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NASHVILLE REGIONS 2020

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ABOUT VITAL SIGNS

Since 2013, Middle Tennessee leaders have turned to the Vital Signs report to understand what emerging issues will impact the region's economic well-being and quality of life. Vital Signs utilizes data from the Census and other respected sources and pairs this data with findings from the annual Vital Signs survey of Middle Tennessee residents. The result is a rich understanding of the issues facing the region and how Middle Tennesseans see and understand those issues. Vital Signs is created by the Nashville Area Chamber of Commerce relying on the Chamber's Research Center for data collection and analysis. The Greater Nashville Regional Council (GNRC) is the Chamber's partner in the creation of Vital Signs.

The Vital Signs process was created in 2001 by Community Foundations of Canada as a broad, agenda-setting mechanism focused on outcomes and solutions to key community issues. The Vital Signs trademark is used with permission from Community Foundations of Canada. Nashville Area Chamber leaders brought the Vital Signs program to Nashville after learning about Vital Signs on the Chamber's Leadership Study Mission to Toronto in 2011.

Vital Signs 2020 addresses four issues impacting the Middle Tennessee region – Workforce and Economic Development, Housing, Transportation and Infrastructure. The report explores these issues through the lens of COVID-19 and its impacts. The pandemic and resulting recession have laid bare challenges in workforce development, housing, transportation and infrastructure that existed before COVID-19 and have been exacerbated by it. The year's events have also opened new windows of opportunity for recovery and growth. Understanding the trends, based on data and Middle Tennesseans' impressions of what is next, is the work of Vital Signs.



EXECUTIVE SUMMARY

Vital Signs 2020 addresses challenges that existed for the Middle Tennessee region before COVID-19 and that the pandemic has illuminated and, in many cases, exacerbated.

Prior to COVID-19, the Nashville Area MSA's unemployment rate was 2.5%, but that overall figure masked an unemployment rate among Blacks that was two times that of whites. During COVID-19, unemployment among Whites peaked at 10.3%, but the unemployment rate among Blacks peaked at 21.8%.

The 2020 Vital Signs survey revealed that 50.7% of respondents indicated that childcare impacts their ability to work which is more troubling when understood with estimates that Tennessee parents who encounter childcare problems lose a combined \$850 million in earnings each year.

Almost 37% of Middle Tennessee residents responding to the 2020 Vital Signs survey are considered "housing cost-burdened," meaning they spend over 30% of their household income on their mortgage or rent.

Even in 2020, over 600,000 Tennesseans still lack access to quality high-speed internet and 27% of Tennesseans have no internet subscription.

The topics in Vital Signs 2020 – economic and workforce development, housing, transportation, and infrastructure represent the challenges and opportunities faced by a growing, and by many measures thriving, region. Vital Signs 2020 weaves together research on each topic drawn from the Census Bureau, Bureau of Labor Statistics, Center for Neighborhood Technology, among others with results from the Vital Signs 2020 resident survey, a survey of the Middle Tennessee residents administered by the Chamber's Research Center.

For each topic, Vital Signs attempts to provide a snapshot of regional issues pre-COVID and provide insight on how the region might respond to these challenges for a recovery that will benefit all Middle Tennesseans. The Vital Signs 2020 resident survey draws the connection between how

Middle Tennessee residents understand the challenges faced by our region with the data that helps explain the complexity of these issues.

The challenges to the region throughout 2020 – tornados, COVID-19, and the downtown Nashville bombing – undoubtedly had a profound impact on the economic well-being of our state, region and communities. The Vital Signs 2020 resident survey asked Middle Tennesseans about their predictions for the future and found that the region's residents are hopeful but believe it will be some time before their lives are back to normal; 41% of Middle Tennessee residents felt the economy would be slightly or much better in 2021, but 53% thought it would be over a year before life returned to normal.

ECONOMIC AND WORKFORCE DEVELOPMENT

Analysis for 2020 Vital Signs finds that Middle Tennessee's economic development work in job creation slowed during COVID but is quickly regaining steam. Economic forecasting projects that the Nashville MSA's economy will recover by second quarter of 2021 and the Clarksville MSA's economy will recover by the third quarter of 2021 (with the exception of the hospitality and leisure industries).

More concerning are the disparate unemployment impacts of COVID and the question of how to prepare

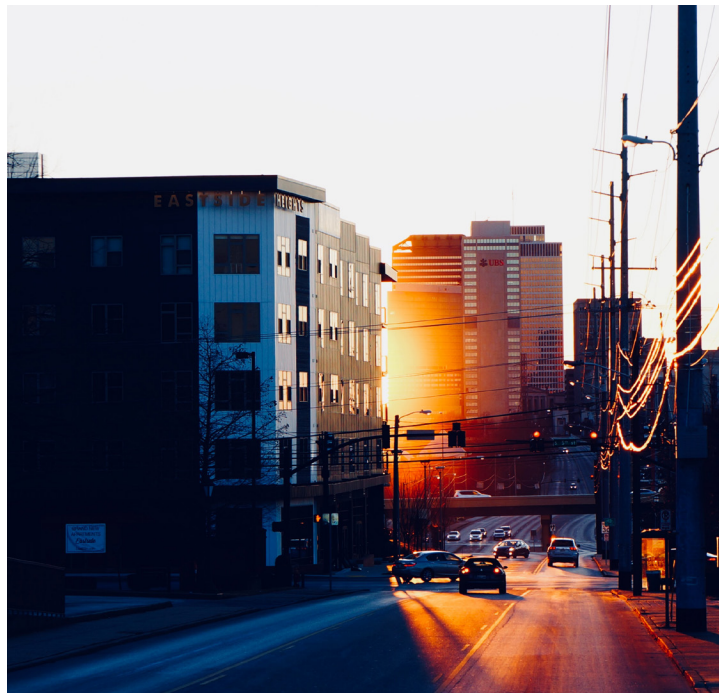
enough Middle Tennesseans for work in well-paid jobs in the future. Prior to COVID-19, the Nashville Area MSA's unemployment rate was 2.5%, but that overall figure masked an unemployment rate among Blacks that was two times that of Whites. During COVID-19, unemployment among Whites peaked at 10.3%, but the unemployment rate among Blacks peaked at 21.8%.

Given the disparate impacts of COVID unemployment, the aging labor force and the increasing pace of

automation and use of AI, continued and expanded focus on workforce development is critical. Employers throughout Middle Tennessee can enhance their workforce by providing upskilling and reskilling opportunities for their employees. Taking advantage of labor and workforce development funding and programs like Tennessee Reconnect allow employers to connect to necessary training benefiting their employees and meeting workforce needs (*see www.TNreconnect.gov*).

HOUSING

The Middle Tennessee region remains a desirable location for businesses and families. Home sales continued to rise throughout the last quarter of 2020, yet 37% of respondents to the 2020 Vital Signs survey of Middle Tennessee residents are housing cost-burdened, spending over 30% of their income on owning or renting a home. Meanwhile, COVID-19 and the resulting recession put more Middle Tennesseans at risk of losing their home or rental. While the 2020 Vital Signs resident survey found that only a small percentage of respondents who were renters reported being evicted or forced to move since March (just under 8%), a much larger percent – 41% – were fearful about being able to pay rent in the coming six months.





TRANSPORTATION

Although traffic and congestion decreased substantially during the pandemic, the region's residents recognize that traffic will return. Over 72% of the 2020 survey respondents signaled that it is very or extremely important for regional leaders to offer a transit plan with a strategy for funding. Meanwhile, research released by Transportation for America (T4A) demonstrated that cities that invested in transit during the Great Recession of 2008 saw their economies rebound more quickly and more equitably allowing all residents to quickly benefit from and contribute to recovery. Unfortunately, Metro Nashville/Davidson County's transit system, WeGo, has seen its funding diminish in past years and was only funded at stable levels in FY21 due to one-time funding through federal COVID relief funding. In 2020, Mayor Cooper's Transportation Plan was endorsed by Metro Council, but without needed dedicated funding, it is unclear how much access to jobs and education can be expanded.

INFRASTRUCTURE

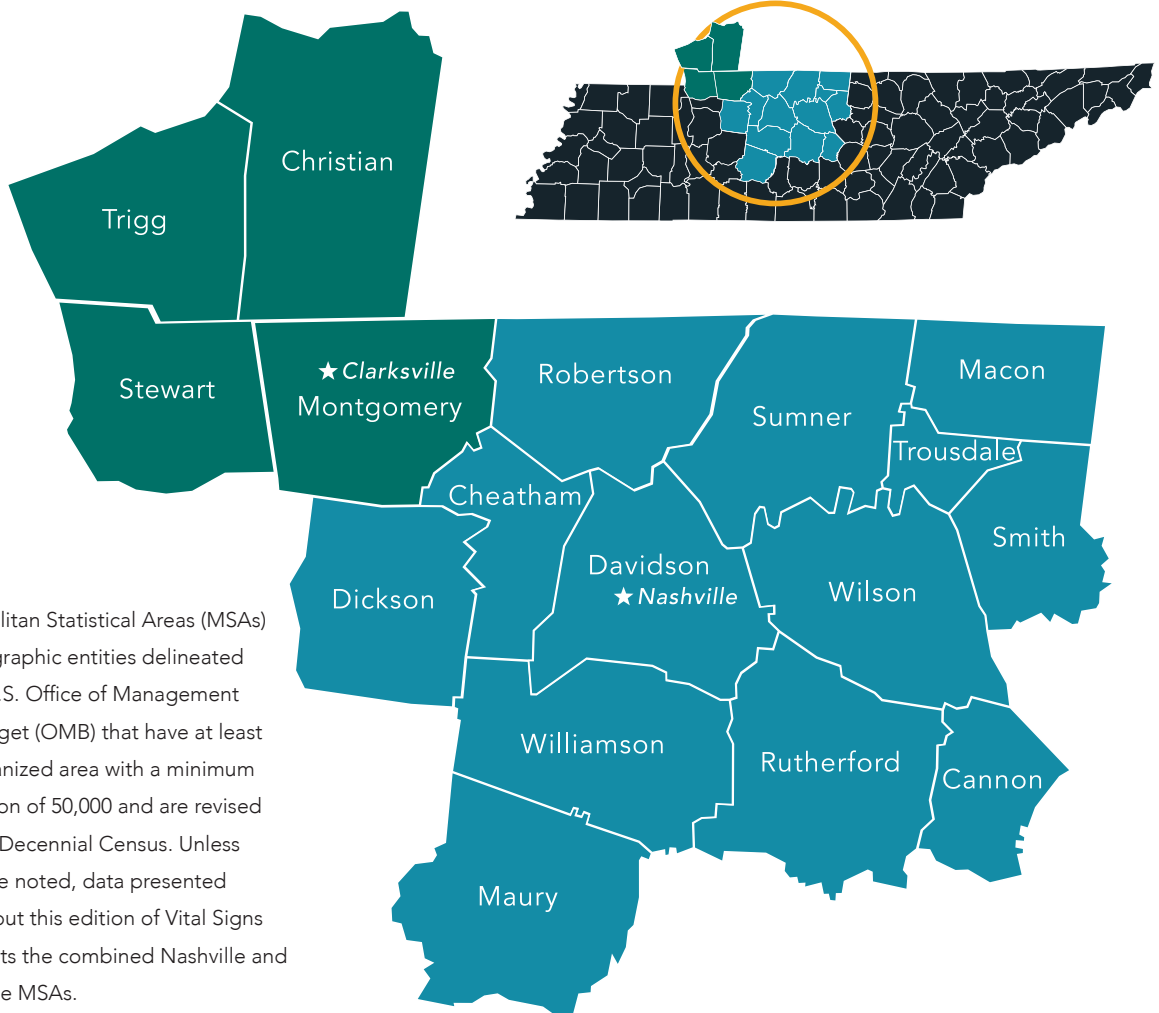
While some infrastructure has seen lessened use in 2020, the need for reliable broadband has been brought to the forefront of public policy discussions. Significant investment in broadband, devices and digital literacy have occurred through federal COVID-relief legislation and action by the State of Tennessee. Despite this, as of 2020, over 600,000 Tennesseans still lack access to quality high-speed internet and 27% of Tennesseans have no internet subscription.

The issues, challenges and opportunities presented in Vital Signs 2020 must receive continued thought, action and collaboration across sectors to spur Middle Tennessee's recovery and future resilience. The measure of success should be not only the region's prosperity, but demonstration that all Middle Tennesseans benefit from, and contribute to, the growth and economic success of the region.

MIDDLE TENNESSEE, OUR REGION

Vital Signs 2020 considers issues impacting the Nashville Metropolitan Statistical Area (MSA) and the Clarksville MSA. In Vital Signs, these two MSAs will be referred to as Middle Tennessee or the Middle Tennessee region.




THE REGION



Metropolitan Statistical Areas (MSAs) are geographic entities delineated by the U.S. Office of Management and Budget (OMB) that have at least one urbanized area with a minimum population of 50,000 and are revised with the Decennial Census. Unless otherwise noted, data presented throughout this edition of Vital Signs represents the combined Nashville and Clarksville MSAs.

OVERVIEW

SOURCE: US Census Bureau, Population Estimates Program, 2019; US Census Bureau, American Community Survey, 1-Year Estimates, 2019

	 United States	 Nashville MSA	 Clarksville MSA
Population	328,239,523	1,934,317	307,820
Median Age	38.5	36.7	31.6
Median Home Value	240,500	285,100	162,500
Median Household Income	65,712	70,262	53,547
Educational Attainment High School or Above	88.6%	90.5%	91.5%
Educational Attainment Bachelor's Degree or Above	33.1%	38.5%	26.4%
Percent Cost Burdened by Housing	Data is not available for this geography	* 30.6%	* 24.6%
Percent Cost Burdened by Transportation	Data is not available for this geography	25.0%	29.0%

Center for Neighborhood Technology,
The Housing and Transportation Affordability Index

*The Vital Signs 2020 resident survey indicated that a higher percentage of Middle Tennessee residents are cost burdened by housing.

Due to their proximity and the fluidity of commuting workforce, the Nashville and Clarksville MSAs are a combined economic engine for the state of Tennessee and significant competitor for economic development and workforce attraction in the U.S. The Middle Tennessee region is bound

together in economic success and economic challenges – as has been evident during COVID-19.

COVID-19 cases were first reported in Middle Tennessee in early March 2020. As of January 14, 2021, the Middle Tennessee region had

205,632 confirmed cases of COVID-19 and 2,057 deaths attributed to the virus. When responding to the Vital Signs 2020 resident survey, 77.7% of Middle Tennesseans indicated that they or someone they know has experienced a confirmed case of COVID-19.



ECONOMIC IMPACT OF COVID-19

Roughly 38% of the respondents to the Vital Signs 2020 resident survey noted that their employment was impacted by COVID-19, up to and including loss of employment. Impacts on employment have also resulted in substantial loss of personal and disposable income for many Middle Tennessee families. Thirty-five percent of the Vital Signs 2020 resident survey respondents noted that – compared to a year ago – their financial situation was slightly worse, moderately worse or much worse.

These economic challenges have impacted Middle Tennesseans' housing, transportation and infrastructure needs. In some cases, these economic challenges have caused Middle Tennesseans to think differently about future employment including considering changing jobs or industries or undertaking re-skilling or upskilling. Vital Signs 2020 explores these challenges and opportunities.

ECONOMIC DEVELOPMENT AND WORKFORCE DEVELOPMENT

The Middle Tennessee region has multiple industries foundational to its economic strength, including manufacturing, health care, and financial and business services. Within each of these industries, Middle Tennessee boasts a growing number of headquarters, transportation, distribution/logistics centers and information technology hubs. The region's success in economic growth in these industries hinges, however, on Middle Tennessee's supply of skilled and available workforce.

When companies are considering a city or region for expansion or relocation, they must have confidence that the region is home to – or can attract – the skilled workforce their company needs. Workforce supply, in turn, is dependent on a community's ability to provide the infrastructure and quality of life attractive to workforce, including housing that affordably meets the employees' preferences, transportation options that fit their lifestyles, access to quality education and/or dependable childcare, and access to recreation.

Throughout 2019 and early 2020, the economic outlook for the Middle Tennessee region was strong. In 2019, GDP grew by 4.5% in the Nashville MSA and 3.7% in the Clarksville MSA. Given the strength of the region's manufacturing base, there were no expectations of a manufacturing

slowdown as JP Morgan Chase's Global PMI remained above 50, indicating expansion of the sector. Consumer confidence remained strong, as reflected in 2019's Vital Signs Middle Tennessee resident survey, with over 75% of respondents indicating they expected the region's future economy to be as good or better than it had been during the previous year. The onset of the COVID-19 pandemic in March diminished this confidence. Yet of the Middle Tennessee residents who responded to this same question in 2020, 68% expect the region's future economy to be as good or better in 2021.

While most Middle Tennesseans are hopeful about the region's future, the pandemic revealed the fragility of employment in various industries, and the disproportionate impact that the resulting recession has had on workers of color and workers with less education or training. Even prior to the pandemic, it was evident that not all residents were benefiting from Middle Tennessee's economic success. This section will discuss how Middle Tennessee's economic development has been impacted by COVID-19 and how investments in workforce development – both in upskilling and reskilling of workers and investing in workforce supports like childcare – are critical to the region's recovery.

COVID IMPACTS ON REGIONAL ECONOMIC DEVELOPMENT

The Nashville region entered the COVID-19 pandemic with one of the hottest economies in the US, record low unemployment, and ranked the #1 metro for job growth in the nation according to the US Bureau of Labor Statistics (March 2020).

Over the last several years, the Middle Tennessee region has seen significant growth in business relocation and expansion. Beginning in mid-March 2020, the region's economic development efforts transitioned from conversations with companies interested in relocating or expanding in the region to work assisting Nashville's business community survive and recover from the impacts of a tornado, the pandemic and the Christmas Day bombing in downtown Nashville.

While not at pre-pandemic levels, conversations around business relocations and expansions are now resuming. 2020 concluded with 43% growth in new job announcements over 2019. The supply chain management sector led the way with the largest growth in announced jobs in 2020. In this sector, job announcements grew by 35% over 2019.

Emerging from the pandemic, the five most-favorably ranked cities according to proprietary model forecasting by Nuveen are: Boston; Washington, D.C.; Nashville; Columbus; and San Jose.

– MARKETWATCH.COM
NOVEMBER 2020

Carly Tripp/Nuveen

TOP 2020 REGIONAL CAPITAL INVESTMENTS

General Motors: \$2 Billion Investment

Facebook: \$800 Million Investment

TOP 2020 REGIONAL NEW JOB ANNOUNCEMENTS

Amazon: 1,000 Jobs

Agero: 900 Jobs

Ramsey Solutions: 600 Jobs

COVID IMPACTS ON EMPLOYMENT

In 2019 and early 2020, the Nashville and Clarksville MSAs were experiencing record low unemployment. After early restrictions closed businesses in response to COVID-19, the Nashville and Clarksville MSAs' March 2020 unemployment rates were 2.5% and 4.3% respectively. The unemployment rates skyrocketed to peaks of 15.2% (Nashville MSA) and 16.1% (Clarksville) by April 2020. The unemployment rates declined to 4.2% (Nashville MSA) and 5.4% (Clarksville MSA) in November 2020. The unemployment rates rose again to 5.2% (Nashville MSA) and 6.7% (Clarksville MSA) in December 2020. Preliminarily, this equates to a 2020 annual average unemployment of 7.0% for the Nashville MSA and 7.6% for the Clarksville MSA.

The November unemployment rate would appear to suggest that the Middle Tennessee economy was back to pre-recessionary levels (reflecting a tight labor market and full employment). Re-employment is happening faster in Nashville compared to other metro areas in the state and is driving statewide recovery. While unemployment seems to have returned to close to 5% (which is the benchmark of "full employment" – meaning those who wish to have a job are able to find employment), the accumulated effect of economic impact from lost revenues, productivity, wages, and unemployment not captured by the standard measure continues to be felt deeply both individually and in the broader economy.

Further complicating the employment picture, the official unemployment number does not take into account all of the people who are collecting extended unemployment or those who are gig or 1099 employees receiving benefits under the Coronavirus Aid, Relief and Economic Security Act (CARES Act). Thus, while the November reported unemployment is between 4% - 5% in the two MSA region, with additional analysis, the actual figure is closer to 9%.

To gain a more accurate perspective on the employment landscape, the Chamber's Research Center utilized two additional assessment tools.

The first is the Vital Signs 2020 Middle Tennessee resident survey, which revealed that 38% of respondents experienced impacts of COVID-19 on their employment, ranging from losing their job to being furloughed, to experiencing a pay cut.

The second tool is the use of an economic impact analysis built from comprehensive unemployment claimant data from the Tennessee Department of Labor and Workforce Development. Based on a 40-week period beginning March 15, 2020 through December 31, 2020, the Nashville and Clarksville MSAs were found to experience significant job loss throughout 2020. According to the model, the Nashville MSA lost 171,000 jobs (this represents 12.6% of the workforce) in 2020 and is projected to lose another 15,637 jobs (1.1%) in

2021. Likewise, the Clarksville MSA has lost 11,600 jobs (7% of the workforce) in 2020 with an additional 1,046 jobs (0.6%) projected to be lost in 2021.

In addition to jobs, the Nashville MSA faced an overall economic loss of approximately \$25.8 billion (2012 inflation-adjusted dollars) in 2020. This translates into a loss of nearly \$14 billion real dollars (2012) or about 11.7% of GDP, and a loss of \$9.3 billion from disposable personal income or a per capita loss of \$2,922 (2012). In the Clarksville MSA, total economic impact was \$1.6 billion (2012) lost from the economy. This includes a loss of \$815 million (2012) from real GDP and \$457 million from disposable personal income or \$781 (2012) per capita.

The Research Center's COVID-19 Economic Impact model predicts Middle Tennessee's economic recovery in

second quarter of 2021 for the Nashville MSA and third quarter of 2021 for the Clarksville MSA (see the COVID-19 Economic Impact model at www.nashvillechamber.com).

Some industries suffered greater damage from the COVID-induced recession and are projected to take longer to recover – most notably, hospitality and leisure industries such as accommodations, restaurants, and food service industries; recreation industries including performing arts, museums, and spectator sports; and retail industries, especially those that were not able to convert to an e-commerce model. The occupations most heavily impacted by COVID-19 are food service workers, retail workers, administrative service workers, and those engaged in personal services. While manufacturing and construction occupations were also impacted initially, these have made a strong recovery.

COVID IMPACTS ON EMPLOYMENT IN THE NASHVILLE MSA – IMPACTS BY RACE, GENDER AND AGE

Not everyone has been equally impacted by COVID-19-related unemployment. Using the unemployment claimant data from the Tennessee Department of Labor and Workforce Development, it is possible to disaggregate the unemployment data by race, ethnicity, age, and gender to examine the disproportionate harm caused to some demographic groups by the COVID-induced recession.

The accompanying table outlines the demographic composition of the Nashville MSA. It is useful to reference this table to understand the Nashville MSA's racial, ethnic, gender and age composition in the labor force when considering how each of these cohorts have been impacted by COVID-19-related unemployment. The analysis reveals certain demographic groups are over-represented in the number of the unemployed.

NASHVILLE MSA DEMOGRAPHIC DATA (2019)

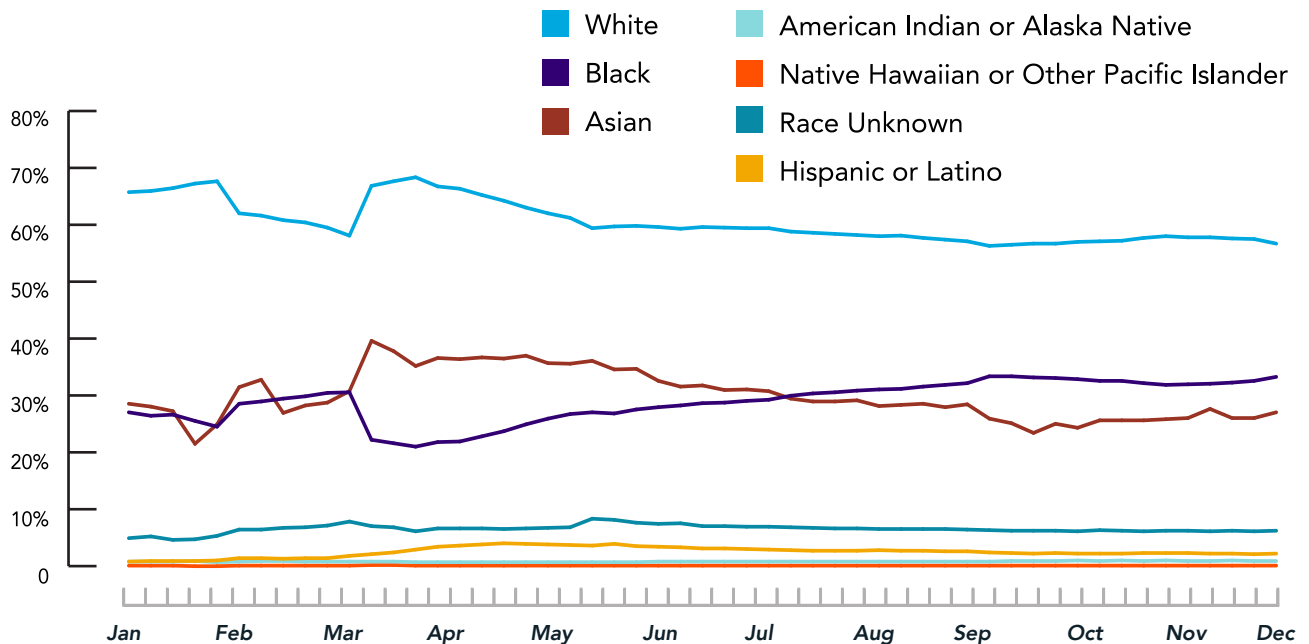
	Population 16+	% of Population	# in Labor Force	% of Labor Force
Total Population	1,537,911		1,065,772	
<i>Race</i>				
White	1,200,463	78.1%	822,317	77.2 %
Black	231,772	15.1%	166,180	15.6 %
Asian	46,058	3.0%	32,563	3.1%
American Indian / Native Alaskan*	4,766	0.2%		
Native Hawaiian / Pacific Islander*	1,243	0.1%		
<i>Ethnicity</i>				
Hispanic or Latino	97,162	6.3%	73,648	6.9%
<i>Gender</i>				
Male	743,545	48.4%	555,077	52.1%
Female	794,366	51.7%	510,029	47.9%

Age	Population 16+	% of Population	Labor Force	% of Labor Force
16 – 19	100,047	6.5%	48,023	4.5%
20 – 24	125,320	8.2%	101,384	9.5%
25 – 34	297,858	19.4%	262,275	24.6%
35 – 44	267,899	17.4%	229,054	21.5%
45 – 54	247,233	16.1%	205,945	19.3%
55 – 64	236,898	15.4%	162,344	15.2%
65 and older	262,656	17.1%	56,095	5.3%

SOURCE: US Census Bureau, American Community Survey, 1-Year Estimates, 2019

*Population of all ages data was used. Due to sample size the ACS does not provide 16+ population data for this demographic at this geographic level, nor does it provide the number in the labor force.

BREAKDOWN OF THE UNEMPLOYED BY RACE AS A PERCENT OF THE TOTAL NUMBER OF UNEMPLOYED IN THE NASHVILLE MSA



SOURCE: Tennessee Department of Labor and Workforce Development

Upon review of this data, significant disparity is evident in the number of Blacks who are experiencing unemployment during COVID-19 as a percent of total residents of the Nashville MSA who are experiencing unemployment. While Blacks are 15.1% of the population and 15.6% of the labor force in the Nashville MSA, as of December 2020, they comprise 33.3% of the unemployed. Even prior to the impact of COVID-19, Blacks composed a disproportionate percentage of the unemployed, 27% – 30.6% of the unemployed, despite only being 15.6% of the labor force. No other race or ethnicity (note the inclusion of the Hispanic or Latino cohort) is experiencing a level of

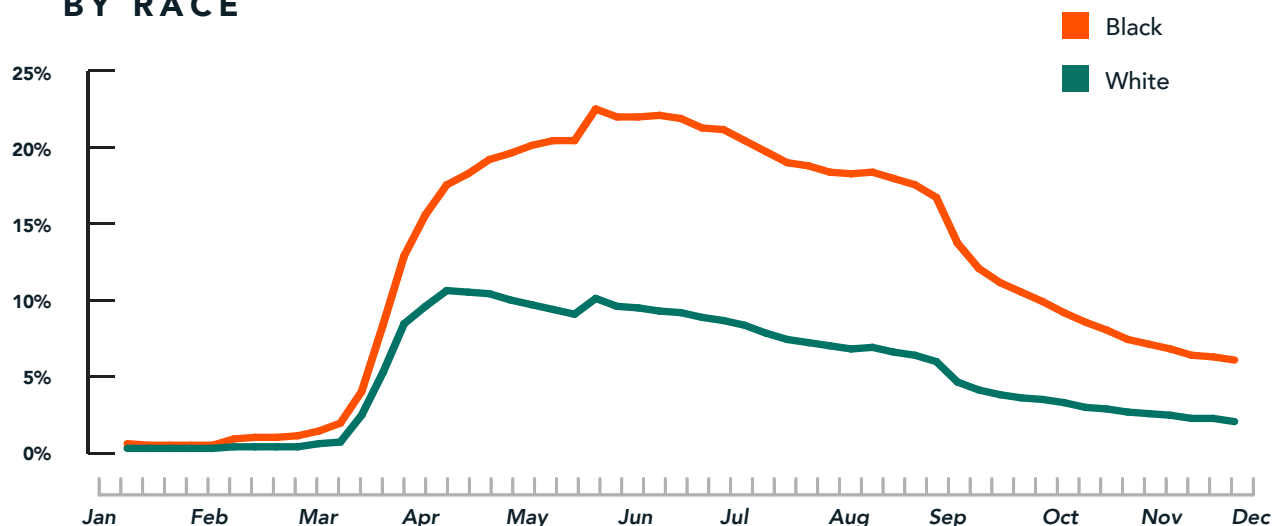
unemployment so disproportionate with their representation within the labor force.

Does this disparity exist because Blacks are disproportionately represented in occupations that are more likely to be subject to recession or the impact of COVID-19? Based on US Bureau of Labor Statistics, Current Population Survey, nationally, there is a slightly higher percentage of Blacks employed in office and administrative support occupations, transportation and material moving occupations, food preparation and serving related occupations, production occupations, and personal care and service occupations. These

occupations have experienced higher levels of unemployment due to COVID-19, however, the percentage of Blacks in these occupations does not account for the magnitude of current unemployment levels experienced by the Nashville MSA's

Black population. While this analysis examines the composition of occupations by race on the national level, further exploration of occupational data is needed on the regional level.

NASHVILLE MSA UNEMPLOYMENT RATE BY RACE



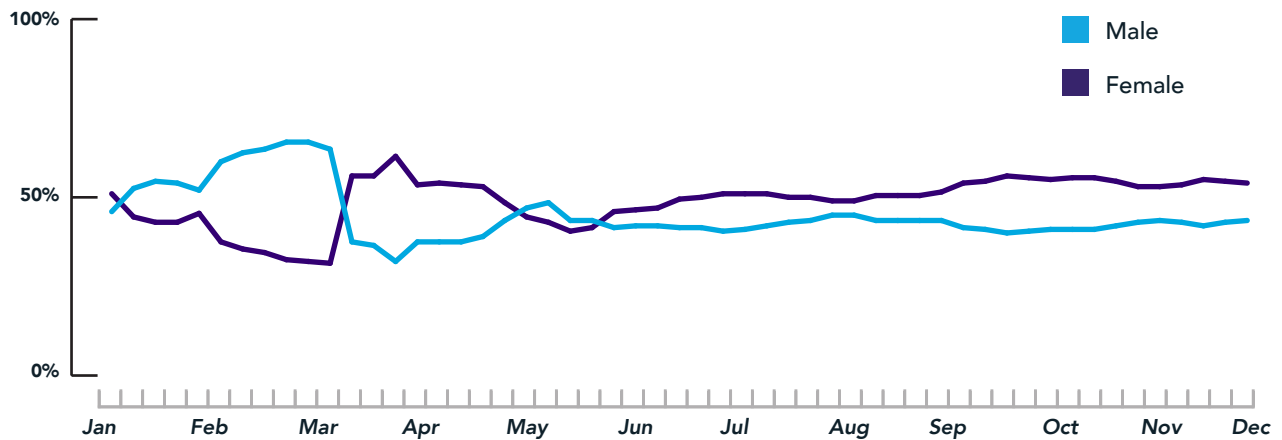
SOURCE: Tennessee Department of Labor and Workforce Development

Using the disaggregated data pertaining to the race of the unemployed, it was possible to calculate the unemployment rate based on percentage estimates of the labor force of each race derived from Census data. Only Black and White unemployment rate is shown as only these two races were unemployed at levels that varied significantly from their proportion of the labor force.

Looking at a more conventional measure of unemployment – unemployment rate by race as seen in the figure above – the unemployment rate between Blacks and Whites depicted is striking in terms of disparity for the Black community. Even prior to the onset of COVID-19,

the Black unemployment rate in the Nashville MSA was higher than the rate of White unemployment. After the onset of COVID-19 related closures, the Black unemployment rate was 65% higher than the rate among Whites (17% vs. 10.3%). While the White unemployment rate peaked at 10.3% in April and then began to decline to approximately 2.0% (December 2020), the unemployment rate for Blacks increased to a high of 21.8% (climbing for 1.5 months) before decreasing to 5.9% (December 2020). The racial composition of occupational choices and those occupations' predisposition to unemployment because of COVID-19 is not significant enough to account for this disparity.

BREAKDOWN OF THE UNEMPLOYED BY GENDER AS A PERCENT OF THE TOTAL NUMBER OF UNEMPLOYED IN THE NASHVILLE MSA



SOURCE: Tennessee Department of Labor and Workforce Development

While women make up 51.7% of the Nashville MSA's population, they are only 47.9% of labor force. Looking at the proportion of women who make up the unemployed indicates a gender disparity in employment existed prior to the COVID-19 closures, though the level of women as a proportion of the unemployed fluctuated. After COVID-19 related closures of schools and businesses began to occur, women begin to encompass between 50% - 53% of the unemployed population. Even as most sectors move towards reemployment, the trend for women seems to be shifting toward women representing a higher proportion of the unemployed population. This likely reflects the impact of households where

responsibilities for childcare and remote schooling fall primarily to women.

The Nashville Area Chamber of Commerce Research Center also analyzed COVID-19 unemployment data to consider disparities based on age. The proportion of the unemployed segmented by age does not show significant disparity based on age in the Nashville MSA. While those aged 35 – 44 had 0.4% more unemployed than their proportion of the labor force and those 65 and older had 1.6% more unemployed than their proportion in the labor force, overall, significant age-related employment disparities were not seen during COVID-19.

COVID IMPACTS ON EMPLOYMENT IN MONTGOMERY COUNTY – IMPACTS BY RACE, GENDER AND AGE

The Nashville Area Chamber of Commerce's Research Center conducted similar unemployment analysis for Montgomery County (the Clarksville

MSA could not be assessed as two of the MSA's four counties are in the State of Kentucky, offering no access to disaggregated unemployment

data). The accompanying table outlines the demographic composition of the Montgomery County. It is useful to reference this table to understand Montgomery County's racial, ethnic, gender and age composition, when

considering how each of these cohorts have been impacted by COVID-19-related unemployment. The analysis reveals certain demographic groups are over-represented in the number of the unemployed.

MONTGOMERY COUNTY DEMOGRAPHIC DATA (2019)

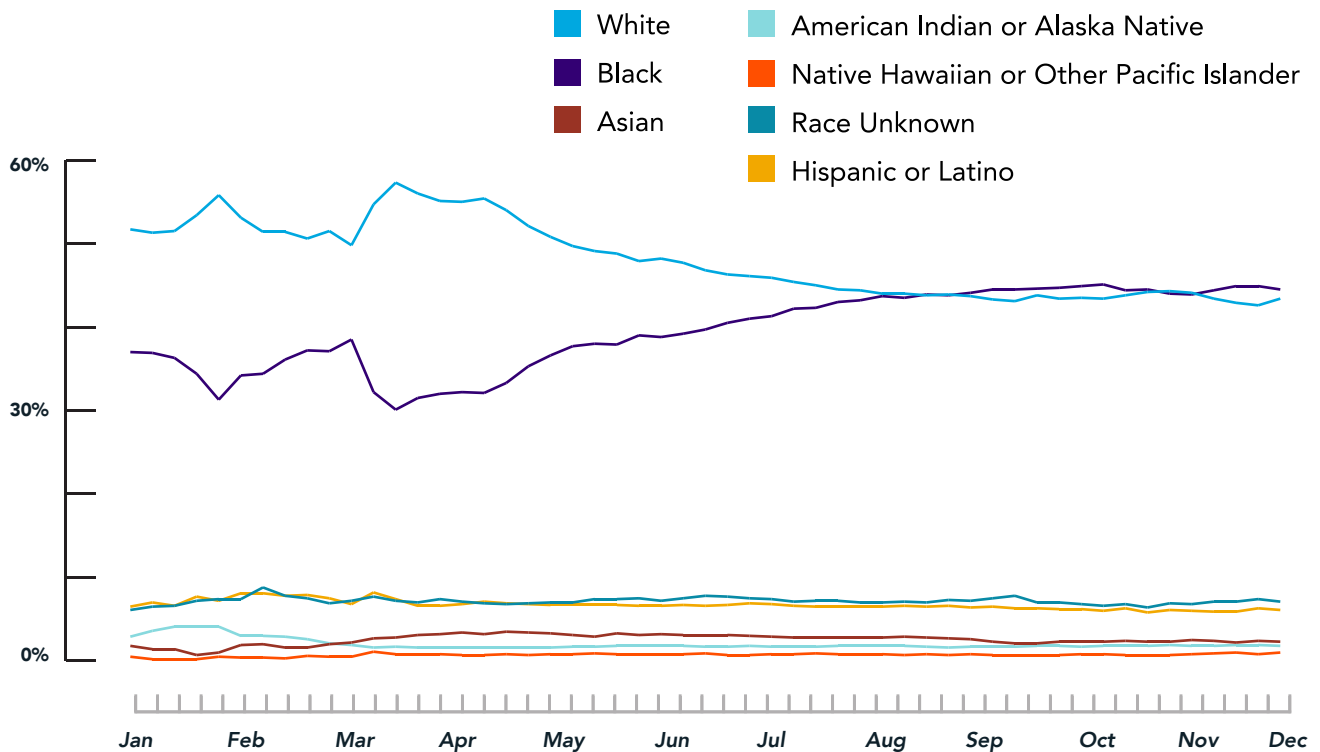
	Population 16+	% of Population	# in Labor Force	% of Labor Force
Total Population	158,170		103,847	
<i>Race</i>				
White	110,441	69.8%	71,897	69.2%
Black	32,716	20.7%	22,574	21.7%
Asian	4,234	2.7%		
American Indian / Native Alaskan*	1,038	0.7%		
Native Hawaiian / Pacific Islander*	683	0.4%		
<i>Ethnicity</i>				
Hispanic or Latino	14,788	9.3%	10,514	10.1%
<i>Gender</i>				
Male	77,614	49.1%	56,115	54.0%
Female	80,556	50.9 %	47,732	46.0%

Age	Population 16+	% of Population	Labor Force	% of Labor Force
16 – 19	12,936	8.2%	6,559	6.3%
20 – 24	15,757	10.0 %	13,362	12.9%
25 – 34	37,377	23.6%	30,800	29.7%
35 – 44	29,751	18.8 %	22,283	21.5%
45 – 54	22,184	14.0%	16,394	15.8%
55 – 64	19,958	12.6%	11,844	11.4%
65 and older	20,207	12.8 %	2,584	2.5 %

SOURCE: US Census Bureau, American Community Survey, 1-Year Estimates, 2019

*Population of all ages data was used. Due to sample size the ACS does not provide 16+ population data for this demographic at this geographic level, nor does it provide the number in the labor force.

BREAKDOWN OF THE UNEMPLOYED BY RACE AS A PERCENT OF THE TOTAL NUMBER OF UNEMPLOYED IN MONTGOMERY COUNTY

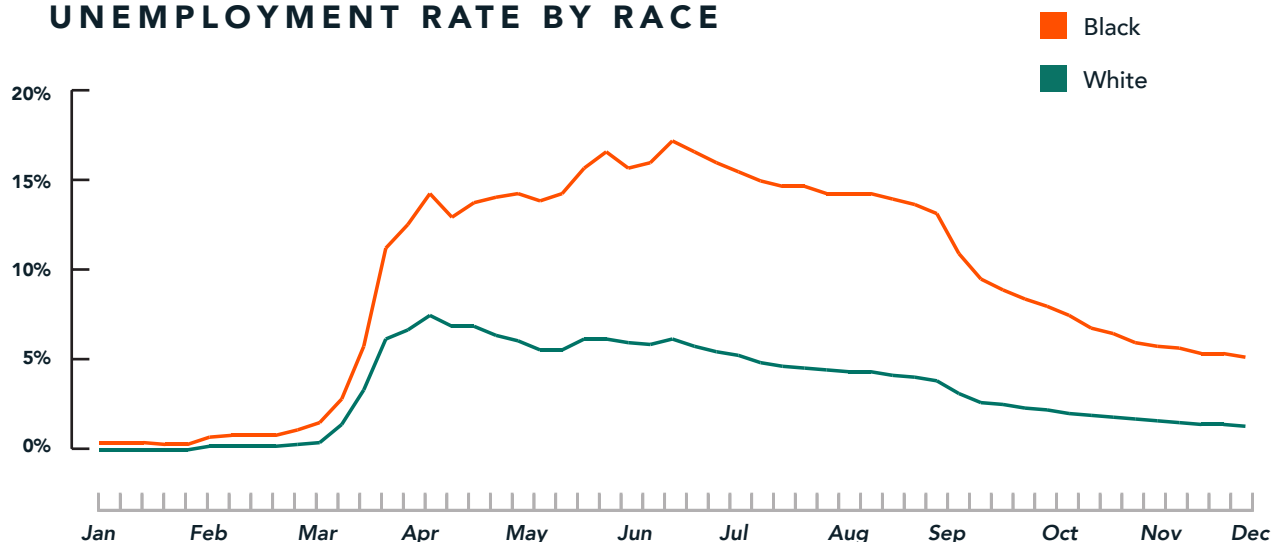


SOURCE: Tennessee Department of Labor and Workforce Development

Upon review of this data, significant disparity is evident in the number of Blacks who are experiencing unemployment during COVID-19 as a percent of total residents of Montgomery County who are experiencing unemployment. While Blacks are 20.7% of the population and 21.7% of the labor force in Montgomery County, as of December 2020, they comprise

44.5% of the unemployed. Even prior to the impact of COVID-19, Blacks composed a disproportionate percentage of the unemployed, 30% – 38.5% of the unemployed, despite only being 21.7% of the labor force. Similar to the Nashville MSA, no other race or ethnicity is experiencing a level of unemployment so disproportionate with their representation within the labor force.

MONTGOMERY COUNTY UNEMPLOYMENT RATE BY RACE



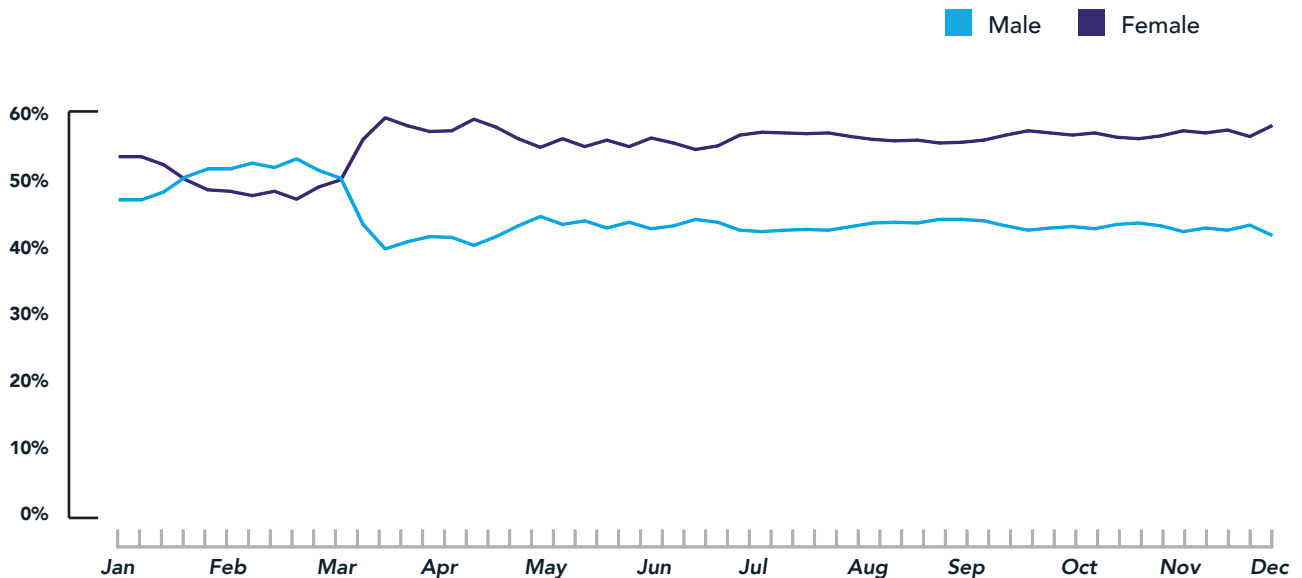
SOURCE: Tennessee Department of Labor and Workforce Development

Again, calculating the unemployment rate based on percentage estimates of the labor force of each race derived from Census data, only Black and White unemployment rate is shown as only these two races were unemployed at levels that varied significantly from their proportion of the labor force.

Similar to the Nashville MSA, the unemployment rate between Blacks and Whites depicted above is striking in terms of disparity for the Black community. Even prior to the onset of COVID-19, the Black unemployment rate in Montgomery

County was higher than the rate of White unemployment. After the onset of COVID-19 related closures, the Black unemployment rate was double the rate among Whites (14.4% vs. 7.4%). While the White unemployment rate peaked at 7.7% in April and then began to decline to approximately 1.6% (December 2020), the unemployment rate for Blacks increased to a high of 17.3% (climbing for two and a half months more) before decreasing to 5.4% by the end of December 2020 (3.4X higher than the White unemployment rate).

BREAKDOWN OF THE UNEMPLOYED BY GENDER AS A PERCENT OF THE TOTAL NUMBER OF UNEMPLOYED IN MONTGOMERY COUNTY



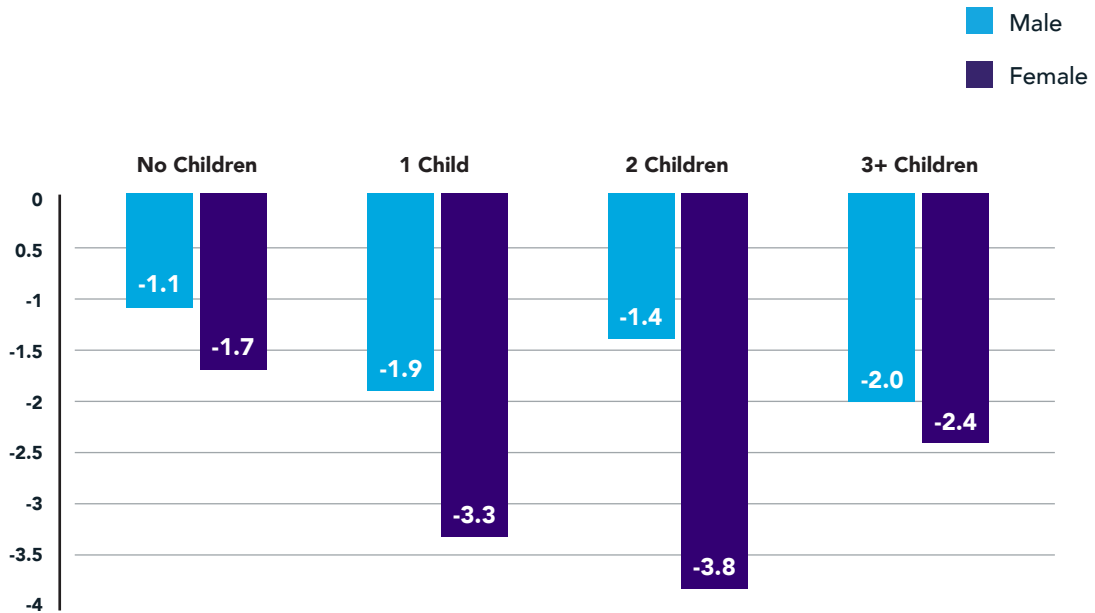
SOURCE: Tennessee Department of Labor and Workforce Development

While women make up 50.9% of the Montgomery County's population, they are only 46.0% of the labor force. Analyzing the proportion of women who make up the unemployed reveals a gender disparity in unemployment even prior to the COVID-19 closures, though the level of women as a proportion of the unemployed fluctuated. After COVID-19 related closures of schools and businesses began to occur, women began to encompass between 55.4% - 57.3% of the unemployed population. Even as most sectors move towards re-employment, the trend for women seems to be shifting toward women representing a higher proportion of the unemployed

population. This likely reflects the impact of households where responsibilities for childcare and remote schooling fall primarily to women.

According to the Bureau of Labor Statistics, nationally female labor force participation began to decline in 2020; approximately 2.2 million fewer women were in the labor force in October 2020 than in October 2019. This indicates that women are not just unemployed, but are choosing to not actively look for employment. These changes in labor force are even more pronounced for those with children.

LABOR FORCE PARTICIPATION NET CHANGE BY GENDER (US)



SOURCE: Jan - Sept. 2020 Data, US

National data from the Bureau of Labor Statistics also indicated that the largest burden of childcare falls on women; 3.3% to 3.8% of women with one or two children have left the labor force between January and September of 2020.

The Nashville Area Chamber of Commerce Research Center also analyzed COVID-19 unemployment data to consider disparities based on age. In Montgomery County, the proportion of the unemployed segmented

by age does not show significant disparity based on age. Those aged 35 – 64 had 4% to 6% more unemployed than their proportion of the labor force over the course of 2020. Those 65 and older had 2.9% more unemployed than their proportion in the labor force prior to the onset of COVID and 1.6% by December 2020. Overall, the analysis found no significant age-related employment disparities as a result of COVID-19.

WORKFORCE DEVELOPMENT

The projected deficits in skilled workforce (i.e., more jobs than workforce to fill them) will continue to broaden over the next five years, exacerbated by the economic conditions created by COVID-19, instability in global economies, attrition due to an aging labor force and

disruption by technology. By considering which key occupations are needed by target industries as well as the skills gaps and occupation gaps that exist currently in the region, there are five key occupational groups ripe for workforce development efforts:

healthcare practitioners and technical occupations, computer and mathematical occupations, business and financial occupations, management occupations, and production occupations for advanced manufacturing.

Preparing students and retooling and upskilling adult workers can ensure these critical target sectors are well-supplied with the qualified workforce necessary to grow and sustain competitiveness. At the same time, talent development can help ensure that more residents can compete for good and promising jobs (those jobs that pay above the regional median and offer benefits either now or have the potential to do so within ten years) and benefit from Middle Tennessee's growing economy.

Employers throughout the region have opportunities available to enhance their workforce through upskilling and reskilling for employees. Taking advantage of labor and workforce development funding and programs like Tennessee Reconnect allow employers to connect to necessary training benefiting their employees and meeting workforce needs (see www.TNreconnect.gov).

With some industries severely damaged (at least in the short-term) and the COVID-induced recession disproportionately harming communities of color, providing opportunities and support for Middle Tennessee's workforce to gain new skills, certifications and degrees is crucial to meet the needs of employers and to ensure the region's economic recovery. Meanwhile, Middle Tennessee residents recognize the changes in workforce need and the necessity of gaining new skills to succeed in the work environment. According to the 2020 Vital Signs resident survey, 31.7% feel they will need additional education to advance their career.



36.5% Middle Tennessee residents intend to pursue on the job training within the next two years.

VITAL SIGNS 2020 SURVEY

EDUCATIONAL ATTAINMENT BROKEN OUT BY RACE AND ETHNICITY NASHVILLE MSA

Less than Highschool		Highschool Diploma or Equivalent	
White Alone	8.8%	White Alone	27.0%
Black or African American	10.8%	Black or African American	27.1%
Asian Alone	14.7%	Asian Alone	14.3%
Two or More Races	37.5%	Two or More Races	29.3%
Hispanic or Latino	4.3%	Hispanic or Latino	3.9%
Not Hispanic or Latino	7.4%	Not Hispanic or Latino	26.6%
Some college, no degree		Associate's degree	
White Alone	19.3%	White Alone	7.1%
Black or African American	24.6%	Black or African American	8.6%
Asian Alone	11.4%	Asian Alone	5.5%
Two or More Races	14.7%	Two or More Races	4.1%
Hispanic or Latino	1.6%	Hispanic or Latino	0.5%
Not Hispanic or Latino	19.7%	Not Hispanic or Latino	7.2%
Bachelor's degree		Graduate or professional degree	
White Alone	25.2%	White Alone	12.8%
Black or African American	17.2%	Black or African American	11.7%
Asian Alone	26.8%	Asian Alone	27.3%
Two or More Races	11.4%	Two or More Races	4.8%
Hispanic or Latino	1.6%	Hispanic or Latino	0.6%
Not Hispanic or Latino	25.8%	Not Hispanic or Latino	13.2%

SOURCE: American Community Survey 2017-2019 1-Year Estimates,
3 Year Weighted Average

Post-secondary educational attainment has a direct impact on the economic success of Middle Tennessee residents. Educational attainment and earnings data demonstrate that Blacks or persons of two or more races, and Hispanic or Latino groups are underrepresented at higher educational attainment levels and subsequently have lower earnings.

Unsurprisingly, those Middle Tennessee residents most severely impacted throughout the pandemic were those who were on the sidelines of prosperity even before the pandemic began. Recent enrollment data from Tennessee Board of Regents education institutions further highlights the challenges faced by underrepresented populations in education attainment.



2020 TENNESSEE BOARD OF REGENTS ENROLLMENT (TENNESSEE DATA)

Enrollment in fall 2020 declined 11.5% compared to total enrollment in fall 2019. **That is 10,000 fewer students.**

Adult enrollment declined 13% from 2019 to 2020.
That is 3,300 fewer students.

Black enrollment declined 19% from 2019 to 2020.
That is 2,680 fewer students.

Female student enrollment declined 9% from 2019 to 2020.
That is 4,790 fewer students.

CHILDCARE

As more Middle Tennesseans struggle to find quality, affordable childcare, this has become a topic of interest to business and a significant policy discussion in recent years. Quality childcare is linked to children's future academic and life success. The availability of high-quality, affordable childcare also has a direct impact on the Middle Tennessee economy, supporting a more skilled and productive workforce. Parents that have access to reliable and affordable childcare are more productive at work. They experience less absenteeism from work and less "presenteeism" – where the parent is at work, but unfocused due to worrying about their childcare. Additionally, affordable childcare leaves more take-home pay and allows more parents to work, especially mothers. Reliable childcare also allows for parents to more easily accept a promotion, which could entail longer hours. Reliable and affordable childcare makes that promotion, and the pay raise that usually

comes with it, more attainable. Access to quality, affordable childcare allows families to realize their full economic potential, fostering economic growth and prosperity.

During the pandemic, it has become abundantly clear how the country's economy is reliant on childcare. As childcare centers closed temporarily or permanently, many working parents have struggled to work and provide childcare and a record number of women have dropped out of the workforce.



**48% of Tennesseans live
in a childcare desert.**

– 2020 WORKFORCE STUDY
NASHVILLE AREA
CHAMBER OF COMMERCE

Even prior to COVID-19, many counties in Middle Tennessee had fewer spots at childcare facilities than children needing the care. The table below shows the child population of Tennessee counties in the Nashville and Clarksville regions coupled with the number of children that childcare centers in those counties are able to accommodate (Tennessee Department of Human Services). In every county, the child population far exceeds the number of available childcare spots and while not all of those children

may need childcare, the disparity still shows a severe lack of resources and infrastructure to accommodate families with children in Middle Tennessee. The March 2020 tornadoes and COVID-19 caused many childcare centers to close. Some reports have estimated that approximately 750 childcare centers have closed across Tennessee and that the number would have been higher, but for the assistance provided to childcare centers by Tennessee's Department of Human Services.

CHILDCARE NEED IN MIDDLE TENNESSEE (2018)

Age	UNDER 5 YEARS	5 TO 9	10 TO 14	TOTAL	CHILDREN SERVED - TN DHS	DIFFERENCE
Cannon	736	1,112	622	2,470	351	-2,119
Cheatham	2,109	2,391	2,868	7,368	1,963	-5,405
Davidson	46,442	41,615	36,702	124,759	36,020	-88,739
Dickson	3,200	2,914	3,923	10,037	2,011	-8,026
Macon	1,685	1,561	1,551	4,797	445	-4,352
Maury	5,951	5,682	6,016	17,649	2,910	-14,739
Robertson	4,408	4,531	5,051	13,990	3,160	-10,830
Rutherford	20,275	22,251	21,031	63,557	17,047	-46,510
Smith	1,082	1,284	1,276	3,642	362	-3,280
Sumner	10,954	12,472	11,991	35,417	8,199	-27,218
Trousdale	594	563	449	1,606	341	-1,265
Williamson	13,080	17,180	18,791	49,051	15,732	-33,319
Wilson	7,966	9,273	8,967	26,206	7,777	-18,429
Montgomery	16,696	14,697	13,965	45,358	10,251	-35,107
Stewart	772	659	866	2,297	337	-1,960

SOURCE: US Census Bureau, ACS Demographic Estimates, 2018 5 Year Estimates, Tennessee Department of Human Services, Child Care Providers Map including traditional childcare centers for 13 or more children (including preschool and after school care), drop-in centers, family home care for 7 or fewer children, and group home care for 8-12 children.

According to the annual Vital Signs survey, only 3.1% of people in the Nashville region work for a company that offered childcare benefits. Yet 50.7% respondents indicated that childcare impacts their ability to work. Expanding the basic infrastructure of childcare is a pressing need in Middle Tennessee. Critical to this effort is assessing where there are not enough facilities to accommodate the needs of the community and whether these centers located in places that are easily accessible for the community as a whole.



Tennessee parents who encounter childcare problems lose a combined estimated \$850 million in earnings each year. [1]

– TENNESSEANS FOR QUALITY EARLY EDUCATION (2020)

COVID RELIEF FOR CHILDCARE

During the pandemic, Governor Bill Lee directed the Department of Human Services to relax the regulatory burden on childcare centers. To support these efforts, the administration is providing \$10 million in COVID-19 emergency response and recovery grants to support existing childcare facilities.

On April 17, 2020, the Tennessee Department of Human Services announced the COVID-19 Essential Employee Child Care Payment Assistance Program, a new category of childcare payment assistance to support families that are working in essential workforce positions.

DHS also responded to childcare needs across the state by transferring \$57 million from TANF to a separate childcare fund to cover pandemic-related daycare expenses. DHS is also making additional grant dollars available to help strengthen early childhood education for childcare providers across the state.

The impacts of the tornados, COVID-19, and the resulting recession have been tremendously difficult for working parents throughout the Middle Tennessee region. A commitment to effectively providing assistance to families to help alleviate hardship will continue to ensure our region and its residents grow stronger as we recover.

FAMILIES FIRST ASSISTANCE

Families First, the state's Temporary Assistance for Needy Families (TANF) program, is a workforce development and employment program. The federal TANF program, provides states with broad flexibility on how to spend grants designed to help working parents and their children get out of poverty. The program, which is managed by The Tennessee Department of Humans Services, receives \$191 million annually from the federal government.

WHAT'S NEXT

PARTNERSHIP 2030

The Nashville Area Chamber of Commerce's Partnership 2030 is the Nashville region's public-private economic development initiative, dedicated to Middle Tennessee's long-term economic prosperity. The Partnership was formed in 1990 to maintain and grow the Nashville region's economy by creating jobs through relocating and expanding businesses, attracting a talented and creative workforce, and developing and promoting quality of place and livability.

Partnership 2030 is supported by nearly 250 business and community investors dedicated to the success of the Nashville region. The Partnership focuses on a 10-county economic market – Cheatham,

Davidson, Dickson, Maury, Montgomery, Robertson, Rutherford, Sumner, Williamson and Wilson. Presenting the region as a broad portfolio of choice for business strengthens the entire Middle Tennessee economic engine. This regional approach continues to be a critical component to success in an increasingly competitive environment. For more than three decades, the Partnership has been successful in creating a vibrant, regional economy and will continue to build upon this foundation for decades to come.

View P2030: nashvillechamber.com/economic-development

MIDDLE TENNESSEE WORKFORCE STUDY

Despite the obstacles presented by 2020, data in the Nashville Area Chamber of Commerce Research Center's Northern Middle Tennessee Workforce Study highlights strengths and opportunities that exist as part of the economic and labor force landscape in Middle Tennessee. With this analysis, it is possible to plan programming and investment so that every person in the Middle Tennessee

region has the opportunity, support, and resources to connect to a career in a high-wage, high-demand pathway. This report lays the groundwork for collaboration among policymakers, educators, talent and economic development professionals, employers, and researchers.

View the study: nashvillechamber.com/research/recent-studies

NASHVILLE TALENT HUB



The Nashville Talent Hub is a partnership between the Nashville Area Chamber of Commerce, Metro Nashville, Nashville

State Community College, and Tennessee College of Applied Technology Nashville. The Nashville Talent Hub works to connect adults to educational opportunities and meaningful career pathways through the Reconnect Cafes, Reconnect Ambassador Program and connection to Nashville Promise Zone partners. To date, more than 1,000 adults in the Promise Zone are connecting to education beyond high school, and 1,342 people have completed a degree or credential while receiving support from Nashville Reconnect. The Reconnect

Ambassador Program was also recognized by the Institute for Higher Education Policy as a best practice in student support. Eighty-five Reconnect Ambassadors have been trained. People in community-based organizations, employers, state and local government offices, churches and schools in Nashville serve as trusted connection points for adults who wish to return to school but do not know where to start.

The Talent Hub designation, which Lumina Foundation awards with support from The Kresge Foundation, indicates that a community has shown the capacity and capability to significantly increase the numbers of residents with college degrees, certificates, or other credentials beyond a high school diploma.

TENNESSEANS FOR QUALITY EARLY EDUCATION

A 2019 report release by Tennesseans for Quality Early Education, "Want to Grow Tennessee's Economy? Fix the Child Care Crisis," delivers unprecedented insight into the adverse economic impacts of Tennessee's child care system dysfunction. The consequences: \$1.34 billion annually in lost earnings and revenue.

See the full report here: tqee.org/child-care-study

[1] hunt-institute.org/covid-19-resources/state-child-care-actions-covid-19/#state-tn

[2] hunt-institute.org/covid-19-resources/state-child-care-actions-covid-19/#state-tn

[3] tn.gov/humanservices/news/2020/11/30/tennessee-department-of-human-services-announces-renewed-support-for-childcare.html

[4] tennessean.com/story/news/politics/2020/11/13/tennessee-families-first-massive-reserves-tanf-funds-larger-than-ever/6276920002/

TRANSPORTATION

With the onset of COVID-19 in March 2020, the role of transportation and the use of transit shifted in Middle Tennessee. Personal and professional routines changed: businesses implemented telecommuting policies and schools shifted to remote

learning; residents took over their streets for walking, biking and socially-distanced visiting; streets teemed with delivery cars and trucks. As a result, traffic and travel patterns throughout Middle Tennessee have changed dramatically over the past year.

However, as many Middle Tennesseans shifted to working remotely, essential workers continued to commute – to jobs in public safety, at hospitals, and at grocery stores, convenience stores, and pharmacies. The pandemic revealed our region’s reliance on essential workers and the challenges that many essential workers face in their daily commutes, especially essential workers relying on transit.

Previous Vital Signs reports have argued that the value and success of transportation investments should be judged on the ability of the investment to improve access to jobs, education, and amenities. The Middle Tennessee region’s economy benefits, its workforce benefits and its quality of life improves when the region’s residents can easily access jobs, education and amenities. Investments in transit are critical to that goal.

COVID Impacts on Transportation and Emerging Trends

Widespread use of telecommuting

Growing demand for delivery

Hesitancy for riders to return to transit

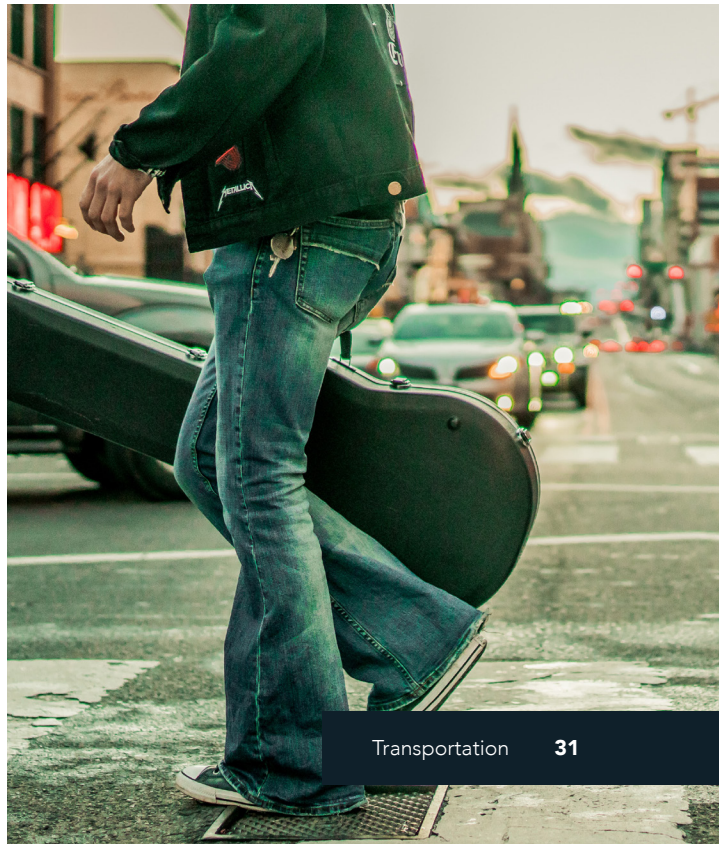
Decline in tax revenue/Delay of transportation investments

Improved air quality

Increase in crash severity despite reduction in crashes

Surge in Walking and Biking

– GREATER NASHVILLE REGIONAL COUNCIL (2020)



TRANSIT IN MIDDLE TENNESSEE STRUGGLED PRIOR TO THE PANDEMIC

Unfortunately, with access as a goal, Nashville/Davidson County's transit system, WeGo, was on unstable financial footing before COVID-19, which resulted in changes to WeGo's service and increased fares.

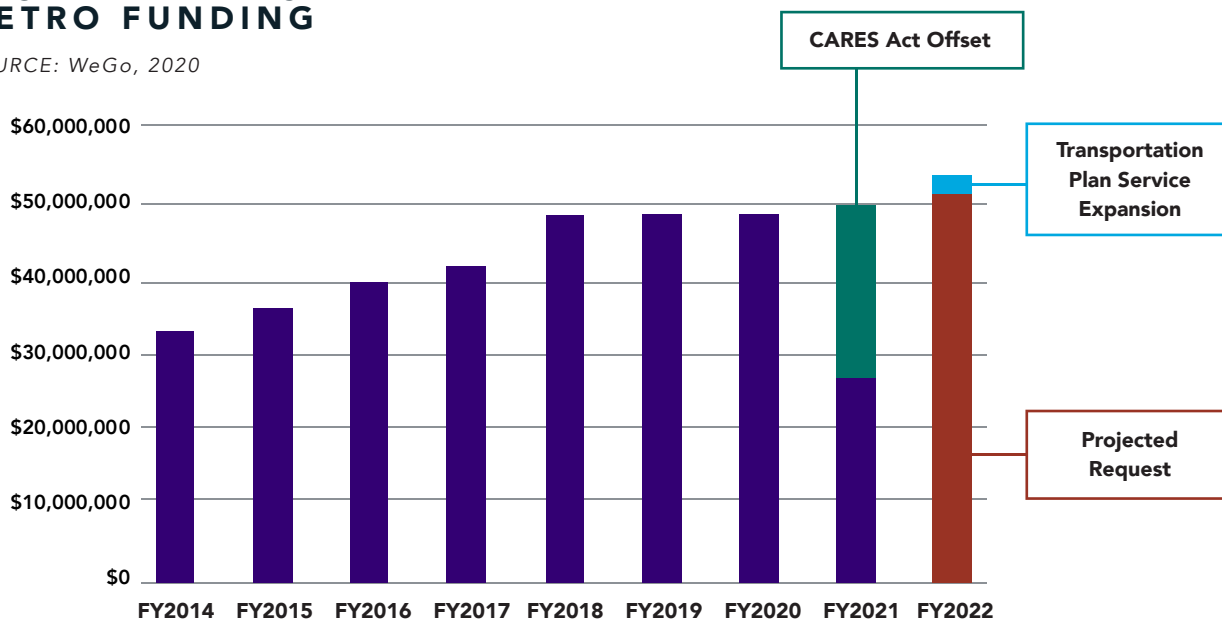
In FY20, WeGo faced a budget deficit of \$8.9m, which the WeGo Board addressed through system design and operations changes as well as fare increases. Metro Nashville's finances were so strained in FY21 that the Council adopted a 34 percent property increase while also asking most departments to make budget cuts. WeGo was spared cuts only because Metro's portion of WeGo's budget, \$22.8M, was covered by one-time funding through the federal Coronavirus Aid, Relief and Economic Security Act (CARES Act). Acknowledging the role of transit for

resilience during disaster and for recovery post-disaster, Congress included funding in the CARES Act for operations and capital needs for transit agencies throughout the United States with a goal of assuring that transit agencies would exit the pandemic in the same financial condition as they entered it. In the Middle Tennessee region, almost \$76 million was distributed to aid transit agencies during the midst of COVID-19. It is worth noting that Metro Nashville/Davidson County was one of the few jurisdictions that used the CARES Act money to replace, rather than supplement, local funding for transit.

To address the deficit from FY20 and the use of one-time funds in FY21, Metro would need to put \$30.7M to WeGo in Metro's FY22 budget.

RECENT TRENDS IN METRO FUNDING

SOURCE: WeGo, 2020



TRANSIT DURING THE PANDEMIC

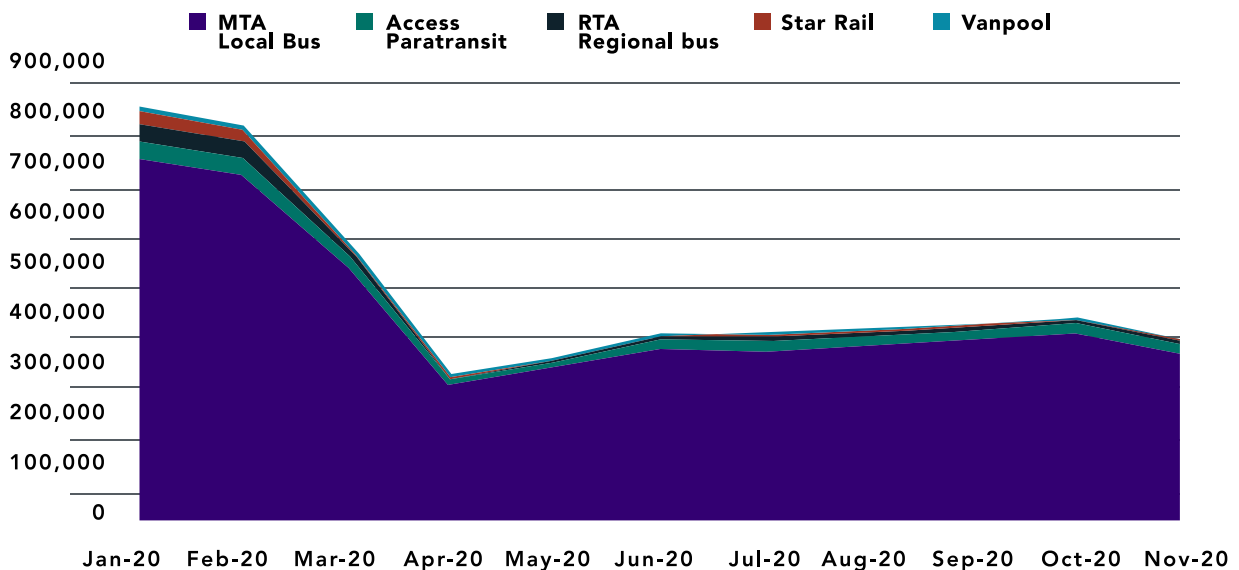
With the fear of the spread of COVID-19 and uncertainty about how the virus spread, WeGo made changes to service to improve safety. Despite this, many regular transit users across the region chose other modes of transportation. At its lowest point of ridership in 2020, WeGo experienced a 65 percent decrease in

ridership on the Regional Transportation Authority (RTA) commuter bus; the WeGo Star ridership saw a decrease of 90 percent; and Access Ride services experienced a decrease of 80 percent. Even at its lowest ridership levels, transit agencies observed continued ridership by essential workers.

MONTHLY RIDERSHIP TREND

SOURCE: WeGo, 2020

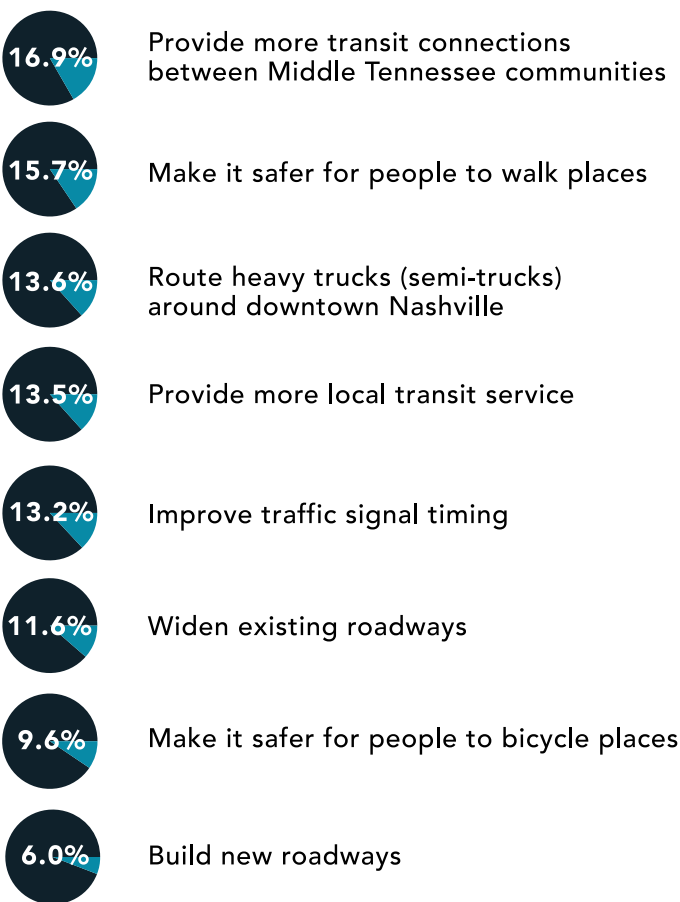
After a significant drop in ridership at the beginning of the pandemic, there has been a slow but steady uptick in ridership, though this trend reversed somewhat entering winter as COVID-19 cases increased.



	MTA Local Bus	Access Paratransit	RTA Regional bus	Star Rail	Vanpool
Jan-20	706,344	38,996	32,118	24,844	5,852
Feb-20	674,948	37,075	30,018	22,854	5,362
Mar-20	499,545	25,386	15,685	8,398	4,504
Apr-20	270,963	12,150	2,977	1,510	2,992
May-20	298,597	15,151	3,165	1,690	2,698
Jun-20	337,537	18,964	4,524	2,469	2,842
Jul-20	335,092	19,510	4,509	2,537	2,006
Aug-20	344,170	20,087	4,719	2,528	1,912
Sep-20	353,720	20,835	4,500	2,611	2,192
Oct-20	367,810	22,056	4,903	3,108	2,338
Nov-20	333,158	17,092	4,228	2,468	1,824

VITAL SIGNS 2020 SURVEY

Which of the following transportation strategies do you think Middle Tennessee leaders should prioritize?
(pick your top three)



Over 65% of Middle Tennessee residents believe problems with transportation are a moderate to significant threat to the continued success of our local economy.

TRANSIT POST-PANDEMIC

With the acceleration of telecommuting during COVID-19, much has been made about how the pandemic could permanently alter work and – as a result – remake cities and the need for transportation infrastructure. Will remote work continue,

It is too soon to know what the impact of COVID-19 will be on cities, yet the 2020 Vital Signs survey revealed that Middle Tennessee residents continue to see the need for transit and mobility solutions throughout the region. Similar to previous survey results, over 72% of the 2020 survey respondents signaled that it is very or extremely important for regional leaders to offer a transit plan with a strategy for funding. Support diminishes however, when respondents were asked about funding transportation – 45% of survey respondents indicated that they would support a local tax increase dedicated to implementing a set of transportation projects and services to address current and future transportation needs.

leaving office space and parking garages unused or converted to other uses? Will residents flock to less dense communities, or communities at some distance from their “office,” since employees only have to log-in each day?



22% of Middle Tennesseans believe remote work will be permanently adopted.

VITAL SIGNS 2020 SURVEY

Middle Tennesseans are likely aware, intuitively, of the growth the region continues to experience. The Greater Nashville Regional Council (GNRC) predicts that the regional population will grow by 88% from 2020 to 2045 and that, as a result, the region will experience a 103% increase in miles traveled along congested routes. (GNRC, 2020) The projected growth of the region requires that Middle Tennessee leaders continue to plan and provide additional transit options to serve existing residents and newcomers.

TRANSIT IS CRITICAL TO MIDDLE TENNESSEE'S RECOVERY AND FUTURE RESILIENCE

COVID-19 caused transit systems across the country, including in Middle Tennessee, to experience hardship due to drops in usage and revenue. **Rather than look at transit as something that is funded after recovery, it is critical to see that funding transit can drive recovery.**

Research by Transportation for America (T4A) looked at how various communities funded transit during another recent economic shock – the Great Recession in 2008. T4A's research found that in communities where transit funding and

operations languished during the Great Recession, employees that were reliant on transit were slower to see their personal and household wealth and economic well-being rebound, which was a drag on the overall economic recovery. This workforce could not as quickly and fully take advantage of the economic recovery, because they lacked transportation options. Meanwhile, communities that continued to invest in transit saw a faster economic recovery that benefitted more of the workforce. [1]

Middle Tennessee has far to go, however, in providing transit access. The 2020 Vital Signs survey found that over 31% of Middle Tennessee residents have difficulty accessing transit because of cost, proximity to work or home, or because it is not available at a convenient point in the day.

WeGo, however, has shifted to considering the value of routes and hours of service according to the access that is generated – the number of residents who will – with any given route or service shift – see an increase in access to jobs, education, and amenities. This focus and commitment to access is evident through WeGo’s proposed **Better Bus** plan – proposing to provide 44,000 more residents and 45,000 more jobs with access to frequent service and providing 95% of riders the opportunity to travel earlier or later.



CENTER FOR NEIGHBORHOOD TECHNOLOGY, ALLTRANSIT, 2019

Nashville MSA



Jobs Accessible in 30-minute Trip per Average Household	36,857
% of Jobs Located within 1/2 Mile of Transit	54.3%
% of Workers Living within 1/2 Mile of Transit	32.3%
% cost burdened by transportation	25.0%

Clarksville MSA



Jobs Accessible in 30-minute Trip per Average Household	3,063
% of Jobs Located within 1/2 Mile of Transit	27.7%
% of Workers Living within 1/2 Mile of Transit	13.9%
% cost burdened by transportation	29.0%

Davidson County



Jobs Accessible in 30-minute Trip per Average Household	86,746
% of Jobs Located within 1/2 Mile of Transit	83.4%
% of Workers Living within 1/2 Mile of Transit	67.9%
% cost burdened by transportation	22.0%

Montgomery County



Jobs Accessible in 30-minute Trip per Average Household	4,401
% of Jobs Located within 1/2 Mile of Transit	44.1%
% of Workers Living within 1/2 Mile of Transit	19.8%
% cost burdened by transportation	29.0%

SOURCE: Center for Neighborhood Technology, 2019, AllTransit

Investment in transportation infrastructure and mobility is not only important for economic recovery but will be critical for future economic success of our region and to provide

resilience for workers and the economy in the face of future economic challenges. With a growing regional economy, the need for investment in accessible and equitable

transportation solutions is clear as is the need for a dedicated funding source to avoid the cuts and setbacks transit has faced in the past and ensure continuous improvement.

WHAT'S NEXT

THE METRO NASHVILLE TRANSPORTATION PLAN

In 2020, Mayor Cooper's Office of Transportation, Infrastructure and Sustainability engaged the community in creating a transportation plan for Metro Nashville. The Mayor's Office sought to create a plan that would reflect the community's priorities for investment and would draw on specific projects from Metro's many previous, approved transportation plans including plans for bike/pedestrians, for transit, for smart infrastructure, etc.

The Mayor's Office hosted listening sessions and engagement opportunities with community stakeholders from January to March of 2020, providing opportunities to residents throughout Davidson County to voice their ideas, priorities, and concerns regarding transit and transportation in Nashville. The release of a proposed transportation plan in the fall of 2020 provided the community an opportunity to review and comment on the plan.

On December 1, 2020, Mayor Cooper's office presented the plan to Metro Council, seeking the Council's approval of a resolution of endorsement for the plan. While individual contracts and other actions for implementation would still need to come before the Council, the resolution of endorsement by Metro Council would improve Metros' chances in securing funding in competitive grants. On December 15, the Council adopted the resolution of endorsement in a vote of 33 for, 5 opposed, and one abstaining.

The adopted plan will serve as a first step in creating a transportation system that adequately serves Nashville/Davidson County residents - addressing a backlog of maintenance items and upgrading the bus system; modernizing the city's traffic management system; investing in neighborhood infrastructure - including sidewalks, bikeways, and

greenways; improving safety and advancing the Mayor's Vision Zero Action Plan; and creating a Nashville Department of Transportation. The plan also calls for higher order transit on Gallatin Pike, Charlotte Pike and West End, as well as addressing the WeGo Star's needs within Davidson County.

Although necessary and commendable, this adopted plan alone does not provide the transportation solutions to adequately solve the future transportation needs of Nashville and create the hub of a transit system to serve the Middle Tennessee region. Additional projects and corridors will require review and study to accommodate existing and future growth. Emphasis must also continue to be placed on the need for dedicated funding for transit to deliver the robust transit system needed to connect Middle Tennesseans with jobs and educational opportunities.

The next issue before the Mayor and Metro Council is how to begin implementation of the adopted plan. Mayor John Cooper noted, in his comments before Council on December 1, that much of the plan could be funded and implemented through Metro's operating and capital budgets. It is worth

noting that – in addition to the \$30.7M deficit from FY19 and FY20 discussed above – to make the first three priority service enhancements in transit (part of the "Better Bus" program), improving weekday frequency, weekend frequency and span of service (longer hours), would cost an additional \$10.7M.

GREATER NASHVILLE REGIONAL COUNCIL

In early 2021, mayors and transportation officials from across Middle Tennessee adopted an update to the region's transportation plan. The Regional Transportation Plan (RTP) allocates more than \$10.5 billion in anticipated federal grants and matching funds to improve transportation throughout a seven-county planning area that includes Nashville, Maury, Robertson, Sumner, Rutherford, Williamson, and Wilson counties.

Visit **[GNRC.org/Transportation](https://www.gnrc.org/Transportation)**

While the COVID-19 pandemic impacted the ability to engage the public during much of 2020, a significant portion of public outreach was conducted over the last three years. GNRC worked closely with the Tennessee Department of Transportation (TDOT) and local governments to conduct studies, public meetings, and research to inform the Plan's recommendations. The Plan intends to help ensure coordination among existing transportation planning efforts of TDOT, transit agencies, and area cities and counties.

MOVING FORWARD

Transportation continues to be an issue of concern for business and community stakeholders. Business and community leaders have come together, bringing expertise and influence to generate transportation solutions across the Nashville region through Moving Forward, a group dedicated to creating regional

transportation solutions that work for Middle Tennesseans. Moving Forward brings the community together by empowering business, community, and transit thought leaders to engage with the critical transportation issues facing Middle Tennessee.

Visit **movingforwardmidtn.com**

[1] smartgrowthamerica.org/resources/learning-from-the-2009-recovery-act

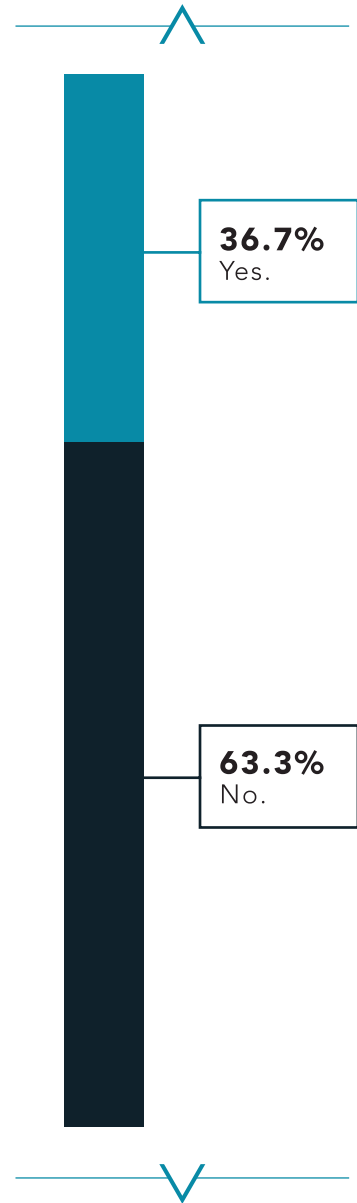
HOUSING

Housing affordability was challenging for many Middle Tennesseans prior to COVID-19, and the pandemic and resulting recession has worsened the situation. Finding housing that meets diverse households' needs and budgets and is in proximity to employment are major challenges. The 2020 Vital Signs Middle Tennessee resident survey revealed that almost 37% of Middle Tennessee residents are considered "housing cost-burdened," meaning they spend over 30% of their household income on their mortgage or rent. The figures for housing cost burdened households increase for households that have lesser educational attainment or are minorities. With the cost of shelter, transportation, and other necessities such as food, clothing, medicine, and utilities consuming the bulk of household income, there is little left for investments that could improve family wealth, such as savings, investment in education, or creation of a business.

"Affordable Housing" is housing that is affordable to families that earn 60% or less of the area's median household income. **"Workforce Housing"** is housing that is affordable to families that earn more than 60%, but less than 120%, of the area's median annual household income. In 2019, the U.S. Department of Housing and Urban Development listed the annual median household income for a household of four in the Nashville area as \$80,000. The 2017 Housing Nashville study of housing needs in Metro Nashville revealed that the greatest need is in increasing affordable rental supply, particularly households at 0-60% median income.

VITAL SIGNS 2020 SURVEY

Do you spend more than **1/3** (30%) of your household's take home pay on your rent or mortgage?



Many Middle Tennesseans have experienced housing hardships due to the pandemic, yet the COVID-induced recession does not appear to be slowing the region's overall residential growth. The region continues to see home construction and sales at rates similar to those prior to the pandemic. Year-end 2020 home sales in the Nashville area actually surpassed those in 2019 by 14% in November and 22% in December (Greater Nashville REALTORS®, 2020).

Home prices across the region also continue to rise. In 2020, Middle Tennessee's median price for a residential single-family home was \$345,000 and for a condominium it was \$245,000. This compares with 2019's median residential and condominium prices of \$324,000 and \$269,900, respectively. Meanwhile, home inventory has drastically shrunk over the past year. Nashville area home inventory in December 2020 was down approximately 49% compared to that of December 2019 (Greater Nashville REALTORS®, 2020).

The inability of household income to keep pace with mortgage and rent prices and the fact that home sales are on the rise while inventory is down, begs the question about which households can afford housing in Middle Tennessee and which are left out of the security and opportunity that stable, quality housing provides.

Studies prior to the pandemic revealed the racial disparities in households that are housing cost burdened. A study by the Federal Reserve Bank of Atlanta revealed that non-white households make up 40.5% of the renter market in the Nashville area and 44.7% of that renter base are considered "vulnerable renter households," which according to the United States Department of Housing and Urban Development (HUD), typically have household incomes that fall below 30% of the area's median income or are considered extremely low income.



Pre-COVID, the lack of available and affordable housing options hindered businesses in hiring the workforce they needed and meant that workers were less likely to find needed housing in proximity to their work. The Middle Tennessee region's economy includes a broad range of employees at different skill and wage levels, thus the need for a wide range of housing options exists and the rate of housing starts has not kept pace. With the continued growth of the region and the influx of residents moving to the area, housing remains difficult to find, especially at an affordable level.

Housing costs are usually the largest expense for a household, and housing costs in the Middle Tennessee area continue to rise as the region grows. Although the region has seen increases in wages over the course of the last five to ten years, wage increases have been far outpaced by housing and rent costs during the same period.

MEDIAN HOUSEHOLD INCOME INCREASE COMPARED TO MEDIAN HOME/RENT PRICE INCREASES



Nashville MSA

NOTE: Utilized 1-Year estimates and Zillow data to get the most real-time/market accurate picture to juxtapose against income

	2009	2014	2019	5 Year % Increase	10 Year % Increase
Median Household Income	\$51,066	\$52,640	\$70,262	33.5%	37.6%
Median Gross Rent	\$784	\$881	\$1,146	30.1%	46.2%
Median Home Price	\$180,071	\$185,461	\$275,884	48.8%	53.2%



Clarksville MSA

	2009	2014	2019	5 Year % Increase	10 Year % Increase
Median Household Income	\$41,685	\$45,130	\$53,547	18.7%	28.5%
Median Gross Rent	\$716	\$816	\$902	10.5%	26.0%
Median Home Price	\$143,550	\$146,450	\$171,212	16.9%	19.3%

SOURCE: US Census Bureau, American Community Survey 1-Year Estimates, 2009, 2014, 2019; Zillow Home Value Index, Annual Averages, 2009, 2014, 2019

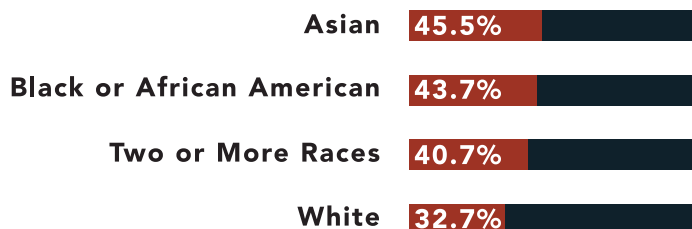
VITAL SIGNS 2020 SURVEY

Do you spend more than **1/3** (30%) of your household's take home pay on your rent or mortgage?

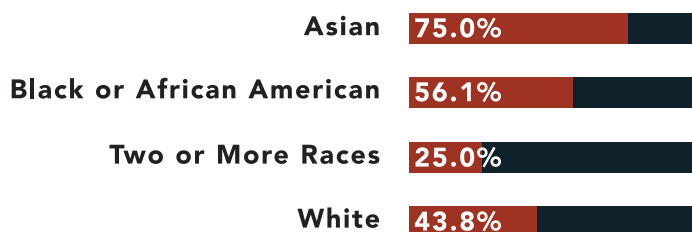
BROKEN OUT BY RACE



Nashville MSA



Clarksville MSA

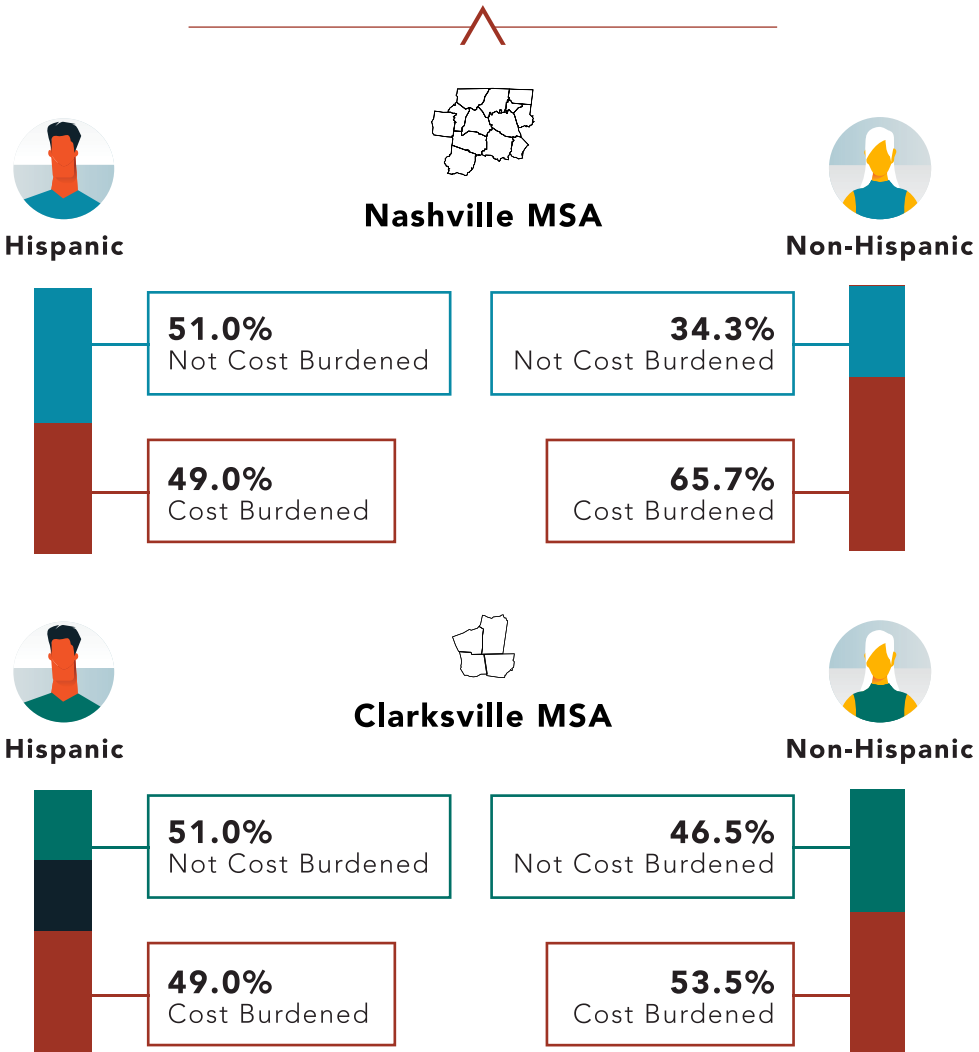


NOTE: due to a small sample size from those that identified as Native American (American Indian) or Alaska Native and Native Hawaiian or Other Pacific Islander were excluded.

VITAL SIGNS 2020 SURVEY

Do you spend more than **1/3** (30%) of your household's take home pay on your rent or mortgage?

BROKEN OUT BY ETHNICITY



HOUSING AND COVID

During COVID, many Middle Tennesseans who experienced pay cuts, were furloughed, or lost their jobs took advantage of moratoria on evictions. Others sought assistance for rent and mortgage payments offered with federal funding through the Coronavirus Aid, Relief and Economic Security Act (CARES Act), distributed through Metro Nashville/Davidson County government, among other entities.

The 2020 Vital Signs resident survey found that while only a small percentage of respondents who were renters reported being evicted or forced to move since March (just under 8%), a much larger percent – 41% – were fearful about being able to pay rent in the coming six months.


With individuals and families facing the possibility of eviction, rental assistance programs have been critical for Middle Tennesseans in maintaining housing. In Nashville, rental and mortgage assistance was offered by Metro

Government and by non-profits such as The Housing Fund, Affordable Housing Resources and the Nashville Conflict Resolution Center.

Renters in Middle Tennessee who risked eviction due to the pandemic-induced recession benefitted from a federal moratorium on evictions. In a given year, approximately 20,000 renters in Tennessee are evicted from their homes. [1] The CARES Act, passed in March, included an eviction moratorium, requiring landlords to give renters 30 days' notice before proceeding with eviction. That moratorium expired July 26 but, with the 30-day notice provision, kept households in their homes for another month. Then, on September 4, the Centers for Disease Control (CDC) issued a temporary order to stop evictions, linking the loss of one's home to a greater likelihood of moving to a homeless shelter or other congregate setting and contracting COVID. The CDC action was slated to expire on December

31. On December 27, President Donald Trump signed a \$900B relief package that, among many other actions, extended the moratorium for one month. As of March of 2021, the eviction moratorium has been extended through June 30, 2021. Affordable housing advocates have argued that once that moratorium is lifted, there will be massive evictions and foreclosures as renters and homeowners, still financially devastated by the pandemic, will be unable to make rent and mortgage payments.

Through the federally funded COVID-19 Rent Relief Act, Tennessee received about \$458 million in federal funding to support renters who are or have been struggling to pay rent, utilities, or other home energy costs due to loss of income as a result of the pandemic. The Tennessee Housing Development Agency (THDA) will administer \$383 million covering counties with less than 200,000 residents, which opened the application portal on March 1,



2021. Davidson, Knox, Rutherford, Shelby counties and Memphis will split and administer the remaining \$75 million. [2]

The picture of the impact of COVID-19 on housing in Middle Tennessee is ever evolving. Many residents throughout the region were directly impacted by the pandemic due to pay

cuts or furloughs. Others who lost their jobs have not found new work or have not been able to re-enter the workplace due to childcare needs. While a combination of local and federal relief options and policy decisions, supplemented by private sector action, have staved off some evictions and foreclosures, it is still too

early to know how Middle Tennessee residents' housing will be impacted by the economic fallout of the pandemic. What is known is that – even pre-COVID – housing starts were not keeping pace with need and many residents were struggling to find housing affordable and proximate to work.

WHAT'S NEXT

Aiding renters and homeowners during COVID-19 with moratorium on evictions and rent and mortgage assistance may keep Middle Tennessee's affordability crisis from dramatically worsening, but the lack of affordable housing has been an issue for some time – COVID-19 has simply drawn more attention to the problem. Action from the private and public sector is underway to address Middle Tennessee's, and especially Davidson County's, challenge in providing housing that is affordable for residents.

AMAZON'S INVESTMENT IN AFFORDABLE HOUSING IN RESPONSE TO COVID AND MORE BROADLY

In December 2020, Amazon and The Housing Fund announced a new program to aid homeowners who missed mortgage payments due to the pandemic and recession. The program is underwritten by a \$2.25M investment by Amazon. Amazon followed that investment with an announcement in

early January that it would create a \$2B Housing Equity Fund to create and maintain affordable housing in the cities that are home to Amazon's headquarters – Nashville, Seattle, and Arlington, Virginia. Amazon's Housing Equity Fund is currently taking recommendations for how to invest the funds.

REGIONAL HOUSING ASSESSMENT

The Greater Nashville Regional Council (GNRC) is undertaking a regional housing assessment to identify gaps between current and projected housing needs and housing supply, with a particular focus on vulnerable populations.

The assessment will not only illustrate local housing needs in 13 counties in northern Middle Tennessee but will demonstrate how housing need and supply fit into a regional picture.

METRO AFFORDABLE HOUSING TASK FORCE

In January 2021, Mayor John Cooper appointed a task force of Nashville housing leaders and advocates to study and find solutions to Nashville's urgent need for workforce and low-income housing. This group is comprised

of affordable housing developers, Metro government officials, financing specialists, affordable housing advocates, the Tennessee Housing and Development Agency, and the Greater Nashville Regional Council.

The task force will consider:

Preserving and creating new affordable housing units for various income levels.

Tying affordable housing goals to transportation, library and schools' improvements.

Improving partnerships between nonprofit and for-profit builders.

Streamlining the process to attain lower-cost housing for Nashvillians.

Identifying outstanding financing tools.

Studying successes in other cities.

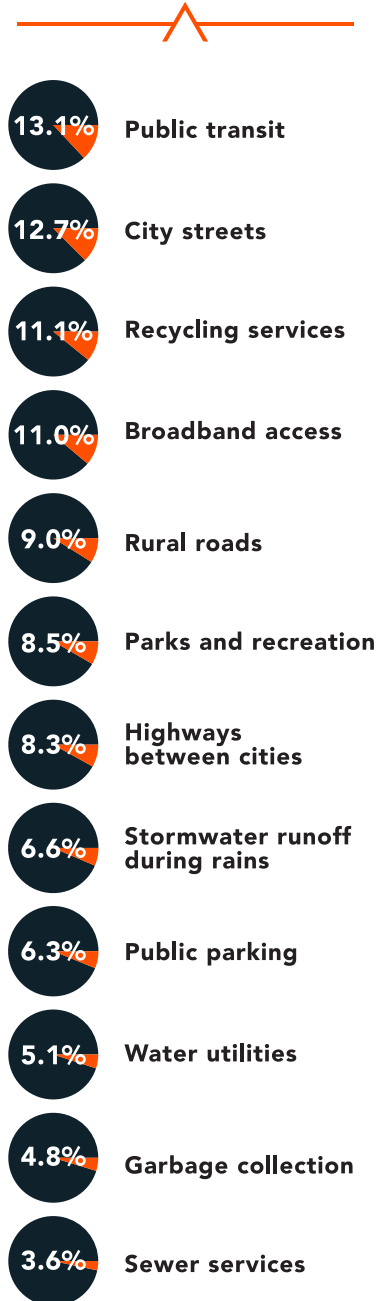
Changing government policies to help retain existing affordable housing.

[1] evictionlab.org/map/#/2016?geography=states&type=er&locations=47,-86.066,35.836

[2] tennessean.com/story/news/politics/2021/02/03/tennessee-housing-authority-provide-rental-relief-tenants/4354049001/

VITAL SIGNS 2020 SURVEY

Which three items below do you think should receive the most attention from community leaders over the next year?



INFRASTRUCTURE

The pandemic has provided fresh perspective on many aspects of life, including a critical component of every city and county in Middle Tennessee – the region’s infrastructure. For example, while Middle Tennessee roads and bridges have carried less traffic in the past year, residential use of water and electricity and residential generation of trash and recyclables has increased as residents work and learn from home.

The most important insight gained on infrastructure during life with the pandemic is the lack of consistent, robust broadband across the region and the disadvantage experienced by households without access to internet, devices and digital literacy. Lack of access to the internet was highlighted at the end of 2020 when a suicide bomber in downtown Nashville caused significant damage to AT&T infrastructure, leaving thousands without phone or internet service, including cutting off 911 service for Metro Nashville and several surrounding communities.

The bombing revealed systemic weaknesses of the communication systems that have become essential infrastructure. [1]

The disruption brought communications in the region to a halt, affecting hospitals, the Nashville airport, government offices and individual mobile users. Issues with credit card devices also impacted businesses big and small. [2] A total of 46 counties across Tennessee had disruptions in 911 call center services. The event revealed the need for redundancy throughout the communications systems that ultimately impact all Tennesseans. According to the most recent American Community Survey report, even prior to the bombing on Christmas and the resulting damage to the region’s communications infrastructure, over 10% of Nashville MSA households and over 14% of Clarksville MSA households lacked internet access.

This year, with students learning remotely, with many employees telecommuting, with residents living more of their lives – visiting, shopping, using telemedicine – online, Vital Signs addresses the region’s infrastructure overall, but focuses on the challenges faced by the region’s broadband system.

MIDDLE TENNESSEE'S OVERALL INFRASTRUCTURE

Middle Tennessee's infrastructure has been both expanded and strained by growth. Middle Tennessee continues to face the challenge of investing in maintenance for existing infrastructure while adding new infrastructure at a pace that keeps up with the region's growth. According to the Greater Nashville Regional Council (GNRC), the cost of infrastructure needs across the Middle Tennessee region totals \$18.9 billion. Transportation, education, health, safety, and welfare investments account for 93% of needs. With Middle Tennessee's rapid growth, the region's transportation infrastructure needs account for almost 27% of statewide needs. As noted above, the continued economic success of Middle Tennessee is also dependent on solutions to emerging infrastructure needs, such as broadband and digital access.

While the global pandemic has impacted each of these infrastructure needs differently, the continued investment in infrastructure will either enhance or slow Middle Tennessee's recovery. Investment, even in challenging fiscal

times, can ensure Middle Tennessee residents have access to the tools needed for economic success – transportation, education, healthcare, safety, and technology.

To identify and track infrastructure needs throughout the state, the State of Tennessee compiles an annual inventory of public infrastructure needs, called the Public Infrastructure Needs Inventory or PINI. The Greater Nashville Regional Council is responsible for the collection of this data in Middle Tennessee. The PINI describes the extent and type of capital investment needed in each county across a breadth of infrastructure categories: transportation and utilities (including broadband), public buildings, water and wastewater infrastructure, law enforcement and public health related facilities and vehicles, fire protection, housing, industrial development, education related facilities and systems, and recreation or community facilities. It is important to note that the projects listed within a given five-year timeframe may not be completed in that timeframe and may be rolled to the next five-



PUBLIC INFRASTRUCTURE NEEDS INVENTORY COMBINED NEEDS ACROSS THE MIDDLE TENNESSEE REGION

TRANSPORTATION & UTILITIES
\$8,962,238,180

47.30%

EDUCATION
\$2,608,223,625

13.8%

HEALTH, SAFETY, & WELFARE
\$6,114,158,812

32.3%

RECREATION & CULTURE
\$927,891,217

4.9%

GENERAL GOVERNMENT
\$274,746,000

1.4%

ECONOMIC DEVELOPMENT
\$70,670,365

0.4%

TOTAL
\$18,957,928,199

PROJECTIONS OF INFRASTRUCTURE

FIVE YEAR PERIOD - JULY 2018 THROUGH JUNE 2023

Source: GNRC for the Tennessee Advisory Commission on Intergovernmental Relations [3]



Number
of Projects
80
Estimated
Cost
\$58,629,380
Per Capita
\$4,054



Number
of Projects
367
Estimated
Cost
\$1,038,673,937
Per Capita
\$8,099



Number
of Projects
54
Estimated
Cost
\$35,404,000
Per Capita
\$2,611



Number
of Projects
118
Estimated
Cost
\$269,018,015
Per Capita
\$6,652



Number
of Projects
307
Estimated
Cost
\$422,694,580
Per Capita
\$4,481



Number
of Projects
407
Estimated
Cost
\$892,507,082
Per Capita
\$4,769



Number
of Projects
723
Estimated
Cost
\$9,196,584,935
Per Capita
\$13,279



Number
of Projects
284
Estimated
Cost
\$639,489,030
Per Capita
\$9,005



Number
of Projects
49
Estimated
Cost
\$126,788,474
Per Capita
\$11,514



Number
of Projects
151
Estimated
Cost
\$267,309,880
Per Capita
\$5,001



Number
of Projects
362
Estimated
Cost
\$1,992,320,607
Per Capita
\$6,132



Number
of Projects
400
Estimated
Cost
\$2,154,943,418
Per Capita
\$9,299



Number
of Projects
67
Estimated
Cost
\$151,886,764
Per Capita
\$6,259



Number
of Projects
121
Estimated
Cost
\$130,830,000
Per Capita
\$6,561



Number
of Projects
415
Estimated
Cost
\$1,581,143,595
Per Capita
\$11,244

In recent years, the need for broadband access for Tennesseans, especially for those residing in rural communities, has been a topic of importance for State and local elected leaders. Rural economic development, and in particular broadband expansion, has been a top priority of the GNRC Mayors Caucus. High-speed broadband access has historically been viewed as a luxury, but the pandemic has made clear that broadband infrastructure is necessary to ensure that communities are not at a disadvantage in competing economically and in educating their youth.

Tennessee has recently prioritized investment in broadband access, appropriating \$45 million towards the Tennessee Broadband Accessibility Act since 2018. [4] Even with that investment, as of 2020, over 600,000 Tennesseans still lack access to quality high-speed internet and 27% of Tennesseans have no internet subscription. [5]

In March 2020, as schools throughout Middle Tennessee began remote learning programs and businesses shifted to telecommuting, the urgency around providing high-speed internet connectivity to residents became very clear. Acknowledging this challenge, federal dollars for broadband expansion were included in the Coronavirus Aid, Relief and Economic Security Act (CARES Act). In August 2020, Governor Lee announced the Tennessee Emergency Broadband Fund, which included an investment of \$61 million in broadband expansion across the state to support distance learning, telehealth and telecommuting.

According to the Tennessee Department of Economic and Community Development, this program provided assistance to approximately 55,000 Tennesseans by December 31, 2020. Federal CARES Act funding has also been utilized to provide education technology to students across Tennessee. In April 2020, the Tennessee Department of Education received \$260 million and as recently as January 2021 received another \$1.1 billion dedicated to critical K-12 education expenses, a portion of which will go towards necessary education technology needs. [7]

As the 112th Tennessee General Assembly got underway, on February 8th, 2021 Governor Bill Lee made additional commitments to broadband expansion and access in his State of the State address and his proposed annual state budget. Governor Lee proposed a one-time investment of \$200 million for broadband expansion to underserved areas throughout the state through grants and tax credits.

In 2017 the Tennessee General Assembly passed the Tennessee Broadband Accessibility Act (TBAA), which has provided broadband access to approximately 66,000 Tennesseans. 600,000+ Tennesseans still lack access to high quality internet connectivity. [6]

**TENNESSEE DEPARTMENT
OF ECONOMIC AND
COMMUNITY DEVELOPMENT**

BROADBAND AND DIGITAL ACCESS

SOURCE: US Census Bureau. American Community Survey, 1-Year Estimates, 2019

Nashville MSA



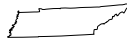
	Households Without Computer Access		Households Without Internet Access		Total Households
	Count	Percent	Count	Percent	
White alone	67,092	4.7%	82,671	5.8%	1,429,168
Black or African American alone	20,657	7.5%	33,755	12.2%	275,919
American Indian and Alaska Native alone	547	12.2%	337	7.5%	4,485
Asian alone	660	1.3%	1,957	3.9%	50,746
Native Hawaiian and Other Pacific Islander alone	38	4.7%	202	25.1%	804
Some other race alone	2,053	7.0%	3,663	12.4%	29,467
Two or more races	1,406	3.0%	3,731	8.0%	46,368
Hispanic or Latino origin (of any race)	7,622	5.7%	13,952	10.3%	134,892

Clarksville MSA



	Households Without Computer Access		Households Without Internet Access		Total Households
	Count	Percent	Count	Percent	
White alone	12,819	6.1%	13,835	6.6%	210,255
Black or African American alone	4,640	8.5%	5,399	9.9%	54,631
American Indian and Alaska Native alone	74	4.6%	154	9.5%	1,623
Asian alone	384	6.9%	114	2.1%	5,536
Native Hawaiian and Other Pacific Islander alone	11	1.1%	157	15.1%	1,038
Some other race alone	145	3.9%	357	9.5%	3,764
Two or more races	247	2.1%	726	6.1%	11,987
Hispanic or Latino origin (of any race)	619	2.4%	1,966	7.8%	25,330

Tennessee



	Households Without Computer Access		Households Without Internet Access		Total Households
	Count	Percent	Count	Percent	
White alone	401,156	7.9%	395,146	7.8%	5,098,033
Black or African American alone	153,959	14.2%	130,905	12.1%	1,081,761
American Indian and Alaska Native alone	2,192	12.4%	1,735	9.8%	17,657
Asian alone	2,654	2.3%	4,825	4.2%	114,883
Native Hawaiian and Other Pacific Islander alone	539	14.9%	464	12.8%	3,621
Some other race alone	8,956	9.8%	13,845	15.2%	90,976
Two or more races	7,382	5.1%	14,106	9.7%	144,678
Hispanic or Latino origin (of any race)	28,261	7.9%	44,609	12.5%	357,674

United States



	Households Without Computer Access		Households Without Internet Access		Total Households
	Count	Percent	Count	Percent	
White alone	13,831,312	6.0%	14,930,507	6.5%	230,103,209
Black or African American alone	3,842,214	9.7%	4,494,382	11.4%	39,444,211
American Indian and Alaska Native alone	355,212	13.4%	350,697	13.2%	2,658,310
Asian alone	446,971	2.5%	681,684	3.9%	17,567,528
Native Hawaiian and Other Pacific Islander alone	42,969	7.4%	54,533	9.4%	579,972
Some other race alone	1,035,035	6.6%	1,768,945	11.2%	15,774,262
Two or more races	339,850	3.2%	636,863	6.1%	10,479,304
Hispanic or Latino origin (of any race)	3,905,429	6.8%	5,955,629	10.4%	57,395,284

ACCESS AND DEVICES ARE NOT ENOUGH- DIGITAL LITERACY

Access to digital infrastructure is a challenge for some parts of Middle Tennessee, as is access to digital devices. Additionally, having the ability to understand and utilize the available digital tools for education, employment, or telemedicine, is a third, major driver of the digital divide. Digital literacy is “the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills.”[8]

Even prior to the pandemic, digital skills and competencies were increasingly important in the workplace. Studies show that about 46% of overall labor demand is now for middle-skill jobs, which are jobs that provide a living wage, typically paying at least \$15 an hour. Of those available middle-skill jobs, about 82% are considered digitally intensive, making digital literacy a critical component for achieving economic stability and success.[9]

While possessing digital skills and competencies is critical for jobs now and in the future, the pandemic has revealed that the benefits of telecommuting have come disproportionately to the wealthier. The Economist noted, in its end of the year issue, that studies found that “60% of jobs in America paying over \$100,000 can be done from home, compared with 10% of jobs paying under \$40,000.”[10]

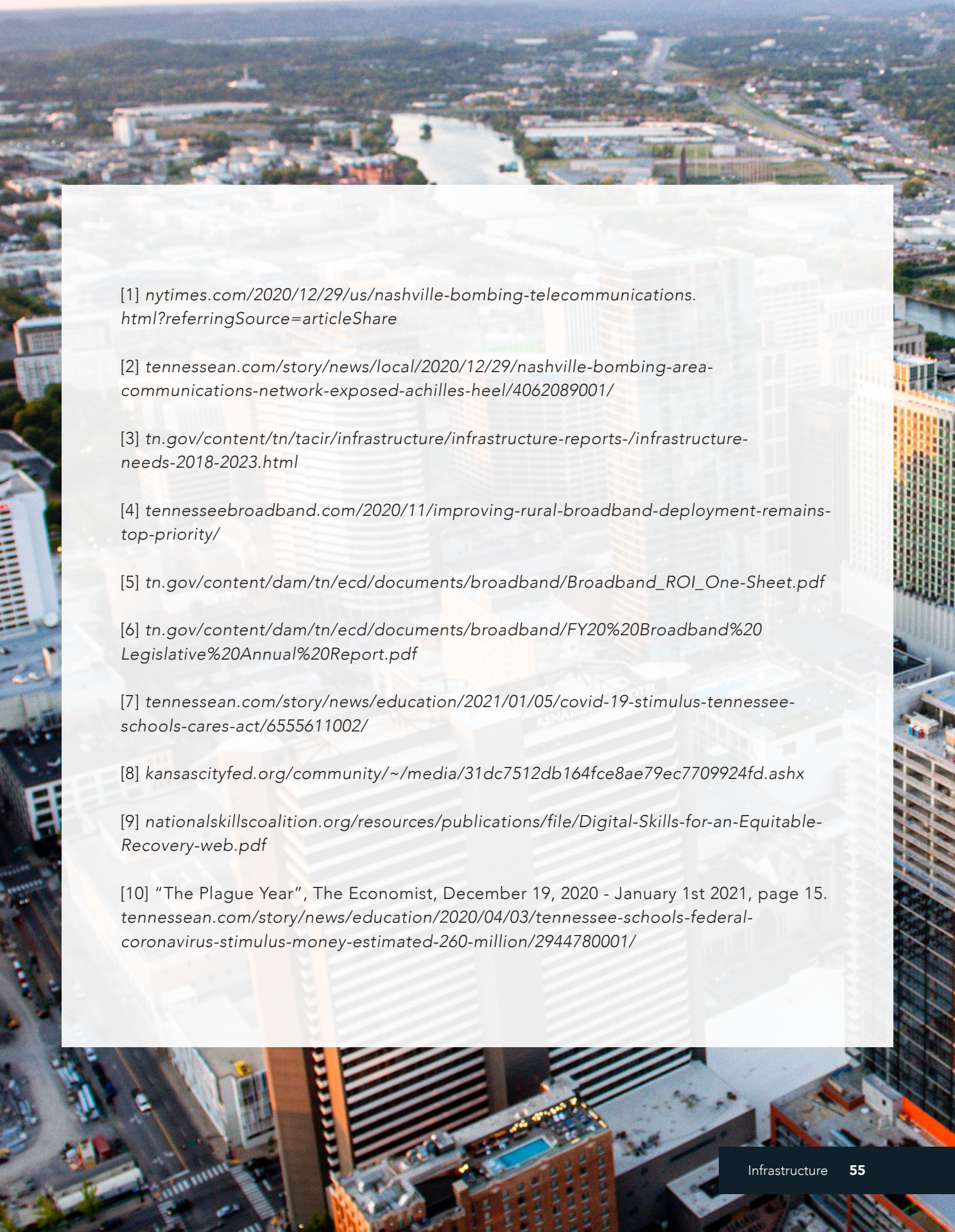
The onset of COVID-19 forced a considerable proportion of the existing workforce to quickly learn and adopt digital skills and made it clear that digital skills will be essential in most jobs. An equitable economic recovery is in large part dependent upon the region’s workforce having adequate access to necessary digital infrastructure and skills. Federal, state, and local elected officials must continue to explore programmatic and long-term digital access solutions.

WHAT’S NEXT

BROADBAND ACCESSIBILITY GRANTS

The Broadband Accessibility Grant Program is a critical part of Tennessee’s plan to address broadband gaps. The program offsets the capital expenses in the deployment of broadband in unserved areas. The goal of this program is to facilitate broadband access to all Tennesseans, while promoting practices that increase deployment and encourage adoption. Funds will be targeted to areas that are unlikely to receive broadband service without grant funding.

tn.gov/economic-development/rural-development/tennessee-broadband-grant-initiative/tnecd-broadband-accessibility-grant.html



[1] [nytimes.com/2020/12/29/us/nashville-bombing-telecommunications.html?referringSource=articleShare](https://www.nytimes.com/2020/12/29/us/nashville-bombing-telecommunications.html?referringSource=articleShare)

[2] tennessean.com/story/news/local/2020/12/29/nashville-bombing-area-communications-network-exposed-achilles-heel/4062089001/

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[4] tennesseebroadband.com/2020/11/improving-rural-broadband-deployment-remains-top-priority/

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[6] tn.gov/content/dam/tn/ecd/documents/broadband/FY20%20Broadband%20Legislative%20Annual%20Report.pdf

[7] tennessean.com/story/news/education/2021/01/05/covid-19-stimulus-tennessee-schools-cares-act/6555611002/

[8] kansascityfed.org/community/~-/media/31dc7512db164fce8ae79ec7709924fd.ashx

[9] nationalskillscoalition.org/resources/publications/file/Digital-Skills-for-an-Equitable-Recovery-web.pdf

[10] "The Plague Year", The Economist, December 19, 2020 - January 1st 2021, page 15.
tennessean.com/story/news/education/2020/04/03/tennessee-schools-federal-coronavirus-stimulus-money-estimated-260-million/2944780001/

