



The Montrose Group, LLC

TRANSFORMING YOUR WORLD

MID-AMERICA EDC MACROECONOMIC ANALYSIS FINAL REPORT

FROM THE MONTROSE GROUP, LLC

JUNE 12, 2020



EXECUTIVE SUMMARY

The MidAmerica Economic Development Council (Mid-America EDC) is a professional association representing thirteen states that collectively contributes significantly to the national economy. The Mid-America EDC region includes Illinois, Iowa, Indiana, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin and Wyoming. Collectively, the Mid-America EDC region represents 20 percent of the nation's population, 20 percent of the nation's total business establishments and 21.7 percent of the nation's total workforce. If the Mid-America EDC region were a country it would be almost twice the size of Canada and roughly the same size as France. There are substantial economic, demographic, and regional assets that position the Mid-America EDC states well for valuable, targeted growth opportunities. The Mid-America EDC region has a strong representation of manufacturing and agricultural industry sectors and state universities with Research & Development efforts that are charting the course for our nation's future.

The population of the Mid-America EDC region is just over 65.653 million according to the U.S. Census Bureau's American Community Survey. This is a 4.0% increase from the 2010 population of 64.090 million and, while the region is growing, its growth lags the national average of 6.3% during the same period. The region's labor force participation rate of 66.2% is significantly higher than the national average of 62.9% and the region's population has a higher percentage of people with a High School diploma or higher (90.9%) versus the national average (87.7%). This data suggests that, while growing at a slower pace than the national average, the Mid-America EDC region population has a strong workforce base and education levels that are aligned well with employment opportunities within the region.

The total GDP of the Mid-America EDC region has grown by 3.6 percent between 2017-2019 from \$3.595 T to \$3.723 T. Mid-America EDC's regional GDP is roughly the size of Germany and the fourth largest economy in the world. While the region has experienced reasonable growth, it has not kept pace with the national average of 9.1 percent growth over the same period.

The Mid-America EDC region has a comprehensive multimodal transportation infrastructure system that supports the region's leading industry sectors and positions the region well for future economic prosperity. Fifty-three of the nation's 180 intermodal sites are located within the Mid-America EDC footprint. Additionally, there are more than 14,000 miles of interstate highways, 43,400 miles of Class I rail lines, nine cargo ports, and 4 major international airport hubs located within the 13-state region. States within the Mid-America EDC region have a long history of strength in industry sectors such as agribusiness, manufacturing, natural resources, and transportation. The region has a workforce that is heavily concentrated in Animal production and Aquaculture, Mining (except Oil and Gas), Food Manufacturing, Primary Metal Manufacturing, Fabricated Metal Product Manufacturing, Machinery Manufacturing, and Transportation Equipment Manufacturing leading the way from a location quotient perspective. This perspective shows that the Mid-America EDC region has a higher concentration of workers in these sectors than the rest of the country.

Mid-America EDC states should focus on keeping and attracting jobs in the industries in which it has a historic strength such as agribusiness and food production manufacturing, machinery manufacturing, automotive manufacturing, and metals manufacturing, but it should also look to the industries and the occupations of the future such as software development, logistics and fulfillment centers, medical device manufacturers, and pharmaceutical companies to determine those that it can attract to provide high-wage jobs to the people that live in the region. The jobs projected to grow in the future is a mix between those that require a high school degree and those that require a bachelor's degree. The preservation of existing industry strengths, and the attraction of high-wage jobs to Mid-America EDC states ensures that the population and the median family income and local tax base will continue to rise for the foreseeable future. The abundance of affordable, high-quality technical educational institutions, and 4-year and post-baccalaureate universities and research institutions in the Mid-America EDC region creates opportunities to meet the workforce needs of today, prepare for the workforce needs of tomorrow, and develop and commercialize new technologies that propels the region into the future.



Mid-America EDC's Strength in the United States

Economic Force

4th Largest Economy in the World

Driving Mid-America EDC

24% of total U.S. employment in Transportation Equipment Manufacturing calls Mid-America EDC region home

Feeding America

Seven of the Top 10 agriculture producing states are located in the Mid-America EDC region, with 5,088 companies in Agribusiness and Food Manufacturing sectors.

Fortune 1000

250 Fortune 1000 Company HQ's call Mid-America EDC states home

Mid-America EDC Region Works

90.9% of Mid-America EDC residents have High School or Higher education, with a 66.2% labor force participation rate - 5% higher than the national average.

Manufacturing's Competitive Advantage

Mid-America EDC Region home to a Skilled Manufacturing Workforce more affordable than Texas and competitive with SE Region.

Venture Capital Supports Entrepreneurial Ecosystem

Over \$17 B invested in Mid-America EDC Region in last 5 years.

MID-AMERICA EDC MACROECONOMIC ANALYSIS OVERVIEW

The MidAmerica Economic Development Council (Mid-America EDC) is a professional association representing thirteen states that collectively contributes significantly to the national economy. The Mid-America EDC region represents 20 percent of the nation's population, 20 percent of the nation's total business establishments and 21.7 percent of the nation's total workforce. There are substantial economic, demographic, and regional



assets that position the Mid-America EDC states well for valuable, targeted growth opportunities. The Mid-America EDC region has a strong representation of manufacturing and agricultural industry sectors and state universities with Research & Development efforts that are charting the course for our nation's future.

A general overview of the Mid-America EDC region's demographics shows that the region's population growth of 4.0% lags the national average of 6.3%. The region's labor force participation rate of 66.2% is significantly higher than the national average of 62.9% and the region's population has a higher percentage of people with a High School diploma or higher (90.9%) versus the national average (87.7%). Looking at cost of living, the Mid-America EDC region is an affordable region to reside in with the median home value within the region of \$178,823 compared to that national median value of \$229,700. Median monthly renter costs are also considerably more affordable (\$840) than the national monthly cost of \$1,058.

Mid-America EDC Region General Demographic Profile

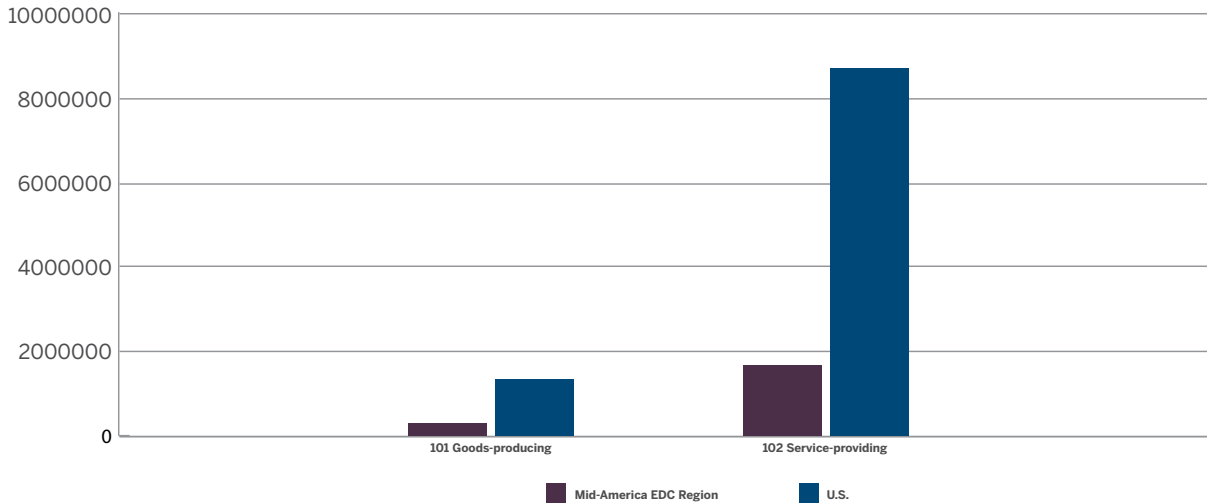
| People | Mid-America EDC Region | United States |
|--------------------------------|------------------------|---------------|
| Population Growth 2010-19 | 4.0% | 6.3% |
| Population Age 19-64 | 54.1% | 55.5% |
| Labor Force Participation Rate | 66.2% | 62.9% |
| HS Diploma or Higher | 90.9% | 87.7% |
| Median Household Income | \$58,869 | \$60,293 |
| Median Housing Value | \$178,823 | \$229,700 |

Source: U.S. Census Data

To analyze the industry sector strengths within the Mid-America EDC region, the industry sectors were sorted based on leading sector location quotients by state using the U.S. Bureau of Labor Statistics data. A location quotient is a method of using Federal industry cluster data to identify the economic concentration of a certain industry in a state, region, county, or city compared to a base economy, such as a state or nation. A location quotient greater than 1 indicates that a locality, in this case the Mid-America EDC region, has a higher concentration of companies in a specific industry sector than does the rest of the nation. When conducting a high-level industry strengths analysis using U.S. Bureau of Labor Statistics information, Goods-producing (1.24) and Service-providing (0.94) led the region's strengths. Goods-producing represents 304,774 business establishments and 5.79 M employees. Service-providing represents 1.67 M business establishments and 22.35 M employees. Amongst the top high-level industry sector strengths within the Goods-producing sector is Natural resources and mining, Manufacturing, and Construction which have strengths in all thirteen Mid-America EDC states. Within the Service-providing sector, industry strengths lie in Trade, transportation, and utilities, Financial activities, and Education and health services which have strengths in 70 percent of Mid-America EDC states.

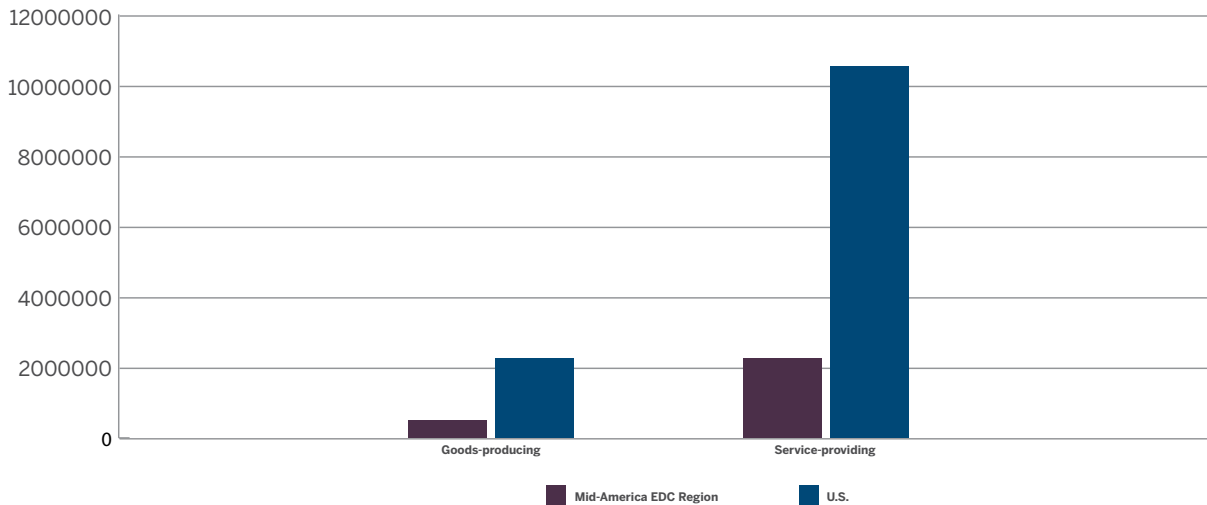


High-Level Industry Strengths by Number of Establishments



Source: U.S. Bureau of Labor Statistics

High-Level Industry Strengths by Employees

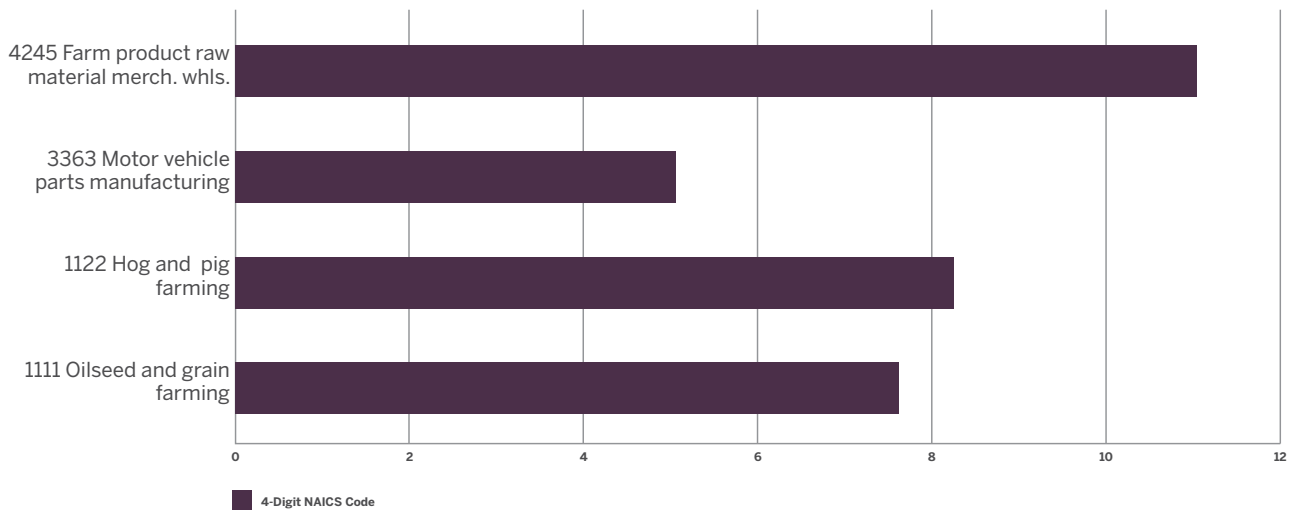


Source: U.S. Bureau of Labor Statistics

Leading industry sectors were then inventoried based on 4-digit NAICS codes. States with the associated industry sector identified as a top five sector were inventoried. Sectors representing the largest number of states were listed as a Mid-America EDC region strength. The 4-digit NAICS code sectors were then broadened to a 3-digit NAICS code to capture the broader industry sector classification. Farm product raw material merchandise wholesale (**11.47**), Hog and pig farming (**8.63**), Oilseed and grain farming (**7.75**), and Motor vehicle parts manufacturing (**5.45**) represent the strongest industry clusters within the region when analyzing 4-digit NAICS sectors.



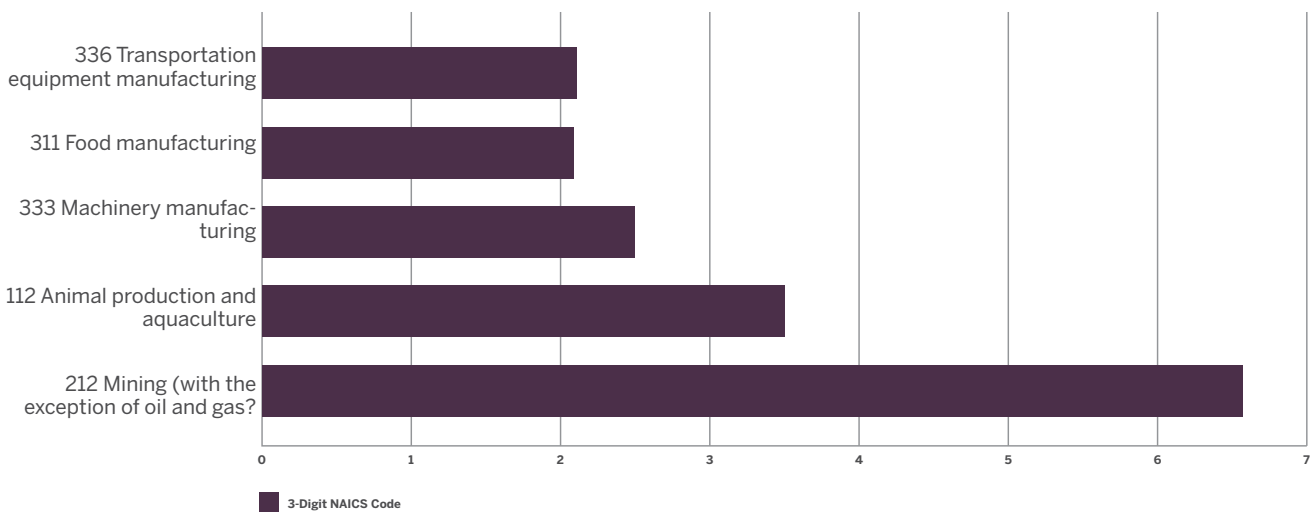
Focused LQ Strengths



Source: U.S. Bureau of Labor Statistics

Taking a higher-level view on industry sector strengths within the Mid-America EDC region via 3-digit NAICS codes, the region finds its most significant strengths in Mining (with the exception of oil and gas) (**6.75**), Animal production and aquaculture (**3.79**), Machinery manufacturing (**2.66**), Food manufacturing (**2.33**), and Transportation equipment manufacturing (**2.30**).

High Level LQ Strengths

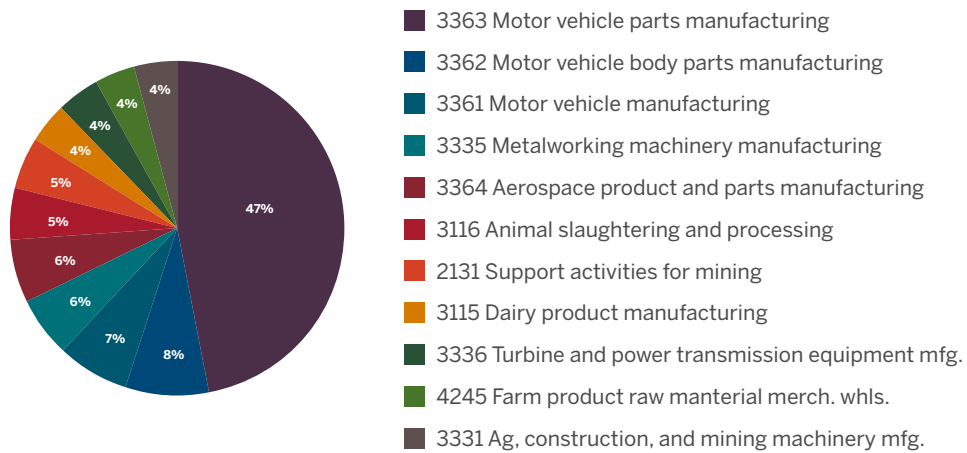


Source: U.S. Bureau of Labor Statistics

Transportation equipment manufacturing, which accounts for automotive and aerospace manufacturing activities, is the leading employment sector within the Mid-America EDC region with over 407,500 employees. While not one of the leading sectors by location quotient strength, the Machinery manufacturing sector employs over 81,200 people in the thirteen states. Animal production and aquaculture round out the top three sectors by employment levels with just over 30,700 employees.



Leading Employment Sectors in Mid-America EDC Region

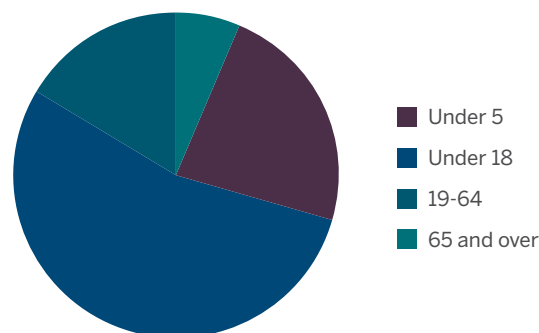


Source: U.S. Bureau of Labor Statistics

Taking a deeper dive into the breakdown of the region's top ten strongest LQ industry sectors by employment, the Motor vehicle parts manufacturing sector (272,479 employees) represents a dominate percentage of total employment at 47 percent. Looking at the top three leading industry sectors, which includes Motor vehicle body parts manufacturing (43,717 employees) and Motor vehicle manufacturing (40,017 employees), these sectors represent 62 percent of the total workforce within the top ten sectors at 356,213 employees which has long been a key component of the region's industrial history. The Mid-America EDC region represents 35.8 percent of the total U.S. employment in these three sectors.

The Mid-America EDC region's workforce has a balanced demographic range of those people that are in their working years, with a clear majority of workers, 54%, in the 19-64 age range. The availability of a workforce primed for employment based upon age is a major advantage for any region and one that many states struggle to address. In addition, regions need a pipeline of future workers with a strong student age population. This workforce pipeline creates an opportunity for communities to grow not just through the import of workers from other regions but through the retention of their student population to remain following the completion of school or technical training. For Mid-America EDC the pipeline of population under the age of 18 only accounts for 30% of the total regional population. Like many regions, Mid-America EDC states are not retaining enough of its young people and those that live in the region are not producing enough new citizens to keep pace.

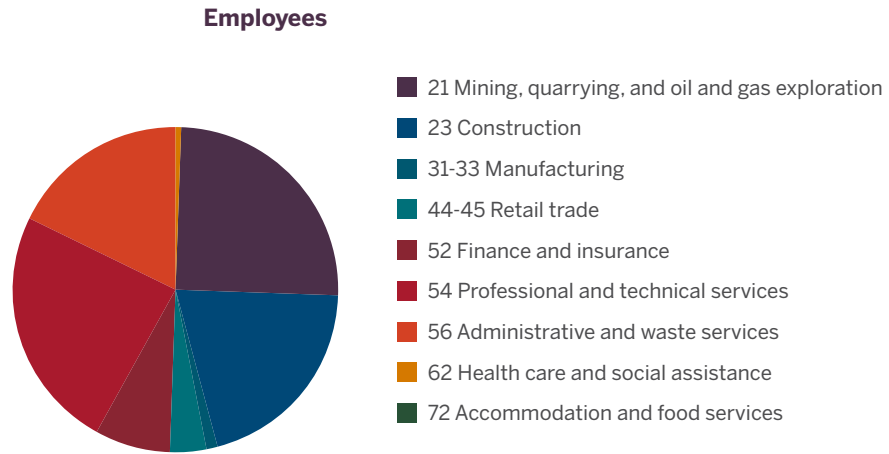
Mid-America EDC Region Population by Age



Source: U.S. Census Data

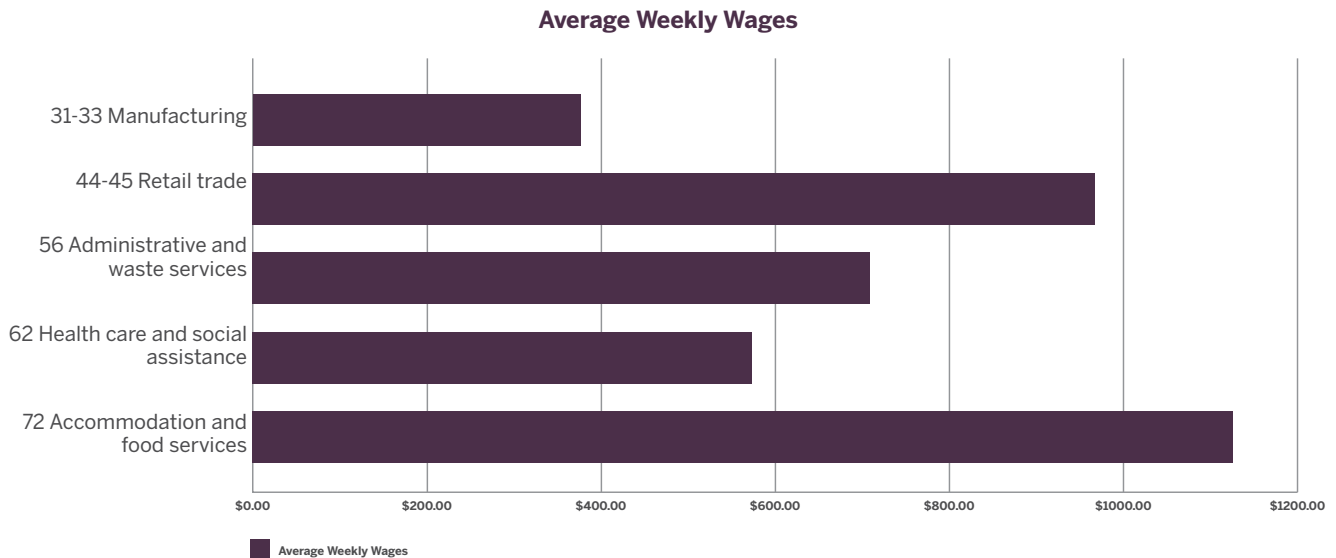
KEY WORKFORCE INSIGHTS

When looking at key employment figures by high-level industry sectors, we get a better understanding of the skill sets necessary to work within the Mid-America EDC region. Leading industry sectors in the region, based on total number of employees, are reflective of the location quotient industry strengths previously analyzed. Manufacturing has the highest number of employees in the region (**4,093,185**), followed by Health care and social assistance (**3,967,076**), Retail trade (**3,315,550**), Accommodation and food services (**2,851,253**) and Administrative and waste services (**1,195,664**). Every state in the Mid-America EDC region has Retail trade and Accommodation and food services as leading employment sectors, with Manufacturing and Health care and social assistance representing twelve of the thirteen states.



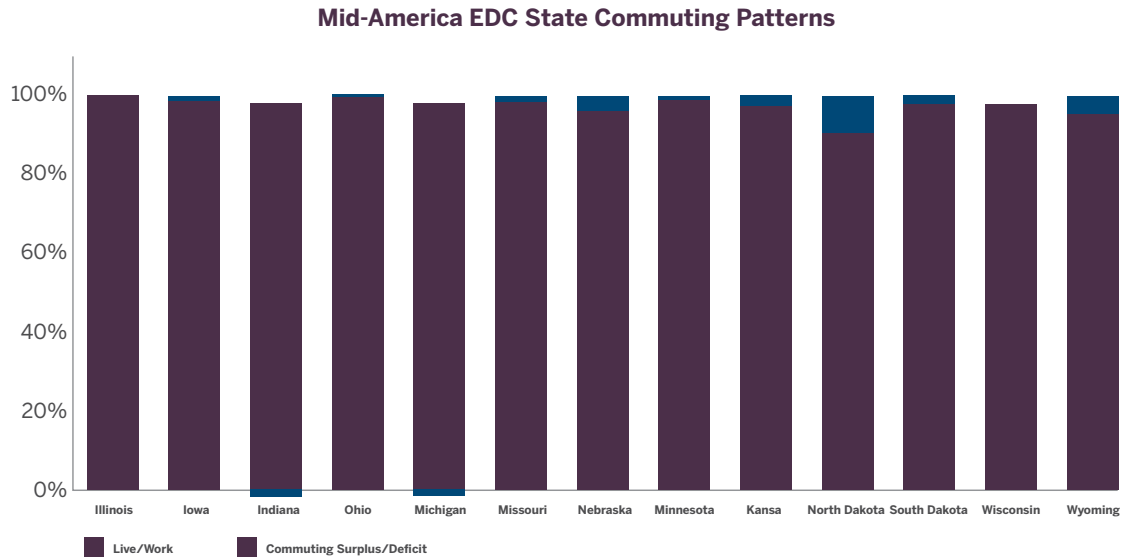
Source: U.S. Bureau of Labor Statistics

Of the leading employment sectors, Manufacturing has the highest average weekly wage of **\$1,121.50** followed by Healthcare and social assistance (**\$951**) and Administrative and waste services (**\$713.40**). Technical and skilled trades training programs and education are especially important to the Mid-America EDC region in order to fill jobs within these leading employment and wage-earning industry sectors. Retail trade and Accommodation and food services jobs fall at the lowest end of average weekly wages at \$365.15 and \$574.31 respectively.



Source: U.S. Bureau of Labor Statistics

Looking at the overall commuting patterns by state we find that four out of the thirteen Mid-America EDC states are seeing more residents leave the state on a daily basis for employment than are coming into the state for work. Michigan sees the greatest loss of residents to other states for work, losing 64,575, followed by Wisconsin at 54,631, Illinois at 19,515, and Indiana at 44,313. While some of these numbers are likely reflective of employees travelling to work within the Mid-America EDC region, it is important for communities to engage as many of their residents in the local workforce as possible especially in the tight labor market the country is currently facing.



Source: U.S. Census Bureau

MID-AMERICA EDC REGION HIGHER EDUCATION AND RESEARCH & DEVELOPMENT SNAPSHOT

One critical component to supporting a robust economy is having higher education institutions that are providing educational programming to meet the in-demand occupations within leading industry sectors. Within the Mid-America EDC region there are more than 278 community colleges offering 2-year degree programs, certification programs and adult education. Roughly 20% of all community colleges in the country are located within the region. The average in-state tuition cost for a community college in the region is \$5,514 which is higher than the national average of \$3,347.

There are 134 four-year state institutions of higher education in the Mid-America EDC region with an average in-state tuition of \$13,430 per year. This average annual tuition is more than \$7,000 less than the national average, offering affordable, high-quality educational opportunities to individuals looking to pursue a four-year degree or higher. Based on 2019 enrollment figures, the largest public universities in the Mid-America EDC region are The Ohio State University (68,100 enrolled), University of Wisconsin (45,319 enrolled), University of Michigan (44,042 enrolled), Michigan State University (39,176 enrolled), and University of Illinois at Urbana-Champaign (38,943 enrolled).

On a national level there are 1,687 private, nonprofit four-year institutions and the average annual in-state tuition at the national level is \$44,551. Within the Mid-America EDC region there are 312 private, nonprofit four-year institutions which represents approximately 18.5 percent of the total private, nonprofit institutions in the United States. The average annual tuition of Mid-America EDC private nonprofit four-year institutions is \$23,548 which is nearly half that of the national average. The largest private, nonprofit educational institutions within the Mid-America EDC region are Northwestern (22,127 enrolled), Loyola University Chicago (17,007 enrolled), University of Chicago (17,002 enrolled), Washington University in St. Louis (15,852 enrolled), and St. Louis University Main Campus (14,438 enrolled).



Forbes Magazine ranked its top 650 public and private institutions for 2019, with ten Mid-America EDC region institutions ranked in the top 100. Those institutions are the University of Chicago (16), Northwestern (17), University of Notre Dame (18), Washington University in St. Louis (31), Carleton College (52), Kenyon College (71), Grinnell College (80), Oberlin College (85), Macalester College (86), and Case Western Reserve University (100).

Data from the Carnegie Classification of Institutions of Higher Education was used to research the number of colleges and universities that have doctoral programs. This research included only public and private nonprofit educational institutions and found there are 418 public and private nonprofit educational institutions throughout the United States offering doctoral programs. Of the 418 educational institutions, 180 are located within the Mid-America EDC region. There are several institutions that have satellite campuses and these satellite campuses were incorporated into the primary campus location as they are operated by the same institution.

State's play an important role in advancing knowledge, supporting academic research, and promoting science- and technology-based economic development. Understanding the Mid-America EDC region's role in Research & Development is important for the formation of public policy and planning around science and technology. It is also important to have a broad understanding of the overall funding sector sources and character of work in U.S. Research & Development. According to the Congressional Research Service, as of 2018 the Business Sector accounted for **69.7 percent** of total overall funding of Research & Development activities. This equates to \$404.2 B, while the Federal Government accounted for **21.9 percent** of overall funding at \$127.3 B.

Table I. U.S. R&D Funding by Sector and Character, 2018

| Current dollars, in billions | | | | | | | | |
|------------------------------|----------------|--------------|------------------|--------------|--------------|--------------|--------------|--------------|
| Sector | Basic Research | | Applied Research | | Development | | Total | |
| | Dollars | Percent | Dollars | Percent | Dollars | Percent | Dollars | Percent |
| Federal Government | 40.4 | 41.8 | 39.5 | 34.3 | 47.4 | 12.9 | 127.3 | 21.9 |
| Nonfederal Government | 2.5 | 2.6 | 1.6 | 1.4 | 0.6 | 0.2 | 4.7 | 0.8 |
| Business | 28.0 | 29.0 | 62.4 | 54.3 | 313.9 | 85.2 | 404.2 | 69.7 |
| Higher Education | 13.1 | 13.6 | 5.7 | 4.9 | 2.3 | 0.6 | 21.1 | 3.6 |
| Other Nonprofit | 12.5 | 13.0 | 5.8 | 5.1 | 4.3 | 1.2 | 22.7 | 3.9 |
| Total | 96.5 | 100.0 | 115.0 | 100.0 | 368.5 | 100.0 | 580.0 | 100.0 |

Source: CRS analysis of National Science Foundation, National Patterns of R&D Resources: 2017-2018 Data Update. NSF 20-307, Tables 6-9, January 8, 2020

Note: Rows and columns may not add to totals due to rounding. Data for 2018 data are preliminary and may be revised.

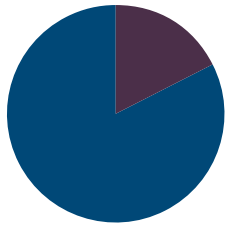
Source: Congressional Research Service, 2018

The National Science Foundation (NSF) was created by Congress in 1950 as an independent federal agency primarily charged with “promoting the progress of science; advancing the national health, prosperity, and welfare; and securing national defense.” NSF is vital because it supports basic research and people to create knowledge that transforms the future. Looking at NSF data on the Mid-America EDC region delineates the roll the region plays in the overall Research & Development efforts in the United States. According to the most recent NSF data, the Total R&D Performance of the Mid-America EDC region (including business R&D performance and higher education R&D performance) is \$93.876 B which represents roughly **17.76 percent** of the national R&D Performance. When looking at the total square feet of Academic Research Space within



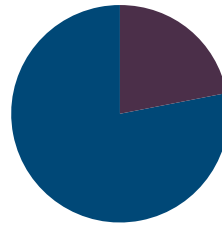
the Mid-America EDC region, the region has 48.358 B square feet under roof, which is **21.98 percent** of the total Academic Research Space in the United States.

Total R&D Performance, 2017 (\$millions)



Mid-America EDC Region US

Academic Research Space, 2017 (thousands sq. ft.)

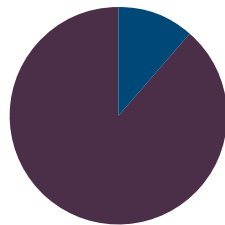


Mid-America EDC Region US

Source: National Science Foundation

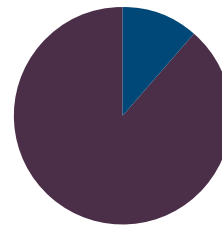
Drilling down into the number of SBIR awards issued in 2018, the Mid-America EDC region received **658** of the nation's 4,838 SBIR awards, which represents 13.60 percent of total awards made. Financially, the federal government made a total of \$123.637 B in Science & Engineering R&D obligations in 2018. Of those obligations, the Mid-America EDC region received **\$14.021 B**, or 11.34 percent of the total obligations in 2018.

SBIR Awards, 2018



Mid-America EDC Region US

Federal Obligations for S&E R&D, 2018 (\$thousands)



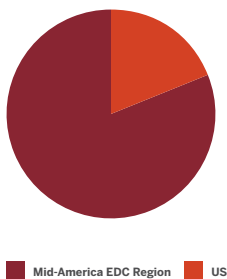
Mid-America EDC Region US

Source: National Science Foundation

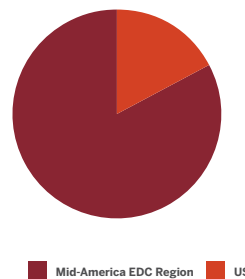
Switching gears to account for medical research, the National Institute of Health (NIH) reports annually on research and funding awards (grants, contracts, and intramural spending) at academic institutions and organizations across the country through the NIH Research Portfolio Reporting Tools (RePORT). The most recent NIH data comes from 2019 and reports 59,531 awards made throughout the United States, of which Mid-America EDC states received **11,358** (19.08%) awards. The total 2019 funding of NIH-sponsored projects is \$30.886 B of which Mid-America EDC states received **\$5.317 B** (17.2%) in funding.



National Institute of Health Awards, 2019



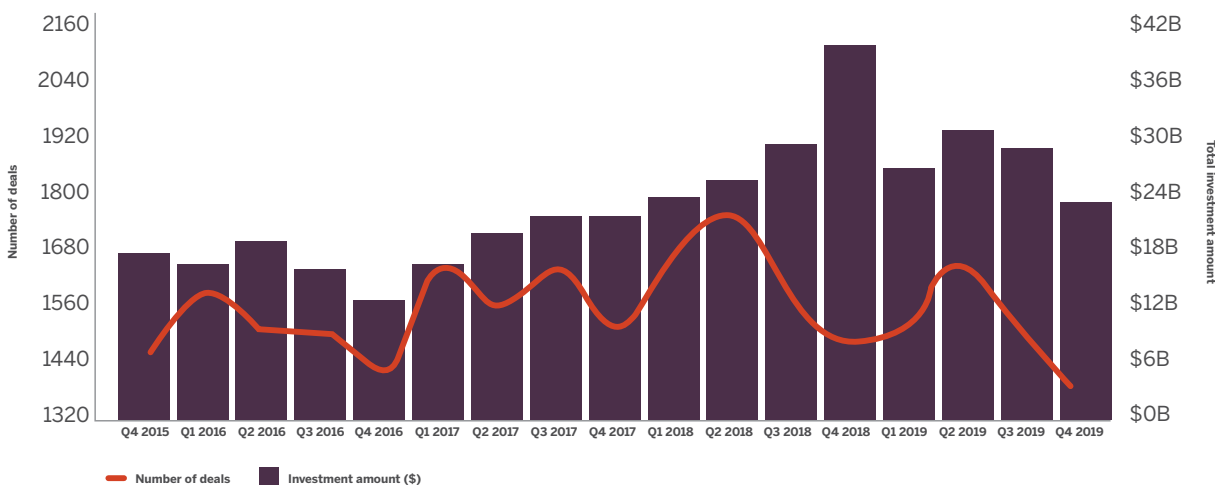
National Institute of Health Funding, 2019 (\$billions)



Source: National Institute of Health, 2019

The PwC MoneyTree Report contains historical trend data and updates on the Venture Capital and high-growth startup ecosystems and emerging companies. The MoneyTree Report is used by the financial community, entrepreneurs, and government policymakers worldwide to assess the entrepreneurial ecosystem on a broad spectrum or funneled down into granular data. At the beginning of 2020, PwC indicated that IPO markets would remain robust at the start of the year based on economic trends and investor sentiment, however with the unforeseen COVID 19 pandemic, current geopolitical environment, U.S. presidential election, and Fed policy decisions, IPO market activity will surely be skewed from original expectations. Over the last five years, national MoneyTree Report data shows there were **26,386 deals** and an investment amount of just over **\$370.04 B**.

National PwC MoneyTree Report 2015-2019

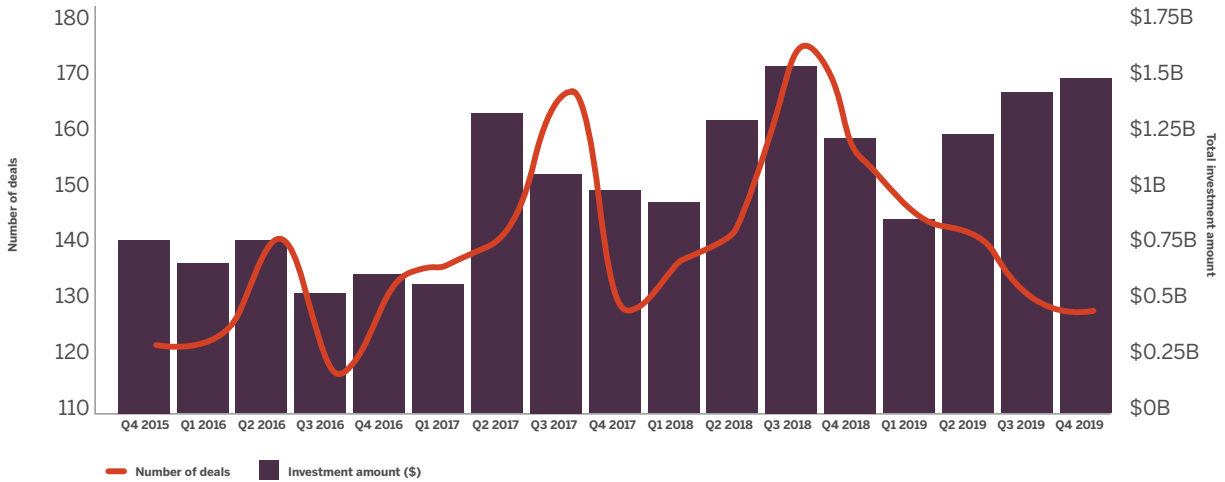


Source: PwC MoneyTree Report Analysis, 2015-2019

Looking at the PwC MoneyTree Report over the same five-year period for the Mid-America EDC region, we seen similar patterns of deal flow and investment trends, suggesting the entrepreneurial environment within the region is similar to the national environment. Within the Mid-America EDC region there were 2,371 deals representing **8.9 percent** of total U.S. deals during the 2015-2019 period. Investment over the five-year period equaled just shy of \$17.35 B which represents **4.7 percent** of total U.S. investment. While the trends within the Mid-America EDC region are in line with national trends, the region represents a relatively small portfolio of entrepreneurial activity considering Mid-America EDC states account for 20 percent of the population, 21.7 percent of the nation’s workforce, and 14.27 percent of overall NSF and NIH funding in 2019.



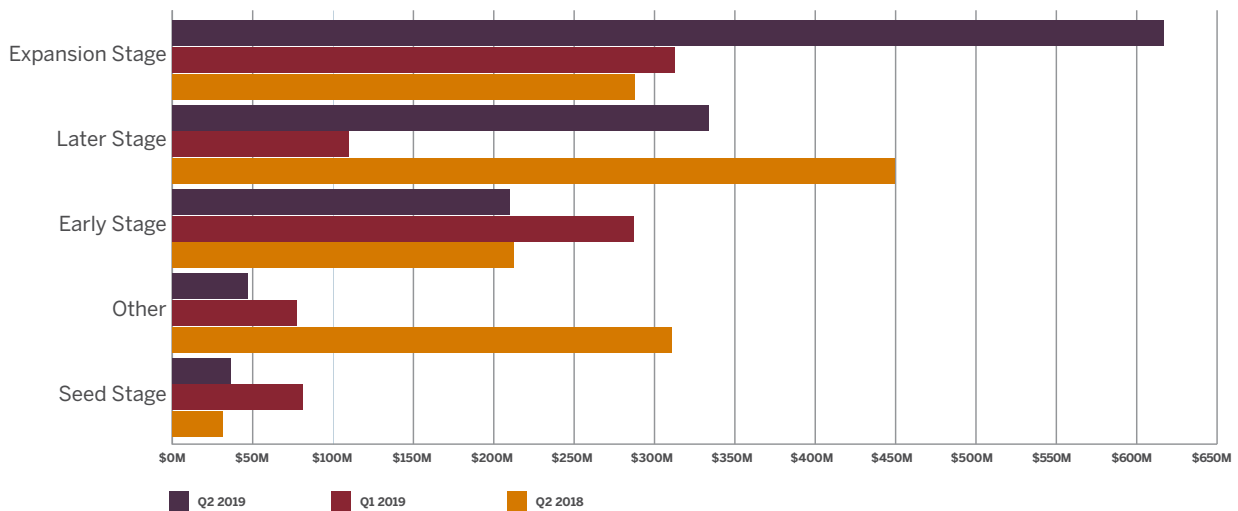
Mid-America EDC Region PwC MoneyTree Report 2015-2019



Source: PwC MoneyTree Report Analysis, 2015-2019

Within the PwC MoneyTree Report, investment data for the region can be broken down into investments by the funding stage of a company. PwC defines the different funding stages as Seed Stage (seed/angel), Early Stage (Series A), Expansion Stage (Series B and C), Later Stage (Series D and E+) and Other (rounds not associated with a specific stage in a company’s funding history). Looking at the most recent data, within the Mid-America EDC region a majority of investments made as of Q2 2019 are in the Expansion Stage, suggesting these investments are in more mature entrepreneurial companies that are approaching acquisition or nearing a public offering and are maturing into a Later Stage company. Investments in Expansion Stage companies are almost double that of Later Stage companies and over double investment levels in Early Stage companies during the same timeframe. During the same quarter of 2018, Mid-America EDC region investments were higher for Later Stage companies than any other stage. This data also suggests that between Q2 2018 and Q2 2019, investment volumes were shifting from Later Stage companies into earlier Expansion Stage and Other companies, possibly indicating the attraction of investors to supporting a new round of entrepreneurial ventures.

Mid-America EDC Region PwC MoneyTree Investment Stages Report 2018-2019



Source: PwC MoneyTree Report Analysis, 2019

ECONOMIC LANDSCAPE

Mid-America EDC Region Compared to United States, Southeast Region and Texas

The Mid-America EDC region makes up roughly 17.1% of the total national GDP. The United States GDP in millions of dollars has grown from \$119,918,000 to \$21.729,000 **(9.1%)** between 2017-2019. Comparatively, the Mid-America EDC region has seen a **3.6%** increase in overall regional GDP in millions from \$3,595,635 in 2017 to \$3,723,824 in 2019. States representing the largest share of the region's GDP include Illinois, Ohio, Michigan, Minnesota and Indiana. The region's economic landscape also includes 250 of the top 1,000 companies on Fortune's Top 1,000 list for the 2020 year. Illinois has the highest number of Fortune 1000 companies **(65)**, followed by Ohio **(53)**, Michigan **(28)**, Minnesota **(24)**, Wisconsin **(23)**, Missouri **(20)**, Indiana **(18)**, Nebraska **(8)**, Iowa **(6)**, Kansas **(4)**, and North Dakota **(1)**. The states of North Dakota, South Dakota, and Wyoming do not have any Fortune 1000 companies with headquarters. The top 50 on the Fortune 1000 ranking include:

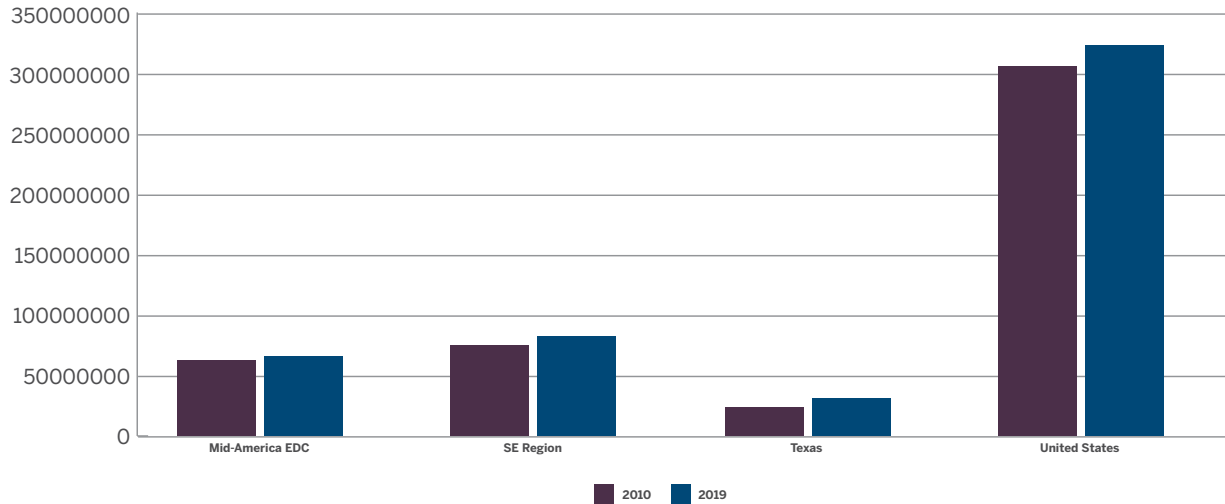
| Company | Fortune 1000 Ranking | State |
|--------------------------|----------------------|-----------|
| Berkshire Hathaway | 6 | Nebraska |
| United Health Group | 7 | Minnesota |
| Ford Motor Company | 12 | Michigan |
| Cardinal Health | 16 | Ohio |
| General Motors | 18 | Michigan |
| Walgreens Boots Alliance | 19 | Illinois |
| Marathon Petroleum | 22 | Ohio |
| Kroger | 23 | Ohio |
| Anthem | 29 | Indiana |
| State Farm Insurance | 36 | Illinois |
| Target | 37 | Minnesota |
| Boeing | 40 | Illinois |
| Centene | 42 | Missouri |
| Proctor & Gamble | 50 | Ohio |

Source: *Forbes Magazine, 2020*

For purposes of this analysis, eleven states within the Southeast Region were compared to the Mid-America EDC region. Additionally, the state of Texas economy was analyzed in comparison to the Mid-America EDC region. The total population in the Southeast Region experienced an increase of **7.2%** between 2010-2019, growing from approximately 76.5M people to just over 83.1M people. This is a substantially higher growth rate compared to the Mid-America EDC region's growth rate of 4.0% over the same period. When examining population trends within the state of Texas between 2010-2019, the state experienced tremendous growth, seeing an increase in population of **15.3%**.



Population Growth 2010-2019



Source: U.S. Census Bureau

From a labor force participation rate standpoint, the Mid-America EDC region enjoys a higher participation rate (**66.2%**) compared to the Southeast Region (**60.1%**) and state of Texas (**64.2%**). When looking at the percentage of the populations of prime working age (between 19-64 years) within Mid-America EDC states, Southeast Region states, and the state of Texas each region finds itself near the national average of 55.5%. The Mid-America EDC region has 54.1% of its population in the prime working age; the Southeast Region has 55.1% of its population in the prime working age; and Texas has 54.5% of its population in the prime working age. The Mid-America EDC region has a mean travel time to work of 21.4 minutes, which is roughly 5 minutes less than travel times in the Southeast Region, state of Texas and national averages.

Manufacturing as an overall sector is one of the region's strong suits with a broad array of manufacturing industries, a skilled manufacturing workforce, and a robust public infrastructure system that competitively moves goods both domestically and internationally. One important factor to maintaining the robust manufacturing sector in the Mid-America EDC region is to maintain wages that are competitive with other manufacturing regions in the U.S. Comparing the Mid-America EDC region with the Southeast region and state of Texas, average weekly wages between the Mid-America EDC region (**\$1,233**) and Southeast region (**\$1,193**) are virtually identical while the average weekly wage in the manufacturing sector in Texas is significantly higher (**\$1,546**). This data suggests that Mid-America EDC states compete on a level playing field from a wage standpoint with the Southeast region states.

NAICS 1013 Manufacturing Average Weekly Wages, Q4 2019



| NAICS 1013 Manufacturing Average Weekly Wages, Q4 2019 | |
|--|----------------------|
| State | Average Weekly Wages |
| Mid-America EDC Region Average Wage | \$1,233 |
| Illinois | \$1,427 |
| Iowa | \$1,235 |
| Indiana | \$1,236 |
| Ohio | \$1,260 |
| Michigan | \$1,406 |
| Nebraska | \$1,074 |
| Minnesota | \$1,349 |
| Missouri | \$1,186 |
| Kansas | \$1,194 |
| North Dakota | \$1,132 |
| South Dakota | \$990 |
| Wisconsin | \$1,187 |
| Wyoming | \$1,356 |
| | |
| Southeast Region Average Wage | \$1,193 |
| Alabama | \$1,170 |
| Arkansas | \$992 |
| Mississippi | \$999 |
| Louisiana | \$1,514 |
| Georgia | \$1,143 |
| Florida | \$1,288 |
| South Carolina | \$1,188 |
| North Carolina | \$1,182 |
| Virginia | \$1,209 |
| Kentucky | \$1,232 |
| Tennessee | \$1,207 |
| | |
| Texas | \$1,546 |

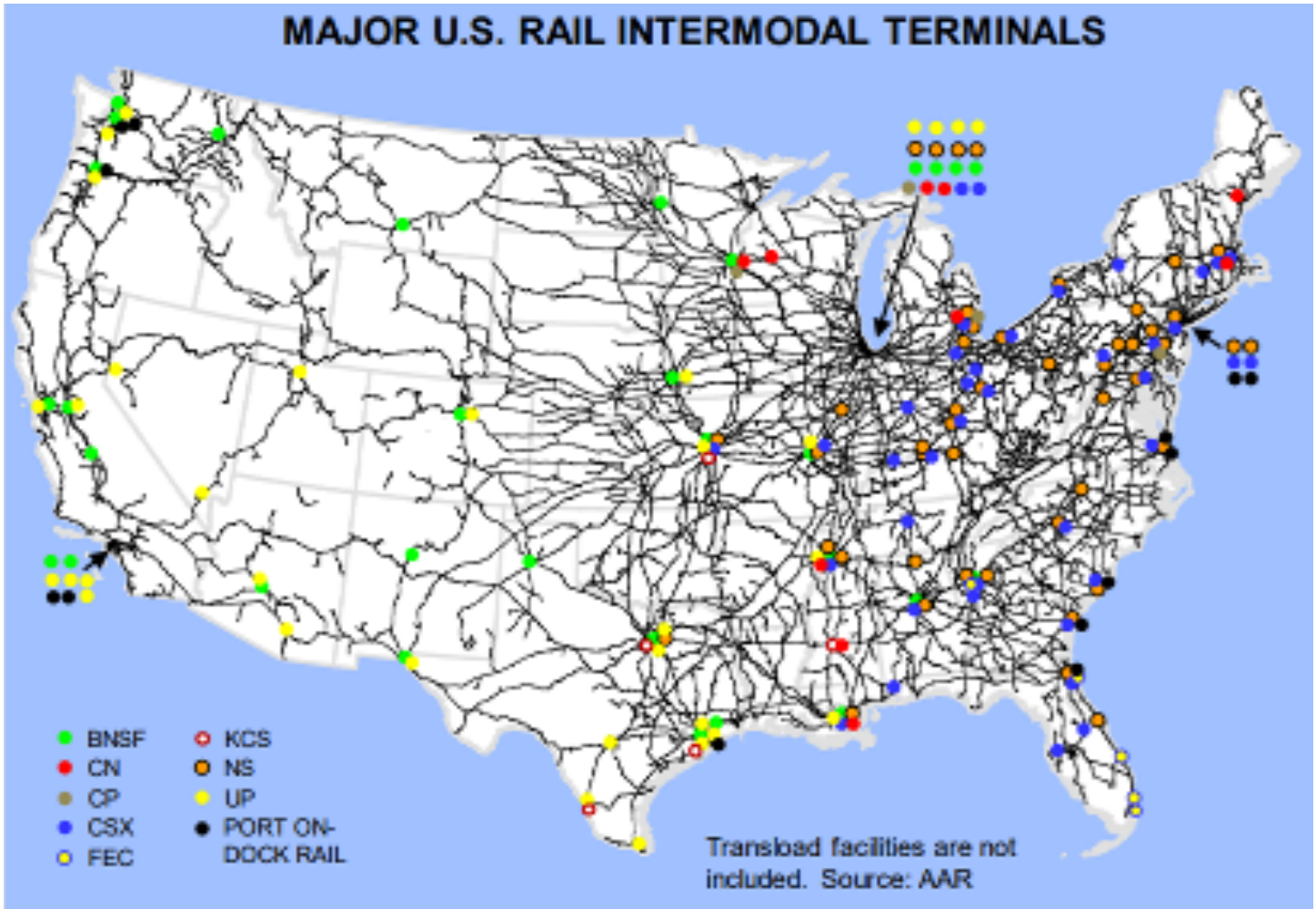
Source: U.S. Bureau of Labor Statistics

The median household income compares favorably to the Southeast Region, where Mid-America EDC states have an average median household income of \$58,869 compared to \$52,383 and is similar to the median household income in the state of Texas (\$59,570). Conversely, the Mid-America EDC region's poverty level average of 11.9% is notably lower than the Southeast Region (15.6%) and the state of Texas (14.9%) suggesting that the affordability of the region, combined with modest average wages, provide the means necessary for a majority of residents to live comfortably in the Mid-America EDC region. Median housing values in the Southeast Region (\$149,572) and state of Texas (\$161,700) are considerably lower than the Mid-America EDC region's median value of \$178,823.



TRANSPORTATION AND LOGISTICS IN THE MID-AMERICA EDC REGION

In March 2020, the Association of American Railroads issued a report entitled “Rail Intermodal Keeps America Moving,” where the Association reported rail intermodal is the largest single source of U.S. freight rail revenue, due in large part to the railroads investment of billions of dollars in new intermodal terminals, track upgrades, and other infrastructure projects that have made rail intermodal more reliable and cost effective. The AAR goes on to define rail intermodal as the long-haul movement of shipping containers and truck trailers by rail, combined with a truck or water movement at one or both ends. Intermodal allows railroads, ocean carriers, trucking companies, and intermodal customers to take advantage of the best attributes of various transportation modes to yield an efficient and cost-effective overall freight movement. The U.S. intermodal system is a comprehensive web of interconnected systems, as displayed in the map below.



Source: Association of American Railroads

Within the Mid-America EDC region there are fifty-three intermodal facilities among the seven Class I railroads. The state of Illinois has the largest number of intermodal facilities within the Mid-America EDC region at twenty-one, followed by Ohio with ten facilities, Missouri with eight facilities, Michigan with four facilities, Minnesota and Wisconsin with three facilities each, Indiana with two facilities, and Iowa and Nebraska have one facility each.

Top 15 Markets for Intermodal Traffic Handled in the United States in 2017*

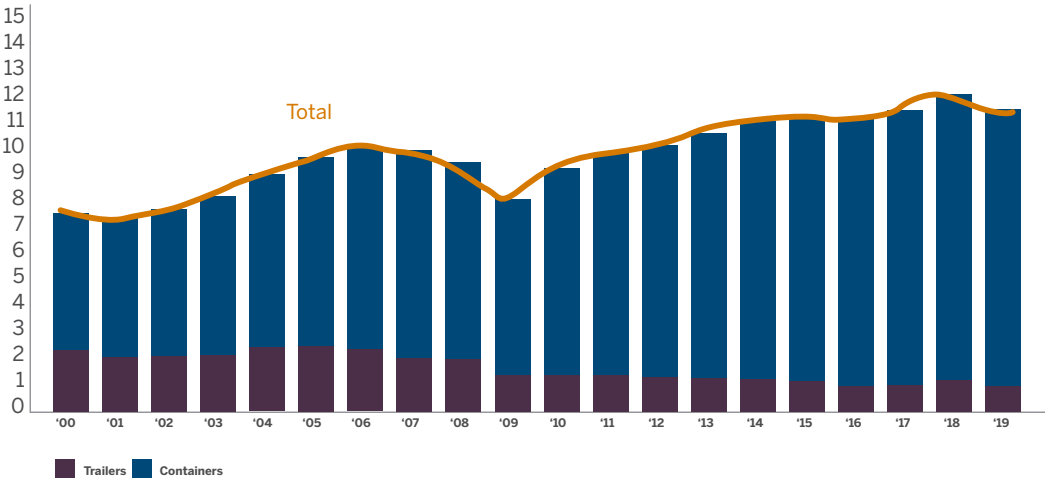
| Market | Containers and Trailers |
|--|--------------------------------|
| 1. Chicago / Elwood / Joliet , IL | 6,088,000 |
| 2. Long Beach / Sand Pedro / San Bernadino / City of Industry , CA | 5,230,000 |
| 3. Atlanta, GA | 1,396,000 |
| 4. Dallas / Ft. Worth / Saginaw, TX | 1,344,000 |
| 5. Little Ferry / North Bergen / South Kearny / Jersey City / Newark / Elizabeth, NJ / Staten Island, NY | 1,145,000 |
| 6. Seattle / Bremerton / Tacoma / Everett, WA | 958,000 |
| 7. Memphis, TN / West Memphis, AR | 828,000 |
| 8. Norfolk / Portsmouth, VA | 650,000 |
| 9. Harrisburg, PA | 637,000 |
| 10. Stockton, CA | 607,000 |
| 11. Jacksonville, FL | 561,000 |
| 12. Detroit / Pontiac, MI / Toledo, OH | 550,000 |
| 13. Svannah, GA | 464,000 |
| 14. Columbus / Marion / Marysville, OH | 431,000 |
| 15. Kansas City, MO / Kansas City, KS | 383,000 |

*Originated and terminated Source: AAR analysis of 2017 STB Waybill Sample
 Source: Association of American Railroads

According to AAR data, U.S. rail intermodal volumes have grown substantially since 2000 as a result of many factors such as better service, massive spending, fuel costs that are three to four times more fuel efficient than trucks, international trade, avoidance of highway gridlock, and workforce shortages for truck drivers. Additionally, the AAR data shows there has been a gradual decline in the transport of trailers and a significant increase in the transport of containers over this period.



U.S. Rail Intermodal Traffic (millions of containers and trailers)



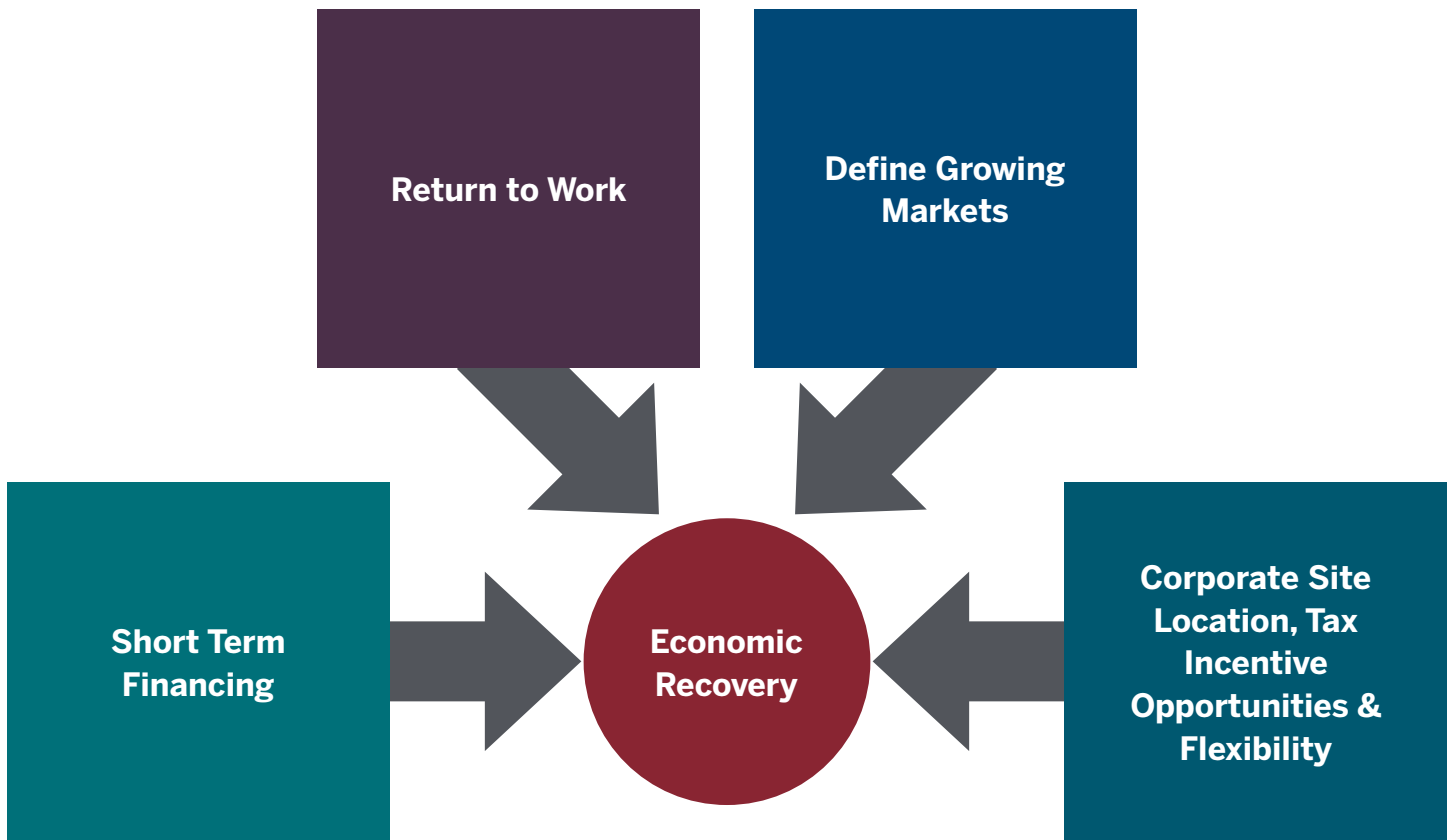
Source: Association of American Railroads

The AAR also reported on the top 15 markets for intermodal traffic that was handled in the United States in 2017. Of the top 15 markets, four are located within the Mid-America EDC region. Chicago / Elwood / Joliet, IL handled just over 6 million containers and trailers in 2017, followed by Detroit / Pontiac, MI / Toledo, OH that handled 550,000 containers and trailers, Columbus / Marion / Marysville, OH that handled 431,000 containers and trailers, and Kansas City, MO / Kansas City, KS that handled 383,000 containers and trailers. These figures are based on originated and terminated freight.

Twenty-five percent of all U.S. freight traffic moves through Chicago, making it the largest capacity intermodal facility in the Mid-America EDC region and the third largest intermodal system in the world. Chicago is also home to the largest inland container port in North America, CenterPoint Intermodal Center which is in Joliet, IL.

CORPORATE SITE LOCATION TRENDS & THE MID-AMERICA EDC REGION

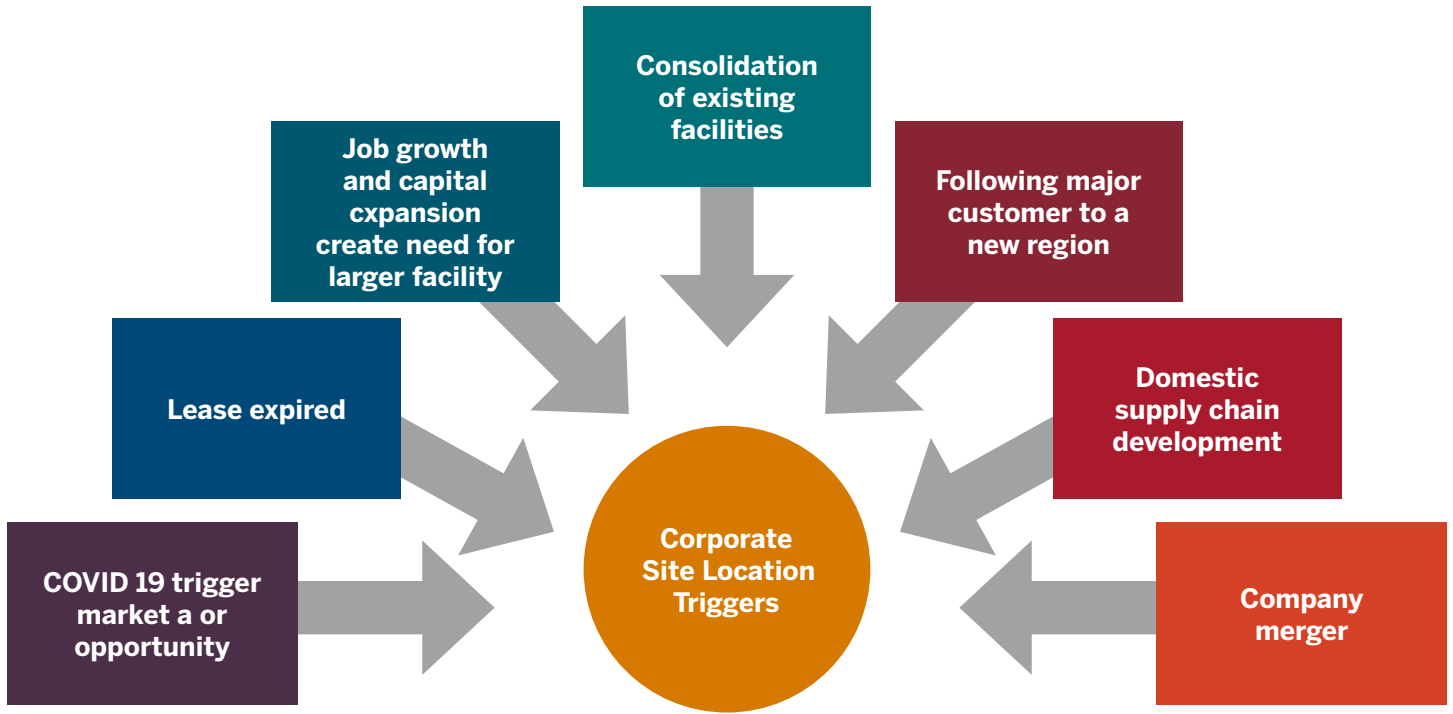
Amid the negative news stories, skyrocketing unemployment numbers and a myriad of webinars and videoconference calls, companies across America are surviving and preparing for economic recovery. The Montrose Group recommends company economic recovery strategies in the Mid-America EDC region be focused on five key steps: assessing the economic damage; gaining short term financing; returning to work; exploring tax incentives opportunities and flexibility; redefining company supply chain systems to address operational challenges; and preparing sites for new development.



The Montrose Group has a four step approach toward implementation of economic recovery services for disasters like COVID 19 that first defines the economic challenge companies face by measuring the before, during and after of the disaster's impact on the region's economy, workforce and employer base and review of job postings; input-output economic and workforce models; skill shaping for upskilling; and development of COVID 19 supply chain strengths and weaknesses. Next, companies need to address short term financing needs through local, state, and federal government sources made available through the federal government stimulus program. Companies then need to push for a return to work understanding their own market, local and state regulations, and federal government recommendations. Companies should next negotiate added flexibility to existing tax incentives if they will not meet job creation and capital investment goals set in a pre-COVID 19 economy or negotiate new tax incentives through a multi-state corporate site location process. Addressing company supply chain management issues is another critical aspect of the corporate site location process as COVID 19 may drive companies to shift their supply chain closer to domestic facilities. Finally, companies for their own growth or the investments planned by a domestic supply chain should explore site development strategies focused on land use entitlements such as zoning, negotiations of tax incentives, infrastructure finance and the local government and school district compensation agreements that accompany these incentives and finally gain construction sales tax exemptions offered to many large scale economic development projects.



Corporate site location is a process whereby a company decides where to grow jobs and make a capital investment. Specific triggers exist that tell a company they should undertake a corporate site location process such as the end of a real estate lease, growth needs for people or equipment beyond their current facilities' capabilities, consolidation of existing facilities, a growth opportunity in a new region, a company merger, COVID 19 generated market or supply chain development opportunities.



Real estate brokers and site selection consultants from throughout the Mid-America EDC footprint were interviewed to gain additional perspective on recent trends and Mid-America EDC regional competitiveness. A balanced geographic representation of brokers and site selectors were interviewed from throughout the Mid-America EDC region. Real Estate Brokers and Site Selection Consultants interviewed were asked about top site location assets; regional services or amenities lacking in the Mid-America EDC region; specific, business-friendly economic development and workforce development policies and programs within the region; economic development and workforce development policies and programs that make it difficult to do business in the region; and any additional insight important to share with the region.

| Corporate Site Location & Industry Trends | Interview Responses |
|--|---|
| 1. What do you see as the top assets from a site location perspective of the states within the Mid-America EDC region that you work in? | <ul style="list-style-type: none"> • Amongst Midwest clients, there is a strong access to talent • Businesses are looking to build relationships to universities and technical schools to access talent • Universities are a big driver in site location • Public infrastructure for distribution sector is critical and a Mid-America EDC regional asset; it is stronger than other parts of US <ul style="list-style-type: none"> ◦ Rail/intermodal systems, water resources, major airports, and interstate systems • Location to major metro areas is an asset to client's access to markets. • Regions with strong quality of life initiatives have done well in attracting and retaining talent, including C-suite talent. |
| 2. Are there regional services or amenities that are lacking within the Mid-America EDC region that would help make the region more competitive for site location? | <ul style="list-style-type: none"> • Container traffic is on the rise, however the Mid-America EDC region is not expected to see growth in container-related activity with the region's geographic location. • Cheaper labor, less regulations and competitive incentives programs in Southeast make it more attraction for site location. • In some of the more rural parts of the Mid-America EDC region, it becomes more expensive for site location if transportation infrastructure is limited. It is more expensive to bring product in and ship product out, and often the backhaul |
| 3. Are there specific, business-friendly economic development and workforce development policies or programs that make working in Mid-America EDC states attractive? | <ul style="list-style-type: none"> • Overall, the Mid-America EDC region has competitive incentives programs. • Companies evaluate whether they will have taxable income. If they will not, incentives such as corporate income tax credits are sometimes not valuable. <ul style="list-style-type: none"> ◦ Mid-America EDC states with no corporate or state income taxes are favorable to other states. • Refundable tax credits are most attractive if a tax credit will be offered. • Clients typically want cash grants that can be applied "above the line" vs tax credits/ incentives that may not be available on a year-to-year basis. • Local tax abatement incentives are valuable and local |
| 4. Conversely, are there specific economic development and workforce development programs or policies that make working in a specific Mid-America EDC state difficult? | <ul style="list-style-type: none"> • Incentives are a factor, but not always the most important factor in site location analyses. • There is a definite need for shovel ready sites of all sizes, including mega sites. • Workforce/talent attraction remains the greatest need. States can offer workforce/ talent attraction and workforce training grants, but it is difficult to always utilize the full benefit of these funds as it gets increasingly more difficult to attract talent. |
| 5. Other perspectives important to share? | <ul style="list-style-type: none"> • The #1 driver of site location is access to workforce/talent. Manufacturing talent is hard to find and retain. • Business Retention & Expansion clients are looking at talent trends over a 10-20-year window. • Automation in manufacturing processes is on the rise. • The Mid-America EDC region should consider the impact of COVID 19 and how it will change the economic landscape – reshoring opportunities, regionalization of industry sectors and distribution channels, etc. Pharma/medical devices will be a key growth sector. <ul style="list-style-type: none"> ◦ Most industry sectors view COVID 19 as a pause and not a full stoppage. ◦ Cost control will likely result in some industry retraction (e.g., office and retail). ◦ Companies will need to build resilience strategies into overall business models. • Seeing more transportation providers and utility providers partnering on site development, which is a positive. • Top 3 Site Location Drivers - #1. Workforce availability and workforce pipeline strategy in place. #2. Does the site work for the project. #3. Incentives. • States that have streamlined economic development processes and clear, simplified messages on program values stand out to site consultants <ul style="list-style-type: none"> ◦ Indiana is easy to work in. ◦ Ohio and Illinois are more cumbersome to work with. ◦ South Dakota has very low taxes and not as many incentives. ◦ Iowa and Nebraska have strong incentives programs. • A state or region's strength in specific industry sectors helps drive the focus of where a site selection project will search. |



Understanding the strengths and weaknesses of industries and how those industries are performing in potential targeted regions for a corporate site location process is a critical step to determining if a region will be well suited to the expansion or location of a particular company. Pre-COVID 19, economic projections see overall job growth in professional services, educational services, and health care while most other industry job growth remains steady or declines. Large declines were anticipated to continue in manufacturing, financial services, and government jobs.

| Post-COVID 19 Industry Winners | Post-COVID 19 Industry Losers |
|---|--|
| <ul style="list-style-type: none"> • Logistics • Medical Equipment Manufacturers • PhRMA • E-Commerce • Current Manufacturing Supply Chain | <ul style="list-style-type: none"> • Traditional brick & mortar retail • Airlines • Events • Hospitality |

As the table above indicates, prime among the COVID 19 corporate site location losers are underperforming, lowly capitalized or overly full markets in industries that were struggling prior to COVID 19. Look at traditional retail. Large, traditional, 1950's era shopping malls and their cousin the 1980's retail strip centers are closing for public health reasons may not reopen when COVID 19 is gone but not forgotten. These malls and strip have been struggling to compete in the Age of Amazon. Losing millions of dollars in revenue is likely to kill many of these retail institutions. Along with the malls is likely more big box retail stores that have not made the transition to the digital age and the distribution fulfillment center. Craft beer companies are facing equal challenges but not because their market is dying but because their market has overheated. Many craft beer companies have publicly discussed turning their facilities into sources for hand sanitizer to fill this pressing public need. Hundreds of restaurants will likely not survive a three-month closure without government support. Financial services operations like bank branches may have hundreds of locations close and many not open again. Global manufacturing outside of the United States will also become a harder sell. Lax environmental and health standards in China and third world countries should cause U.S. policy makers and consumers to question more where the products they use come from.

Much like COVID 19 corporate site location losers, many of the winners will be in industries who were trending the right way before the public health crisis. Look at retail's unruly cousin – logistics, distribution, and fulfillment centers. The COVID 19 consumer with the widespread closure of most non-grocery or pharmacy stores is on-line right now shopping on Amazon, Chewy or other on-line retailers to fill their needs. Assuming these on-line purchases are delivered on time, what starts as a forced consumer behavior is going to become the common practice for millions more global consumers. Consumers will not buy less when this public health crisis is over, they will just change more how they buy goods and services. COVID 19 is like "pouring gasoline on a fire" for the logistics, distribution, and fulfillment industry. It creates a substantial opportunity for regions with large scale industrial parks prepared with zoning, tax incentives, infrastructure finance and construction financing to add thousands of jobs to make up for other economic losses in the coming months and years. Equal to logistics growth, the source of COVID 19 will drive more manufacturing back to the United States in many industry categories. Starting with protective personal equipment, hospital equipment, pharmaceuticals, and any product that policy makers and consumers needed in the current crisis but was manufactured in China. Then add in the hostility that is coming China's way following the conclusion of the spread of COVID 19. Hopefully, the summer of 2020 will be when the "hangover" from COVID 19 happens. This should be a period of economic revival but also may be a time when policy makers and consumers really question if "Made in China" is the stamp they want on their products. Automation in the manufacturing sector makes the United States more appealing for these jobs as fewer, higher skilled, higher wage workers are needed. Thus, not only is U.S. manufacturing is positioned for future growth but the Mid-America EDC region stands to prosper from this growth.

