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WHERE DOES GREATER OMAHA STAND?

During times of turmoil, we're reminded how important it is to have a strong foundation. We can be rocked by everything from disease to natural disaster, but as long as that foundation is solid, we know we can withstand, regroup and regain our forward momentum.

Last year, before the coronavirus upended lives and the local, national and global economies, UNL

economist Dr. Eric Thompson gathered data for our 2020 Barometer. This annual benchmark offers all of us valuable insight into how we, as one Greater Omaha region, compare to nine other high-performing metros in terms of overall economic performance and eight sub-categories, including job growth, entrepreneurship, cost of doing business and quality of life. By examining the changes over time, the 2020 Barometer helps us strengthen our advantages and uncover opportunities for further growth.

Now, as we deal with the fallout of COVID-19, the Barometer reminds us that our economic underpinnings are sturdy and will only speed our local recovery. We have strong advantages in entrepreneurship, business costs and quality of life. Year after year, our cost of living and energy costs fall well below the national average. Our arts and culture scene is a true community asset; our air is clean and we best all nine aspirational cities in commute times and healthcare access.

It's not all rosy though. The truth is our forward progress continues to be outpaced. While we perform competitively against the Barometer's nine comparative cities, Greater Omaha ranked 6th overall in the 2020 Barometer, down from 5th in 2019. Opportunities for growth are most pronounced in the areas of human capital, aspects of growth and innovation. We need to sustain and accelerate improvement to move up the rankings and keep from falling further behind Nashville, Salt Lake City, Austin and Raleigh.

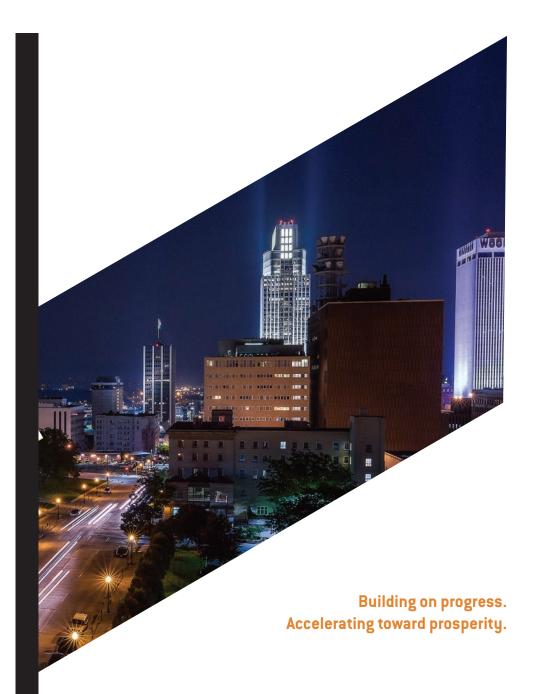
Don't take that as a cause for discouragement; but, instead, as a call to action. This is our chance to acknowledge our opportunities and be the generation that stands together to address them — even and especially during this time of heightened uncertainty. We have the strong foundation. It would be an absolute shame not to roll up our sleeves, mobilize each other's strengths, and build on it.

Regards

David G. Brown

President and CEO, Greater Omaha Chamber

and S. Grow



COMPARISON CITIES

Each comparison city in the 2020 Barometer was chosen for specific reasons outlined below:

PEERS

▶ Salt Lake City, UT

SLC has a metropolitan area population of 1.2 million people. While the landscape of the region is very different than ours, we have aspects in common, including proximity to an air force base that serves as one of the state's largest employers. The SLC region is a center for health care in Utah, and a national hub for innovation and entrepreneurship in the technology industry.

Louisville, KY

This region of 1.3 million people crosses state lines into Indiana and is home to several post-secondary institutions, including University of Louisville and several smaller, private four-year colleges. Located 40 miles northeast of Fort Knox, Louisville, like Omaha, has a strong military presence. It is the cultural and health care center for Kentucky and boasts a large transportation industry. Louisville is located 100 miles southwest of Cincinnati, a much larger city with professional baseball and football teams—similar to Omaha's relationship with Kansas City.

Colorado Springs, CO

With a metropolitan population of more than 700,000, Colorado Springs is smaller than Omaha. Colorado Springs boasts two major military installations — Peterson Air Force Base and Colorado Springs Army Air Base. Major industries include professional, scientific and technical services, as well as health care.

COMPETITORS

Des Moines, IA

A fellow Midwestern city, Des Moines' major industries are finance and insurance, health care and social assistance. Its metropolitan population comes in at more than 600,000, and much like 0maha, it sits at the intersection of two major interstates: I-80 and I-35. Des Moines' low cost of living and affordable wages make it attractive to potential businesses.

▶ Kansas City, MO

This region's population of 2.1 million famously straddles two states, just like Omaha. Kansas City is known as a hub for financial services and as an entrepreneurial and startup community. KC's population is well-educated: 37 percent of those 25 and older hold a bachelor's degree or higher.

▶ Oklahoma City, OK

With a population of 1.4 million, the Oklahoma City region boasts two medical schools and several major institutions. Like Omaha, OKC is a health care center for its state and a national hub for the energy industry. Tinker Air Force Base is a major asset to the region.

ASPIRATIONAL CITIES

Austin, TX

Austin has been overshadowed by Dallas and Houston for much of its history, but in the past 30 years, the city has come into its own. With its population of more than 2.1 million, Austin is home to a thriving creative class of entrepreneurs, innovators and musicians, as well as higher education institutions, including Texas State University and the Big 12 powerhouse of University of Texas at Austin.

▶ Raleigh, NC

Raleigh, with a population of 1.3 million, is positioned inside the research triangle where University of North Carolina at Chapel Hill, North Carolina State University, Duke University and three medical schools reside. Raleigh is a hotbed of high-tech activity and innovation, specifically in the areas of information technology and biotechnology.

Nashville, TN

Nashville is known as the cradle of the country music industry, but it's also seen major economic development over the past four decades. Nearly 1.9 million people reside in the region's 13 counties, which are the engine to its thriving entertainment scene, advanced manufacturing industry and higher education systems, including Middle Tennessee State University and Vanderbilt.

2020 RESULTS

The 2020 Barometer compares the economic performance and characteristics of Greater Omaha with nine other metros to reveal strengths and opportunities for growth. Greater Omaha continues to perform competitively when compared with these high-performing metros and has a strong advantage in entrepreneurship, business costs, growth trends and quality of life. While we have made strides, our forward progress continues to be outpaced, when measured relative to the Barometer's nine aspirational cities.

Drops to an overall rank of 6th with a score of 104

- Greater Omaha continues to be ahead of the U.S. average
 - 4% above the U.S. for the overall index
- Ranks ahead of two competitors & two peer cities
- Lags behind all three aspirational cities, one competitor city, & one peer city



135

2020 Index Ranks



GROWTH



HUMAN CAPTIAL



QUALITY OF LIFE



ENTREPRENEURSHIP



INNOVATION





BUSINESS COST



PRIVATE CAPITAL

- Ranks high in Business Costs (3rd) & Entrepreneurship (3rd)
- Growth: Dropped from 6th to 7th as growth has slowed
- > Lack of workers and struggles in Nebraska's agricultural sector have contributed to this trend
- Human Capital: Maintained ranking of 8th, but index value continues to rise
- > 4% above the U.S. average
- · Sustains rankings on all other indexes: Quality of Life, Innovation, Infrastructure, and Private Capital

FIVE-YEAR RESULTS

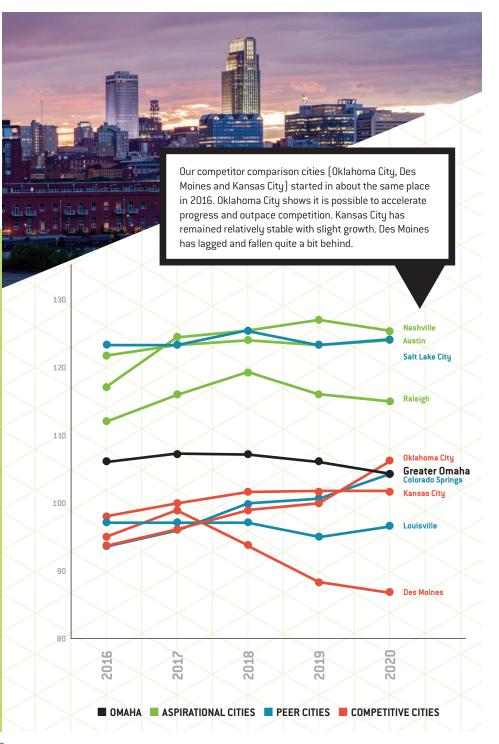
Driving transformation. Striving for prosperity.

The Barometer shows our progress and evolution over the past five years. Have we accelerated economic growth compared to other thriving, successful cities, or maintained our current momentum? By examining the changes over time, the 2020 Barometer helps us strengthen our advantages and uncover opportunities for further growth.

Results: 2016-2020

- Dropped from 5th to 6th
 - > This does not mean our progress has stagnated. We are 4% higher than the national average. However, we compare ourselves against thriving cities who have continued to advance faster than us.
- Forward progress outpaced by highperforming comparison metros
 - > We continue to fall further behind Nashville, Salt Lake City, Austin, and Raleigh. Greater Omaha has potential to capture its rank of 5th back from Oklahoma City in the coming years, but also has the potential to fall behind either Kansas City or Colorado Springs.
 - > We need to sustain and accelerate improvement to move up the rankings.

- Building on strengths
 - > Entrepreneurship: Maintained ranking of 3rd. This is still an area of strength for us, but we need to vigilantly cultivate our entrepreneurs
- Capitalizing on opportunities for growth
- > Private Capital: Sustained 5th ranking
- > Human Capital: Lagging in college graduates and knowledge-based workers

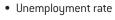


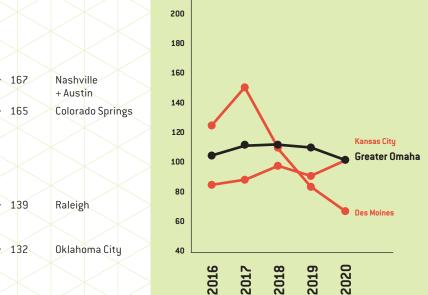


Solid economic growth supports the performance of labor and property markets and ensures opportunity for locally-oriented businesses. It feeds prosperity and improves the likelihood that workers will stay employed and advance in their careers. Indicators of growth are the first and, perhaps, most interesting barometer for a metropolitan economy.

Indicators of growth include:

- Real GDP by Metropolitan Area
- Total employment growth
- Private wage growth
- Private wages per job





119 Salt Lake City

200

- 100 US Greater Omaha
 - + Kansas City

Louisville

72

69 Des Moines

Ranked 7th, dropping from a rank of 6th last year.

■ OMAHA ■ ASPIRATIONAL CITIES

■ PEER CITIES ■ COMPETITIVE CITIES

- In 2016, Greater Omaha had an index value slightly above the national average. Now, we are at the national average, with a value of 100.
- Growth has also improved in KC while declining in Des Moines.

While Greater Omaha has maintained strong wage growth, wage growth has started to improve in other parts of the country.



Total Employment

Source: Current Employment Statistics, Bureau of Labor Statistics, 2016-2019 (accessed Mar. 2020)

1	AUSTIN25
2	NASHVILLE226
3	RALEIGH184
4	SALT LAKE CITY175
5	COLORADO SPRINGS 163
6	OKLAHOMA CITY 102
7	DES MOINES88
8	KANSAS CITY 60
9	LOUISVILLE 55
.0	GREATER OMAHA 43

Total employment growth captures the expansion of private sector and government job opportunities.

Greater Omaha employment grew by a cumulative 1.9% between 2016 and 2019. Growth in comparison metropolitan areas was even faster, so Greater Omaha sustained its 10th ranking.

Unemployment Rate

Source: Local Area Unemployment Statistics program, Bureau of Labor Statistics, 2019 (accessed Mar. 2020)

1	DES MOINES 67
2	SALT LAKE CITY70
3	NASHVILLE70
4	AUSTIN 72
5	GREATER OMAHA
6	OKLAHOMA CITY82
7	KANSAS CITY
8	COLORADO SPRINGS 91
9	RALEIGH94
10	LOUISVILLE102

The unemployment rate typically rises during an economic recession and falls after the economy begins to recover. A low unemployment rate suggests an economy has experienced consistent growth.

Greater Omaha's average unemployment rate in 2019 was 3.0%.

Private Wages

Source: Current Employment Statistics, Bureau of Labor Statistics, 2016-2019 (accessed Mar. 2020)

1	COLORADO SPRINGS 192
2	NASHVILLE 185
3	OKLAHOMA CITY 167
4	AUSTIN 152
5	RALEIGH130
6	KANSAS CITY
7	GREATER OMAHA111
8	SALT LAKE CITY99
9	LOUISVILLE68
10	DES MOINES55

Growth in private wages provides a more comprehensive measure of economic growth. This category reflects both the increase in hourly wages and hours worked per week, as well as change in the level of private employment. Thus, the measure reflects earning power and the number of jobs created.

Omaha ranks 7th for growth in private wages. From 2016-2019, private wages per job increased 14.0% in Greater Omaha.

Private Wages per Job

Source: Current Employment Statistics, Bureau of Labor Statistics, 2016-2019 (accessed Mar. 2020)

COLORADO SPRINGS 217
OKLAHOMA CITY 197
NASHVILLE 158
GREATER OMAHA 152
KANSAS CITY
RALEIGH100
AUSTIN 89
LOUISVILLE 71
SALT LAKE CITY 61
DES MOINES 43

Growth in private wages per job reflects improvement in the standard of living. Wages per job typically rise over time with inflation (and as the standard of living improves), but can fall when the economy creates new jobs with wages lower than existing jobs.

Greater Omaha's rank has improved from 7th six years back to 4th. From 2016-2019, private wages per job increased 14.0%.

Real GDP by Metro

Source: U.S. Economic Accounts, Bureau of Economic Analysis, 2016-2018 (accessed Feb. 2020)

	1	AUSTIN202
	2	RALEIGH
	_	NALLIGIT
	3	COLORADO SPRINGS 146
	4	NASHVILLE 126
	5	SALT LAKE CITY114
	6	OKLAHOMA CITY 74
ì	7	KANSAS CITY
	8	GREATER OMAHA 71
	9	LOUISVILLE 67
	10	DES MOINES 11

Real (inflation adjusted) Gross Domestic Production (GDP) by metropolitan area provides a broad measure of economic output.

Greater Omaha's real GDP grew by a cumulative 3.8% between 2016 and 2018.

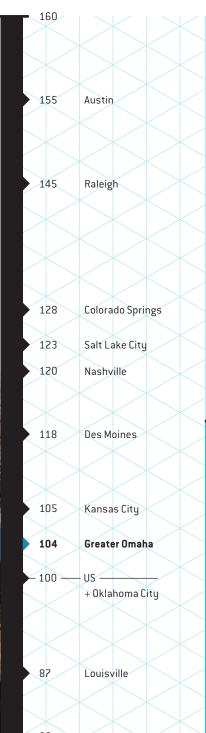
HUMAN CAPITAL

Human capital — the accumulated educational and occupational skill of the workforce — is critical for economic growth. A human capital index includes indicators of both experience and education, capturing the share of the workforce that continues to gain work experience, particularly in knowledge-intensive fields. After accounting for education and experience, a more diverse workforce brings a greater wealth of experience to the labor market. Growth in the labor force reflects how quickly the workforce is increasing, a necessary resource for businesses to expand.

Indicators of Human Capital include:

- · High school diploma attainment
- College degree attainment
- Labor force participation rate
- · Percentage of knowledge-based workers
- Percentage of minorities in the workforce
- Population growth among those 18 & Older







Remains in the 8th rank.

- Greater Omaha's human capital has not decreased – grew from just below the U.S. average to above the U.S. average at 104.
- Omaha's human capital was rising while the human capital index declined in Oklahoma City.

Ranks high on number of high school graduates and employed adults.

Lags behind aspirational and some peer metros in college graduates and participation in knowledge-based jobs.

HUMAN CAPITAL

High School Attainment (Age 25+)

Source: American Community Survey, U.S. Census Bureau, 2014-2018 (accessed Feb. 2020)

1	COLORADO SPRINGS 107
2	DES MOINES105
3	KANSAS CITY 105
4	GREATER OMAHA104
5	RALEIGH104
6	SALT LAKE CITY103
7	AUSTIN102
8	LOUISVILLE102
9	NASHVILLE102
10	OKLAHOMA CITY 101

Graduating high school or obtaining a GED remains an important first step for individual success. Graduates are much better prepared to pursue opportunities in a changing economy compared to individuals who do not finish high school.

Ninety-one percent of people in Greater Omaha have a high school degree, giving us a rank of 4th. Greater Omaha ranked 3rd three years ago, but we are now slightly behind Kansas City and continue to trail Colorado Springs and Des Moines.

College Attainment (Age 25+)

Source: American Community Survey, U.S. Census Bureau, 2014-2018 (accessed Feb. 2020)

1	RALEIGH146
2	AUSTIN
3	DES MOINES 127
4	COLORADO SPRINGS 120
5	KANSAS CITY
6	GREATER OMAHA 114
7	NASHVILLE110
8	SALT LAKE CITY108
9	OKLAHOMA CITY96
10	LOUISVILLE91

Graduating college provides improved opportunities for careers in a variety of higher-paying, knowledge-intensive industries.

Greater Omaha has 4.3% more college graduates [35.8%] than the national average [31.5%].

Labor Force Participation Rate

Source: American Community Survey, U.S. Census Bureau, 2014-2018 (accessed Feb. 2020)

1	DES MOINES 114
2	SALT LAKE CITY112
3	GREATER OMAHA 112
4	AUSTIN111
5	RALEIGH109
6	NASHVILLE108
7	KANSAS CITY 107
8	COLORADO SPRINGS 107
9	OKLAHOMA CITY104
10	LOUISVILLE103

Workers gain experience fastest in regions where a larger share of the population is participating in the workforce. Thus, the labor force participation rate is a key measure of human capital development.

More than 70% of Greater Omaha adults are employed, which is 7% higher than the national average. Greater Omaha ranked 2nd two years ago, but has fallen to 3rd slightly behind Salt Lake City.

Share of Knowledge-Based Workers

Source: Occupation Employment Survey, U.S. Bureau of Labor Statistics, 2016-2018 (accessed Oct. 2019)

COLORADO SPRINGS 113
RALEIGH11:
AUSTIN110
DES MOINES110
SALT LAKE CITY108
KANSAS CITY10!
OKLAHOMA CITY
GREATER OMAHA102
NASHVILLE98
LOUISVILLE8!

Workers who find employment in knowledge-based occupations can better maintain and grow their skills. The share of workers in knowledge-based occupations — such as managers, financial workers, scientists, teachers and heath care professionals — is a key human capital indicator.

With 32.2% of workers in knowledge-based occupations, Greater Omaha reflects the national average and is about 4.0% behind No. 1 ranked Colorado Springs.

Percent Minority Workforce

Source: Quarterly Workforce Indicators, U.S. Census Bureau, 2016-2018, End of Quarter

1	AUSTIN125
2	RALEIGH100
3	OKLAHOMA CITY 87
4	COLORADO SPRINGS 74
5	NASHVILLE 72
6	KANSAS CITY 67
7	SALT LAKE CITY62
8	LOUISVILLE 60
9	GREATER OMAHA58
10	DES MOINES42

Along with skill and experience, workforce diversity is another key component of human capital. A diverse workforce brings a larger set of perspectives and experience to the workplace, potentially offering a broader set of solutions to the challenges which businesses must solve.

Racial and ethnic minorities accounted for an average of 21.1% percent of the Greater Omaha workforce during the 2016 to 2018 period. Greater Omaha ranked 9th, ahead of only Des Moines. The share of minority workforce has been rising steadily in Greater Omaha, from 17.1% in 2010 to 21.6% in 2018, but Greater Omaha has remained ranked 9th.

Population Growth Among Those 18 & Older

Source: Population Estimates, U.S. Census Bureau, 2015-2017 (accessed Jan. 2019)

1	AUSTIN	345
2	RALEIGH	300
3	COLORADO SPRINGS	246
4	SALT LAKE CITY	244
5	NASHVILLE	229
	DES MOINES	208
7	GREATER OMAHA	134
8	KANSAS CITY	129
9	OKLAHOMA CITY	110
10	LOUISVILLE	70

While workforce characteristics are a key measure of human capital, labor force growth also is critical. Businesses need strong growth in the supply of available workers to expand.

The population of those age 18 and over grew by 2.3% cumulatively in the Greater Omaha metropolitan area over the 2016 to 2018 period. This growth rate was 0.6% faster than the U.S. average. Omaha ranks 7th, ahead of Kansas City, Oklahoma City and Louisville.



Innovation relates to the capacity to develop new methods and technologies with potential application in the economy. These technologies can spur high-value entrepreneurial ventures and enhance the productivity of workers. Innovation is measured via technical progress in both the private industry and education sector.

Indicators of innovation include:

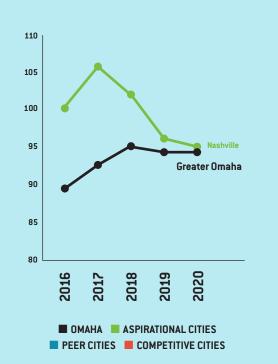
• Share of jobs in tech positions

Share of jobs in IT sectorPatents per 10,000 workers

NIH funding per job

• Science Graduate Students per 10,000 People





Sustains rank of 6th for the past five years.

- Greater Omaha improved index score by 5% since 2016
- Gap between Greater Omaha and Nashville has closed substantially, suggesting Greater Omaha could overtake Nashville in the future
- > The share of employment in the information technology industry has not grown in Nashville over the period while it has grown in Omaha and nationwide
- Greater Omaha is well ahead of Kansas City (No. 7) and Oklahoma City (No. 8)

Strengthens innovation in scientific research, especially NIH funding and science-related grads.

Lags in patents per worker.



Share of Jobs in Technology Positions

Source: Occupation Employment Survey, Bureau of Labor Statistics, 2016-2018 (accessed Nov. 2019)

1	RALEIGH
2	AUSTIN169
3	COLORADO SPRINGS 149
4	SALT LAKE CITY124
5	KANSAS CITY
6	GREATER OMAHA 107
7	DES MOINES104
8	OKLAHOMA CITY96
9	NASHVILLE80
10	LOUISVILLE 74

Private sector innovation occurs at businesses throughout the economy and can be tracked through the concentration of workers in occupations and industries where scientific work and product-development take place.

Rates of innovation are elevated in metropolitan areas with a larger share of the workforce in the following occupations: computer science and mathematical; engineering; and life, physical and biological science.

Greater Omaha has 6.0% of its jobs in tech positions, which is 0.4% above the national average.

Science-Related Graduate Students per 10,000 People

Source: National Center for Education Statistics, 2017-2018 (accessed Jan. 2020)

1	RALEIGH	271
2	SALT LAKE CITY	124
3	OKLAHOMA CITY	118
4	AUSTIN	110
5	GREATER OMAHA	104
6	LOUISVILLE	. 92
7	COLORADO SPRINGS	. 74
8	NASHVILLE	. 58
9	KANSAS CITY	. 48
10	DES MOINES	0

Innovative research in biomedical, computer science, engineering and physical science fields is achieved through a combination of faculty and graduate students. A concentration of graduate students in a metropolitan area indicates a focus on research activity.

Greater Omaha maintained its ranking of 5th from last year, but was ranked 3rd two years ago. Our 4.6 grads per 10,000 people are slightly above the national average of 4.4.

Share of Jobs in the Information Technology Industries

Source: County Business Patterns database, U.S. Census Bureau, 2016-2017 (accessed Jan. 2020)

1	AUSTIN297
2	RALEIGH232
3	COLORADO SPRINGS 214
4	KANSAS CITY
5	SALT LAKE CITY131
6	GREATER OMAHA 113
7	DES MOINES80
8	NASHVILLE70
9	OKLAHOMA CITY 59
10	LOUISVILLE46

Rates of innovation also are elevated in metropolitan areas with a larger share of the workforce working in software development, data processing, internet publishing and computer systems design.

IT industries comprise 2.8% of Greater Omaha's economy. This is slightly better than the national average of 2.5%.

NIH Awards per Job

Source: National Institutes of Health, 2015-2018 (accessed Feb. 2020)

NASHVILLE230
SALT LAKE CITY165
RALEIGH114
GREATER OMAHA 112
OKLAHOMA CITY
LOUISVILLE 58
AUSTIN50
KANSAS CITY 47
DES MOINES 3
COLORADO SPRINGS 3

The National Institutes of Health (NIH) provide grant funding to innovative biomedical research. The level of NIH funding per worker in a metropolitan area shows biomedical innovation in universities, research institutes and private businesses.

Greater Omaha decreased its rank to 4th for 2020, but continues to be above the national average.

Patents per 10,000 Workers

Source: U.S. Patent and Trademark Office, 2016-2018 [Statewide] and Current Employment Survey, 2016-2018 (accessed Feb. 2020)

1	COLORADO SPRINGS 119
2	SALT LAKE CITY103
3	AUSTIN 82
4	RALEIGH78
5	DES MOINES 62
6	KANSAS CITY44
7	NASHVILLE 37
8	LOUISVILLE 35
9	OKLAHOMA CITY
10	GREATER OMAHA32

Patent activity broadly measures innovation by capturing the development of new products and technologies throughout the economy. Patents per 10,000 workers provides a measure of the concentration of activity within a metropolitan area.

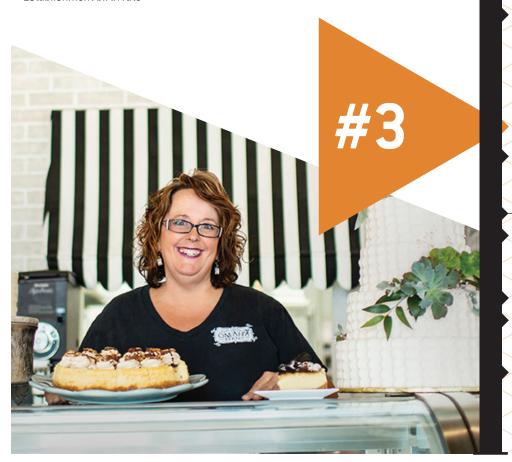
With only 3.4 patents per 10K workers, Greater Omaha trails the national average of 10.8.

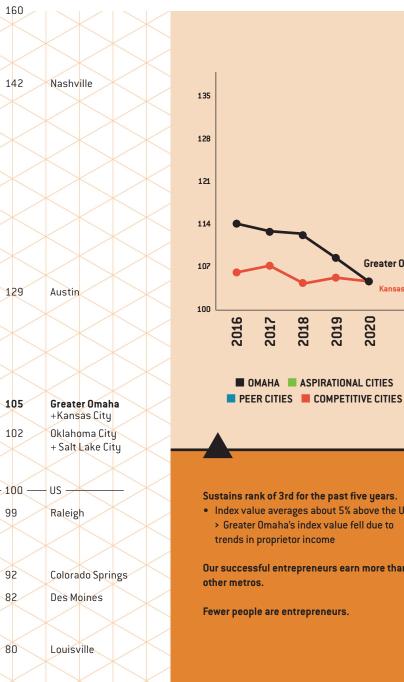


Arguably the most critical type of human capital in a market economy, entrepreneurs combine workers, capital and other key resources to introduce new or improved products and meet growing demand. As a result, metropolitan areas with a more entrepreneurial population achieve faster growth.

Indicators of entrepreneurship include:

- · Non-farm proprietors
- Non-farm proprietor income share
- Business services share of employment
- Average income per non-farm proprietor
- Minority entrepreneurship
- Establishment birth rate







Sustains rank of 3rd for the past five years.

- Index value averages about 5% above the U.S.
- > Greater Omaha's index value fell due to trends in proprietor income

Our successful entrepreneurs earn more than

ENTREPRENEURSHIP

Non-Farm Proprietor per Person

Source: Regional Economic Information System, U.S. Bureau of Economic Analysis, 2016-2018 (accessed Jan. 2020)

1	AUSTIN
2	NASHVILLE 12
3	OKLAHOMA CITY
4	SALT LAKE CITY11
5	RALEIGH10
6	COLORADO SPRINGS 10
7	DES MOINES9
8	KANSAS CITY 9
9	GREATER OMAHA 8
10	LOUISVILLE 8

The percent of the population that owns a business (non-farm proprietorship) is the first measure of the entrepreneurial activity.

Greater Omaha has maintained its rank of 9th for the past 5 years. In 2020, we had 0.12 proprietorships per person, less than the national average of 0.13.

Business Services Employment Share

Source: Current Employment Statistics, U.S. Bureau of Labor Statistics, 2016-2019 (accessed Feb. 2020)

1	AUSTIN 169	9
2	RALEIGH150	0
3	KANSAS CITY 14	1
4	COLORADO SPRINGS 139	9
5	SALT LAKE CITY 12	1
6	NASHVILLE 103	3
7	DES MOINES89	9
8	GREATER OMAHA80	6
9	OKLAHOMA CITY 8!	5
10	LOUISVILLE7	7

The business services sector includes some of the most dynamic parts of the economy, including information technology, science and engineering. New businesses are commonly created in this growing sector. The percentage of people working in the business services sector captures this creation of high-value new businesses.

Similar to the number of small business owners, we lag on this indicator. Only 5.3% of our jobs are in business services, just under the national average of 6.2%. Greater Omaha maintained its ranking of 8th for 2020.

Non-Farm Proprietor Income Share

Source: Regional Economic Information System, U.S. Bureau of Economic Analysis, 2016-2018 (accessed Jan. 2020)

1	NASHVILLE244
2	AUSTIN
3	GREATER OMAHA 135
4	OKLAHOMA CITY 131
5	KANSAS CITY
6	SALT LAKE CITY101
7	LOUISVILLE
8	RALEIGH
9	DES MOINES 75
10	COLORADO SPRINGS 67

The percent of non-farm income earned by entrepreneurs (non-farm proprietors) provides another measure of entrepreneurship within the economy. This indicator reflects both the number of people engaged in entrepreneurship, as well as the earnings of entrepreneurs.

Entrepreneurs earn 11.8% of all non-farm income in Greater Omaha, more than the national average of 8.8%. Our successful entrepreneurs have kept us at 3rd for the past two years, behind only Nashville and Austin.

Minority Entrepreneurship Share

Source: Survey of Business Owners, U.S. Census Bureau, 2012

1	AUSTIN93
2	RALEIGH92
3	OKLAHOMA CITY92
4	NASHVILLE 83
5	DES MOINES
6	LOUISVILLE73
7	COLORADO SPRINGS 73
8	SALT LAKE CITY72
9	GREATER OMAHA 71
10	KANSAS CITY 71

The proportion of the minority population which owns a business is another key measure of entrepreneurial activity. The number of minority businesses were divided by the total minority population in that year. [Data from the 2017 survey will not be available until later in 2020.]

A smaller percent (5.0%) of the minority population owns a business in Greater Omaha than the national average (7.0%). We are very close to our peer, Salt Lake City (No. 8).

Average Income per Non-Farm Proprietor

Source: Regional Economic Information System, U.S. Bureau of Economic Analysis, 2016-2018 (accessed Jan. 2020)

1	NASHVILLE206
2	GREATER OMAHA 165
3	AUSTIN119
4	KANSAS CITY
5	OKLAHOMA CITY 102
6	SALT LAKE CITY86
7	LOUISVILLE 83
8	DES MOINES 81
9	RALEIGH72
10	COLORADO SPRINGS 60

Average income per proprietor rises when business owners operate in fields that are more lucrative and engage in full-time, rather than part-time, entrepreneurship.

Our entrepreneurs excel in their respective businesses, earning over \$56,000 per year.

While Greater Omaha is 65% above the national average, our advantage has eroded somewhat due to a recent drop in non-farm proprietor income.

Establishment Birth Rate

Source: Business Employment Dynamics, U.S. Bureau of Labor Statistics [state level] (accessed February 2020)

1	SALT LAKE CITY127
2	COLORADO SPRINGS 114
3	KANSAS CITY 11:
4	AUSTIN
5	RALEIGH100
6	NASHVILLE 89
7	OKLAHOMA CITY 89
8	GREATER OMAHA 89
9	LOUISVILLE89
10	DES MOINES 7!

The establishment birth rate is a measure of the share of entrepreneurs and business managers in the economy who are engaged in establishing new businesses or new locations. This metric is new to the Barometer this year.

The establishment birth rate for Greater Omaha is 11% below the national average and is ranked 6th for 2020, tied with Nashville and Oklahoma City.



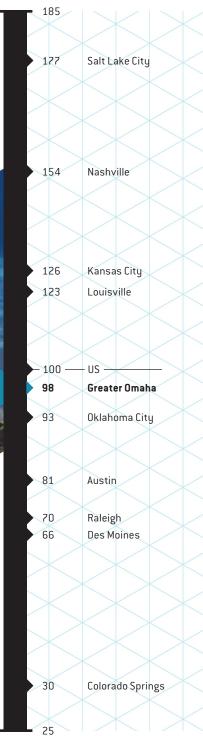
Metropolitan areas that serve as a hub for transportation activity have important additional advantages for growth. For example, hubs for air travel give headquarter locations direct flight options to visit out-of-town clients. Multiple interstate highways or a thriving local logistics industry provide manufacturing and warehousing firms a competitive edge.

Indicators of infrastructure capacity include:

• Miles of interstate highway

• Air passenger enplanements

• Transportation services





Sustained rank of 5th since 2016.

 Steady rank hides that our score has declined due to fewer jobs in transportation services

■ OMAHA ■ ASPIRATIONAL CITIES
■ PEER CITIES ■ COMPETITIVE CITIES

- Falling further behind Louisville (No. 4) and losing ground to Oklahoma City (No. 6)
- > Oklahoma City could overtake Greater Omaha if recent trends continue



Miles of Interstate Highway

Source: Transportation maps of relevant state transportation agencies

1	NASHVILLE 17
2	OKLAHOMA CITY 15
3	SALT LAKE CITY13
4	KANSAS CITY 12
5	GREATER OMAHA 12
6	LOUISVILLE10
7	DES MOINES 8
8	AUSTIN 3
9	RALEIGH3
10	COLORADO SPRINGS 2

Metropolitan areas served by multiple interstate highways – or with abundant industrial sites along highways – have significant advantages for location and growth of manufacturing and warehousing activity. The miles of interstate highway located within a metropolitan area reflects both the length and number of interstates that traverse each metro.

We have 199 miles of interstate highway. The average for the 10 metros is 167 miles.

Passenger Enplanements

Source: Federal Aviation Administration, 2016-2018 (accessed Nov. 2019)

1	SALT LAKE CITY	. 259
2	NASHVILLE	. 157
3	AUSTIN	. 153
4	RALEIGH	. 129
5	KANSAS CITY	. 125
6	GREATER OMAHA	51
7	OKLAHOMA CITY	43
8	LOUISVILLE	38
9	DES MOINES	28
10	COLODADO SERINCS	17

Airports that serve as hubs for national travel, or draw on a large regional passenger base, generate high levels of passenger travel and a variety of route options.

Consequently, metropolitan areas containing airports with more passenger enplanements would provide an advantage to local business travelers.

With almost 2.3 million enplanements, we rank 6th and fall below the 10-metro average of 4.5 million. Our passenger enplanements have been steadily increasing, but at a slower pace than our comparisons.

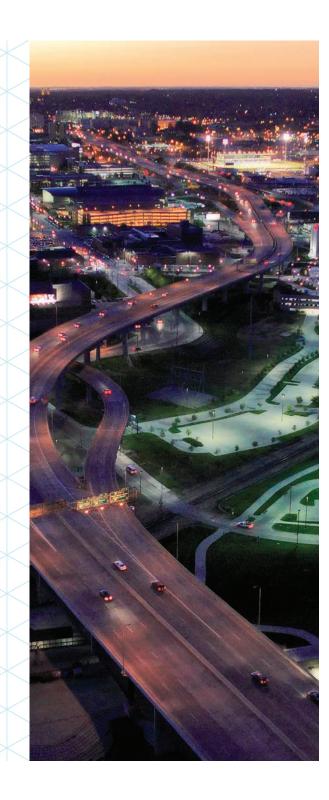
Transportation Services

Source: Quarterly Census of Employment and Wages, U.S. Bureau of Labor Statistics, 2016-2018 (accessed Feb. 2020)

1	LOUISVILLE 221
2	SALT LAKE CITY139
3	NASHVILLE 134
4	KANSAS CITY 126
5	GREATER OMAHA 125
6	OKLAHOMA CITY86
7	DES MOINES 81
8	AUSTIN 52
9	RALEIGH50
10	COLORADO SPRINGS 45

A large, local transportation and logistics industry provides an advantage for businesses. We capture these benefits through the share of metropolitan area employment in the transportation and warehousing industry.

Transportation services comprise 4.3% of our jobs, placing us ahead of the national average of 3.5%.







COST OF DOING BUSINESS

Labor Costs

Source: Occupation Employment Survey, U.S. Bureau of Labor Statistics, 2016-2018 (accessed Nov. 2019) Occupations: accountants, software developers, lawyers, retail salesperson, licensed practical nurses, industrial machinery mechanics, and heavy truck and tractor-trailers drivers

1	LOUISVILLE 8
2	OKLAHOMA CITY 8
3	GREATER OMAHA 8
4	KANSAS CITY 9
5	NASHVILLE9
6	DES MOINES9
7	SALT LAKE CITY94
8	AUSTIN9
9	COLORADO SPRINGS9
10	RALEIGH9

Labor costs, the greatest expense for many businesses, refer to the general level of wages required for workers given a particular skill level. Labor costs are best measured by comparing hourly wages across metropolitan areas for a set of common occupations that reflect various skill and education levels.

Greater Omaha was ranked 3rd last year and five years back. Our average wage rate for these occupations is \$29.85, 13% below the national average.

Property Costs

mmercial Group, CBRE Hubbell Commercial, Newmark Grubb Zimmer, Cushman & NAI NP Ondge, Avison Young, Newmark Grubb Acres

1	LOUISVILLE80
2	OKLAHOMA CITY 81
3	DES MOINES84
4	KANSAS CITY86
5	COLORADO SPRINGS 89
6	GREATER OMAHA90
7	SALT LAKE CITY96
8	RALEIGH115
9	NASHVILLE 127
10	AUSTIN 152

Space costs are compared on a per-square-foot basis and reflect the costs for all types of business properties, including industrial, commercial and retail properties.

With our average rental rates of \$13.55 per square foot, we rank 6th. Greater Omaha's rank dropped from 3rd last year due to an increase in the average rent for office space.

Industrial Energy Costs

Sources: Lincoln Electric Systems' National Electric Rates Survey (2016-2019) and Energy Information Administration, U.S. Department of Energy (state natural gas rates) [accessed Jan. 2020]

1	OKLAHOMA CITY 64
2	AUSTIN
3	GREATER OMAHA91
4	LOUISVILLE94
5	DES MOINES95
6	COLORADO SPRINGS 108
7	NASHVILLE 111
8	SALT LAKE CITY109
9	RALEIGH116
10	KANSAS CITY

Utility costs refer to the bundle of utilities, including electric, natural gas, water, and sewer and broadband access. Consistent, comparable measures of cost, however, are limited for utilities and are most feasible for electric and natural gas utility rates. This indicator reflects average industrial rates for electricity and natural gas.

Our energy costs are 9.0% cheaper than the national average, giving us a rank of 3rd.





Quality of life plays a key role in attracting and retaining talent in a metropolitan area, making it a significant consideration for businesses that rely on those employees.

Key quality of life components include:

- Cost of living
- Air quality
- Commute time
- Climate
- Health care access
 - Natural recreation amenities
- Violent crime rate
- Arts and culture





Salt Lake City

128

118 Nashville

117

14 Greater Omaha

Colorado Springs

+ Austin

111 Louisville

104 Raleigh
103 Des Moines

+ Oklahoma City

94 Kansas City



Upholding rank of 5th for the last five years.

■ PEER CITIES ■ COMPETITIVE CITIES

- Has a similar ranking as Austin
- Greater Omaha has the potential to leap to 4th if there are further improvements in human-made amenities
- > Further behind 2nd ranked Nashville and would need substantial improvements to move ahead

Gaining momentum in decreasing violent crime.

Leading in abundant arts and cultural opportunities (No. 2), accessible health care (No. 1) and quick commute times (No. 1).

Disadvantages in climate and natural recreation amenities.

QUALITY OF LIFE

Cost of Living

Source: Council for Community and Economic Research, 2019 Q1 – Q3 Average.

1	OKLAHOMA CITY 85
2	DES MOINES89
3	GREATER OMAHA92
4	LOUISVILLE 93
5	RALEIGH94
6	KANSAS CITY95
7	NASHVILLE98
8	AUSTIN99
9	COLORADO SPRINGS 101
10	SALT LAKE CITY103

Cost of living is a comprehensive measure of the cost of household goods and services, such as housing, groceries, utilities and other common services.

Greater Omaha's cost of living is 8% below the national average, behind only Oklahoma City and Des Moines.

Violent Crime Rate

Source: Unified Crime Reports, Federal Bureau of Investigations, 2016-2018 (accessed Jan. 2020)

1	RALEIGH 62
2	AUSTIN80
3	DES MOINES92
4	GREATER OMAHA94
5	SALT LAKE CITY104
6	LOUISVILLE109
7	COLORADO SPRINGS 114
8	OKLAHOMA CITY 133
9	NASHVILLE 162
10	KANSAS CITY 165

Personal safety is a critical component of quality of life and can be captured by the violent crime rate. This indicator compares violent crimes per 100,000 people across the metros.

People commit 6% fewer violent crimes in Greater Omaha than the U.S. Greater Omaha was ranked 3rd last year but was ranked 6th and above the national average rate four years back.

Commute Time

Source: American Community Survey, U.S. Census Bureau, 2014-2018 (accessed Feb. 2020)

× .	
1	GREATER OMAHA
2	DES MOINES
3	SALT LAKE CITY85
4	OKLAHOMA CITY 85
5	KANSAS CITY 87
6	COLORADO SPRINGS 89
7	LOUISVILLE 90
8	RALEIGH98
9	AUSTIN
10	NASHVILLE104

Commute time shows the ease of travel to destinations around a metropolitan area.

Greater Omaha's average commute is 20.3 minutes, over six minutes faster than the national average, giving us a ranking of 1st among the ten metropolitan areas.

Air Quality

Source: Air Quality Index Report, Environmental Protection Agency, 2016-2018 (accessed Nov. 2019)

1	RALEIGH102
2	DES MOINES102
3	GREATER OMAHA101
4	NASHVILLE 101
5	AUSTIN101
6	COLORADO SPRINGS 101
7	OKLAHOMA CITY 100
8	KANSAS CITY100
9	LOUISVILLE99
10	SALT LAKE CITY92

Air quality is a critical indicator of pollution, measured for metropolitan areas by the Environmental Protection Agency (EPA). The EPA reports the share of days with good or moderate air quality each year.

In Greater Omaha, 99.0% of the time, we have good or moderate air quality, slightly above the 10-metro average of 97.6%.

However, our air quality has incrementally worsened, dropping us from 2nd to 5th in five years. Greater Omaha ranked 3rd in air quality, an improvement from 5th last year. Only Raleigh and Des Moines rank above Omaha in air quality.

Health Care Access

Source: Occupational Employment Survey, Bureau of Labor Statistics, 2016-2018 (accessed Nov. 2019) and U.S. Census Bureau (accessed Jan. 2020)

1	GREATER OMAHA 129
2	LOUISVILLE 124
3	NASHVILLE 124
4	KANSAS CITY 121
5	SALT LAKE CITY115
6	DES MOINES 114
7	OKLAHOMA CITY 113
8	RALEIGH91
9	COLORADO SPRINGS 88
10	AUSTIN 83

Access to health care, a key quality-of-life amenity, generally rises when doctors, nurses and other health care professions account for a larger share of the workforce.

No. 1 ranked Greater Omaha beats the national average by 0.8% with 3.4% of our population working in health care jobs.

Climate

Source: Economic Research Service, U.S. Department of Agriculture

1	COLORADO SPRINGS208
2	AUSTIN140
3	SALT LAKE CITY128
4	OKLAHOMA CITY
5	RALEIGH109
6	KANSAS CITY
7	LOUISVILLE70
8	NASHVILLE 67
9	GREATER OMAHA56
10	DES MOINES 45

Quality of life also depends on climate. Key aspects of climate that contribute to comfort and outdoor activity include temperature, humidity and sunshine. The Economics Research Service has developed an index to measure climate amenities in metropolitan areas.

Omaha ranks 9th for climate amenities according to this index, primarily due to its cold winters and hot summers.



Natural Recreation Amenities

Source: Economic Research Service, U.S. Department of Agriculture

1	SALT LAKE CITY254
2	NASHVILLE 183
3	AUSTIN
4	LOUISVILLE 175
5	COLORADO SPRINGS 145
6	DES MOINES103
7	RALEIGH94
8	GREATER OMAHA92
9	KANSAS CITY 83
10	OKLAHOMA CITY 74

The natural recreation amenities available to a metropolitan area – such as temperature, humidity, sunshine, topography and access to water – affect quality of life as well.

Greater Omaha ranks 8th for natural recreation amenities according to this index, primarily due to its flat topography and moderate access to water. We are ranked ahead of the nearby metropolitan areas of Kansas City and Oklahoma City.

Arts and Culture

Source: Quarterly Census of Employment & Wages, U.S. Bureau of Labor Statistics, 2016-2017 (accessed Feb. 2020) and County Business Patterns, U.S. Census Bureau, 2016-2017 (accessed Feb. 2020)

1	NASHVILLE 210		
2	GREATER OMAHA186		
3	SALT LAKE CITY123		
4	DES MOINES108		
5	LOUISVILLE 107		
6	COLORADO SPRINGS 97		
7	KANSAS CITY96		
8	AUSTIN 85		
9	OKLAHOMA CITY 81		
40	DALEICH CZ		

Access to arts and cultural opportunities is another key component to quality of life. Access rises with the number of and level of activity at performance companies, presenting organizations, museums and zoos. Since some organizations do not report attendance, activity is measured via employment in arts and cultural activities per person.

Greater Omaha offers abundant arts and cultural opportunities with 1.62 arts/cultural jobs per person, compared to the U.S. average of 0.87. We trail just behind Nashville and have been 2nd for the past five years.





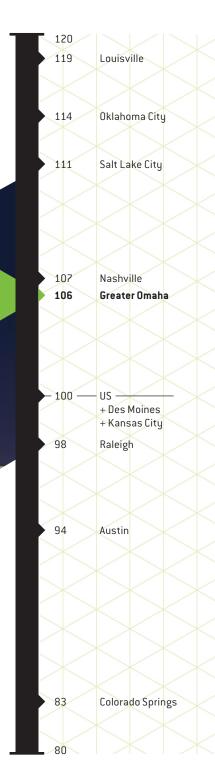
Private capital such as machinery, software and buildings are a cornerstone of a productive economy. A stock of private capital complements human capital in raising worker productivity and ensures a larger metropolitan economy.

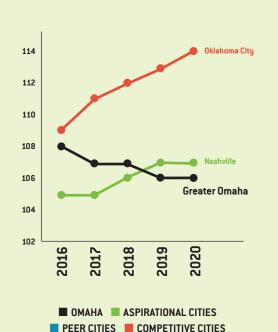
Indicators of private capital include:

• Private equipment

• Private structures

• Intellectual property products





Fell from 4th in 2016 to 5th in 2020.

- 6% more private capital per job than the nation, reflecting the importance of goods-producing industries, such as manufacturing and warehousing to Greater Omaha
- Losing ground to Oklahoma City because of their increase in the value of private structures

Possess strength in equipment and structures.

Opportunities to improve stock of software or patented processes.



Private Equipment

Sources (accessed Feb. 2020): National Income & Production Accounts, U.S. Bureau of Economic Analysis, 2016-2018 Current Employment Statistics, U.S. Bureau of Labor Statistics, 2016-2018

1	LOUISVILLE 123
2	SALT LAKE CITY109
3	NASHVILLE106
4	GREATER OMAHA106
5	DES MOINES104
6	KANSAS CITY 103
7	OKLAHOMA CITY99
8	RALEIGH90
9	AUSTIN 88
10	COLORADO SPRINGS 79

Private equipment includes the equipment/machinery that employees use to produce goods and services in factories, construction sites, warehouses, offices, health care facilities and stores. Metros with a higher concentration of capital-intensive businesses have higher levels of private equipment per worker.

Our businesses possess \$48,942 in private equipment per job, 6.0% more than the national average.

Private Structures

Sources (accessed Feb. 2020): National Income & Production Accounts, U.S. Bureau of Economic Analysis, 2016-2018 Current Employment Statistics, U.S. Bureau of Labor Statistics, 2016-2018

1	OKLAHOMA CITY	. 170
2	LOUISVILLE	. 121
3	GREATER OMAHA	. 112
4	SALT LAKE CITY	. 110
5	NASHVILLE	. 106
6	DES MOINES	. 103
7	KANSAS CITY	. 101
8	RALEIGH	94
9	AUSTIN	89
10	CUI UDADO SERINCS	07

Private structures house the factories, inventory, offices and stores that businesses use to serve their customers. The use and value of structures vary by industry, with industries such as manufacturing and warehousing often requiring more square feet of structures per worker.

Omaha businesses boast \$99,468 in private structures per job, 11.8% more than the national average.

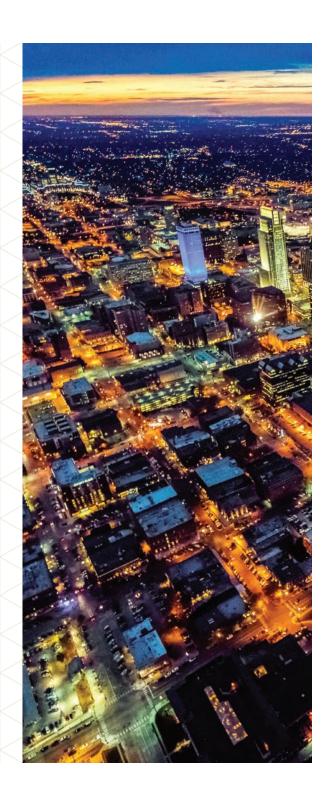
Intellectual Property Products

Sources (accessed Feb. 2020): National Income & Production Accounts, U.S. Bureau of Economic Analysis, 2016-2018 Current Employment Statistics, U.S. Bureau of Labor Statistics, 2016-2018

Current Employment Statistics, U.S. Bureau of Labor Stat		
1	SALT LAKE CITY115	
2	LOUISVILLE 112	
3	RALEIGH112	
4	NASHVILLE109	
5	AUSTIN105	
6	GREATER OMAHA100	
7	KANSAS CITY96	
8	DES MOINES94	
9	COLORADO SPRINGS 82	
10	OKLAHOMA CITY 74	

Intellectual property products, such as software or patented processes are key to the efficient and productive operation of businesses. The use of intellectual property products varies by industry but is especially prevalent in manufacturing.

Our businesses own \$22,112 in intellectual property products per job, comparable to the national average of \$22,218. This year we ranked 6th, the same as the previous year.



SUMMARY

We have revealed our strengths and uncovered opportunities for further growth by stacking ourselves against nine other high-performing metros on eight key economic areas. The Barometer shows the evolution of these assets and areas of improvement over time. Overall, Greater Omaha ranked 6th for the 2020 Barometer. While we're still ahead of the national average, we are growing at a slower pace than many of our thriving comparison metros.

To continue to build on our progress and accelerate towards prosperity, we need to capitalize on our advantages and convert our growth opportunities into strengths.

OUR STRENGTHS



Growth

- Rapid rise in private wages, indicating a rising standard of living
- Low unemployment



Entrepreneurship

Our prosperous entrepreneurs earn higher income than all of the comparison cities



Innovation

Increases in science-related grads and NIH funding per job (indication of scientific research)



Business Costs

Maintaining position as one of the most affordable metros



Private Capital

Valuable stock of private equipment and structures





- Leader with rich arts and cultural options, accessible health care, and fast commutes
- Increases in public safety

OUR OPPORTUNITIES FOR GROWTH



Growth

Slow, steady growth in jobs and GDP - Advantageous in that we minimize severe economic downturns but we are also losing ground to rapidly growing metros



Innovation

Lower concentration of both ITrelated industries and tech workers



Infrastructure

► Fewer passenger enplanements and gradually decreasing transportation and services industry



Private Capital

► Trailing stock of software and patented processes



Human Capital

Lagging in college graduates, knowledge-based jobs and minority workforce



Entrepreneurship

Dur entrepreneurs are more successful, but less numerous than other metros, especially in the business services industry and among minorities

METHODOLOGY

In 2014, the Greater Omaha Chamber Business Intelligence Department developed The Barometer: an Economic Scorecard of the Greater Omaha Region. In 2015, we contracted an objective third-party, the University of Nebraska-Lincoln Bureau of Business Research (BBR), to develop a new methodology for the Barometer. The 2020 Greater Omaha Barometer, is the seventh edition of the Barometer report. It was developed by the University of Nebraska-Lincoln Bureau of Business Research (BBR), in coordination with the Greater Omaha Chamber Business Intelligence Department.

The 2020 Greater Omaha Barometer is designed to evaluate and compare the economic performance and characteristics of the Greater Omaha economy with nine other metropolitan areas from around the United States. These nine comparison cities are a set of prosperous metros including nearby competitors and peers of Greater Omaha, as well as the rapidly growing metropolitan areas of Austin, Raleigh and Nashville. Comparisons reveal strengths and challenges within the Greater Omaha economy.

The 2020 Greater Omaha Barometer explores metropolitan characteristics related to economic growth including human capital, private capital, infrastructure capacity, innovation, entrepreneurship, quality of life for households, and the cost of doing business. Index values for each characteristic are calculated for Greater Omaha and the nine comparison metropolitan areas of Austin, Colorado Springs, Des Moines, Kansas City, Louisville, Nashville, Oklahoma City, Raleigh and Salt Lake City. Indexes are calculated utilizing data from 2016 through 2019, or if 2019 data is not yet available, 2015 through 2018. All indicators were given an average index value equaling 100, based on either national averages or the average of all comparison cities, and then each comparison city was measured against that index value. Data on educational attainment and other measures from the American Community Survey are based on 5-year averages, from 2014 through 2018. An index of economic growth also is calculated for each metropolitan area, based on growth from 2016 through 2019. The 2020 Greater Omaha Barometer therefore reflects current conditions and recent growth in the metropolitan economies.

Changes to the 2020 Barometer from earlier editions include:

- Time Comparison: Greater Omaha Barometer values were re-estimated 6 years prior using the same set of measures and indexes. This re-estimation will occur each year as data are revised and new measures added to the Barometer
- New Measures
 - Patents per 10,000 Workers
 - >The U.S. Patent and Innovation Office no longer provides annual patent data at the metropolitan level so the measure was provided at the state level for 2020
 - Establishment Birth Rate
 - >Measures the share of entrepreneurs and business managers in the economy who are engaged in establishing new businesses or new locations

The data gathering and analysis work was completed by the BBR from November 2019 through March 2020. All data sources are cited within the report.

Any questions regarding this report should be directed toward the Greater Omaha Chamber Business Intelligence Department at 402-345-5000.