NASHVILLE REGION'S

VITAL SIGNS

2015

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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 economic well-being and activate community-driven solutions to address them. The Chamber's Research Center leads the data collection for the project, and the Nashville Area Metropolitan Planning Organization is the Chamber's lead partner in the effort. Every October, the Chamber releases the Vital Signs report, which forecasts emerging issues and challenges. The Vital Signs Action Team, which is composed of regional business and community leaders, then initiates a yearlong process of leadership discussion, priority-setting and action.

Nashville Area Chamber leaders began making plans to launch the initiative, modeled after Toronto's Vital Signs, after their Leadership Study Mission to Toronto in 2011. The Nashville region has joined a growing list of international cities using this framework to identify regional issues and solutions. 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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This report was prepared in cooperation with the U.S. Department of Transportation Federal Highway Administration and the Tennessee Department of Transportation through the Nashville Area Metropolitan Planning Organization.

Executive Summary

There are many things that make life good in Middle Tennessee. Our regional economy continues to experience tremendous growth that serves as the foundation for our quality of life. Job growth is high, unemployment is low, and every dollar our residents make stretches further in our region than it would elsewhere. Our K-12 systems continue to make improvements in preparing more students for college and the workforce. Our region provides greater access to arts and cultural institutions, our residents feel safe, and regional collaboration is strong. It is no wonder that 89 percent of residents feel like our region is a vibrant, lively and appealing place to live.

However, building prosperity requires focused intention.

In 2013, the Nashville region joined a growing list of international cities using the Vital Signs framework to identify regional issues and solutions. This third report examines three critical issues that threaten the continued economic prosperity of Middle Tennessee:

What is required of our labor force to continue our prosperity?
Between 2010 and 2015, the joint Nashville-Clarksville region saw an average of **14 percent job** growth in business establishments. In our region, employers are requiring higher skill levels among the new workers they hire, and jobs that do not require education after high school are quickly disappearing. In the 17-county joint Nashville-Clarksville region, **40.6 percent** of people hold at least an associate degree. While this number has increased in recent years, the region does not yet produce enough graduates with the needed skills to fill jobs being created in Middle Tennessee. According to the 2015 Vital Signs regional poll, those respondents with a high school education or less were **three times more likely** than college graduates to report they had trouble affording basic needs, such as housing, adequate food, home heating or health care services over the last year. Minorities, people who speak a language other than English at home and those living in poverty are less likely to have completed postsecondary education.

How does the well-being of our residents impact our quality of life and prosperity?
Compared to peer regions, Nashville-region residents have greater access to quality care. However, our residents fare worse on many health outcomes, including chronic pulmonary disease (COPD), obesity, stress, depression, diabetes, heart attack, physical activity, and smoking, compared to peers – even when accounting for differences in demographics. Although a high percentage of Middle Tennesseans are insured, **269,750 residents** remain uninsured, making preventive treatment more difficult. In our 2015 Vital Signs regional poll, **88 percent** of respondents said their health had a significant impact on their ability to live their lives the way they want. **More than half** of all respondents said they had to go without health care in the last year.

How well are we connecting people to jobs, housing and recreation?
Since 2005, transit ridership has **increased by 40 percent** in Middle Tennessee. Despite increasing demand, Middle Tennessee's public transit agencies are significantly underfunded and not keeping pace with growth or the level of investment seen in most peers across the nation. Without transit alternatives, most Middle Tennesseans must rely on a personal vehicle as their primary mode of transportation. **Forty-five percent of respondents** identified improving transportation as one of the top three priorities that the region should collectively address. Only **29 percent** of respondents said the same in 2014. Additionally, **44 percent** of respondents say they get stuck in traffic jams on a daily of frequent basis – a 10 percentage point increase compared to 2014. Congestion is projected to **more than double** by 2040.

This year's report also includes a dashboard of indicators on a variety of issues to help us identify emerging issues that may threaten our quality of life. This dashboard points to a new challenge: It is becoming a lot less affordable to live in our region, especially if you are a renter. Nearly **two out of three of our residents** think the region needs to focus on expanding affordable housing options.

We must remain committed to helping our students and adults complete their higher education. We must expand access to health care to Middle Tennesseans without it. We must make additional investments in our transportation system. Addressing these issues will be crucial to ensuring that the prosperity being generated by our economy is being spread equally, that our residents can live their lives the way they want, and that our growth doesn't create a strain on our infrastructure.

The Vital Signs process not only includes an annual assessment of our region's assets and challenges. It also includes the work of an Action Team of business and community leaders who are charged with convening regional leaders and identifying solutions to challenges that arise in the annual report.

Over the last year, Middle Tennesseans proved they were up to the challenge of accelerating the prosperity of the region.

As a result of our regional collaboration over the last year:

- More than 6,000 students from Middle Tennessee are taking advantage of the Tennessee Promise, Gov. Haslam's initiative that makes tuition at any community college or Tennessee College of Applied Technology (TCAT) in the state free for students who graduate from high school.

- Through a groundbreaking research study, the region has a deeper understanding of the gaps between the quality of our health care industry and health outcomes of our residents.

- More than 100 community leaders have come together through a new initiative called "Moving Forward: Transit Solutions for Our Region" to ensure the creation of a regional transportation solution through a cohesive community effort.

There is tremendous opportunity to address the issues we are facing. Our leaders and residents have already shown an ability to work together to address priority issues to keep Middle Tennessee moving forward. We must continue to leverage this leadership to maintain our position as a growing and prosperous region.

Kent Adams
President and CEO
Caterpillar Financial Services Corporation
Board chair, Nashville Area Chamber of Commerce

Mayor Kenneth Wilber
City of Portland
Executive board chair, Nashville Area MPO

Chris Holmes
President and CEO
FirstBank
Chair, Vital Signs Action Team

WHAT IS REQUIRED OF OUR LABOR FORCE TO CONTINUE OUR PROSPERITY?

What's working:

• In the 17-county joint Nashville-Clarksville region, 40.6 percent of people hold at least an associate degree.

• The region currently outpaces the state and nation on the percentage of adults with a bachelor's degree.

• Twelve of 15 counties increased their high school graduation rates from 2013 to 2014.

• Eleven of 15 counties improved the percentage of students scoring at least a 21 on the ACT – an important hurdle for being eligible for the lottery-funded HOPE Scholarship – from 2013 to 2014.

Work that remains:

• Minorities, people who speak a language other than English at home and those living in poverty are less likely to have completed postsecondary education.

• Residents with a high school education or less are three times more likely to have had trouble affording basic needs in the last year, such as housing, adequate food, home heating, or health care services.

What we should do:

• Leverage Tennessee Reconnect, Gov. Haslam's initiative to help adults enter higher education and gain new skills to advance in the workplace, to increase education attainment rates for adults.

• Share best practices throughout the region to ensure Tennessee Promise students complete their associate degree or credential.

• Continue commitment to K-12 reforms, including rigorous standards, aligned assessments and accountability for results.

Education attainment levels are increasingly important to a region's economic competitiveness. According to the Georgetown University Center on Education and the Workforce, at least 55 percent of jobs in Tennessee will require postsecondary education over the coming years. In Middle Tennessee, employers are requiring higher skill levels among the new workers they hire. Jobs that do not require education after high school are quickly disappearing, and individuals without additional postsecondary education will find fewer and fewer opportunities in the job market. The limited opportunities they will have access to will mean they will earn less in their lifetime than their peers and have a harder time affording basic necessities. According to the 2015 Vital Signs regional poll, respondents with a high school education or less were three times more likely than college graduates to report they had trouble affording basic needs, such as housing, adequate food, home heating or health care services, over the last year.

While the percentage of adults in our region who have obtained education after high school has increased in recent years, the region does not yet produce enough graduates with the needed skills to fill jobs being created in Middle Tennessee.

REGIONAL POLL RESULT

According to the 2015 Vital Signs regional poll, respondents with a high school education or less were three times more likely than college graduates to report they had trouble affording basic needs, such as housing, adequate food, home heating or health care services, over the last year.

Education Attainment and Workforce Needs

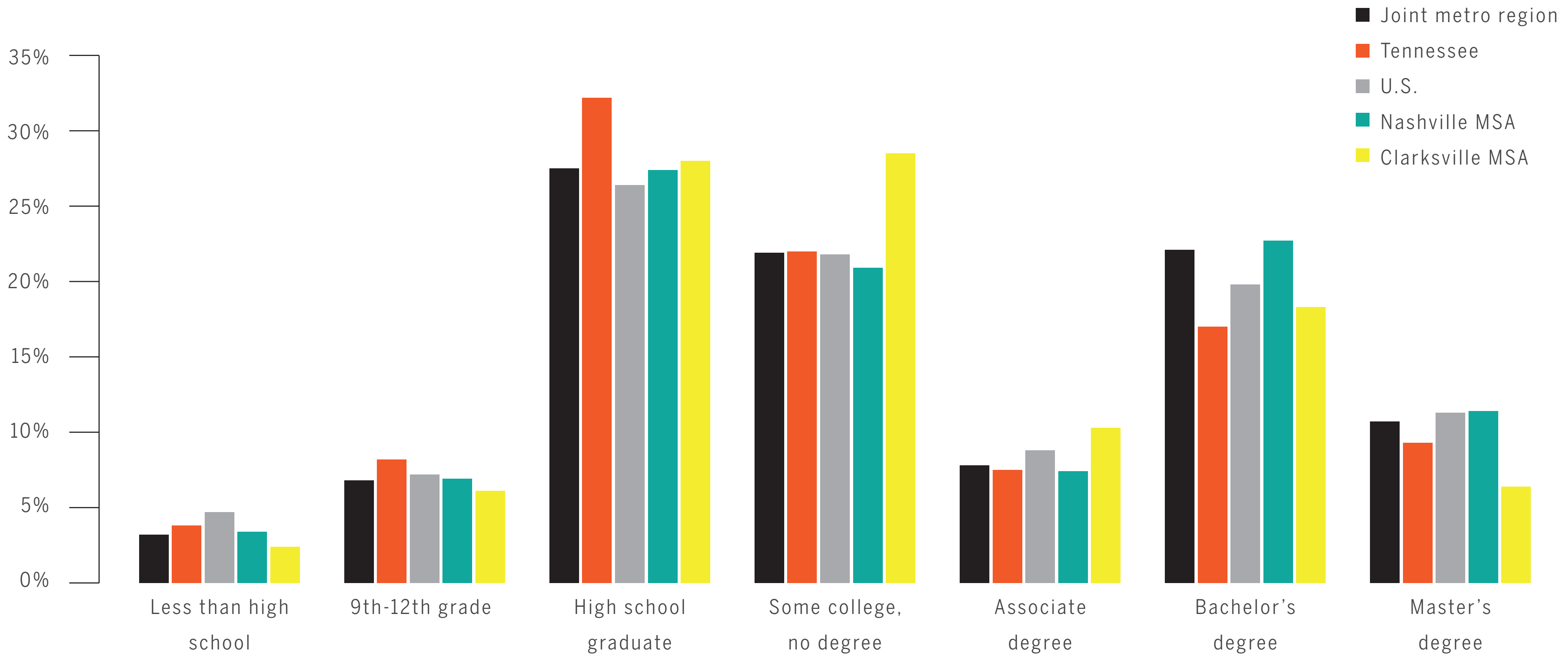
In the joint Nashville-Clarksville metro region, 40.6 percent of people have at least an associate degree. In the last few years, the joint metro region has seen important increases in education attainment. There are now five counties (Williamson, Davidson, Rutherford, Wilson and Sumner) in which at least a quarter of adults have a bachelor's degree or higher. Data show that the area continues to exceed both state and national levels of those with a bachelor's degree.

KEY TAKEAWAY

While the percentage of adults in our region who have obtained education after high school has increased in recent years, the region does not yet produce enough graduates with the needed skills to fill jobs being created in Middle Tennessee.

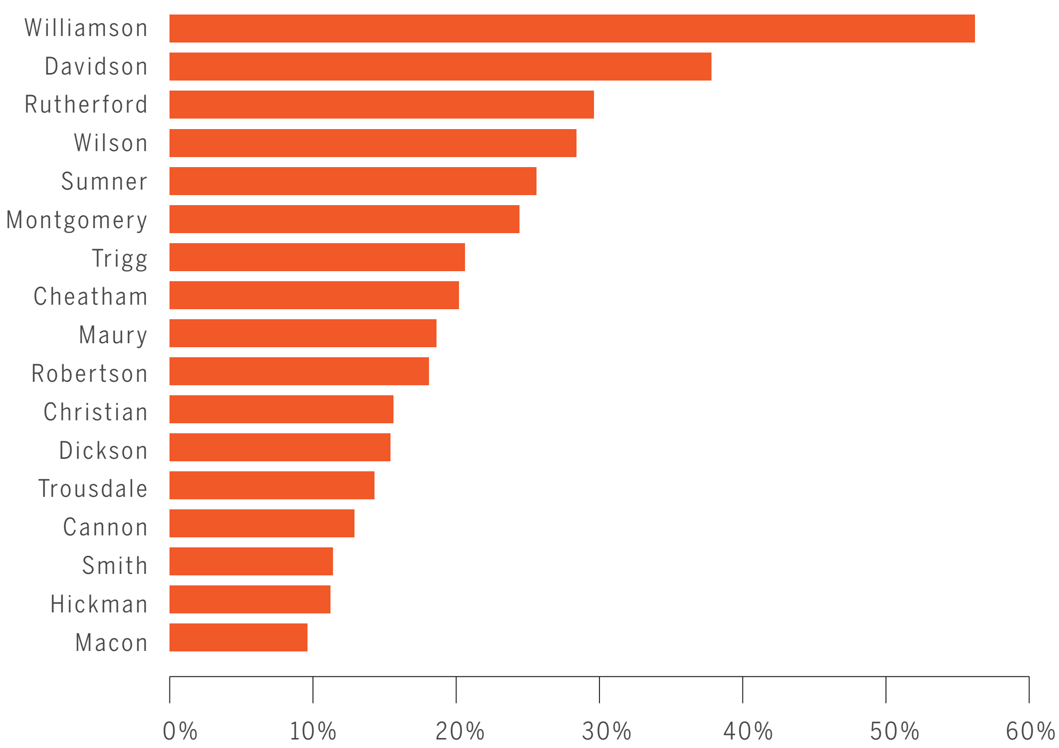
Educational Attainment

Source: U.S. Census Bureau and American Community Survey, 2013



Percentage of Population with a Bachelor's Degree or Higher

Source: U.S. Census and American Community survey 5-year estimates, 2013

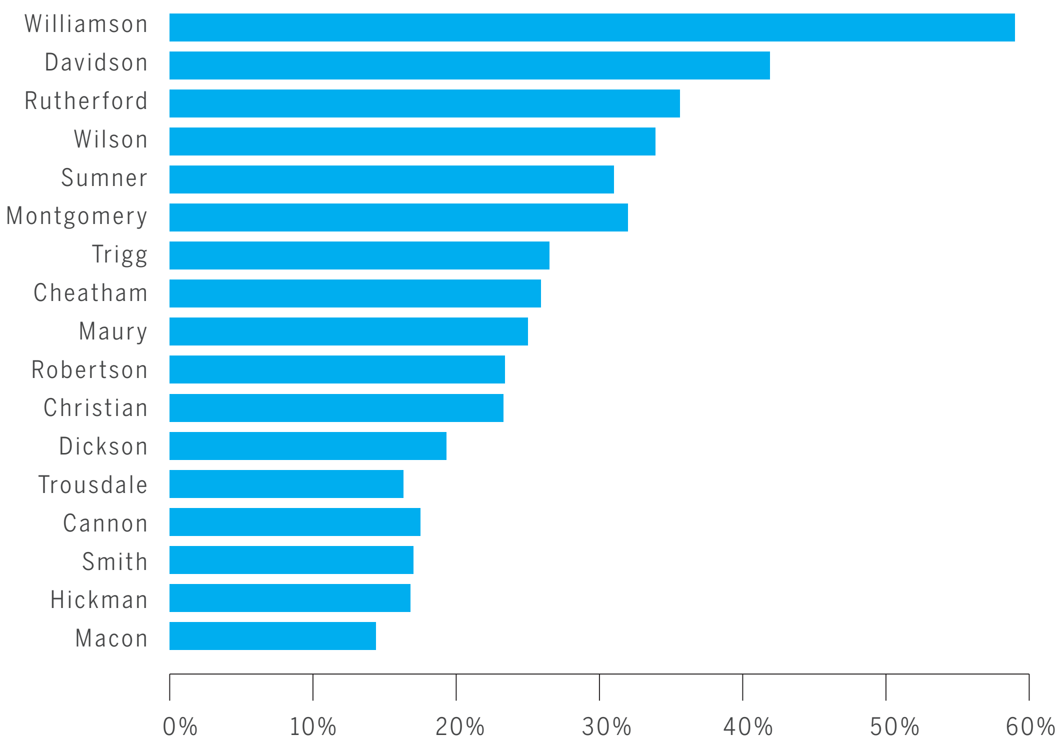


Despite these important increases, educational attainment is more limited in our region among certain groups. For example, minorities, people who speak a language other than English at home, and those living below the poverty level are much less likely to hold at least an associate degree compared to the rest of the population. In our 2015 Vital Signs poll, nearly half of minorities said they need more education or training in order to advance in their career. Four out of 10 respondents earning less than $50,000 said they needed more education to advance their careers.

Educational attainment has a strong correlation with unemployment and lifetime earning potential. Individuals who earn an associate degree will make almost half a million dollars more in their lifetime than individuals with just a high school diploma, while earning a bachelor's degree results in lifetime earnings that outpace the earnings of high school graduates by $1.6 million.

Percentage of Population Over 25 with an Associate Degree or Higher

Source: U.S. Census and 5-year American Community Survey estimate, 2013



Joint Metro Region Percentage of Group with an Associate Degree or Higher

Source: EMSI and U.S. Census Bureau 1-year American Community Survey estimate, 2013

White	38.1%
Black	28.4%
American Indian	25.2%
Asian	52.0%
Native Hawaiian	22.4%
Two or more races	35.4%
Hispanic	18.4%
Non-Hispanic	40.6%

REGIONAL POLL RESULT

In our 2015 Vital Signs poll, nearly half of minorities said they need more education or training in order to advance in their career. Four out of 10 respondents earning less than $50,000 said they needed more education to advance their careers.

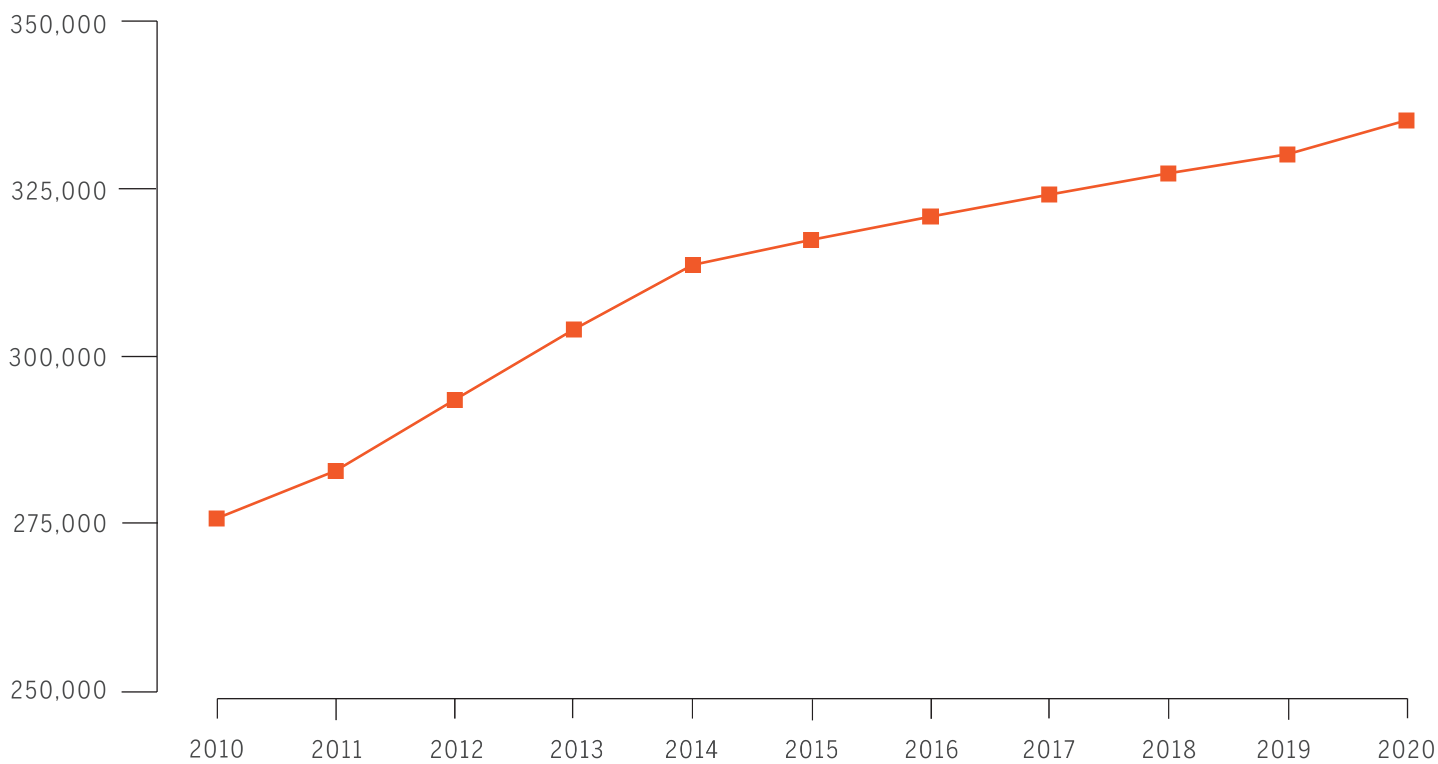
Drive to 55 in Middle Tennessee

In response to changing workforce needs, Tennessee has set a goal that 55 percent of the adult population will have a postsecondary credential by 2025. The Nashville region needs an additional 162,010 degree holders to reach that goal. Currently, there are 223,951 adults age 25 and older who have obtained some college, but have not received a degree.

In Middle Tennessee, an increasing number of jobs will go to workers who have experience or obtained an education credential after high school. In our region, one-third of all jobs are deemed "middle skill." Middle-skill jobs require employees have education beyond high school. These jobs have strong earning potential, and are critical to several key local industries, including advanced manufacturing and distribution, especially automotive-related; and health care and information technology. The availability of these jobs is projected to grow over the coming years.

Historical and Projected Middle-Skill Jobs, Joint Metro Region

Source: EMSI, 2015



According to the 2015 Vital Signs poll, 73 percent of all respondents said financial assistance would make them more likely to pursue additional education. Just as many (73 percent) said that merely having information about what their options are would make them more likely to pursue additional education. These two things were considered far more important than a guarantee of job advancement (8 percent) or flexibility in their schedules (9 percent). It is clear that a targeted information/awareness campaign is needed to ensure more adults obtain the education and training they need to fully participate in the workforce.

The chart on the next page shows how many additional degree holders are needed in Middle Tennessee counties to reach 55 percent attainment, as well as how many adults currently have some education after high school.

REGIONAL POLL RESULT

According to the 2015 Vital Signs poll, 73 percent of all respondents said financial assistance would make them more likely to pursue additional education. Just as many (73 percent) said that merely having information about what their options are would make them more likely to pursue additional education. These two things were considered far more important than a guarantee of job advancement (8 percent) or flexibility in their schedules (9 percent).

Drive to 55 in Middle Tennessee

Source: Tennessee Higher Education Commission, U.S. Census Bureau 2009-2013 5-year estimates

County	Additional adults needed to get to 55%	Number of adults with some college, no degree
Cannon	2,728	1,389
Cheatham	9,346	4,424
Davidson	39,667	74,057
Dickson	9,061	5,786
Hickman	5,181	2,444
Macon	8,331	5,131
Maury	5,269	3,397
Montgomery	19,575	26,546
Robertson	10,636	8,165
Rutherford	25,035	35,639
Smith	3,858	1,926
Sumner	18,588	22,003
Trousdale	1,520	807
Williamson	(8,210)	18,300
Wilson	11,425	13,937

ACT 21+, Graduation Rate and College-going Rate

*Sources: * Tennessee Department of Education, 2014; ** Tennessee Higher Education Commission, 2013*

District	% ACT scores 21+ rate* (2013)	% ACT scores 21+ rate* (2014)	Number of students with a 21+ on ACT (2014)	% Graduation% rate* (2013)	Graduation rate* (2014)	% College-going rate** (2013)
Cannon	23.5	26.5	36	82.9	95.1	37.7
Cheatham	33.7	40.2	198	86.1	91.2	50.4
Davidson	27.7	29.3	1,131	76.6	78.7	52.5
Dickson	38.7	35.4	199	87.4	90.7	54.8
Hickman	25.9	26.8	66	91.6	92.5	40.0
Macon	24.0	32.8	77	89.8	86.0	45.0
Maury	32.9	33.5	240	83.1	87.0	55.0
Montgomery	39.9	39.8	738	94.0	93.4	49.5
Robertson	31.9	32.6	225	93.4	95.1	50.8
Rutherford	41.1	43.8	1,382	91.9	92.5	56.3
Smith	36.9	37.6	88	93.4	97.4	47.2
Sumner	44.4	44.2	807	89.4	89.5	64.4
Trousdale	35.9	36.5	38	98.8	96.9	55.3
Williamson	71.9	72.6	1,899	93.8	94.4	76.2
Wilson	43.5	41.7	582	95.1	96.3	59.8
Tennessee	36.2	36.9	22,57	86.3	87.2	57.2

The college-going rate reflects high school students that were enrolled at any higher education institution (community college, university, in-state, out-of-state, public or private).

District	% reading proficiency rate (3rd-8th)*
Cannon	40.9
Cheatham	47.7
Davidson	40.7
Dickson	57.6
Hickman	44.6
Macon	43.3
Maury	46.0
Montgomery	53.5
Robertson	47.8
Rutherford	60.8
Smith	53.2
Sumner	57.8
Trousdale	56.7
Williamson	83.5
Wilson	61.2
Tennessee	49.5

K-12 System Performance

Over the last year, our region has shown progress in preparing more of its students to enter the workforce. Between 2013 and 2014, 12 out of the 15 counties in our joint region experienced improvements in their high school graduation rates. Additionally, 11 counties experienced improvements in the percentage of students scoring at least a 21 on the ACT. This means that not only are more students graduating from high school, but more of them are graduating with a higher likelihood of succeeding in postsecondary education. It also means more students are clearing an important hurdle to be eligible for the lottery-funded HOPE Scholarship. In 2013, 57.2 percent of high school graduates in our region enrolled in postsecondary education.

Tennessee Promise – A Look at the Region

After the inaugural Vital Signs report was released in October 2013, the Vital Signs Action Team, a group of regional business and community leaders, initiated a yearlong process to address a key area of need identified in the report: improving the region's postsecondary attainment rate. To determine a path forward, the Action Team conducted 16 one-on-one interviews with regional mayors and co-hosted six convenings throughout the region with mayors that brought together more than 150 higher education, K-12, business and other community leaders. Ultimately, the group determined to focus their efforts on ensuring the region takes full advantage of Tennessee Promise, Gov. Haslam's initiative that makes tuition at any community college or Tennessee College of Applied Technology (TCAT) in the state free for students that graduate from high school.

The Vital Signs Action Team developed a dashboard to measure progress among school districts in a 15-county region in signing up high school seniors and recruiting adult mentors for the program. The dashboard was sent out weekly.

The first Tennessee Promise dashboard, which was shared with stakeholders in early October, showed that 12 out of 15 counties fell short of meeting their goals for student applications.

- Middle Tennessee goal: 7,081
- Middle Tennessee starting point: 3,674 (52 percent of goal)

Only two of 15 counties had recruited enough mentors to work with students participating in Tennessee Promise.

- Middle Tennessee goal: 1,909
- Middle Tennessee starting point: 916 (48 percent of goal)

TN Promise Applicant Progress

Source:Governor's Office, 2015

Target met

Target not met

County	College non-going rate*	Target number of students	Number of seniors applied	Attended team meeting 1	Completed FAFSA by 2/15	Attended team meeting 2	Completed community service by 8/1	Percent of applicants retained	Percent of target students still in the program
Cannon	58%	86	152	109	96	86	50	33%	**58%**
Cheatham	44%	199	383	253	221	206	151	39%	**76%**
Davidson	44%	1,799	4,228	2,866	2,377	2,005	1,202	28%	**67%**
Dickson	45%	247	500	340	306	268	193	39%	**78%**
Hickman	60%	158	264	193	178	163	126	48%	**80%**
Macon	46%	111	243	188	180	172	123	51%	**111%**
Maury	41%	284	768	604	547	503	382	50%	**134%**
Montgomery	47%	887	1,592	1,111	939	761	502	32%	**57%**
Robertson	46%	328	616	420	359	319	231	38%	**70%**
Rutherford	42%	1,204	2,559	1,898	1,654	1,444	1,030	40%	**86%**
Smith	47%	101	155	111	104	87	60	39%	**59%**
Sumner	29%	516	1,984	1,378	1,259	1,135	873	44%	**169%**
Trousdale	36%	33	79	71	70	68	45	57%	**134%**
Williamson	28%	668	1,630	1,203	1,072	830	581	36%	**87%**
Wilson	37%	459	1,509	935	851	711	536	36%	**117%**
Middle Tennessee	38%	7,081	16,662	11,680	10,213	8,758	6,085	37%	**86%**

**The college non-going rate is based on the 2012 college-going data compiled by the Tennessee Higher Education Commission.*

By the student application deadline in November, all the counties in the region had exceeded their goal for student applications for the Tennessee Promise.

- Middle Tennessee goal: 7,081
- Middle Tennessee ending point: 16,662 (235 percent of goal)

By December, the region had exceeded its goal for mentor recruitment.

- Middle Tennessee goal: 1,909
- Middle Tennessee ending point: 2,715 (142 percent of goal)

While the region has seen significant progress in getting students to sign up for the program, only 86 percent of target students remain eligible in the program. It will be important to determine how many of these students decided to pursue four-year institutions, as well as how many of these students decided not to enroll in any postsecondary education, so the region can revise its strategies to ensure all students who want to take advantage of the program not only apply but enroll and, ultimately, complete.

KEY TAKEAWAY

While the region has seen significant progress in getting students to sign up for Tennessee Promise, it will be important to monitor how students perform to ensure they earn a postsecondary credential.

Field of Degree

Source: U.S. Census and 1-year American Community Survey Estimate, 2013

Field of Degree	Atlanta	Austin	Charlotte	Denver	Indianapolis	Kansas City	Louisville	Memphis	Nashville MSA	Raleigh	Tampa
Science and engineering	40.62%	45.06%	40.63%	43.96%	41.70%	38.75%	41.99%	37.97%	38.82%	49.27%	41.98%
Computers, mathematics and statistics	5.49%	6.19%	4.25%	4.88%	4.11%	4.36%	3.50%	2.73%	3.59%	6.83%	4.18%
Biological, agricultural, and env. sciences	4.52%	5.04%	5.07%	5.92%	5.65%	5.90%	5.74%	6.25%	6.32%	8.19%	4.84%
Physical and related sciences	2.60%	3.11%	2.60%	3.68%	3.23%	2.55%	3.39%	2.96%	2.86%	3.51%	3.36%
Psychology	4.67%	4.26%	4.66%	5.02%	3.71%	4.43%	4.93%	3.53%	4.80%	4.44%	4.75%
Social sciences	7.29%	8.64%	7.60%	7.83%	4.95%	4.97%	6.62%	6.41%	6.04%	8.09%	7.03%
Engineering	7.73%	10.12%	7.61%	8.24%	6.48%	6.40%	6.13%	5.20%	5.46%	10.77%	7.36%
Multidisciplinary studies	0.32%	1.02%	0.55%	0.84%	0.39%	0.54%	0.37%	0.69%	0.50%	0.58%	0.72%
Science and engineering-related fields	8.02%	6.67%	8.29%	7.54%	13.18%	9.59%	11.31%	10.20%	9.23%	6.88%	9.74%
Business	26.52%	19.92%	25.82%	23.06%	22.26%	24.28%	23.29%	24.97%	23.78%	19.50%	25.16%
Education	11.57%	9.82%	11.36%	9.05%	14.33%	14.43%	13.31%	14.98%	12.14%	10.02%	13.37%
Arts, humanities and other	21.29%	25.20%	22.19%	23.93%	21.71%	22.54%	21.41%	22.08%	25.26%	21.21%	19.49%
Literature and languages	3.61%	5.25%	3.97%	3.96%	3.29%	3.27%	3.33%	4.25%	4.51%	4.31%	3.24%
Liberal arts and history	4.21%	4.78%	4.50%	4.73%	5.77%	4.97%	5.93%	4.20%	5.09%	4.04%	4.11%
Visual and performing arts	3.40%	5.02%	3.53%	4.54%	3.28%	3.81%	2.80%	3.29%	4.45%	2.98%	2.82%
Communications	4.74%	5.36%	4.32%	4.86%	3.68%	4.73%	4.88%	4.30%	5.19%	3.99%	4.08%
Other	5.33%	4.79%	5.87%	5.84%	5.70%	5.76%	4.47%	6.04%	6.01%	5.89%	5.23%
Total completions	1,259,961	506,645	493,736	733,589	394,702	460,151	232,345	227,642	376,236	346,472	562,476

Nashville ranks 36th for number of job openings needing STEM skills. In the first quarter of 2013 alone, 7,824 jobs openings were posted for STEM-related skills.

Takeaways for Improving Postsecondary Attainment Rates in Middle Tennessee

While Middle Tennessee is making progress in improving education attainment rates, work remains to ensure all of our residents have the education and skills they need to secure jobs being created in the region. To guide action, Middle Tennesseans should:

- **Leverage Tennessee Reconnect to increase education rate for adults, especially those with some college, no degree.** In the 2015 Vital Signs regional poll, residents identified having financial support and information about their options as the two most important things that would encourage them to continue their education. It will be important for Middle Tennessee business and community leaders to promote those opportunities to the 223,951 adults age 25 and older who have obtained some college so they can complete a degree program or receive an industry-recognized certification to help them advance in their careers and meet workforce needs.

- **Share best practices throughout the region to ensure Tennessee Promise complete their associate degree or credential.** The class of 2015 is the first to enroll in community colleges and TCATs with the support of Gov. Haslam's Tennessee Promise initiative. It will be important for the region to learn from those counties (Macon, Maury, Sumner, Trousdale and Wilson) that are having the greatest success retaining students in the program so that we can ensure students remain in a postsecondary pathway and, ultimately, complete.

- **Continue commitment to K-12 education.** Of the counties in the joint metro region, the majority have increased their graduation rate and prepared more students to succeed in postsecondary. Local and state leaders should remain committed to reforms that support rigorous educational standards and that help students understand career pathways and what education and training they need to access them.

HOW DOES THE WELL-BEING OF OUR RESIDENTS IMPACT OUR QUALITY OF LIFE AND PROSPERITY?

What's working:

• Nashville-region residents have greater access to affordable, high-quality care than residents in peer regions.

• Our residents are more likely to use health services compared to peers.

• Our region has the lowest incidence of asthma when compared to our peers.

Work that remains:

• We fall behind our peers in many areas, including chronic obstructive pulmonary disease (COPD), obesity, high stress, heart attack, physical activity and smoking.

• 269,750 residents in our joint metro region are uninsured, making access to preventive and ongoing care more difficult.

• Drug costs outpace costs in peer regions.

• Residents in our region have lower survival rates after being treated for certain conditions, such as heart conditions and pneumonia.

• Low-income Middle Tennesseans are disproportionately impacted by poor health outcomes.

What we should do:

• Take advantage of our health care system to coordinate care, reduce costs and focus on preventive care.

• Expand health insurance to Middle Tennesseans without it.

• Strengthen partnerships to better serve low-income Middle Tennesseans.

• Enhance public infrastructure to promote healthy living.

According to Gallup-Healthways Well-Being research released in 2015, persons who live in high-well-being communities are more likely to be motivated to achieve their goals, feel supported by family and friends, and be proud of their community. They are also less likely to suffer from depression over their lifetime. For communities, health status has an impact on their ability to sustain a strong workforce, contain health care costs, and grow a competitive region. In our 2015 Vital Signs regional poll, 88 percent of respondents said their health had a significant impact on their ability to live their lives the way they want.

The Nashville region is known for the size and scope of its health care industry and its health services providers. Being a health care capital has meant that our residents have substantial access to quality care than residents in other regions. However, our residents fare worse on many health outcomes compared to peers – even when accounting for differences in demographics.

REGIONAL POLL RESULT

In our 2015 Vital Signs regional poll, 88 percent of respondents said their health had a significant impact on their ability to live their lives the way they want.

In 2014, the Nashville Area Chamber's Research Center spearheaded a partnership with FTI Consulting's Center for Healthcare Economics and Policy to assess the health status and the cost, quality and access to health care in the Nashville region compared to our peer regions. In addition to comparing the overall health status of these regions, the report made demographic adjustments to compare the health status of similar populations across the regions. Lastly, the report analyzed private commercial claims, along with Medicare information, to provide a comprehensive assessment of health care access. While Nashville-region residents have greater access to quality care than residents in peer regions, they fare worse on many health outcomes compared to peers – even when accounting for differences in demographics.

Health Outcomes for the Nashville Region and Its Peers

Comparison of the medical and health behaviors of this region with peer regions shows that while our region performs well in some areas, we fare worse than at least half of our peers in a majority of areas, even when accounting for differences in demographics:

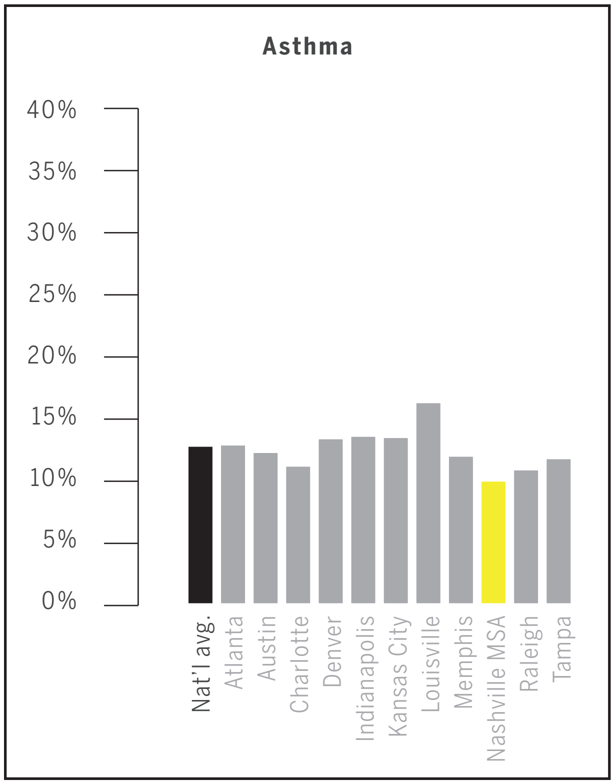
- The Nashville area has the lowest incidence of asthma compared to peer regions.
- Nashville area residents experience levels of chronic obstructive pulmonary disease (COPD), obesity and stress levels that are moderate to high compared to our peers. When accounting for demographics, these levels slightly improve.
- Our residents experience levels of depression and diabetes that are moderate compared to our peers. These levels are unchanged when adjusted for population difference.
- Nashville residents experience very unfavorable rates of heart attack, physical activity and smoking in both absolute and adjusted rankings.

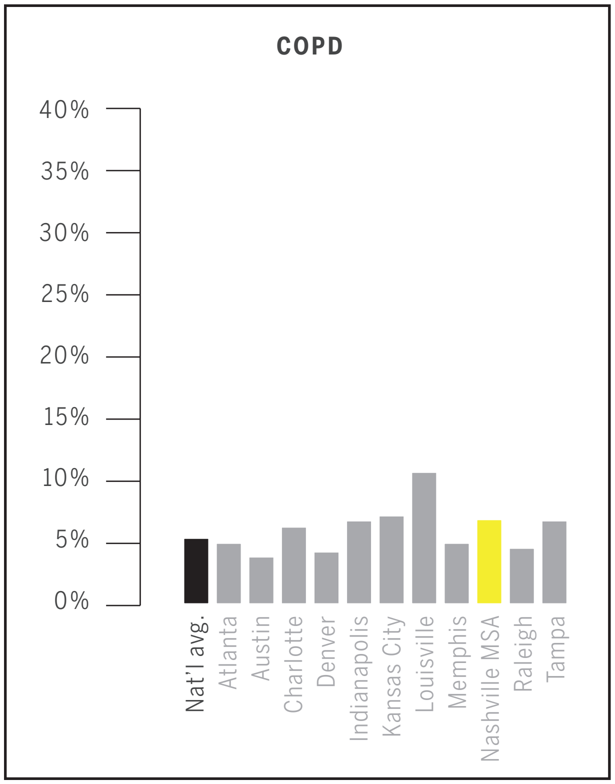
KEY TAKEAWAY

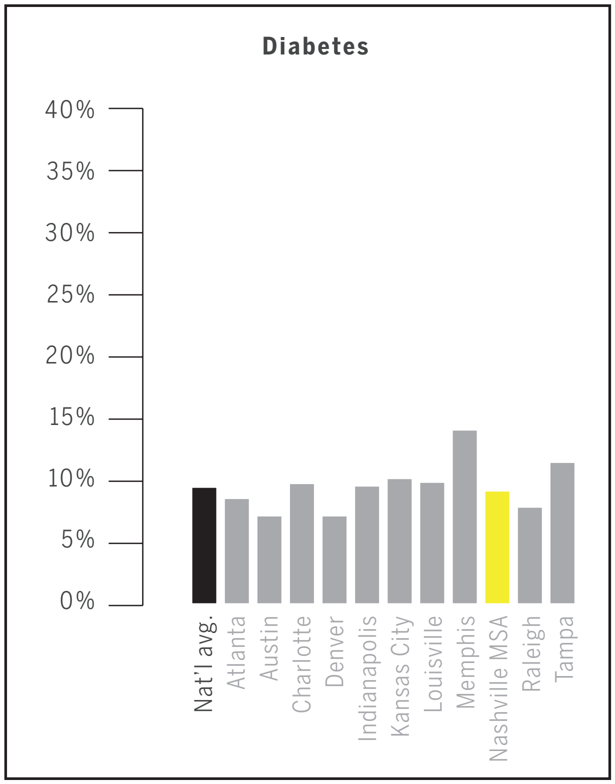
While Nashville-region residents have greater access to quality care than residents in peer regions, they fare worse on many health outcomes compared to peers – even when accounting for differences in demographics.

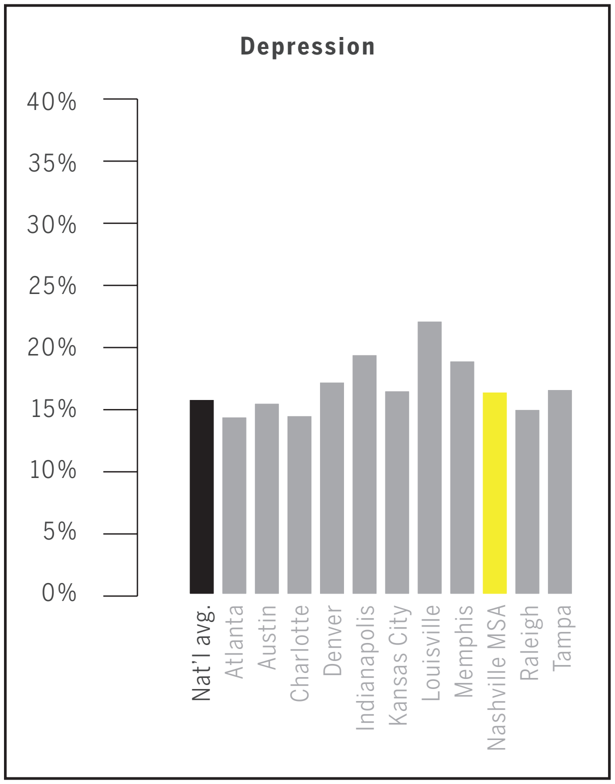
MSA-Level Health and Health Behaviors

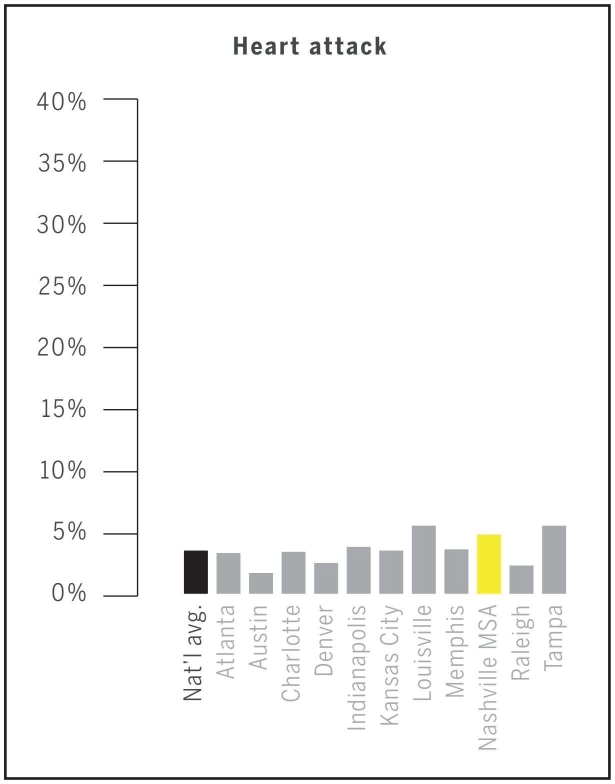
Source: FTI Center for Healthcare Economics and Policy, calculations (unadjusted) using The Centers for Disease Control and Prevention, BRFSS SMART Data, 2012

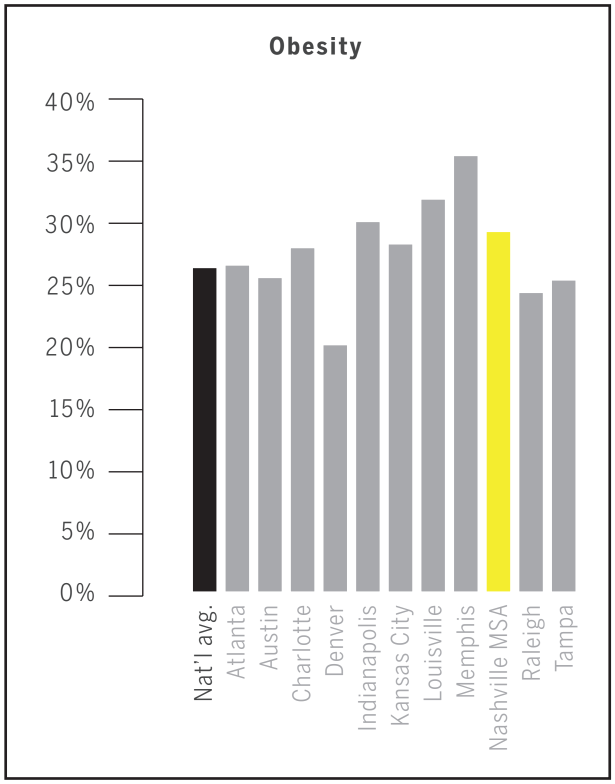




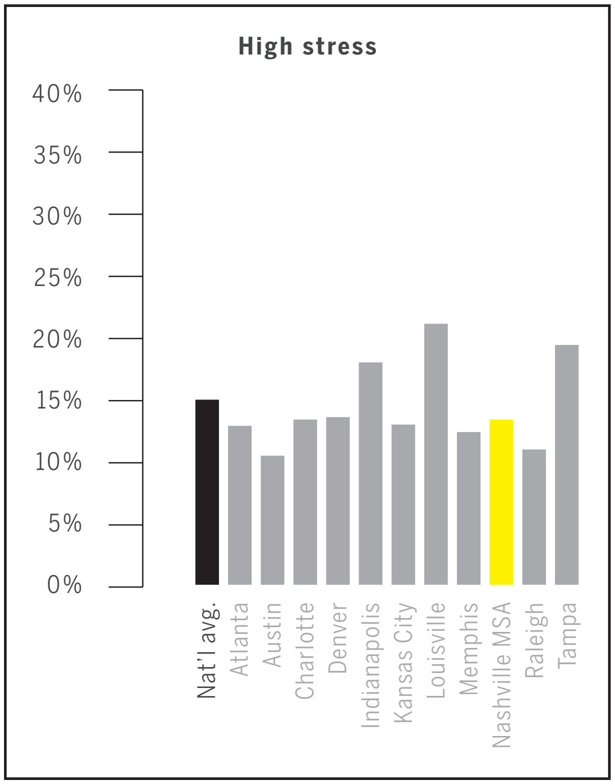


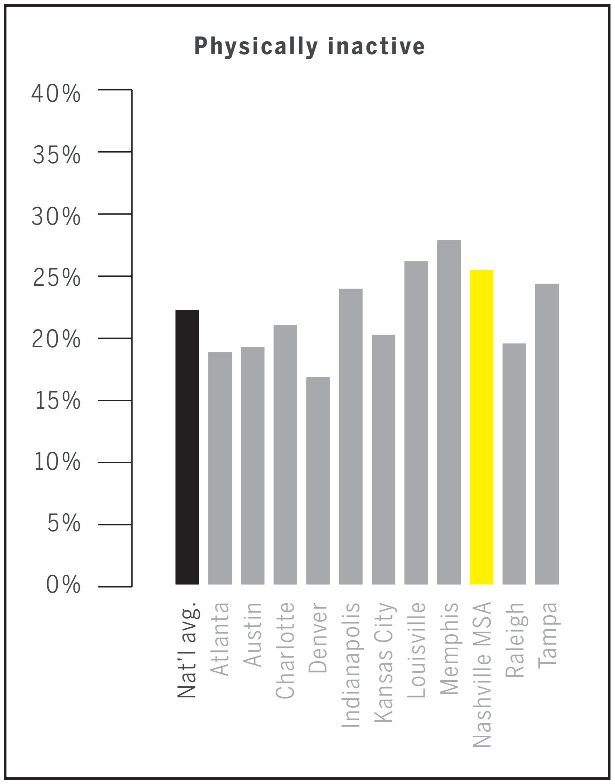


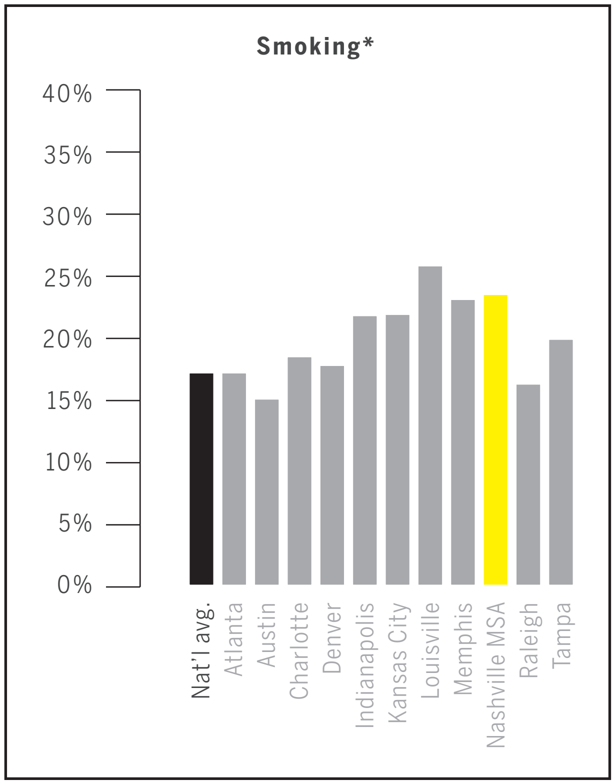




* These graphs show the adjusted outcomes for Nashville residents compared to peers. When accounting for demographic differences, Nashville-region residents experience more favorable outcomes for COPD, obesity and high stress compared to peers. When making these same adjustments, our residents experience worse outcomes for smoking.







Poor health outcomes disproportionately impact low-income Middle Tennesseans. Research conducted through the NashvilleNext process suggests neighborhoods are separated by socioeconomic levels, which impacts the access that residents have to factors – such as access to fresh foods and opportunities for walking to key destinations – that can positively impact health outcomes. According to the 2015 Vital Signs poll, while only 9 percent of respondents making between $50,000 and $100,000 and 2 percent of respondents making more than $100,000 reported having fair or poor health, 31 percent of respondents earning less than $50,000 said they experience fair or poor health.

REGIONAL POLL RESULT

According to the 2015 Vital Signs poll, while only 9 percent of respondents making between $50,000 and $100,000 and 2 percent of respondents making more than $100,000 reported having fair or poor health, 31 percent of respondents earning less than $50,000 said they experience fair or poor health.

Access to Health Care and Coverage

With regard to health care cost, access, quality and use, the Nashville region tends to outperform its peers. Health care is relatively more affordable in our region and our residents benefit from insurance coverage rates above the national average, ready access to physicians and high quality of care.

Out of 11 peer regions, the Nashville region ranks third for number of physicians per 100,000 residents. The presence of two medical schools and a robust array of hospitals, clinics and other medical settings has contributed to an increase in physicians in our region over time. The Nashville region also ranks third for insurance coverage compared to our peers, with 84.4 percent of residents insured.

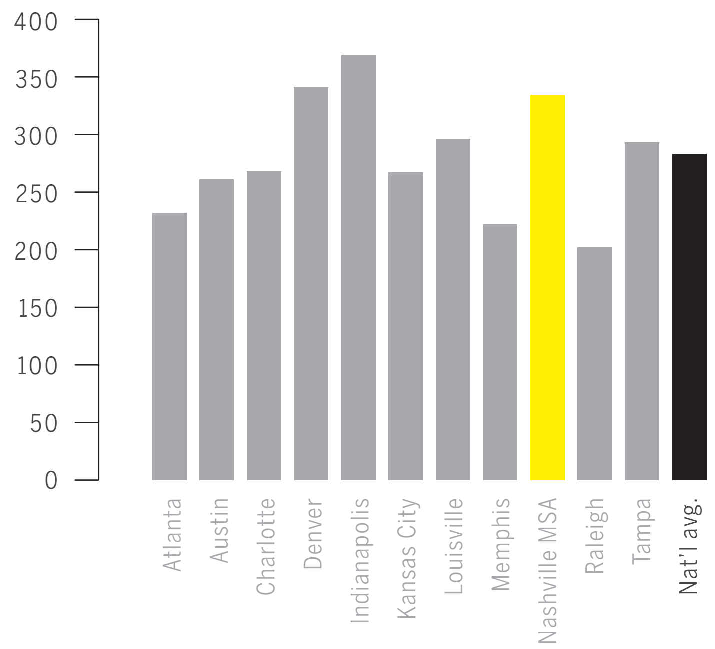
Health Insurance Coverage Rate as a Percent of Population Under 65 by MSA

Source: FTI Center for Healthcare Economics and Policy, calculations using U.S. Census Bureau's Small Area Health Insurance Estimates

MSA	Insurance rate
Tampa	78.5
Atlanta	79.4
Austin	79.4
Charlotte	81.9
National average	83
Memphis	83.4
Denver	83.6
Raleigh	83.7
Indianapolis	84.1
Nashville MSA	**84.4**
Louisville	84.8
Kansas City	85.8

Physicians per 100,000 Population by MSA

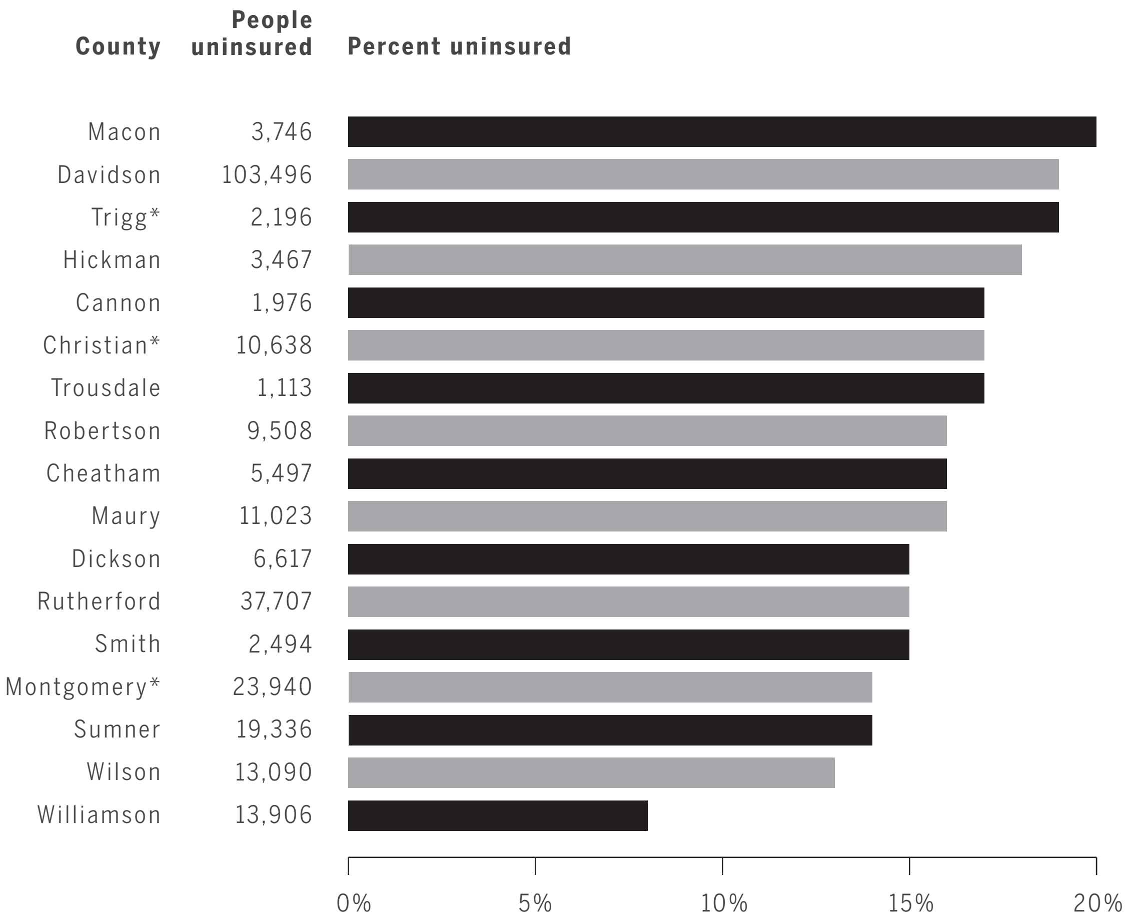
Source: Centers for Medicare and Medicaid Services NPPES NPI Dataset, 2014



Health Care Coverage

Source: County Health Rankings, 2015
** Clarksville area*

Although a large share of Middle Tennesseans are insured, particularly compared to peer regions, 269,750 in the joint metro region remain uninsured. According to research conducted by the Center for Business and Economic Research at the University of Tennessee Knoxville, living without insurance makes it more difficult for individuals to take advantage of preventive care because of cost. Treating severe health problems like heart attacks or other issues that require medical stays could result in financial ruin for families. According to the 2015 Vital Signs poll, more than half of all respondents said they had to go without health care in the last year. It is imperative that the state and region continue efforts to expand coverage to more residents to ensure the continued health and wellness of Middle Tennesseans.



REGIONAL POLL RESULT

According to the 2015 Vital Signs poll, more than half of all respondents said they had to go without health care in the last year.

KEY TAKEAWAY

Although a high percentage of Middle Tennesseans are insured, 269,750 residents remain uninsured, making preventive treatment more difficult because of cost.

Commercially Insured Healthcare Service Utilization by MSA

Source: Truven Impatient Services and Outpatient Services Files, 2010-2012

MSA	Total enrollees	Total receiving services	Receiving inpatient services	Receiving outpatient services	OP services exclusively
National	51,994,763	40,082,931 (77.2%)	2,119,545 (4.1%)	40,064,939 (77.1%)	37,963,386 (73.1%)
Atlanta	1,357,387	1,063,593 (78.4%)	46,778 (3.4%)	1,063,202 (78.3%)	1,016,815 (74.9%)
Austin	424,715	325,927 (76.7%)	15,693 (3.7%)	325,804 (76.7%)	310,234 (73.0%)
Charlotte	363,327	293,952 (80.9%)	13,677 (3.8%)	293,867 (80.9%)	280,275 (77.1%)
Denver	365,126	278,506 (76.3%)	14,238 (3.9%)	278,409 (76.3%)	264,268 (72.4%)
Indianapolis	577,488	448,229 (77.6%)	21,377 (3.7%)	448,041 (77.6%)	426,852 (73.9%)
Kansas City	297,153	233,054 (78.4%)	14,902 (5.0%)	232,864 (78.4%)	218,152 (73.4%)
Louisville	290,866	227,354 (78.2%)	12,157 (4.2%)	227,250 (78.1%)	215,197 (74.0%)
Memphis	197,118	150,830 (76.5%)	8,177 (4.1%)	150,744 (76.5%)	142,653 (72.4%)
Nashville MSA	**310,832**	**247,774 (79.7%)**	**12,832 (4.1%)**	**247,715 (79.7%)**	**234,942 (75.6%)**
Raleigh	168,119	136,714 (81.3%)	5,657 (3.4%)	136,676 (81.3%)	131,057 (78.0%)
Tampa	335,277	261,534 (78.0%)	15,441 (4.6%)	261,425 (78.0%)	246,093 (73.4%)

Commercially Insured Enrollees with at Least One Doctor Office Visit by Physician Specialty by MSA

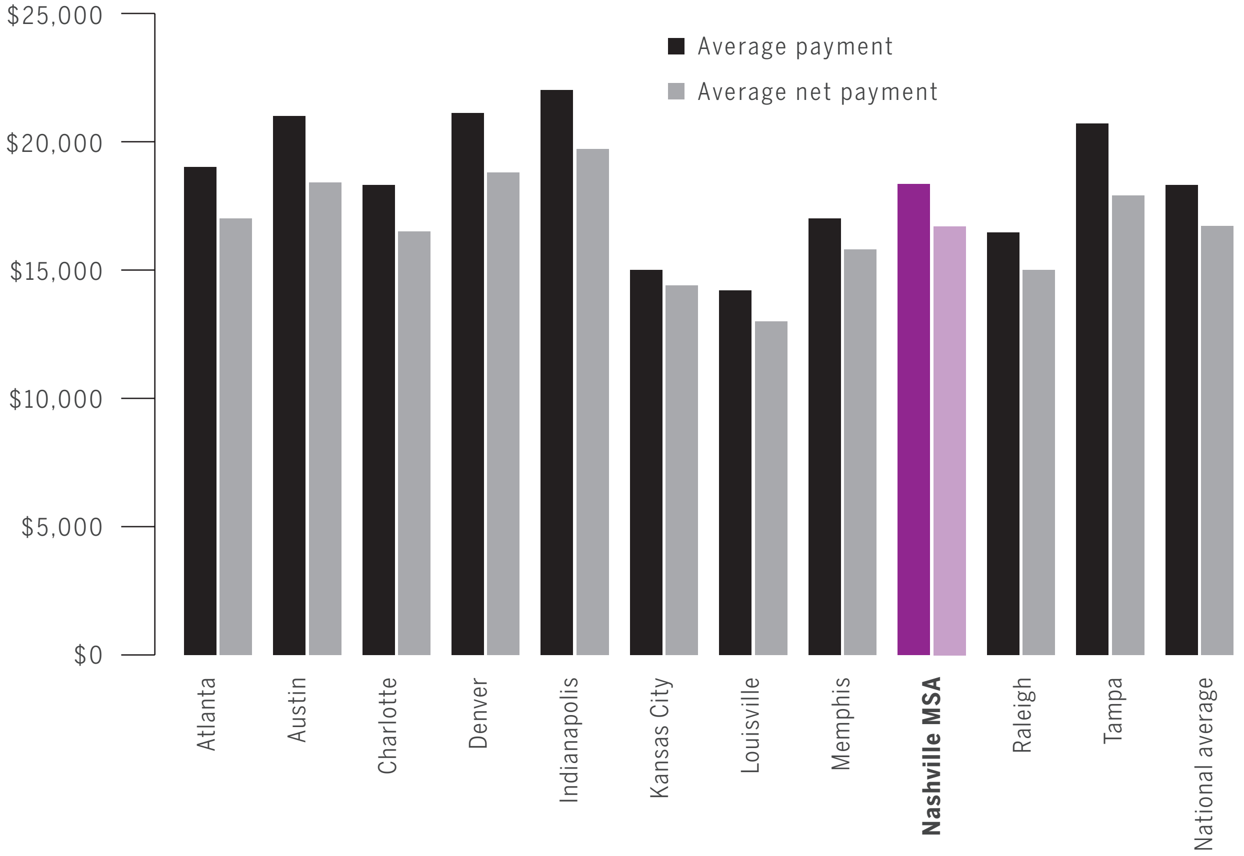
Source: Commercial Claims Outpatient Services Files, 2012

MSA	At least one office visit	Office visit (%)	Total office visits	Average visits	Average visits per patient type		
					Primary care	Specialty	Other
National	38,380,381	73.9%	255,333,985	6.7	2.5	2.1	2.7
Atlanta	1,027,483	75.7%	6,517,893	6.3	2.7	2.2	1.5
Austin	305,615	72.0%	2,065,111	6.8	2.7	2.1	2.5
Charlotte	286,847	79.0%	1,884,951	6.6	2.8	2.0	1.6
Denver	259,589	71.1%	1,597,820	6.2	2.4	1.7	2.0
Indianapolis	426,760	73.9%	2,506,323	5.9	2.4	1.7	1.6
Kansas City	221,223	74.4%	1,321,290	6.0	2.4	1.3	2.0
Louisville	217,884	74.9%	1,443,810	6.6	2.5	2.1	1.6
Memphis	144,608	73.4%	922,399	6.4	2.7	2.1	2.0
Nashville MSA	**241,203**	**77.6%**	**1,623,752**	**6.7**	**2.8**	**2.1**	**1.9**
Raleigh	133,084	79.2%	886,215	6.7	2.7	1.8	1.9
Tampa	251,002	74.9%	1,655,386	6.6	2.4	2.1	1.8

In addition to an abundance of physicians and medical facilities in the Nashville region, our residents are more likely to use health services, as measured by inpatient and outpatient experiences, than peers in competitor regions. Data also show that our region's residents enjoy a cost advantage compared to peer regions and the nation when it comes to accessing medical care, as measured by the average inpatient net payment per stay. However, among drug costs, Nashville-area patients are at a disadvantage. Only residents in Louisville and Tampa pay more. While these data relates to individuals covered by commercial insurance, there are varying levels of coverage for a variety of health care needs, including drugs.

Commercially Insured Health Care Service Utilization by MSA

Source: Truven Impatient Services and Outpatient Services Files, 2010-2012



Average Drug Payments per Patient by MSA

Source: Truven Outpatient Pharmaceutical Files, 2010-2012

MSA	2010	2011	2012
Atlanta	$1,108	$1,143	$1,144
Austin	$937	$974	$1,008
Charlotte	$1,087	$1,116	$1,100
Denver	$1,017	$1,051	$1,108
Indianapolis	$1,171	$1,266	$1,187
Kansas City	$1,107	$1,136	$1,122
Louisville	$1,226	$1,341	$1,267
Memphis	$1,137	$1,180	$1,230
Nashville MSA	**$1,203**	**$1,195**	**$1,243**
Raleigh	$1,283	$1,302	$1,194
Tampa	$1,220	$1,241	$1,306

Nashville residents are fortunate to have greater access to quality care compared to our peer regions. Patients in the Nashville region receive higher than overall scores for 1) percent of beds above average for timely and effective care; and 2) percent of patients with favorable experiences. However, our residents are less likely to survive after being treated for certain conditions, such as heart conditions and pneumonia, compared to peers in other regions. These survival rates are driven by patient conditions, procedures and the tendency for major urban hospitals to serve the most challenging cases from surrounding areas.

Percent of Beds Above or Below National Average for Timely and Effective Care, Patient Experience and Survival Rates by MSA

Source: Centers for Medicare and Medicaid Services Hospital Compare Files from American Hospital Association's 2012 Survey Database

Takeaways For Improving Health Outcomes in Middle Tennessee

It is clear that much work remains to improve the health and well-being of Middle Tennessee residents. While the region's residents experience low levels of asthma, other areas, such as heart attack, physical activity, smoking, COPD, obesity and high stress, demand attention and action. To guide action, Middle Tennesseans should:

- **Take advantage of our health care system to positively influence health outcomes in Middle Tennessee.** Compared to peer regions, our residents are more likely to be insured and more likely to take advantage of health care services. With our residents now accessing services for chronic diseases, there are opportunities to engage with individuals around a broader continuum of health and well-being that ultimately can mean cost savings, improved health and productivity.

- **Expand health insurance coverage to Middle Tennesseans without coverage.** There are 269,750 Middle Tennesseans without health care coverage, making it more difficult for them to access the quality care that exists in our region. It is imperative that the state and region work to expand insurance coverage to ensure that more of our residents can access preventive care and treat chronic health conditions.

- **Strengthen partnerships between health departments and community organizations to better serve low-income Middle Tennesseans.** Data suggest that poor health outcomes do not impact all Middle Tennesseans equally. Low-income individuals are twice as likely to report being in poor or fair health. Public health departments can play a crucial role in strengthening partnerships, through shared data and coordinated strategies, with community organizations that support populations that are disproportionately impacted by poor health.

- **Enhance the public infrastructure to promote healthy living.** Neighborhoods are often separated along socioeconomic lines, with varying access to factors that promote or, if missing, deter healthy living. As the region works to develop and redevelop neighborhoods, opportunities for increased access to bicycle and pedestrian pathways, transit, healthy foods and services, and open space should take priority.

HOW WELL ARE WE CONNECTING PEOPLE TO JOBS, HOUSING AND RECREATION?

What's working:

• Collaboration in Middle Tennessee continues to grow, as does support for the development of regional solutions to transportation challenges.

• Transit ridership has steadily increased over the last decade, and system improvements are occurring even with funding limitations.

• Alternative modes of transportation, such as walking and biking, are growing in popularity, and jurisdictions across the region are investing more in bicycle and pedestrian facilities.

Work that remains:

• Congestion is continuing to grow. By 2040, the amount of time our residents spend in their cars is projected to more than double.

• Connectivity is limited throughout the region. Transit options consist mainly of bus systems operated with limited service hours and routes.

• Every county in Middle Tennessee has significantly unfunded transportation needs. This makes investing in the expansion of transit options, as opposed to maintenance and ongoing system operation only, nearly impossible.

What we should do:

• Dedicate local funding to expand public transit options and call on state and federal leaders to identify additional revenue to address unfunded transportation needs.

• Leverage the strengths of the region through "Moving Forward: Transit Solutions for Our Region" to achieve community-based goals for the expansion of public transit options.

• Implement "Complete Streets" to better connect the transportation network to local destinations, improve safety for pedestrians and bicyclists, and provide better access to transit.

• Upgrade existing roadways and transit services with modern technologies to improve traffic flows and provide real-time travel information.

Transportation is the backbone of a strong and prosperous economy. Investments in our transportation system generate significant economic return by providing access to jobs, goods, services, education, health care and recreation. As the Nashville region has seen considerable economic success over recent years, residents and businesses in Middle Tennessee have begun to feel the pressure of our prosperity. The resulting population growth and economic boom have led to mounting congestion and rising cost of living, and have continued to strain already limited funding for transportation.

Commuting in Middle Tennessee

Traffic congestion across Middle Tennessee has increased rapidly in recent years as a result of economic expansion, increases in population and continued cross-county work commuting. With limited alternatives, the vast majority of Nashville-area residents rely on their personal vehicle to get to and from work, outpacing many peer regions, with 83 percent of drivers commuting to work alone each day.

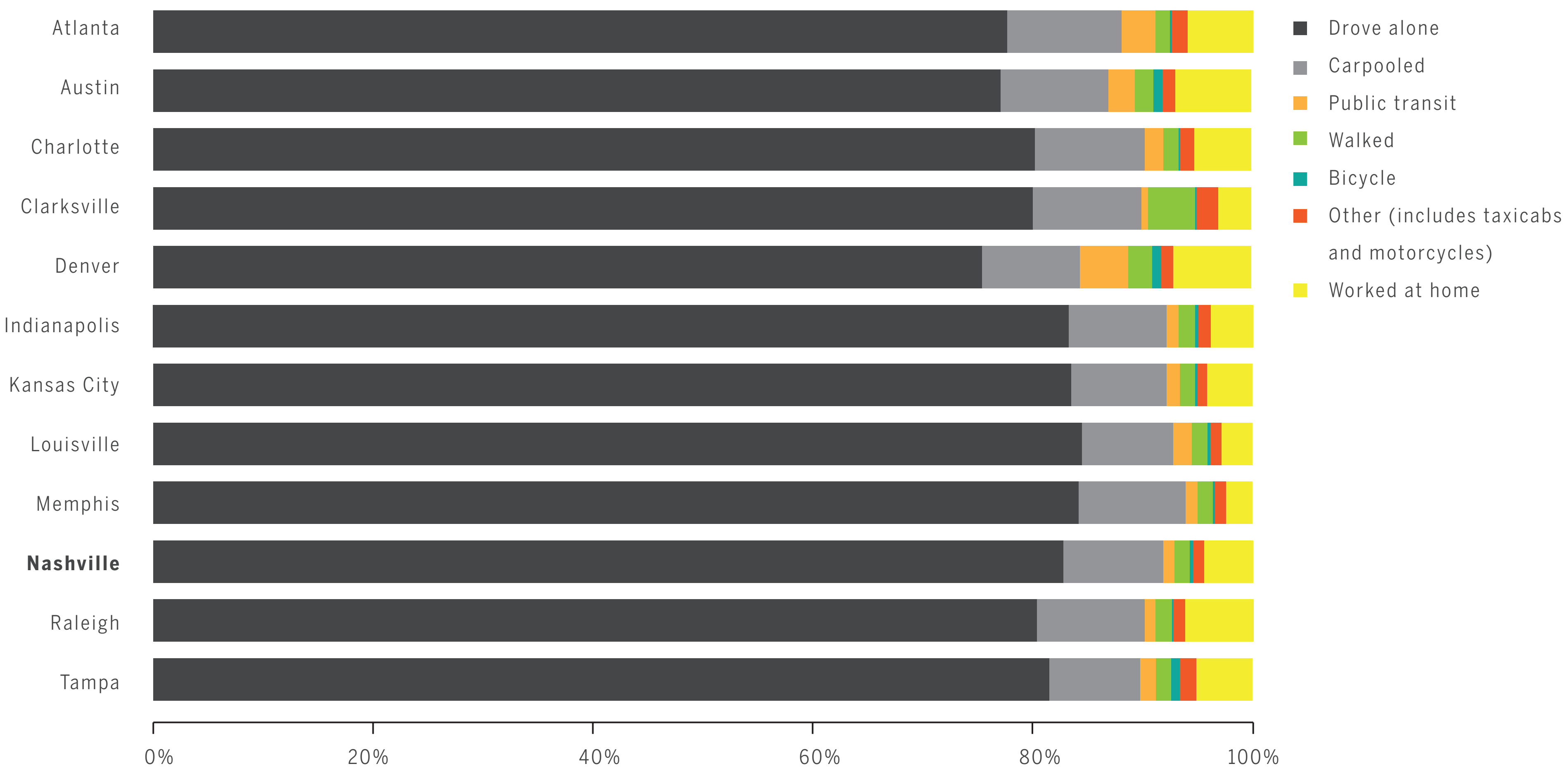
In the 2015 Vital Signs regional poll, 44 percent of respondents said they get stuck in traffic jams on a daily or frequent basis – a 10-percentage-point increase compared to what residents reported in 2014. While residents express an interest in using transit options aside from their personal vehicle, the lack of dedicated funding for transportation at the local level and funding uncertainties at the state and federal levels are inhibiting the ability of our region to meet the increasing needs and expectations of our growing population.

REGIONAL POLL RESULT

In the 2015 Vital Signs regional poll, 44 percent of respondents said they get stuck in traffic jams on a daily or frequent basis – a 10-percentage-point increase compared to what residents reported in 2014.

Commuting Mode

Source: 2013 American Community Survey 1-Year Estimates



However, due to increased congestion, residents are finding it more difficult to use their personal vehicles as their primary mode of transportation for commuting. In our Vital Signs poll, 35 percent of respondents said that road conditions and other factors made it difficult for them to get to and from work from their residence. It is critical to think beyond the commute when planning investments in our transportation system. As integral as the commuting trip is to our regional economy, it is important to note that trips to and from work account for only 20 percent of all our travel.

Commute Time

Source: American Community Survey 1-Year Estimates, 2013

	Travel time to work in minutes									
	< 10	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-44**	**45-59**	**> 60**	**Mean**
Atlanta	7.9%	10.8%	13.2%	15.2%	5.7%	15.5%	8.2%	12.1%	11.5%	30.0
Austin	9.9%	12.8%	15.9%	15.5%	6.6%	15.5%	7.3%	9.2%	7.3%	26.4
Charlotte	10.4%	13.8%	16.0%	15.3%	7.0%	14.9%	8.0%	8.1%	6.4%	26.0
Clarksville	17.4%	14.8%	18.3%	15.8%	8.0%	11.6%	2.8%	5.4%	5.9%	21.8
Denver	8.8%	11.1%	14.7%	16.3%	7.4%	16.7%	8.7%	9.1%	7.1%	27.1
Indianapolis	12.5%	12.1%	15.2%	16.4%	8.1%	15.1%	8.8%	7.1%	4.8%	24.4
Kansas City	13.3%	14.0%	17.1%	16.5%	7.8%	15.0%	6.5%	6.2%	3.6%	22.9
Louisville	10.7%	12.9%	17.2%	19.0%	9.2%	15.0%	6.4%	5.5%	4.1%	23.3
Memphis	10.7%	12.9%	15.7%	17.8%	7.8%	17.8%	6.0%	7.3%	3.9%	24.1
Nashville	9.2%	12.3%	15.5%	16.6%	6.9%	16.1%	7.3%	9.1%	7.0%	26.5
Raleigh	10.0%	11.2%	16.8%	17.2%	8.4%	16.1%	7.8%	7.0%	5.5%	25.6
Tampa	11.2%	12.3%	14.9%	16.4%	6.7%	14.8%	7.5%	9.2%	7.1%	26.1

REGIONAL POLL RESULT

In our Vital Signs poll, 35 percent of respondents said that road conditions and other factors made it difficult for them to get to and from work from their residence.

Commuter Stress Index

Source: Texas A&M Transportation Institute Mobility Study, 2015

	2007	**2008**	**2011**	**2014**
Atlanta	1.28	1.24	1.24	1.32
Austin	1.32	1.31	1.38	1.44
Charlotte	1.24	1.22	1.2	1.29
Denver	1.30	1.23	1.27	1.36
Indianapolis	1.18	1.23	1.22	1.19
Kansas City	1.18	1.15	1.15	1.17
Louisville	1.22	1.16	1.22	1.23
Memphis	1.26	1.21	1.23	1.21
Nashville	1.25	1.20	1.28	1.27
Raleigh	1.24	1.19	1.21	1.19
Tampa	1.26	1.22	1.28	1.24
Large Area Avg.	1.27	1.23	1.25	1.37

KEY TAKEAWAY

Investments in roadways have not elevated traffic challenges for Middle Tennesseans. The average auto commuter lost 45 hours in 2014 due to congestion, and collectively cost the region more than $800 million.

Active Transportation Facilities

Source: Compiled from local data by Nashville Area MPO. Bicycle includes bike routes, bike lanes and shared use lanes.

	Total lane miles	Greenway	Bicycle miles	Sidewalk
Cheatham	1,330.6	n/a	n/a	n/a
Davidson	7,124.3	76.8	153.2	258.9
Dickson	2,254.6	n/a	n/a	n/a
Maury	2,850.8	8.8	44.3	16.3
Montgomery	3,573.6	n/a	n/a	n/a
Robertson	2,332.6	5.3	12.2	16.7
Rutherford	4,435.2	28.5	36.3	87.5
Sumner	3,527.5	25.5	64.5	48.2
Williamson	3,747.5	62.8	64.8	55.1
Wilson	2,846.9	12.6	47.6	21.3

KEY TAKEAWAY

Over recent years, communities across the region have increased investments in active transportation facilities. Residents have growing expectations that streets are designed or upgraded to include sidewalks and bicycle lanes to improve safety and offer transportation choices.

According to the 2014 Nashville Area MPO's Regional Household Transportation and Health Study, when asked about alternative modes of transportation to and from work, 77 percent of respondents in urban areas said they walk for transportation at least once per week. Twelve percent said they bicycled at least one per week. Continued investment in active transportation facilities such as sidewalks, bicycle lanes and greenways will offer options to those commuting shorter distances and improve safety.

Policies such as "Complete Streets" have emerged around the country to integrate people and places into the planning, design, construction and operation of transportation networks. In Middle Tennessee, Davidson County leads with more than 7,000 miles of combined greenways, bicycle lanes and sidewalks.

Transit Ridership in Middle Tennessee

Since 2005, transit ridership has increased by 40 percent in Middle Tennessee. Even as the ridership has increased on the region's urban transit systems, the options consist mainly of bus systems operated with limited service hours and routes which run in traffic.

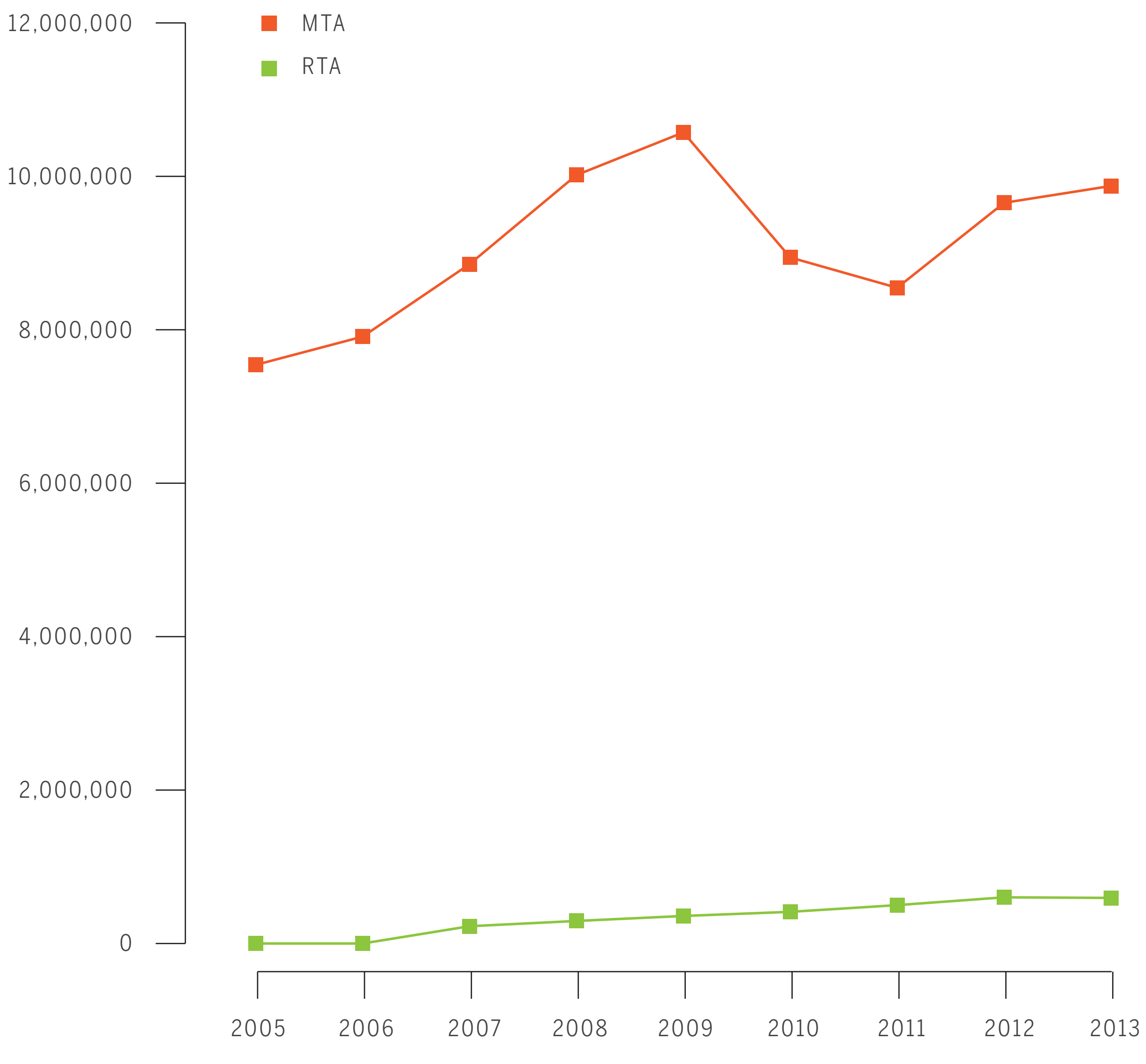
In terms of annual passenger ridership, the Nashville region fares poorly with only 61 passenger miles per capita, the second fewest among its peers and less than half of the average (124.4) of other large urbanized areas. Transit trips per capita were 8.6 – the fewest among the same peers and only one-third the average of other urbanized areas. Half of respondents in the 2015 Vital Signs poll said they would use transportation other than their personal car if they had more convenient options from which to choose.

REGIONAL POLL RESULT

Half of respondents in the 2015 Vital Signs poll said they would use transportation other than their personal car if they had more convenient options from which to choose.

Transit Ridership in Middle Tennessee (Annual Passenger Trips)

Source: Nashville Area MPO, 2015



Existing Transit Service in Middle Tennessee

Currently, Middle Tennesseans have access to a number of bus routes that primarily operate within Nashville, Murfreesboro, Franklin and Clarksville. These routes are operated by local transit authorities: Nashville Metropolitan Transit Authority, Murfreesboro Rover, Franklin Transit Authority and Clarksville Transit, respectively. There are also regional bus routes operated by the Middle Tennessee Regional Transportation Authority (RTA) that connect downtown Nashville to cities throughout the region, including Brentwood, Clarksville, Franklin, Gallatin, Hendersonville, LaVergne, Murfreesboro, Smyrna, Springfield, Spring Hill and Thompson's Station. In addition to bus routes, the RTA operates the Music City Star regional rail, which connects Davidson and Wilson counties, and provides weekday service to commuters. It is currently the only rail option available for public transit in the region.

moving forward
transit solutions for our region

Moving Forward: Transit Solutions for Our Region

In the 2014 Vital Signs report, improving our region's transportation system emerged as a critical issue. After the release, the Chamber engaged in one-on-one discussions with 25 organizations to determine what next steps were needed to move transportation forward in Middle Tennessee. The Chamber's 2015 Leadership Study Mission to Salt Lake City also included an additional day of learning focused on transit. The Moving Forward initiative is a response to those discussions.

In August 2015, the Chamber launched "Moving Forward: Transit Solutions for Our Region" to ensure the creation of a regional transportation solution through a cohesive community effort. This will be accomplished by engaging business and community leaders in an annual, systematic review of the region's progress toward implementing regional transportation. The Moving Forward initiative is one example of the increased activity on a regional scale to improve transportation in Middle Tennessee. Since 2009, the Middle Tennessee Mayors' Caucus, which is comprised of mayors and county executives across the region, has lent their collective strength and leadership to support regional solutions. Progress will be measured toward the following goals:

- Support the completion of an RTA & MTA strategic plan within one year (2016)
- Support the identification and passage of state and federal government revenue enhancements for transit within two years (2017)
- Support the engagement of at least 30,000 unique individuals in the transit discussion within two years (2017)
- Identify and secure a local dedicated funding source for transit in the region within three years (2018)
- Support breaking ground on the first rapid transit project in the region within five years (2020)

Moving Forward will be led by a Coordinating Committee and three issue-specific Task Forces that will review our region's progress and identify recommendations toward achieving these goals. The Task Forces will meet monthly and the Coordinating Committee will meet approximately bimonthly, with the initial report release slated for 2016.

Annual Transit Usage

Sources: Texas Transportation Institute, 2015; National Transit Database, 2015

		Annual passengers		Per capita	
MSA	**Population**	**Miles**	**Trips**	**Miles**	**Trips**
Denver	2,615,000	613,571,126	101,352,739	234.6	38.8
Austin	1,500,000	166,953,946	36,402,271	111.3	24.3
Charlotte	1,200,000	147,154,466	29,045,870	122.6	24.2
Raleigh	1,333,000	105,140,050	22,433,514	78.9	16.8
Memphis	1,085,000	51,678,745	10,460,246	47.6	9.6
Nashville	1,200,000	77,573,592	10,544,859	64.6	8.8
Peer average	1,546,600	216,899,667	39,938,928	119	22.7

Funding Challenges

Contributing to the region's lower per capita passenger miles and trips are the limited resources available in the system. Though resources have slowly increased, the Nashville Metropolitan Transit Authority (MTA) invests less per capita in public transit than our peer cities. Transportation networks across the country are funded through a variety of sources of revenue – local, state and federal funds. Tennessee operates as a pay-as-you-go state, meaning the Tennessee Department of Transportation (TDOT) does not take on debt to fund transportation projects. While this fiscally conservative process was once successful, the revenue Tennessee receives today from state and federal sources falls far short of growing needs. Due to shrinking revenue, TDOT has been limited to mainly maintenance of existing roadways and has not been able to implement important new projects across the state.

Tennessee's situation is not unique, and as funding at the federal level continues to be in flux, states across the U.S. have moved to protect their ability to invest in transit by establishing new revenue sources. Since 2012, 12 states have responded by enacting new revenue sources for transportation, while dozens more have considered such legislation. Each legislative package was crafted to respond to the unique challenges of the state where it was passed, but each contains lessons for other states looking to address their funding needs.

Unlike other large U.S. regions, Middle Tennessee does not have a dedicated source of funding for our transit system. Dedicated funding is important, as it reduces the annual burden placed on local governments to find funding for public transportation from general fund revenues. Dedicated funding also minimizes uncertainty for public transit customers, operators and the business community looking to invest along fixed transit routes. Additionally, it protects regional or multi-jurisdictional services which are subject to annual funding decisions made by each of the participating municipalities. The 2014 Public Opinion Poll conducted by the Nashville Area MPO found that 61 percent of respondents would be willing to pay slightly more in some sort of fee or tax to help pay for the expansion of mass transit choices.

Implementing dedicated funding in Middle Tennessee would supplement existing local funding and would allow the region to leverage additional federal funds for large capital projects, secure the annual operations of existing and future services, and provide the region additional capacity to implement its long-range vision for mass transit.

Funding for Operations per Capita*

Source: National Transit Database, 2015

Large Urban Transit Systems	Fares	Agency misc.	Local	State	Federal	Total	Farebox
Nashville MTA	$19.05	$3.31	$50.08	$8.40	$15.77	$96.61	20%
Peer Cities							
Atlanta (MARTA)	$85.94	$18.52	$171.95	$0.51	$46.58	$323.49	27%
Austin (Capital Metro)	$20.89	$7.17	$119.11	$ - -	$32.71	$179.88	12%
Charlotte (CATS)	$24.81	$6.11	$65.33	$11.08	$6.05	$113.38	22%
Denver (RTD)	$37.40	$10.94	$89.26	$0.79	$24.40	$162.79	23%
Indianapolis (IndyGo)	$12.46	$0.67	$24.19	$11.57	$17.13	$66.03	19%
Kansas City (KCATA)	$16.54	$2.82	$73.20	$0.31	$15.65	$108.52	15%
Louisville (TARC)	$15.42	$0.85	$54.57	$2.66	$16.47	$89.97	17%
Memphis (MATA)	$15.01	$1.62	$31.23	$11.80	$16.26	$75.93	20%
Raleigh (CAT)	$10.82	$4.10	$44.22	$7.56	$15.22	$81.92	13%
Tampa (HART)	$18.89	$1.60	$35.16	$6.51	$16.72	$78.88	24%

* Other misc.: Transit agency parking fees, real estate revenues, other fees/charges

Freight in Middle Tennessee

In addition to resident usage, additional stress is added to the region's transportation by freight being transported. An estimated 182 million tons of truck freight move through the Nashville area annually. Of that tonnage, 77 percent passed through the region on its way to another destination. Evaluating the impact of this freight traffic on local infrastructure may be critical to improving congestion in Nashville's downtown core during peak travel periods.

Takeaways for Improving Regional Transportation in Middle Tennessee

Traffic congestion is expected to increase, and without other options, our inability to move about the region will jeopardize future economic development efforts as we become less attractive to new residents and businesses. To remedy this, regional leaders must be engaged to ensure that our transportation system keeps pace with anticipated growth. To guide action, Middle Tennessee should:

- **Dedicate local funding to expand public transit options and call on state and federal leaders to identify additional revenue to address unfunded transportation needs.** Paying for transportation infrastructure is a shared responsibility among all levels of government, and we must take steps locally or our region's economy and quality of life will suffer.

- **Leverage the strengths of the region through "Moving Forward: Transit Solutions for Our Region" to achieve community-based goals for the expansion of public transit options.** The public planning process will benefit from a broader citizen understanding of the benefits of transit and the cost of the status quo. The private sector will enrich community engagement and help create public buy-in of the plans that local governments, transit agencies and TDOT are responsible for implementing. Holding these organizations accountable will keep us on the right track.

- **Implement "Complete Streets" to better connect the transportation network to local destinations, improve safety for pedestrians and bicyclists and provide better access to transit.** A diverse and growing region needs public streets that are built to their fullest potential and designed for all users.

- **Upgrade existing roadways and transit services with modern technologies to improve traffic flows and access to real-time travel information.** Our initial response to traffic congestion should focus on getting the most from our existing infrastructure through intelligent transportation systems that are designed to optimize our current assets.

KEY TAKEAWAY

While ridership and demand for transit have increased across the region, Middle Tennessee's public transit agencies are significantly underfunded and not keeping pace with growth or the level of investment seen in most peers across the nation.

VITAL SIGNS DASHBOARDS

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

- Housing & community
- Prosperity & affordability
- Transit & transportation
- Healthy living
- Economy & workforce
- Education & learning
- Arts & culture
- Safety & criminal justice
- Community engagement & regional leadership

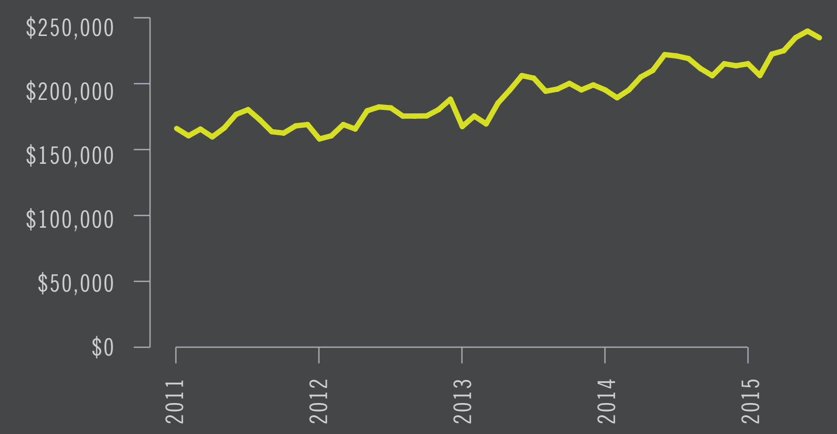
1 Housing Affordability Index Rank Out of 176 MSAs

Source: National Association of Realtors, 2014

	Affordability index 2014	Affordability index rank 2014
Louisville	246.1	42
Kansas City	240.3	46
Indianpolis	238.5	48
Memphis	224.3	62
Atlanta	221.7	70
Tampa	205.6	80
Raleigh	193.1	97
Nashville	191.4	99
Charlotte	174.1	128
Austin	169.9	134
Denver	135.9	157

3 Median Home Sales Price in the Nashville MSA

Source: Greater Nashville Asssociation of Realtors, 2011-2015



2 Fair Market Rent

U.S. Census, American Community Survey (ACS) U.S. Department of Housing and Urban Development, 2015

*5-year ACS **3-year ACS ***1-year ACS

	Total # of 2-bedroom apartments	% above fair market value for 2-bedroom
Cannon*	511	4.6%
Cheatham*	1,127	32.7%
Davidson***	54,602	53.0%
Dickson*	2,201	24.6%
Hickman*	717	36.1%
Macon*	838	38.0%
Maury**	4,499	28.8%
Robertson**	2,045	22.9%
Rutherford***	13,171	47.9%
Smith*	931	47.6%
Sumner**	6,783	41.4%
Trousdale*	330	19.1%
Williamson**	4,838	62.7%
Wilson**	4,188	45.8%
Montgomery**	10,309	44.7%
Trigg*	415	19.5%
Christian**	4,434	31.6%

Fair market rent varies from county to county. In our region, the values range from $581 to $850.

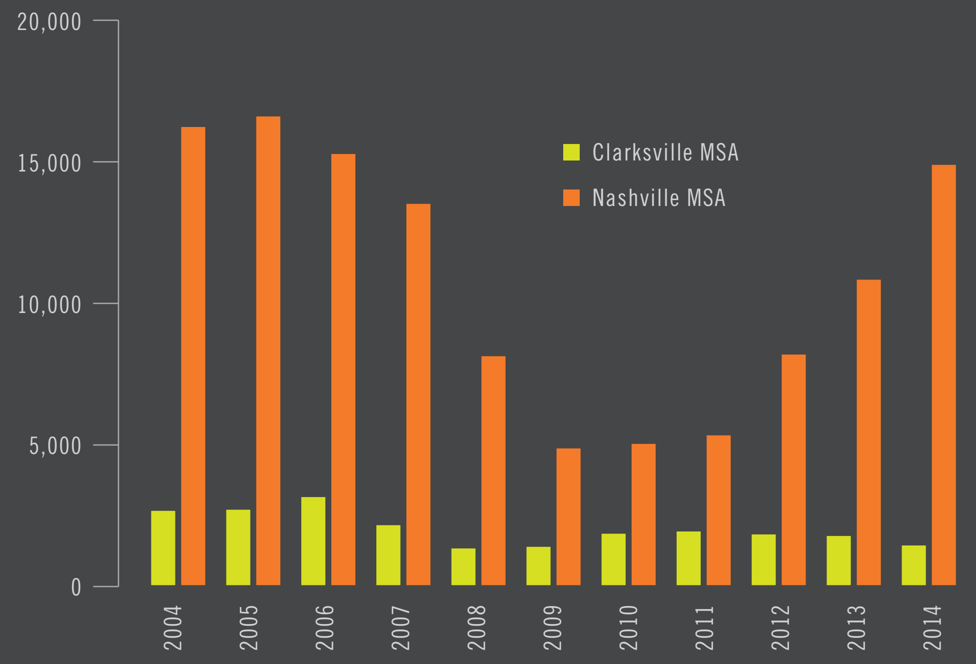
REGIONAL POLL RESULTS

64 percent of respondents think the region needs to focus on expanding affordable housing options. 77 percent of respondents with an income of less than $50,000 said the same thing. 74 percent of renters agreed.

When asked what the region should do to build more affordable housing, 49 percent said local governments should work with private developers. This was favored over requiring all new development to include affordable housing (18 percent), relying on local governments alone (13 percent), relying on private developers alone (11 percent), or using rent control (1 percent).

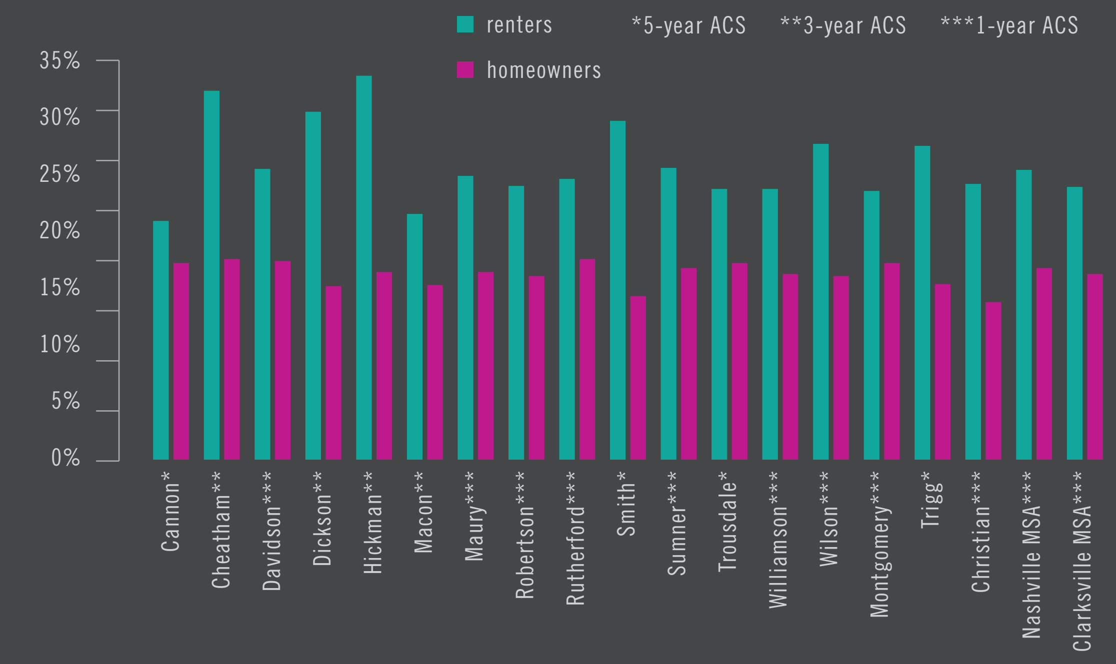
4 Residential Building Permits

Source: U.S Census Bureau, 2004-2014



5 Housing Cost as a Percentage of Income

Source: U.S. Census Bureau, American Community Survey (ACS), 2013



HOUSING & COMMUNITY

Key Takeaway: The availability and affordability of housing is a key component of a region's quality of life. Data show that our region is becoming less affordable over time, and nearly two out of three respondents to the 2015 Vital Signs poll think the region needs to focus on expanding affordable housing options. Renters spend more of their income on housing than homeowners by a considerable amount.

1 Between 2013 and 2014, the Nashville region saw its housing become less affordable – both in absolute terms and in relation to how we compare to other metro regions in the country. On that measure, we fell 12 spots in the rankings.

2 Fair market rent is an important measure for assessing the affordability of housing for a region. The U.S. Department of Housing and Urban Development annually estimates fair market rents based on rental unit rates in the local market; these are used to determine standard payment options for housing voucher programs, initial renewal rents for some Section 8 housing and rent ceilings for other housing assistance programs. In nine counties in the region – Davidson, Hickman, Macon, Montgomery, Rutherford, Smith, Sumner, Williamson and Wilson – more than one-third of rental units are above fair market value. These nine counties account for 86 percent of all rental housing in the region.

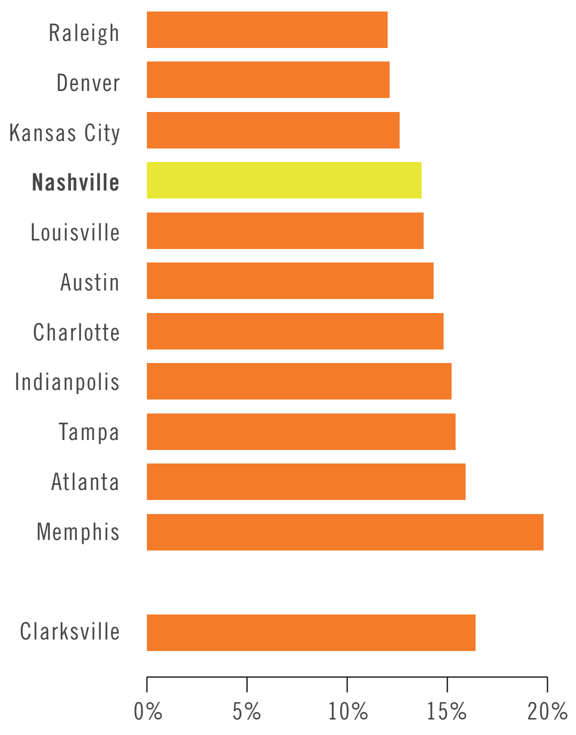
3 Over the last four years, median home sales in Cheatham, Davidson, Dickson, Maury, Robertson, Rutherford, Sumner, Williamson and Wilson counties have collectively increased by 42 percent – from $165,500 in 2011 to $234,900 in 2015.

4 After a four-year decline in the number of new housing permits granted, Nashville has seen a steady increase in the number of building permits granted. Between 2013 and 2014, the city saw a 37.2 percent increase. Clarksville has seen a decline in the number of authorized private housing permits granted since 2012.

5 In Middle Tennessee, owning a home allows you to spend a smaller percentage of your income on housing. It is 1.5 times as expensive to rent as it is to own a home in our region.

1 **Poverty Rates by MSA**

Source: U.S. Census Bureau, American Community Survey (ACS),2013



2 **Per Capita Personal Income by MSA**

Source: Bureau of Economic Analysis, 2013

Denver	$51,946
Nashville	$45,759
Kansas City	$45,558
Austin	$44,760
Raleigh	$43,947
Indianpolis	$42,542
Charlotte	$41,645
Louisville	$41,477
Atlanta	$41,307
Memphis	$40,987
Tampa	$40,425
Clarksville	$39,591
Tennessee	$39,558

3 **Cost-of-Living Index by MSA (U.S. Average = 100)**

Source: C2ER, 2014 Annual Averages

Denver	107.5
Kansas City	100
Atlanta	99.6
Charlotte	95
Austin	94.6
Indianpolis	93.5
Raleigh	93.3
Tampa	92.4
Louisville	91.9
Nashville	90.2
Memphis	85.6

4 **Household Income Distribution by County**

Source: U.S. Census Bureau, 2013

*5 year ACS **3 year ACS ***1 year ACS

	Less than $5,000	$5,000 to $9,999	$10,000 to $14,999	$15,000 to $19,999	$20,000 to $24,999	$25,000 to $34,999	$35,000 to $49,999	$50,000 to $74,999	$75,000 to $99,999	$100,000 to $149,999	$150,000 or more
Cannon*	5.3%	6.6%	5.2%	6.9%	6.6%	12.3%	17.4%	20.2%	10.5%	6.6%	2.3%
Cheatham**	3.2%	2.6%	3.2%	5.7%	5.5%	12.5%	16.6%	23.1%	12.0%	11.1%	4.6%
Davidson***	4.0%	3.3%	4.4%	6.1%	6.1%	11.9%	17.1%	17.7%	11.7%	10.7%	7.0%
Dickson**	4.0%	4.9%	4.4%	9.5%	5.1%	12.8%	17.9%	17.3%	11.0%	9.4%	3.7%
Hickman**	3.2%	5.7%	9.2%	9.0%	7.0%	15.5%	18.4%	16.0%	7.1%	5.5%	3.4%
Macon**	2.6%	9.5%	8.1%	6.1%	8.4%	17.2%	17.8%	16.5%	6.7%	6.1%	0.9%
Maury***	1.6%	2.5%	5.1%	6.9%	9.3%	11.1%	17.1%	20.4%	11.5%	10.2%	4.3%
Robertson***	2.1%	2.7%	3.5%	6.4%	6.2%	14.4%	13.9%	23.2%	13.9%	9.5%	4.2%
Rutherford***	1.9%	3.3%	3.7%	4.4%	5.1%	9.2%	16.0%	20.6%	15.5%	13.3%	7.1%
Smith*	4.3%	6.6%	8.4%	6.3%	4.3%	11.4%	15.7%	21.1%	10.2%	6.8%	4.9%
Sumner***	1.6%	2.1%	4.9%	5.0%	5.7%	8.3%	16.7%	21.2%	13.4%	12.6%	8.6%
Trousdale*	2.8%	4.6%	11.1%	3.6%	8.2%	12.6%	15.2%	22.5%	8.2%	6.6%	4.8%
Williamson***	1.1%	0.8%	3.5%	1.9%	4.0%	6.6%	8.6%	15.9%	14.6%	17.3%	25.9%
Wilson***	4.2%	1.2%	3.7%	5.3%	6.1%	8.4%	15.9%	19.5%	16.6%	11.8%	7.3%
Montgomery***	4.5%	3.7%	4.3%	4.0%	4.7%	11.5%	16.0%	26.0%	11.5%	10.3%	3.5%
Trigg*	2.6%	4.5%	7.3%	7.5%	5.0%	12.2%	15.4%	20.2%	14.9%	7.4%	3.1%
Christian***	4.2%	6.2%	5.3%	4.7%	6.8%	11.0%	17.1%	20.1%	8.6%	8.9%	7.1%
Nashville MSA***	3.1%	2.8%	4.4%	5.3%	5.8%	10.7%	15.7%	18.9%	12.9%	11.8%	8.5%
Clarksville MSA***	4.2%	4.7%	5.0%	4.2%	5.1%	11.4%	16.0%	24.0%	10.5%	10.2%	4.5%

5 **Household Income by Age of Householder**

Source: U.S. Census Bureau, 2013

*5-year ACS **3-year ACS ***1-year ACS

	15 to 24 years	25 to 44 years	45 to 64 years	65 years and older
Cannon*	$35,250	$49,241	$46,000	$26,861
Cheatham**	$28,577	$52,259	$51,281	$46,379
Davidson***	$30,006	$48,558	$51,691	$42,638
Dickson**	$29,896	$44,031	$47,344	$36,198
Hickman**	$23,972	$43,777	$39,336	$26,731
Macon**	$25,216	$42,588	$39,387	$23,543
Maury***	$35,703	$44,083	$55,855	$32,728
Robertson***	$33,078	$60,859	$51,658	$29,996
Rutherford***	$28,526	$66,199	$67,996	$39,629
Smith*	$34,044	$48,186	$48,160	$31,313
Sumner***	$31,941	$60,252	$67,928	$39,437
Trousdale*	$13,875	$51,125	$48,149	$35,119
Williamson***	$22,117	$95,215	$104,751	$43,181
Wilson***	$21,556	$62,432	$62,098	$41,986
Montgomery***	$32,153	$52,033	$57,477	$38,047
Trigg*	$32,833	$54,459	$48,510	$33,340
Christian***	$26,414	$50,726	$44,123	$34,174
Nashville MSA***	$28,627	$56,905	$60,906	$39,235
Clarksville MSA***	$31,655	$51,434	$56,309	$34,668

PROSPERITY & AFFORDABILITY

Key Takeaway: Overall, living in our region not only means that you earn more money than residents in peer regions; it also means that every dollar you earn here goes further. However, one in seven residents in Davidson County lives below the poverty line, meaning our prosperity isn't shared equally.

1 One in seven Davidson County residents lives below the poverty line. Although this rate is lower than the majority of our peer regions, it will be important to ensure all of our residents have access to the economic prosperity the region is experiencing.

2 3 The Nashville region is fortunate to have a per capita income that outpaces nearly all of our peers. Additionally, cost of living remains below the national average. This means that not only do our residents earn more; it also means that every dollar they earn here goes further when it comes to spending on products and services, buying homes or pursuing their dreams of starting or growing a business.

4 5 The household income distribution varies significantly throughout the region. Overall, about half of all households in the region earn $50,000 or less.

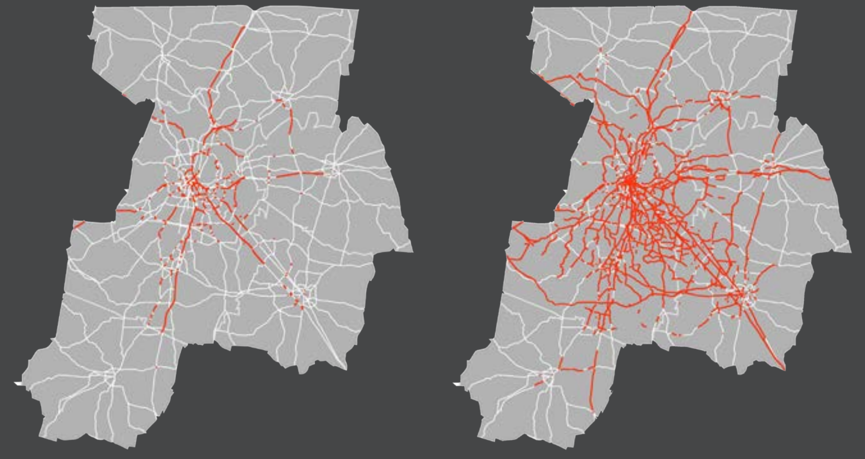
Commuter Stress Index by MSA

Source: Texas A&M Transportation Institute Mobility Study, 2015

	2007	2008	2011	2014
Atlanta	1.28	1.24	1.24	1.32
Austin	1.32	1.31	1.38	1.44
Charlotte	1.24	1.22	1.2	1.29
Denver	1.30	1.23	1.27	1.36
Indianapolis	1.18	1.23	1.22	1.19
Kansas City	1.18	1.15	1.15	1.17
Louisville	1.22	1.16	1.22	1.23
Memphis	1.26	1.21	1.23	1.21
Nashville	**1.25**	**1.20**	**1.28**	**1.27**
Raleigh	1.24	1.19	1.21	1.19
Tampa	1.26	1.22	1.28	1.24
Large Area Avg.	1.27	1.23	1.25	1.37

Congestion Projections

Source: Nashville Area MPO, 2015



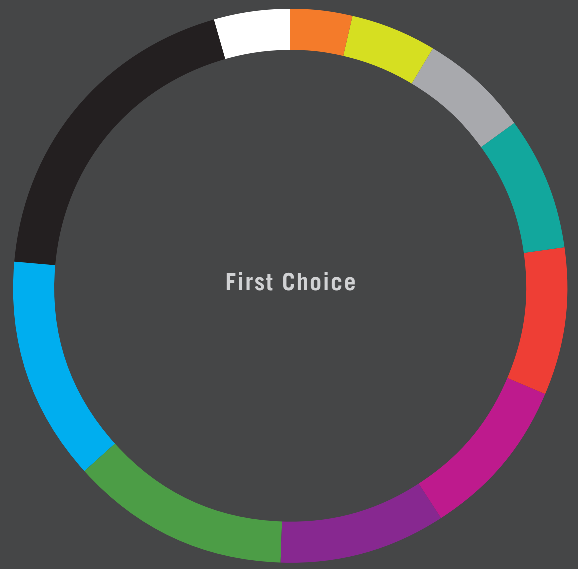
2010 congestion

2040 congestion

Congestion is expected to increase over the next 25 years, creating longer drive times.

Poll: More Important Problem to Solve

Source: Regional Attitudinal Survey, Nashville Area MPO, 2014



- 3.80% Lack of bicycle lanes
- 4.90% Not enough roads
- 6.50% Poor timing of traffic lights
- 7.80% Too much road construction
- 8.60% Too many accidents
- 9.50% Poorly planned development
- 9.60% Too much truck traffic
- 12.80% Potholes or poorly maintained roadways
- 13.10% Lack of sidewalks
- 19.20% Lack of transit options
- 4.30% No first choice

TRANSIT & TRANSPORTATION

Middle Tennessee has emerged as the state's foremost economic engine, leveraging its assets in government, music, automotive, manufacturing, health care and other top industry sectors. However, growth and development have placed enormous pressure on transportation infrastructure, and without additional transit options or the funding to pay for them, continued prosperity is at risk. The area ranks poorly or near the bottom nationally for key indicators around health and transportation, and we must find a way to turn the corner on these trends in order to ensure our future offers the same quality of life for future.

According to the Texas Transportation Institute's 2015 Urban Mobility scorecard, congestion costs commuters in the Nashville-Davidson urbanized area $1,168 annually in wasted fuel and lost time based on today's gasoline prices. Additionally, drivers spend 45 hours annually delayed in traffic.

As long as Middle Tennessee is attracting people and businesses, we will see an increase in traffic. Improving traffic conditions is one of the key aims of transportation planning, but we are running out of options to widen roadways. Developing alternative modes of travel will be needed as our region grows. The population in Middle Tennessee is expected to increase by 76 percent between 2010 and 2040. Understanding where those people will live, work and shop within the region is critical to determining how to improve the transportation system in order to accommodate that development.

Middle Tennessee's need for transportation dollars far outpaces available revenue by a margin of 4 to 1. Transportation revenue as it relates to costs has been in significant decline since 1993. Since then, inflation has reduced its purchasing power, and increased vehicle fuel economy means you are buying less gas to go the same distance. Tennessee's state gas tax has not been adjusted since 1989.

Currently, more than 1.7 million people call the 10-county area home. The Nashville Area MPO predicts there will be 2 million people by 2020 and more than 3 million by 2040. While Davidson County is expected to remain the most populous in the region, Williamson and Rutherford counties are on track to pass Chattanooga-Hamilton County in size by 2040, adding nearly 300,000 people each.

Annual Transit Usage

Source: Texas Transportation Institute, 2015

		Annual passengers		Per capita	
MSA	Population	Miles	Trips	Miles	Trips
Denver	2,615,000	613,571,126	101,352,739	234.6	38.8
Austin	1,500,000	166,953,946	36,402,271	111.3	24.3
Charlotte	1,200,000	147,154,466	29,045,870	122.6	24.2
Raleigh	1,333,000	105,140,050	22,433,514	78.9	16.8
Memphis	1,085,000	51,678,745	10,460,246	47.6	9.6
Nashville	**1,200,000**	**77,573,592**	**10,544,859**	**64.6**	**8.8**
Peer average	1,546,600	216,899,667	39,938,928	119	22.7

Purchasing power of the gas tax has dropped 28 percent since 1997.

Poll: Solutions Must Be Regional

Source: Regional Attitudinal Survey, Nashville Area MPO, 2014

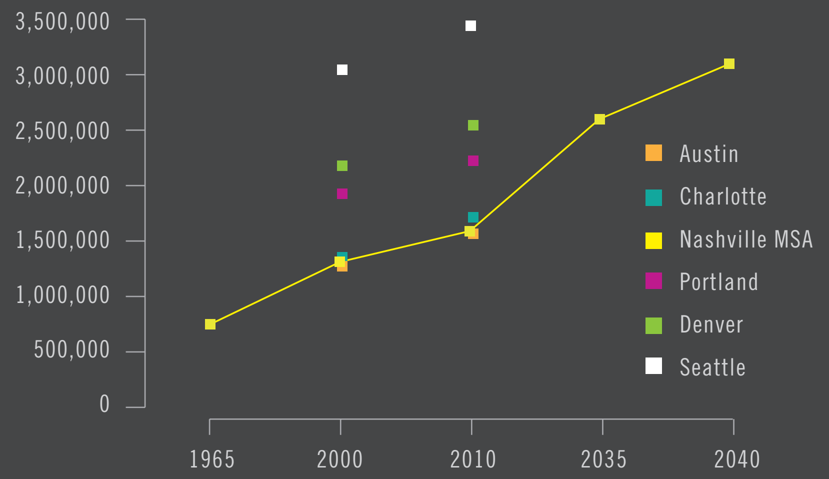
Communities in Middle Tennessee should begin working together to build a regional rapid transit system like light rail, commuter rail or bus rapid transit to prepare for future growth.

If it meant that the region could significantly expand mass transit choices, most people would be willing to pay slightly more in some type of tax or fee to help pay for it.

If it meant that the region could significantly expand mass transit choices, I would be willing to pay slightly more in some type of tax or fee to help pay for it.

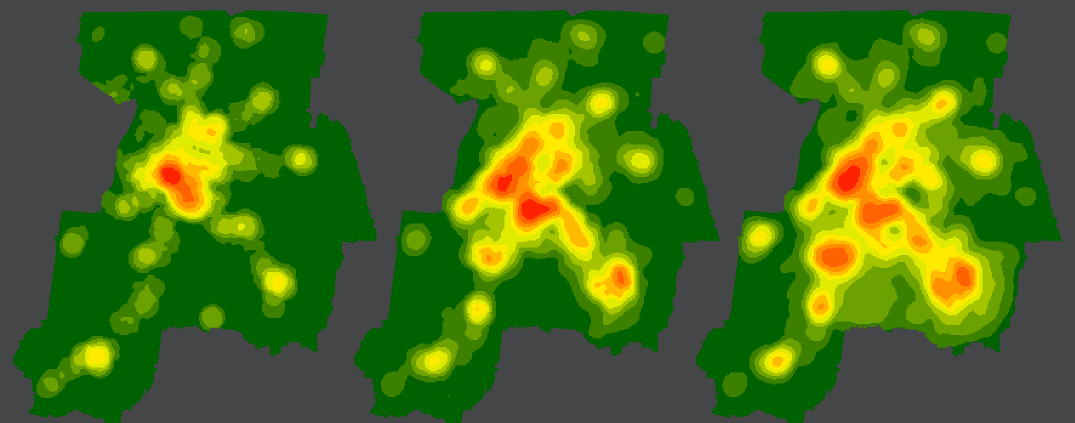
Population Growth in the Nashville MSA Compared to Peers

Source: U.S. Census Bureau Decennial Census, 2000 & 2010



Land Development Density

Source: Nashville Area MPO, 2015



1970

2010

2040

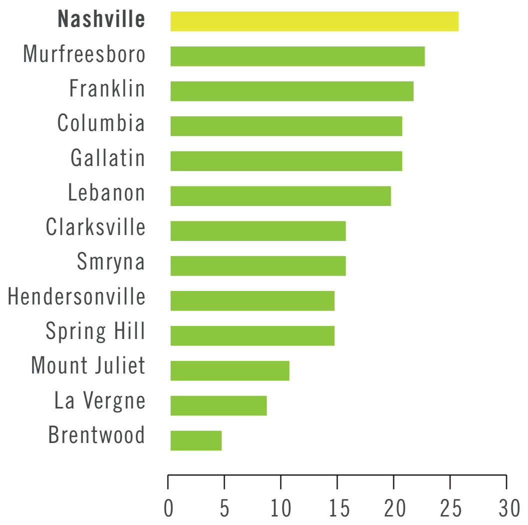
1 Fitness Index Rankings by MSA

Source: American Fitness Index, 2015

Denver	6
Raleigh	13
Atlanta	14
Austin	20
Kansas City	26
Tampa	27
Charlotte	43
Nashville	**45**
Louisville	46
Memphis	49
Indianapolis	50

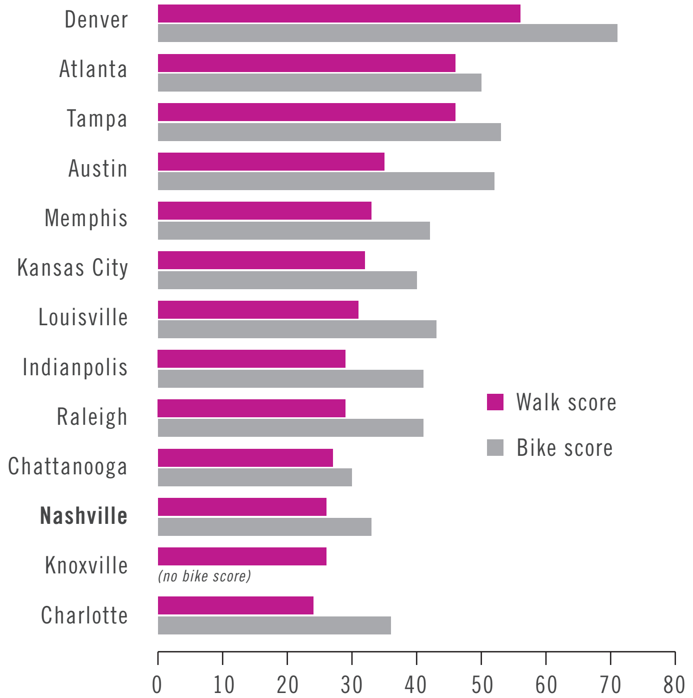
2 Walk Score by Community

Source: Walkscore.com, 2015



3 Walk Score and Bike Score

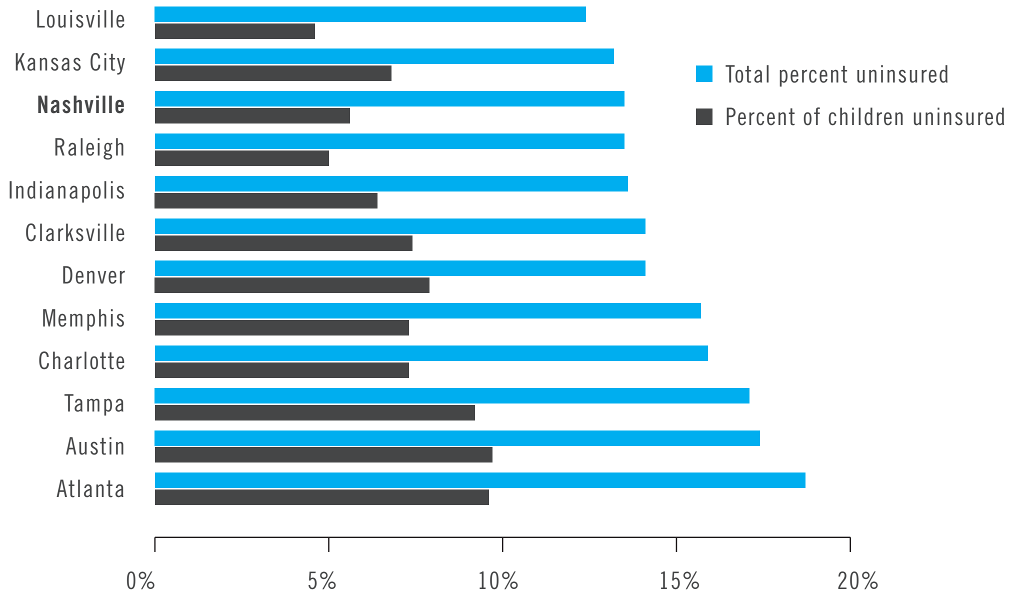
Source: Walkscore.com, 2015



Some of New York City's communities have walk and bike scores of 100 (the highest ranking). New York City, overall, has a walk score of 88 and a bike score of 65.

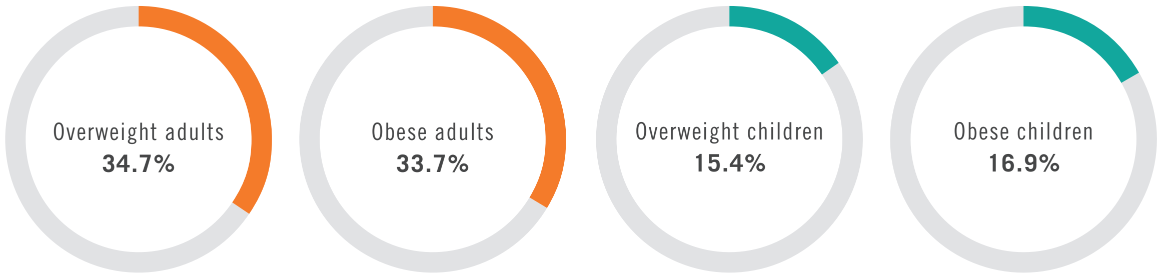
4 Percent of Uninsured Population by MSA

Source: U.S. Census Bureau, 1-year estimate, 2013



5 Percent of Tennesseans who are Overweight or Obese

Source: Centers for Disease Control, 2013



6 Health Snapshot in the Nashville and Clarksville* MSAs

Source: County Health Rankings, 2015

least favorable

most favorable

	Poor or fair health	Physically unhealthy days in last month	Mentally unhealthy days in last month	Smokers	Obese	Physically inactive	Access to exercise opportunities	Excessive drinking	Adults who do not see doctors due to cost	Preventable hospital stay rate per 1,000 Medicare enrollees
Tennessee	19.4%	4.3	3.4	22.6%	32.0%	30.3%	70.3%	9.3%	11.1%	73
Cannon	20.0%	5.2	n/a	27.6%	30.7%	34.0%	33.6%	n/a	**30.4%**	110
Cheatham	17.5%	3.7	3.3	30.5%	30.1%	33.8%	70.9%	n/a	n/a	87
Christian*	23.1%	4.7	3.7	24.7%	33.7%	31.5%	61.8%	12.1%	15.2%	92
Davidson	14.4%	3.0	2.7	17.2%	30.8%	25.7%	**86.8%**	10.9%	15.2%	62
Dickson	22.4%	4.1	4.8	26.1%	34.9%	34.8%	58.9%	n/a	14.0%	87
Hickman	23.6%	**6.6**	**5.0**	**37.7%**	34.4%	36.8%	21.5%	n/a	22.1%	69
Macon	**25.7%**	5.7	4.2	35.1%	32.4%	31.0%	39.1%	n/a	27.7%	**169**
Maury	19.8%	4.4	3.2	25.7%	**35.1%**	33.9%	59.6%	12.7%	17.4%	57
Montgomery*	17.8%	5.2	2.8	27.5%	30.5%	28.2%	52.4%	**16.8%**	10.7%	81
Robertson	15.4%	3.2	2.1	23.9%	33.9%	31.8%	79.9%	n/a	13.4%	83
Rutherford	14.5%	3.9	2.7	17.1%	31.7%	25.4%	76.9%	**8.5%**	13.2%	85
Smith	12.9%	2.7	n/a	23.5%	33.2%	32.1%	34.4%	n/a	15.3%	112
Sumner	20.5%	3.6	3.4	20.0%	29.7%	24.8%	74.5%	8.8%	17.2%	86
Trigg*	24.1%	4.4	4.7	26.4%	29.4%	30.5%	62.0%	14.1%	19.3%	95
Trousdale	n/a	n/a	n/a	n/a	33.8%	**37.3%**	**7.4%**	n/a	n/a	131
Williamson	**6.9%**	**2.0**	**1.9**	**10.9%**	**27.0%**	**23.2%**	67.0%	13.9%	**9.6%**	**47**
Wilson	16.9%	4.7	3.6	29.0%	31.7%	28.5%	78.6%	13.8%	15.5%	79

	Food environment index	Low birth weight	Primary care physician ratio	Dentist ratio	Mental health providers ratio
Tennessee	6.9	9.2%	1,388:1	1,996:1	786:1
Cannon	8.2	9.6%	3,453:1	4,592:1	2,296:1
Cheatham	8.6	8.3%	2,310:1	7,898:1	2,079:1
Christian*	**5.9**	9.2%	2,357:1	**749:1**	**330:1**
Davidson	6.5	9.1%	1,059:1	1,401:1	395:1
Dickson	7.5	8.0%	2,519:1	1,733:1	1,197:1
Hickman	7.7	8.7%	4,834:1	**8,089:1**	2,427:1
Macon	7.8	7.5%	**5,625:1**	5,675:1	**22,701:1**
Maury	7.2	9.0%	1,518:1	1,675:1	450:1
Montgomery*	6.3	8.0%	2,306:1	2,455:1	716:1
Robertson	8.2	8.3%	2,677:1	3,546:1	2,407:1
Rutherford	7.5	8.2%	2,231:1	2,036:1	1,358:1
Smith	8.0	8.2%	1,910:1	3,815:1	6,358:1
Sumner	7.8	7.9%	1,786:1	2,559:1	1,624:1
Trigg*	7.8	8.6%	2,408:1	4,764:1	14,293:1
Trousdale	8.1	**11.6%**	2,598:1	7,828:1	n/a
Williamson	**8.9**	**6.9%**	**699:1**	1,362:1	751:1
Wilson	8.3	8.1%	2,832:1	2,651:1	1,876:1

HEALTHY LIVING

Key Takeaway: The health status and behaviors of a region have far-reaching implications, not only for residents' quality of life, but also for our region's ability to sustain a strong workforce, contain health care costs and grow. While the Nashville region is a leader for the number of insured residents, work remains to transform our physical environment to enable and promote healthy activities.

1 Between 2014 and 2015, the Nashville MSA's fitness index improved from 46 to 45. During that same time, four of our peers slipped in the rankings (Denver, Austin, Charlotte and Indianapolis), five did better (Atlanta, Tampa, Kansas City, Louisville and Memphis), and one fared the same (Raleigh). Despite our improvement, our relative position remains unchanged.

2 Of communities in our region, Nashville fares as the most walkable, likely due to Davidson County's investments in greenways, sidewalks and bicycle lanes. Davidson County leads the region on this measure.

3 The Nashville MSA falls behind all but Knoxville and Charlotte on walkability, despite investments made in Davidson County. On our bike score, we fall behind every comparison region with the exception of Chattanooga.

4 The Nashville region outperforms all but two peers (Louisville and Kansas City) with regard to the number of insured individuals in the region. We also lead for the number of insured children. Our region only falls behind Louisville and Raleigh on this measure.

5 Tennessee remains one of the most obese states in the U.S., with 33.7 percent of adults and 16.9 percent of children obese and 34.7 percent of adults and 15.4 percent of children overweight.

6 Health outcomes and health behavior vary widely throughout the region. As a region, we consistently fall behind the state average for the percentage of smokers, the percent of adults who do not see a doctor due to cost, the preventable hospital stay rate, and the percent of residents with access to exercise opportunities.

ECONOMY & WORKFORCE

Key Takeaway: Since the Great Recession, the Nashville region has posted strong gains in productivity, job growth and employment, outpacing many competitor peers and other counties in Tennessee. Specifically:

1 3 Between 2005 and 2013, per capita real GDP has grown 3 percent in the Nashville MSA and 1 percent in the Clarksville MSA. Compared to peers, the Nashville MSA leads all but three peer competitors (Denver, Indianapolis and Charlotte).

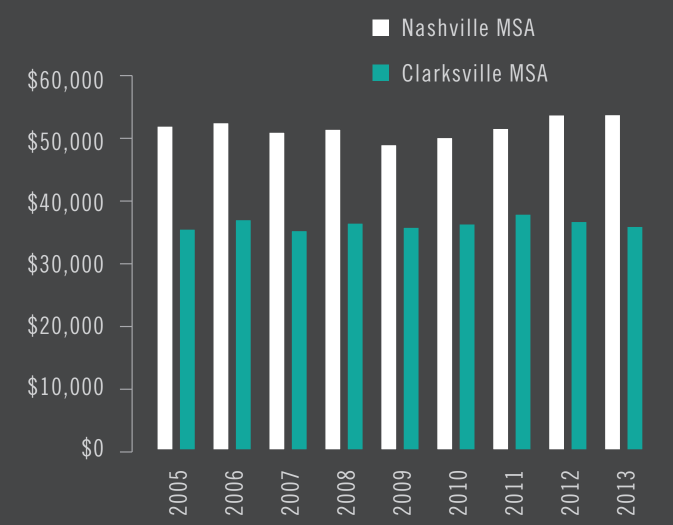
2 The Nashville MSA has a gross metropolitan product of $100,841B placing the region in approximately the top third of the 100 leading metros in the country.

4 Between 2010 and 2015, the joint Nashville-Clarksville region saw an average of 14 percent growth in business establishments.

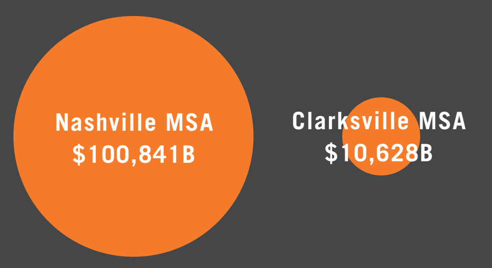
5 The Nashville MSA outpaces six out of 10 competitor peers with regard to change in employment over the last five years.

6 7 At 5.1 percent unemployment, the Nashville MSA experienced unemployment levels below both the state (5.7 percent) and national (5.3 percent) averages for June 2015. That month, seven of the 10 lowest unemployment rates in the state were in Middle Tennessee counties: Williamson, Davidson, Sumner, Wilson, Rutherford, Robertson and Cheatham.

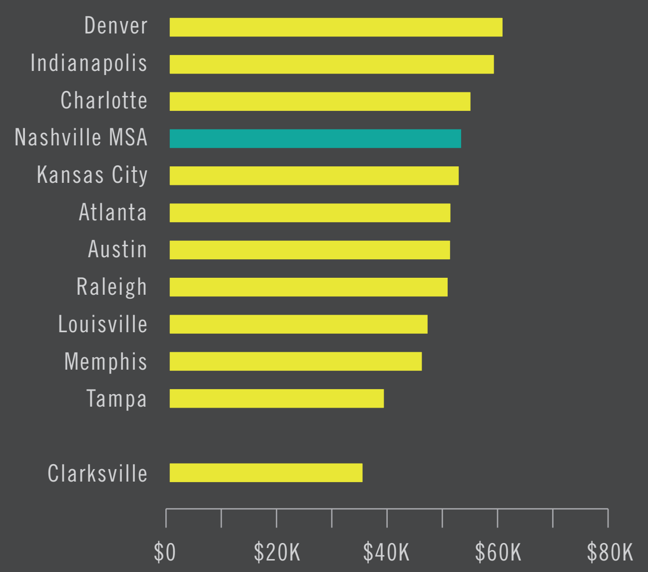
1 **Per Capita Real GDP By Metropolitan Area (chained 2009 dollars)** *Source: Bureau of Economic Analysis*



2 **Current Gross Metropolitan Product** *Source: Bureau of Economic Analysis, 2013*



3 **Per Capita Real GDP (chained 2009 dollars) by MSA** *Source: Bureau of Economic Analysis*



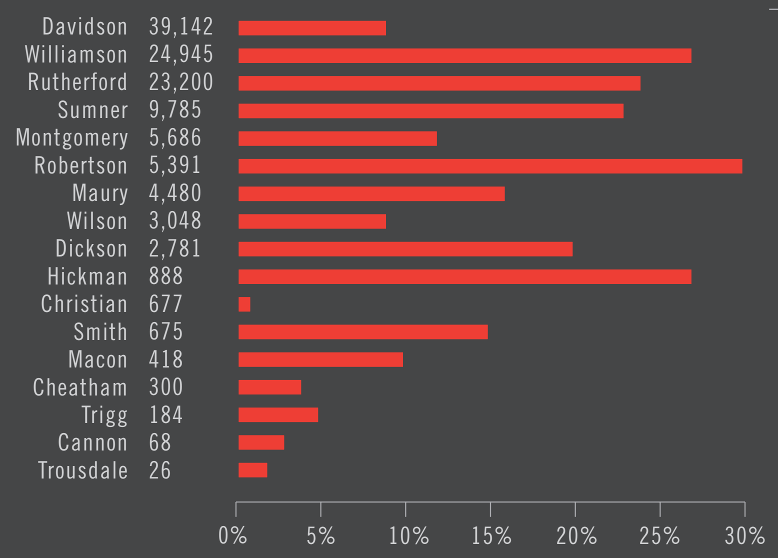
2014 Unemployment Rates by MSA
Source: Bureau of Labor Statistics, 2014

Memphis	7.6
Atlanta	6.8
Tampa	6.1
Charlotte	6
Louisville	5.9
Indianapolis	5.7
Kansas City	5.6
Nashville	5.2
Raleigh	4.9
Denver	4.8
Austin	4.2

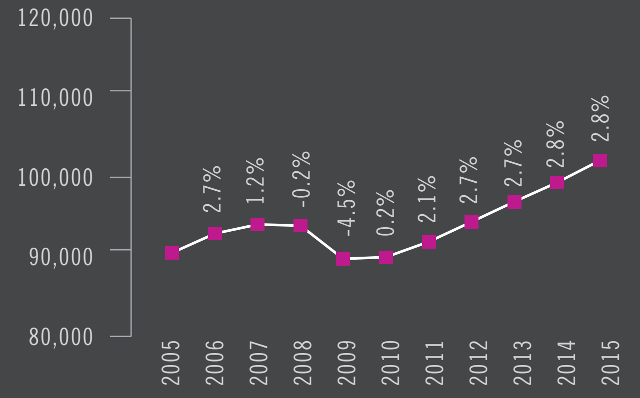
Joint Metro Region Top 5 Industries (not including government) Percent of Current GDP
Source: EMSI, 2015

Manufacturing	11%
Health care and social assistance	8%
Finance and insurance	7%
Real estate and rental and leasing	7%
Professional, scientific and technical	6%

4 **2010-2015 Percentage Change in Business Establishments by County** *Source: EMSI, 2015*



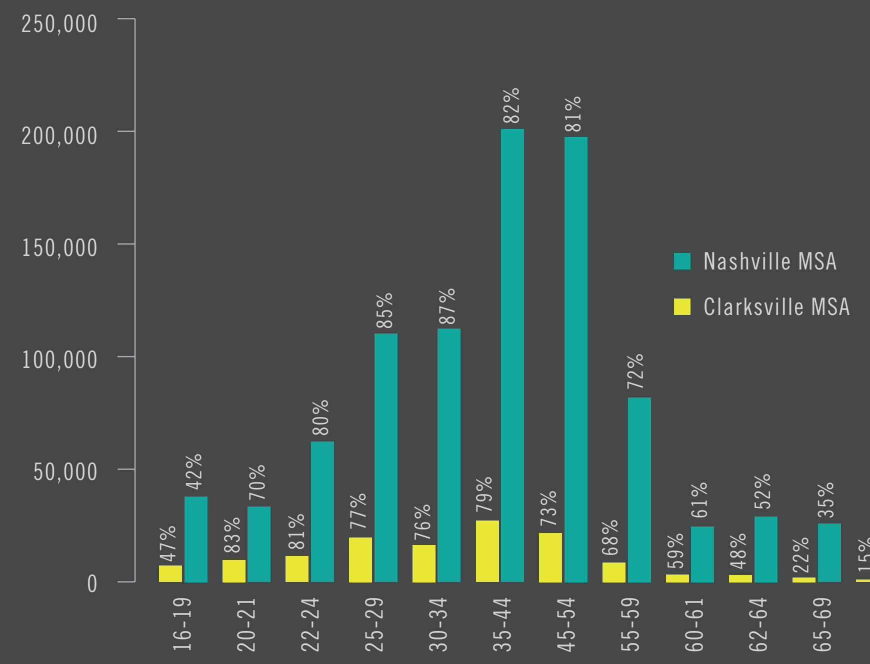
Nashville-Clarksville Joint Region Employment (2005-2015) *Source: EMSI, 2015*



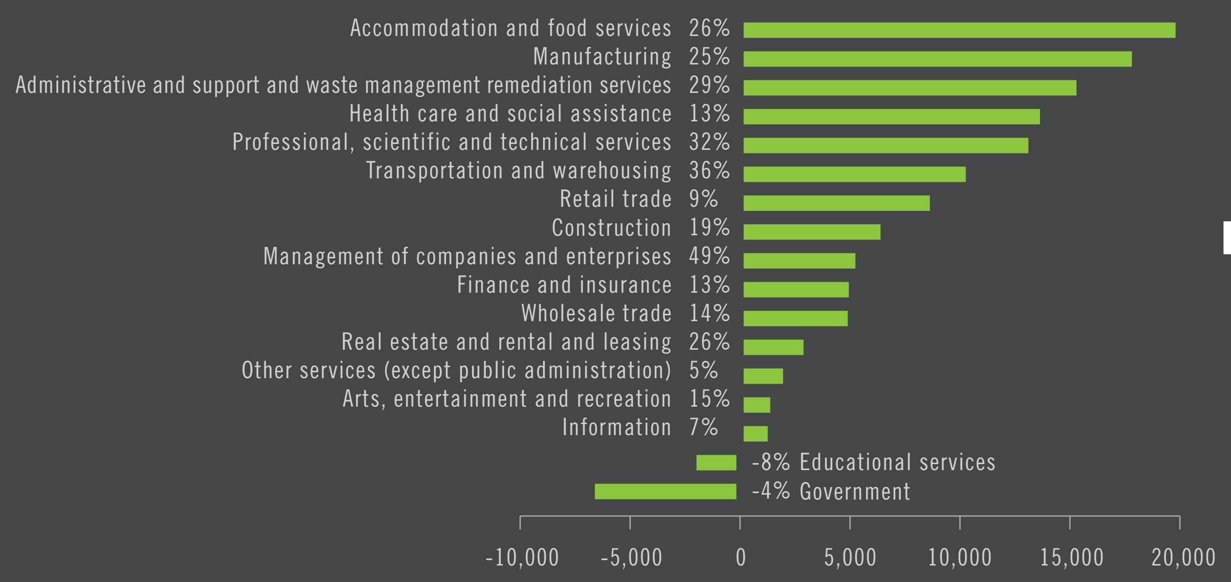
5 **2010-2015 % change in employment by MSA**
Source: EMSI, 2015

Austin	17.8%
Raleigh	15.9%
Denver	15.6%
Charlotte	15.1%
Nashville MSA	14.7%
Atlanta	12.8%
Louisville	12.1%
Indianapolis	10.8%
Tampa	10.1%
Kansas City	8.4%
Memphis	4.1%
Clarksville	5.8%

Labor Force Participation Rate by Age
Source: U.S. Census Bureau, 1-year estimates, 2013



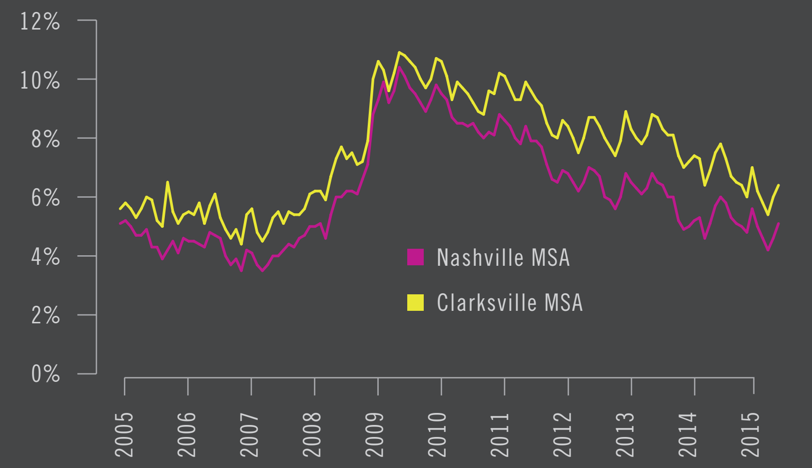
Joint Metro Region Employment Change by Industry, 2010-2015
Source: EMSI, 2015



6 **Current unemployment rates (June 2015)**

Nashville MSA: 5.1% (48,530 people)
Clarksville MSA: 6.4% (7,125 people)

7 **Historical Unemployment Rate** *Source: Bureau of Labor Statistics, 2015*



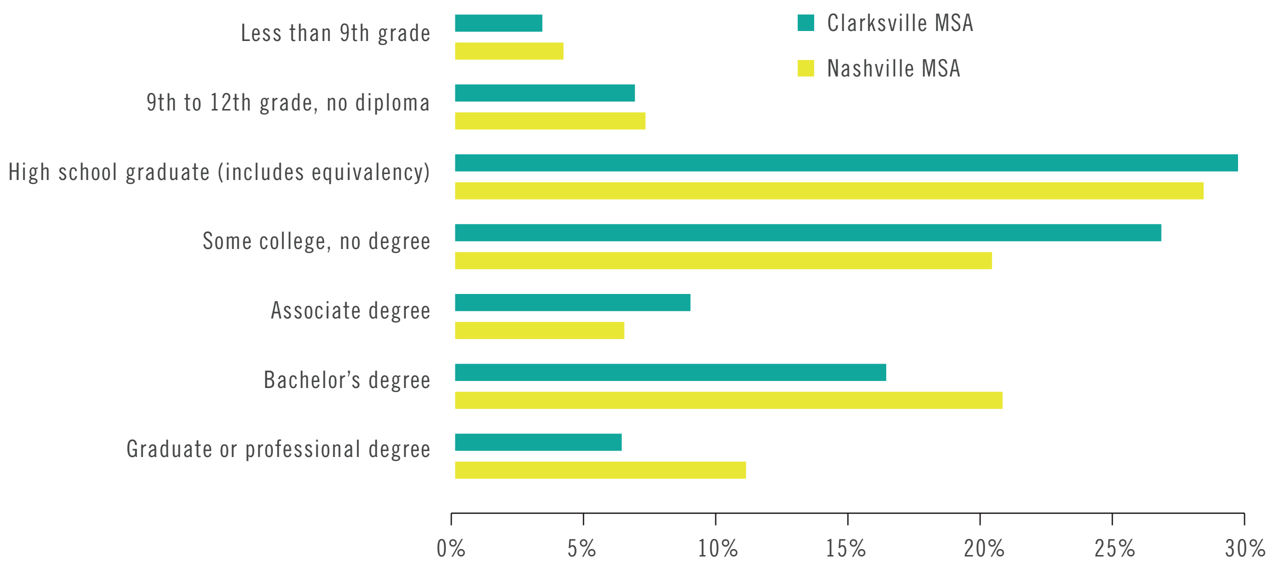
1 ACT 21+ Rates by County

Source: Tennessee Department of Education, 2014

District	% ACT Scores 21+ rate (2014)	% Change Between 2013-2014
Cannon	26.5	▲ 3.0
Cheatham	40.2	▲ 6.5
Davidson	29.3	▲ 1.6
Dickson	35.4	▼ 3.3
Hickman	26.8	▲ 0.9
Macon	32.8	▲ 8.8
Maury	33.5	▲ 2.6
Montgomery	39.8	▼ 0.1
Robertson	32.6	▲ 0.7
Rutherford	43.8	▲ 2.7
Smith	37.6	▲ 0.7
Sumner	44.2	▼ 0.2
Trousdale	36.5	▲ 0.6
Williamson	72.6	▲ 0.7
Wilson	41.7	▼ 1.8
Tennessee	**36.9**	▲ 0.7

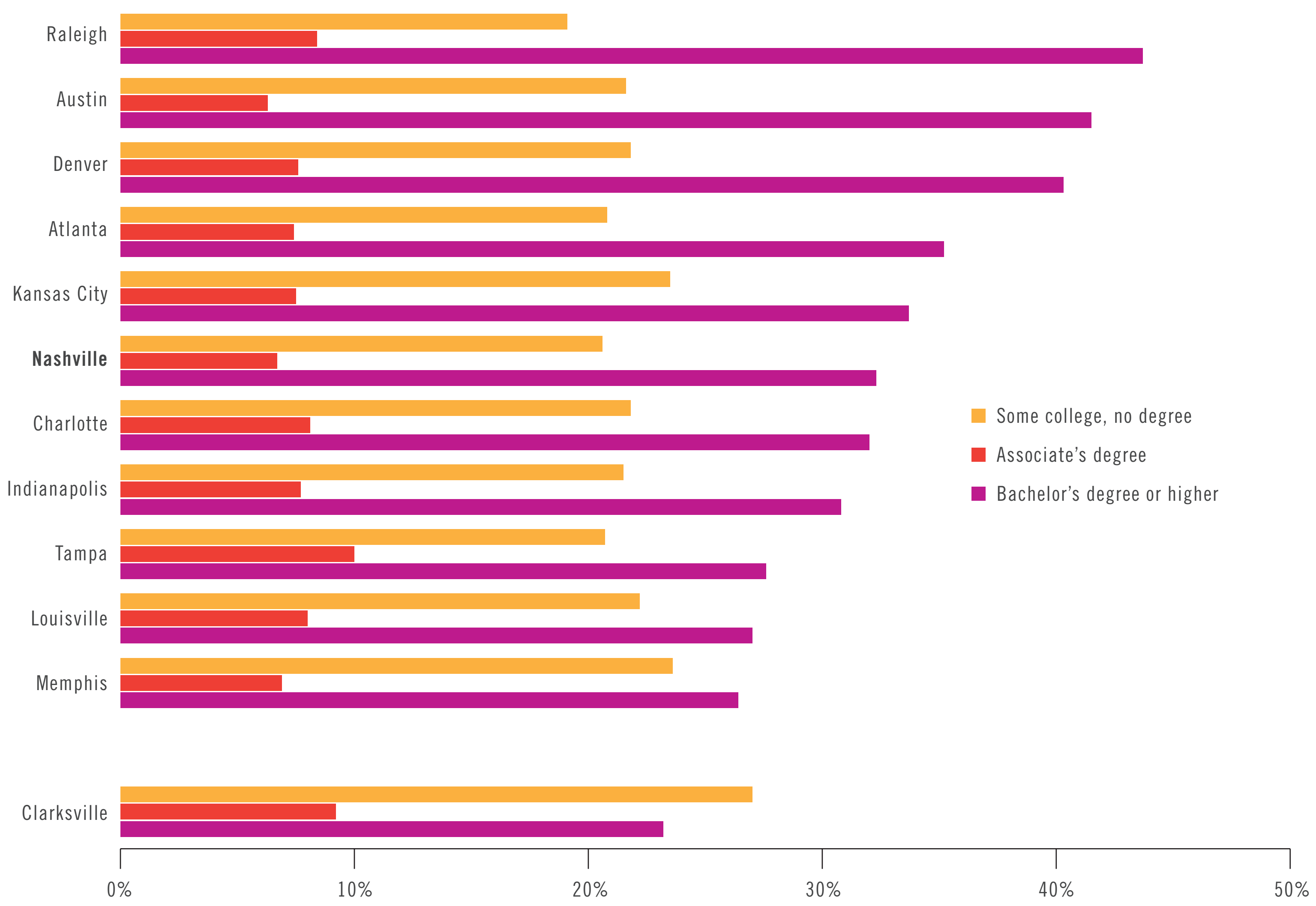
2 Educational Attainment Population 25 Years and Older

Source: U.S. Census Bureau, American Community Survey, 1-year estimates, 2013



3 Peer Comparison - Educational Attainment Population 25 Years and Older

Source: U.S. Census Bureau, 1-year estimates, 2013



4 Joint Metro Region 2014 Institutional Completions

Source: EMSI, 2015

Institutional completions by type, 2014	
Award of less than one academic year	10.1%
Award of at least one but less than two academic years	12.6%
Associate degree	14.1%
Award of at least two but less than four academic years	0.9%
Bachelor's degree	41.0%
Postbaccalaureate certificate	0.4%
Master's degree	15.9%
Post-master's certificate	0.3%
Doctoral degree	4.6%
All certificates	24.3%
All degrees	75.7%

Total number of 2014 completions: 29,838

EDUCATION & LEARNING

Key Takeaway: Educational attainment is a hallmark measure for assessing a region's preparation for an increasingly competitive job market. The joint Nashville-Clarksville region continues to make progress in educational attainment, but we fall behind many of our competitor regions, and work remains to meet the governor's Drive to 55 goal.

1 Between 2013 and 2014, 11 counties experienced improvements in the percentage of students scoring at least a 21 on the ACT. This means more of our students are graduating with a higher likelihood of succeeding in postsecondary education. It also means more students are clearing an important hurdle to be eligible for the lottery-funded HOPE Scholarship.

2 In the Clarksville MSA, 32 percent of adults have obtained at least an associate degree. In the Nashville MSA, 39 percent of adults have obtained at least an associate degree. Our combined region needs an additional 162,010 degree holders to reach Gov. Haslam's Drive to 55 goal of 55 percent attainment.

3 Compared to our peers, the Nashville MSA falls in the middle of the pack, with six regions outpacing us and four (Indianapolis, Tampa, Louisville and Memphis) falling behind us with regard to percentage of adults with at least an associate degree. The Clarksville region falls behind all 10.

4 In 2014, nearly 30,000 degrees were obtained in the joint metro region. If all of those degree holders remained in the region after graduation, the region would meet the governor's 55 percent goal in a handful of years.

- 0.80% Cannon (5)
- 0.80% Cheatham (5)
- 47.59% Davidson (296)
- 2.57% Dickson (16)
- 0.64% Hickman (4)
- 0.32% Macon (2)
- 5.95% Maury (37)
- 4.82% Montgomery (30)
- 2.09% Robertson (13)
- 9.00% Rutherford (56)
- 0.96% Smith (6)
- 6.59% Sumner (41)
- 0.32% Trousdale (2)
- 15.27% Williamson (95)
- 2.25% Wilson (14)

Nearly half of Middle Tennessee arts nonprofits are located in Davidson County.

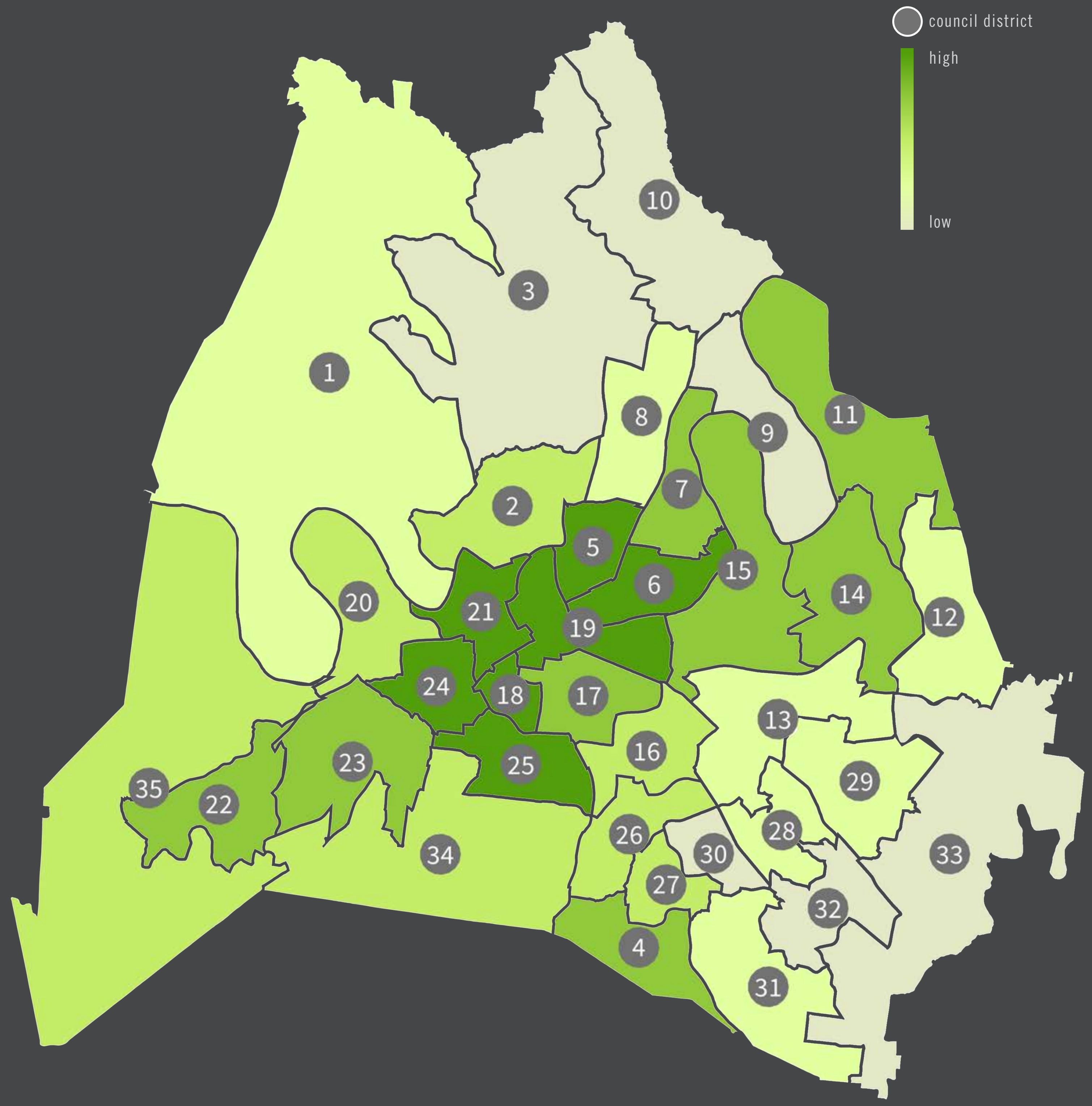
Arts Vibrancy Index

Source: National Center for Arts Research, 2014

	Rank
Nashville MSA	**2nd**
Arts providers	**1st**
Independent artists	7th
Arts and culture employees	4th
Arts, culture and entertainment employees	29th
Arts organizations	2nd
Arts dollars	**9th**
Program revenue	10th
Contributed revenue	23rd
Total expenses	8th
Total compensation	17th
Government support	**22nd**
State arts dollars	23rd
State arts grants	86th
Federal arts dollars	60th
Federal arts grants	55th

Cultural Activity by Metro Council District- Composite Layer

Source: The Research Center, Nashville Area Chamber of Commerce, Culture Here, 2015



The cultural activity composite attempts to measure a region's cultural vibrancy as well as measure the access that residents in that region have to culture. The composite measures number of venues, park space, access to cultural opportunities through public transit and other access measures, and a variety of other index rankings.

ARTS & CULTURE

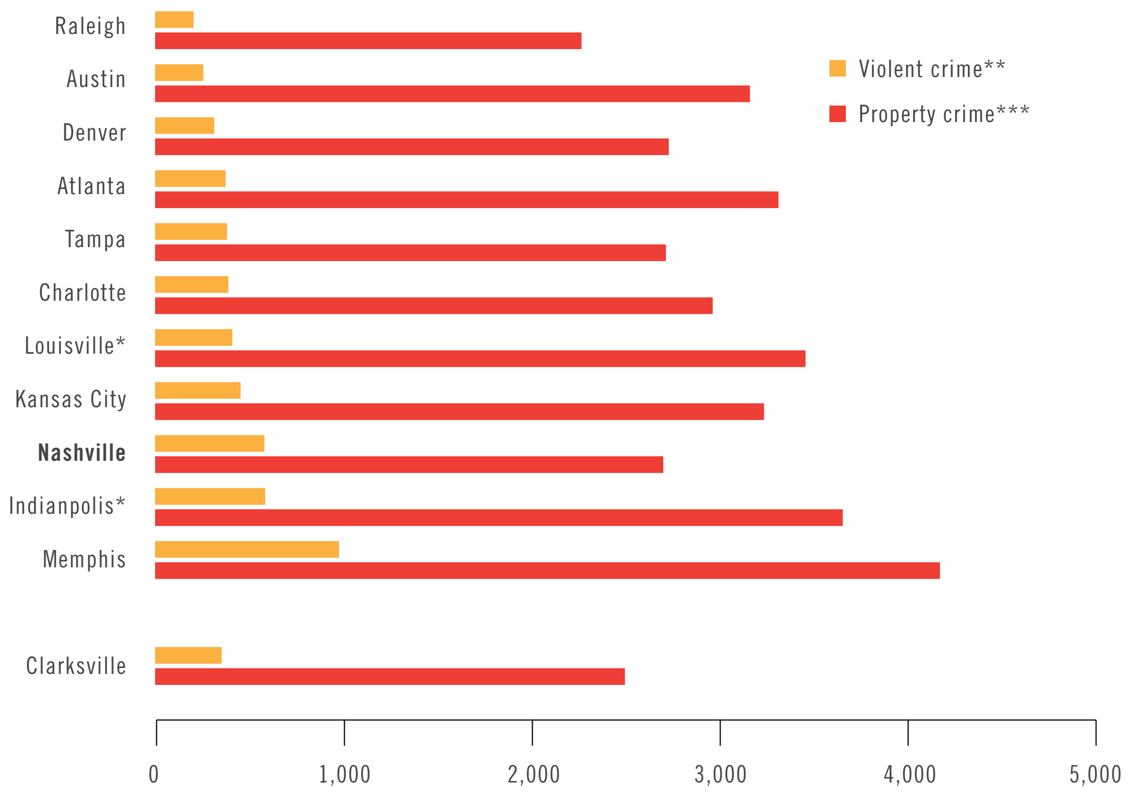
The cultural vitality of the joint Nashville-Clarksville region functions as a visible display of the quality of life in the area. Residents gain pleasure from interacting with the cultural environment, young and old fulfill intellectual and emotional drives for expression and knowledge, and bonds between individuals and neighborhoods are strengthened. The region benefits from a broad range of organizations, activities, venues and programs in the cultural and creative sector.

Key components of the region's cultural life include:

- A large and vibrant arts and cultural landscape, with more than 5,000 organizations, establishments and activities comprising this sector locally.
- A strong core to the region's cultural life, with an abundance of amenities and venues in Davidson County that serve a region-wide audience and constituency.
- The area's cultural vitality is ranked second among large cities on the national Arts Vibrancy Index.
- Continued strong focus on challenges to increase support for culture and the arts, access to arts activity by residents throughout the entire region and maintaining a diverse mix of cultural and artistic expression and opportunity.

1 **Violent and Property Crime Rates per 100,000 by MSA**

Source: FBI Crime Statisics, 2013 and 2012



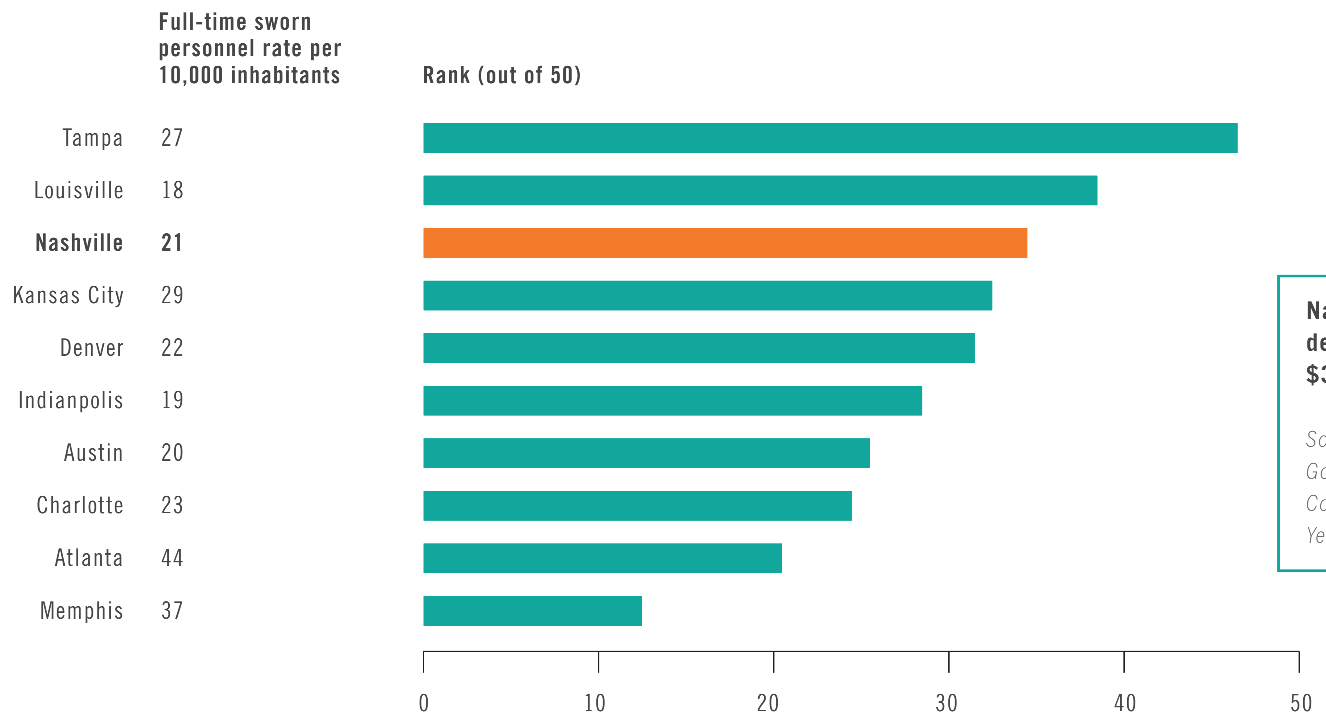
*2012 data

** Violent crime includes criminal homicide, forcible rape, robbery and aggravated assault

*** Property crime includes burglary, larceny-theft and motor vehicle theft

2 **Police Force Density by MSA**

Source: Bureau of Justice Statistics, 2013



Nashville fire and police department budgets totaled $399.3 million in FY2015.

Source: The Metropolitan Government of Nashville & Davidson County, Operating Budget for Fiscal Year, 2015

Forty-six percent of Tennessee offenders will return to prison in three years.

Source: Tennessee Department of Corrections, 2010

REGIONAL POLL RESULTS

Ninety percent of respondents said they feel safe being out alone at night in their neighborhood or near their house.

Ninety percent of respondents said their personal property was safe while they were away from home.

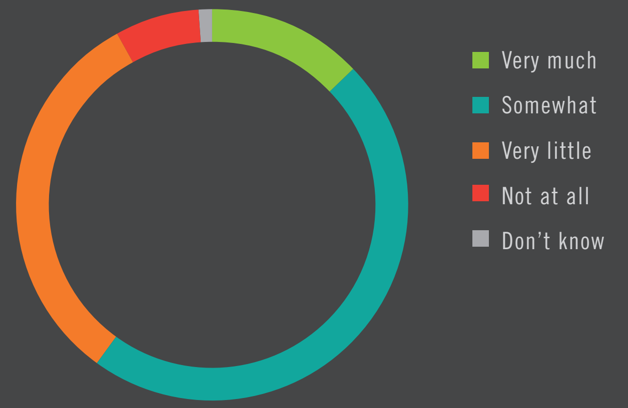
SAFETY & CRIMINAL JUSTICE

Key Takeaway: The safety of a region is critical. Both a real and perceived sense of security in homes, businesses, institutions and public space is fundamental to personal well-being. Residents in our joint metro region feel safe, and the region continues to experience reductions in overall crime rates.

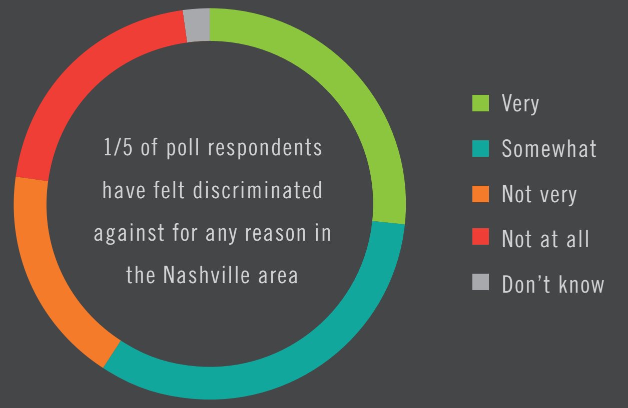
1 Although the Nashville MSA has experienced a reduction in crime over the last several years, the region compares unfavorably to peers with regard to violent crime. Only Indianapolis and Memphis have more reports of violent crime per 100,000 inhabitants. With regard to property crime, the region fares much better. Nashville leads all but two peers – Raleigh and Clarksville – on that measure. The Clarksville MSA performs well on both of these measures compared to peers.

2 The Nashville region ranks 35th out of 50 MSAs for police force density.

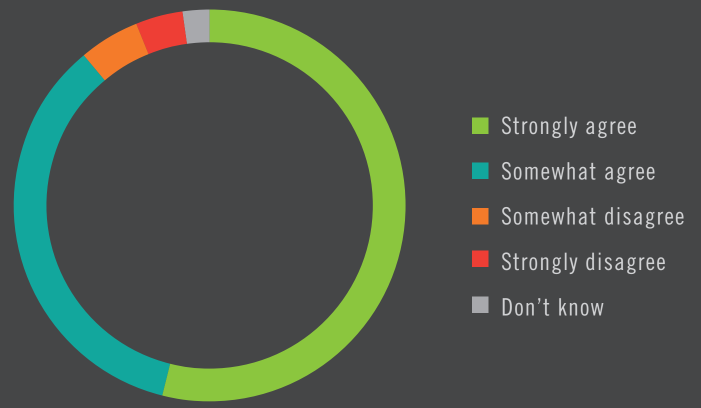
Poll results: How much do you feel you are a part of the cultural life of your community?



How aware are you personally of discrimination occurring in the workplace, or in other places you come in contact with, for any reason?

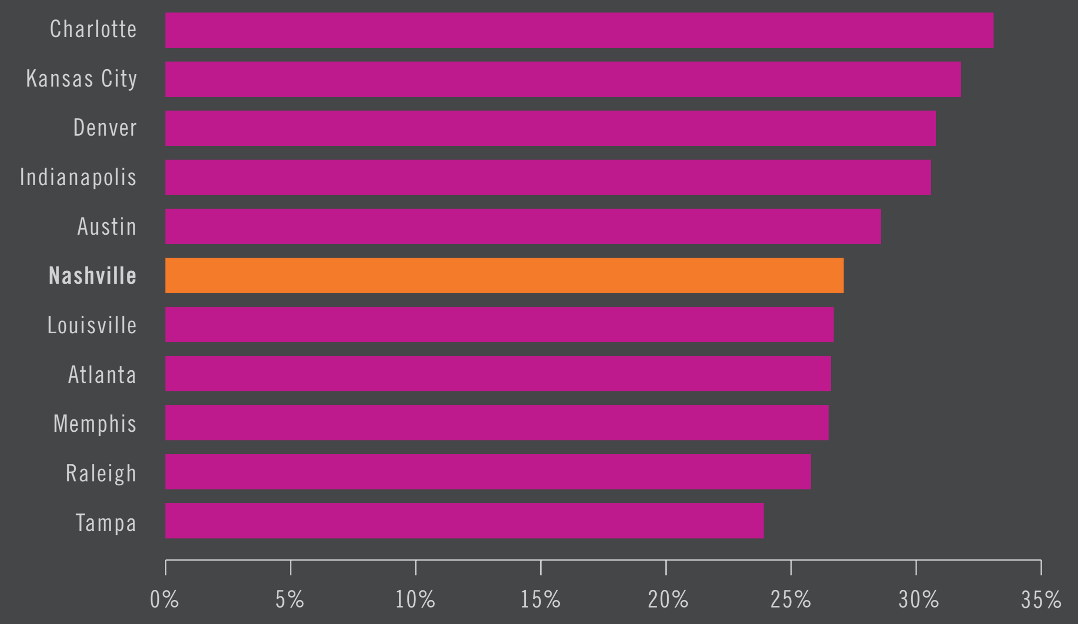


The Nashville region is a vibrant, lively and appealing place to live.



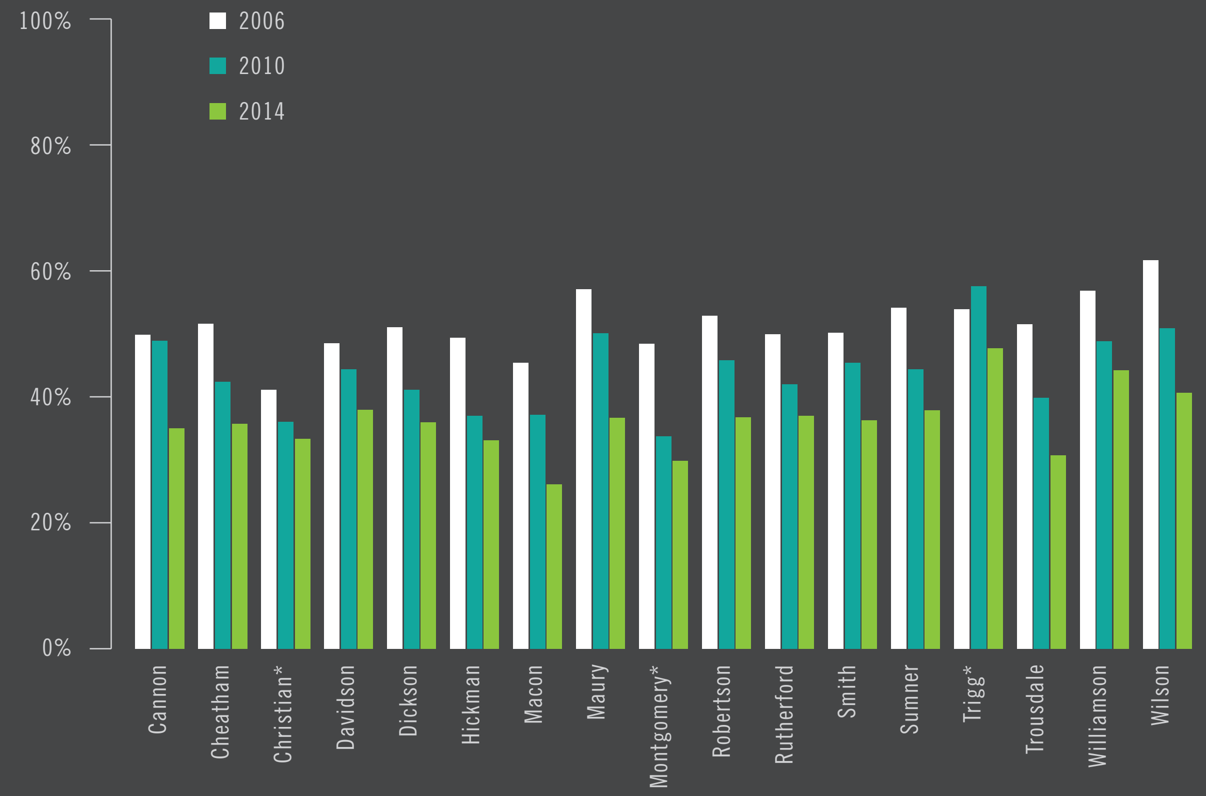
1 **Volunteer Rate by MSA**

Source: Corporation for National and Community Service, 2013



2 **Voter Turnout by County**

Source: Tennessee Secretary of State Department, Kentucky State Board of Elections



3 **Moody's Bond Rating (most recent tax backed rating)**

Source: Moody's 2010-2015

Williamson County, TN	Aaa
Rutherford County, TN	Aa1
Davidson County, TN	Aa2
Maury County, TN	Aa2
Montgomery County, TN	Aa2
Sumner County, TN	Aa2
Wilson County, TN	Aa2
Cheatham County, TN	Aa3
Christian County, KY	Aa3
Dickson County*, TN	Aa3
Robertson County, TN	Aa3
Cannon County, TN	A2

**City data; Hickman, Macon, Smith, Trigg and Trousdale county data not available*

The Middle Tennessee Mayors' Caucus is a 40-member organization representing 10 counties. The Caucus is a voluntary forum that provides an opportunity for mayors and county executives to build stronger relationship between communities and to brainstorm solutions to challenges facing a rapidly growing region. The Caucus adopts a legislative agenda each year to help inform the Middle Tennessee legislative delegation.

Number of multi-county governing boards enabled by state or federal law: 5

COMMUNITY ENGAGEMENT & REGIONAL LEADERSHIP

Key Takeaway: The active engagement of residents in the civic life of our communities, and the extent to which regional leaders collaborate to address important issues facing our rapidly changing region, are critical to Middle Tennessee's continued prosperity. While collaboration has increased in recent years and the vast majority of our residents view the region as a vibrant, lively and appealing place to live, more than half of residents are aware of discrimination occurring in the community and fewer people are engaged in the civic life of the region.

1 Despite being in the Volunteer State, the Nashville region falls in the middle of the pack with regard to the percentage of residents who volunteer. Twenty-seven percent of our residents volunteer.

2 Between 2006 and 2014, voter turnout throughout the joint Nashville-Clarksville region has decreased by an average of 30 percent. This means that in each of the last three midterm elections, there have been fewer people deciding which elected officials represent us.

3 The majority of counties in the region are judged to be of high quality and subject to low credit risk.

2015-2016 Vital Signs Action Team

Chris Holmes, FirstBank, chair

Kolin Holladay, Adams and Reese, vice chair

Sara Butler, Goodwyn, Mills and Cawood

Chuck Byrge, Harpeth Capital LLC

Ron Corbin, RBBC Holdings

Lucia Folk, CMT

Beth Fortune, Vanderbilt University

LeShane Greenhill, Sagents

Joe Harkins, Wheelhouse Marketing Advisors

Joey Hatch, Skanska

John Herzog, Butler Snow LLP

MaryAnne Howland, Ibis Communications

Kristen Keely-Dinger, Baptist Healing Trust

Lauren Lane, Habitat for Humanity

Dr. Randy Lowry, Lipscomb University

Scott Perry, The Memorial Foundation

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About the Research Center

Led by Dr. Garrett Harper, the Research Center provides each client with hands-on research rooted in a data-driven approach that has been nationally recognized. The Research Center's work has appeared in *The Wall Street Journal, TIME magazine, Billboard* magazine and *The Atlantic*, among others. The one-on-one interviews, focus groups and surveys of stakeholders and industry leaders elicit a full understanding of the context behind the numbers and trends. Regardless of the scope of your project, the Nashville Area Chamber of Commerce's Research Center is equipped to deliver the data you need to feel confident in your results.

Dr. Garrett Harper serves as vice president of research and information services for the Chamber's Research Center, a position he has held since 1990. He has also served as research director for the Nashville Convention and Visitors Corporation and for Heartland Alliance in Chicago, Ill. Harper, a certified community researcher, is past president of the American Chamber of Commerce Researchers Association. 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, business research, regional science, quality-of-life studies, market research, and economic and international development. Harper serves as an adjunct professor at Middle Tennessee State University, Trevecca Nazarene University, Cumberland University, Columbia State Community College and Volunteer State Community College. He holds B.A., M.B.A., M.P.H., M.T.S., J.D. and Ph.D. degrees, a certificate in geographic information systems, and is completing an M.S.

Chris Cotton serves as research analyst for the Research Center. He oversees demographic, economic and business research for the Nashville region, and has developed research materials for numerous regional studies and events. Cotton has authored work for the Journal of Applied Research in Economic Development and is also an active member in the Council for Community and Economic Research. He is a graduate of Belmont University with concentrations in entrepreneurship and finance.

Chris Zimmer serves as research coordinator for the Research Center. In this role, he compiles demographic and economic data for a variety of studies on business, economics and government. He is a graduate of Belmont University with a degree in business administration and marketing.

Riley Scholer serves as research assistant for the Research Center. In this role, he compiles demographic and economic data for a variety of studies on business, economics and government. He is currently pursuing a degree in public policy studies at Vanderbilt University.

Regional Survey Methodology

A telephone survey of 750 randomly selected adult residents in the 17 counties that make up the Nashville Metropolitan Statistical Area and Clarksville Metropolitan Statistical Area was conducted July 20-Aug. 6, 2015, by Davis Research of Calabasas, Calif. The survey was written by the Nashville Area Chamber of Commerce, and has an error rate of plus or minus 3.58 percent for the total sample, with at least 50 percent cell phone responses.

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