METRO COMPARISON 2019

TOP 100 METRO AREAS

RALEIGH #1

AUSTIN #2

SEATTLE #3

ATLANTA #10

SAN FRANCISCO #8

NASHVILLE #6

BOSTON #13
The metro comparisons analysis is an independent study commissioned by Wake County Economic Development that contrasts the Raleigh metro with the top 100 largest metros around the United States. A database of more than 232 comparative metrics was analyzed covering the areas of cost, talent, demographics, innovation, and economic diversity.

The Raleigh metro is home to a diverse population of both industry and people, has a strong business climate, a workforce of highly educated professionals, and a quality of life that is hard to beat. The strength of the Raleigh metro lies within the data presented in this metro comparison as the **Raleigh metro tops the rankings as the most competitive metro in the U.S.**

The study revealed that, although the Raleigh metro is smaller than some of its competitors, it consistently outperforms and outpaces other larger communities in many of the metrics used in the study. A series of five indexes were created to aggregate the indicators and highlight key business growth and site selection decision factors.

**Five indexes revealed the region’s strengths as a leading metro:**

- Talent
- Cost of Doing Business
- Global Engagement
- Momentum
- Future

**Overall Index Rating**

- Raleigh, NC – 1
- Austin, TX – 2
- Nashville, TN – 6
- San Francisco, CA – 8
- Atlanta, GA – 10
- Boston, MA – 13
The selected metros were chosen based on regions the Raleigh metro typically competes with for the best businesses and top talent.
One of the biggest competitive advantages for the Raleigh metro is talent. The availability of skilled labor continues to be a top priority for both existing companies and those considering the region for relocation or expansion. Nearly fifty percent of all residents have a bachelor’s degree or higher, making the Raleigh metro one of the most educated metros in the U.S. The Research Triangle region has more than 163,000 students enrolled in a four-year institution with more than 42,000 graduates entering the workforce each year with a bachelor’s degree or higher.

**Overall Index Rating**

- Raleigh, NC – 1
- Austin, TX – 3
- San Francisco, CA – 8
- Atlanta, GA – 10
- Nashville, TN – 17
- Boston, MA – 21

**SUMMARY**

Raleigh’s thriving workforce and tech market are fueled by several components: innovative startups spinning out of the region’s many incubators, corporate headquarters and technology centers, the largest research park in North America, partnerships originating in the area’s three tier-one research universities and access to the largest community college in the North Carolina, Wake Tech Community College. These factors are also attracting highly skilled and educated talent to the Raleigh metro. The talent pipeline will continue to fuel the growth and development of the Raleigh metro. Over the next 10 years, the Raleigh metro is projected to grow by 24 percent.
NO. 1 STATE FOR WOMEN IN TECH
NORTH CAROLINA | NC TECH | 2019

NO. 2 BEST CITY FOR YOUNG PROFESSIONALS
RALEIGH, NC | SMARTASSET | 2018

NO. 2 BEST PLACE TO LIVE IN AMERICA
RALEIGH, NC | MONEY MAGAZINE | 2018

NO. 2 INCREASE IN MILLENNIAL TECH TALENT*
RALEIGH-DURHAM, NC | CBRE | 2018

NO. 3 BEST QUALITY OF LIFE IN THE WORLD
RALEIGH, NC | NUMBE.O.COM | 2019

#4 LOCATION WHERE THE JOBS WILL BE IN 2019 (RALEIGH, NC)
FORBES | 2018

68% OF NEW RESIDENTS TO THE RALEIGH METRO HAVE A BACHELOR’S DEGREE OR HIGHER
(MORE THAN DOUBLE THE NATIONAL AVERAGE)

COST OF LIVING INDEX

<table>
<thead>
<tr>
<th>City</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raleigh, NC</td>
<td>95.1</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>99.8</td>
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<tr>
<td>Nashville, TN</td>
<td>101.3</td>
</tr>
<tr>
<td>Atlanta, GA</td>
<td>102.2</td>
</tr>
<tr>
<td>Boston, MA</td>
<td>152.6</td>
</tr>
<tr>
<td>San Francisco, CA</td>
<td>197.0</td>
</tr>
</tbody>
</table>

Supporting Summary: The Cost of Living index measures price level for consumer goods and services. The average for all metro/non metro areas equals 100 percent. If a metro’s index is below 100, then the metros cost of living is below the national average.

*Based on growth between 2011 and 2016.
PROJECTED POPULATION GROWTH (2016 - 2046)

- Raleigh, NC: 70.7%
- Austin, TX: 11.0%
- Boston, MA: 48.7%
- Atlanta, GA: 40.5%
- Nashville, TN: 19.4%
- San Francisco, CA

PERCENT OF POPULATION BORN IN A DIFFERENT STATE

- Raleigh, NC: 39.7%
- Atlanta, GA: 37.5%
- Nashville, TN: 36.7%
- Austin, TX: 28.3%
- Boston, MA: 23.3%
- San Francisco: 19.1%
### POPULATION OVER AGE 25 WITH POSTSECONDARY EDUCATION

<table>
<thead>
<tr>
<th>City</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raleigh, NC</td>
<td>72.5%</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>70.0%</td>
</tr>
<tr>
<td>Boston, MA</td>
<td>68.5%</td>
</tr>
<tr>
<td>Atlanta, GA</td>
<td>64.5%</td>
</tr>
<tr>
<td>Nashville, TN</td>
<td>61.6%</td>
</tr>
<tr>
<td>San Francisco, CA</td>
<td>72.6%</td>
</tr>
</tbody>
</table>

### POPULATION OVER AGE 25 WITH BACHELOR’S DEGREE AND/OR ADVANCED DEGREE

<table>
<thead>
<tr>
<th>City</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raleigh, NC</td>
<td>45.2%</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>42.9%</td>
</tr>
<tr>
<td>Boston, MA</td>
<td>46.4%</td>
</tr>
<tr>
<td>Atlanta, GA</td>
<td>37.0%</td>
</tr>
<tr>
<td>Nashville, TN</td>
<td>34.0%</td>
</tr>
<tr>
<td>San Francisco, CA</td>
<td>47.4%</td>
</tr>
</tbody>
</table>

### GROWTH IN STEM COMPLETIONS

- **48.1%** Boston, MA
- **40.3%** Raleigh, NC
- **35.0%** Atlanta, GA
- **43.6%** San Francisco, CA
- **37.5%** Austin, TX
- **5.5%** Nashville, TN
COST OF DOING BUSINESS

This index examines many cost factors including cost of doing business, legal and regulatory environment, and tax climate. A company’s decision to grow or locate in a community relies heavily on the business environment and the general cost of doing business.

**Overall Index Rating**

- **Raleigh, NC** – 1
- **Austin, TX** – 3
- **Nashville, TN** – 17
- **Atlanta, GA** – 36
- **Boston, MA** – 79
- **San Francisco, CA** – 93

**SUMMARY**

The Raleigh metro is a stable place to do business, with low costs, a low-tax structure, and pro-business regulatory environment. Construction costs, electric rates, overall taxes, and our cost of living are all below the national average. The Raleigh metro business costs fall five percent below the national average. Additionally, North Carolina has secured a AAA bond rating for the last 50 years, making it one of only 10 states to earn this rating. North Carolina also holds the third lowest corporate income tax in the U.S. at 2.5 percent.

Raleigh metro’s competitive business climate has helped attract employers looking to relocate their operations away from rising costs in other major metros and has helped existing companies grow and thrive. While costs are ever-rising in tech hotspots like Silicon Valley, talent continues to move to new growth markets like the Raleigh metro, which can support lifestyles for a much lower cost. In fact, the Raleigh metro was just recognized by Quartz at Work as the only tech hub with a cost of living below the national average.
NO. 2 BEST U.S. METRO FOR BUSINESS AND CAREERS
RALEIGH, NC  |  FORBES  |  2018

NO. 1 BEST STATE FOR BUSINESS
NORTH CAROLINA  |  FORBES  |  2018

NO. 2 LOWEST STATE & LOCAL TAX BURDEN
NORTH CAROLINA  |  ERNST & YOUNG  |  2018

SQUARE FOOT COST 40K SF OFFICE BUILDING CONSTRUCTION

<table>
<thead>
<tr>
<th>City</th>
<th>Cost</th>
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<tbody>
<tr>
<td>Raleigh, NC</td>
<td>$70.35</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>$74.23</td>
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<tr>
<td>Nashville, TN</td>
<td>$81.40</td>
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<tr>
<td>Atlanta, GA</td>
<td>$84.12</td>
</tr>
<tr>
<td>San Francisco, CA</td>
<td>$115.61</td>
</tr>
<tr>
<td>Boston, MA</td>
<td>$118.08</td>
</tr>
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</table>

COST OF DOING BUSINESS RANKING

<table>
<thead>
<tr>
<th>City</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raleigh, NC</td>
<td>1st</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>6th</td>
</tr>
<tr>
<td>Nashville, TN</td>
<td>35th</td>
</tr>
<tr>
<td>Atlanta, GA</td>
<td>39th</td>
</tr>
<tr>
<td>San Francisco, CA</td>
<td>86th</td>
</tr>
<tr>
<td>Boston, MA</td>
<td>98th</td>
</tr>
</tbody>
</table>
SUMMARY

Foreign direct investment in the region is critical to growth, diversity in the workforce, global reach, and the creation of a more dynamic economy. The Raleigh metro has benefited tremendously with the growth of international activity and investment. The Raleigh metro has invested time in creating an environment capable of supporting foreign companies and has several strategic initiatives aimed at bringing foreign direct investment to the metro area. Companies, such as China-based Lenovo, and Japan-based Ajinomoto, have found long-term success in the Triangle, as have other newer companies, including Infosys, and Credit Suisse. The Raleigh metro offers a unique foundation for foreign-born residents and foreign-owned companies. The region has three tier-one research universities, access to a variety of industries, close proximity to the metros along the east coast, and an international airport with flights to London, Paris, Toronto, and Cancun, plus more than 62 nonstop flights to various destinations. Additionally, the region hosts just over 12,000 international students who are living in the area to take advantage of the higher education and variety of industry sectors.

GLOBAL ENGAGEMENT

With more than 700 international companies, the Raleigh metro and the Research Triangle region offer a strong foundation for global companies to grow and thrive. Foreign investment in the region yields not only new jobs and investment but also introduces a new culture, practices, and customs. The global engagement index measures a region’s ability to attract foreign direct investment, engage in international trade, and appeal to highly skilled foreign-born talent.

Overall Index Rating

San Francisco, CA - 1
Boston, MA - 4
Nashville, TN - 24
Raleigh, NC - 25
Atlanta, GA - 31
Austin, TX - 32
### DIVERSITY & INCLUSIVITY

- **#6 MOST INCLUSIVE METRO IN THE U.S.**
  Raleigh, NC | Brookings Institute | 2019

- **#6 STATE FOR FOREIGN DIRECT INVESTMENT**
  North Carolina | Business Facilities | 2018

Wake County is growing at a rate of 64 people per day (43 move here, 21 are born here). Of those 43 people moving here, 11 are coming from international locations.

### TOTAL EXPORT SUPPORTED JOBS AS PERCENT OF TOTAL JOBS

- Raleigh, NC: 8.2% (8.1% in Boston, MA)
- Austin, TX: 7.5%
- Nashville, TN: 7.5%
- San Francisco, CA: 13.8%
- Boston, MA: 12.1%

### GROWTH IN TOTAL EXPORT SUPPORTED JOBS

- Raleigh, NC: 83.1%
- Austin, TX: 46.3%
- Boston, MA: 43.5%
- Atlanta, GA: 59.6%
- Nashville, TN: 63.6%
- San Francisco, CA: 87.4%
The Momentum Index measures current economic activity and includes common factors such as population, gross metropolitan product, wages, and productivity. The Raleigh metro is experiencing an ascending trajectory fueled by innovative talent and companies. Wake County and the Raleigh metro are rapidly growing (64 people per day) and attracting highly skilled talent and companies from around the world.

**Overall Index Rating**

- Austin, TX – 2
- San Francisco, CA – 3
- **Raleigh, NC – 9**
- Nashville, TN – 18
- Atlanta, GA – 26
- Boston, MA – 29

**SUMMARY**

Raleigh has seen consistent in-migration contribute to the population, with an increase of 12 percent from 2011-2016. The region and Raleigh have experienced strong job and wage growth and the momentum remains strong. The population in Raleigh is expected to grow 71 percent over the next 30 years, which signals a major transformation for the region. Not only is the region expected to grow but has grown 132 percent since 1990. Raleigh is poised for growth and is actively preparing for an influx of people, companies, and a changing economy. By pursuing critical needs of the region, such as mass transit, research and development, innovation, diversifying industry, and preserving greenspace, the Raleigh metro will continue to grow in a smart and sustainable way.
NO. 3 BIGGEST BOOMTOWNS IN AMERICA
RALEIGH, NC | MAGNIFY MONEY | 2018

NO. 3 STATE WHERE AMERICA IS MOVING
NORTH CAROLINA | ATLAS’ VAN LINES | 2019

NO. 4 HIGHEST MIGRATION INCREASE IN THE U.S.*
NORTH CAROLINA | AMERICAN CITY BUSINESS JOURNLNS | 2018

POPULATION CHANGE (2013 - 2018)

- Raleigh, NC: 12.3%
- Austin, TX: 15.1%
- Boston, MA: 3.7%
- Atlanta, GA: 8.0%
- Nashville, TN: -0.6%
- San Francisco, CA: 3.9%

PROJECTED ANNUAL AVERAGE GDP GROWTH RATE (2015 - 2021)

- Raleigh, NC: 3.8%
- Austin, TX: 3.8%
- Boston, MA: 2.1%
- Atlanta, GA: 2.7%
- Nashville, TN: 2.9%
- San Francisco, CA: 2.8%


- Raleigh, NC: 19.2%
- Austin, TX: 30.4%
- Boston, MA: 10.7%
- Atlanta, GA: 22.1%
- Nashville, TN: 16.4%
- San Francisco, CA: 16.4%

*Measured between 2015 and 2016.
The region’s economy and viability largely depend on the strength of the business ecosystem and the diversity of industries. The Raleigh metro is twice as concentrated in high-tech industries as the U.S. average. Across the region, universities, businesses, and government entities are known for relying on the skills of the Raleigh metro’s high-performing students and world-leading researchers to support new inventions and solve complex problems. Strong infrastructure and transportation also will fuel the success of the region and with funded investments in transportation, our region will remain ranked as having some of the lowest traffic congestion of any major metro in the U.S. The competitive advantages the Raleigh metro has will boost this region to remain economically viable and prosperous for years to come.
NO. 1 BEST CITY TO DRIVE IN THE US
RALEIGH, NC | TFLCAR.COM | 2019

NO. 2 OF AMERICA’S MOST DIGITALLY INCLUSIVE TECH CITIES
RALEIGH, NC | BROOKINGS INSTITUTION | NOVEMBER 2018

NO. 8 LEADING TECH HUB IN 2019 IN AMERICA
RALEIGH, NC | INDEED | APRIL 2019

HIGHER EDUCATION R&D IN SCIENCE & ENGINEERING FIELDS AS A PERCENTAGE OF GDP

- Raleigh, NC: 0.55%
- Austin, TX: 0.32%
- Boston, MA: 0.67%
- Atlanta, GA: 0.39%
- Nashville, TN: 0.32%
- San Francisco, CA: 0.32%

1st UNIVERSITY-BASED IBM Q-HUB IN NORTH AMERICA
NCSU/RALEIGH, NC | CAMPUS TECHNOLOGY | 2019

NO. 2 STATE FOR INSTALLED SOLAR POWER CAPACITY
NORTH CAROLINA | BUSINESS FACILITIES | 2018

NO. 4 FASTEST CITY FOR INTERNET SPEEDS IN THE U.S.
RALEIGH, NC | OOKLA | 2018
PERCENTAGE OF ROADS IN POOR CONDITION

<table>
<thead>
<tr>
<th>Location</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raleigh, NC</td>
<td>10%</td>
</tr>
<tr>
<td>Nashville, TN</td>
<td>8%</td>
</tr>
<tr>
<td>Atlanta, GA</td>
<td>8%</td>
</tr>
<tr>
<td>Boston, MA</td>
<td>14%</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>16%</td>
</tr>
<tr>
<td>San Francisco, CA</td>
<td>71%</td>
</tr>
</tbody>
</table>

RANKING OF MILKEN HIGH TECH INDUSTRIES WITH LQ >=1

<table>
<thead>
<tr>
<th>Location</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raleigh, NC</td>
<td>4th</td>
</tr>
<tr>
<td>San Francisco, CA</td>
<td>10th</td>
</tr>
<tr>
<td>Austin, TX</td>
<td>18th</td>
</tr>
<tr>
<td>Atlanta, GA</td>
<td>33rd</td>
</tr>
<tr>
<td>Boston, MA</td>
<td>33rd</td>
</tr>
<tr>
<td>Nashville, TN</td>
<td>48th</td>
</tr>
</tbody>
</table>

Supporting Summary: Raleigh metro had the 4th highest LQ of any metro studied.

Location quotient (LQ) is a valuable way of quantifying how concentrated a particular industry, cluster, occupation, or demographic group is in a region as compared to the nation. It can reveal what makes a particular region “unique” in comparison to the national average.
OVERALL

Overall Index Rating

Raleigh, NC - 1
Austin, TX - 2
Nashville, TN - 6
San Francisco, CA - 8
Atlanta, GA - 10
Boston, MA - 13
Conclusions

This comparison revealed that, despite powerful competition (100 other metros), the Raleigh metro is the best performing metro in the U.S. and continues to remain one of the top places for business and careers according to a recent Forbes article. The Raleigh metro sets the bar for how a region can adjust and adapt to changes in the economy and experience incredible regional growth and economic success. Based on the comparison, the following key takeaways confirm the competitive placement:

• **Raleigh Metro is the #1 Best Performing Metro in the U.S.** – To be the best performing metro in the U.S. says a lot about the many competitive advantages to living and working in the Raleigh metro. Instead of one core focus, the Raleigh metro remains a vibrant and attractive location for high caliber talent and companies, has a strong foundation of legacy companies, three tier one research universities, diverse industry, and a high quality of life.

• **#1 Metro in Talent Index** – One of the key differentiators for the Raleigh metro is the access and abundance of highly educated and skilled talent. Nearly 50 percent of the existing population in the Raleigh metro has a bachelor’s degree or higher and 68 percent of new residents have a bachelors degree or higher... That is more than double the national average!

• **#1 Metro in Cost of Doing Business Index** – The Raleigh metro’s low cost of doing business has helped existing companies thrive and has also attracted new companies to the market. With a low cost of doing business (5% below the national average), companies see this as a huge advantage when relocating or expanding their business.

• **#1 Metro in Future Index** – Planning for smart growth continues to be a focus for the Raleigh metro. With a diverse industry base and a high concentration of fast growing companies, the Raleigh metro is focused on economic mobility and preparing for advances in transit, infrastructure, and development.

As the best performing metro in the U.S., the momentum of the Raleigh metro shows no signs of slowing down. The metro continues to grow by 64 people per day, with 43 moving to the area and 21 being born. Experts predict that in the next 10 years, the Raleigh metro is projected to grow by 24 percent. The future of the Raleigh metro is certainly bright but perhaps the best way to describe the momentum is quote from David Morken, CEO of a Raleigh-based tech company, Bandwidth, **“Raleigh is entering the next chapter and I can’t wait to see where it goes.”**