Nashville Region's Vital Signs 2 0 1 6







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About Nashville Region's Vital Signs

Nashville Region's Vital Signs is a collaborative process led by the Nashville Area Chamber of Commerce to track key issues that impact the region's well-being and quality of life and activate community-driven solutions to address them. The Chamber's Research Center leads the data collection for the project, and the Nashville Area MPO is the Chamber's lead partner in the effort. Every October, the Chamber releases the Vital Signs report, which forecasts emerging challenges and identifies potential solutions.

Nashville Area Chamber leaders began making plans to launch the initiative, modeled after Toronto's Vital Signs, after the Leadership Study Mission to Toronto in 2011. The Nashville region has joined a growing list of international cities using this framework. The Vital Signs process was created in 2001 by Community Foundations of Canada to be a broad community agenda-setting mechanism that focuses on outcomes and solutions to key community issues. The Vital Signs trademark is used with permission from Community Foundations of Canada.

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Executive Summary

The Nashville region is dynamic. Together with the Clarksville MSA, the joint metro region comprises one of the single most significant examples of two adjacent metropolitan areas in the country. The Nashville Region's Vital Signs 2016 is an opportunity to examine this joint region and identify patterns and trends around such critical issues as transportation, postsecondary attainment and health and wellness.

High among priorities is the region's need to implement a long-term solution to increasing commute times through the expansion of transit options. Successfully accomplishing this will require dedicated funding. Finding the right revenue solution requires the involvement and commitment of residents and elected officials throughout Middle Tennessee as well as at the state level. Data increasingly shows that quality of life and affordability are being impacted by lack of access to transit and mobility. Mean travel time in the Nashville region has steadily increased between 2012 and 2014. With more than 100,000 Nashville MSA residents crossing county lines to get to and from work each day, transportation is an issue that must be addressed by, solved for and funded by the entire population.

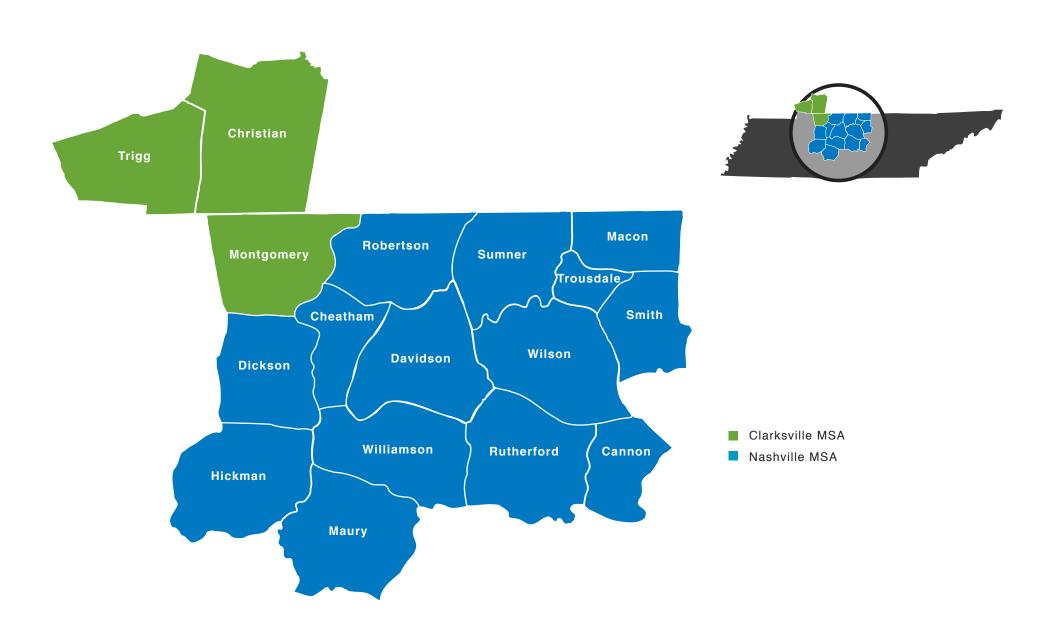
A focus on increasing postsecondary attainment in the region is being driven by needs at both the state and regional levels. The state of Tennessee's intent to have 55 percent of adults hold a degree or certification is motivation from the top. In order to addresses these needs, many cities and towns throughout Middle Tennessee have developed strategies to ensure the adults have access to necessary resources and supports to earn degrees or credentials from area postsecondary institutions. The Middle Tennessee Reconnect Community initiative focuses efforts and resources on adults. Tennessee Promise continues to prove to be an effective way to engage the region's high school graduates in postsecondary attainment. Fourteen of the region's 15 counties have shown significant increases in their college-going rates since Tennessee Promise was launched. With the positive impact of educational attainment on earnings and employment demonstrated time and again, educating the region's residents, especially in those fastestgrowing occupations in the joint metro region, becomes even more critical for employers and employees alike. Over the next five years, the top five fastest-growing occupations in the region will add nearly 30,000 new jobs. The majority of these will require some postsecondary education. With an unprecedented number of workers expected to retire in the coming decade, communities must prepare the workforce of tomorrow today.

The health and wellness of the region's population is also a critical element to what makes this a special place to live. Likewise, the health and wellness of the workforce is taken into consideration by employers and can absolutely impact the region's overall economic viability. Chronic health conditions – including hypertension, COPD and depression – are prevalent at a higher rate in this region than nationally. An unhealthy workforce – and its cost to both individuals

and employers — is a matter that is receiving local, regional and national attention. An asset to our community is the number and use of primary-care physicians in the region are above the national average. This means there is an opportunity for residents to access the health care services necessary to address the sorts of health issues that are of most concern.

The Nashville Region's Vital Signs is a snapshot in time. It is designed to highlight issues using facts and figures. The real impact of the report comes when the information conveyed is used to inspire action. In each section of Vital Signs, there are ways that a reader can immediately connect with a program or initiative that is making a positive difference on mobility, education and health and wellness. It is the undertaking of solutions as a region that will ultimately have the greatest impact. For while each municipality, county, district or census tract contributes to the economic and social viability of the entire joint metro region, we are all connected. Transportation infrastructure, housing availability, economic clusters and job opportunities within each small geography shape and influence the character and path of those features within the larger region.

Our Region



Population Growth in Peer MSAs

Sources: U.S. Census Bureau Decennial Census, 2015

	Estimates Program	D	sus	
MSA	2015	1970	2000	2010
Atlanta	5,710,795	1,684,200	4,112,198	5,268,860
Seattle	3,733,580	1,424,605	2,414,616	3,439,809
Minneapolis / St. Paul	3,524,583	988,735	1,135,614	3,279,833
Tampa	2,975,225	1,105,553	2,395,997	2,783,243
Denver	2,814,330	1,238,273	2,581,506	2,543,482
Charlotte	2,426,363	840,347	1,499,293	1,758,038
Kansas City	2,087,471	1,373,146	1,776,062	2,035,334
Austin	2,000,860	360,463	1,249,763	1,716,289
Indianapolis	1,988,817	1,111,352	1,607,486	1,756,241
Nashville	1,830,345	699,271	1,231,311	1,589,934
Memphis	1,344,127	834,103	1,135,614	1,316,100
Louisville	1,278,413	906,752	1,025,598	1,235,708
Raleigh	1,273,568	446,074	1,187,941	1,130,490
Clarksville	281,021	118,945	232,000	260,625

From 1970 through 2010, the population growth of Nashville rivaled or exceeded that of many MSAs, including Memphis, Charlotte and Denver. In the current decade, only Denver and Austin are anticipated to grow faster than Nashville.

Definitions of MSAs

When examining other MSAs, Vital Signs took into consideration both aspirational MSAs and peer MSAs based on population, transit systems and resources committed to transit.

Atlanta	Atlanta-Sandy Springs-Roswell, GA Metro Area
Austin	Austin-Round Rock, TX Metro Area
Charlotte	Charlotte-Concord-Gastonia, NC-SC Metro Area
Clarksville	Clarksville, TN-KY Metro Area
Denver	Denver-Aurora-Lakewood, CO Metro Area
Indianapolis	Indianapolis-Carmel-Anderson, IN Metro Area
Kansas City	Kansas City, MO-KS Metro Area
Louisville	Louisville/Jefferson County, KY-IN Metro Area
Memphis	Memphis, TN-MS-AR Metro Area
Nashville	Nashville-Davidson-Murfreesboro-Franklin, TN Metro Area
Raleigh	Raleigh, NC Metro Area
Seattle	Seattle-Tacoma-Bellevue, WA Metropolitan Statistical Area
Tampa	Tampa-St. Petersburg-Clearwater, FL Metro Area
Minneapolis / St. Paul	Minneapolis-St. Paul-Bloomington, MN-WI Metro Area

Metropolitan statistical areas (MSAs) are geographic entities with a core urban area of 50,000 or more population, delineated by the Office of Management and Budget (OMB) and revised with the Decennial Census.

Advancing Regional Mobility

A personal perspective

Cheryl Lewis has worked at LifeWay for 32 years. For the last nine years, RTA's Music City Star has been her exclusive form of transportation to and from her downtown Nashville office. She drives approximately four miles from her Wilson County home to the Lebanon train depot, takes the train in and finishes her morning commute with a 15-minute walk to work from the First Avenue train station. In the afternoon, she completes the circuit to return home.

"My workday schedule is extended a bit by taking the train, but it's just the right thing to do," says Lewis, who views transportation as both a regional and environmental issue.

A graduate of the Transit Alliance's Transit Citizen Leadership Academy, Lewis is a valuable resource to her community on the subject of transit-specific policies. She participated in the program at the recommendation of Wilson County Mayor Randall Hutto and learned alongside leaders from across the region about the value of public transit. She also serves as a firsthand resource to residents of Lebanon and Wilson County who are exploring Music City Star ridership as a way to commute to their Nashville-based jobs.

As for why she has taken the train for the past nine years, she notes the sense of community that often develops between train commuters. She also acknowledges she enjoys spending her commute time reading or visiting with fellow passengers instead of driving. "For me, there is no reason not to ride mass transit. I wouldn't take anything for my ride on the train," says Lewis.

MUSIC CITY

The Nashville region continues to receive national recognition for its creativity, strong economy and quality of place. This success, however, has given rise to significant challenges, as issues of transportation and affordability emerge as threats to the region's appeal. These issues must be addressed if the region is to maintain its prosperous economy and highly desirable quality of life.

Quality of Life

Since 2010, the Nashville region has welcomed approximately 150,000 new residents, at a rate of nearly 30,000 per year. This trend is expected to continue for the next two decades, with more than half of the state's population growth between 2010 and 2040 predicted to occur in the 10-county region of Middle Tennessee. Regional growth already has begun to impact quality of life. Increasingly, job seekers and business leaders factor quality-of-life issues into decisions about where to work and live. Livability must be an area of focus in order for our region to continue to attract and grow businesses, as well as draw and retain a talented workforce.

While Middle Tennessee's economy is thriving and the region is growing, there are numerous challenges to address. Regionally, in the last year alone, there has been a 2 percent increase in time spent in cars commuting to and from work and school. This increase significantly impacts area mobility and travel times, and will continue to shape our ability to access jobs, health care, education and entertainment. The Nashville Area MPO's traffic models predict the amount of time residents spend in cars will double by the year 2040 as a result of increasingly congested roadways.

Coordination of transportation investments and an increase in regional transit options can lessen traffic congestion, making the region more competitive and providing a better quality of life for residents by allowing them more time out of their cars to spend with friends and family. Coordination is also critical – beyond transportation – to issues such as housing and strategic economic development in order to ensure the long-term success of the region, as well as individual communities.

Transit Funding

Since early 2015, the Nashville MTA and Regional Transportation Authority have worked with stakeholders to produce a strategic plan that provides specific solutions to the transit needs of the region. This plan will detail the actionable steps needed to improve our transit system, implementation of which will depend on the strong community support to secure needed funding. It is estimated to be \$5.96 billion in capital costs over the next 25 years.

Dedicated funding means providing a reliable source of annual revenue to support transit operation and capital investments. It does not necessarily mean "new" or "increased" funding, though the expansion of existing transit service does require new revenue. Revenues can be generated in a variety of ways. For example, they can be established by a legislative body or by voters before a transit project begins, allowing them to be dedicated for transit without being subject to the same level of discretion associated with general fund revenues. This approach reduces the annual burden placed on local governments to find funding for public transportation and minimizes the uncertainty for public transit customers, operators and members of the business community interested in investing along fixed transit routes.

Without dedicated funding and reliable revenues in mind, the Nashville region is underfunding its existing transit systems compared to many peer cities. The result is a product that does not meet the needs of current or potential riders. To develop a regional transportation system that supports expected population growth over the next 25 years, significant investment is required. Successfully addressing the funding challenges for transportation in Middle Tennessee requires an educated community willing to collaborate across city and county lines in order to increase investment in transportation, foster robust civic support and enable bold leadership from elected officials at all levels of government.

The primary source of funding for transportation in the Nashville region comes from federal and state gas taxes. These have not increased since 1993 and 1989, respectively. Revenue collected from fuel sales has been stagnant in recent years, translating to a continued decline in the buying power of these transportation funds. This scarcity of funding sources has limited the investments that can be made in the region's roadways and bridges. Additionally, this lack of sources and absence of dedicated funds severely limits the ability to provide much-needed regional transit services.

Take Action

Middle Tennessee Connected

To get engaged, visit nashvillempo.org.

Mayors across the region adopted Middle Tennessee Connected, the region's 25-year transportation plan. It outlines how the region will use its limited federal-level funds to invest in its transportation system. While Middle Tennessee Connected sets forth the overarching polices and investment decisions for a multi-modal transportation network, the implementation of the region's transit vision is truly a public-private partnership that involves multiple initiatives.

Moving Forward

To get engaged, visit movingforwardmidtn.com.

Launched in summer 2015, Moving Forward is a private-sector initiative designed to engage business and community leaders in a systematic review of the region's progress toward implementing the vision for transit. Through three task forces – Routes and Modes, Revenue and Finance, and Public Engagement - members dive into the complexities of transportation planning to better understand the challenges facing the region. Annually, the group will produce a report which offers recommendations to cities, counties, transit agencies and the state legislature to support implementation of the vision.

Transit Alliance

To get engaged, visit thetransitalliance.org.

Since 2009, the Transit Alliance of Middle
Tennessee has built widespread support for
securing the funding needed to implement a
regional transit vision. Its regional educational
program – Transit Citizen Leadership Academy –
equips private- and public-sector leaders across
Middle Tennessee with the necessary information
to lead conversations about the value of public
transit within their own networks. In the coming
years, the Alliance will play a critical role in the
campaign to dedicate a share of local funding to
transit.

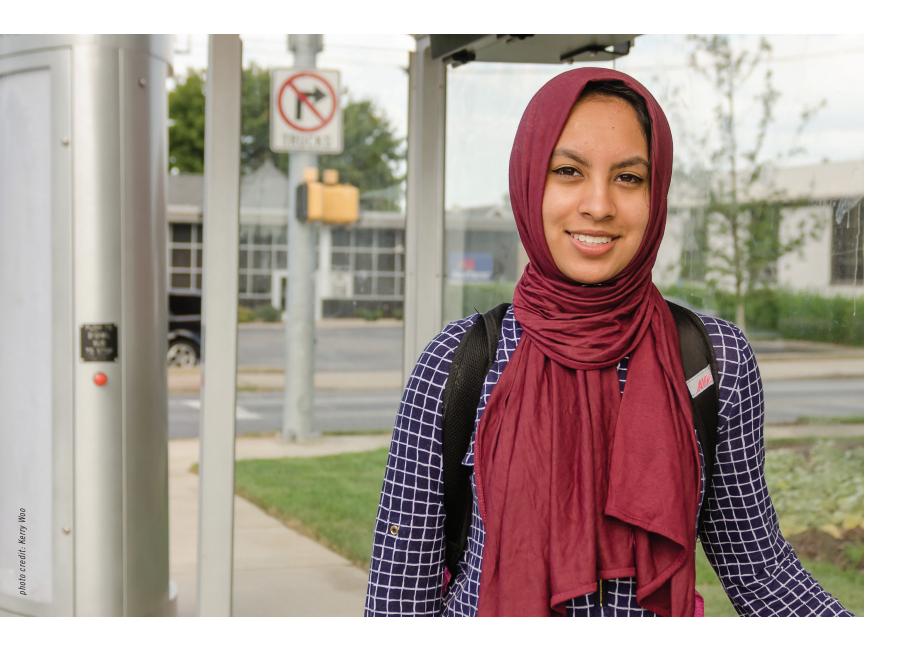
By the Numbers

Funding for Operations Per Capita in 2014

Source: National Transit Database, 2014

Large Urban Transit Systems	Total	Fares	Local	State	Federal	Other funds	Farebox collections as percent of total funding
Atlanta (MARTA)	\$331.43	\$81.25	\$160.21	\$1.23	\$44.71	\$44.03	24.5%
Minneapolis / St. Paul (Metro Transit)	\$194.50	\$50.78	\$12.61	\$125.29	\$2.16	\$3.67	26.1%
Austin (Capital Metro)	\$187.40	\$21.18	\$132.39	\$0.00	\$26.82	\$7.02	11.3%
Denver (RTD)	\$184.26	\$41.94	\$9.81	\$0.51	\$25.75	\$106.24	22.8%
Charlotte (CATS)	\$115.25	\$24.83	\$73.33	\$10.81	\$4.29	\$1.99	21.5%
Kansas City (KCATA)	\$109.08	\$16.18	\$73.04	\$0.41	\$16.40	\$3.05	14.8%
Nashville (MTA)	\$106.63	\$19.83	\$56.91	\$9.28	\$16.53	\$4.08	18.6%
Indianapolis (IndyGo)	\$91.88	\$12.26	\$23.93	\$11.38	\$16.49	\$27.82	13.3%
Louisville (TARC)	\$90.71	\$15.36	\$53.58	\$4.35	\$16.46	\$0.95	16.9%
Raleigh (CAT)	\$85.62	\$10.81	\$50.80	\$7.48	\$11.77	\$4.75	12.6%
Seattle (Sound Transit)	\$83.22	\$20.93	\$57.58	\$0.51	\$0.04	\$4.16	25.2%
Tampa (HART)	\$78.25	\$18.75	\$37.83	\$6.03	\$13.85	\$1.79	24.0%
Memphis (MATA)	\$69.69	\$12.36	\$27.40	\$9.77	\$15.34	\$4.82	17.7%

Just like most highways and roads, most transit systems are not self-supporting. Even systems with higher farebox recovery still rely on a mix of funding sources to cover costs.



A personal perspective

Access to reliable, regional transportation made it possible for Maryam Fakhruddin to attend Middle Tennessee State University.

A 2015 graduate of Hillsboro High School in Nashville, Fakhruddin lived on campus at MTSU, in part to avoid the expense and time required for a daily commute by car. She lived on campus her freshman year because traveling back and forth from Nashville daily would require the added expense of owning a car and be challenging due to both distance and traffic.

When she made the trip back to Nashville from Murfreesboro on weekends or holidays, Fakhruddin took RTA's Route 84X Express Bus Service from campus to downtown Nashville. Her family would then pick her up at Music City Central. RTA's regional bus service allowed her the flexibility and convenience of living in Murfreesboro without relying on a car.

Commuting Mode: How Do People Get to Work? A One-Year Estimate

Source: U.S. Census Bureau, 2014 (people = workers age 16 and older)

		Drove a	Drove alone Carpooled		led	Public Tr	ansit
	Total people	Number	%	Number	%	Number	%
Atlanta	2,605,472	2,021,550	77.6%	267,114	10.3%	79,662	3.1%
Austin	986,709	755,647	76.6%	99,287	10.1%	24,629	2.5%
Charlotte	1,121,688	908,379	81.0%	105,616	9.4%	20,859	1.9%
Clarksville	118,729	99,852	84.1%	8,049	6.8%	1,372	1.2%
Denver	1,435,800	1,096,122	76.3%	126,419	8.8%	64,946	4.5%
Indianapolis	937,158	788,912	84.2%	79,334	8.5%	11,177	1.2%
Kansas City	1,003,135	836,201	83.4%	85,001	8.5%	10,362	1.0%
Louisville	597,445	488,568	81.8%	56,482	9.5%	12,028	2.0%
Memphis	596,848	506,927	84.9%	51,215	8.6%	5,935	1.0%
Nashville	871,472	711,778	81.7%	85,652	9.8%	11,383	1.3%
Raleigh	620,561	496,438	80.0%	55,755	9.0%	6,502	1.0%
Seattle	1,842,053	1,270,814	69.0%	180,460	9.8%	175,948	9.6%
Tampa	1,293,084	1,048,414	81.1%	95,758	7.4%	19,415	1.5%
Minneapolis / St. Paul	1,848,703	1,428,952	77.3%	158,315	8.6%	89,198	4.8%

Walked		Bicycle		Other		Worked at	home
Number	%	Number	%	Number	%	Number	%
35,432	1.4%	4,064	0.2%	36,737	1.4%	160,913	6.2%
16,580	1.7%	7,232	0.7%	15,008	1.5%	68,326	6.9%
15,155	1.4%	1,991	0.2%	12,335	1.1%	57,353	5.1%
5,010	4.2%	125	0.1%	1,999	1.7%	2,322	2.0%
29,215	2.0%	12,983	0.9%	11,608	0.8%	94,507	6.6%
12,591	1.3%	2,642	0.3%	6,905	0.7%	35,597	3.8%
12,441	1.2%	1,796	0.2%	10,265	1.0%	47,069	4.7%
10,001	1.7%	1,757	0.3%	6,256	1.0%	22,353	3.7%
6,306	1.1%	815	0.1%	9,901	1.7%	15,749	2.6%
13,667	1.6%	1,517	0.2%	7,352	0.8%	40,123	4.6%
8,106	1.3%	1,400	0.2%	7,112	1.1%	45,248	7.3%
66,643	3.6%	21,867	1.2%	21,141	1.1%	105,180	5.7%
19,699	1.5%	11,236	0.9%	21,792	1.7%	76,770	5.9%
45,089	2.4%	18,647	1.0%	17,305	0.9%	91,197	4.9%

Austin has twice as many users of public transit as Nashville, while Denver has nearly six times as many transit riders as our region.

Annual Transit Usage in 2014

Source: National Transit Database, 2014

	Per	Capita	Annual Passengers			
Urbanized Area	Miles	Trips	Miles	Trips	Population	
Seattle	312.3	48.3	1,038,278,396	160,445,681	3,325,000	
Denver	231.8	40.0	606,025,897	104,489,114	2,615,000	
Minneapolis / St. Paul	176.0	34.7	495,570,292	97,602,886	2,815,000	
Atlanta	170.1	29.3	765,469,408	131,756,876	4,500,000	
Charlotte	131.4	24.5	157,661,624	29,438,356	1,200,000	
Austin	111.8	22.8	167,669,128	34,178,526	1,500,000	
Raleigh	64.3	9.1	62,089,086	8,778,882	965,000	
Louisville	62.0	13.7	68,839,250	15,252,339	1,110,000	
Tampa	60.5	11.9	153,611,470	30,191,674	2,540,000	
Nashville	57.0	8.6	68,358,353	10,301,618	1,200,000	
Memphis	43.1	8.6	46,745,902	9,354,609	1,085,000	
Kansas City	38.7	10.2	61,905,009	16,313,457	1,600,000	
Indianapolis	27.6	6.8	42,892,469	10,577,224	1,555,000	
Clarksville	25.6	4.6	4,062,845	733,752	159,000	

Nashville is below most of its economic development peers in annual transit usage.

Transit Ridership in Middle Tennessee: Annual Passenger Trips on RTA/MTA

Source: Nashville Metro Transit Authority and Middle Tennessee Regional Transportation Authority, 2015

	MTA	RTA
2010	8,942,499	412,678
2011	8,547,382	500,135
2012	9,654,912	601,697
2013	9,874,459	594,213
2014	9,619,309	619,589

Over the last three years, regional transit ridership has increased. This increase has been largely driven by usage of the Music City Star, a reliable alternative for commuters from Wilson County to downtown Nashville.

Commuting Time: How Long Does It Take People to Get to Work? A One-Year Estimate

Source: U.S. Census Bureau, 2014

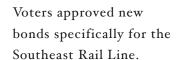
	Percentage change be-	Mean Travel Time to Work (in minutes)						
MSA	tween 2010 and 2014	2010	2011	2012	2013	2014		
Seattle	10.2%	26.9	27.6	28.5	28.6	29.6		
Austin	6.1%	25.0	25.8	25.5	26.4	26.5		
Tampa	4.9%	25.5	25.5	25.9	26.1	26.7		
Minneapolis / St. Paul	4.0%	24.8	24.9	24.9	25.1	25.8		
Denver	3.3%	26.5	26.6	26.9	27.1	27.4		
Nashville	3.3%	26.1	26.0	26.3	26.5	27.0		
Charlotte	2.9%	25.4	25.2	25.6	26.0	26.1		
Atlanta	2.4%	30.3	30.6	30.0	30.0	31.0		
Kansas City	1.7%	22.5	22.9	22.7	22.9	22.9		
Indianapolis	1.3%	24.3	24.7	25.1	24.4	24.6		
Raleigh	1.0%	24.9	24.2	24.5	25.6	25.2		
Memphis	0.3%	23.6	23.8	23.5	24.1	23.7		
Louisville	-1.6%	24.1	24.1	23.7	23.3	23.7		
Clarksville	-4.6%	23.0	23.4	22.0	21.8	21.9		

A regional approach to transportation takes into consideration a variety of modes. As commuting times increase, residents are increasingly interested in a diversity of options for getting to and from work.

Denver: A Region's Success Story

The nine-county Denver area is a thriving, dynamic community. Its rapid population growth has led to increased travel demand and congestion throughout the region. It has also created and maintained one of the most collaborative regional political environments in the county. The area's ability to build consensus that regional transit - and land use that supports it - is essential to the success of Greater Denver means engaged elected officials are from suburban areas as well as the city's core.

Path to funding regional transit



Despite opposition from the governor, voters approved a regional sales tax increase for the FasTracks transit expansion plan. FasTracks called for more than \$7 billion focused on multiple new corridors operating a mixture of transit modes. This included 122 miles of new light and commuter rail, 18 miles of bus rapid transit, 57 new transit stations, improved bus service, 31 new Park-n-Rides, and a major redevelopment of Denver's Union Station.



1999

Five counties and 25 The municipalities in the Den

Denver region signed the Mile High Compact. It is an intergovernmental agreement to manage growth by adhering to the ideals in Metro Vision, managed and maintained by the Denver Regional

Council of Governments.

2000

The rail line from the Denver airport to downtown Denver opened. The Regional Transportation District (RTD), which coordinates bus and rail transit service to Denver, Boulder and surrounding cities in Colorado, was the first transit agency in the country to successfully attract private-sector investment for a light-rail system. RTD contracted with a multinational business group to build this line. The \$2.2 billion partnership is known as Eagle P3.

2016

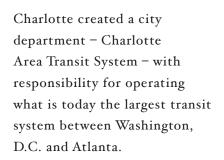
Denver's first effort to increase revenue for transit was the "Guide the Ride" initiative. Designed to raise a regional sales tax by 0.4 percent to pay for transit, it failed at the polls.

FasTracks has resulted in more than \$5 billion either invested or committed to the Denver region. It has created 15,000 direct full-time jobs since 2005. Every \$1 invested in transit infrastructure translates into a \$4 return over 20 years.

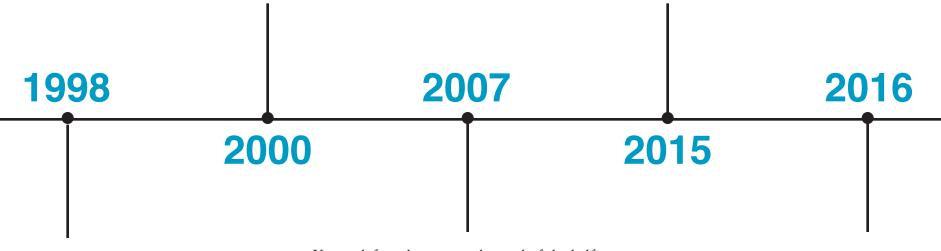
Charlotte: A Region's Success Story

Charlotte-Mecklenburg County created successful coalitions to support transit through public-private partnerships. They also enjoyed strong mayoral and city council leadership in support of sustainable transportation.

Path to funding regional transit



The first 1.5 miles of the Gold Line streetcar line opened at a cost of \$37 million, with Phase 1 ridership exceeding projections. Of the total cost, \$25 million was provided through a federal grant, and \$12 million was provided by the city. Ultimately, the line will be 10 miles long, with bids for the 2.5-mile Phase 2 currently being secured. The federal government has agreed to pay for \$75 million of the construction costs. The city plans to pay the other \$75 million with money from the general fund budget.



Voters approved a half-cent sales tax through a ballot initiative that provided dedicated funding for transit. Voters defeated a proposed repeal of the half-cent sales tax and its dedicated funding for transit.

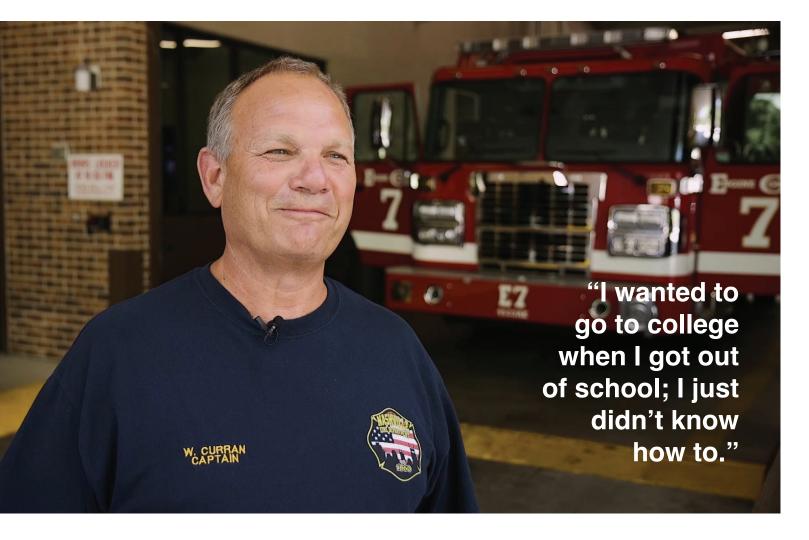
The 9.6-mile-long LYNX Blue Line began operating with 15 stations and seven park-and-ride locations. Construction of the line cost \$463 million and was funded with federal and state transit grants, as well as the county's half-cent sales tax. Since opening, the Blue Line has helped attract 2,600 residential units, 420,000 square feet of retail space, and 320,000 square feet of office space. It has generated \$6.5 million in tax revenues annually for the City of Charlotte and \$12.2 million annually for the county.

Work is underway on a 9.3-mile Blue Line extension to connect downtown with the UNC Charlotte campus. Construction of the line will cost \$1.2 billion and is being funded with federal and state transit grants, as well as the county's half-cent sales tax.

Improving Postsecondary Attainment

The Middle Tennessee Reconnect Community is a 10-county collaborative dedicated to supporting every adult in the region who aspires to earn a college degree. The collaborative includes public and private, nonprofit higher education institutions; the region's three workforce development boards; and community and employer partners. We work to ensure each adult has access to resources and supports necessary to start and finish a college degree. This initiative is supported by a grant from Lumina Foundation and through TN Reconnect, the state's strategy to help adults enter higher education to gain new skills, enter jobs that pay well, or advance in their current workplace. The Middle Tennessee Reconnect Community's advisors, located in American Job Centers around the region, engage community organizations and employers to provide adults with advising, support and a personalized path to and through college.

Adult postsecondary attainment is the key to achieving the state's goal of 55 percent of Tennesseans with a degree or credential by 2025. Adults who are working, and those in underserved and minority populations, have the greatest opportunities to increase attainment. Increasing educational attainment can create a brighter future for families in Tennessee, where education beyond high school is necessary to move into a career that provides an adequate income. Middle Tennessee Reconnect's goal is to make higher education an expectation, not an unattainable dream.



A personal perspective

Bill Curran, a firefighter for 25 years, is a captain with the Nashville Fire Department. While he enjoyed a self-described "great career," he knew he was missing job opportunities because of his lack of a college degree. "I wanted to go to college when I got out of school; I just didn't know how to," says Curran. Ten years ago, he started an associate degree, but left the program before graduating because he couldn't afford it. A few years later, one of his sons – then a student at Volunteer State Community College – encouraged his dad to go back to school. "I wanted to show my kids that since I expect them to be able to do it, I could do it myself," Curran agreed.

He earned his associate degree from Volunteer State's Fire Science Technology Program. Because of his degree, Curran earned a raise at work and now has many career options open to him that were previously unavailable. In addition to the professional benefits, he is proud that he is the first of his 10 siblings to earn a college degree. He's even prouder that his four children are all college graduates.

By the Numbers

Tennessee Promise Applicant Progress

Source: Tennessee Higher Education Commission, 2015

County	Fall 2015 college- going rate*	Target number of students	2014-15 Composite ACT Score for Public School Disctrict	Completed FAFSA by February 2015	Completed community service by August 2015	Percent of applicants retained
Cannon	52.3%	147	18.6	77.8%	31.9%	23.6%
Cheatham	56.6%	454	20.8	73.9%	40.1%	31.0%
Davidson	57.8%	4,099	18.7	74.5%	29.5%	17.5%
Dickson	58.8%	546	21.0	75.6%	40.3%	31.1%
Hickman	58.8%	265	18.4	77.7%	47.0%	33.6%
Macon	64.1%	241	18.5	83.2%	51.6%	41.4%
Maury	61.1%	692	18.6	82.1%	51.3%	41.3%
Montgomery	52.0%	1,887	19.4	72.2%	32.7%	22.4%
Robertson	54.7%	707	19.4	73.7%	37.8%	27.9%
Rutherford	63.9%	2,868	19.9	78.4%	40.1%	28.5%
Smith	57.3%	214	18.5	79.0%	38.9%	27.4%
Sumner	71.0%	1,805	20.4	79.2%	45.1%	33.9%
Trousdale	66.7%	93	20.8	94.0%	50.6%	32.5%
Williamson	82.7%	2,379	23.8	82.9%	35.6%	28.0%
Wilson	69.5%	1,257	20.0	79.7%	36.8%	28.0%

*The college-going rate is based on college-going data compiled by the Tennessee Higher Education Commission. The data reflects high school students that were enrolled at any higher education institution (community college, university, in state, out of state, public or private).

Fourteen of the region's 15 counties have shown significant increases in their college-going rates since Tennessee Promise was launched.

The average Tennessee
Promise amount awarded to a
student in fall 2015 was \$550.
Tennessee Promise is the state's
last-dollar scholarship fund.

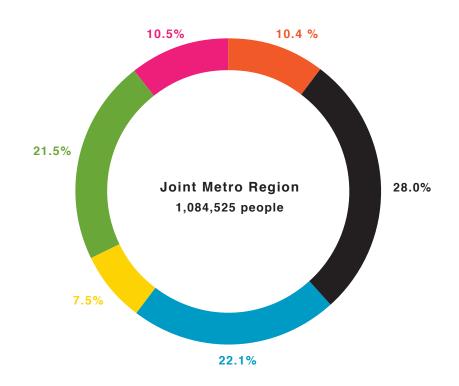
Educational Attainment of Population Age 25-64

Source: U.S. Census Bureau, 2014

	Nashville MSA		Clarksvill	le MSA
	Number	Percent	Number	Percent
Less than high school	100,599	10.6%	12,028	8.8%
High school graduate or equivalent	262,205	27.7%	41,849	30.6%
Some college, no degree	200,492	21.2%	39,232	28.7%
Associate degree	68,742	7.3%	13,134	9.6%
Bachelor's degree	211,724	22.3%	20,970	15.3%
Graduate or professional degree	103,890	11.0%	9,660	7.1%
Total population age 25-64	947,652		136,873	

Educational Attainment for Joint Metro Region Population Age 25 - 64

Source: U.S. Census Bureau, 2014

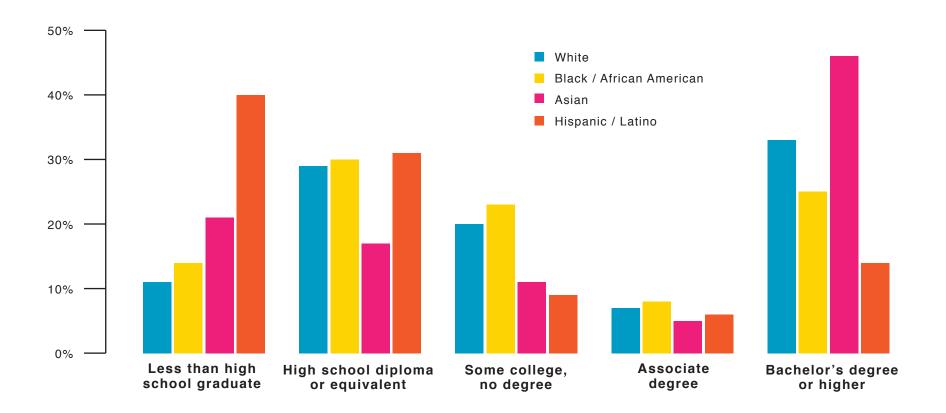


Approximately 240,000 working-age joint metro region residents have attended college, but do not have a degree.



Education Attainment by Race / Ethnicity 25 Years and Older, Nashville MSA, 5-Year Estimates

Source: U.S. Census Bureau, 2014



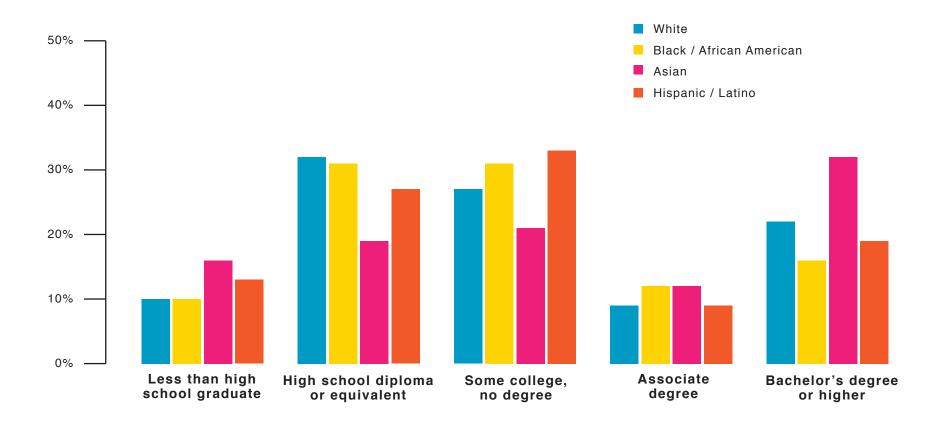
Educational Attainment by Race / Ethnicity, 25 Years and Older, Nashville MSA

Source: U.S. Census Bureau, 2014

	White	Black / African American	Asian	Hispanic / Latino
Less than high school	10.6%	14.2%	20.8%	39.8%
High school or equivalent	28.6%	29.9%	16.8%	30.7%
Some college, no degree	20.0%	23.2%	10.8%	9.4%
Associate degree	7.4%	7.5%	5.3%	6.2%
Bachelor's and above	33.4%	25.2%	46.2%	13.9%
Total	961,353	168,783	29,133	61,299

Education Attainment by Race / Ethnicity 25 Years and Older, Clarksville MSA, 5-Year Estimates

Source: U.S. Census Bureau, 2014



Educational Attainment by Race / Ethnicity, 25 Years and Older, Clarksville MSA

Source: U.S. Census Bureau, 2014

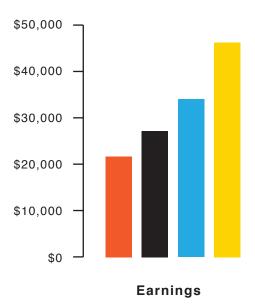
	White	Black / African American	Asian	Hispanic / Latino
Less than high school	10.2%	9.8%	15.5%	12.6%
High school or equivalent	31.7%	31.1%	18.6%	26.7%
Some college, no degree	26.9%	31.3%	21.2%	32.6%
Associate degree	8.9%	11.5%	12.2%	8.6%
Bachelor's and above	22.3%	16.3%	32.5%	19.5%
Total	126,801	31,250	3,325	11,670

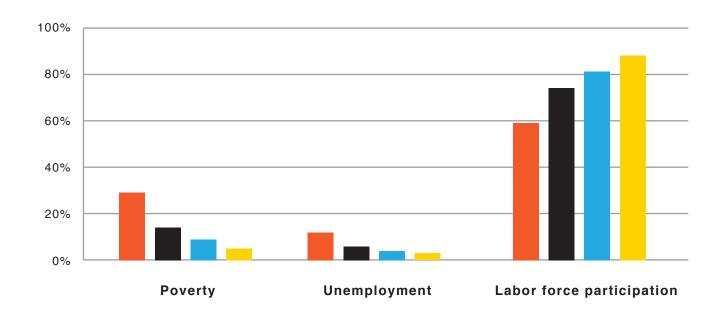
Impact of Education Attainment on Earnings and Employment in Nashville MSA, 1-Year Estimates

Source: U.S. Census Bureau, 2014



- High school graduate
- Some college or associate degree
- Bachelor's degree or higher





Take Action

Employer Partner

For more information about becoming an Employer Partner, visit midtnreconnect.org.

Employers are an integral part of the pathway to increasing postsecondary attainment. By sharing practices and participating in new programs that enhance and create workplaces that support attainment, Middle Tennessee can increase create workplaces that support adults returning to school and completing degrees and lead the region and the nation in education innovation in the workplace. Employers who become an Employer Partner with the Middle Tennessee Reconnect Community can use the Employer Toolkit to establish new and enhance current programs that support employees returning to school, measure current programs and review how their organizations currently support employee education attainment. They can also participate in data collection opportunities to measure the attainment level of their workforce and identify barriers their workforce faces in re-entering or completing postsecondary education.

Tennessee Achieves

For information, or to explore volunteering with any of these programs, visit tnachieves.org.

Community volunteers play an incredibly vital role in the achievement of attainment goals as well. Adults in Middle Tennessee can help by becoming tnAchieves mentors and assisting high school students in the transition to higher education. Volunteers are also needed to serve on boards or committees that support postsecondary efforts in Nashville-region communities. Other opportunities include supporting area high schools as they assist adults and students in completing the Free Application for Federal Student Aid.

Impact of Educational Attainment on Earnings and Employment in the Clarksville and Nashville MSA (5-year estimate)

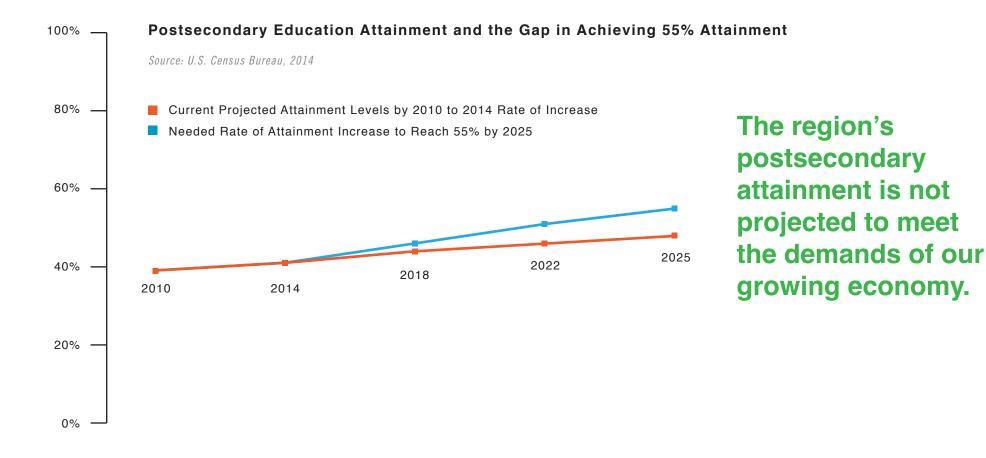
Source: U.S. Census Bureau, 2014

Earnings by Educational Attainment	Nashville MSA	Clarksville MSA
Less than high school graduate	\$19,602	\$21,210
High school graduate (includes equivalency)	\$27,523	\$26,805
Some college or associate degree	\$33,863	\$32,273
Bachelor's degree	\$46,167	\$41,043
Unemployment by Educational Attainment		
Less than high school graduate	14.4%	17.9%
High school graduate (includes equivalency)	8.5%	8.4%
Some college or associate degree	6.4%	8.0%
Bachelor's degree	3.2%	3.9%
Poverty by Educational Attainment		
Less than high school graduate	27.7%	27.6%
High school graduate (includes equivalency)	12.9%	18.2%
Some college or associate degree	9.0%	10.8%
Bachelor's degree	4.0%	3.4%
Labor Force Participation by Educational Attainment		
Less than high school graduate	59.6%	52.8%
High school graduate (includes equivalency)	74.6%	68.4%
Some college or associate degree	81.3%	75.7%
Bachelor's degree	86.3%	85.0%

Postsecondary Education Attainment and the Gap in Achieving 55% Attainment in the 10-county Middle Tennessee Reconnect Community, 5-Year Estimates

Source: U.S. Census Bureau, 2014

County	Educational attainment rate (25-64)	Population with some college, no degree (25-65)	Additional degrees required at current population to reach 55% educational attainment
Cheatham	27.5%	4,537	6,017
Davidson	44.6%	73,099	38,071
Dickson	20.7%	5,912	9,094
Maury	29.1%	10,866	11,553
Montgomery	34.6%	26,884	19,361
Robertson	26.2%	8,136	10,434
Rutherford	38.8%	34,976	23,497
Sumner	34.0%	22,707	18,756
Williamson	63.9%	18,015	(9,296)
Wilson	37.9%	13,848	11,127
Total	41.1%	218,980	138,614



Public Institutional Completion Rates at Middle Tennessee Reconnect Schools

Source: IPEDS and National Center for Education Statistics, 2015

	on-time completion rate (2 years)				150% completion rate (3 years)				ars)		
Two-year institutions	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	
Columbia State Community College	14%	17%	14%	18%	16%	14%	14%	17%	14%	18%	
Motlow State Community College	16%	15%	18%	16%	22%	17%	16%	15%	18%	16%	
Nashville State Community College	9%	6%	10%	12%	12%	9%	9%	6%	10%	12%	
Volunteer State Community College	10%	13%	12%	16%	16%	11%	10%	13%	12%	16%	

	on	on-time completion rate (4 years)			150% completion rate (6 years)					ars)		
Four-year institutions	2010	2011	2012	2013	2014	20	10	2011	2012	2013	2014	
Austin Peay State University	32%	34%	36%	36%	37%	32	%	31%	32%	34%	36%	
Middle Tennessee State University	46%	45%	45%	46%	46%	45	%	46%	46%	45%	45%	
Tennessee State University	34%	36%	35%	30%	42%	36	%	40%	33%	36%	35%	

"I felt like I was stuck in a job that I loved, but I couldn't advance."

A Personal Perspective

When Sandra Timberlake finished high school, she never thought she would have an opportunity to attend college. A single mom supporting her family through the receipt of welfare benefits, she began work at St. Thomas Health in 1999. Her opportunities for advancement were limited, though. "I felt like I was stuck in a job that I loved, but I couldn't advance unless I had the current, essential technology skills needed," says Timberlake. Through the Welfare to Work program, she learned she could receive a free postsecondary degree in office administrative technology at the Tennessee College of Applied Technology – Nashville (TCAT). She also received a Reconnect grant that helped her further her education. When Timberlake graduated in August 2016, she had been honored as the TCAT - Nashville Outstanding Student of the Year and was awarded membership in the National Technical Honor Society. "I now have a lot more options in my career because I have that college degree," she says.

Attainment of Associate Degree and Above

Source: U.S. Census Bureau, 2014

	Associate degree and higher
Raleigh	52.9%
Denver	48.1%
Austin	47.8%
Atlanta	42.9%
Kansas City	42.3%
Charlotte	41.5%
Nashville	39.5%
Indianapolis	39.2%
Tampa	37.7%
Louisville	35.6%
Memphis	32.8%
Clarksville	30.6%
Tennessee	32.0%
U.S.	38.3%

Ensuring that students are entering college ready to progress and complete is a major opportunity to increase the number of graduates. Attention must also be paid to the disparities in attainment rates that continue among white, black/African American and Hispanic/Latino students.

Fastest-Growing Occupations in the Joint Metro Region by Net Employment Change

Source: EMS, 2016

	2016 jobs	2021 jobs	2016-2021 change	2016-2021 % change
Office and administrative support	173,515	182,962	9,447	5%
Health care practitioners and technical	64,209	72,668	8,459	13%
Food preparation and serving-related	91,575	97,690	6,115	7%
Sales and related	101,354	107,126	5,772	6%
Business and financial operations	49,281	53,896	4,615	9%
Transportation and material moving	82,076	86,349	4,273	5%
Health care support	26,782	30,675	3,893	15%
Management	62,554	66,361	3,807	6%
Education, training and library	50,646	54,262	3,616	7%
Personal care and service	27,080	29,971	2,891	11%
Installation, maintenance and repair	41,956	44,840	2,884	7%
Computer and mathematical	23,662	26,255	2,593	11%
Total	794,690	853,055	58,365	7%

Over the next five years, the top five fastest-growing occupations will add nearly 30,000 new jobs. The majority will require some postsecondary education and many are middle-skill occupations.

Percentage of Workers Aged 55 and Older by Occupation, Joint Metro Region

Source: EMSI, 2016

	Percent of workers age 55 and older
Community and social service	27.8%
Education, training and library	26.9%
Building and grounds cleaning and maintenance	24.6%
Architecture and engineering	22.9%
Management	22.9%
Legal	22.7%
Office and administrative support	22.5%
Farming, fishing and forestry	22.0%
Protective service	21.9%
Life, physical and social science	21.4%
Health care practitioners and technical	20.5%
Transportation and material moving	20.4%
Business and financial operations	20.3%
Installation, maintenance and repair	20.1%
Personal care and service	20.1%

As the population ages, more and more workers move into pre-retirement. Certain occupations and industry sectors will face significant challenges to replace retiring workers.

In 2016, more than 200,000 workers (almost 20 percent of the workforce) are 55 years of age or older.

Middle-skill Occupation* Growth in the Joint Metro Region

Source: EMSI, 2016

	Middle-skill Jobs	Middle-skill Percent Growth	All Jobs	All Jobs Percent Growth
2001	276,866	n/a	848,126	n/a
2006	296,427	7.1%	927,763	9.4%
2011	281,808	-4.9%	916,558	-1.2%
2016	330,423	17.3%	1,051,878	14.8%
2021	348,458	5.5%	1,118,092	6.3%

^{*}Typical entry-level into middle-skill jobs requires a high school diploma with more than short-term, on-the-job training OR work experience but less than a bachelor's degree AND a median hourly wage over \$13.68 in the joint metro region.

Historical and Projected Middle-skill Jobs in the Joint Metro Region

Source: EMSI, 2016

	Number of Jobs	
2010	275,858	_
2011	282,962	
2012	293,536	
2013	304,010	_
2014	313,649	_
2015	317,396	
2016	320,851	
2017	324,138	_
2018	327,309	_
2019	330,150	
2020	335,205	

Middle-skill jobs are an integral piece in resolving labor force shortages nationwide. Over the past decade, growth in middle-skills jobs has been more than 3.5 times the national average at 9.6 percent. More than 41 percent of production, transportation, construction and maintenance jobs are middle-skill occupations.

Enhancing Health & Wellness

A Personal Perspective

In true "walk the talk" fashion, the Clarksville Parks and Recreation Department is demonstrating the city's commitment to building a healthier and more successful community. The Governor's Foundation for Health and Wellness named the department a Healthier Tennessee Workplace for encouraging employees to live a healthy lifestyle – both at work and at home.

At Parks & Recreation, those healthy values are put into practice with a passion befitting a staff dedicated to fitness and fun. For example, the parks staff removed soda machines from employee areas; uses staff donations to purchase healthy snacks; and conducts monthly fitness challenges for staff, using city parks and facilities.

A healthy population is a population able to actively participate in the life and economy of a region. This true on both the personal and professional arenas. The issues of health and wellness as they affect workforce are an increasing priority for the joint metro region. An increasing workforce shortage, due to aging population, among other factors, means new attention must be paid to the consequences of poor health to individuals as well as employers.

With nearly one million workers in the joint metro region, there is great opportunity to create new energy for remedying and solving health challenges through the involvement of employers. Engagement of employers in health and wellness programs for their workforce is quickly becoming a major imperative as the need for talented, trained workers grows in a tightening labor market. Local, state and national initiatives provide excellent examples and opportunities for firms and individuals in the Nashville MSA and the Clarksville MSA to emulate.

Several key characteristics serve as indicators of the joint metro region's current vital signs in health:

- Strong comparative physician population.
- Health services utilization is comparatively high.
- The key working adult population age 45-64 exhibits comparatively higher patterns of health services use and cost overall.

Take Action

Health Competitiveness Initiative

To get engaged, visit nashvillechamber.com/researchcenter.

The Nashville Area Chamber of Commerce has partnered with FTI Consulting's Center for Healthcare Economics and Policy and a group of regional health service providers, payors, health-related nonprofits and employers to address workplace health and productivity. These stakeholders work collaboratively around reporting and pilot activity focusing on aspects of health impacting the economy and prosperity of the region.

Healthy Nashville

To get engaged, visit healthynashville.org.

An initiative of the Metro Nashville Health Department, this program directs the Community Health Improvement Plan (CHIP). It is an action-oriented plan outlining the priority community health issues based on the Mobilizing for Action through Planning and Partnerships (MAPP) community health assessment. The Healthy Nashville CHIP outlines how these issues will be addressed, including strategies and measures to ultimately improve the health of Nashville by achieving the following vision: "A healthy Nashville has a culture of well-being, where all people have the opportunity and support to thrive and prosper." In addition to the goals and objectives included in the CHIP, the Healthy Nashville Leadership Council and Metro Public Health Department will continue to seek opportunities to partner, convene and participate in initiatives that support the three priority issues for the community.

A Personal Perspective

Guided by a wellness committee comprised of employees from each department, Barge, Waggoner, Sumner and Cannon, Inc. (BWSC) has historically focused on wellness as part of what Bob Higgins, Jr., president and CEO, describes as "a priority to support well-rounded professionals." A healthy workplace, he explains, "speaks to our core values."

More recently, with the rise of insurance premiums, BWSC decided to further efforts to support employee health. BWSC partnered with Humana Vitality in providing individualized health plans and incentives to employees. This "carrier-agnostic" program provides different activities in which employees earn points after an initial health assessment. Employees can earn prizes with these points, as well as compete and partner to advance on points levels. With coordinated implementation and



incentives, the program had an 87 percent participation rate in the past year.

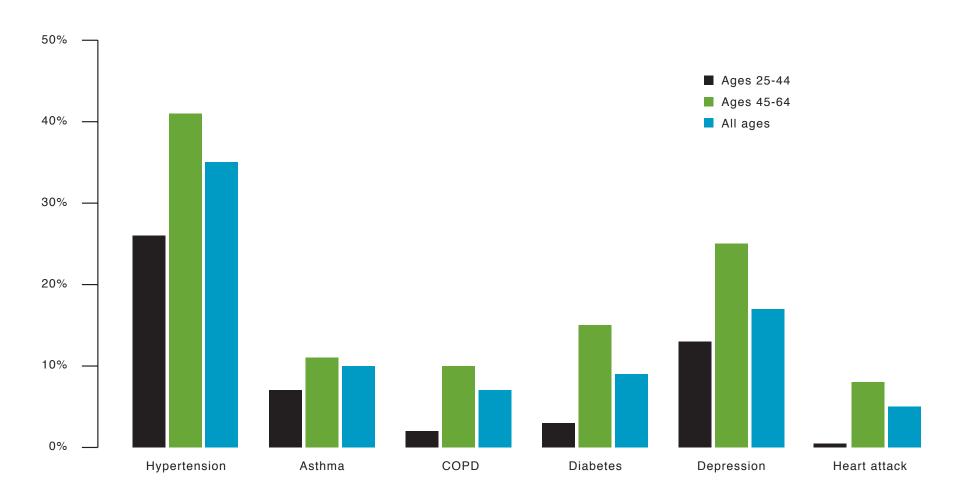
BWSC's wellness initiatives move far beyond blood pressure checks and tracking water intake to include an innovative, health-focused space in the company's new office building. From bike racks to a workout room with showers, exercise is encouraged before employees even start the workday. The floor plan is designed without exterior offices, allowing natural light to flow to employees' interior workspace. Employees also have the option to use adjustable standing desks as a nod to ergonomic innovation and physical activity.

Firms of all sizes and types can take on inexpensive and straightforward steps to move employees toward a healthier lifestyle. Encouraging regular checkups, providing gym and shower access through gym sponsorships and discounts, and offering nutritious food and snack options are just a few examples of how employers can engage in steps that benefit workers and businesses alike. Flexible work schedules and dress requirements that encourage walking meetings are other ideas that have enjoyed successful implementation for employee health benefits.

By the Numbers

Chronic Conditions in the Nashville MSA By Age

Sources: The Centers for Disease Control and Prevention, BRFSS SMART Data, 2011 & 2012



The prevalence of adverse health conditions in the region's population is notable, particularly in the key age group of 45 - 64. Related costs are real and important to individuals as well as employers.

Comparison of Chronic Condition Prevalence by Age Cohort, 2013

Source: Truven Inpatient Services, Outpatient Services, and Annual Enrollment Files, 2013

	Asthma		COPD		Depression		Diabetes		Hypertension							
	all ages	age 25-44	age 45-64													
U.S.	3.0%	2.3%	3.0%	1.0%	0.5%	2.0%	4.3%	5.0%	5.6%	5.2%	3.0%	11.5%	12.4%	8.1%	27.7%	
Atlanta	3.1%	2.2%	2.7%	0.7%	0.4%	1.5%	3.6%	4.2%	4.7%	5.4%	3.1%	12.2%	14.7%	10.2%	32.3%	
Austin	3.0%	2.1%	2.8%	0.5%	0.3%	1.1%	3.5%	4.3%	4.8%	4.3%	2.9%	10.7%	9.1%	6.2%	23.4%	
Charlotte	2.3%	1.5%	2.3%	0.7%	0.4%	1.5%	3.2%	3.9%	4.3%	4.2%	2.8%	10.3%	10.0%	7.2%	24.4%	
Denver	3.1%	2.4%	3.1%	0.5%	0.2%	1.1%	4.0%	4.5%	5.3%	2.9%	1.8%	6.7%	6.9%	4.1%	17.2%	
Indianapolis	3.1%	2.4%	3.0%	1.0%	0.5%	2.3%	4.9%	5.7%	6.5%	5.0%	2.8%	11.5%	12.3%	7.8%	28.3%	
Kansas City	2.9%	2.2%	2.7%	0.9%	0.5%	1.9%	3.8%	4.7%	4.9%	4.4%	2.6%	10.6%	9.1%	6.3%	22.0%	
Louisville	3.0%	2.2%	2.9%	1.6%	0.7%	3.5%	4.4%	5.2%	5.6%	5.6%	3.3%	12.1%	14.9%	10.0%	32.0%	
Memphis	2.7%	2.2%	2.7%	1.0%	0.4%	2.1%	3.2%	3.9%	4.3%	6.5%	4.3%	14.2%	17.6%	13.7%	38.0%	
Nashville	2.4%	2.0%	2.5%	1.1%	0.5%	2.4%	4.7%	5.6%	6.4%	6.2%	3.6%	13.8%	15.0%	10.3%	32.7%	
Raleigh	2.4%	1.8%	2.0%	0.4%	0.2%	0.8%	3.1%	3.8%	4.0%	4.1%	2.8%	9.5%	9.4%	6.9%	22.4%	
Tampa	3.2%	2.5%	3.1%	1.1%	0.5%	2.3%	3.9%	4.3%	5.4%	5.5%	3.2%	11.8%	14.2%	9.2%	30.3%	

Our region exhibits higher-than-national prevalence in chronic conditions including COPD, depression, diabetes and hypertension.

Annual Use and Costs Associated with Diabetes in the Nashville MSA (All Ages)

Source: Truven Inpatient Services, Outpatient Services, and Annual Enrollment Files, 2013

11% Hospitalization Rate		Outpat	15 ient Visits	14 Prescriptions		
Average Cost	Average Cost	Average Cost	Average Cost	Average Cost	Average Cost	
to Insurer:	to Individual:	to Insurer:	to Individual:	to Insurer:	to Individual:	
\$34,969	\$1,307	\$5,621	\$911	\$3,778	\$626	

Diabetics experienced an 11 percent hospitalization rate, averaged 15 outpatient visits a year and had an average of 14 prescriptions.

Annual Use and Costs Associated with Hypertension in the Nashville MSA (All Ages)

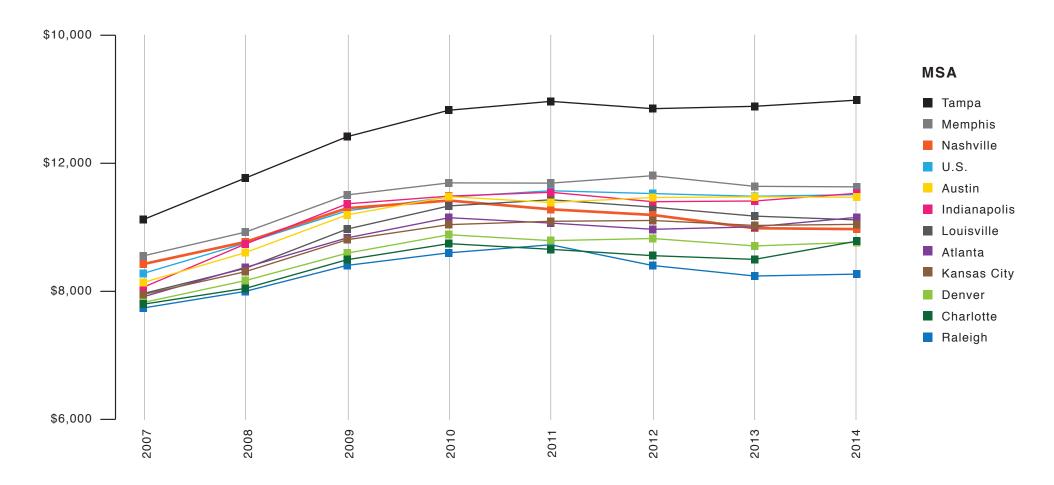
Source: Truven Inpatient Services, Outpatient Services, and Annual Enrollment Files, 2013

10% Hospitalization Rate		Outpat	14 ient Visits	12 Prescriptions		
Average Cost	Average Cost	Average Cost	Average Cost	Average Cost	Average Cost	
to Insurer:	to Individual:	to Insurer:	to Individual:	to Insurer:	to Individual:	
\$31,185	\$1,358	\$4,979	\$837	\$2,474	\$439	

Residents with hypertension experienced a 10 percent hospitalization rate, averaged 14 outpatient visits a year and had an average of 12 prescriptions.

Total Nominal* Medicare Cost per Beneficiary, 2007-2014

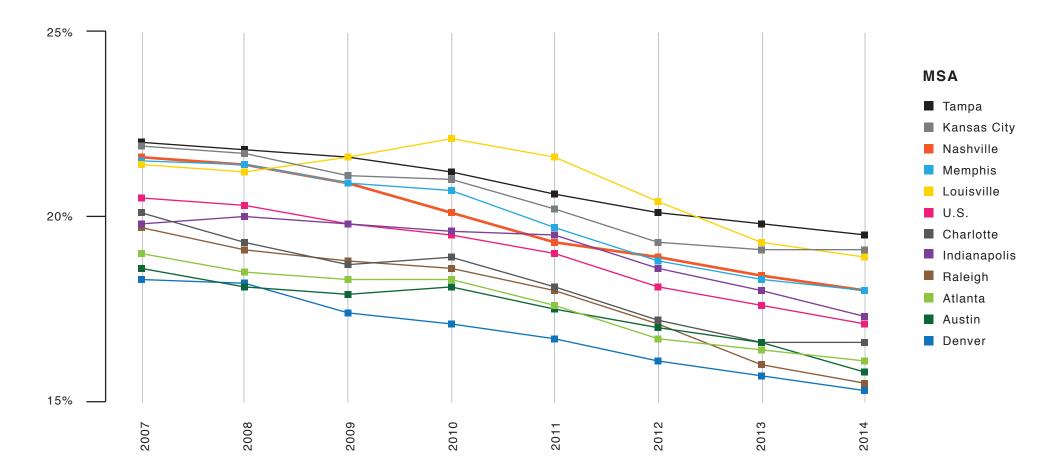
Source: CMS Geographic Variation Public Use File



*not adjusted for inflation

Nashville fell from third-highest costs in 2007 to ninth-highest costs in 2014. Over that time period, Nashville went from 1.75 percent above the national average to 6.0 percent below the national average in Medicare costs. During that same time period, the national average rose by 14.8 percent.

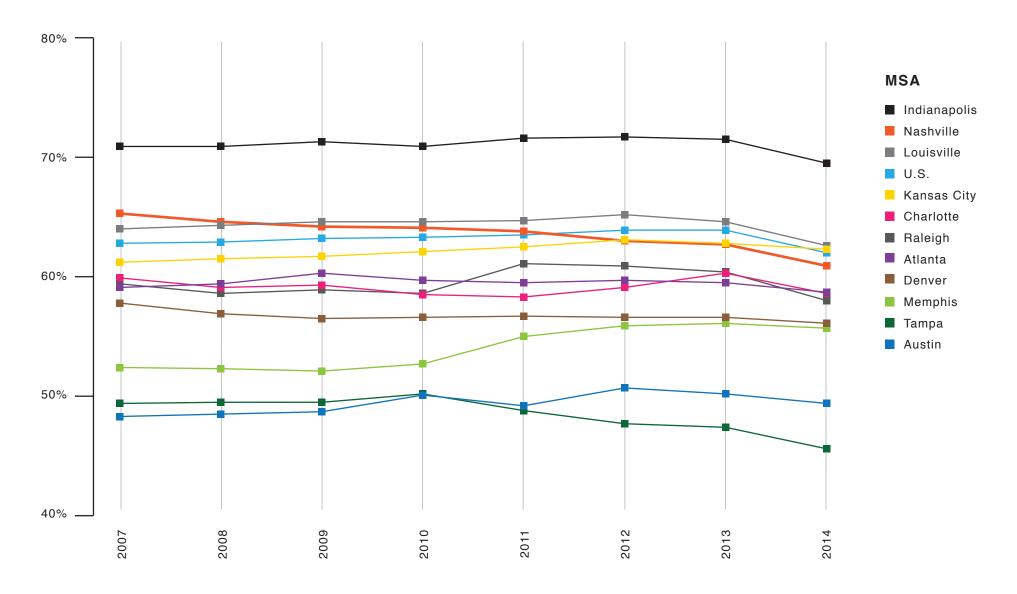
Source: CMS Geographic Variation Public Use File



The percentage of Nashville beneficiaries who used inpatient services ranked third-highest in 2007 and fifth-highest in 2014. This was slightly above the national average in both years.

Outpatient Users - Percentage of Beneficiaries with an Outpatient Visit, 2007-2014

Source: CMS Geographic Variation Public Use File



A comparison of the percentage of beneficiaries with an outpatient visit shows that many MSAs had moderate changes up to 2013, followed by a drop in 2014. Nashville continued to have a high rate of use.

Physicians per 100,000 by MSA, 2016

Source: Centers for Medicare & Medicaid Services' NPPES NPI Dataset

	Physicians per 100,000	Psychiatric Physicians and Psychologists per 100,000	Family Medicine Physicians per 100,000	Internal Medicine Physicians per 100,000	Internal and Family Medicine Physicians per 100,000
Atlanta	232	33	25	60	85
Austin	259	41	41	54	95
Charlotte	255	30	38	62	100
Denver	345	58	45	81	127
Indianapolis	356	33	51	87	138
Kansas City	289	42	45	66	111
Louisville	284	44	32	65	97
Memphis	211	28	22	54	75
Nashville	318	37	23	83	106
Raleigh	198	45	27	47	74
Tampa	294	31	38	86	124
U.S.	288	30	39	74	113

Physicians and use of primary-care physicians represent two measures of access to health care. The Nashville MSA has a greater number of physicians, psychiatric physicians and psychologists and internal medicine physicians per 100,000 by MSA compared to the national average.

Percentage of Population That Had a Primary Care Visit

Source: The Centers for Disease Control and Prevention, BRFSS SMART Data 2012

	Primary Care Visit All Ages	Primary Care Visit Ages 25-44	Primary Care Visit Ages 45-64
U.S.	68.4%	58.9%	71.6%
Atlanta	70.0%	63.6%	72.9%
Austin	61.9%	45.9%	68.7%
Charlotte	71.3%	60.9%	76.4%
Denver	61.2%	51.9%	63.0%
Indianapolis	65.8%	59.3%	69.0%
Kansas City	66.1%	57.4%	68.3%
Louisville	65.1%	56.0%	69.1%
Memphis	75.3%	70.6%	71.9%
Nashville	74.6%	70.5%	78.3%
Raleigh	72.8%	66.0%	79.4%
Tampa	70.0%	59.8%	70.6%

Primary care visits are an important touch point.
The Nashville
MSA's high rate of utilization indicates great opportunity for doctors' visits to be used to help improve health outcomes.

Vital Signs Dashboards

Each year, the Nashville Region's Vital Signs report includes indicators on a variety of issues important to the quality of life in Middle Tennessee. The next several pages share data about:

- Community
- Population
- Housing
- Economy
- · Culture
- Safety
- Vital Signs Regional Poll Results

The Community

The Clarksville and Nashville MSAs are growing, thriving regions enriched by diverse residents, ideas and opportunities. As these regions continue to develop, a focus must be kept on the human and social ties that make these communities strong and appealing. Whether longtime residents or new to the area, the populations of these regions interact with one another, with their built and social environments and with an economic setting that is unique to the Nashville and the Clarksville areas. A shared desire to strengthen and deepen the positive qualities of these regions is key to identifying and addressing both challenges and solutions that will continue to make this part of Tennessee uniquely attractive.

According to the Vital Signs 2016 Regional Poll:

- More than nine out of 10 respondents think the Nashville region is a vibrant, lively and appealing place to live.
- About a quarter of respondents over 65 years old think the Nashville region is headed in the wrong direction.
- Almost twice as many nonwhite respondents report feeling discriminated against in the past six months than do white respondents. More than twice as many women than men feel they have been discriminated against in the past six months.
- Age, race and gender were the most frequently cited reasons for discrimination among survey respondents. Respondents across all income levels reported encountering discrimination at similar rates.

Annual volunteer hours

The residents of Davidson County exhibit lower rates of volunteerism than many other metropolitan areas. However, the Nashville region's volunteers contribute more hours per capita than other regions.

Voter activity

In 12 years - from 2002 to 2014 - voter turnout in the Nashville region for non-presidential elections dropped 13 percentage points. Local and state elections held in nonpresidential election years experience far lower voter participation than do those in presidential election years. Voter turnout for the Nashville MSA in the presidential election primaries in March 2016 was 34 percent.

New population to region

One of every four people moving to the Clarksville or Nashville MSAs from out of state is between the ages of 25 and 34. More than one out of every six people between the ages of 25 and 44 moving to the regions are coming from another country. These new residents are much more likely to have earned a college degree than current residents.

Religious identification

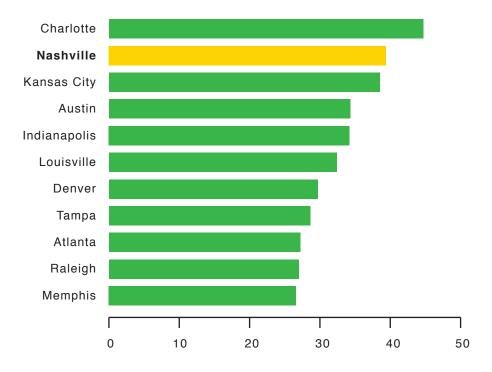
Religion forms an important part of the fabric of these regions. Affiliations with many religious groups reflect the diversity and strength of this part of the life of individuals and communities across the area.

Household spending

While average total amount spent in each MSA varies, spending patterns across different expense categories remain consistent.

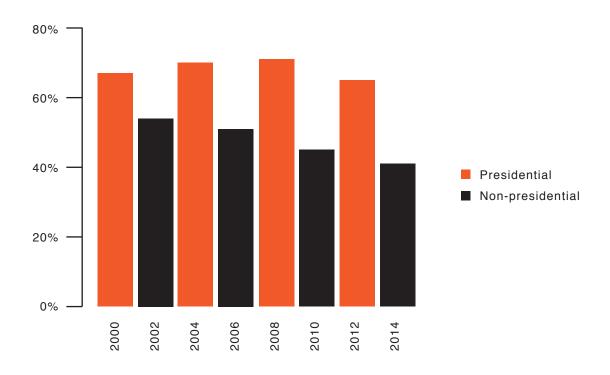
Annual Volunteer Hours per Resident

Source: Corporation for National Community Service, 2015



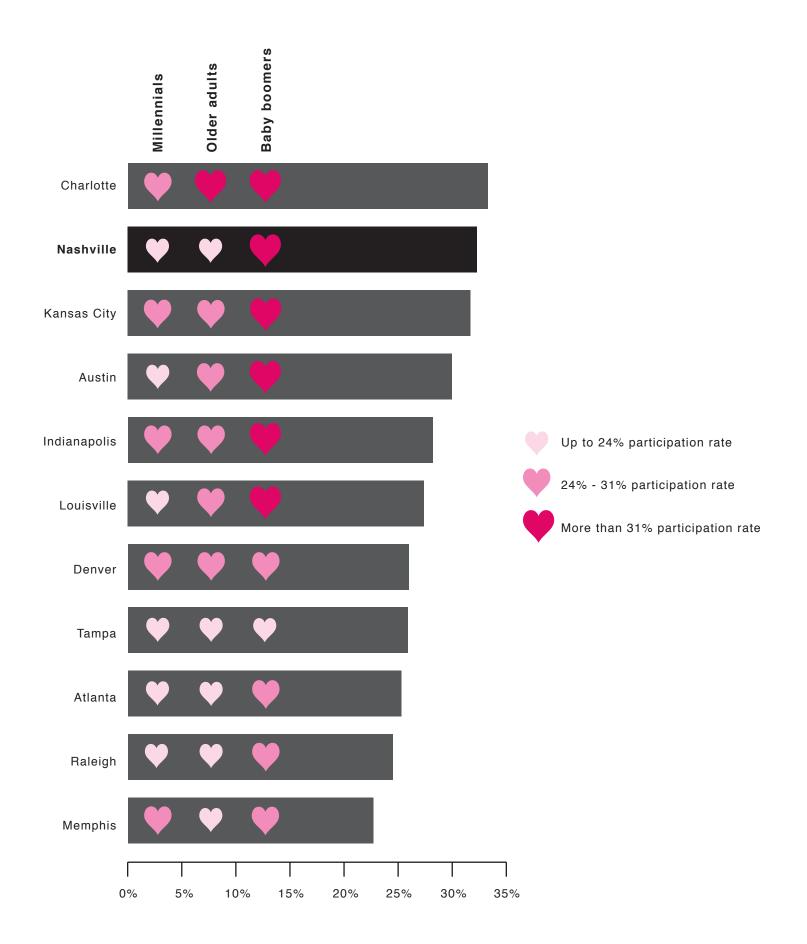
November General Election Turnout for the Joint Metro Region in Non-presidential vs. Presidential Election Years

Source: Corporation for National Community Service, 2015



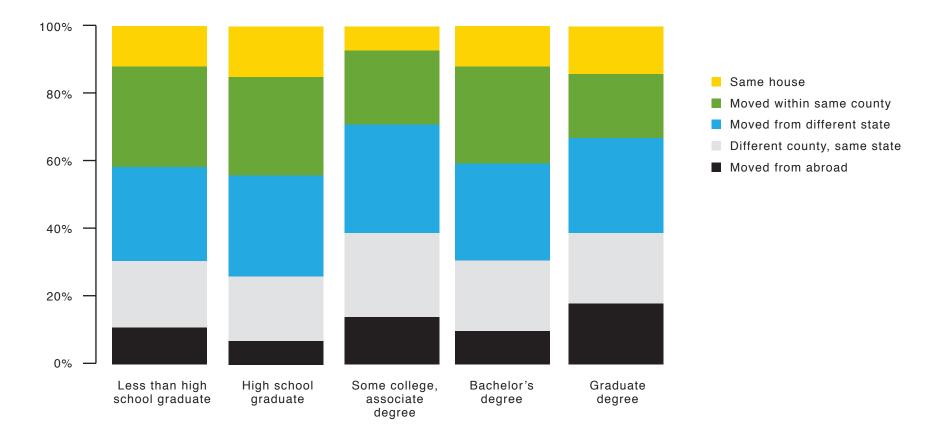
Percent of People Volunteering With Age Breakdown by MSA

Source: Corporation for National Community Service, 2015



Education Level by Geographic Mobility in the Joint Metro Region

Source: U.S. Census Bureau, 2014



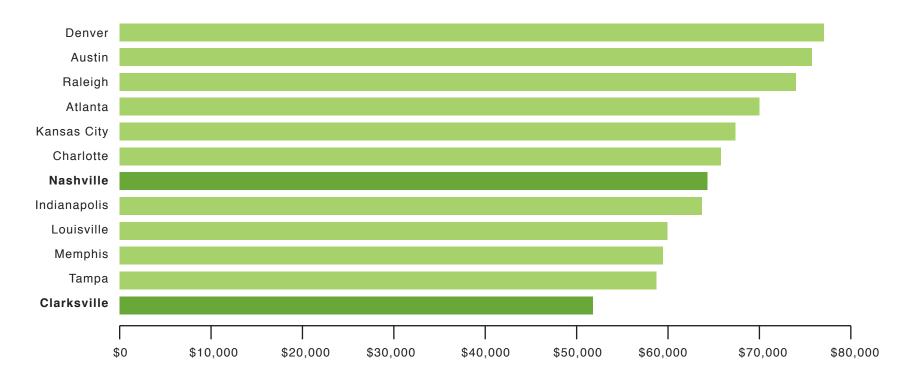
Religious Identification by Region

Source: Association of Religion Data Archives, 2010

	Nashville MSA	Tennessee	U.S.
Evangelical Protestant	65.0%	67.7%	33.2%
Mainline Protestant	15.8%	15.1%	15.0%
Catholic	8.2%	6.3%	39.1%
Black Protestant	6.6%	7.8%	3.2%
Mormon	1.6%	0.6%	4.1%
Other Christian	1.0%	0.1%	<1%
Muslim	0.7%	0.4%	1.7%
Jewish	0.2%	0.4%	1.5%
Buddhist	0.2%	0.1%	0.7%
Orthodox Christian	<1%	0.3%	0.7%
Other religion	<1%	0.2%	<1%

Average Annual Household Spending by MSA

Source: ESRI, 2016



The Population

The population of the joint metro region reflects strong levels of growth and increasing diversity. This area has grown substantially over the past 30 years. With the population growth, the area has changed in composition by race, age, origin and educational background, among other factors. More than 19 percent of Metro Nashville Public Schools students are designated as English Language Learners at some point in their academic career, and more than 120 languages are represented in the school district.

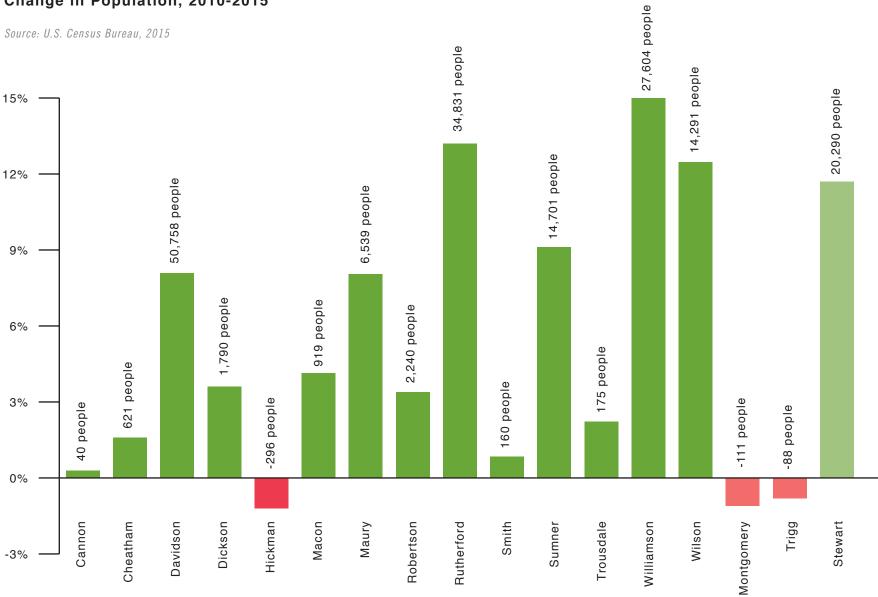
Components of Population and Population Change, Nashville MSA, 2000-2015

Source: U.S. Census Bureau, 2015

	Population	Total population change	Natural increase	Vital e	events	Net migration		nigration
				Births	Deaths	Total	International	Domestic
2000	1,317,580							
2001	1,343,263	16,012	8,149	18,096	9,947	7,558	2,392	5,166
2002	1,363,834	16,304	8,335	18,257	9,922	7,969	4,521	3,448
2003	1,386,743	18,205	8,460	18,674	10,214	9,609	4,027	5,582
2004	1,416,452	23,758	8,424	19,813	11,389	15,355	3,941	11,414
2005	1,450,538	27,584	8,873	20,419	11,546	18,833	3,307	15,526
2006	1,489,156	33,973	9,437	20,673	11,236	24,725	3,784	20,941
2007	1,524,920	34,742	10,299	21,848	11,549	24,483	3,370	21,113
2008	1,556,368	30,573	11,022	22,884	11,862	19,465	2,840	16,625
2009	1,582,264	25,896	11,202	23,285	12,083	14,676	3,850	10,826
2010	1,675,913	19,970	10,654	22,610	11,956	9,392	3,243	6,149
2011	1,698,288	22,257	9,867	21,555	11,688	12,338	3,015	9,323
2012	1,727,153	28,345	9,530	22,457	12,927	18,663	3,728	14,935
2013	1,758,577	31,153	9,681	22,821	13,140	21,438	3,463	17,975
2014	1,792,649	34,072	9,397	22,977	13,580	23,922	4,039	19,883
2015	1,830,345	36,435	10,342	24,090	13,748	26,062	4,809	21,253

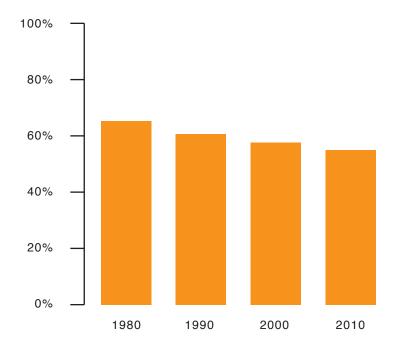
The Nashville region has experienced significant growth over the past 15 years. It has come from positive net domestic and international migration, with births making up the largest portion of Nashville's growth.

Change in Population, 2010-2015



Change in Population, 2010-2015

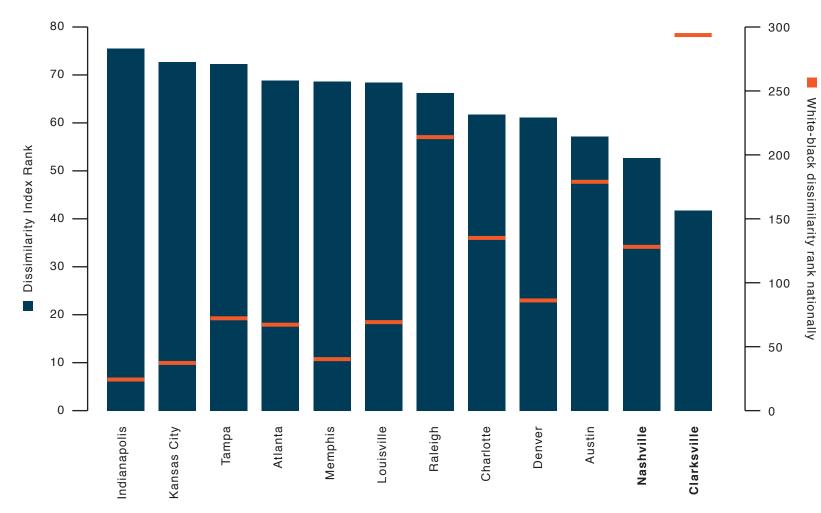
Source: U.S. Census Bureau, 2015



According to the Brown US2010
American Communities Project,
the dissimilarity index "measures
whether one particular group is
distributed across census tracts
evenly." Nashville ranks 137 of 380
MSAs for black-white dissimilarity.

White-Black Dissimilarity Index and Ranking among 380 MSAs

Source: American Communities Project, 2010



Gini Index by County

Source: U.S. Census Bureau, 2014

Robertson	39%
Cheatham	39%
Rutherford	40%
Wilson	42%
Macon	42%
Maury	43%
Smith	44%
Hickman	44%
Dickson	44%
Williamson	44%
Sumner	45%
Cannon	45%
Trousdale	46%
Davidson	49%



The Gini index measures economic disparity within a geographic region. The Census Bureau defines the Gini index as "a statistical measure of income inequality ranging from 0 to 1. A measure of 1 indicates perfect inequality (i.e., one household having all the income and the rest having none. A measure of 0 indicates perfect equality, i.e., all households having an equal share of income.)"

Net Population Change Per Day, Nashville MSA

Source: U.S. Census Bureau, 2015

	Total change	Net migration
2001	43.9	20.7
2002	44.7	21.8
2003	49.9	26.3
2004	65.1	42.1
2005	75.6	51.6
2006	93.1	67.7
2007	95.2	67.1
2008	83.8	53.3
2009	71.0	40.2
2010	54.7	25.7
2011	61.0	33.8
2012	77.7	51.1
2013	77.0	58.7
2014	93.4	65.5
2015	99.8	71.4

Migration, 2009 - 2013

Source: U.S. Census Bureau, 2013

Inflow	MSA	Outflow	Net
2,812	Memphis	2,020	792
2,449	Knoxville	1,627	822
2,106	Atlanta	2,093	13
1,643	Chicago	698	945
1,099	New York City	564	535
1,043	Orlando	546	497
888	Los Angeles	470	418
883	Dallas	886	-3
852	Tampa	458	394
820	Detroit	358	462
814	Washington, D.C.	741	73
610	Boston	187	423
591	Miami	468	123
569	Houston	600	-31
481	Jacksonville	223	258
452	Birmingham	659	-207
396	Indianapolis	471	-75
380	San Francisco	152	228
361	Phoenix	568	-207
350	Austin	196	154

Housing

Housing costs comprise a substantial portion of a household's expenditures. A household is considered "burdened" when it must designate more than 30 percent of its income to housing, a threshold set in 1981 and one used by most public housing programs.

Historically, the low cost of living in the joint metro region relative to the national average has been an attribute enjoyed by both residents and newcomers to the area. With increased demand relative to housing supply in recent years, a large portion of the consumer market has seen increases in price in both single- and multi-family housing. At the same time, transformations in neighborhoods and overall growth have prompted residential movements to new parts of the region. This movement has, in turn, intensified already high commuting burdens. The connection between housing and transportation costs becomes critical when one considers that transportation costs typically rank second only to housing costs for most households. In this regard, housing-related change in the joint metro region has meant an exacerbation of increasing cost burden for some residents and new risk of less competitive cost of living overall for many. For example, one-third of the region's 18-34-year-olds surveyed had to move in the past year or will have to move in the coming year to find a more affordable living arrangement.

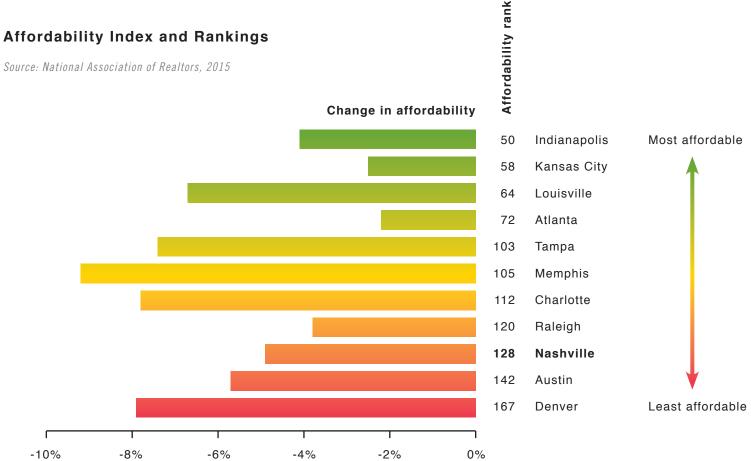
Cost of Living, First Quarter 2016

Source: Council for Community and Economic Research, 2016

MSA	Index (100 = U.S. average)
Denver	109.3
Atlanta	99.6
Austin	98.6
Nashville	96.1
Raleigh	93.8
Charlotte	92.7
Indianapolis	92.4
Tampa	92.3
Kansas City	91.3
Louisville	86.3
Memphis	83.3

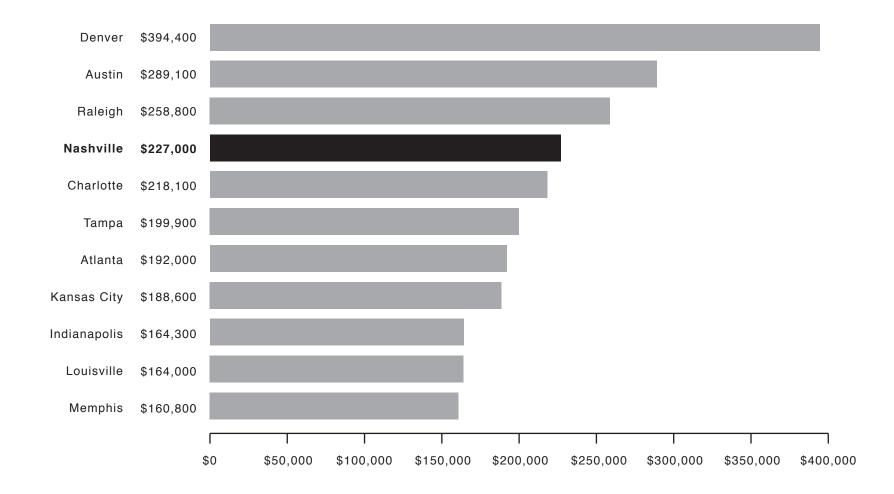
The National Association of Realtors (NAR) provides data and rankings on the affordability of different MSAs by measuring whether or not a typical family earns enough income to qualify for a mortgage loan on a typical home. Among key metropolitan areas, the Nashville MSA's median housing price is lower only than that of Denver, Raleigh and Austin.

Affordability Index and Rankings



Median Housing Prices by MSA

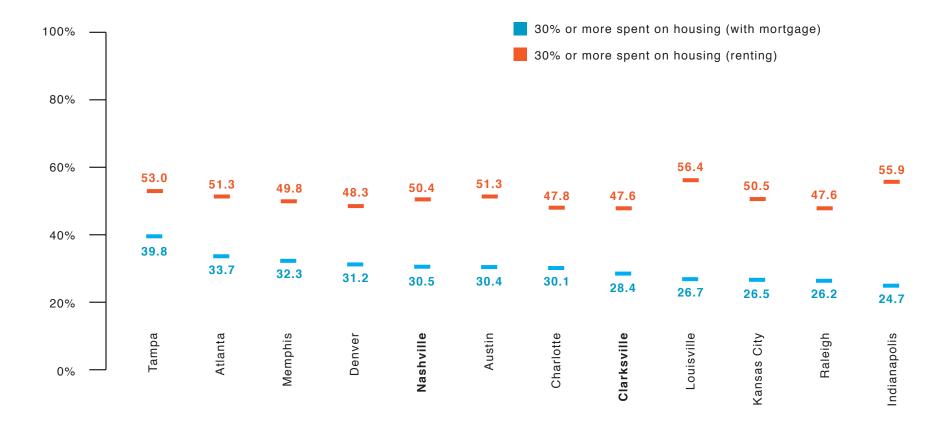
Source: National Association of Realtors, Q2 2016



Nashville's current cost of living is slightly lower than the national average. Housing comprises the largest share of household costs and impacts Nashville's relative position in the index.

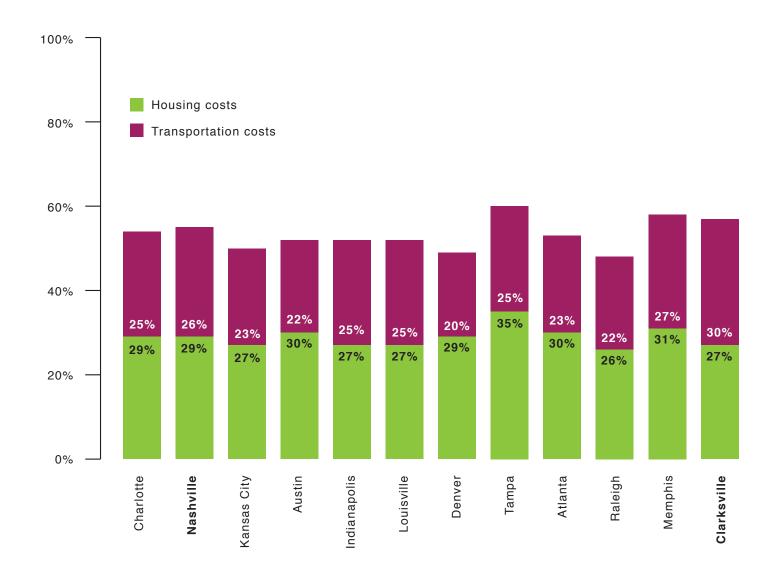
Housing Cost as a Percentage of Income by MSA

Source: U.S. Census Bureau, 2014



Housing and Transportation Costs

Source: Center for Neighborhood Technology, 2015

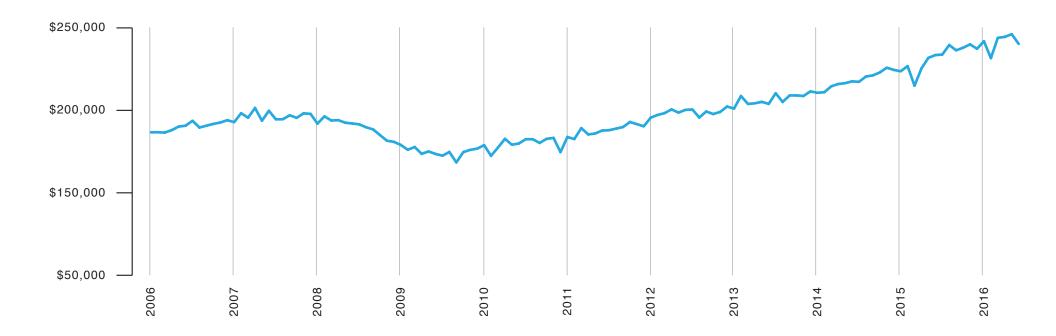


When housing and transportation costs are combined, the Nashville MSA is less competitive than other key MSAs. This can impact the region in many ways, with particular effect on those with limited means to absorb higher costs, those with higher commuting costs, those with fewer mobility options, or those with some combination of these challenges.

The Economy

Monthly Seasonally Adjusted Sales Tax Collected for the Nashville MSA

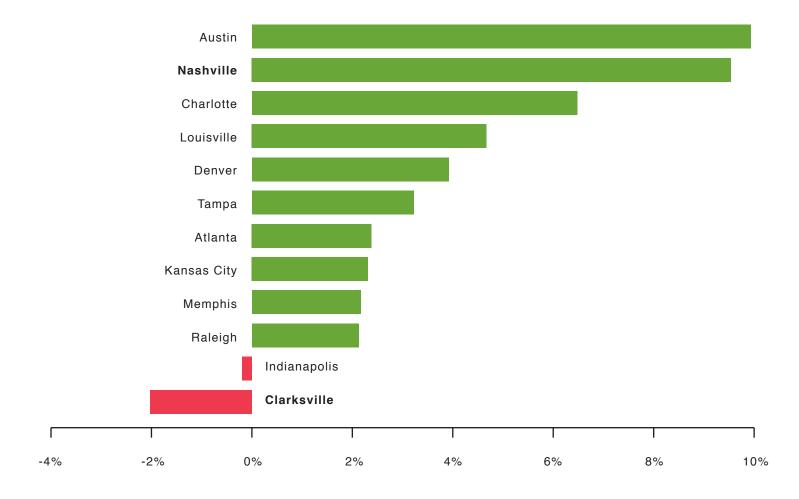
Source: Tennessee Advisory Commission on Intergovernmental Relations, Tennessee Department of Revenue



Strong growth in tax revenue in the MSA has been continuous since 2011 and reached new highs in 2016.

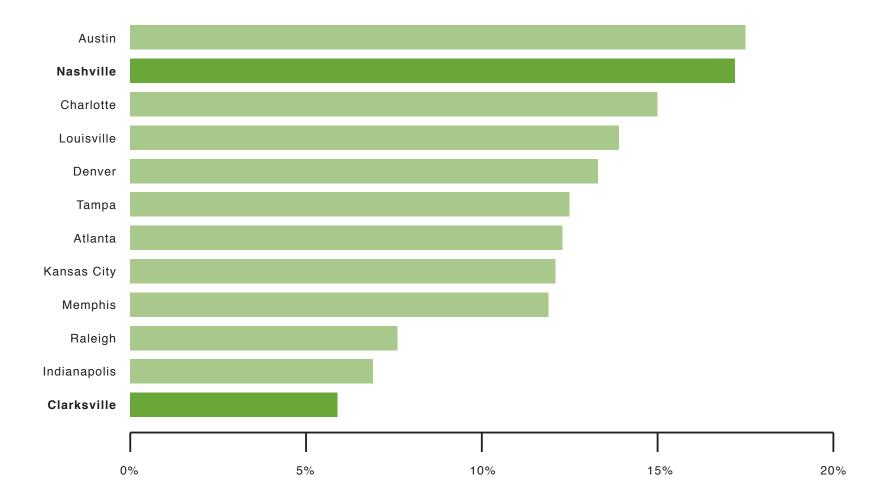
Real Change per Capita GDP, 2010-2014

Source: U.S. Bureau of Economic Analysis, 2014



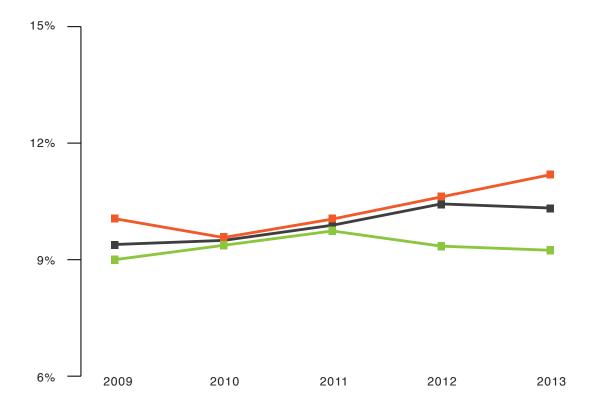
Per Capita Income Growth, 2010-2014

Source: U.S. Bureau of Economic Analysis, 2014



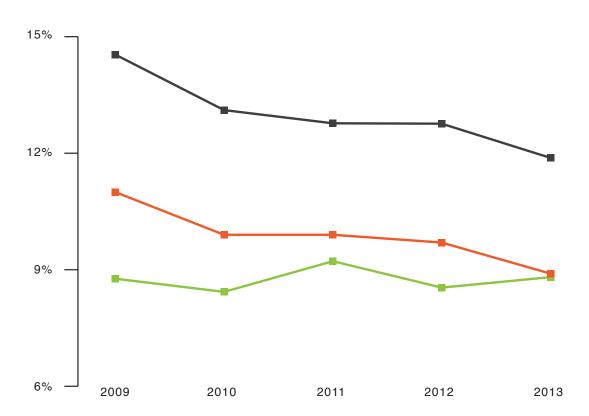
Business Establishment Entry Rate as Percent of Total Establishments

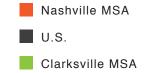
Source: U.S. Small Business Administration, 2014



Business Establishment Exit Rate as Percent of Total Establishments

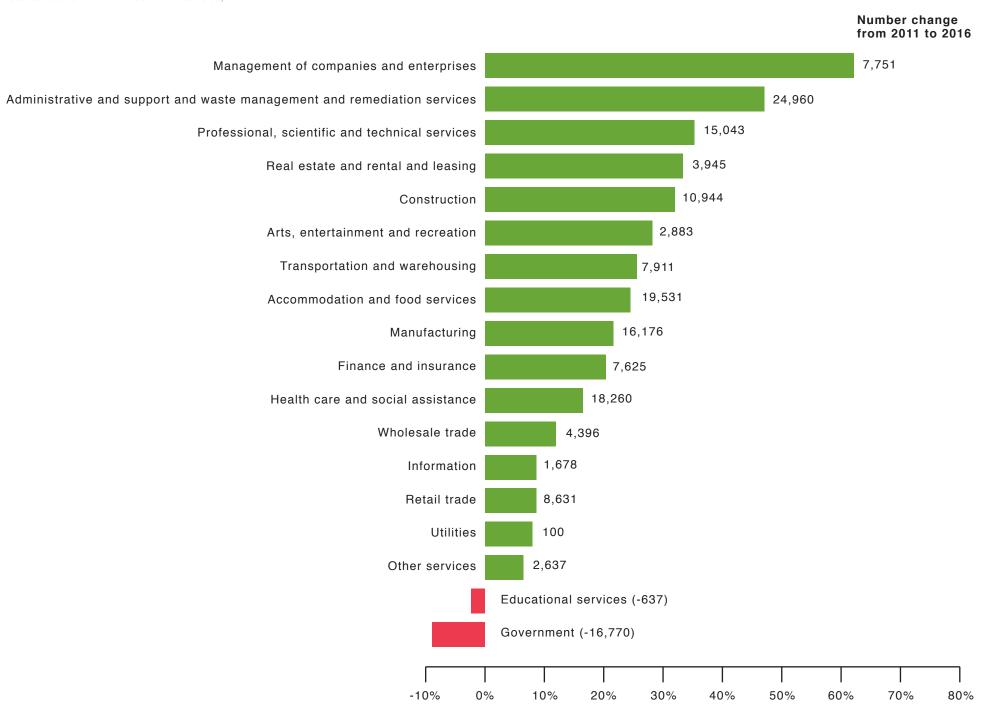
Source: U.S. Small Business Administration, 2014





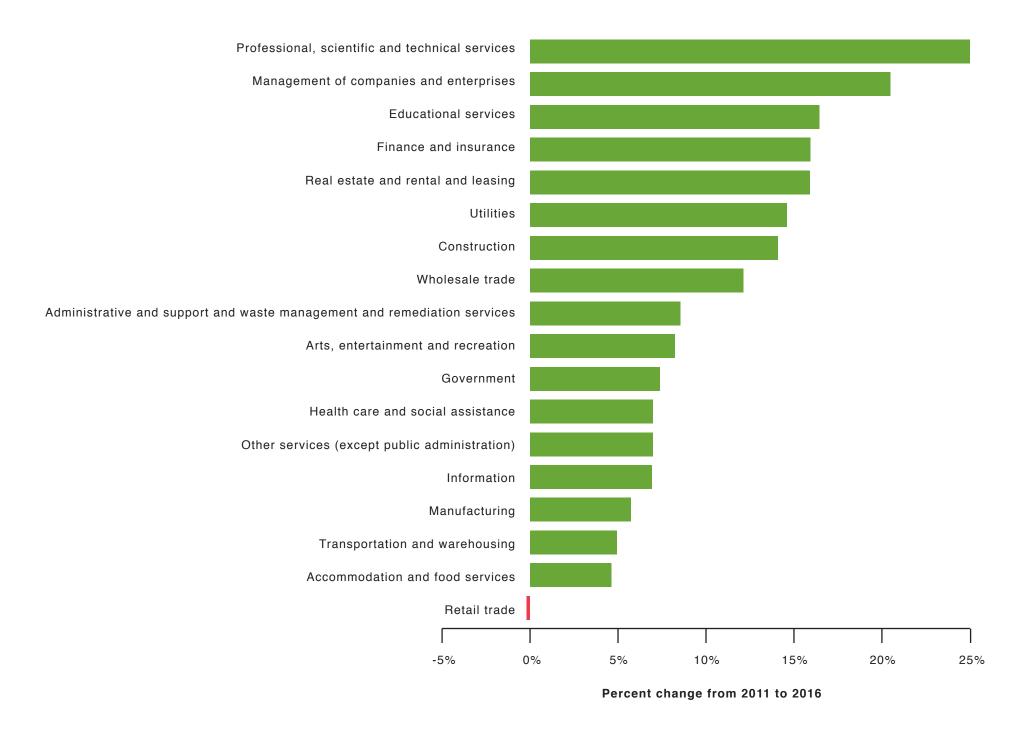
Business Establishment Entry and Exit Rate as Percent of Total Establishments

Source: U.S. Small Business Administration, 2014



Percent change from 2011 to 2016

Source: EMSI, 2016



Poverty Rates by MSA

Source: U.S. Census Bureau, 2014

	2009	2014	
Memphis	19.4%	20.3%	
Tampa	13.9%	15.8%	
Clarksville	16.0%	15.7%	
Atlanta	13.4%	15.7%	
Louisville	14.3%	15.5%	
Austin	13.9%	15.1%	
Nashville	13.3%	15.1%	
Charlotte	13.6%	15.0%	
Indianapolis	13.7%	14.6%	
Kansas City	11.4%	12.6%	
Raleigh	11.4%	12.3%	
Denver	12.0%	12.0%	

Poverty Rate by County

Source: U.S. Census Bureau, 2014

	Percentage	Number
Macon	21.2%	22,582
Christian	20.4%	74,459
Davidson	18.8%	646,048
Hickman	18.8%	24,354
Cannon	18.1%	13,786
Montgomery	16.3%	182,015
Maury	16.1%	82,729
Smith	15.9%	19,092
Trousdale	15.9%	7,859
Trigg	15.5%	14,277
Cheatham	15.1%	39,324
Dickson	14.5%	50,115
Rutherford	13.3%	275,461
Robertson	12.3%	67,024
Wilson	10.4%	119,584
Sumner	10.2%	166,636
Williamson	5.6%	193,921

Arts & Culture

Arts Vibrancy Index

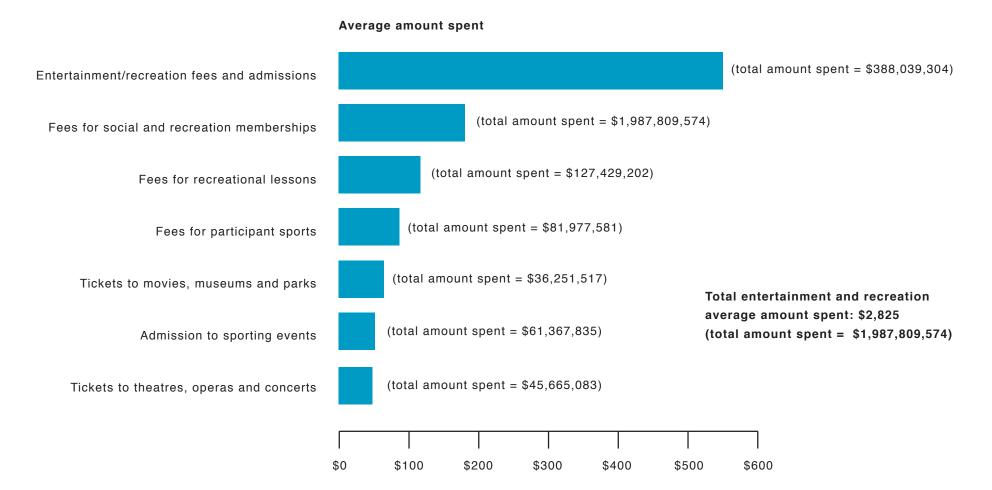
Source: National Center for Arts Research, 2016

Nashville MSA rank among MSAs Overall 2 Arts organizations 2 Arts providers 7 Arts and culture employees 7 Independent artists 9 Program revenue 10 Total expenses 11 Arts dollars 12 Total compensation 16 Government support 16 Contributed revenue 23 State arts dollars 31 Arts, culture and entertainment employees 39 Federal arts grants 47 Federal arts dollars 57

State arts grants

78

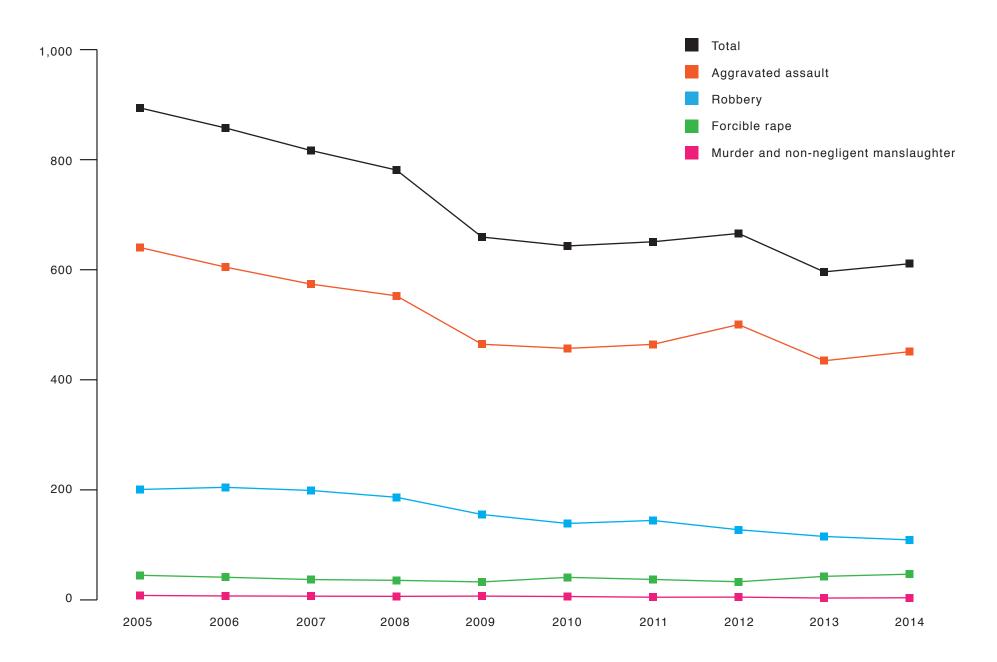
Source: ESRI, 2016



Safety

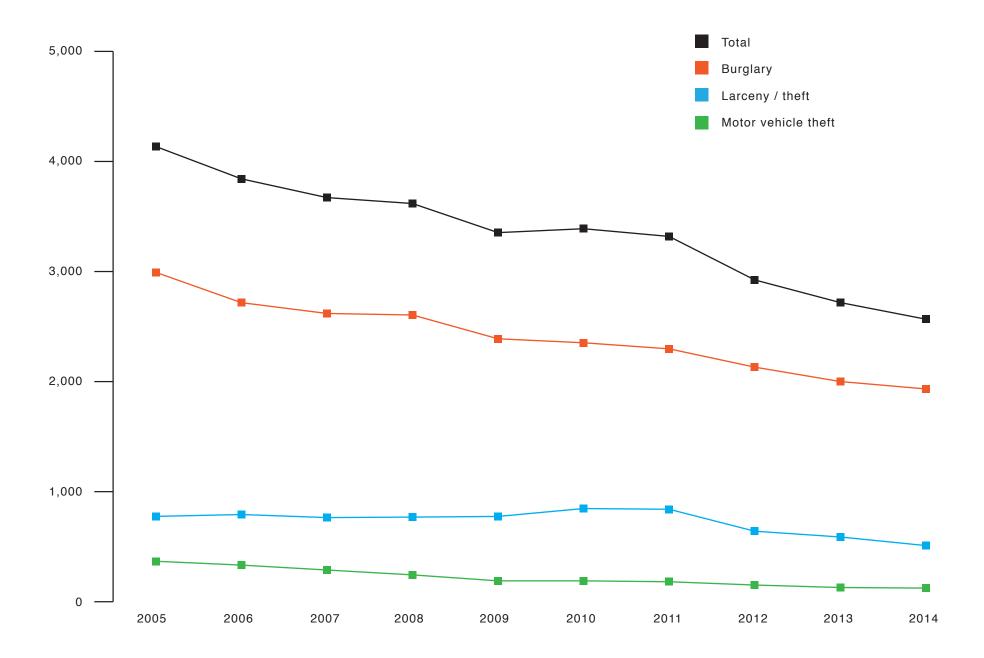
Violent Crime Rates per 100,000 Population over Time in Nashville MSA

Source: U.S. Federal Bureau of Investigation, 2015



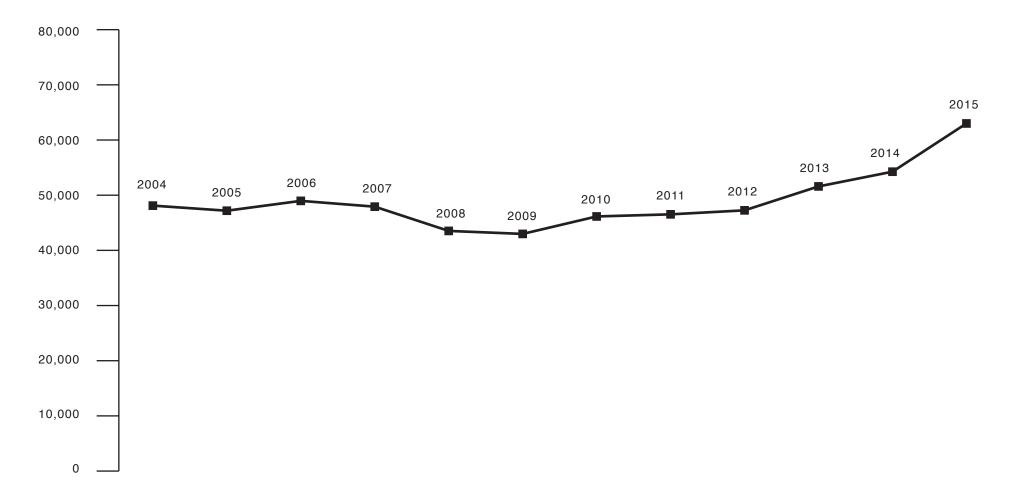
Property Crime Rates per 100,000 Population over Time in Nashville MSA

Source: U.S. Federal Bureau of Investigation, 2015



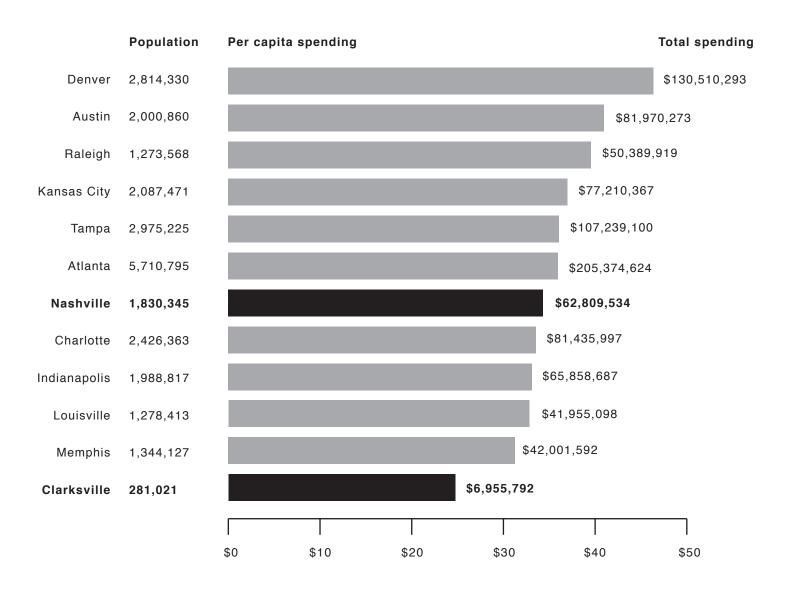
Motor Vehicle Accidents in Nashville MSA

Source: Tennessee Department of Safety and Homeland Security, 2015



Per Capita Consumer Spending on Property Management and Security

Source: ESRI, 2016



Vital Signs Regional Poll

Regional priorities

- Public education, new jobs and public safety are the top priorities for local officials to work together on over the next five years. Respondents cited creating new jobs as their top priority only half as often as the prior two years.
- More than four of every five respondents between the ages of 18 and 44 report that the quality of public schools is very important in their decisions about where to live.
- Ninety percent of respondents would like the local governments in the Nashville region to work together to address their priority issues.
- Seventy percent of respondents are in favor of pooling taxes with other communities in the Nashville area to address shared regional priorities.
- Forty-six percent of respondents are supportive of increasing taxes to address shared regional priorities.
- Respondents were asked to respond to the statement, "I believe a 4-year-old child where I live should have the opportunity to attend a pre-K to make sure he/she is ready for school." Among minority respondents, 94 percent agreed. Among respondents ages 18 to 34, 94 percent agreed. Among female respondents, 89 percent agreed.

Mobility

- Sixty-four percent of respondents are supportive of dedicating a portion of taxes to expanding mass transit options in the Nashville region.
- Women and minority respondents stated they are more likely than their counterparts to use transportation other than cars if a reliable form of public transportation were available.
- Among respondents ages 18 to 34, 6 percent are more likely to use public transportation daily.
- Among Hispanic respondents, 11 percent stated they use public transportation daily.
- People across all income levels anticipate using an alternative to a personal car if a convenient mode of public transportation were available.
- Nine percent of respondents surveyed say they walk or bike daily instead of driving.
- In Williamson County, 67 percent of respondents feel traffic congestion has gotten worse over the last year. Among Davidson County respondents, 68 percent feel traffic congestion has gotten worse over the last year.

Postsecondary education

- Forty-two percent of minority respondents, 40 percent of respondents with household incomes below \$50,000, and 44 percent of respondents between 18 and 34 feel they need additional education or training in order to advance their careers.
- Respondents with a higher education degree are more likely than respondents with a high school diploma or less to think the outlook for the next generation is positive.

Health

- Fewer than 50 percent of people with a household income less than \$50,000 per year believe they are in good health. Seventy-three percent of people with a household income over \$100,000 per year believe they are in good health.
- Most respondents report that they exercise more than one time per week. Twenty-seven percent of respondents between the ages of 45 and 64 say they walk or bike daily.
- Among respondents from all income levels, 9 percent say they went without health care during the past year.

Housing

- Fifty-two percent of respondents are supportive of having a portion of taxes dedicated to addressing the housing issues in the region. Among minority respondents, 68 percent are supportive.
- A third of the 18- to 34-year-olds surveyed stated they had to move in the past year or will have to move in the coming year in order to find a more affordable living arrangement.

Economy

- Twenty-eight percent of 18- to 34-year-olds surveyed expect to change jobs during the next year.
- Among respondents ages 45 to 65, 13 percent say they feel insecure in their current jobs.
- Among respondents with annual household incomes above \$100,000, 91 percent think they are headed in the right direction financially.
- Among respondents with annual household incomes less than \$50,000, 66 percent of respondents agreed with the statement, "I am headed in the right direction financially."
- Among respondents with a household income below \$50,000, 32 percent were not able to afford a basic need during the past year.
- Eighty-four percent of respondents think it is important to "know your neighbors personally."
- Ninety-six percent of respondents report feeling safe where they live.

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About The Research Center

The Research Center of the Nashville Area Chamber of Commerce focuses on topics and trends useful to understanding and expanding the economic vitality of the joint metro region. It provides analysis and reporting on current and emerging issues that provides focus on real-world needs of business, communities and the region.

Garrett Harper

Dr. Garrett Harper has served as vice president of research for The Research Center at the Nashville Area Chamber of Commerce since 1990. He is past president of the American Chamber of Commerce Researchers Association and is a certified community researcher. He serves on the national steering committee of the U.S. Census American Community Survey Data Group and is active in a variety of academic and practitioner organizations relating to demographics, regional science, music and entertainment industries, quality-of-life research, workforce development, and economic and international development. His research specializes in impact analysis, survey research, and market feasibility. His work has been featured in *The Atlantic Cities, USA Today, The New York Times, The Wall Street Journal, The Carnegie Reporter,* NPR and other media. Harper serves as an adjunct professor at Lipscomb University, Trevecca Nazarene University, Cumberland University, Volunteer State Community College and Columbia State Community College. He holds a Ph.D. in international development, an M.P.H. in health administration and planning, an M.B.A. in health care marketing, an M.T.S. in theology, a J.D. in law, a certificate in Geographic Information Systems, and is completing an M.S.A.N.R. in agribusiness and natural resources.

Rebecca West

Rebecca West serves as director of applied research at The Research Center. West started her career at the Chamber as manager of a small business accelerator program called ScaleUp Nashville. Prior to her work with the Chamber, West worked in nonprofit management and small business development, and participated in the six-month government-sponsored startup program StartUp Chile. West holds an M.A. in economic development and Latin American studies from Vanderbilt University and a B.A. in theology from Georgetown University. She is proficient with IMPLAN, R and STATA.

Chris Zimmer

Chris Zimmer serves as manager of analytics and applied research for The Research Center. In this role, he compiles demographic and economic data for a variety of studies on business, economics and the public sector. He is a graduate of Belmont University with a degree in business administration and marketing. Zimmer is proficient with EMSI, ESRI, IMPLAN, Qualtrics, SPSS and survey design.

Riley Scholer

Riley Scholer serves as coordinator of applied research for The Research Center. A native of Lake Bluff, Ill., Scholer graduated from Vanderbilt University with a degree in public policy.

Regional Survey Methodology

Davis Research of Calabasas, Calif., conducted a telephone survey from July 28 through August 8, 2016, of 750 randomly selected adult residents in the 17 counties that comprise the Nashville and Clarksville Metropolitan Statistical Areas. The survey was developed by The Research Center of the Nashville Area Chamber. Results reported reflect a margin of error of +/-3.5 percent at the 95 percent confidence level. Selected characteristics of the sample include the following:

- 50% male
- 48% 45-64 years old
- 24% nonwhite
- 29% Davidson County resident
- 41% cell phone respondent
- 25% annual household income greater than \$100,000
- 77% homeowner
- 43% completed college

Survey content and objectives focused on assessing representative resident population perceptions, beliefs and opinions on important issues in their lives and about the region. The survey process provides a useful corollary to data relating to these issues and topics. Responses help in assessing other research and data findings, indicating nuances not captured in other data, offering a qualitative perspective on issues, and helping frame and guide discussions on topics.



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