

Q1 2021

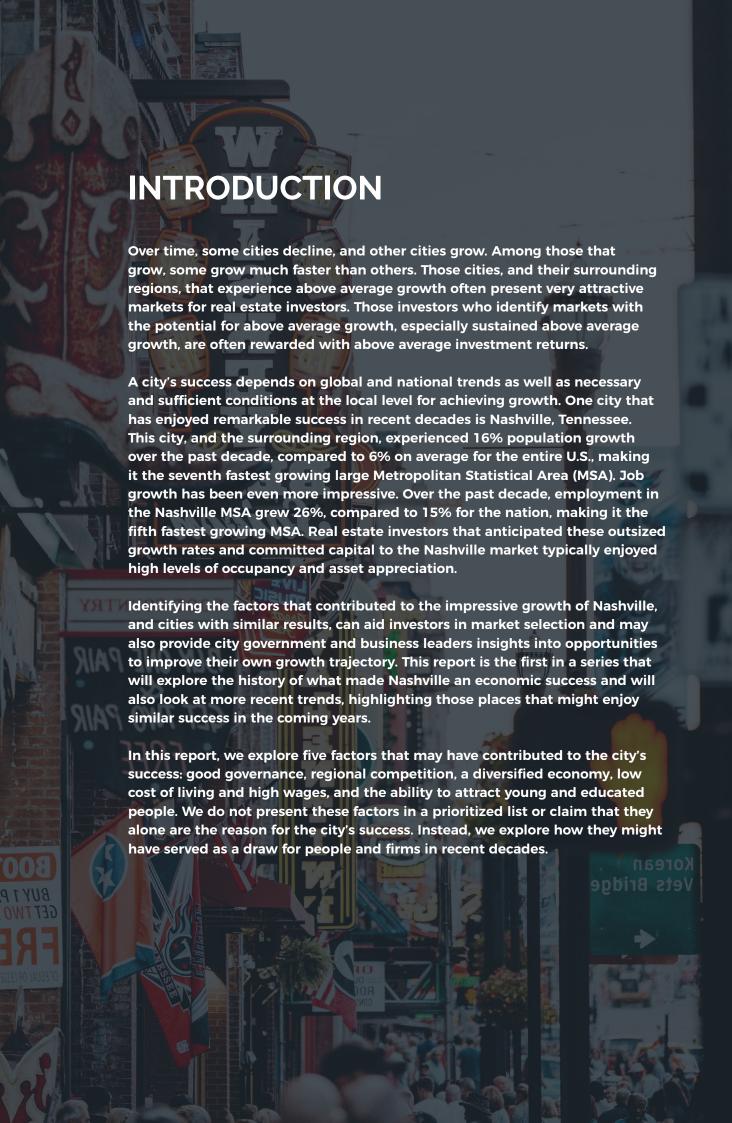
FINDING THE NEXT NASHVILLE

UNDERSTANDING FACTORS THAT CAUSE CITIES AND REGIONS TO ACHIEVE ABOVE AVERAGE GROWTH

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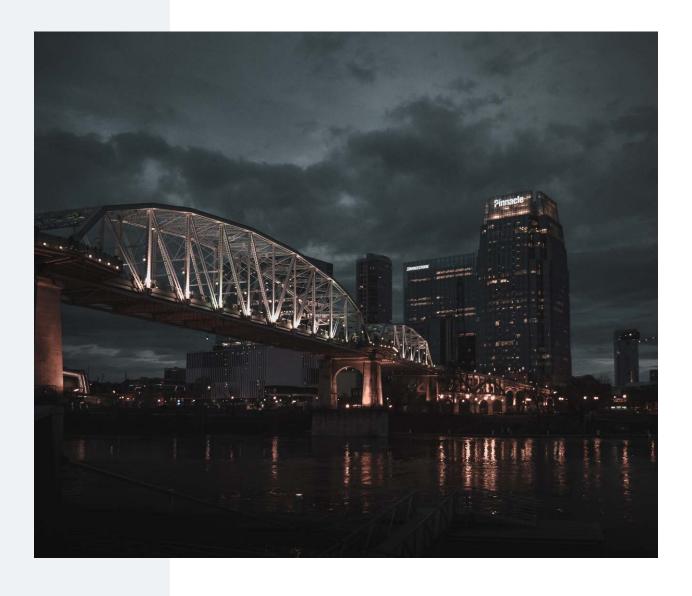




NASHVILLE EDS, MEDS, AND MUSIC

Founded in 1779 and named after a Continental Army general who died during the American Revolutionary War, Nashville's early success was due to its location on the Cumberland River, which made it an important port depot and center for manufacturing. In 1843, the city was designated Tennessee's state capitol and by 1850, it was the 14th largest city in the South with just over 10,000 residents. The city earned the moniker "Athens of the South" due to its many colleges and universities including Vanderbilt, founded in 1873, while simultaneously becoming a center for the Lost Cause of the Confederacy with the founding of the first chapter of the United Daughters of the Confederacy and the site of racialized terror.

The metro area, which is home to 1.9 million people, also carries the nickname "Music City" for its vibrant performing arts scene that includes the almost 100-year-old Grand Ole Opry with nearly 5,000 episodes. The city's cultural institutions and hospitality industry drew 15.8 million visitors to the metro area in 2018 with \$7 billion in spending. Nashville is also a health care hub with over 124,000 employees in the health care and social assistance industry in the metro area in 2019, which includes the tens of thousands of employees at <u>Vanderbilt University Medical Center</u>. Local employer HCA Healthcare nearly doubled its number of employees from 5,447 in 2010 to 10,600 in 2019.



GOOD GOVERNANCE LAYING THE SEEDS FOR SUCCESS

From 1950 to 1960, the population of the suburbs of Nashville in Davidson County grew by 55%, while the city's population declined by two percent. As the suburbs grew, they struggled to keep up with increased demand for services and infrastructure, including the need for fire protection and an overburdened sewer and water system. As the city shrank, it struggled to pay for existing infrastructure that an increasing number of suburban residents used, but did not pay for. In an effort to address these disparities, the citizens of Davidson County, Tennessee voted in 1962 to consolidate the governments of the City of Nashville and Davidson County into the Metropolitan Government of Nashville-Davidson County, thus creating the first fully unified city/county government in the United States.

Consolidation allowed for the expansion of water, sewer, and safety services to the suburbs. There is also evidence that it led to a more efficient government by eliminating duplicative upper management positions and creating economies of scale. In the first decade after consolidation, surveys indicated that residents were in favor of the new government by a ratio of 5 to 1. In recent decades, Louisville, Kentucky and Indianapolis, Indiana have followed Nashville's lead and consolidated their governments. While a good governance structure is crucial, the quality of local governance relies heavily on the quality of leadership.

The quality of Nashville's leadership has varied over the years. From 1987 to 1991, Bill Boner served as the third mayor of Metropolitan Nashville. His controversial appearance on the Phil Donahue show in 1990 where his extra-marital affair was on full display amounted to a local scandal that received national attention. Following Mayor Boner's departure from office, Metropolitan Nashville had a series of two-term mayors from 1991 to 2015 with Phil Bredesen, Bill Purcell, and Karl Dean, This newfound stability in the office of the mayor was associated with a dramatic increase in population growth. The city's decennial population growth changed from 7% from 1980 to 1990, to 11.5% from 1990 to 2000, and 10% from 2000 to 2010. During Karl Dean's eight years as mayor, he oversaw a reimagining of Downtown Nashville, which included the opening of the new Music City Center, a new minor league baseball stadium, a new riverfront park and amphitheater, and plans for a \$100 million flood protection system following devastating flooding in 2010. He also pushed for incentives to attract two large corporations, HCA Healthcare and Bridgestone Americas, to build new headquarters in Nashville. In recent years, the city has once again struggled with scandal as Mayor Megan Barry resigned from office after pleading guilty to felony theft of property over \$10,000 and an extra-marital affair.

In the 2018 Tennessee gubernatorial election, Republican Bill Lee lost Davidson County (where Nashville is located) by 32 percentage points, but won the office and the state by 19 percentage points. Davidson County was one of only three counties in the state that voted for Bill Lee's Democrat competitor, former Nashville Mayor Karl Dean. The previous governor of Tennessee, Republican Bill Haslam, carried all counties by a majority. Nashville has recently struggled with contrasting politics and policies between the Democrat run city and the Republican run state. The state government has preempted the city government from innovating in policy areas that were viewed as too progressive, such as the partial decriminalization of marijuana and LGBT antidiscrimination ordinances. If a state's governor knows they do not need the support of a city, they can ignore its residents without having to worry about losing votes. In recent years, Baltimore City's Democratic mayor has also struggled to work with Maryland's Republican governor, losing out on funding for a light rail line and having money diverted to suburban and rural counties for road building projects, instead of to Baltimore. Conversely, policy coordination between state and local governments can increase a city's chance to succeed. At best, this coordination can take the form of transfers and targeted programs from state to local governments and at the very least, it can mean the absence of intervention and preemption by the state against local governments.

GOOD GOVERNANCE LAYING THE SEEDS FOR SUCCESS

It is difficult to measure how much of a city's success or failure is due to its political leaders. Furthermore, sometimes it might matter less how good of a job an elected official is actually doing, and more how the public and investors perceive they are doing. If they believe that a city has a bright future, this can drive investment and migration decisions. Mayor Richard M. Daley led Chicago for six mayoral terms for a total of 22 years, winning over 78% of the vote in the 2003 election. His tenure included the only decennial period of population growth in the city after 1950 when the city grew from 2.8 million people in 1990 to 2.9 million people in 2000, reversing four decades of population decline. Although not without <u>controversy and scandal</u>, Daley's mayoral stability signaled rising confidence in Chicago.

Other hallmarks of good governance include public opinion polls and elections with competitive races. Cities benefit from quality local press outlets that scrutinize elected officials and investigate fraud and corruption. The efficient delivery of basic city services such as trash pickup and 311 and 911 responsiveness also go a long way towards building public confidence in elected officials. Lastly, transparency from politicians and public officials is another indicator of good government. For example, Nashville is one of many cities that has an Open Data portal that allows the public to scrutinize everything from beer permit locations to public employee salaries.

It remains an open question as to what the "right" jurisdictional size of a local government should be. The <u>multitudinous political jurisdictions</u> in the St. Louis area highlight an extreme, where fragmented governments create <u>uneven access to basic public goods and services</u> and political borders reinforce patterns of racial and socioeconomic segregation. New Jersey's high prices <u>have been blamed</u> on patchwork governments, as almost 200 municipalities have populations of less than 5,000. Yet if a political jurisdiction encompasses too much space, people will have less ability for their voice and vote to be heard in local politics, and less ability to leave and seek out better government. Nashville seems to have found a happy medium, where the suburbs receive city services and in turn, they help contribute to the tax base of the city.

Ultimately, both the quality of leadership and the structure and systems of government matter. In Nashville, the consolidation of the county and city government allowed for a more effective tax base and improved delivery of services. The city's 25 years of stability in the mayor's office allowed Nashville to grow without the distraction of scandal. History has shown that the best political system will yield poor results without quality leadership, and even the best leader will struggle to operate in a broken and outdated system. Governments need to continually experiment with new practices and ways of operating while ensuring that the right incentives are in place to attract the best leaders who are ultimately accountable to an engaged electorate. These basic principles have been instructive for Nashville and other cities that have experimented with their governance structure.

COMPETITIVE MARKET EFFECT AND THE DRAW OF A MAJOR METRO AREA

Footloose people and firms can choose from a wide variety of places to live and work in the U.S. Most of the U.S. population lives in metropolitan areas, with over two thirds of the population living in the 100 largest metropolitan areas in 2019. People and businesses decide where to locate based on a wide variety of factors, but an important dynamic for metropolitan areas is their proximity to other major metropolitan areas.

Cities can benefit from being in proximity to other major metropolitan areas. For example, Baltimore benefits from its proximity to the booming job center of Washington, D.C., just 40 miles south. However, Baltimore can also lose these benefits if residents prefer to live in lower tax York, Pennsylvania, just 47 miles north. If a city is located near several large metropolitan areas, it can draw people and businesses from those areas as they seek out the locations that fit them best. In contrast, workers may be hesitant to move to distant metro areas out of fear that relocating and finding the best place to live and work in those areas will be more difficult, while firms may be hesitant to move to distant metro areas out of fear that doing so will make them less attractive to the workers they seek to hire.

The Nashville Metropolitan Statistical Area (MSA) has 22 other MSAs within 200 miles of its central business district. This is fewer than places such as New York City (34) and Chicago (39), but more than other MSAs like New Orleans (11) and Dallas (13). By this measure, Nashville is above the median of 18 other MSAs within 200 miles of a central business district among 365 MSAs in the U.S.

In 2019, the Nashville MSA was home to 1.9 million people, making it the 37th largest MSA in the nation. Since 2000, it has also been one of the fastest growing metro areas, ranking 15th among the 100 largest MSAs with a growth rate of 18%. From 2014 to 2018, net migration from other metropolitan areas to the Nashville metro area was almost 20,000. Additionally, another 10,000 immigrated from abroad, including 4,000 people from Asia and over 2,000 from Central America. While around a quarter of domestic migration was from other metro areas in Tennessee and neighboring states, Nashville drew significant numbers of people from Chicago (8% of net migrants), Miami (6% of net migrants), and New York City (4% of net migrants).

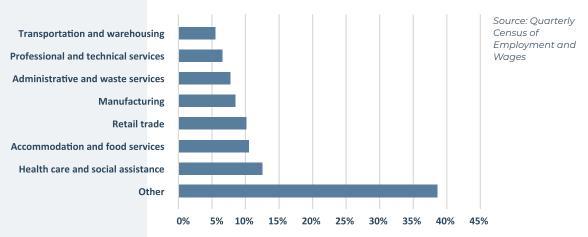
NET MIGRATION FROM US METRO AREAS TO NASHVILLE METRO AREA 2014 TO 2018

Rank	Metro Area	Net Migration
1	Chicago-Naperville-Elgin, IL-IN- WI Metro Area	1,629
2	Miami-Fort Lauderdale-West Palm Beach, FL Metro Area	1,231
3	Johnson City, TN Metro Area	1,113
4	New York-Newark-Jersey City, NY-NJ-PA Metro Area	786
5	Atlanta-Sandy Springs-Roswell, GA Metro Area	727
6	San Antonio-New Braunfels, TX Metro Area	638
7	North Port-Sarasota-Bradenton, FL Metro Area	614
8	Cleveland, TN Metro Area	609
9	Greenville-Anderson-Mauldin, SC Metro Area	520
10	Clarksville, TN-KY Metro Area	499

Rank	Metro Area	Net Migration
11	SacramentoRoseville Arden-Arcade, CA Metro Area	417
12	Birmingham-Hoover, AL Metro Area	412
13	Los Angeles-Long Beach- Anaheim, CA Metro Area	410
14	Wichita, KS Metro Area	395
15	Baton Rouge, LA Metro Area	394
16	Cleveland-Elyria, OH Metro Area	377
17	San Francisco-Oakland- Hayward, CA Metro Area	361
18	Buffalo-Cheektowaga-Niagara Falls, NY Metro Area	354
19	Houston-The Woodlands-Sugar Land, TX Metro Area	354
20	Seattle-Tacoma-Bellevue, WA Metro Area	345

Growing labor demand in a city is crucial to its continued success, as employment opportunities and high wages will attract job seekers and help retain residents. Detroit's economy was hit hard when car manufacturing globalized, as was Baltimore's economy when the city lost steel manufacturing jobs. A diversified local economy can protect a city from such economic shocks. One of the reasons for Nashville's continued success could lay in its diversified economy with a good mix of jobs in healthcare, accommodation and food service, professional and technical services, and manufacturing.

NASHVILLE METRO AREA EMPLOYMENT IN 2019 BY INDUSTRY



Nashville has one of the most diverse employment bases of any metropolitan area in the U.S. Using two different measures of employment diversity by industry, Simpson's Diversity Index and the Hachman Index,² the Nashville metropolitan area ranked as the fourth most diverse (Hachman's) and the 13th most diverse (Simpson's) among the 100 largest metro areas in the nation in 2018. From 2000 to 2018, Nashville had the 19th highest employment growth and the 22nd highest population growth of the largest 100 metro areas.

TOP 10 MOST DIVERSE ECONOMIES (AND NASHVILLE) BY SIMPSON'S INDEX, EMPLOYMENT GROWTH, AND POPULATION GROWTH AMONG THE 100 LARGEST MSAS, 2000 TO 2018

Metro Area	Diversity Rank	Employment Growth Rank	Population Growth Rank	Employment Growth	Population Growth
Salt Lake City	1	22	31	28%	30%
Atlanta	2	47	19	14%	39%
Denver	3	29	26	24%	35%
Dallas	4	26	17	25%	43%
Seattle	5	34	32	23%	29%
Charlotte	6	23	9	27%	51%
Houston	7	14	12	34%	49%
Los Angeles	8	77	78	3%	7 %
San Francisco	9	57	64	11%	15%
Chicago	10	89	85	-1%	4%
Nashville	13	19	22	30%	38%

² Simpson's Diversity Index is a measure of population diversity in a community. Values range from 0 to 1 with 1 being the most diverse. In the economic context, if a city has multiple industries and each industry is equally represented in the community, then its diversity value is 1. If one industry dominates the others, its diversity value is closer to 0. Hachman's Index is a measure of economic diversity that measures industry diversity relative to a diverse reference region, which is the United States in this case. Values range from 0 to 100, with 100 being the most diverse.

TOP 10 MOST DIVERSE ECONOMIES (AND NASHVILLE) BY HACHMAN'S INDEX, EMPLOYMENT GROWTH. AND POPULATION GROWTH AMONG THE 100 **LARGEST MSAS. 2000 TO 2018**

Metro Area	Diversity Rank	Employment Growth Rank	Population Growth Rank	Employment Growth	Population Growth
Knoxville	1	45	61	14%	15%
Columbia, SC	2	53	34	12%	29%
Indianapolis	3	52	42	12%	24%
Nashville	4	19	22	30%	38%
Portland, OR	5	25	35	26%	28%
Chicago	6	89	85	-1%	4%
Buffalo	7	79	97	2%	-3%
Cincinnati	8	80	72	2%	11%
Virginia Beach	9	62	71	9%	12%
Kansas City, MO	10	66	56	8%	18%

However, while Nashville ranked high on Simpson's and Hachman's diversity indexes and also had high employment and population growth, cities such as Washington, D.C.; McAllen, Texas; Las Vegas. Nevada: and Riverside. California all ranked near the bottom in measures of employment diversity, but were in the top 10 for employment growth from 2000 to 2018. This seems to indicate that there is not a positive correlation between metro areas that experienced high rates of employment or job growth from 2000 to 2018 and the diversity of their local economies, as measured by the Simpson and Hachman indexes. Economic diversity might have more to do with protecting a city from economic shocks in the event a key industry contracts, and increasing a city's potential for long-term prosperity, than it has to do with boosting a city's short-term growth. In the short-term, as defined by a period of less than 20 years or so, what may influence a city's success more than economic diversity is its ability to grow jobs in popular industries at a faster rate than the national average.



Since 2000, the Nashville metro area economy has fared well compared to the national average. Overall, the number of jobs in Nashville grew by 45% from 2000 to 2019, compared to 14% nationally. The only industry where Nashville lagged the national average in job growth was in the educational services industry. This is in part because Nashville's share of jobs in education in 2000 (2.2%) was higher than the national share in 2019 (2%). A shift-share analysis, a method of comparing job growth in different geographic areas over a chosen period, of the 100 largest metro areas between 2000 and 2019 shows that Nashville ranked in the top 20 in all industries except for educational services and manufacturing. It ranked in the top 10 in over half of all industries and in the top five in professional and technical services, management of companies and enterprises, and arts, entertainment, and recreation. While the city lost jobs in manufacturing, the decline (-12%) was less sharp than the national decline (-26%), and by 2019 manufacturing was at the national share of 8.5% of all jobs.

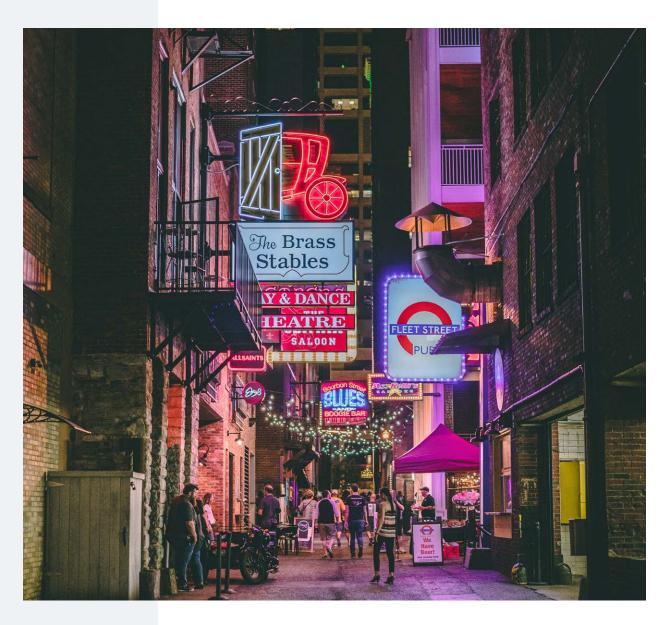
CHANGE IN EMPLOYMENT BY INDUSTRY, 2000 TO 2019

	L	INITED STATES			NASHVILLE		
Industry	2000	2019	% change	2000	2019	% change	MSA Shift Share Rank
Educational services	1,806,564	2,937,234	63%	15,375	22,194	44%	41
Health care and social assistance	12,565,032	20,184,056	61%	63,866	124,379	95%	16
Professional and technical services	6,806,552	9,542,312	40%	28,258	65,359	131%	3
Accommodation and food services	10,032,436	14,030,794	40%	59,561	104,669	76%	8
Management of companies and enterprises	1,783,807	2,407,183	35%	5,199	25,077	382%	3
Arts, entertainment, and recreation	1,835,540	2,426,459	32%	8,142	16,641	104%	4
Transportation and warehousing	4,188,864	5,491,748	31%	23,854	54,859	130%	6
Administrative and waste services	8,046,188	9,284,487	15%	53,769	77,094	43%	13
Real estate and rental and leasing	2,024,291	2,292,359	13%	11,126	17,798	60%	6
Other services, except public administration	4,147,075	4,553,161	10%	19,979	29,749	49%	7
Finance and insurance	5,550,325	6,027,485	9%	32,476	45,536	40%	11
Agriculture, forestry, fishing and hunting	1,194,744	1,263,160	6%	647	985	52%	8
Wholesale trade	5,740,969	5,883,948	2%	32,695	39,669	21%	16
Retail trade	15,278,064	15,602,881	2%	79,721	100,463	26%	16
Utilities	601,369	548,712	-9%	1,190	1,214	2%	19
Information	3,623,400	2,849,185	-21%	20,822	22,170	6%	8
Manufacturing	17,314,423	12,776,157	-26%	96,179	84,315	-12%	27
Total, all industries	129,879,584	148,105,092	14%	688,357	995,346	45%	13

Source: Quarterly Census of Employment and Wages

This fast growth is reflected in commercial real estate prices in the city. From 2003 to 2019, the average price per square foot of office space in the Nashville metro area grew by 89% in 2019 inflation-adjusted dollars from around \$130 per square foot to \$245 per square foot.³ The continued success of Nashville will in part depend on its ability to retain these job gains and grow employment at a faster rate than the national average in industries that continue to be in demand, like professional and technical services and health care.

Past <u>research</u> has shown how housing regulations constrain population growth in cities, and how long-term employment growth in response to increased labor demand is 20% lower in metropolitan areas with high housing regulations. The same study found that Nashville had the third least regulated housing supply market of any metropolitan area in the United States. Nashville's ability to grow employment seems to have been aided by its ability to allow for new housing construction and accommodate new migrants.



QUALITY OF LIFE, COST OF LIVING, AND WAGES

Nashville's ability to draw people in from both the cold Northeast and Midwest, and sunny Florida and California point to its unique draw. Economist Ed Glaeser showed a strong correlation between mean January temperature and state population growth from 1920 to 1980 in his 2005 paper Reinventing Boston. However, Tennessee was an outlier exhibiting the highest population growth of any state over the period and mean January temperatures of around 40 degrees, much cooler than California and Florida. Part of the state's and Nashville's long-term success at attracting people and jobs might be attributed to other factors, such as a diversified local economy that is not reliant on manufacturing, low taxes, and high levels of education, all attributes Glaeser also attributed to population growth. In 2000, Nashville did not rank relatively high in an estimated guality of life measure developed by economist David Albouy, placing 90th among 276 metropolitan areas, ranking near Stockton, California and Tampa Bay, Florida. But between then and 2019, Nashville experienced significant improvements in quality of life including a 40% reduction in violent crimes, relatively high wages, low housing costs and an absence of state income taxes. Among the largest 100 metropolitan areas in the U.S. in 2019, Nashville had the 33rd highest housing cost and the 29th highest median income. With no state income taxes in Tennessee, this meant that after state taxes and housing costs, Nashville had the 21st highest disposable income of any metro area in the U.S that year. Media outlets rank Nashville high in recent years on lists of the "Best Places to Live." For example, US News & World Report ranked Nashville as the 17th best place to live among the 150 most populous metro areas in the U.S. in 2020.

TOP 25 METRO AREAS BY DISPOSABLE INCOME, 2019

Rank	Metropolitan Area	Median Salary	Average Housing Price	Annual Mortgage	State Tax Rate	Disposable Income Before Federal Taxes
1	San Jose	\$136,930	\$1,116,850	\$50,817	9%	\$73,378
2	Seattle	\$82,964	\$510,843	\$23,244	0%	\$59,720
3	Houston	\$68,759	\$215,867	\$9,822	0%	\$58,937
4	Boston	\$82,198	\$490,022	\$22,296	4%	\$56,835
5	Washington, DC	\$79,037	\$429,672	\$19,550	5%	\$55,216
6	New York City	\$80,315	\$482,606	\$21,959	6%	\$53,326
7	Hartford	\$67,332	\$237,402	\$10,802	6%	\$52,827
8	Dallas	\$64,093	\$251,119	\$11,426	0%	\$52,667
9	Chicago	\$64,711	\$241,994	\$11,011	5%	\$50,675
10	Durham	\$66,108	\$264,918	\$12,054	5%	\$50,583
11	Austin	\$65,843	\$335,956	\$15,286	0%	\$50,557
12	Philadelphia	\$64,472	\$249,251	\$11,341	5%	\$50,060
13	Detroit	\$60,831	\$180,430	\$8,210	4%	\$50,036
14	Rochester, MN	\$60,811	\$156,300	\$7,112	8%	\$48,926
15	Atlanta	\$61,725	\$237,082	\$10,787	6%	\$47,388
16	Minneapolis	\$64,502	\$289,045	\$13,152	8%	\$46,454
17	Cinncinati	\$56,678	\$183,151	\$8,333	4%	\$46,002
18	Cleveland	\$55,062	\$157,432	\$7,163	4%	\$45,805
19	Baltimore	\$61,927	\$294,122	\$13,383	5%	\$45,603
20	Charlotte	\$59,069	\$230,574	\$10,491	6%	\$45,110
21	Nashville	\$57,506	\$272,757	\$12,411	0%	\$45,095
22	Denver	\$68,175	\$438,083	\$19,933	5%	\$45,086
23	Memphis	\$53,433	\$150,737	\$6,859	3%	\$44,804
24	New Haven	\$58,601	\$234,024	\$10,648	6%	\$44,730
25	Birmingham	\$54,821	\$162,477	\$7,393	5%	\$44,687

Sources: Median Salary - Bureau of Labor Statistics. **Ouarterly** Census of **Employment** and Wages; Average Housing Price - Zillow Housing Price Index: Annual Mortgage - Author's calculations of average 30-year, fixedrate mortgage with 20% down payment; Tax Rate - Tax Foundation.

QUALITY OF LIFE, COST OF LIVING, AND WAGES

When choosing where to live, different people will consider different preferences. A person who loves skiing is more likely to pay \$2 million for housing to live in Aspen, Colorado than someone who prefers surfing. Nashville is famous for being home to arts and cultural institutions such as the Grand Ole Opry and the Country Music Hall of Fame and the location for many a bachelorette party. Although most well-known for country music, the Music City (as Nashville is often called) is also home to a vibrant underground and independent music scene, the Symphony at the Schermerhorn, the largest ballet in the state, and strong visual arts and fashion industries. In 2019, among the 600 largest counties in the U.S., Davidson County, where Nashville is located, and neighboring Williamson County, located in the Nashville metro area, respectively had the fifth and fourth highest number of arts, entertainment, and recreation business establishments per capita.

ARTS, ENTERTAINMENT, AND RECREATION ESTABLISHMENTS PER **CAPITA BY COUNTY, 2019**

Rank	County	Population	# of Businesses	Per 10K Population
1	New York County, New York	1,632,480	4,363	27
2	Gallatin County, Montana	104,729	197	19
3	Los Angeles County, California	10,098,052	15,905	16
4	Williamson County, Tennessee	218,648	331	15
5	Davidson County, Tennessee	684,017	978	14
6	Yellowstone County, Montana	157,816	206	13
7	Barnstable County, Massachusetts	213,690	260	12
8	Maui & Kalawao County, Hawaii	165,281	201	12
9	Missoula County, Montana	115,983	141	12
10	Washington County, Rhode Island	126,242	146	12

Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages

In 2019, Davidson County also had the second highest number of performing arts companies per capita (behind only New York County), the seventh highest number of independent artists per capita, and the 30th highest number of restaurants per capita among the 600 largest U.S. counties. The rise of Nashville as a consumer city in the last two decades coincided with a backto-the-city migration movement by young professionals who wished to fully participate in the culture and arts scene that cities like Nashville offered.

Nashville's improvements in quality of life coupled with relatively high disposable income served to attract hundreds of thousands of new people and jobs to the metropolitan area since 2000. Cities with similar levels of disposable income, but low quality of life, such as Detroit, Cleveland, and Baltimore, could experience similar gains if they were able to make significant improvements in areas like violent crime reduction, neighborhood health, and educational investments.

YOUNG AND EDUCATED

Many young people seek out cheap living and excellent cultural amenities. Younger generations are drawn to experiences such as dining at nice restaurants, going to concerts, and seeing live theater and comedy. As discussed in the previous section, Nashville ranks comparatively well by this measure, and it seems to have attracted a large number of young, educated people.

The Nashville metropolitan area is home to 1.9 million people, including almost 300,000 people between the ages of 25 and 34. This "young adult" demographic is 23% of the city's population, almost ten percentage points higher than the nation as a whole. Nashville's population is also very educated, with 39% of its population holding a bachelor's degree or higher compared to 33% of the nation as a whole. The intersection of these two demographics, young and educated, is where Nashville excels. Almost half (48%) of the population of Nashville between the ages of 25 and 34 have a bachelor's degree or higher. By this metric, among 100 mid-sized metropolitan areas with between 300,000 and 2 million people, Nashville ranks as the eighth highest in the nation. Back in 2010, Nashville ranked just 38th among its similarly sized peers, but its ranking has climbed significantly since then because between 2010 and 2019 it had the fifth highest growth in its population of people aged 25 to 34 with a bachelor's degree or higher.

SHARE OF POPULATION THAT IS YOUNG AND EDUCATED BY METRO AREA. 2019

Metro Area	Population over 25	Population over 25 with a bachelor's degree or higher	Population between 25 and 34	Population between 25 and 34 with a bachelor's degree or higher	Share of population with a bachelor's degree or higher	Share of population between 25 and 34 with a bachelor's degree or higher
San Jose, CA	1,392,655	733,354	324,398	200,304	53%	62%
Madison, WI	448,645	218,103	98,499	59,571	49%	60%
Raleigh, NC	935,320	448,718	196,735	106,398	48%	54%
Durham, NC	443,205	205,245	97,839	51,347	46%	52%
Bridgeport- Stamford- Norwalk, CT	647,664	317,798	108,198	56,569	49%	52%
Austin, TX	1,507,707	695,959	388,243	197,101	46%	51%
Pittsburgh, PA	1,692,649	609,265	313,826	149,214	36%	48%
Nashville, TN	1,312,544	505,529	297,858	141,507	39%	48%
Des Moines, IA	466,626	177,259	101,301	47,067	38%	46%
Baltimore, MD	1,946,830	815,619	400,722	184,924	42%	46%

Source: US Census Bureau, American Community Survey, 1-year estimates.

YOUNG AND EDUCATED

POPULATION BETWEEN 25 AND 34 WITH A BACHELOR'S DEGREE OR HIGHER

Metro Area	2010	2019	% change
Grand Rapids, MI	29,420	60,512	106%
Lafayette, LA	11,500	22,434	95%
Cape Coral-Fort Myers, FL	10,968	21,257	94%
Lakeland-Winter Haven, FL	9,014	16,477	83%
Nashville, TN	78,438	141,507	80%
North Port-Sarasota-Bradenton, FL	11,423	19,941	75%
Charlotte, NC	91,008	153,887	69%
Austin, TX	117,265	197,101	68%
Greenville, SC	25,947	43,278	67%
Vallejo, CA	10,510	17,519	67%

Source: US Census Bureau, American Community Survey, 1-year estimates.

Other than Vanderbilt University, Nashville is not widely known as a "college town." However, the city, which earned the nickname "Athens of the South" for its educational institutions, is home to 34 colleges and universities including Tennessee State, Belmont, and Lipscomb universities. These three institutions, along with Vanderbilt, enroll a combined 34,000 students and make Nashville a regional pull for many high school students in southern states. In fact, Nashville/Davidson County has the 14th highest number of colleges and universities per capita in the U.S., with five per 100,000 residents.

Many of these students stay in Nashville after graduating. According to data from EMSI and analyzed by the Wall Street Journal, from 2008 to 2018, 23% of Vanderbilt graduates stayed in Nashville after graduation. Seven percent went to New York City, the next largest draw and the biggest draw for recent college graduates nationally. Over half of all students that attended Belmont and Lipscomb stayed in the city after graduation.

Students will stay in an area after graduating if there are good job opportunities and if they have developed an affinity for the city. Firms looking to hire a college-educated workforce will locate in areas with a high number of universities. An oft-cited example of these dynamics at work is the relationship between Silicon Valley in California, and the highly regarded universities in the area, such as Stanford and U.C. Berkeley. Stanford, U.C. Berkeley, and other research and medical universities can serve as tech and biotech startup hubs and help drive employment in a region. Vanderbilt may provide similar employment benefits to Nashville. From 2015 to 2017, Nashville ranked 60th in the world for venture capital funding per capita with \$464 million, which was more than Portland, Oregon (\$450 million per capita), Charlotte, North Carolina (\$396 million per capita), and Pittsburgh, Pennsylvania (\$382 million per capita). In addition, in 2019, Vanderbilt received \$412 million in National Institutes of Health research grants, the 19th highest amount of any university.

By generating capital that benefits both the school and its community, universities and colleges can be catalysts for growth in cities, attracting young and talented minds and serving as hubs for entrepreneurship and job creation. They are community anchor institutions that can play an outsized role in economic development projects and effective coordination between institutions of higher learning, private business, and city government can yield fruitful gains.

WHAT DOES THE FUTURE HOLD?

Discerning the drivers of Nashville's success in recent decades, or any region for that matter, cannot likely be distilled to a discrete list of quantitative or qualitative factors. What does seem clear however is that, in the case of Nashville, certain elements played an important role:

- GOOD AND SMART GOVERNANCE City leaders concluded in the early 1960s that combining its government with the surrounding suburbs for a single consolidated municipality could lead to more effective and efficient public services, and they were right. By the early 1990s, the city enjoyed a period of stable leadership which corresponded with increased population and economic growth.
- **BEING PART OF A REGIONAL NETWORK OF METRO AREAS** Nashville has 22 other MSAs within 200 miles of its CBD, providing a convenient relocation option for residents in those areas who seek a change of work or lifestyle, but do not want to be far from family and familiarity.
- A DIVERSE ECONOMY The region's economic roots, like many southern cities, are found in agriculture and manufacturing. Today, however, the city's employment base is widely diversified, reducing its dependence on any one industry and increasing its potential to maintain a stable and resilient economy over the long term.
- ATTRACTIVE QUALITY OF LIFE While other areas rank higher in some quality of life measures, such as warm winters, Nashville has affordable housing and no state income tax. In addition, its cultural offerings far exceed those of its peers.
- YOUNG AND EDUCATED Among the city's greatest strengths is its young and educated workforce. The city's many universities and renowned music scene act as a virtuous cycle, attracting college students who stay for the culture and ultimately a career.

What made Nashville a success over the past several decades might not be the same ingredients that make Nashville a success in the future. Growth levels will undoubtedly be impacted by issues such as remote working, rising housing prices and, even in the case of Nashville, weather events caused by climate change. The future success of the city will depend on its ability to adapt and respond to these and other changes.

FINDING THE NEXT NASHVILLE SERIES

As noted above, good governance, proximity to other metro areas, a large university population, and attractive cultural offerings can all play a role in shaping a city and region's future. With the support of our research sponsor, Alex. Brown Realty, Inc., we intend to explore these factors, and others, as part of a quarterly report series that will serve to inform real estate investors and city leaders in their daily deliberation around the deployment of capital and community resources.

APPENDIX

JOHNS HOPKINS UNIVERSITY, 21ST CENTURY CITIES INITIATIVE

The 21st Century Cities Initiative at Johns Hopkins University, led by Dr. Matthew E. Kahn, was established in 2014 to strengthen and support understanding of urban issues regarding growth, governance, and public policy.

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Matt is the Bloomberg Distinguished Professor of Economics and Business at Johns Hopkins University and the Director of JHU's 21st Century Cities Initiative. He is a research associate at the National Bureau of Economic Research and a research fellow at IZA. He has taught at Columbia, the Fletcher School at Tufts University, UCLA and USC. He has served as a Visiting Professor at Harvard and Stanford and as the Low Tuck Kwong Distinguished Visiting Professor at the National University of Singapore. He is a graduate of Hamilton College and the London School of Economics. He holds a Ph.D. in Economics from the University of Chicago. He is the author of Green Cities: Urban Growth and the Environment (Brookings Institution Press 2006) and the co-author (joint with Dora L. Costa) of Heroes and Cowards: The Social Face of War (Princeton University Press 2009). He is also the author of Climatopolis (Basic Books 2010), Fundamentals of Environmental and Urban Economics (Amazon Kindle), and Blue Skies over Beijing: Economic Growth and the Environment in China (joint with Siqi Zheng published by Princeton Press). He is the author of the forthcoming book <u>Unlocking the Potential of Post-Industrial Cities</u> (JHU Press 2021). His research focuses on urban and environmental economics. View Matthew Kahn's faculty page.

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APPENDIX

ALEX. BROWN REALTY, INC.

<u>Alex. Brown Realty (ABR)</u> is a privately held real estate investment manager and sponsor of real estate private equity offerings for institutional, family office and high net worth clients. The firm has invested in over \$4 billion in real estate assets since its founding in 1972 and has experience across diverse U.S. markets and property sectors.

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