

| TENNESSEE DASHBOARD | 3RD | QUARTER 2020 | (percent change over the year) |
|---------------------|-----|--------------|--------------------------------|
|---------------------|-----|--------------|--------------------------------|

| Weekly Unemployment Claims | | +546.77 | Total Home Permits* | +33.10 |
|--|---|---------|--|--------|
| Total Nonfarm Employment* | • | -4.58 | Mortgage Tax Collections | +34.89 |
| Unemployment Rate (percentage points)* | | +4.90 | Real Estate Transfer Tax Collections | +8.24 |
| Homeowner Vacancy Rate (percentage points) | | -1.60 | Home Prices* | +6.13 |
| Rental Vacancy Rate (percentage points) | | -3.40 | Mortgages Past Due (percentage points) | +2.43 |
| Single-Family Home Permits* | | +17.33 | Foreclosure Rate** (percentage points) | -0.18 |
| | | | | |

*seasonally adjusted **FHA foreclosure ban in effect until 2021

positive outcome for economy

negative outcome for economy

Economic Overview

Tennessee's Q3 2020 indicators reveal signs of recovery from pandemic shutdowns

Signs of recovery can be seen in Tennessee's third quarter data after the acute economic crisis brought on by the COVID-19 pandemic. Several indicators are showing strong outcomes this period. Single-family and total home permits have jumped in number from last year, by 17.33% and 34.10%, respectively. Additionally, mortgage tax collections have increased by 34.89% over the year.

However, some indicators are rebounding more slowly. Weekly initial claims for unemployment insurance remain at record highs, averaging at 15,406 for the quarter. Although this amount reveals a significant improvement from the second quarter (-61.25%), it is a 546.77% increase compared

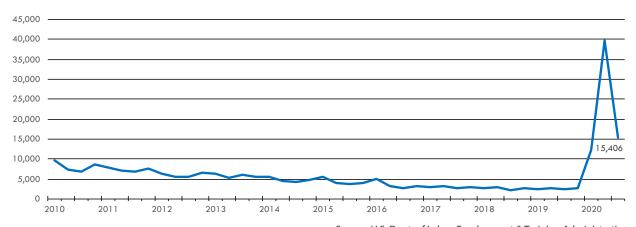
to 2019. Claim numbers gradually dwindled, going from 24,920 in the first week of the period to 10,311 in the last week.

Employment levels across all industries are down from 2019 numbers but are higher than last quarter. The manufacturing industry was the most negatively affected sector, as it sustained a decrease of 8.79% over the year, but it also improved the most over the quarter, as numbers increased by 6.08%. Total employment rose by 6.40% over the quarter, and the unemployment rate fell by 3.77 percentage points over the quarter.



Figure 1. Tennessee initial claims for unemployment insurance

(quarterly averages of weekly data, seasonally adjusted)



Source: U.S. Dept. of Labor, Employment & Training Administration

Table 1. Selected Tennessee employment indicators (thousands, seasonally adjusted)

| | 2019.3 | 2019.4 | 2020.1 | 2020.2 | 2020.3 |
|----------------------------------|--------|--------|--------|--------|--------|
| Employment by Industry (Nonfarm) | | | | | |
| Total Nonfarm | 3,128 | 3,141 | 3,153 | 2,858 | 2,985 |
| Goods-Producing Sectors | 491 | 487 | 487 | 437 | 455 |
| Manufacturing | 356 | 353 | 354 | 306 | 325 |
| Services-Providing Sectors | 2,638 | 2,654 | 2,666 | 2,422 | 2,530 |
| Labor Force | 3,355 | 3,367 | 3,369 | 3,227 | 3,289 |
| Total Employment | 3,242 | 3,256 | 3,256 | 2,837 | 3,019 |
| Unemployed | 113 | 112 | 113 | 390 | 271 |
| Unemployment Rate | 3.37% | 3.30% | 3.33% | 12.03% | 8.27% |

Source: Bureau of Labor Statistics

Vacancy Rate

Tennessee homeowner vacancy rates (0.80%) stayed constant over the quarter but decreased by 1.60 percentage points compared to last year. The rental vacancy rate (8.40%) has decreased over the quarter and the year, -0.70 percentage points and -3.40 percentage points, respectively. Tennessee's rental vacancy rate continues to exceed that of the U.S. by 2.0 percentage points.

The U.S. homeowner vacancy rate is at 0.90%. Like Tennessee, this figure remained constant compared to last quarter, while decreasing 0.50 percentage points compared to last year. The rental vacancy rate in the U.S. is 6.40%. This is a 0.40 percentage point decrease over the year. However, this is a 0.70 percentage point increase compared to last quarter.

Figure 2. Homeowner vacancy rate

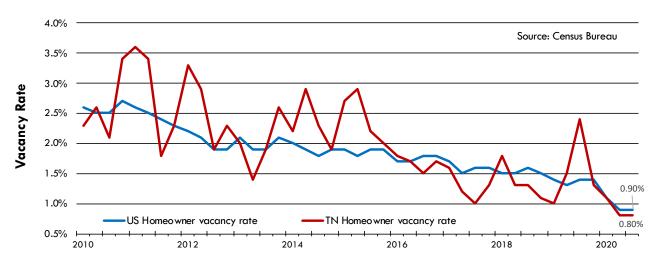
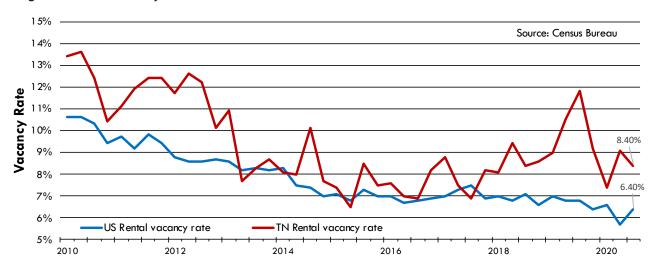


Figure 3. Rental vacancy rate

Q3 2020



Housing Construction

Third-quarter housing construction data in Tennessee is promising, showing growth for all permit types when compared to the previous quarter and year. Compared to last quarter, single-family permits increased 27.0%, multi-family permits increased 12.7%, and total permits increased 18.5%. Compared to last year, the single-family permits increased 17.33%, total permits increased 34.1%, while Tennessee's multi-family permits increased a resounding 74.2%.

The South and the U.S. both experienced growth in single-family permits for both the quarter and year. The South experienced a quarterly increase of 31.7% and an annual increase of 22.0%. The U.S. increased 32.6% for the quarter and 21.1% for the year. Similarly, both the South and the U.S. saw growth for total permits. However, multi-family permits were more tumultuous, with the South experiencing both quarterly (-3.0%) and annual (-14.0%) declines. The U.S. saw growth for the quarter (11.3%) but declines for the year (-10.9%).

Figure 4. Tennessee single-family home permits (thousands, seasonally adjusted annual rate)

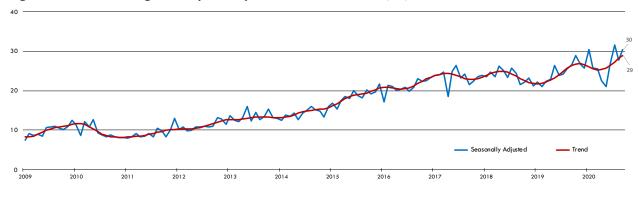


Table 2. Permits issued for privately owned new housing (thousands, seasonally adjusted annual rate)

| | Single-F | amily Per | mits | Multi-Family Permits | | Total Permits | | | |
|------------------------------|-----------|-----------|---------|----------------------|--------|---------------|-----------|-------|---------|
| Quarter | Tennessee | South | U.S. | Tennessee | South | U.S. | Tennessee | South | U.S. |
| 2017.3 | 27.6 | 436.0 | 809.1 | 14.2 | 166.1 | 435.6 | 41.1 | 599.9 | 1,251.8 |
| 2017.4 | 27.9 | 447.7 | 836.2 | 8.2 | 163.2 | 429.8 | 35.5 | 603.1 | 1,260.2 |
| 2018.1 | 28.7 | 464.1 | 864.3 | 5.4 | 188.0 | 478.1 | 34.8 | 648.9 | 1,333.7 |
| 2018.2 | 29.8 | 483.4 | 881.6 | 11.1 | 208.5 | 466.2 | 42.1 | 705.4 | 1,354.0 |
| 2018.2 | 28.6 | 461.8 | 840.7 | 14.6 | 192.2 | 432.2 | 42.1 | 647.9 | 1,276.2 |
| 2018.4 | 26.7 | 453.7 | 823.2 | 10.5 | 212.6 | 453.3 | 36.5 | 662.7 | 1,279.6 |
| 2019.1 | 26.2 | 445.5 | 790.2 | 11.6 | 203.1 | 474.0 | 38.8 | 644.5 | 1,254.0 |
| 2019.2 | 29.2 | 467.3 | 845.1 | 10.1 | 210.0 | 473.5 | 41.0 | 697.9 | 1,328.6 |
| 2019.3 | 30.5 | 492.7 | 864.3 | 10.5 | 233.8 | 533.3 | 40.1 | 713.8 | 1,393.7 |
| 2019.4 | 32.7 | 509.3 | 900.9 | 15.3 | 215.8 | 523.9 | 46.3 | 716.0 | 1,427.3 |
| 2020.1 | 32.6 | 524.9 | 937.4 | 10.7 | 204.8 | 487.6 | 44.3 | 728.0 | 1,418.4 |
| 2020.2 | 28.2 | 456.4 | 789.6 | 16.3 | 207.1 | 426.8 | 45.3 | 686.8 | 1,225.7 |
| 2020.3 | 35.8 | 601.2 | 1,046.6 | 18.3 | 201.0 | 475.0 | 53.8 | 781.8 | 1,517.6 |
| Change from previous quarter | 27.0% | 31.7% | 32.6% | 12.7% | -3.0% | 11.3% | 18.5% | 13.8% | 23.8% |
| Change from previous year | 17.33% | 22.0% | 21.1% | 74.2% | -14.0% | -10.9% | 34.1% | 9.5% | 8.9% |

Source: Census Bureau

Real Estate Transactions & Mortgages

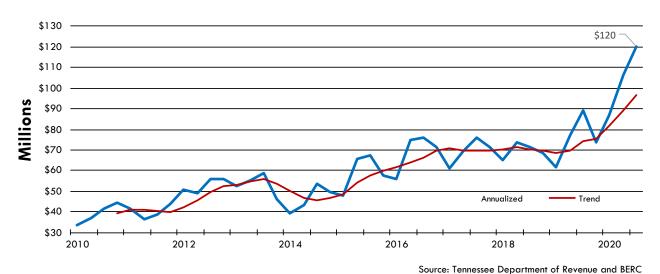
Real estate transfer tax collections averaged \$19.4 million this quarter, bringing annualized collections to \$232.7 million. This is a 36.40% increase compared to last quarter and an 8.24% increase compared to last year.

Mortgage tax collections also showed upward trends, averaging \$10.0 million for the quarter and annualized collections averaging \$120.4 million. This is a 13.40% increase compared to last quarter, and a 34.89% increase compared to last year.

Figure 5. Real estate transfer tax collections (millions, seasonally adjusted annual rate)



Figure 6. Mortgage tax collections (millions, seasonally adjusted annual rate)



Home Sales

Quarterly comparisons for Nashville, Knoxville, and Memphis show that there has been a significant uptick in closings. Nashville's closings show the most significant quarterly increase, at 27.37%, Knoxville's closings increased 25.38%, and Memphis' closings increased 20.55%. Inventory has decreased in all regions for the quarter: Nashville (-16.84%), Knoxville (-22.56%), and Memphis (-15.13%).

The trends are similar when compared to last year. All regions experienced annual growths in closings. Knoxville (11.76%) had the most significant increase, closely followed by Nashville (11.64%), and Memphis (1.60%), while still positive, experienced significantly less closings. Inventory decreased over the year: Nashville (-26.14%), Knoxville (-41.50%), and Memphis (-32.50%).

Figure 7.1 Single-family sales and inventory - Nashville Area

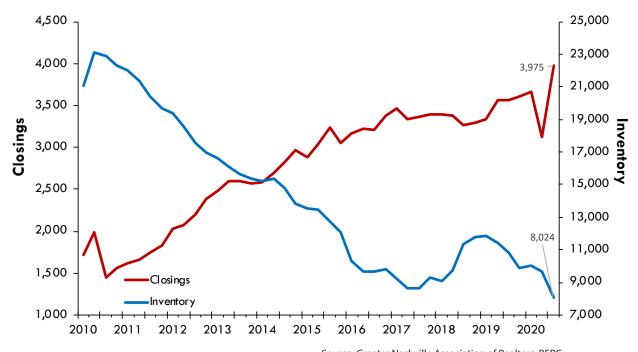


Figure 7.2 Single-family sales and inventory - Knoxville Area

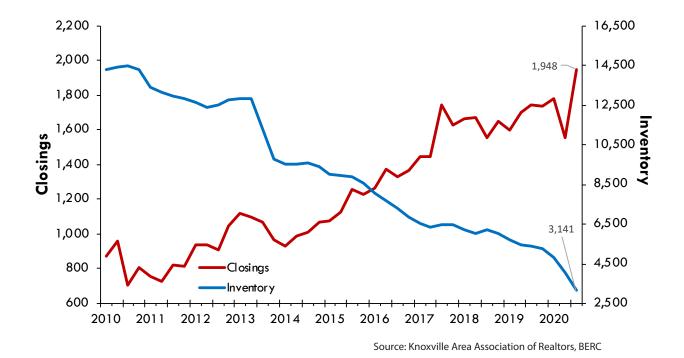
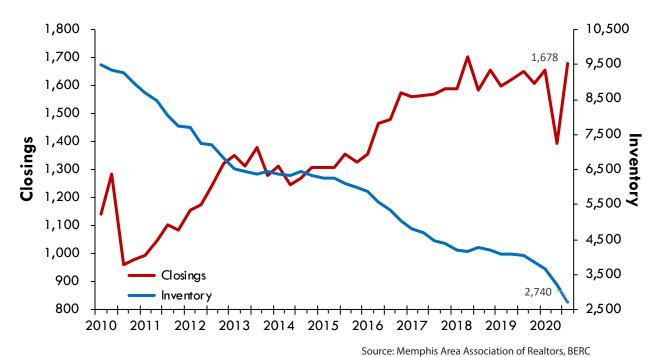


Figure 7.3 Single-family sales and inventory - Memphis Area



Home Prices

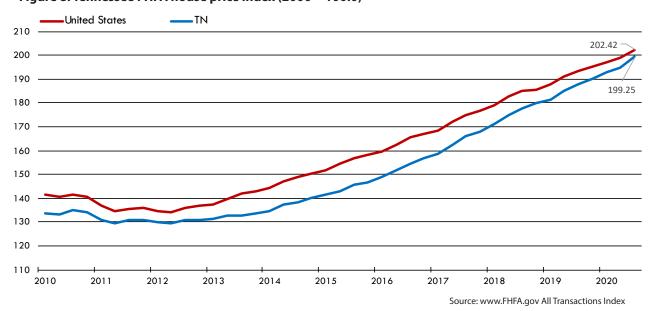
Home prices in Tennessee and the United States continued climbing throughout the third quarter. Tennessee experienced a higher increase in prices, of 6.1%, than the U.S., which saw an increase of 4.7%. All of Tennessee's MSAs also had upswings in home prices, with Chattanooga MSA, Clarksville MSA, and Cleveland MSA having the most substantial growth.

In all areas, the rate of growth in home prices picked back up this period. Cleveland MSA and Jackson MSA had the strongest upturns in year-over-year comparisons. From last quarter, Cleveland MSA's growth rate went from 3.2% to 7.0%, a 3.8 percentage point difference; Cleveland's percent increase in the third quarter is the highest it has been all year. Similarly, Jackson MSA saw its rates rise from 2.1% to 5.8%, a 3.7 percentage point difference. Conversely, in some areas, there were only slight increases. Knoxville MSA's growth rate rose from 6.3% last quarter to 6.4% this quarter, increasing by 0.1 percentage point.

Table 3. Change in housing prices year to year

| Area | 2018.4-2019.4 | 2019.1-2020.1 | 2019.2-2020.2 | 2019.3-2020.3 |
|-----------------------|---------------|---------------|---------------|---------------|
| Chattanooga MSA | 6.3% | 6.5% | 5.3% | 7.1% |
| Clarksville MSA | 4.9% | 10.0% | 6.5% | 8.2% |
| Cleveland MSA | 4.5% | 6.0% | 3.2% | 7.0% |
| Jackson MSA | 2.2% | 6.3% | 2.1% | 5.8% |
| Johnson City MSA | 6.7% | 5.6% | 4.5% | 6.2% |
| Kingsport-Bristol MSA | 6.5% | 5.2% | 3.6% | 6.1% |
| Knoxville MSA | 6.5% | 6.6% | 6.3% | 6.4% |
| Memphis MSA | 6.4% | 7.1% | 5.4% | 6.5% |
| Morristown MSA | 10.3% | 6.9% | 5.2% | 5.7% |
| Nashville MSA | 5.0% | 5.9% | 5.1% | 5.8% |
| Tennessee | 5.8% | 6.4% | 5.4% | 6.1% |
| United States | 5.1% | 5.1% | 4.2% | 4.7% |

Figure 8. Tennessee FHFA house price index (2000 = 100.0)



Source: FHFA All Transactions Index

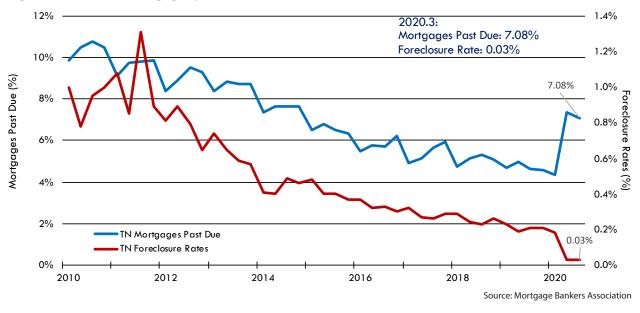
Mortgage Delinquencies & Foreclosures

The number of delinquent mortgages dropped slightly in the third quarter. In Tennessee, mortgages past due came to 7.08%, a 0.27 percentage point decrease from the second quarter. This is a 2.43 percentage point increase compared to the third quarter of 2019. The national mortgage delinquency rate also decreased to 7.60%. Compared to last quarter, the U.S. rate has declined by 0.37 percentage

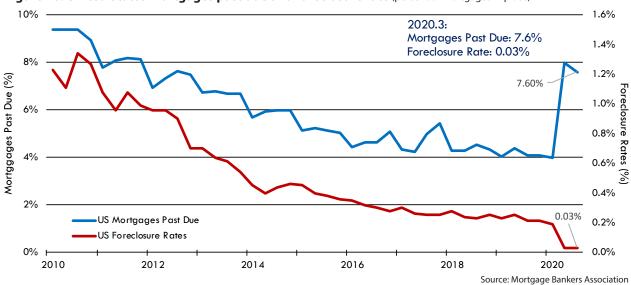
points, but, compared to last year, it has risen by 3.51 percentage points.

For the U.S. and Tennessee, the foreclosure rate stagnated at 0.3%. It is important to note that foreclosure rates are artificially low because of the foreclosure ban on the single-family mortgages insured by the Federal Housing Administration.

Figure 9. Tennessee mortgages past due and foreclosure rate (percent of mortgages in place)







Conclusion

Q3 indicators show promising improvements after the COVID-19's economic impact

Tennessee's third-quarter data shows promising improvements after the economic collapse in the second quarter. Although some indicators display negative results, they also reveal progress. While the amount of initial unemployment claims is still extremely high, it has decreased considerably over the quarter by 61.25%. Likewise, the unemployment rate has fallen by 3.77 percentage points.

Employment across all industries is rising again, and home permits are surging compared to last quarter. Mortgage and real estate transfer tax collections have increased in quarterly and annual comparisons, while homeowner and rental vacancy rates have dropped over the year. While the economy remains in an uncertain state, indicators this quarter exhibit positive momentum.



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Glossary

Home Closings/Inventory.

Number of houses sold/number of houses with active listings. A high number of closings and a low number of inventories would demonstrate a positive step for the economy. (Source: Greater Nashville Association of Realtors, Memphis Area Association of Realtors, and Knoxville Area Association of Realtors)

Homeowner/Rental Vacancy Rate.

Number of vacant units divided by total number of units. A high vacancy rate indicates poor market conditions, a low one strong market conditions. (Source: Census Bureau)

Labor Force.

All persons employed and unemployed but actively looking for a job. Net changes in number of people employed and unemployed are important gauges of the health of the U.S. job market. (Source: Bureau of Labor Statistics)

Mortgage/Real Estate Transfer Tax Collections.

Amount of taxes collected for realty transfers and mortgages, which together account for a large portion of privilege taxes. (Source: Tennessee Department of Revenue)

Mortgages Past Due and Foreclosures Started.

Percentage of mortgages past due and percentage of new foreclosures started, indicating individuals in financial distress. (Source: Mortgage Bankers Association)

Single/Multi-Family Home Permits.

Level of new single- and multi-family housing construction. Housing permits can be early indicators of housing market activity. New residential housing construction generally leads to other types of economic production. (Source: Census Bureau)

Total Nonfarm Employment.

Total number of paid U.S. workers of any business, excluding government, farm, nonprofit, and private household employees; one of the key economic statistics used to analyze whether the economy is expanding or contracting. (Source: Bureau of Labor Statistics)

Unemployment Insurance Claims.

Weekly average layoff figures. The smaller the number, the better the economy is performing. (Source: U.S. Department of Labor)

Unemployment Rate.

Percentage of unemployed individuals divided by the labor force, a determinant of future conditions, used to determine overall economic health. (Source: Bureau of Labor Statistics)

Q3 2020