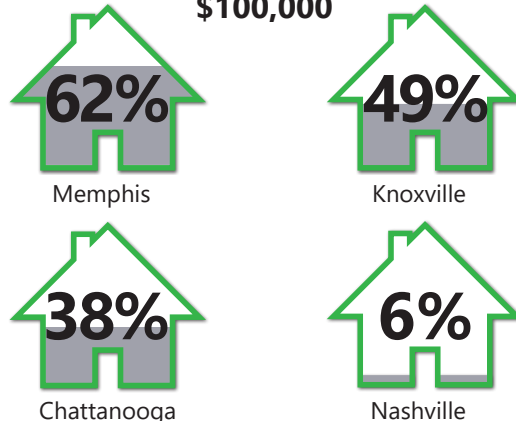


### PROPERTY VALUES

The distance between the median Nashville home value and the next highest city, Chattanooga, signals the scope of difference in these four markets.

This is also illustrated when we examine homes valued beneath \$100,000. As shown in the following sections, Nashville's high home values reveal constrained housing options for workers in low-wage occupations.

#### SHARE OF SINGLE FAMILY HOMES VALUED AT LESS THAN \$100,000



#### MEDIAN VALUE OF SINGLE FAMILY HOME, 2019

<b>\$214,100</b> Nashville	<b>\$124,400</b> Chattanooga
<b>\$101,700</b> Knoxville	<b>\$70,500</b> Memphis

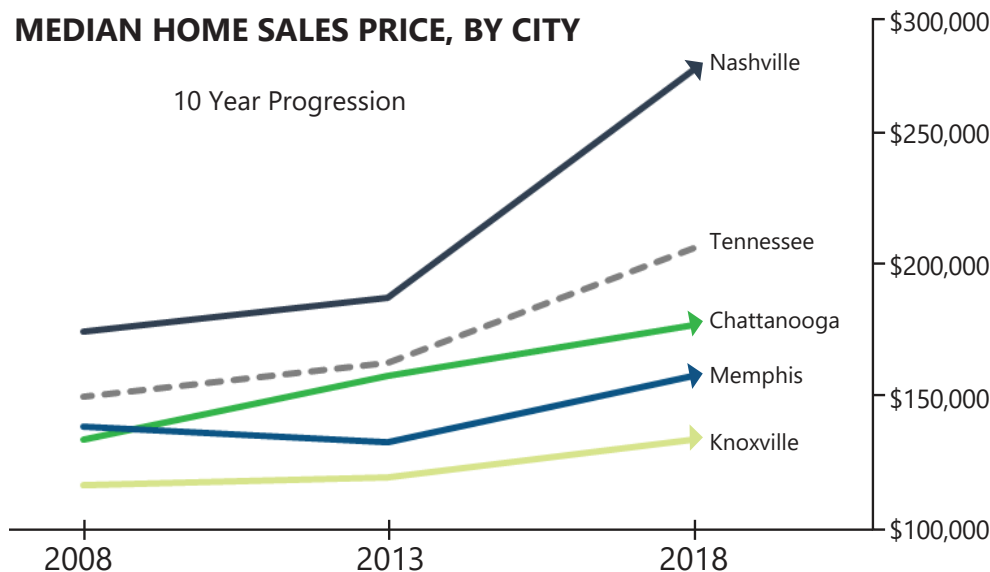
Source: Tennessee Comptroller's Office, Office of Local Government

Roughly **3/5** of Memphis single family homes are valued at less than \$100,000. (Including vacant homes)

### HOME PURCHASES

As was the case with rental costs, Nashville's home sale prices and volume have outpaced the other three cities in recent years. Nashville's home sales price and volume increases over time have also exceeded the other three cities. However, the volume of homes sold increased by at least 50 percent in all four cities from 2013 to 2018.

#### MEDIAN HOME SALES PRICE, BY CITY



Between 2008 and 2018, Nashville's median home sales price grew by **58%**

#### 2018 HOME SALES VOLUME AS A % OF SINGLE FAMILY HOMES

<b>7%</b> Nashville	<b>7%</b> Knoxville
<b>5%</b> Chattanooga	<b>3%</b> Memphis

### LOWER HOME PRICES IMPROVE ACCESS TO HOMEOWNERSHIP

#### AFFORDABLE TO A WAITER OR SALES CLERK



<b>22%</b> Knoxville	<b>21%</b> Memphis
<b>15%</b> Chattanooga	<b>&lt;1%</b> Nashville

#### AFFORDABLE TO EMT OR OFFICE WORKER\*



<b>66%</b> Knoxville	<b>51%</b> Memphis
<b>42%</b> Chattanooga	<b>14%</b> Nashville

Source: Bureau of Labor Statistics; Tennessee Comptroller's Office

\* Occupations earning the median area wage

# THDA HOUSING INDICATORS: **COMPARING TN'S CITIES**



## HOUSING + TRANSPORTATION

### AVERAGE TRAVEL TIME TO WORK, BY CITY

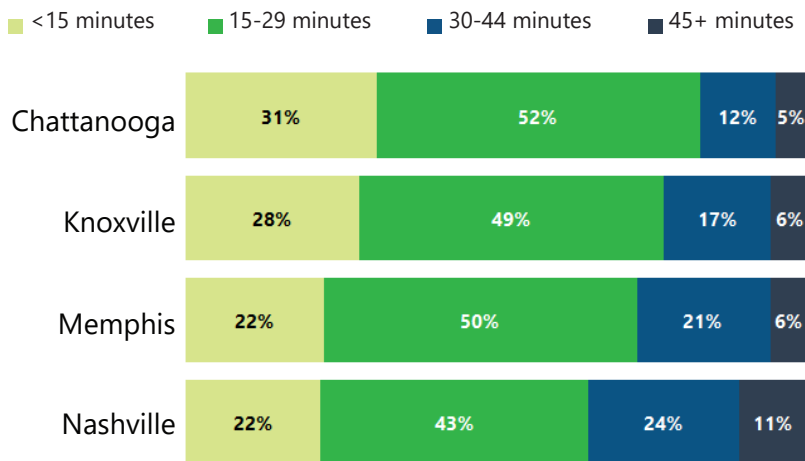


Nashville workers have the longest commutes, on average, of the four major cities, and its commutes are getting longer. One in every ten workers residing in Nashville commutes 45 minutes or longer to work. This is roughly double the proportion for each of the other three major cities. This may be tied, at least in part, to the fact that 17% of Nashville's resident workers commute outside Davidson County.

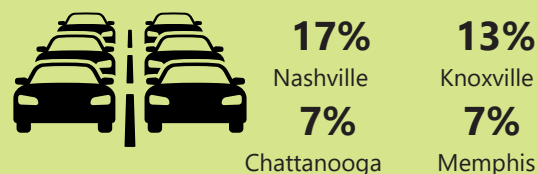
Commute times can be attributable to traffic, geographic dispersion of employment, geographic dispersion of housing, and the capacity and reach of transit systems. Transportation data has broad implications for a city's housing market. Increased commute times will typically translate to higher costs for households.

**Nashville has the highest share of employed residents who commute out of county, but is still lower than the Tennessee rate of **29%**.**

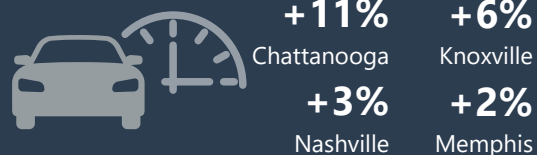
### COMMUTE TIMES, BY CITY



### SHARE OF RESIDENTS WHO COMMUTE OUT OF COUNTY (INCLUDING OUT OF STATE)



### % CHANGE IN AVERAGE TRAVEL TIME TO WORK OVER FIVE YEARS



### PERCENT OF WORKERS WHO WORKED FROM HOME



## THDA HOUSING INDICATORS: COMPARING TN'S CITIES



### APPENDIX A: INDICATORS REFERENCE TABLE

HOUSING STOCK	CHATTANOOGA	KNOXVILLE	MEMPHIS	NASHVILLE	TN	CURRENT AS OF:
Total Housing Units	85,059	93,937	300,305	319,508	2,992,412	2018
Single Family Units	56,621	56,654	196,324	199,347	2,417,062	2018
Multifamily Units	28,438	37,283	103,981	120,161	575,350	2018
Total Population	180,551	187,514	650,632	692,587	6,770,010	2018
Change in Housing Stock from 2014-2018	2,418	5,633	-332	26,578	122,993	2018
	2.9%	6.4%	-0.1%	9.1%	4.3%	2018
Change in Single Family Units, 2014-2018	4,818	5,282	-2,734	17,989	94,648	2018
	9.3%	10.3%	-1.4%	9.9%	4.1%	2018
Change in Multifamily Units, 2014-2018	-2,400	351	2,402	8,589	28,345	2018
	-7.8%	1.0%	2.4%	7.7%	5.2%	2018
Change in Population, 2014-2018	6,773	3,222	-6,244	24,240	220,658	2018
% Change in Population, 2014-2018	3.9%	1.7%	-1.0%	3.6%	3.4%	2018
New Construction Housing Units Permitted, 2019	1,130	1,224	1,026	10,231	41,361	2019
Single Family Permits, 2019	434	430	671	3,980	29,598	2019
Multifamily Units Permitted, 2019	696	794	355	6,251	11,763	2019
New Construction Housing Units Permitted, 2011-2019	7,051	5,826	13,335	56,079	271,390	2019
New Construction Housing Units Permitted, 2011-2019, as a % of 2010 Housing Stock	8.9%	6.6%	4.2%	19.7%	9.7%	2019
HOUSING VACANCY	CHATTANOOGA	KNOXVILLE	MEMPHIS	NASHVILLE	TN	CURRENT AS OF:
Vacant Residential Addresses	4,120	3,867	21,615	5,715	175,283	2019
Share of Residential Addresses that are Vacant	4.0%	3.7%	6.7%	1.6%	5.2%	2019
Share of Vacancies that have been Vacant Longer than 2 Years	74%	69%	87%	53%	73%	2019
AGE OF HOUSING STOCK	CHATTANOOGA	KNOXVILLE	MEMPHIS	NASHVILLE	TN	CURRENT AS OF:
% of Housing Built before 1960	36%	35%	34%	20%	19%	2018
% of Housing Built from 1960 to 1979	25%	29%	35%	27%	25%	2018
% of Housing Built from 1980 to 1999	21%	22%	22%	27%	32%	2018
% of Housing Built 2000 or Later	18%	13%	9%	26%	24%	2018
HOUSING TENURE	CHATTANOOGA	KNOXVILLE	MEMPHIS	NASHVILLE	TN	CURRENT AS OF:
Homeownership Rate	53%	46%	46%	54%	66%	2018
Rate of Renters	47%	55%	54%	46%	34%	2018

Note: Indicators shown in BLUE denote measures of change over time.



# THDA HOUSING INDICATORS: **COMPARING TN'S CITIES**



HOUSEHOLD INCOME	CHATTANOOGA	KNOXVILLE	MEMPHIS	NASHVILLE	TN	CURRENT AS OF:
Median Household Income	\$46,730	\$40,459	\$37,199	\$60,856	\$52,375	2018
Median Renter Household Income	\$32,540	\$30,919	\$26,360	\$42,284	\$33,460	2018
Median Household Income, Homeowners with a Mortgage	\$76,608	\$65,245	\$63,869	\$90,688	\$78,713	2018
MONTHLY HOUSING COST	CHATTANOOGA	KNOXVILLE	MEMPHIS	NASHVILLE	TN	CURRENT AS OF:
Median Gross Rent	\$863	\$843	\$863	\$1,121	\$861	2018
Median Monthly Housing Costs, Homeowners with a Mortgage	\$1,147	\$1,150	\$1,144	\$1,459	\$1,228	2018
Median Rental Costs as a % of Median Homeownership Costs (with a mortgage)	75%	73%	75%	77%	70%	2018
PROPERTY VALUE	CHATTANOOGA	KNOXVILLE	MEMPHIS	NASHVILLE	TN	CURRENT AS OF:
Median Home Value	\$124,400	\$101,700	\$70,500	\$214,100	--	2019
% Change in Median Home Value from One Year Prior	3%	1%	0%	1%	--	2019
Share of Single Family Homes Valued at Less than \$100,000	37.8%	48.8%	62.1%	5.9%	--	2019
Median Ratio of Land Appraisal to Overall Property Appraisal	20.0%	16.6%	19.7%	22.1%	--	2019
PURCHASING A HOME	CHATTANOOGA	KNOXVILLE	MEMPHIS	NASHVILLE	TN	CURRENT AS OF:
2018 Median Home Sales Price	\$180,000	\$135,000	\$159,900	\$280,000	\$210,000	2018
2013 Median Home Sales Price	\$160,000	\$120,000	\$134,000	\$190,550	\$165,000	2013
2008 Median Home Sales Price	\$135,000	\$117,000	\$140,000	\$177,163	\$151,500	2008
Total Home Sales, 2018	3,052	3,678	5,095	14,653	107,560	2018
2018 Home Sales as a % of Single Family Homes	5.4%	6.5%	2.6%	7.4%	4.5%	2018
Share of 2018 Home Sales Affordable to a Median Wage Earner	42%	66%	51%	14%	--	2018
Share of 2018 Home Sales Affordable to a Restaurant Server	15%	22%	21%	1%	--	2018
Mortgage Application Denial Rate	11.7%	9.1%	10.5%	8.3%	9.4%	2018
Share of High-Cost Mortgages	7.5%	5.8%	9.1%	4.9%	7.3%	2018
HOUSING AFFORDABILITY	CHATTANOOGA	KNOXVILLE	MEMPHIS	NASHVILLE	TN	CURRENT AS OF:
Share of Renters that are Cost Burdened	43.2%	46.1%	54.5%	47.3%	44.1%	2018
Share of Renters that are Severely Cost Burdened	21.5%	22.9%	29.0%	20.8%	20.7%	2018
Share of Homeowners that are Cost Burdened (with a Mortgage)	25.7%	31.2%	30.6%	26.7%	24.2%	2018
Share of Homeowners that are Severely Cost Burdened (with a Mortgage)	12.1%	10.1%	13.1%	11.1%	9.1%	2018

Note: Indicators shown in **BLUE** denote measures of change over time.

## THDA HOUSING INDICATORS: **COMPARING TN'S CITIES**



COMMUTING TO EMPLOYMENT	CHATTANOOGA	KNOXVILLE	MEMPHIS	NASHVILLE	TN	CURRENT AS OF:
Average Commute Time to Work (in minutes)	20.6	20.6	21.9	24.5	25.4	2018
Percent Change in Mean Travel Time to Work over 5 Years	10.8%	6.2%	1.9%	2.5%	3.7%	2018
Share of Workers commuting 15 Minutes or Less	30.7%	27.8%	22.1%	21.7%	24.7%	2018
Share of Workers commuting between 15 and 30 Minutes	51.9%	49.1%	50.3%	43.1%	39.6%	2018
Share of Workers commuting between 30 and 45 Minutes	12.1%	17.2%	21.4%	24.2%	20.8%	2018
Share of Workers commuting 45 Minutes or More	5.2%	5.9%	6.0%	11.1%	14.9%	2018
Percent of Resident Workers who Commute out of County	7.2%	12.7%	7.0%	16.9%	28.8%	2018
Percent of Resident Workers who Worked from Home Full-Time	6.0%	4.0%	2.2%	5.7%	4.7%	2018

Note: Indicators shown in **BLUE** denote measures of change over time.





## **APPENDIX B: SOURCES**

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### **HOUSING STOCK**

*American Community Survey, 1-Year Estimates*

Total Housing Units (Single and Multifamily)

Total Population

Change in Housing Stock from 2014-2018 (Single and Multifamily)

Change in Population, 2014-2018

*Census Bureau Building Permits Survey*

New Construction Units Permitted, 2011-2019 (Single and Multifamily)

### **HOUSING VACANCY**

*U.S. Postal Service. Accessed through HUD.*

### **AGE OF HOUSING STOCK, HOUSING TENURE, HOUSEHOLD INCOME, AND MONTHLY HOUSING COST**

*American Community Survey, 1-Year Estimates*

### **PROPERTY VALUE**

*THDA Tabulations of Data from Tennessee Comptroller's Office, Division of Property Assessments*

### **PURCHASING A HOME**

*THDA Tabulations of Data from Tennessee Comptroller's Office, Division of Property Assessments*

2018, 2013, and 2008 Median Home Sales Price

Total Home Sales, 2018

*Bureau of Labor Statistics, Occupational Employment Statistics*

Share of 2018 Home Sales Affordable to a Median Wage Earner or Restaurant Server

*Home Mortgage Disclosure Act (HMDA)*

Mortgage Application Denial Rate

Share of High-Cost Mortgages

### **HOUSING AFFORDABILITY**

*American Community Survey, 1-Year Estimates*

### **COMMUTING TO EMPLOYMENT**

*American Community Survey, 1-Year Estimates*