The Montrose Group, LLC

TRANSFORMING YOUR WORLD

CAPITALIZING ON RURAL CORPORATE SITE LOCATION OPPORTUNITIES

FROM THE MONTROSE GROUP, LLC

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MONTROSE GROUP'S CORPORATE SITE LOCATION PRACTICE DRIVEN BY MULTI-DISCIPLINARY TEAM

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Dave Robinson serves clients based upon 25 years of experience as a corporate site location consultant, economic developpent lawyer, public relations executive and lobbyist before the federal, state and local governments. Mr. Robinson negotiated $200 M in economic development incentives, including $20 M in 2019-20, and co-authored 26 comprehensive economic development, site development, Downtown redevelopment and business incubator feasilibiltys plans. Mr. Robinson is a national economic development author with *The Energy Economy* and *Economic Development from the State & Local Perspective* both published by Palgrave-MacMillan.

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Nate Green serves customers based upon his 21 years as a corporate site location consultant and strategic consultant to economic development organizations. Mr. Green negotiated for $1.2B in economic development incentives, including $20M in 2019-20, and co-authored 26 comprehensive economic development strategies, site development, Downtown redevelopment and business inclubator feasibility plans. Mr. Green was on the start-up team for JobsOhio and served at the Cleveland-Cuyahoga County Port Authority, Ohio Department of Development and the Pickaway Progress Partnership.

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Executive Summary. Rural communities are prime targets for companies considering a corporate site location project. Rural areas in the U.S. cover 97 % of the nation's land area but contain 19.3 % of the population who are more likely to own a single family home, are older and less likely to hold a bachelor's degree or be in poverty than their urban counters.

Rural Market Corporate Site Location Disadvantages	Rural Market Corporate Site Location Advantages
• Slower economic growth	• COVID 19 open spaces
• Populaton loss	• Lower real estate costs
• Older population	• Lower labor wage rates
• Fewer bachelor degrees	• Manufacturing haven

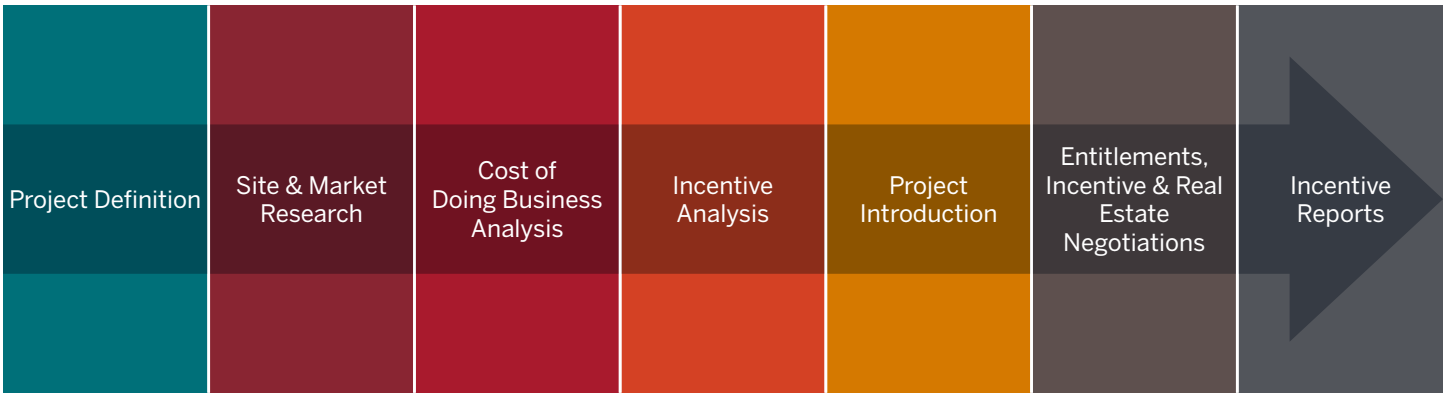
Private companies seeking a corporate site location see disadvantages and advantages in rural markets. In general, rural markets, compared to their urban and suburban counterparts, have slower overall economic growth, face the loss or slow growth of population driven by the failure to retain younger workers which is drives down rural bachelor degree rates. However, rural markets have the potential to benefit from their open spaces in a COVID 19 world, enjoy substantially lower real estate and wage rates, have long been a base for manufacturing companies, will benefit from the continued automation of manufacturing facilities as this will require fewer workers and mitigated the lack of rural population and are prime targets for companies seeking to locate facilities tied to energy intensive industries, and connecting their supply chain to domestic facilities.

Montrose Group recommends companies considering rural communities for corporate site location projects focus on addressing regional workforce challenges by building a Public-Private-Partnership (PPP) to retain and attract skilled labor through industry base training programs with growth opportunities focused on technology and manufacturing companies through the development of IT and robotics workforce development programs, and rebuild rural Downtowns to create a neighborhood where young workers want to live, work and play through small business development focused on the development of business incubators that support the success of startup companies and historic preservation redevelopment financed through Downtown district programs, historic preservation tax credits, state grants, opportunity zone funds, and new market tax credits. Furthermore, rural markets should be strong targets for manufacturing companies considering energy intensive industry growth and domestic supply chain expansion, as well as a range of industries that should prosper in a COVID 19 world through a traditional corporate site location and site development process that reviews potential markets for economic and demographic strengths, searches for available sites and negotiates options to lease or purchase, negotiates land use entitlements, infrastructure finance and economic development incentives.

Anatomy of a corporate site location project. The corporate site location process decides where a company locates, and this process is about a lot more than tax incentives. Triggers such as the end of a real estate lease, growth needs are beyond their current facility, decay of their existing facility, consolidation of existing facilities, a growth opportunity tied to a customer, a merger of companies, or a company seeking to capitalize on an economic trend tell a company they should undertake a corporate site location project. The corporate site location process begins with defining the project to learn about the industry, number of jobs, payroll and capital investment planned by a company, needs for the project site and geographic markets that fit the

company's business plan leading to the creation of potential state and regional target list for the company's location. Next, market research begins to understand the economic analysis of growth, industry cluster, labor shed, transportation, infrastructure, and supply chain of an industry, company and region and potential real state options for each of these markets. Sites in these states and regions are reviewed as well as the real estate, labor and tax policy all impacting the cost of doing business in a region followed by an analysis to review relevant infrastructure finance programs and economic development incentives. Upon completion of this research, the company will then narrow their search to a handful of sites in multiple states and cities that all would fit the company's business purpose. A confidential Request for Proposal or project letter is then sent from a corporate site location consultant or legal counsel that outlines the nature of the corporate site location project and the specific needs of the company related to the site in question with specific infrastructure, workforce, incentive and site needs.

Montrose Group Corporate Site Location Process



Site acquisition, land use entitlements, economic development incentive and government compensation agreements are then negotiated. Defining the economic prospects, workforce capabilities and cost of doing business in multiple regions is the first step for companies considering an economic expansion.

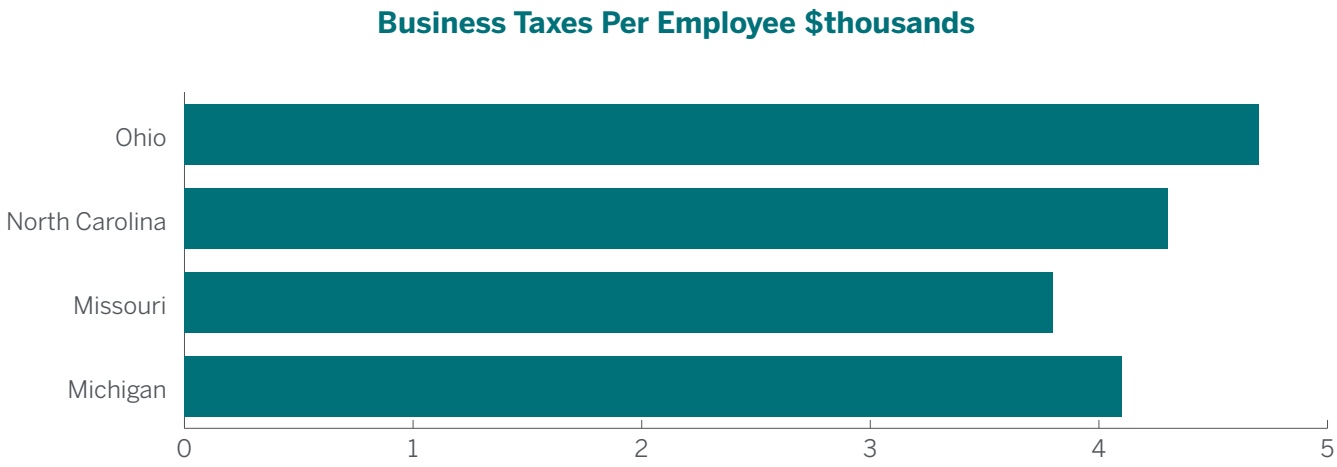
Growing markets and cost of doing business. The corporate site location process begins with listening to define the project to learn about the industry and number of jobs, payroll and capital investment planned by a company or project site all leading to the creation of a larger potential state and regional target list for the company's location.

Next, market research begins to understand the economic analysis of growth, industry cluster, labor shed, transportation, infrastructure, and supply chain of an industry, company and region and potential real state options. The economic growth of these states was compared to measure the vitality of the state through a long-term review of Gross Domestic Product growth. Measuring a state's macroeconomic growth is just the start of the data dive for a corporate site location project. For companies seeking a large pool of skilled workers, large to mid-sized urban markets are often targets for future economic growth. These communities offer an opportunity for economic growth with a skilled and more affordable workforce. An important measure for these regions is their concentration in the company's industry. An industry cluster analysis provides a snapshot of what industry strengths a region has and further illustrates what industries are likely to succeed in a region as like industries tend to locate near each other for workforce and other economic benefits. A location quotient is a method of measuring the industries that are a strength of a region and that are growing. A location quotient above 1.0 indicates economic strength of that industry in a particular region.

Demographic data is also researched to understand the larger population and income trends of potential sites. Demographic factors such as population size and growth, homeownership rates, median family incomes, level of education and poverty rates all impact the long-term economic vitality of a region. The demographic data for the remaining target cities all illustrate growing and stable urban regions in the United States.
Workforce data is critical to a company's decision to locate or grow in a region. With the retirement of the Baby

Boom generation regions everywhere are struggling to find the answer to the workforce development puzzle. The level of college educated workers at a region under consideration is very relevant to companies in the advanced services/white collar and high-tech industries. Also, the volume and costs of that skilled workforce also can have a "leveling" impact that benefits regions with less growth in each sector. Finally, a cost of doing business analysis provides an economic measure of the wage rates, construction, real estate, and tax structure of multiple regions and states that determines quality of life measures for the region.

Local and state government business tax rate. Taxes by the state and local government are a critical component of measuring the cost of doing business in a region. The chart below outlines a comparison between Michigan, Missouri, North Carolina, and Ohio of the business burden carried from state and local taxes on a per employee basis as measured by the Council of State Taxation from FY 2019 data. However, the specific taxes a company will pay at a site is the most important analysis that a supply chain partner needs to understand as that is a critical cost of doing business the local and state government can directly impact through tax incentives.

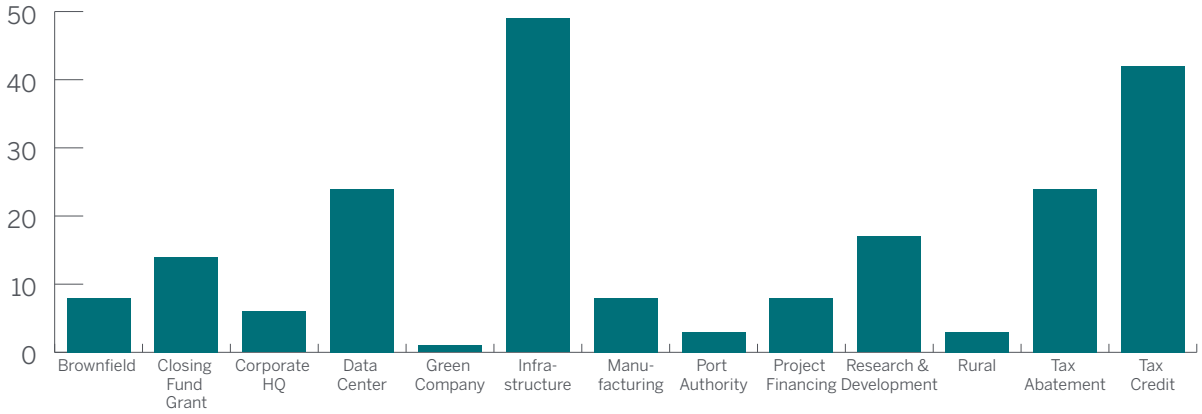


Source: Council of State Taxation

The tax burden placed on companies by local and state governments matters but it is also relevant for corporate site location projects what these local and state governments tax. Local and state government tax property, sales, and income. In 2019, business property taxes increased for the ninth year in a row since 2010.[1] Almost half of the $14.8 billion in increased property tax revenue came from gains in four large states: Texas ($2.3 billion), California ($2.0 billion), New York ($1.4 billion) and Florida ($1.0 billion).[2] Nationally, business property tax revenue increased by an average of 4.9%, but for 33 states, this revenue grew at a slower rate.[3] Texas had the largest dollar increase in business property tax revenue, collecting 2.3 billion more than in 2018. Washington had the highest growth rate for business property tax revenue, increasing by 15.4%.[4] Sales tax is another substantial cost center for both the operation and construction of data centers, and many states offer aggressive economic development incentives to address their high sales tax costs which often provide revenue for local and state governments. From 2019 to 2020, the state with the largest gain in sales tax collections on business inputs was California, which saw an increase of over $3.6 billion.[5] Of the 45 states with a state sales tax, 42 experienced an increase in sales tax collections on business inputs.[6] Washington DC also experienced an increase in sales tax collections on business inputs.[7] Traditional high cost states like California, New York and Illinois have substantial sales and property taxes in place as well as every other tax government can think of. Texas and Florida's very high sales and property tax illustrates the downside of not having a state or local income tax.

Local and state tax incentives. To address regional cost of doing business factors, all fifty states offer some form of economic development incentives. As the chart below outlines, infrastructure incentives are provided by all the states in the union except New Jersey where tax incentives have become a challenging political topic. State economic development tax credits follow closely behind infrastructure program as the second most popular tax incentive program in the nation with efforts to attract data centers and using general tax abatements tying for third. Princeton Economics estimates that state and local governments invest about $30 B dollars in economic development incentives annually.[8] According to the Council of State Taxation, businesses paid more than $833 billion in state and local taxes in FY19, an increase of 5.7% from FY18, state business taxes increased by 6.3%, and local business taxes grew by 5.2%, and, in FY19, business tax revenue accounted for approximately 44.0% of all state and local tax revenue.[9] Thus, while economic development incentives at times catch media headlines they still constitute a very small percentage of the tax revenues state and local governments captures for companies.

Local and State Economic Development Incentive Programs



Tax credits are tools private developers, investors and individual companies use to reduce tax burdens in exchange for economic growth. Tax credits may be either refundable or non refundable. A refundable tax credit, a moderate form of negative income tax, can reduce the tax owed below zero and result in a net payment to the taxpayer beyond its own payment into the tax system. A non refundable tax credit cannot reduce the tax owed below 0; thus, taxpayers do not receive a refund exceeding their payments into the tax system. Most state economic development tax credits are triggered by high-wage, non-retail job creation and some level of capital investment. These tax credits in most cases are competitively awarded as there is a limited amount of state government funding available to support them. Thus, higher job growth, higher wage, and larger capital investments from companies attractive for investment are given priority for these tax credits.

To attract new businesses and encourage the expansion of existing businesses, state and local governments also may offer tax abatements as an economic development incentive. Tax abatements temporarily decrease the amount of taxes a business owes. While this tax incentive has a general effect on property taxes, the means employed by state and local governments to achieve this effect varies from program to program. Enterprise Zones are the most common tax abatement program.[10] These programs offer real and personal tax incentives to businesses that expand or locate within designated "Enterprise Zones." First, the locality must designate an area as an Enterprise Zone. Enterprise Zone designation is based upon an areas poverty and unemployment rate. However, state law may not limit which municipality may use the Enterprise Zone program; thus, Enterprise Zones are as prevalent in wealthy suburban communities as they are in the poor, inner city neighborhoods. This goes against the original intent of the Enterprise Zone program. Once designated, businesses that wish to build or expand in Enterprise Zones can apply for the program's abatement. Generally, the tax incentive permits the local government to offer a full or partial exemption of the real or personal property values attributable to the new development.

States offer outright grants for companies in exchange for the retention and creation of an agreed upon number of jobs and capital investment. A recent trend is the use of "closing funds" as the dominant form of economic development incentives. States moved to streamline their economic development incentives and focus on the creation of a large fund that makes cash awards to companies through major corporate site location projects. Low or no interest government sponsored loans or other project financing programs are an attractive alternative to bank or other private sector financing for a planned economic development expansion. Companies with growth potential face new challenges to gain the financing needed to move to the next level and eight states offer some form of a project financing program to attract economic development as outlined below. Port authorities are governmental agencies with few of the restrictions placed on governments. Port authorities operate across the United States and provide services akin to a public bank providing a range of public finance tools critical to economic development projects. Three states have tax incentives designed to support the operation of local port authorities that include Alabama, Georgia, and Virginia. Arkansas, Ohio, and Wyoming also authorize port authorities to provide what is a sales tax exemption for the construction material in economic development projects that can produce substantial economic development savings.

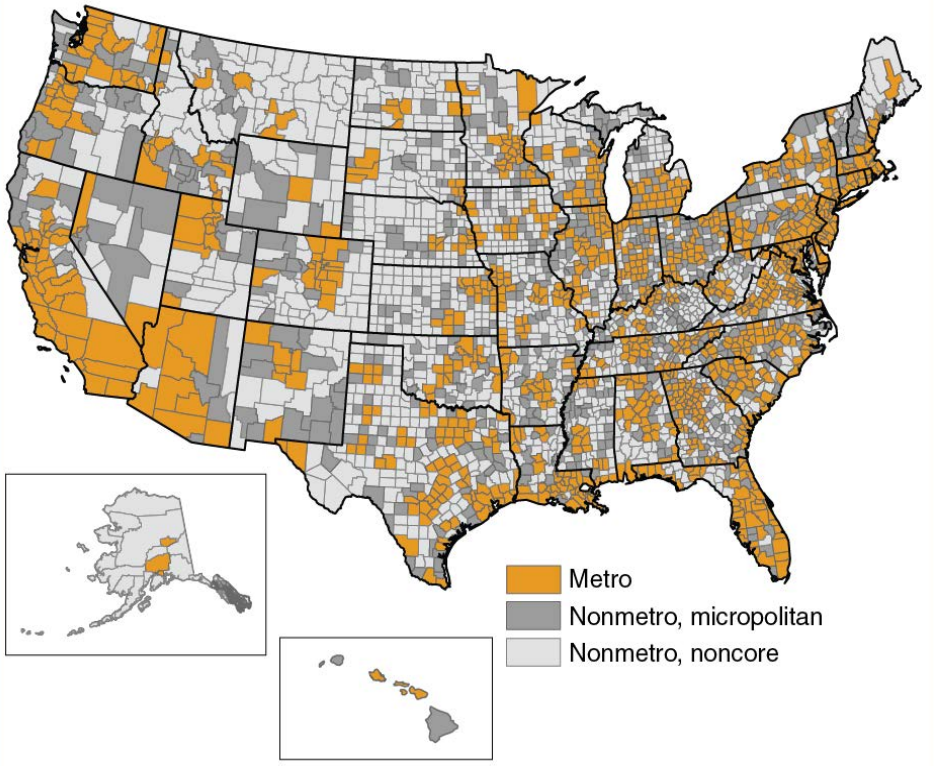
Along with corporate headquarters, manufacturing jobs with their high-wages and long supply chain that can provide a multiplier effect for the jobs have long been sought by economic development leaders across the nation. While nearly every general state tax credit can be used for manufacturing firms, eight states as listed below also have tax credits designed specifically for manufacturing firm. Research and development and technology related jobs are another major focus for economic development leaders. Technology based Economic Development initiatives are attractive because they create high wage "multiplier" jobs with companies in the growth mode for the Information Age economy. Research and development, particularly focused on the recruitment of corporate research and development centers, is an economic development prize and seventeen states, as listed at www.montrosegroupllc.com, offer economic development incentives focused on gaining research and development centers. Many of these state programs are focused on the retention and attraction of major corporate research and development centers.
Recognizing the challenge of developing in rural communities, several states focus tax incentives on rural markets, including:

- New Mexico's Rural Jobs Tax Credit Program is a non-refundable credit program applied to Maines due on state, gross receipts, corporate income, or personal income taxes designed to spur job growth in any county other than Los Alamos County, certain municipalities like Albuquerque, Rio Rancho, Farmington, Las Cruces, Roswell, and Santa Fe, as well as 10-mile zones around those select municipalities for manufacturers making a product in the State, non-retail service companies exporting a substantial percentage of services out of the State (50% or more in revenue), or companies in certain green industries.
- Utah Rural Economic Development Incentive Grant is a program designed for businesses creating new, high-paying jobs in rural Utah counties whether remote, online, or physically located in that county paying for each new position between $4,000 and $6,000 based upon the employee's location and wage.
- Washington Rural County/CEZ Business and Occupation Tax Credit Program is available to manufacturers, labs, and commercial testing facilities locating in a rural county or within a CEZ creating new employment or increase in-state employment by 15% paying a tax credit equal to $2,000 per position with annual wages/benefits of $40,000 or less and $4,000 with annual wages/benefits greater than $40,000.

The total cost of doing business at each site under consideration will be reviewed comparing site real estate, construction, workforce and tax costs minus the economic development incentives, and a site is then chosen that best serves the client's needs.

Defining rural. Defining rural seems to be as much art as science. In 2013, the federal government's Office of Management and Budget (OMB) defined metropolitan (metro) areas as broad labor-market areas that include: central counties with one or more urbanized areas; urbanized areas are densely-settled urban entities with 50,000 or more people; and outlying counties that are economically tied to the core counties as measured by labor-force commuting.[11] Under the OMB definition, outlying counties are included if 25 % of workers living in the county commute to the central counties, or if 25 % of the employment in the county consists of workers coming out from the central counties—the so-called "reverse" commuting pattern.[12]

Metro, nonmetro micropolitan, and nonmetro noncore counties, 2013



Source: USDA, Economic Research Service using data from the U.S. Census Bureau.

Non-metro counties are outside the boundaries of metro areas and are further subdivided into two types: Micropolitan (micro) areas, which are non-metro labor-market areas centered on urban clusters of 10,000-49,999 persons and defined with the same criteria used to define metro areas; and all remaining counties, often labeled "noncore" counties because they are not part of "core-based" metro or micro areas.[13] The Census Bureau provides the official, statistical definition of rural, based strictly on measures of population size and density, and rural areas comprise open country and settlements with fewer than 2,500 residents.[14] Urban areas comprise larger places and densely settled areas around them, but according to the Census Bureau, urban areas do not necessarily follow municipal boundaries.[15] They are essentially densely settled territory as it might appear from the air, and nearly all counties are both metro and non-metro. Again, the Census Bureau sees the magic number at 50,000 people for metro v. non-metro but they will also consider with the city have a core with a population density of 1,000 persons per square mile and may contain adjoining territory with at least 500 persons per square mile.[16]

Four-state case study and rural corporate site location. Michigan, Missouri, Ohio and North Carolina are four states that compete for corporate site location projects based upon their common, large economic market and workforce and their mix of urban, suburban and rural markets connected to even larger regional Midwest and Southern markets. These states offer a good basis for a corporate site location project comparison.

Targeted State Demographic & Economic Comparison

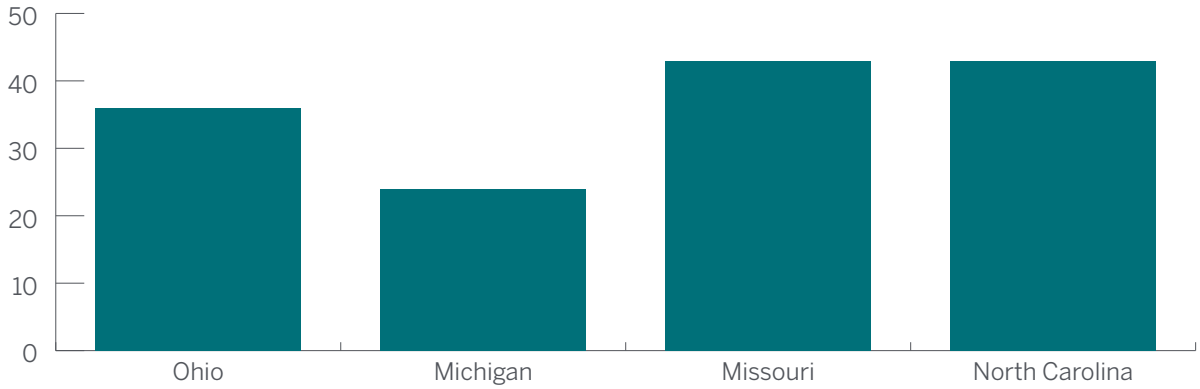
Fact	North Carolina	Missouri	Ohio	Michigan
Population	10,383,620	6,126,452	11,689,442	9,986,857
Home ownership rate	65.00%	66.90%	66.10%	71.0%
Median home value	$161,000	$145,400	$135,100	$146,200
Bachelor's degree or higher	29.90%	28.20%	27.20%	28.6%
Median household income	$50,320	$51,542	$52,407	$54,938
Per capita income	$28,123	$28,282	$29,011	$30,336
Poverty Rate	14.00%	13.20%	13.90%	13.0%
State GDP (in millions $)	$565,801	$317,749	$676,192.5	$536,888.3

Source: Census Bureau Quick Facts

A review of the demographic and economic measures for North Carolina, Missouri, Michigan, and Ohio illustrates these states, while not identical, are clearly alike enough to compete often for a range of economic development projects. Ohio, Michigan, and Missouri are more developed industrial centers with long established manufacturing centers. North Carolina is a rising economic giant whose population and economy has enjoyed substantial growth in recent decades. Digging a layer deeper in North Carolina, Missouri, Michigan and Ohio, a review of these states regional economies illustrates the counties that are truly rural. Michigan, North Carolina, Michigan, Missouri and Ohio are dominated economically by midsized urban markets of Detroit, Ann Arbor, Lansing, Kalamazoo, Saginaw, (Michigan), Columbus, Cleveland, Cincinnati, Toledo, Akron, Canton and Youngstown (Ohio), Kansas City and St. Louis (Missouri) and Raleigh-Durham and Charlotte (North Carolina). Those markets are further served by ex-urban counties that have grown substantially in recent years who have transitioned for rural to urban communities. The counties listed in Appendix A are the ones determined were going to constitute the rural counties for the purposes of this white paper.

Michigan, Missouri, North Carolina & Ohio rural population base. Demographics have a major impact on corporate site location decisions. Regions that are large and growing population base, have a younger, more educated workforce and less poverty are more attractive for economic investment. Looking at a comparison of Michigan, Missouri, North Carolina, and Ohio offers insights on the competitiveness of these rural markets for corporate site location projects. Rural counties in these states constitute 56 counties in Michigan with 2.39 M people, 104 rural counties in Missouri with 2.4 M people, 77 counties in North Carolina with just 4.4 M people, and 64 counties in Ohio constituting 4.2 M people. All four states reviewed offer a large population base in rural markets offering opportunities for corporate site location projects. North Carolina and Missouri are much more rural in nature than competitors Ohio and Michigan. This is more dramatic related to North Carolina as it is roughly the same population as Ohio and Michigan but has almost double its population base in rural communities compared to these established, Midwest industrial states. Missouri, which is a smaller state population wise compared to Michigan, North Carolina and Ohio, has a larger share of its population in rural communities and is 20,000 square miles larger than Ohio, 10,000 square miles larger than North Carolina with two urban centers on different edges of the state that spill population into adjoining states. As the chart below outlines, Missouri and North Carolina have a substantially larger percentage of their state's overall population in rural counties while Ohio is close to the top two states and Michigan has the smallest share of its state population in its rural counties. Michigan's smaller rural population base may make rural development challenging in certain communities considering the state of Michigan is the largest of the four sample states being almost 100,000 square miles counting the large Upper Peninsula land mass.

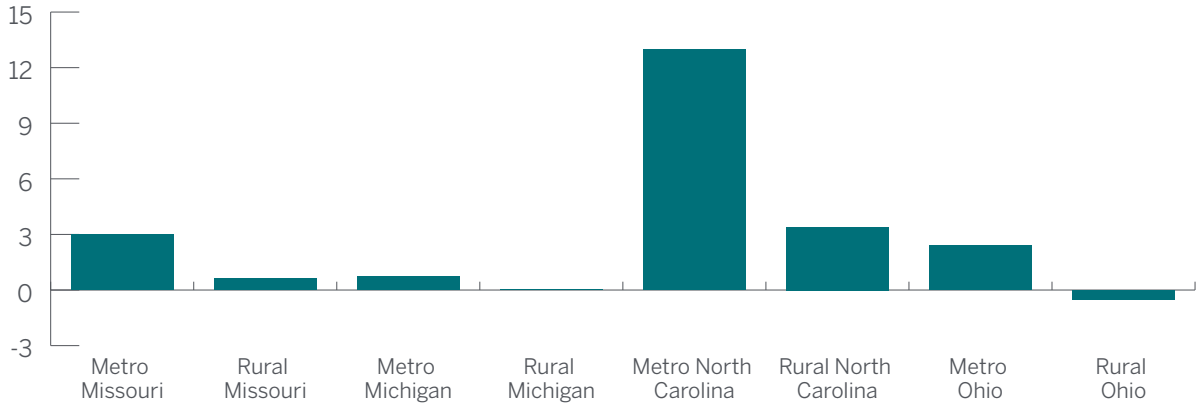
State Benchmark Comparison: Percentage Rural Population



Source: IndexMundi

The largest challenge facing rural communities is the loss of population. As the table below illustrates, rural communities are in large part losing population which is traveling close by to their urban counterparts. Rural North Carolina shows the largest degree of growth over rural Missouri Michigan and Ohio. However, that is not a major accomplishment. Rural Ohio lost population from 2010 to 2019 and it appears most of them have moved to the growing urban center in Columbus as this community has grown by 10% during the same timeframe. Urban centers like Cleveland and St. Louis continue to struggle and are not benefiting from the migration of rural workers. Rural North Carolina is growing more than the competitor states but is still behind the high-growth metro North Carolina markets driven by substantial growth in the Raleigh-Durham and Charlotte markets. The rural markets from a population standpoint are struggling as well in Michigan and Missouri and their metro markets are not growing from a population standpoint as quickly as the South and Southwest. Of greater concern for Michigan and Missouri as their larger urban metro centers are not growing at nearly the rate of successful mid-sized urban markets in North Carolina or even Ohio.

Population Change 2010-19



Source: IndexMundi

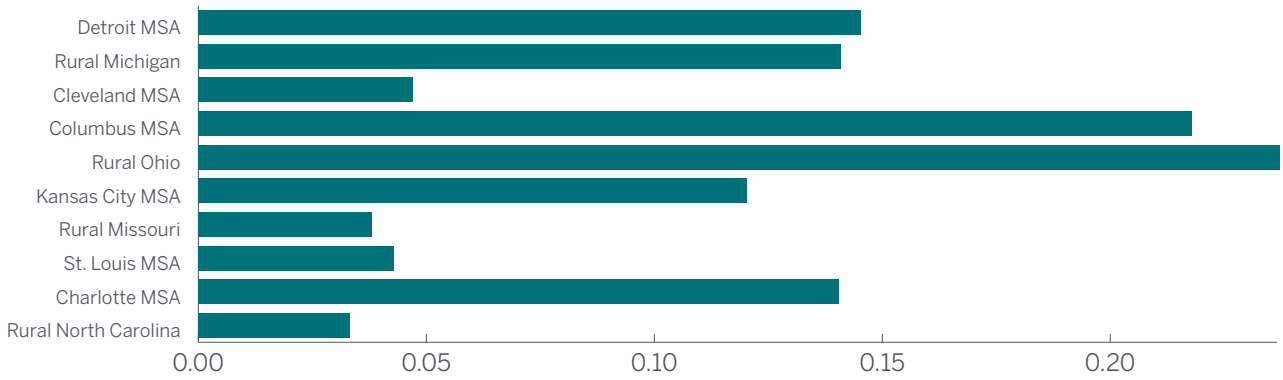
The continued depopulation of rural regions will have a dramatic impact on the economic future of rural communities across the United States. Not only are rural areas less densely populated, their populations are getting older, on average, due to both outmigration of younger people, and, in some cases, older adults retiring to rural areas.[17] As of mid-2018, those 65 and older make up almost a quarter of the population in nonmetro areas, and prime working-age adults, 25 to 54 years old, comprise only 43 % of the population.[18] That compares to a 50 % share of prime working age adults and 19 % of adults 65 and older in metro areas.[19]

Michigan, Missouri, North Carolina, and Ohio's rural GDP. The overall economic growth in rural communities across America's is on-par with large, legacy cities but they are not growing at the same rate as the mid-sized urban markets located in the same state. However, these rural markets are sizable and capable of serving a range of corporate site location projects. Measures of a region's Gross Domestic Product (GDP) is the best measure of overall economic growth in a region. The rural markets in these target states in the aggregate illustrate large economies with

- Rural Michigan's GDP in 2018 at $95,565,721,000,
- Rural Ohio's GDP in 2018 at $123,374,341,000,
- Rural North Carolina's GDP in 2018 at $124,712,132,000, and
- Rural Missouri's GDP in 2018 at $87,072,965,000.

These are substantial economic markets. In fact, these rural markets are close to the same size of the urban markets of, Cleveland whose MSA's GDP is $119,327,107,000, the Columbus MSA's GDP is $114,675,302,000, the Kansas City MSA's GDP is $120,352,988,000, the St. Louis MSA's GDP is $152,060,042,000, and the Charlotte MSA's GDP is $146,813,931,000. The Detroit MSA has a much larger GDP of $238,679,503,000. As the table below illustrates, over a 10-year timeframe, counties in rural Ohio are growing economically the faster than rural communities in Missouri and North Carolina. Rural Michigan has also illustrated strong growth comparable with the growth of the large Detroit metro market. However, most rural markets are not keeping space are growing their economy at a slower pace than the mid-sized urban markets in their own state at a similar level as the table below illustrates comparing rural Michigan, Missouri, North Carolina and Ohio with urban markets in those states.

GDP Percentage Increase 2008-18



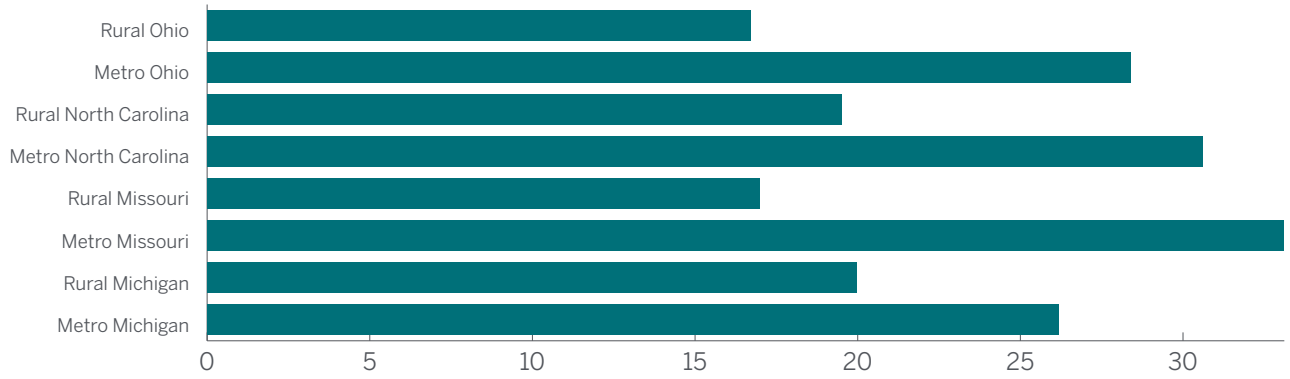
Source: U.S. Bureau of Economic Analysis

Ohio's substantial rural development has been driven the last 10 years by the capture of oil and natural gas as part of the shale energy explosion in eastern and southeastern Ohio.

Rural workforce. The level of education for a region impacts the industries in which the region can attract companies in particular industries. As an example, if a region lacks a large base of college educated workers, they will struggle to attract advanced services/white collar jobs that need a base of workers with a bachelor's degree or higher. Same goes with the occupations of Science, Technology, Engineering and Math (STEM)

workers such as software engineers. Although educational attainment has increased in both metro and nonmetro areas since before the Great Recession, there remains a significant rural-urban education gap.[20] In metro areas as of 2018, 43 % of the prime working age population has a four-year college degree or higher, compared with just 25 % of nonmetro populations.[21] About 40 % of the nonmetro prime working age population lacks any postsecondary education; however, the share of nonmetro prime working-age adults with associate's or vocational degrees has increased at a faster pace than in metro areas since the start of the Great Recession in 2007.[22]

Average Percentage of Bachelor Degrees for 25 & Older



Source: U.S. Census Bureau

As the table above illustrates, rural communities possess fewer holders of bachelor's degrees on average compared to metro counties. This fall off in college graduates is even more dramatic when examining successful mid-sized urban market such as Raleigh-Durham that has roughly half its population with a college degree, Kansas City's MSA is at 37% with a bachelor degree or higher, Detroit's MSA has at 32% bachelor degree or higher rate, and the Columbus MSA has a 37.9 bachelor degree or higher rate. Thus, urban markets in Ohio, Missouri, North Carolina, and Michigan have an opportunity to retain and attract a base of advanced services and technology jobs that demand college educated workers with a bachelor's degree. Michigan appears to have a strong base of college educated workers in rural markets with 20% of their rural counties have a bachelor's degree for their population over 25. Michigan's rural college graduate rate is not on par with the Detroit MSA or metro Michigan counties but they do top Ohio, Missouri, and North Carolina for rural college graduates. Not all jobs require a college degree but a college educated workforce is critical for advanced industry white collar occupations that constitution most professional service firms. financial services that includes banking and insurance, and higher end computer software professionals.

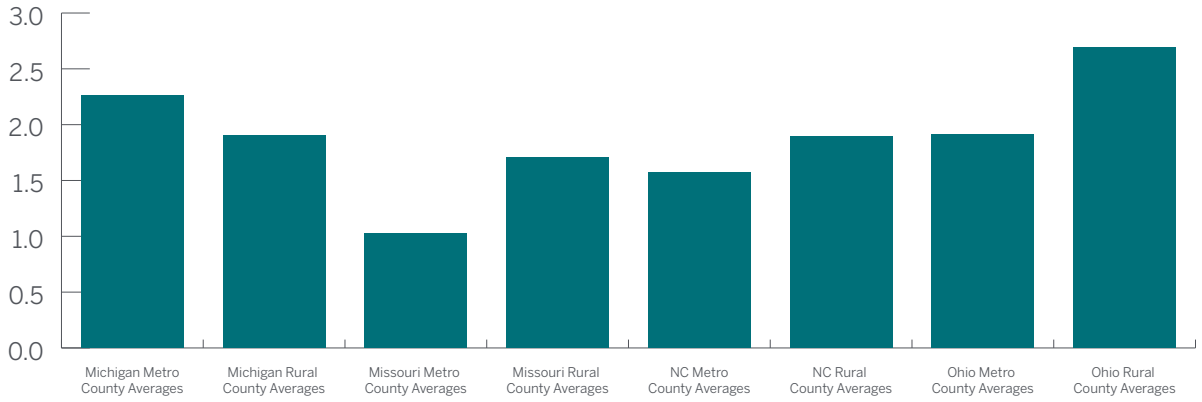
Rural communities and COVID 19. While measuring the public health and economic impact of the current COVID 19 crises like trying to describe a roller coaster ride, rural communities, with a small population density should have fewer public health cases if the residents follow proper public health criteria. When COVID 19 invaded the United States, it hit urban areas first with a population density that made transfer of the virus easier than less densely populated rural markets. However, as the virus has progressed, rural communities, who moved more slowly adopt public health prevention measures such as wearing masks have grown in the number of COVID 19 cases they have. Although the prevalence of COVID-19 cases remains lower in nonmetro areas, the share of cases in nonmetro areas has grown since late March.[23] The share of confirmed U.S. COVID-19 cases in nonmetro areas grew from 3.6 % on April 1 to 12.7 % on October 7.[24] By October 7, the regions with the highest prevalence of COVID-19 cases included much of the eastern coastal region, most of the South, and large parts of the Midwest, the Great Plains, and the West. Less affected areas generally included many areas of the Northeast, Appalachia, the Mountain West, Hawaii, and Alaska—though many exceptions are evident in these regions.[25] Among metro counties, COVID-19 case rates are highest among mining-dependent counties, nonspecialized counties (those with a diverse economic base), and recreation counties. Metro case rates are lowest in farming-dependent metro counties.[26]

The U.S. Center for Disease Control (CDC) notes several important points related to rural communities and COVID 19. Long-standing systemic health and social inequities have put some rural residents at increased risk of getting COVID-19 or having severe illness.[27] In general, rural Americans tend to have higher rates of cigarette smoking, high blood pressure, and obesity as well as less access to healthcare which can negatively affect health outcomes.[28] They are also less likely to have health insurance.[29] Rural communities are also becoming more diverse racially and ethnically and are at increased risk of getting COVID-19 and having severe illness.[30] Rural areas can face different health challenges depending on where they are located, and each rural community should assess their unique susceptibility and social vulnerability to COVID-19.[31] Many rural communities are considered highly vulnerable according to CDC's Social Vulnerability Index (SVI).[32] The SVI includes factors such as housing, transportation, socioeconomic status, housing, race and ethnicity, and language which can be helpful in determining how to help support rural communities before, during, and after COVID-19.[33] Rural hospitals do not have the capabilities of their urban hospital market based upon their smaller size and lack of facilities. Questions have arisen whether rural hospitals are truly prepared for a major COVID 19 outbreak.[34] The CDC notes rural communities also have strengths, assets, and protective factors that public health can use to tailor policies and messages designed to: reduce the risk of COVID-19 community spread and improve the general health of rural populations, which may minimize the severity of COVID-19.[35] The reality is COVID 19 is not just a global public health crisis but an economic challenge as well. Regions that address the challenge effectively with proven public health measures such as restricting large gatherings, wearing masks, good hygiene and other efforts will benefit economically. The converse is true. Rural markets with a lower population density should have a natural advantage long term in appearing attractive to corporate site location projects if they address head on the spread of COVID 19.

Rural communities and manufacturing. Rural communities present substantial economic opportunities. Manufacturers in the United States account for 11.39% of the total output in the economy, employing 8.51% of the workforce.[36] Total output from manufacturing was $2,334.60 billion in 2018.[37] In addition, there were an average of 12.8 million manufacturing employees in the United States in 2018, with an average annual compensation of $84,832.13 in 2017.[38] The percentage of the American economy manufacturing makes up has been declining steadily since the 1950s but it remains a substantial component of the nation's' economy with its high-wage jobs.

Whether it is the attraction of a skilled and ready workforce, fewer labor unions and flat, ready land primed for development, rural communities are often the choice for manufacturing corporate site location projects. The table below illustrates that rural counties in Ohio, North Carolina and Missouri all have a higher concentration of manufacturing workforce wages than their metro counterparts and Rural Michigan is only slightly behind metro Michigan centers. All these markets are strong manufacturing centers as they are above a location quotient of 1. Measures of location quotients are a statistical tool to indicate whether a particular industry cluster is strong or weak in a region. Based upon national averages, a location quotient of 1 defines the region as meeting the national average for that industry. A location quotient below 1 indicates the region does not have a particular industry cluster strength in that market and above 1 illustrates the industries relative strength.

Concentration of Manufacturing Wages Rural v. Metro

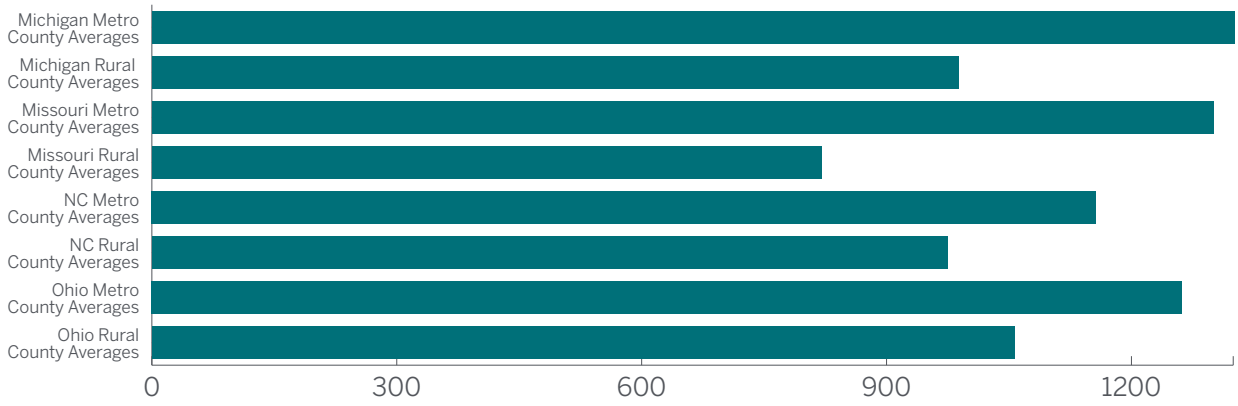


Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages

Michigan, Missouri, Ohio, and North Carolina all are manufacturing centers with location quotients at or above one for all four states. The Detroit region as home to the American auto industry is the only metro center to have more manufacturing than the state's rural counterparts. Rural Missouri, North Carolina and Ohio all have a larger concentration of manufacturing compared to their urban counterparts. Ohio is the leader among these four states when it comes to manufacturing strength in rural markets with a location quotient double the national average but Michigan, Missouri and North Carolina all are strong manufacturing centers.

Rural communities labor costs. Rural communities' cost of doing business are substantially lower than their urban counterparts. The largest cost for nearly every company is labor. Paying workers, unless it is a data center or some other energy intensive, capital intensive business, will be the largest cost facing any company. Regions with competitive wage rates are highly attractive for corporate site location projects. As the table below illustrates, rural counties in Michigan, Missouri, North Carolina, and Ohio pay manufacturing workers a substantially lower wage compared to their metro urban counterparts in the same states. The same factor in an urban setting costs substantially more to operated. As an example, the average manufacturing worker in Ohio earns over $54,000 in a rural community and a factor with 100 worker spends $5.4M on worker wages. That same worker in an Ohio metro area earns over $65,000 a year and 100 workers costs that same company over $6.5 M in payroll. This million-dollar wage differential adds up to tens of millions of dollars over a period. More importantly from a public policy standpoint, a $54,000 job in a rural community creates substantially higher economic opportunity for that worker in a community that lacks many high-wage, advanced services, and technology jobs. Rural Missouri has the lowest average manufacturing worker weekly wage compared to Ohio, Michigan, and North Carolina.

Manufacturing Average Weekly Wage



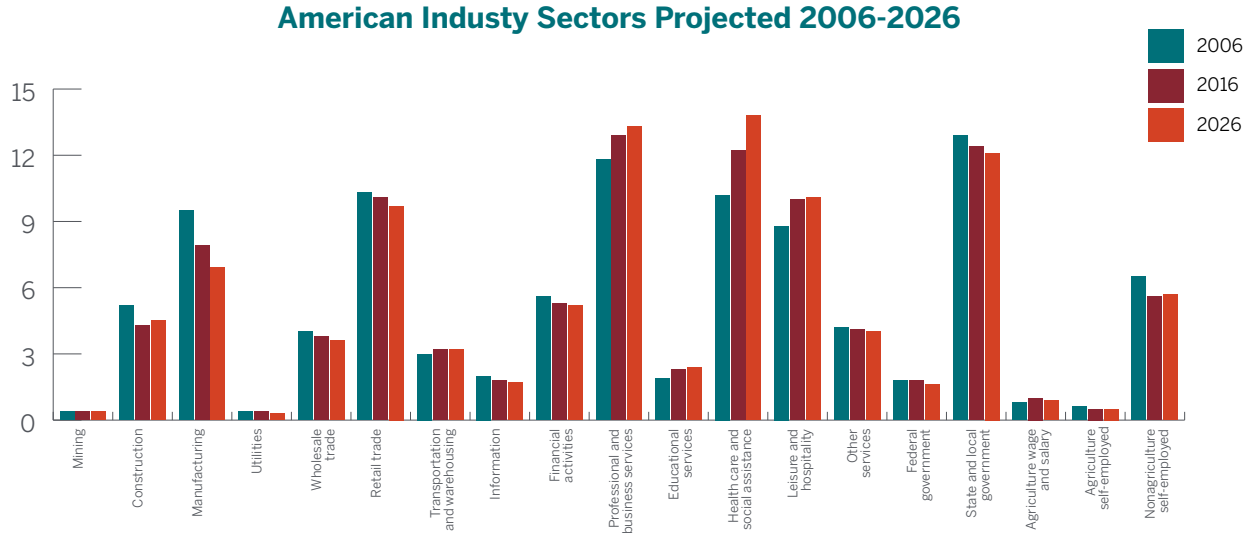
Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages

Rural commercial real estate costs. Workforce costs are not the only factor impacting rural communities lower cost of doing business. Lower real estate costs are another important factor making rural markets attractive for corporate site location projects. First, real estate is all driven by local factors impacting the site in question. So, generalizations can be challenging but the laws of supply and demand and the rapid growth of urban and suburban markets have driven up prices in these urban markets. Second, many urban sites are complex compared to rural greenfield sites. Urban sites in many cases involve a reuse of land which has benefits from an infrastructure standpoint but may have environmental issues as well as be in a struggling neighborhood with residents who may or may not wish development. An example is telling for how rural real estate costs compare to urban or suburban counterparts.

Central Ohio Aerospace and Tech Center II
Eagle Rock Business Park

Two parcels being marketed on AEP Quality Sites website are both certified by AEP as primed and ready for food processing and industrial development, they are of similar size and both are greenfield developments. Rural Eagle Park Business Park in Tiffin, Ohio is listed for $15,000 an acre and its suburban competitor, Central Ohio Aerospace and Tech Center II in Health, Ohio is listed for $66,000 an acre. Heath is in ex-urban Licking County just east of the growing Columbus, Ohio market surrounded by a large cluster of industrial development. Tiffin is in Northwest Ohio in a rural community that is strongly connected to regional agriculture and the site is certified for a food processing manufacturing facility. Both are good prospects for development.

Automation and rural manufacturing. Automation of nearly all industries has been impacting companies and communities for decades by making companies more productive with fewer workers making higher wages. COVID 19 will likely expedite this economic trend as a robot cannot contract a human virus. Current 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 are anticipated to continue in manufacturing, financial services, and government jobs. Automation is a major driver in changes for the American economic landscape. Technology advances are expected to have a major impact on a range of American industries as illustrated by the table below. Automation has been making America's manufacturing industry the most competitive and productive in the world but it is also played a large part in dropping the number of manufacturing jobs in the U.S. About 9% of the US workforce is in manufacturing and this total has dropped from over 30% in the 1950s. However, recent advances in machine learning, robotics and artificial intelligence are driving major changes in the economic marketplace all of which impact a region's economic development strategy. Employment in production occupations is projected to decline 4 %, with a loss of about 423,200 jobs from 2019 to 2029.[39] Technological advancements are expected to continue to replace many of the manufacturing workers that make up a large share of the production occupations.[40] Fewer workers are expected to be needed in the manufacturing sector as many processes have become computer-controlled.[41] While this may appear to be bad economic development news, automation of the manufacturing industry actually increases the wages of the workers that remain but also will create an opportunity for rural markets that simply have a workforce pool too small for a 3000 worker manufacturer. Advanced manufacturing facilities with fewer, highly skilled workers may well be a good fit for rural markets



Montrose Group's 2020 rural corporate site location strategies. Montrose Group sees solid opportunities for companies considering rural markets for a corporate site location project but the approach involves the development of a unique PPP that focuses not just on real estate, infrastructure and economic development incentives but with a strong focus on ensuring the region retains and attract the talent needed.

Companies considering rural markets for a corporate site location project need to focus on four key strategies all with the underlying goal of ensuring the talent needed for their company is available in these otherwise attractive markets. The four strategies include: build communities young talent wants to live, work and play in;

retain and attract tech and home grown talent through industry partnerships; develop a stronger small business base while attracting technology centers and capitalize on traditional manufacturing and logistics industry strengths.

Four Rural Corporate Site Location Strategies

- **Rebuild attractive communities**
- **Develop industry based training programs**
- **Expand small business & tech base**
- **Capitalize on traditional industrial strength**

Rural Downtowns and younger talent. Transforming rural historic Downtowns to attract younger workers to live, work and play is a critical step to addressing the rural talent gap. Companies considering rural markets for a corporate site location project need to ensure the community is focused on transforming their rural Downtown. America's younger generation is more concerned with where they live and what they can do than necessarily where they work. Rural communities also have the added benefit of less population density which can help drive down COVID 19 rates. However, rural communities will not be attractive to a younger generation of workers unless they can address critical quality of life issues such as the availability of quality housing, creation of mixed use developments, and the development of quality, local retail and entertainment districts. Redeveloping rural Downtowns is the place to start when looking to retain and attract younger workers.

Redeveloping rural Downtowns can be accomplished through creation of a Public-Private-Partnership (PPP) to incentivize retail, residential and office investments. Redeveloping existing sites costs more than building on greenfield sites but the payoff for developers and the community can be substantial. Thus, states and the federal government offer a range of tools to support rural Downtown redevelopment that include: Downtown Redevelopment Districts and historic preservation tax credits; entertainment districts designation, state project financing; and the federal governments new market tax credit and opportunity zone programs. This PPP should begin with the creation of a Downtown Redevelopment District Plan that can ensure the local government has the needed Urban Overlay or mixed use zoning friendly to retail, residential and office redevelopment projects, outlines funding strategies for public infrastructure such as Tax Increment Financing, CDBG grants, and EDA grants, ensures the adoption of a property tax abatement program designed to entice residential and office investments in underutilized rural Downtown markets and reminds the private sector a number of tools such as state and federal Historic Preservation Tax Credits, state grants & loans such as Brownfield revitalization programs, and federal government New Market Tax Credits and Opportunity Zone Funds can often be used to make rural Downtown redevelopment projects profitable. Planning is followed by local government action and marketing to the private sector for the promotion of retail, residential and office projects in rural Downtowns at identified sites.

Rebuild Rural Downtowns

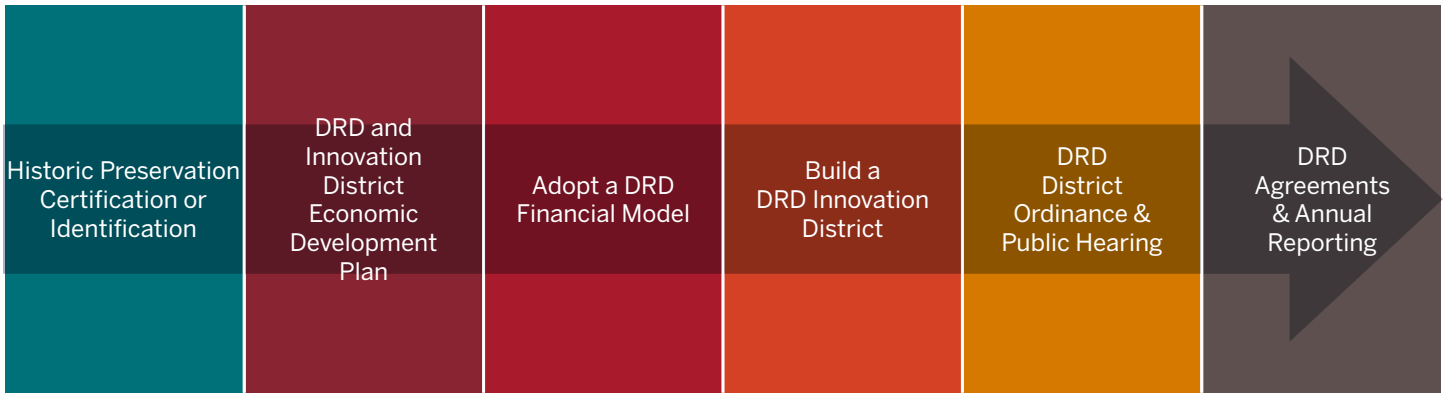
- **Downtown redevelopment districts**
- **State & federal historic preservation tax credits**
- **State project financing**
- **Entertainment districts**
- **Opportunity zones**
- **New market tax credits**

The redevelopment of historic structures is creating an economic boom in urban, rural, and suburban communities across the United States. In part, this historic building renaissance is driven by a new market-Millennials. The movement of Millennials to the urban core is bringing new light to the economic benefits of historic preservation. There are 77M Millennials between ages of 18-36 and they constitute the largest generation in American—just surpassing the Baby Boomers. Regions attracting Millennials gain workers and consumers that are major drivers of the American economy. However, attracting Millennials is not easy as their wants and needs differ from older generations-- 62% of Millennials want to live in mixed-use development, 40% of Millennials want to live in Urban NOT Suburban areas, 2/3 of Millennials are renters, Millennials own fewer cars as they aspire to live in a mixed use, pedestrian friendly environment. Fortunately for urban, rural, and suburban communities, the older, established Central Business Districts often dominated by historic structures are primed to attract Millennials as they are designed before the car dominated America's development patterns.

Downtown redevelopment districts and rural Downtowns. Rural communities looking to redevelop their Downtown also have the opportunities in states like Michigan and Ohio of utilizing the Downtown redevelopment district programs to spur private investment by capturing the growth of future property taxes.

Ohio municipal corporations can create downtown redevelopment districts (DRDs) and innovation districts to promote rehab of historic buildings if a city has a certified historic structure, creates a district as large as 10 contiguous acres around that historic structure and develops a DRD economic development plan. Six steps exist to redevelopment historic property using DRDs.

Montrose Group Ohio DRD Plan Approach



The DRD process begins with the identification of a certified historic structure or undertakes the process of gaining that historic certification. DRD historic certification is accomplished through four different routes including if a building is on the National Register of Historic Places, contributes to a National Register Historic District, located in a National Park Service Certified Historic District or a Certified Local Government Historic District. Historic preservation certification also requires an approved renovation plan to keep historic building "historic." DRD districts must have an economic development plan. A DRD economic development plan should identify the redevelopment project costs including building, infrastructure and operations, financial modeling of the parcels within 10 acres around the historic structure and review of other tax credits, grants, loans and private contributions to address those costs, a site development plan that considers the economic potential of the DRD through commercial, mixed use and research market research, determines the DRD broadband service to see whether the DRD qualifies as an Innovation District, and outlines that local government process and agreements needed to create a DRD. Next, the municipality must adopt a DRD financial model addressing the building, infrastructure and operational costs through an tax exemption up to 70% of the increased value of real property in the DRD providing the collection of service payments in lieu of taxes from the property owners and redevelopment charges assessed to property owners within the DRD- both of which may be levied without property owner approval. The DRD may not be exclusively residential and last for 10 years or 30 years with school board approval. Additional funding for the DRD can be gained from federal and state historic preservation and new market tax credits and state Capital Bill funding. DRDs with a 100-gigabit broadband level or higher can become an Innovation District. Innovation Districts can use DRD generated funds to give grants and loans to high-tech companies. The Innovation District designation can ignite a tech-based economic development project by providing the capital needed for early stage capital tech companies. DRDs are created through a city ordinance describing the area included in the district, the number of years the DRD will exist, the economic development plan, ID of the historic building (s) in the district, potential designation of an innovation district within a DRD, establishment of a special fund for the deposit and dispersal of service payments and redevelopment charges, and acknowledgement that city must file an annual DRD report to the Ohio Development Services Agency. Finally, the city must hold a public hearing on the proposed DRD ordinance and give notice of the hearing to each property owner in the district. Following passage of a DRD ordinance, municipalities should enter into various agreements with building owners, school board and other funders of the project. Examples of these agreements include local government and school board revenue sharing agreements, development agreements with DRD participants to outline funding terms of the public-private-partnership and grant and loan agreements from other outside public and private sector funding sources.

Michigan's Downtown Development Authority (DDA) program is designed to be a catalyst in the development of a community's downtown district.[42] The DDA provides for a variety of funding options including a tax increment financing mechanism, which can be used to fund public improvements in the downtown district and the ability to levy a limited millage to address administrative expenses.[43] DDA TIFs can be used to fund infrastructure improvements projects – streetscapes, street lighting, floodwall protection, parks, public parking, water, sewer, utility services, park improvements as well as market research and feasibility studies, property acquisition, elevators (to meet ADA), rent subsidies, business loans/grants, catalytic projects and historic preservation.[44] Any city, village or township, that has an area in the downtown zoned and used principally for business, is eligible to create an authority.[45] Once established, the DDA is required to prepare a development plan and may create a tax increment financing plan to submit for approval to the local municipality. [46] A development plan describes the costs, location and resources for the implementation of the public improvements that are projected to take place in the DDA district.[47] A tax increment financing plan includes the development plan and details the tax increment procedure, the amount of bonded indebtedness to be incurred, and the duration of the program.[48] Financing options for DDA activities:

- Tax Increment Financing;
- Millage (two mills for cities with less than 1M people and one mill for if over 1M);
- Special assessments;
- Revenue bonds;
- Revenues from property owned or leased by the DDA;
- Donations and grants to the authority; and
- Contributions from the local unit of government.[49]

Michigan local governments must establish that it is necessary for the best interests of the public to do the following related to the defined business district: to halt property value deterioration; increase property tax valuation; eliminate the causes of deterioration; promote economic growth; and create and provide for the operation of the DDA.[50] The local government then sets a public hearing, based upon its resolution of intent, to create a DDA with notice given of a public hearing by publication and mail to taxpayers within a proposed district and to the governing body of each taxing jurisdiction levying taxes that would be subject to capture of tax increment revenues.[51] The local government takes comments at the public hearing, and, within 60 days, the governing body of another taxing jurisdiction may, by resolution, exempt its taxes from capture and file the resolution with the clerk of the municipality.[52] Not less than 60 days following the hearing, the governing body may adopt proposed ordinance creating the DDA and designating the boundaries of the DDA district, and the ordinance must be published at least once in a local newspaper and filed with the Secretary of State.[53] The governing board of the DDA shall be appointed or may, for municipalities of less than 5,000, be the same as the planning commission, but otherwise the authority will be supervised by a board that includes the municipality's chief executive officer and 8–12 members appointed by the governing body.[54] A majority of the board must be individuals with an ownership or business interest in property in the district and one member must reside in the district if there are more than 100 residents in the district. If the DDA board anticipates the need for capturing tax increments or using revenue bonds to support a project, a development plan and a tax increment financing plan must also be adopted by the DDA board and the municipality.[55] The DDA tax increment financing mechanism allows for the capture of the incremental growth of local property taxes over a period of time to fund public infrastructure improvements.[56] A community can capture property taxes which would have otherwise been paid to entities such as the library, community college and county, and instead use them for public improvements in targeted areas.[57] By borrowing against the future tax increments, the DDA can fund large-scale projects, which can lead to new development opportunities within the downtown. In addition to the financing mechanism, the DDA structure results in the creation of a public board dedicated solely to the improvement of the downtown.[58] Negotiating agreements with other local taxing jurisdictions is critical for the successful operation of DDAs. Before 1994, DDAs were able to capture property taxes from all other taxing jurisdictions, but, in 1994, school taxes were removed and opt-outs were created in the law for other taxing jurisdictions.[59]

Michigan requires the adoption of a DDA Plan. Michigan's DDA plan are required to have:

- DDA boundary designation with current public or private uses noted including a legal description of the development area that includes a description of land or property to be sold;
- Development of DDA marketing plan that outlines how the planned development will compete in the regional marketplace.
- Outline of the existing and planned costs for public and private improvements and public infrastructure compared to revenues to be collected from property to be leased, sold, or conveyed, DDA revenue to be collected, other governmental funding sources and private contributions;
- Plans for open space, parking, streetscape and required land use zoning changes needed for the implementation of the DDA plan;
- Estimates of the number of persons residing, to be displaced and plans for those being displaced in the development area; and
- Recommended staff and board appointments, planned operations and procedures for bidding for the leasing, purchasing, or conveying the development upon its completion.

Montrose Group Ohio DRD Plan Approach

DDA Boards play a critical role in Michigan Downtown redevelopment. Downtown Development Authority Boards are very engaged in planning including preparing an analysis of economic changes taking place in the downtown district, analyze the impact of metropolitan growth upon the downtown district, plan and propose the construction, renovation, repair, remodeling, rehabilitation, restoration, preservation, or reconstruction of a public facility, an existing building, or a multiple-family dwelling unit which may be necessary or appropriate to the execution of a plan which, in the opinion of the board, aids in the economic growth of the downtown district.[60] They also plan, propose, and implement an improvement to a public facility within the development area to comply with the barrier free design requirements of the state construction code and develop long-range plans, in cooperation with the agency which is chiefly responsible for planning in the municipality, designed to halt the deterioration of property values in the downtown district and to promote the economic growth of the downtown district, and take such steps as may be necessary to persuade property owners to implement the plans to the fullest extent possible.[61] DDA Boards then implement any plan of development in the downtown district as a unit of local government including the power to make and enter into contracts, acquire property or services, grant or acquire licenses, easements, and options with respect to that property, and improve land and construct, reconstruct, rehabilitate, restore and preserve, equip, improve, maintain, repair, and operate any building within the downtown district.[62] They can also fix, charge, and collect fees, rents, and charges for the use of any building, property, or facility under its control and pledge the fees, rents, and charges for the payment of revenue bonds issued by the authority, lease any building or property under its control, or any part of a building or property, accept grants and donations of property, labor, or other things of value from a public or private source, acquire and construct public facilities, and create, operate, and fund marketing initiatives that benefit only retail and general marketing of the downtown district.[63] Finally, DDA Boards can contract for broadband service and wireless technology service in the downtown district, create, fund and operate retail business incubators and a loan program to pay for improvements for existing buildings located in the DDA district in order to make them marketable for sale or lease.[64]

DDAs are pointed to as a key to successful Downtown redevelopment. Look at the success of Downtown Traverse City, Michigan. Traverse City. Michigan is a true economic success story driven by the redevelopment of their downtown on the shores of Grand Traverse Bay has enjoyed a 6% growth in population from 2010 to 2019 which is substantial for this small community of 15,000 people. The city also has a below average poverty rate of 12% a median family income of $53,871 and over 44% of the residents over the age of 25 have a bachelor's degree or higher. A large part of their success is driven by an incredible Downtown redevelopment strategy using the Michigan DDA and TIF program. The Traverse City DDA has two Tax Increment Financing (TIF) plans, TIF 97 and Old Town TIF.[65] Revenues are used to fund public infrastructure improvement in the DDA District, and the two TIFs are charged an administrative fee that serves as revenue for the Operational Budget. Annually, the City of Traverse City receives a percentage TIF revenues from TIF 97 and Old Town TIF.[66] Major Traverse City projects include the Hardy and Old Town Parking Garages, Pine Street Pedestrian Bridge, Streetscapes (sidewalks and street trees), bridge replacement/repairs (all bridges in Traverse City are in the DDA District) and Riverwalks, and Traverse City TIFs has also funded park improvements at Clinch Park, Jay Smith Walkway, and Lay Park.[67] In fact, Downtown Traverse City generates three times more taxes per acre than the rest of the City, and TIF dollars are utilized to leverage other funds.[68] The Iron Works property in the Old Town District was one of the first TIF projects, and TIF dollars were utilized for public improvements while a private investment was made to redevelop the property.[69]

TRAVERSE CITY DDA PROJECT BEFORE AND AFTER

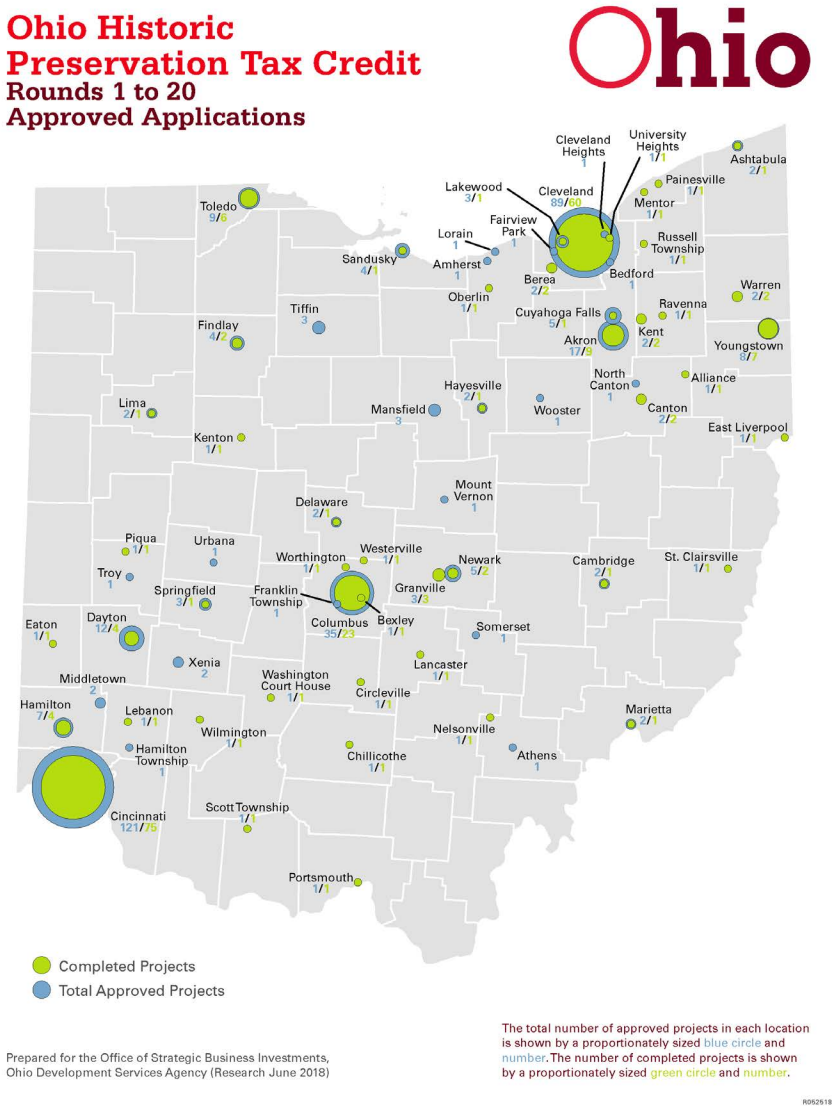
Source: https://dda.downtowntc.com/your-dollars-at-work/

State & Federal Historic Preservation Tax Credit program and rural Downtowns. Saving historic structures can be a key element to an economic development strategy—especially when it comes to redevelop rural Downtowns whose walkable areas are attractive to younger workers. Most rural Downtowns are filled with historic structures—many of which are underutilized and primed for redevelopments. The economic data on the benefits of historic preservation are clear: historic preservation increases land values and enhances the regional economy. For 41 years the U.S. National Park Services, in partnership with the State Historic Preservation Offices, has administered the Federal Historic Preservation Tax Incentives Program. The redevelopment of historic properties in rural Central Business Districts create a unique opportunity to spur economic growth through the attraction of Millennials to live, work and play. Most established Central Business Districts are home to arts, museums, office, and other historic properties primed for redevelopment opportunities and are essential for attracting Millennials much more focused on the quality of place than wage of a job.

The Federal historic preservation tax credit program provides a 20% Federal tax credit to property owners who undertake a substantial rehabilitation of a historic building in a business or income-producing use while maintaining its historic character, and is often matched by state historic preservation tax credits.[70] The historic tax credit is designed to preserve and rehabilitate historic buildings, and to also promote the economic revitalization of older communities in the nation's cities and towns, along Main Streets, and in rural areas.[71] Since the program's inception in 1976, the NPS has certified the rehabilitation of more than 44,000 historic properties throughout the United States, leveraging over $162 B in private investment in historic rehabilitation and generating almost 2.7 M jobs.[72] In Fiscal Year (FY) 2018, 1,013 completed historic rehabilitation projects were certified by the National Park Service, representing $6.9 B in estimated rehabilitation costs that qualify for the 20% federal tax credit.[73] 51% of the certified rehabilitation Historic Preservation Tax Credit projects in FY 2018 were located in low and moderate income census tracks and 75% were located in economically distressed areas.[74] Also, almost half of all projects in FY 2018 were under $1 million, and 18% were under $250,000 with that a quarter of all certified rehabilitation projects in FY 2018 were located in communities with under 50,000 in population and 15% in communities with under 25,000 in population.[75]

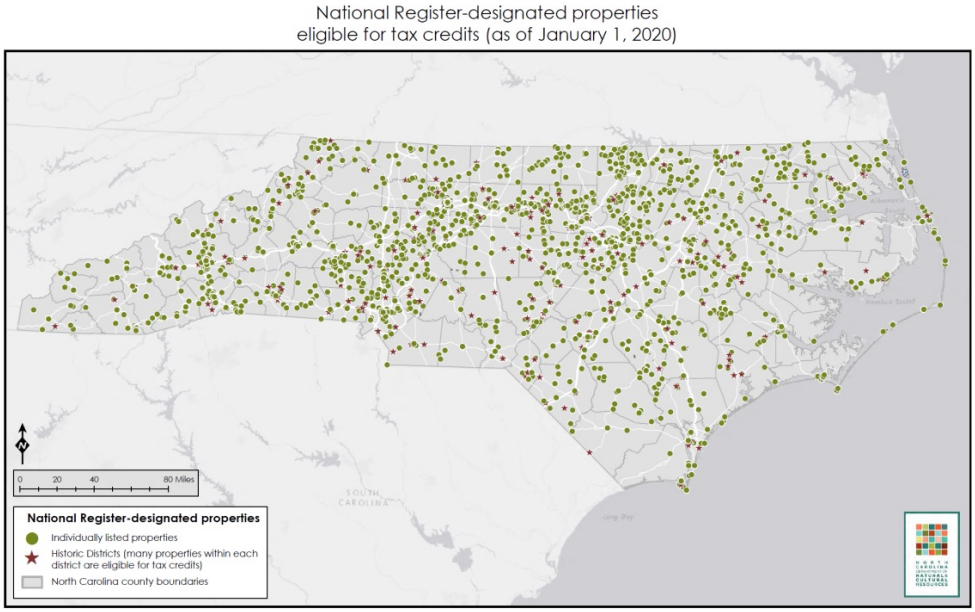
Most states, 36 to be precise, offer a historic preservation tax credit that enhances the value of the federal credit. State historic preservation tax credits work hand in hand with the federal historic preservation tax credit and can provide a substantial boost to redeveloping historic properties. Missouri, North Carolina, and Ohio operate state historic preservation tax credit programs but the state of Michigan cancelled their historic preservation tax credit program in 2011. Highlights of the Ohio, Missouri, and North Carolina historic preservation tax credit programs.

Missouri Historic Preservation Tax Credit. Missouri's historic preservation tax credit has been available since 1998.[76] Both income and owner-occupied properties may qualify for a 25% Missouri tax credit, and the State Historic Preservation Office is responsible for reviewing and approving rehabilitation work for the state credits.[77] Any taxpayer is eligible to participate in this program, and not-for-profit entities and government entities are ineligible.[78] Any participation by not-for-profit entities, including but not limited to ownership interest, capital contributions, distribution of tax credits, incurrence or payment of rehabilitation expenses, lease to a tax-exempt entity, may result in the reduction of tax credits.[79] An eligible property must be listed individually on the National Register of Historic Places, certified by the Missouri Department of Natural Resources as contributing to the historical significance of a certified historic district listed on the National Register, or of a local historic district that has been certified by the U.S. Department of the Interior.[80] The costs and expenses associated with the rehabilitation must exceed 50% of the total basis of the property (acquisition cost).[81] The federal and state credits can be used in combination for the rehabilitation of commercial or income-producing properties, and rehabilitation of non-income producing residential properties qualifies for the state credits only.[82] State legislation created changes in the Missouri state historic preservation tax credit program including, after effective date of legislation, August 28, 2018, reducing the overall project funding cap to $90M in funding with an additional $30M solely for projects located in a qualified census tract.[83] There is a $250,000 cap for tax credits for non-income producing, single family, owner-occupied residential properties but no transaction caps on other eligible projects.[84] From a process standpoint, an application is submitted to the Missouri Department of Economic Development, which will then be submitted to the State Historic Preservation Office to determine the eligibility of the property and proposed rehabilitation, based on the standards of the U.S. Department of the Interior. Preliminary applications subject to the cap will be scored by DED with tax credits award in two cycles annually.[85] Projects receiving less than $275,000 in credits may be accepted at any time.[86]



Ohio Historic Preservation Tax Credit. Ohio's Historic Preservation Tax Credit Program is administered by Ohio's Development Services Agency.[87] The program provides $60 M in tax credits for the rehabilitation expenses incurred by owners of historically significant buildings located across the state, and the tax credits subsidize up to 25% of qualified rehabilitation expenditures for historic rehabilitation projects, capped at $5 million per project for a small number of catalytic projects.[88] Projects must be a certified historic structure, have a redevelopment plan consistent with its historic roots and be certified by the Ohio Office of Historic Preservation. Ohio is full of potential historic redevelopment projects including: 48 certified national historic city halls; 51 certified national historic theaters; 59 certified national historic courthouses; 91 certified national historic college/university buildings; 139 certified national historic hotels; 179 certified national historic museums; and 239 certified national historic office buildings.[89] The program is highly competitive and receives applications bi-annually in March and September.[90] With 24 rounds of funding complete, tax credits have been approved for 475 projects to rehabilitate over 600 historic buildings in 70 different Ohio communities.[91] The program is projected to leverage more than $6.75 billion in private development funding and federal tax credits directly through the rehabilitation projects.[92]

North Carolina Historic Preservation Tax Credit. North Carolina offers a historic preservation tax credit program. Since 1976, over 3,100 completed "certified rehabilitation" projects have been reviewed by the N.C. State Historic Preservation Office, representing almost two billion dollars of investment in historic properties.[93] The spinoff from all this activity includes job creation, downtown and neighborhood revitalization, improved community appearance, and greater community pride.[94] North Carolina's state historic rehabilitation tax credit programs, redevelopment and reuse incentives since 1976 have brought $3.043 billion of private investment into North Carolina communities, boosting local economies and creating construction phase and post-construction permanent jobs while preserving our state's priceless historic character. Historic rehabilitation projects have taken place in 90 of North Carolina's 100 counties.[95] North Carolina was #4 in the US in total private investment cost of $381.2 M for completed, certified historic tax credit projects during the FY 2019 period.[96] North Carolina's historic preservation tax credit program has $4.5 million cap, based on $20 million project of vacant mill in distressed county. The North Carolina historic preservation tax credit programs provides 15 % of qualified rehabilitation costs of up to $10 million for historic income-producing properties, 10 % for $10 million to $20 million and no credit for more than $20 million. A 5 % additional credit with $20 million project cap for projects located in either Tier One or Tier Two areas or on an eligible targeted investment site on expenditures made prior to Dec 31, 2016.



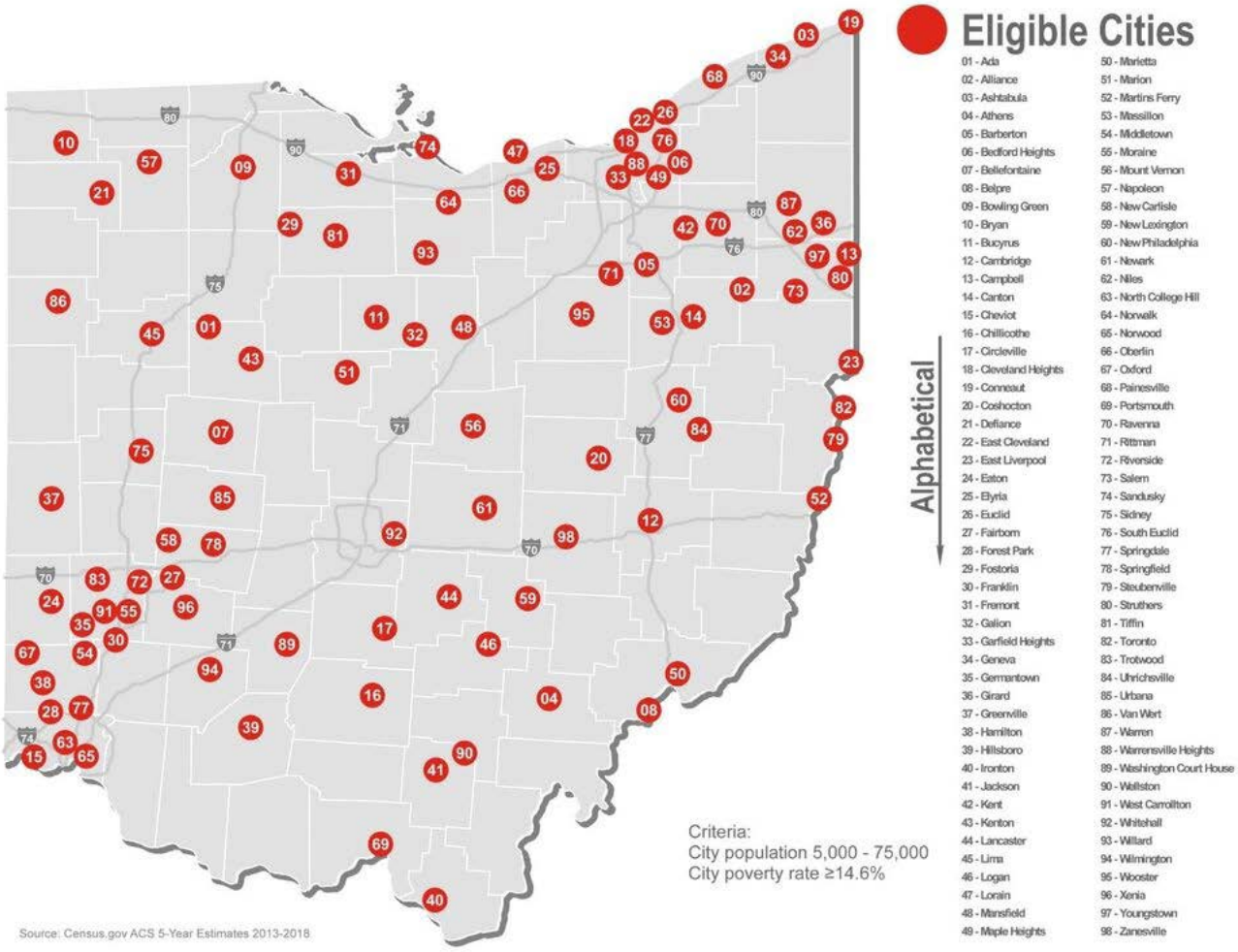
State project financing and rural Downtowns. Many state governments provide funding for the redevelopment of rural Downtowns.

- *JobsOhio Revitalization Program.* The JobsOhio Revitalization Program Loan and Grant Fund is designed to support the acceleration of redeveloping sites in Ohio. Primary focus for the program is placed on projects where the cost of the redevelopment and remediation is more than the value of the land and a site cannot be competitively developed in the current marketplace.[97] Priority will be placed on projects that support near term job creation opportunities for Ohioans, and for revitalization projects typically that retain and/or create at least 20 jobs at a wage rate commensurate with the local market with job creation and retention projects within JobsOhio targeted industry sectors, those making additional capital investment beyond remediation and redevelopment and/or projects with wages higher than the average local wage rate.[98] Eligible applicants include businesses, non-profits or local governments where the entity committing the jobs has signed an agreement such as a letter of intent, option, lease or holds title for the project site and has a specific business plan, financing plan and schedule for redevelopment and job creation to occur.[99] Eligible sites include an abandoned or under-utilized contiguous property where redevelopment for the immediate and primary purpose of job creation and retention are challenged by significant redevelopment constraints.[100] Eligible costs include: demolition; environmental remediation; building renovation; asbestos and lead paint abatement; removal and disposal of universal and construction waste; site preparation; infrastructure; and environmental testing and lab fees; and remediation projects.[101] For environmental remediation loans and grants, a No Further Action letter

issued by an Ohio Certified Professional is typically required for projects where long-term engineering controls are necessary on the site.[102] In certain circumstances, JobsOhio may require a Covenant Not to Sue from the Ohio Environmental Protection Agency, depending on the project and site characteristics.[103]

- *JobsOhio Vibrant Communities Program.* The JobsOhio Vibrant Community Program assists distressed small and medium sized communities with the implementation of catalytic development projects that fulfill a market need and represent a significant reinvestment in areas that have struggled to attract new investment.[104] JobsOhio has identified 98 cities with populations between 5,000 and 75,000 and poverty rates that are at or above the state's average poverty rate that are eligible for support in this program, and eligible applicants include businesses, non-profits, developers, port authorities or local governments.[105] The Vibrant Community Program will offer competitive grants of up to $2 million for development projects that help transform areas within a distressed community.[106] Funding will not exceed 50% of eligible costs, projects must have at least one identified end user. Mixed use projects are eligible; however, the strongest applicants will have a higher percentage of space used for job creation and retention.[107] Eligible projects generally fall into two categories:
  - Real Estate Development Projects – Includes redevelopment of significant community assets, downtown redevelopment, or renovation of outdated retail spaces for a new, non-retail use, and they must have an end user committed to occupy at least 30% of the space.
  - Operated Shared Spaces - Includes business incubators, accelerators, innovation centers and co-working spaces, facilities should target appropriate users, preferably within defined JobsOhio target industries but may also include early stage businesses, and shared spaces must be managed by an experienced entity and offer relevant programming.[108]

The projects will be evaluated on several criteria to assess their financial feasibility and community impact and funded on an annual basis.[109]



- *Michigan Department of Agriculture and Rural Development Grants.* Michigan's Department of Agriculture and Rural Development (MDARD) provides grants on a competitive application process.[110] Funding is focused on the following types of projects in rural areas:
- Infrastructure Development – roadways, bridges, renewable energy, wastewater, rural and housing;
- Rural Capacity Building – museums, local and regional tourism campaigns, and feasibility studies;
- Business Development – business expansion ensuring long-term creation or retention of jobs with a strong local and/or regional impact with a focus this year on livestock processing; and
- Talent Development and Training – local and regional workforce development programs, workforce training, and rural housing projects.[111]

The maximum limit on grant fund requests is $100,000 and the applicants must provide a minimum 30% match.[112] Industries of focus for this program are food and agriculture, forestry, mining, oil and gas production and tourism.[113]

- *North Carolina Center for Community Action.* In Robeson County, North Carolina, the Center for Community Action (CCA) assumed leadership of a regional workforce coordination effort that was organized following massive job loss and increasing poverty in the mid-2000s.[114] The workforce effort, called Women's Economic Equity Project, convened regional government, business, education, and nonprofit leaders to find ways to exploit emerging employment opportunities in health care and education.[115]]Area health care providers, the school system, the community college system, and University of North Carolina Pembroke partnered to develop career pathways for employment in each of the two sectors, offering women tailored education to help them advance in the education and health care fields.[116] To maintain the pathways, CCA organizes quarterly "alliance" meetings with employers, community nonprofits, and public agencies.[117] The meetings are used to determine how best to support employees in these sectors, to discuss shared policy and advocacy positions, and to determine how to create more jobs in the region.[118] Services provided directly to participants include individualized career coaching, monthly support group meetings, and financial support, and current reports indicate the Women's Economic Equity Project serves over 200 women, and CCA is working to expand the program throughout the county and the region.[119]

Opportunity zones and rural development. Opportunity Zone Funds are another important source of funding for rural communities to consider. 8700 census tracts across the United States have been designated as Federal Opportunity Zones and 2019 will be the year Opportunity Zone Funds are created and the "low hanging fruit" for this new program are picked. While Opportunity Zones are very young, four tactics will drive them to be a source of economic development growth in 2019.

The federal tax reform created the new "Qualified Opportunity Zone" program. The Qualified Opportunity Zone program is designed to encourage investment in businesses that are in low-income communities by permitting a taxpayer who recognizes gain on the sale of property to gain certain tax benefits. Federal Opportunity Zones offer three tax incentives to investors: a temporary tax deferral for capital gains reinvested in an Opportunity Fund– the deferred gain is recognized on the earlier of the date on which the opportunity zone investment is sold or December 31, 2026; a step-up in basis for capital gains reinvested in an Opportunity Fund– the basis of the original investment is increased by 10% if the investment in the qualified opportunity zone fund is held by the taxpayer for at least 5 years, and by an additional 5% if held for at least 7 years, excluding up to 15% of the original gain from taxation; and a permanent exclusion from taxable income of capital gains from the sale or exchange of an investment in a qualified opportunity zone fund, if the investment is held for at least 10 years.

The US Treasury Department will certify who is a "Qualified Opportunity Fund" but the tax reform law defines this as a partnership or corporation formed for the purpose of making investments in businesses located in low-income communities designated as "Qualified Opportunity Zones." To gain the program benefits, an investor must invest proceeds from a sale or exchange of assets to an unrelated party into a Qualified Opportunity Fund within 180 days from the date of such sale or exchange. This investor may choose to reinvest only a portion of the proceeds from the original sale or exchange, in which case only a portion of the gain would be deferred. A Qualified Opportunity Fund is required to invest at least 90% of its assets in targeted businesses where substantially all of the tangible assets of each such business are used in a Qualified Opportunity Zone, and at least 50% of the gross income earned from each such business is from the active conduct of business

in a Qualified Opportunity Zone. Opportunity Funds provide investors the chance to put that money to work rebuilding the low-income communities.

The White House Council of Economic Advisors found that the OZ tax cuts have spurred a large investment response.[120] The report estimates that Qualified Opportunity Funds raised $75 billion in private capital by the end of 2019, most of which would not have entered OZs without this incentive.[121] This new capital represents 21 % of total annual investment in OZs and helps explain why the CEA also finds that private equity investment in OZ businesses grew 29 % relative to eligible communities that were not selected as OZs and thus act as a control group.[122]

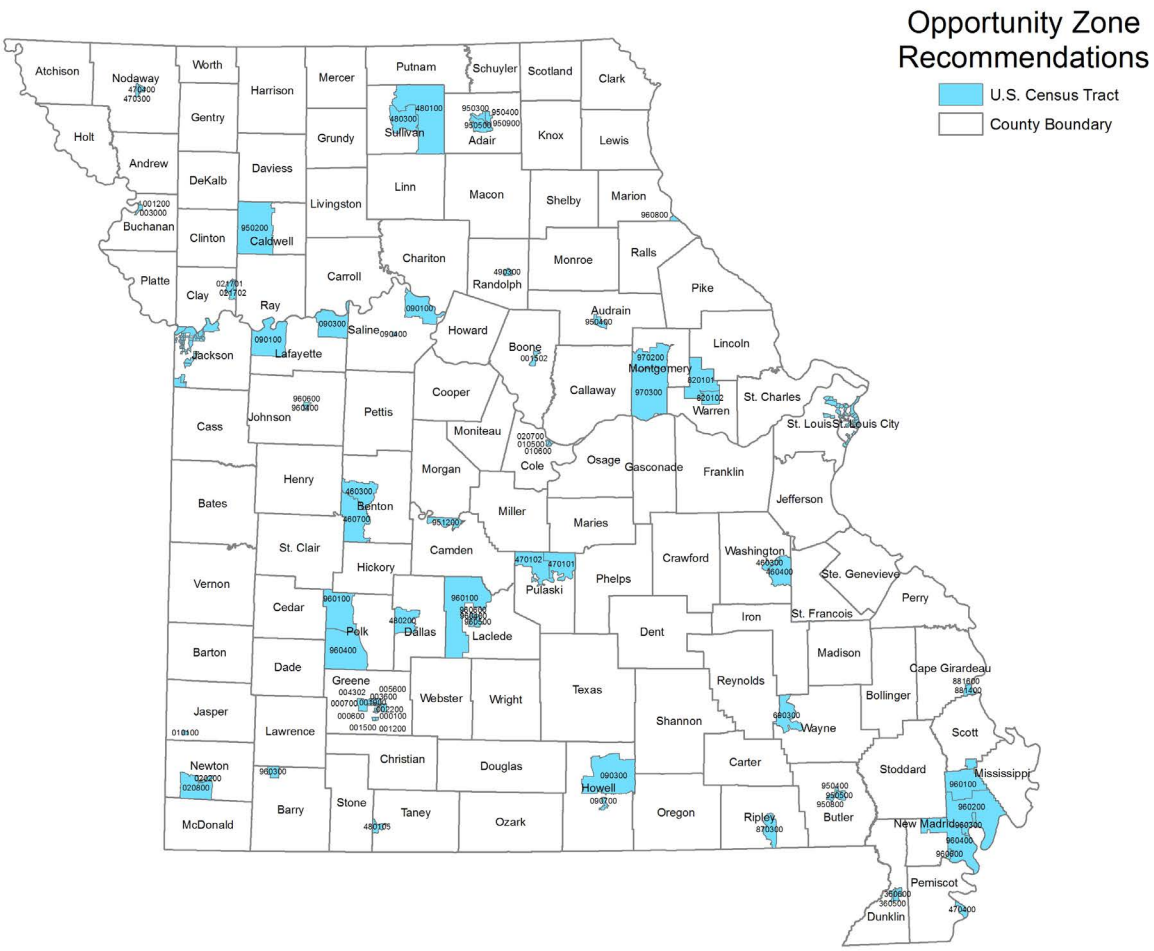
Rural communities account for nearly half of all the Qualified Opportunity Zones and the accounting firm Novogradac reported that Opportunity Zone Funds have reported raising $12 B in assets among 811 Qualified Opportunity Zone Funds that have voluntarily reported to Novogradac.[123] There are 148 funded QOFs that focus solely on residential development and they have raised $2.74 billion.[124] The 287 QOFs that have at least a partial focus on residential development have raised $9.09 billion, which is 75.4 % of the total. As compared to the Novogradac's April Qualified Opportunity Fund list, equity raised with at least a partial focus on residential development increased 23 %.[125] Meanwhile, funds that have at least a partial focus on commercial development have raised $6.98 billion, 57.9 % of the overall total--due to the number of QOFs that have multiple areas of focus, the percentages add up to more than 100 %.[126] As compared to the April list, equity raised with at least a partial focus on commercial development increased 14 %, and QOFs with at least a partial focus on operating businesses have raised $444.2 million, which is 3.7 % of the overall total.[127] QOFs focused at least partially on hospitality have raised $1.82 billion (15.1 % of the total) and those focused at least partially on renewable energy have raised $320.4 million (2.7 % of the total), and. as compared to the April list, equity raised with at least a partial focus on operating businesses increased 25%.[128] QOFs can focus on a national, regional, state or city investment areas.[129] Those with a national focus make up 23.4 % of the funds that have disclosed their focus, and those with a single- or multiple-city focus make up 29.0 % and 26.7 % of all QOFs.[130] The single- and multiple-city QOFs have combined to raise roughly half of the overall equity (single-city QOFs have raised $3.10 billion; multiple-city QOFs have raised $2.85 billion), and, in April, single- and multi-city QOFs had raised 41.9 % of overall equity.[131]

Numerous Opportunity Zone Funds have been created to serve rural communities.

- *Four Points Opportunity Zone Fund.* Armed with $20 million, Four Points is investing in rural communities across Colorado.[132] The fund has invested in more than 300 distressed properties in the state and seeding capital to startups across western Colorado.[133] Aside from forging a new path in startup and rural OZ investing across the Western Slope region, Four Points' founders are focused on backing female and minority-owned businesses.[134]
- *Opportunity Alabama Opportunity Zone Fund.* Opportunity Alabama connects OZ communities, investors, entrepreneurs, plus larger institutions like banks, universities, and development organizations.[135] Founded by Alex Flachsbart, the organization is building programs that educate communities on OZ policy and measure the social impact of projects across Alabama's 158 OZ communities.[136] Opportunity Alabama has also launched an OZ Fund to invest in projects statewide.[137]
- *Center on Rural Innovation.* The Center for Rural Innovation (CORI) created a qualified opportunity zone fund called the CORI Innovation Fund to invest in growth businesses across rural America.[138] The fund will seek out attractive operating businesses that are under-served by traditional venture capital institutions and have the potential to drive economic and job growth in small towns.[139] The CORI Innovation Fund launch is funded in part by a matching grant from the U.S. Economic Development Administration and will focus on promising technology businesses located in or willing to relocate to qualified opportunity zones (QOZs).[140] While the fund will consider opportunities in any QOZ, the initial focus will be on businesses in the communities selected to be part of the Rural Innovation Initiative (RII), which launched this year to build technology startup ecosystems in small communities.[141]

States also support Opportunity Zone investments. Ohio has 320 designated opportunity zones, including 317 low-income communities, plus 3 non-low-income contiguous tracts.[142] A large majority (82 %) of Ohio's opportunity zones are located in urban areas of the state, similar to the statewide urban percentage (81 %).[143] Large swaths of inner city Cleveland and much of Columbus and Cincinnati lie in opportunity zones.[144] The state of Ohio created the state Opportunity Zone Investment Credit and the Ohio Qualified Opportunity Fund. The Ohio opportunity zone investment credit is a non-refundable credit that allows a taxpayer to invest capital

gains in a qualified opportunity fund. The credit shall equal 10 % of the taxpayer's investment in a qualified opportunity fund in the taxable year of the investment. The Ohio Development Services Agency Director cannot issue more than $50 million in Ohio Opportunity Zone Tax Credits over the biennium. This serves as a cap on how many credits can be issued, cannot issue credits to a single applicant that would exceed $1 million over the biennium, and a credit cannot be issued for a project that also has been issued a small business investment certificate or InvestOhio.



Missouri has 161 designated opportunity zones, including 153 low-income communities, plus 8 non-low-income contiguous tracts.[145] Missouri's opportunity zone urban-to-rural ratio is nearly identical to the statewide ratio, with urban tracts representing 72 % of the statewide total, and 71 % of the opportunity zone total.[146] The state's two largest cities are well represented, with St. Louis being home to 41 opportunity zones, and approximately two dozen more located in Kansas City.[147]

Michigan has 288 designated opportunity zones, including 283 low-income communities, plus 5 non-low-income contiguous tract.[148] Michigan gave virtually no preference to either urban or rural areas when it came time to nominate opportunity zones.[149] Approximately three-fourths of their opportunity zones are located in urban areas, a ratio very similar to the statewide average.[150] Detroit is home to 70 opportunity zones, nearly a quarter of the state's total.[151]

North Carolina has 252 designated opportunity zones, including 241 low-income communities, plus 11 non-low-income contiguous tracts.[152] Only one-quarter of North Carolina's census tracts statewide are rural, but one-third of their opportunity zones are located in rural areas.[153] The 252 North Carolina opportunity zone census tracts represent a total population over 1.1 million people, nearly 45,000 families with children in poverty, over 50,000 business establishments, and over $580 million in received public and private investments over the past 5 years.[154]

New Market Tax Credits and rural development. Federal New Market Tax Credits provide a funding source for projects located in federally designated low-income areas. The Federal New Markets Tax Credit provides a 39% Federal Tax Credit Over 7 Years and $1M Ohio Tax Credit paired with Federal Credit for real estate investments in poor communities through complex transactions involving retail, office, and manufacturing projects. New Market Tax Credit projects involve the gaining of an allocation of the federally awarded tax credit from an awardee of the credit. The challenge for use of this program is the demand for projects far exceeds the availability of New Market Tax Credits. The Federal program most comparable to Opportunity Zones is the New Markets Tax Credit (NMTC), though OZs offer improvements over the NMTC program.[155] Both use tax incentives to encourage private investment in low-income communities, but the total tax benefit available through the NMTC program is capped, limiting how much investment it can spur.[156] In most years since 2007, Congress has authorized the NMTC program to award tax credits to support about $3.5 billion in place-based investments.[157] On average, these credits account for about half of total project costs, so the program supports roughly $7 billion in investment annually.[158] As of 2016, nearly 3,400 census tracts have received NMTC program credits since the program's inception in the early 2000s.[159] Based upon Securities and Exchange Commission data, slightly less than half of the existing Opportunity Zone Funds focus on real estate, with the majority targeting commercial real estate.[160] Another 45 % describe their industry as a "Pooled Investment Fund," which suggests that they have investments across various industries.[161] Finally, about 10 % are in the "other" category, which includes funds that reported a focus on health care, technology, construction, and investing, and as well as those selecting the "other" option on the form.[162]

NMTCs have been used in rural communities to promote economic investment. The CDFI Fund targets 20 % of NMTC allocation awards to non-metropolitan counties. Thus, the impact in rural America is significant. Between 2003 and 2014:

- 817 businesses, community facilities, and other important revitalization projects financed;
- $6.15 billion in NMTC allocation generated $11.6 billion in total project costs; and
- NMTC projects generated 49,940 full-time jobs and 21,706 construction jobs.

Below are a few stories of how small towns and farming communities put NMTC capital to work through manufacturing expansions, timber and forestry projects, hospitals, and community facilities.

- *Peterson Farms.* The Peterson Farms project involved equipment purchase and installation for four capacity expansions to allow the company to continue to grow in Shelby, Michigan rather than move to another state, and in so doing, increase procurement from Michigan growers.[163] NMTC financing supported a portion of the project including the addition of a juice bottling line that will allow Peterson Farms to utilize commodities that might have been scrapped due to overproduction, addition of a second applesauce line, and a portion of capacity improvements to the blueberry processing line.[164] The remaining capacity improvements to the blueberry line and acquisition of new apple peeling equipment were completed outside of the NMTC transaction.[165]
- *Mirac, Inc.* A $7.55 million investment in Mirac, Inc., a rural Ohio-based electronics assembly and fabrication company with locations in Lynchburg and West Union, that will help keep jobs in rural Ohio.[166] This project created 100 permanent jobs in rural Ohio.[167]
- *Woodward Opera House.* A renovated Woodward Opera House has been transformed into the Woodward Arts Complex that has updated retail and office space for as many as 29 tenants, a 500-seat theater, two recital and multipurpose rooms, dressing rooms and conference spaces in rural Mount Vernon, Ohio.[168] The Woodward will also be a fresh food hub in what was previously a complete food desert, and the property will help alleviate the fresh food shortage by including a cafe that serves local food and a community kitchen available for local farmers to process or package their produce.[169]
- *North Carolina Renewable Power Lumberton.* NC Renewable Power (NCRP) will retrofit an existing dormant coal-fired power plant to a renewable energy power plant utilizing biomass, in particular, poultry litter and wood waste: retrofit a dormant coal-fired power plant to a 25MW renewable energy power plant utilizing locally sourced poultry litter and wood waste. The NCRP plant is in rural Robeson County, one of NC's poorest areas and a region dominated by large scale poultry production. Water runoff from poultry litter pollutes local waterways. NCRP's use of poultry litter helps local farmers and removes a significant amount of poultry litter from the community. NCRP is only the second utility scale power plant in the U.S. utilizing a high percentage of poultry litter.

Entertainment districts and rural Downtowns. Craft beer is big. Every town wants a craft beer maker. Some urban markets have hundreds. However, rural communities do not need dozens of craft beer joints to have an active and attractive Downtown. However, rural Downtowns do need to be places where young people want to live, work, and raise a family. Playing usually involves some form of entertainment districts and many states have programs local governments can implement to develop these.

Communities with a strong sense of place and livable downtowns drive commerce to quaint storefronts and locally owned restaurants and create a place where people want to be. As the desires of existing residents, future residents and tourists have been shifting over the years to live in communities that have a unique identity, community leaders and stakeholders should be looking for ways to build lively, walkable and livable downtowns that will attract small business owners and entrepreneurs. With employers recognizing and embracing the remote workforce, people increasingly have the freedom to live where they want to and not where they need to. The best talent flocks to communities where the sense of place is evident and desirable making the importance of vibrant downtown business districts unquestionably important.

Communities across the United States permit open containers of alcohol to be carried beyond the licensed premises generally connected to entertainment districts in the region.

- Hood River, Oregon along the Columbia River has no open container laws and allows drinking in public.
- Butte, Montana, prohibits open containers only between 2am and 8am but Montana state law does prohibit open containers in vehicles on a highway.
- Kansas City's Power & Light District permits allows the possession and consumption of alcoholic beverages on the street in open plastic containers through a special state law.
- Las Vegas and Clark County allow the possession and consumption on the street of alcoholic beverages except within parking lots or, if the alcohol was purchased in a closed container, on the premises of or within 1000 feet of the store from which it was purchased.
- Beale Street in Downtown Memphis, Tennessee, is exempt from both Tennessee's statewide open container ban and Memphis's local open container ban.
- New Orleans, Louisiana allows the possession and consumption on the street of any alcoholic beverage in an open plastic container.
- Downtown Savannah, Georgia law allows possession and consumption on the street of one alcoholic beverage in an open plastic container of not more than 16 ounces in the city's historic district.
- An 80-acre area of Downtown Dalton, Georgia permits possession and consumption on the street of one alcoholic beverage in an open paper or plastic cup of no more than 16 ounces between 12:30 p.m. and midnight.

One-way communities can enhance commerce in a downtown business district is to establish a Designated Outdoor Refreshment Area, commonly referred to as a DORA. In April 2015, the Ohio Legislature passed Substitute House Bill 47 creating Designated Outdoor Refreshment Areas, which authorizes municipal corporations and townships to establish designated areas where beer and intoxicating liquor containers purchased from a designated establishment can be consumed at different locations within the DORA. Codified under Ohio Revised Code 4301.82, the act allows the executive officer of a Municipal Corporation or the fiscal officer of a Township to apply to the corresponding Legislative Authority to establish a DORA. There is not a standardized application that Ohio requires, however the state does map out the essential components of the application and process to create the area.

When the executive officer of the municipal corporation or fiscal officer township files an application with the legislative authority, the executive officer or fiscal officer shall ensure that the application contains all the following:

- A map or survey of the proposed outdoor refreshment area in sufficient detail to identify the boundaries of the area, which shall not exceed either of the following, as applicable:
  - Three hundred twenty (320) acers or one-half square mile if the municipal corporation or township has a population of more than thirty-five thousand; or
  - One hundred fifty (150) contiguous acres if the municipal corporation or township has a population of thirty-five thousand or less.
- A general statement of the nature and types of establishments that will be located within the proposed outdoor refreshment area;

- A statement that the proposed outdoor refreshment area will encompass not fewer than four qualified permit holders;
- Evidence that the uses of land within the proposed outdoor refreshment area are in accord with the master zoning plan or map of the municipal corporation or township; and
- Proposed requirements for the purpose of ensuring public health and safety within the proposed outdoor refreshment area.

Upon approval of the application by the legislative authority: the territory described in the application constitutes the outdoor refreshment area; the legislative authority is required to provide to the Division of Liquor Control and the Investigative Unit of the Department of Public Safety notice of the approval of the application and a description of the area specified in the application; and the Division of Liquor Control, as soon as possible after receiving notice of DORA approval, will issue a DORA designation to each qualified permit holder located within the refreshment area that is in compliance with all applicable ORC Chapter 4301 and 4303 requirements.

Qualified permit holders for an outdoor refreshment area means the holder of an A-1, A-1-A, A-1c, A-2, A-2f, or D class permit issued under Chapter 4303 of the Ohio Revised Code. "D class permit" does not include a D-6 or D-8 permit. If an outdoor refreshment area has been created in accordance with ORC 4301.82, the holder of the F-class permit that sponsors an event located in the outdoor refreshment area may apply to the Division of Liquor Control for issuance of an outdoor refreshment area designation. The division shall issue such a designation if the division determines that the permit holder follows all applicable requirements established under ORC 4301 and ORC 4303. An F-class permit holder that receives a designation under this division shall comply with all laws, rules, and regulations that govern its type of permit, and the applicable public health and safety requirements established for the outdoor refreshment area, and not block ingress or egress to an outdoor refreshment area or any other liquor permit premises located within the area.

The creation of an outdoor refreshment area in Ohio is limited as follows:
- A municipal corporation or township with a population of more than fifty thousand (50,000) shall not create more than two outdoor refreshment areas.
- A municipal corporation or township with a population of more than thirty-five thousand (35,000) but less than or equal to fifty thousand (50,000) shall not create more than one outdoor refreshment area.
- A municipal corporation or township with a population of thirty-five thousand (35,000) or less shall not create an outdoor refreshment area, except as provided in division (D)(3)(b) of ORC Section 4301.82.
- The maximum DORA size for qualifying cities and townships is 320 contiguous acres or ½ square mile. Cities and townships under 35,000 residents may create a DORA, but only if the area includes at least four establishments which are 'qualified permit holders', and the maximum size is 150 contiguous acres.

Many communities across Ohio are implementing DORAs to drive economic development priorities and enhance the vibrancy of downtown business districts.

Rural workforce development. COVID 19 has not solved the skilled workforce challenge for the United States. Recent U.S. Department of Agriculture (USDA) survey data shows one out of four businesses located outside metropolitan areas struggle to find qualified workers, compared with just one in six businesses in metro areas that cite the same problem.[170] According to participants, job applicants in their rural regions lack necessary skills in basic math, hands-on trades, information technology, and manufacturing; however, participants also noted a shortage of higher-skilled workers with bachelor's degrees and beyond.[171]

High unemployment rates do not translate into the availability of skilled workers in the occupations that will grow in the future. Rural workforce development often exists in several components due to the challenge of distances from urban centers and a lack of population density in rural markets.
- *Distance Learning.* COVID 19's explosion of digital communication supports the development of workforce development via distance learning in rural markets. Many rural communities lack access to curricula and specialized faculty and trainers available to urban markets, but the transition of many work meetings from in person to on-line video conferencing provides an opportunity for rural markets to eliminate the challenge of distance and reduce travel time for their workers in need of training. Workforce development through distance learning offers all the advantages of self-paced learning but that system will still need support systems that integrate distance learning into workplace, academic, and community environments.[172]

- *Competency-based learning.* Competency-based learning is defines what a worker knows and can do, and it helps employers, employees, and job seekers to understand better what knowledge, skills, and capabilities they should add to their portfolios to be qualified for specific careers.[173] Competency-based learning also allows the possibility of stackable credits, where learning results in units of transferrable credits that reflect competencies attained irrespective of where and how that learning takes place.[174]
- *Lifelong Learning.* Finally, lifelong learning, recognizes the need for workers to continue to update and acquire new knowledge and skills throughout their work lives.[175] It is essential for work and learning to happen simultaneously, not sequentially, allowing for learning to have experiential context and for work to be improved by learning.[176]

The Federal Reserve Bank of Atlanta cited several opportunities for investment in workforce development in rural areas, including:

- Education and training programs that prepare young and adult workers for high demand jobs and skills within existing and burgeoning industry sectors;
- Economic diversification initiatives to expand the region's job base and increase economic resiliency in case a major employer closes or relocates elsewhere;
- Strategies to create community amenities, support entrepreneurship, and improve the quality of jobs to attract and retain workers with a range of skill sets and income levels;
- Community development efforts focused on transportation, housing, childcare, health care, and broadband that help workers and residents, particularly from low-wage sectors, access economic opportunity; and
- Collaboration across the public, nonprofit, and private sectors to align workforce development, economic development, and community development goals.[177]

State workforce development programs. States and regions are working aggressively to address rural workforce development efforts.

- Michigan MiLEAP. Michigan received $17.8 M in U.S. Department of Education funding to implement the Michigan Learning and Education Advancement Program (MiLEAP) program.[178] The program is designed to fund organizations that will help job seekers throughout the state make the jump from education and training to high-skill and high-wage careers.[179] MiLEAP is designed to target services for those who are economically disadvantaged, underemployed, living in distressed rural and urban communities or serving as essential workers during the COVID-19 pandemic.[180] Program participants can lean on MiLEAP Navigators, who will work with individuals to help identify, assess and overcome barriers holding them back from entering their desired career.[181] Michigan employers can engage with MiLEAP by joining multi-employer consortia to address workforce needs on a regional basis.[182] This will include providing existing employees with retraining and re-skilling opportunities, and workforce development partners include Michigan Works! agencies, Michigan community colleges, the Michigan Department of Health and Human Services and other institutions of higher education.[183]
- JobsOhio Virtual Jobs Fairs. JobsOhio recently launched virtual job fairs to connect Ohio companies with potential employees using digital technology rather than the traditional in person job fair. Coordinated by regional JobsOhio network organizations in all parts of the state, the JobsOhio Virtual Jobs Fair are providing a critical connection for area companies to meet challenging workforce development issues during COVID 19.

Rural STEM workforce development. Developing a technology industry workforce is essential for companies and regions focused on economic growth. Workers in the Science, Technology, Engineering and Math (STEM) fields are the core for any effort to build an energy friendly workforce. STEM workers constitute about 5 % of the U.S. workforce, but accounts for more than 50 % of the nation's sustained economic growth according to the Department of Labor. Again, according to the Department of Labor, if current trends continue, more than 90 % of all scientists and engineers in the world will live in Asia. The growth in STEM related jobs is expected to exceed the demand for non-STEM related occupations. However, while the U.S. leads all industrial nations in the raw number of STEM graduates, the U.S. is losing ground when it comes to developing younger STEM workers to meet workforce demands created by retiring Baby Boomers.

Companies and regions needing STEM workers to succeed can adopt several workforce development strategies to meet this challenge. Companies and regions need to identify industry and educational institution partners to create a focus on increasing the number of STEM graduates. Focusing solely on higher education

partners will not meet the demand for STEM workers. Many STEM workers do not need a four-year college degree but may require only a certificate or targeted training program. More importantly, universities and colleges cannot turn students into STEM workers with a magic wand. STEM workforce strategies focus on K-12 institutions in partnership with university and college partners to begin promoting the benefits of a STEM education at an early age to ensure students who reach high school are preparing for STEM majors in colleges. In addition, successful STEM initiatives need to address potential shortage of K-12 teachers in math and sciences who will be needed to teach the additional STEM related course.

Many states are working to gain STEM workers. Colorado's STEM strategy is a national model. STEM-EC is a Colorado based coalition of business and education leaders connecting industry and the K-16 academic community to graduate more STEM students. Industry partners include Qwest, Lockheed Martin Space Systems, BB2e.com, Sun Microsystems, Hewlett Packard and CH2M HILL. Colorado's STEM effort illustrates that it starts with the leadership of the business and education community. The link to industry is an essential element, as the academic community needs assistance in identifying specific STEM fields in which jobs are available and what specific training and curriculum structure prepare students for STEM jobs. Washington STEM offers another statewide model for developing a stronger science, technology, engineering, and math-based workforce. Washington STEM not only links industry and the academic community but also has created a statewide network and provides a series of grants to local STEM programs. An example of a Washington STEM grant is a $10,000 award made to Ellensburg School District for the Robotics Meets Biotech program. It was used to ignite AP Biology student's interest in STEM by exploring how robotics can enhance biotechnology research.

Florida is a leader in rural STEM workforce development. The Northeast Florida Education Consortium (NEFEC) Rural Initiatives for STEM Education (RISE) builds partnerships with STEM professionals to develop connections among students, teachers, schools, higher education, businesses, and industries to develop a STEM workforce for Florida's rural regions. RISE builds partnerships with STEM professionals to provide:

- Independent and collaborative opportunities through workforce experiences for students
- Student and teacher mentoring opportunities with business, industry, and community leaders
- Needs-driven professional development for local school educators, administrators, guidance counselors and teachers,
- Rigorous STEM challenges that engage students and teachers and help them to build conceptual understanding of STEM concepts.[184]

RISE seeks to develop connections among students, teachers, schools, higher education, businesses and industries to develop a STEM workforce for Florida's rural regions.[185] Florida's Rural Initiatives for STEM Education provides professional learning in content and pedagogy for teachers, leadership support for administrators, career support for guidance counselors, and opportunities for students.[186] RISE supports include professional learning in both STEM content and pedagogy for teachers, STEM leadership support for administrators, and STEM career support for guidance counselors, and also provides opportunities for students to engage in rigorous hands on STEM experiences.[187] The NEFEC STEM Expo features student projects and presentation that focuses on STEM careers, educational pathways, and college programs of study. In addition, students and teacher have the opportunity to discuss STEM careers, STEM programs of study, and campus-based STEM opportunities with post-secondary partners and STEM business representatives.[188] The NEFEC 2017 STEM Expo is open to students and sponsoring teachers in NEFEC member districts to share STEM projects and/or presentations to a public audience, and this is an opportunity for students to speak to other students about their interests in STEM fields.[189] Business partners for this project include: Apple; Atkins; Duke Energy; Florida Works; and the Jacksonville Chamber of Commerce, and college partners include: Daytona State College; Embry-Riddle; Florida Gateway College; Florida State University; North Florida Community College; St. Johns River St. College; University of Florida; and University of North Florida.[190]

Rural communities and industry-based training. Rural communities seeking to grow their STEM workforce pool should focus first on partnering with tech companies to make this vision a reality. Rural communities should replicate a program from Arizona that is being coordinated by Amazon Web Services (AWS), state of Arizona, K-12 schools, community colleges and four-year universities to develop AWS certified cloud computing workers. According to LinkedIn, cloud computing has remained one of the most in-demand hard skills for the past five years, and two AWS Certifications appear on the top 10 highest paying certifications list by Global

Knowledge (2019). Data from Economic Modeling Specialists International identified 95,116 unique job postings in Arizona requiring cloud computing skills in 2019, and more than 12 % of those jobs specifically requested AWS skills.[191] The Arizona Commerce Authority (ACA) with the support of Amazon Web Services, Inc. (AWS) announced a statewide commitment to increase access to cloud computing education in schools across Arizona.[192] This initiative aims to train and certify 5,000 students for entry-level cloud computing careers by June 2022, with continued long-term investments in technical skills training for Arizonans.[193] The ACA will work with Arizona schools to enable the AWS Academy and AWS Educate programs to integrate cloud computing education into classrooms using content mapped to in-demand technical careers, and the AWS Academy provides higher education institutions around the globe with a no-cost, ready-to-teach, cloud computing curriculum that prepares students for industry-recognized AWS Certifications and in-demand cloud jobs.[194] AWS Educate is Amazon's global initiative to provide students with no-cost resources for building cloud skills through self-paced learning content and access to AWS promotional credit and the AWS Educate Job Board.[195] AWS Educate also works with institutions to customize or create programs of study by aligning curriculum to in-demand cloud careers, and education institutions across the state are invited to participate in this initiative, including high school career and technical education sites, community colleges and universities.[196] Students can take AWS Academy courses at their participating higher education institution and/or access self-paced online training courses and labs via the AWS Educate program.[197] In addition, educators at participating institutions will receive virtual training taught by AWS experts and access to a limited number of AWS Certification exams at no cost as they qualify to become AWS Academy accredited educators, and educators and students in this program will also receive discounts towards AWS Certification exams.[198] The increase in cloud computing education supports ACA's mission to reskill and upskill Arizonans, especially during a time when many have been underemployed and unemployed due to the COVID-19 pandemic.[199] A select number of Arizonans currently hold an AWS Certification, creating a significant skills gap for local employers interested in hiring technical talent to fill open roles.[200]

In Ohio, Columbus State Community College is the only institution that has built a similar program to the Arizona AWS cloud computing initiative. Columbus State and AWS Academy together are providing Amazon Web Services (AWS) training to Central Ohio. Columbus State is offering professional development programs using AWS Academy course content to offer professional development programs designed to build cloud skills and credentials.[201] These classes provide an opportunity for IT and other professionals to expand their knowledge of cloud computing to stay competitive in their field.[202] Currently, there are two AWS courses offered.[203] The Academy Cloud Foundations (ACF) course is designed for students who want an overall understanding of cloud computing concepts, independent of specific technical roles, and the course provides a detailed overview of cloud concepts, AWS core services, security, architecture, pricing, and support.[204] Students are expected to have general business and IT knowledge to take the class, and the Academy Cloud Foundations course helps prepare students for the AWS Certified Cloud Practitioner exam.[205] The Academy Cloud Architecture (ACA) course is designed to help students understand AWS Cloud Architecture and learn how to design cloud systems. Students who take the course should have completed the Academy Cloud Foundations course or have equivalent knowledge.[206] The ACA course, paired with the ACF course, aligns to the AWS Certified Solutions Architect – Associate certification exam.[207] Courses are taught on Columbus State's campus by AWS Academy-accredited instructors, and AWS Academy developed the course curriculum, which is maintained by subject matter experts to reflect current services and best practices.[208] The curriculum is delivered through instructor-led classes, hands-on labs, and project work, and students have access to course manuals, online knowledge assessments, hands-on labs, a free practice certification exam, and a discount voucher for the certification exam.[209]

Rural communities should develop a STEM workforce development program by replicating the AWS Arizona program by:

- Coordinating local educational institutions to form a STEM Workforce Committee to retain local high school, career center, community college and university graduates in the STEM fields;
- Seeking state funding to create an AWS certified cloud computing program as the first of several regional rural county STEM initiatives;
- Coordinating conversation with the AWS and Amazon leadership to develop a rural county AWS Certified Program;
- Developing the educational curriculum for the AWS certified program in partnership with local K-12 schools, career centers, community colleges and universities; and
- Launching of a rural county AWS Certified Program.

A rural county AWC Certified Program can be the first of many STEM workforce development programs launched by regional economic development groups to support the retention and attraction of STEM workers in the region that will be the key to attracting tech companies to the region.

Rural communities face a greater talent challenge as they often lack a small pool of available workers and, even worse, the workforce pipeline that begins with students in high school leaves town as soon as they graduate. Pickaway County, Ohio's Pickaway Works Program provides a model for addressing the rural workforce development challenge. The mission of Pickaway Works is to collaborate with education, business and community to build partnerships that create relevant career pathways for students and link them with resources and opportunities to succeed.[210] Their vision is to inspire and improve Pickaway County students' college and career readiness which will improve their quality of life and ultimately improve the economic stability of the area. As part of the fastest growing metropolitan region in the Midwest, Pickaway County is in the midst of significant change.[211] The Columbus Region is experiencing historic economic growth with nearly 150,000 new jobs created in the last five years creating substantial economic opportunity for rural Pickaway County located just south of Columbus.[212] To meet local job demand, the local school districts in Pickaway County have invested significant resources over the last several years in developing new career readiness initiatives intended to prepare and align students with local employment opportunities, entrepreneurial training, internships, 21st century skills curriculum and a variety of other tools are now being utilized to equip graduates for the workplace.[213] To foster collaboration with Pickaway County employers and local education and workforce training resources, local economic development leaders began a series of Workforce Connection meetings.[214] These sessions led to the creation of a workforce solution known as Pickaway WORKS – World of Real Knowledge and Skills – launched in November 2017. Pickaway Works builds partnerships that create relevant career pathways and provide local career opportunities for students, meet workforce demands of local employers and strengthen the economic stability of our community by connecting educators with employers, promoting internships for students, preparing students through mock interviews, implementing college readiness programs and other efforts focused on reconnecting education with business and community, to better engage with each other and support a more authentic learning experience for students.[215]

Robotics R&D and Training Centers. The development of robotics training programs is critical for rural communities to succeed in the retention and attraction of manufacturing corporate site location projects. Robotics is the new plastics. The famous line in the 1960's movie Mrs. Robinson when the young, directionless college graduate gets career advice that plastics is the way to go can now be communicated that robotics is the way to go. Manufacturing companies driven by global competition, technology advancements, and a desire to reduce COVID 19 spreading in the workplace are driving an expansion of the use of robots. Company and communities hoping to retain manufacturing jobs will need to create substantial programs to train their workforce in the use of robotics in 2020. By 2020, there will be more than 50 B connected devices in use around the world, all converging to create huge new markets according to a recent Accenture report. In the next several years, revenues are expected to reach many billions of dollars in each sector including the industrial internet, connected home solutions, connected car services, and connected health. Companies around the world are increasing their use of robots. The Information Technology and Innovation Foundation estimates global average for industrial robots per 10,000 manufacturing workers grew from 66 in 2015 to 85 in 2017, and the United States ranked seventh with 200 industrial robots per 10,000 workers. The same study identified nations from Japan to South Korea to China are adopting public policies and devoting resources and tax credits to companies who are modernizing and utilizing technology to make their business more efficient. As an example, in the Chinese Robotics Industry Development Plan (2016–2020), part of its Made in China 2025 initiative promotes domestic robot production and sets a goal of expanding robot use by such companies tenfold by 2025. The Chinese Guangdong province will supposedly invest 943 B yuan (approximately $135 B) to help firms carry out "machine substitution." While economists continue to debate the impact on employment for connected devices, automation, and robotics, no one can question whether these devices will make companies more efficient.

Companies considering rural American manufacturing corporate site location projects are competing with not just other U.S. regions but also in Asia and Mexico. With the expected easing of trade tensions, regions and states must compete by developing a skilled workforce ready to use robotics in the manufacturing workplace. Regions, states and their companies building expertise in robotics innovation and workforce development training to use and develop robots in a range of industries will be better prepared for the future work and have

the ability to retain and attract companies in a range of industries. McKinsey estimates 686,000 computer software, programming and support jobs will be created by 2030 from AI and automation. MarketWatch determined there will be a $98 B value for the global robotics industry by 2024 driven by future expansions into manufacturing, logistics, health care and service industries. Industrial robots have become smarter, faster, and more affordable, and have developed advanced capabilities, such as sensing, dexterity, memory, and trainability. PwC estimates by 2020, the global industrial robot market is expected to reach $41 B, and advanced industrial robotics have been chiefly pioneered and deployed by the automotive industry, particularly Japanese carmakers such as Toyota, followed closely in their wake by European and North American counterparts. Again PwC estimates, 69 % of all industrial robot orders in North America were made by automotive OEMs but, by 2014, that figure had eroded to 56 %, offset by increasing shares by other industries including food and beverage, consumer goods, life sciences/pharmaceutical/biomedical, and metals industries. The Robotics Industries Association says there are currently 230,000 robots now in use in U.S. factories.

Rural regions and states need to focus on developing robotics training centers to proactively train incumbent and new manufacturing workers. Alabama offers a model worthy of replicating. The $73M Alabama Robotics Technology Park is a collaboration between the state of Alabama, Alabama Community College System, AIDT, and robotics industry leaders across the nation. The Alabama Robotics Technology Park consists of a training facility to prepare workers to operate robots for a range of industries, provide technical assistance to companies looking to understand how to integrate automation and robotics into the workplace, and a robotics research and development center focused on future applications. The Alabama Robotics Technology Park is a venue for enhancing and stabilizing Alabama's industries in automation and safety training that promotes workforce development and growth in the state by providing technical assistance for manufacturers who have automated processes. Their training gives trainees "hands-on" experience with state-of-the-art automation equipment. Benefits from the Alabama Robotics Technology Park include:

- Free workforce training to Alabama industries and their affiliates;
- A partnership model where the major automation equipment vendors that are used by Alabama industries are partners with the Alabama Robotics Technology Park;
- An advanced automation line for the purpose of advance training in networking the various devices and automated equipment into one coordinated manufacturing line;
- Customized industry-specific training in Robotic Systems, Vision Systems Customized Training (Vendor & Company Specific); Advance Manufacturing Line (7-Robots, 3-PLCs, 4-Visions); Material Handling; Welding; and Paint/Dispense.

Faculty from the Alabama universities are engaged in research and development of robot/automation technologies and have established a location to conduct these activities. Two and Four-year co-op students are encouraged to be utilized, as training, in this facility, as well as the employees and staff of the tenant entity.

Rural technology company location strategies. Technology companies employ over 11M Americans and jobs in computer and information technology occupations is projected to grow 11 % from 2019 to 2029, much faster than the average for all occupations adding 531,200 new jobs driven by cloud computing, the collection and storage of big data, and information security.[216] These technology companies employ STEM workers paying an average wage double the national average and have the best potential for long-term growth. However, STEM jobs required highly skilled and educated workers and involving promoting small business startup and attraction of large technology companies to a region. Building a rural STEM workforce involves a substantial PPP between business, education institutions and government to develop industry-based workforce development programs targeting rural communities. Second, the development of rural business incubators is an action step that can help substantially to reduce the small business failure rate in a community. Substantial state and federal funding is available for business incubator development that starts with the creation of a business incubator feasibility study to outline the industry and business focus, real estate and other costs, revenue models based upon subsidized small business rents and the services that need to be provided to the small companies such as the operation of a revolving loan fund for business incubator tenants, and professional services for business incubator tenants. Finally, a new model is developing that creates business technology service centers in rural communities to drive information technology services to be provide in rural communities often from large corporations in urban markets. There is also a major IT workforce development training aspect to this technology service centers. Finally, rural communities may not be good targets for large company technology projects involving thousands of workers.

Rural communities' key to long term success is to diversify their economies through expansion in the technology sector. Technology Based Economic Development strategies for rural regions address challenges and opportunities but focus on bringing technology work to rural communities, developing a rural STEM workforce, enhancing access to capital for rural companies, and supporting the creation of start-up companies in rural communities.

Rural Technology Industry Initiatives

- **Business Incubators**
- **Rural Technology Center**
- **Rural Broadband**

Rural Business Incubators. Developing technology incubators and innovation centers is another step rural community have taken—often in partnership with a local university—to make their cities a place a new generation wants to live, work and play. The first business incubator is believed to have originated in New York as Batavia Industrial Centre in 1959.[217] Business incubators are defined as a business support process that accelerates the successful development of start-ups and fledging companies by providing entrepreneurs with an array of targeted resources and services.[218] Well over 1,000 business incubators exist in the United States today and globally it is estimated there are 17,000 business incubators.[219]

Business incubation services can be divided into three categories: preincubation, incubation and post incubation.[220] These services incorporate different processes and procedures that govern the incubator-incubate tenant relationship and illustrate an end goal of helping the startup company not just succeed but to not need the support of the business incubator over a period of time.[221] Pre-incubation services includes the process of attracting, applying for the business incubator, and vetting of potential tenants of the incubator.[222] The terms and conditions including agreement on rent payment, duration in the incubator and use of the facilities.[223] Incubation includes support from idea crystallization and development, prototype building to commercialization.[224] Key performance indicators include progress reports, gaps identification and filling with the help of incubator management, networking, financing, marketing and business acceleration.[225] Post incubation this is the period after graduation from the incubator where the tenant business has exited the incubator and follow up on progress by the incubator staff to monitor progress and maintain relations with previous tenant firms through virtual or visits to incubator seminars and workshops.[226]

Business Incubation is a model of building entrepreneurial capacity; it provides start-ups with networks for building relationships.[227] Incubators offer training, business support, technology support, infrastructure and mentoring which are critical for survival start-ups without much capital to develop into a full fledge enterprise.[228] Incubators provide work space, furniture, legal, back office services that incubates need not worry about, and business incubators can focus on developing technology companies or small business in other industry sectors.[229] Technology and business incubators also have a set of services they provide to small companies starting up, including:

- Business planning, ranging from introductory courses such as those provided by the SBDC, to individualized assistance in developing business plans;
- Coaching and mentoring assistance, which may include service provider referrals, one-on-one coaching, industry mentor programs, and advisory boards;
- Financial advisory services, including budgeting assistance and help in identifying or obtaining capital;
- Market development assistance, including market research, advertising and public relations support, and contract procurement. Some organizations have sponsored reverse trade shows to promote business to business or business to government sales;
- Export assistance, partnered with state export assistance resources;
- Networking opportunities to develop sales leads, foster collaboration among entrepreneurs, and build mentoring relationships; and
- Software addressing business needs such as planning, marketing, human resources, and accounting.

The creation of a business incubator is a common Technology Based Economic Development strategy. Technology Based Economic Development initiatives are attractive because they create high wage "multiplier" jobs with companies in the growth mode for the Information Age economy. Half of the jobs created in the United States recently have been done so by firms that did not exist a decade ago. Many of these jobs were born in the high-tech revolution that boomed in the 1990's and continues today.

Technology-based business incubators creates companies and workers skilled in the Science, Technology, Engineering and Math (STEM) occupations. STEM occupations consist of nearly 100 specific occupations consisting of 6 % of U.S. employment counting nearly 8,000,000 jobs.[230] STEM jobs are high-wage positions paying on average $86,980 and only 4 of the 97 STEM occupations had mean wages below the U.S. average of $43,460.[231] The future growth of jobs in the STEM industry sectors remains strong as the table below illustrates.

Employment in STEM occupations, 2018 and projected 2028 (Numbers in thousands)

Occupation category	Employment		Change, 2018-28		Median annual wage, 2019
	2018	2028	Number	%	
Total, all occupations	161,037.7	169,435.9	8,398.1	5.2	$39,810
STEM occupations	9,708.3	10,566.8	858.5	8.8	$86,980
Non-STEM occupations	151,329.4	158,869.1	7,539.6	5.0	$38,160

Source: U.S. Bureau of Labor Statistics

STEM occupations are primed for growth from 2018 to 2028 with a projected 8.8% growth rate over this time compared with a 5.0% growth rate for non-STEM occupations. More importantly, STEM occupations will pay a median annual wage of nearly $90,000 compared to non-STEM occupations paying almost $40,000. With projected growth rates and high wages, STEM occupations and jobs are worthy of an economic focus for the greater Toledo region.

Business incubators address the high failure rate among small and medium size enterprises in the developing world estimated at approximately 75% within three years. Studies indicate the incubated businesses have a 70% survival rate which have a profound effect on employment creation, economic development, and poverty reduction.[232] Business incubators also create jobs. Researchers conducted a study to examine nine incubator programs with a total of 175 incubated businesses in Missouri and it revealed evidence that these businesses had created 502 jobs in total, or an average of 60.5 jobs each.[233] Finally, researchers reviewed the impact of a business incubator model on global economies such as Germany and found a direct correlation of growth in their Gross Domestic Product. Business incubators address the high failure rate among small and medium size enterprises in the developing world estimated at approximately 75% within three years, create jobs and growth national and regional Gross Domestic Product.

The Coronavirus Aid, Relief, and Economic Security (CARES) Act, signed into law on March 27, 2020, provides the Economic Development Administration (EDA) with $1.5 billion for economic development assistance programs that help communities prevent, prepare for, and respond to the impacts of coronavirus. EDA's Economic Adjustment Assistance program is available to all U.S. communities due to the impact of COVID 19 through an open funding cycle with a grant ceiling of $30M and floor of $100,000 for communities with a Community Economic Development Strategy in place.

EDA's EAA program funds planning and technical assistance, strategy grants, CARES Act CARES Act recovery and resilience strategies including industry supply chain, cluster analyses, econometric analyses, diversification efforts, and travel and tourism-related marketing campaigns, revolving loan funds, construction of infrastructure, public works projects and other economic development projects including water and sewer system improvements, industrial parks, high-tech shipping and logistics facilities (a targeted industry cluster), workforce training facilities, business incubators, Brownfield redevelopment, science and research parks, and telecommunications infrastructure; and innovation grants.

EDA announced several business incubators were funded in recent months including:

- $2,310,000, matched by $790,000 in local investment, to the University of Rhode Island Research Foundation, Kingston/Washington County, Rhode Island, to support the University of Rhode Island Research Foundation with establishing the "401 Tech Bridge" advanced materials innovation center at two sites: the University of Rhode Island in Kingston for direct university research, and the Polaris Manufacturing Extension Partnership-led facility in Portsmouth for industry collaboration. The project will foster a collaboration between the University of Rhode Island, the Naval Undersea Warfare Center, local industry, and educational institutions, which will support an emerging innovation cluster, encourage entrepreneurship, benefit a nearby Opportunity Zone, and promote economic growth throughout the region. The grantee estimates that this investment will help create 400 jobs and generate $440,000 in private investment.
- $2,092,412, matched by $2,092,413 in local investment, to Battle Creek Unlimited, Battle Creek/Calhoun County, Michigan, to support Battle Creek Unlimited and its partners with developing a second-stage food processing business incubator that will serve the region's food processing firms in Calhoun County, Michigan. The new facility will provide space for product testing and production as well as business-oriented training for businesses using the facility. Once completed, the project will help catalyze the next generation of economic growth in a critical local industry cluster, which will bolster job creation, attract private investment, and strengthen the regional economy. The grantee estimates that this investment will help create 104 jobs and leverage $8 million in private investment
- $499,703, matched by $287,872 in local investment, to the AgTech Innovation Alliance, Woodland/Yolo County, California, to support the AgTech Innovation Alliance with the development and implementation of the Lab@AgStart incubator that is designed to spur economic growth in the Sacramento region in California. The project will provide needed funding for equipment, supplies, and initial operational costs to launch the Lab@AgStart, to serve as a new wet-lab incubator for science-based startup companies. Once completed, the project will bring together professional resources to align agriculture with technology, which will help diversify and strengthen the regional economy.

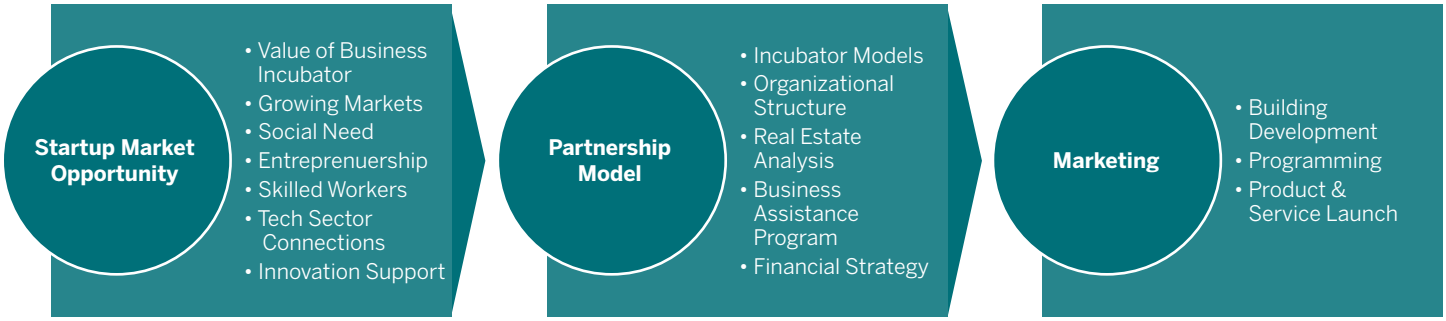
The EDA is a prime source for business incubator funding, but they do require the completion of a business incubator feasibility study and participation in a regional Community Economic Development Strategy or CEDS prior to the award of public works funding to these requests.

States like Ohio are also funding business incubator investments. JobsOhio recently launched their Vibrant Community Program that will provide limited $2 grants to 98 Ohio distressed cities ranging in size from 5000 to 75,000 across the Buckeye State. This program is designed to help small and medium sized communities to implement catalytic development projects that fulfill a market need and represent significant reinvestment in struggling areas. Business, non-profits, developers, port authorities and local governments are eligible applicants. Funding will not exceed 50% of the eligible costs, an end user of the project is required, and even mixed-use projects are eligible. Shared working spaces such as business incubators, accelerators, innovation centers and co-working spaces are expressly listed as eligible projects.

Business incubators address the high failure rate among small and medium size enterprises in the developing world estimated at approximately 75% within three years. COVID 19 federal stimulus funding through the U.S.

Department of Commerce's Economic Development Administration provides $1.5 B in funding that can be used for the development of business incubators across the United States. The completion of a regional Community Economic Development or CEDS strategy and a business incubator feasibility study is required before the U.S. Department of Commerce's Economic Development Administration will award funding for a facility. A business incubator feasibility study should identify the incubator structure design for promoting the creation of new high-wage jobs through company creation with emerging technology and small businesses.

Montrose Group Incubator Feasibility Study Methodology



A business incubator feasibility study defines the startup market opportunity, partnership model needed, and rollout a marketing plan to make the business incubator a success. Seven key company startup market analysis measures determine the incubator's likelihood of success. The key market measures include defining:

- the economic impact of a business incubator to the region by defining what a business incubator is and how it has impacted high-wage job creation and success rates for small businesses;
- whether the market is growing economically through a review of the state and regional Gross Domestic Product, income growth, personal debt, and industry growth;
- whether there is a social need for the business incubator through a review of the demographic data of the state and region;
- whether the state and region can produce additional small companies through a review of its small business company creation;
- whether the state and region has the skilled workers available at a competitive wage through a review of their workforce pool, industry cluster strengths and occupational wages in relevant industry sectors;
- what should be the technology industry and small business startup focus of the business incubator based upon a review of the economic strengths and needs of the state and region; and
- what support from industry partners exists to help development the business incubator?

Next, a partnership model needs to be defined to successfully organize the business incubator in the region under consideration. The partnership model will review other successful incubator models, outline a suggested incubator organizational structure, provide a real estate analysis for the incubator as well as a business assistance program that would be the service offering of the incubator and impact expenses and revenues, and provide a financial analysis that builds a startup proforma for the organization. Finally, a marketing analysis for the launch of the business incubator is needed to develop a sustainable development model. Marketing recommendations will include building development and financing strategies, business programming services and financing strategies, and the development of products and services and the expense and revenue opportunities for both.

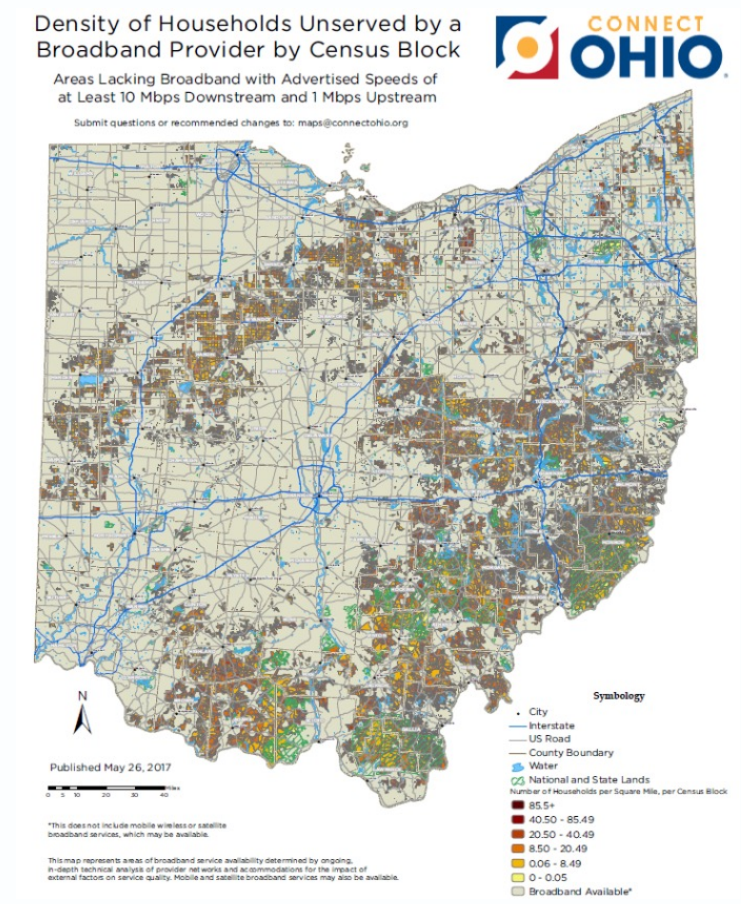
- *Rural Technology Centers.* Jefferson, Iowa's recruited Pillar Technology to open a software innovation center to this small rural community. Pillar's innovation centers are known The Forge. The Forge is just part of a larger coalition focused on bringing tech jobs to Greene County, Iowa.[234] In addition to opening a new Forge in Jefferson, Pillar Technology will be launching a software development training program in collaboration with Greene County Community School District and local community colleges.[235] Students that go through the program will enroll in fourth months of tuition-free software development training provided by Accenture and designed to prepare rural area students for high-demand, software development jobs in Iowa.[236] A long list of California tech companies and entrepreneurs — Microsoft's Kevin Scott, LinkedIn co-founder Allen Blue, venture capitalist Greg Sands and Ripple CEO Brad Garlinghouse — have committed personally or through their companies to help Jefferson's effort.[237] The

Jefferson, Iowa Forge is an example of corporate America's engagement in directing business to rural markets. The goal of these rural technology centers are to recruit IT software projects from large urban based corporation for completion in rural markets. Organizations such as Knight Moves are focused on expanding the rural Iowa tech center model. Knight Moves are focused on

- Preparing workforce ready tech talent that rivals four-year college graduates - with little to no education debt;
- Tech job placement;
- Mentoring individuals toward a tech career starting in their 7th grade — retaining younger residents in the community and keeping families together;
- Increasing diversity and females in high tech careers by engaging them early in their education;
- Upskilling mid-career workers who are at risk of losing their jobs due to advances in automation and artificial intelligence;
- Fostering and advancing entrepreneurialism and tech startups;
- Operating a local innovation, collaboration, training, and entrepreneurial center called a Culture Dish;
- Revitalizing the community main street and commerce areas to attract employers
- Creating technology solutions at no charge for nonprofits; and
- Partnering with companies to solve the tech talent shortage they are continually challenged with.[238]

Rural Broadband. The work from home (WFH) revolution that COVID 19 is spreading could be a boon for rural communities who address quality of life issues but not unless they have adequate broadband to serve this digital revolution. Consumers and businesses are using their mobile devices more than ever before to connect to everyone and everything around them. The demand for wireless data is on the rise with data usage on AT&T's network has increasing more than 360,000% from 2007 to 2017. Small cells help bring customers faster download speeds, improved call quality and a better overall wireless experience. With this increased demand and pressure on the mobile network, the telecommunications industry is working on ways to enhance their network, prepare for 5G network deployment and provide the best possible experience for our customers. Recently, the Ohio General Assembly passed House Bill 478 meant to streamline the process for the deployment of small cells throughout the Buckeye State. The legislation will promote the rapid deployment of small cell facility infrastructure and related capital investment while also ensuring municipal corporations retain local oversight. Ohio House Bill 478 illustrates how a state and its local governments can promote the adoption of broadband services and lay the foundation for the launching of 5G services in municipal environments. HB

478 is Ohio's Small Cell legislation and it establishes procedures for consent for small cell facility operator placement of small cell facilities and wireless support structures in the municipal public way, consent for non-operator (person who is not an operator) placement of these facilities and structures in the municipal public way, and the operator placement of small cell facilities on municipally owned or operated wireless support structures in the municipal public way. State adoption of small cell legislation will speed the deployment of 5G technology while protecting community's rights.



No one is against the installation of more broadband technology into rural communities. As the map below illustrates, rural communities in Ohio, as elsewhere, face a daunting challenge with access to high-speed data networks that people and companies demand to live, work and play. Two challenges exist with bringing enhanced broadband to rural communities. First is who should provide the service- the public or private sector. Many communities desperate for broadband services have launched publicly owned and operated broadband projects. Others are working to entice the private sector to provide these services. No matter who provides the broadband services, neither the public nor private sector will be successful without additional funding. Economists estimate the cost to provide a fiber optic network to underserved rural communities $61B.[239] States are working to fill this financial gap through a variety of strategy. States often support broadband deployment through grants and loans to internet service providers, nonprofit utility cooperatives, and local governments.[240] States such as Tennessee offer only grants, while others, such as Virginia, provide both grants and loans.[241] The money for these grants and loans comes from sources that fall into three categories: special and general funds, state universal service funds, and other revenue streams.[242] Some states have a special designated fund in which money is set aside each year for broadband deployment such as Minnesota's Border-to-Border Fund account and North Carolina's Growing Rural Economies with Access to Technology (GREAT) program.[243] Michigan, for example, appropriated money from its general fund when it created a one-time broadband program in its 2017-18 appropriations bill.[244] Ten states have state universal service funds (USFs) to support broadband projects, and the federal government and states initially established the funds to enable "universal service," the idea that every American should have access to telephone service.[245] The federal Telecommunications Act of 1996—a federal law designed to help deregulate the telecommunications industry and promote competition—permits fees to be levied on telecommunications providers and passed on to consumers and is used to offset the cost of deploying phone and internet to areas without access and those that are expensive to connect, such as rural communities.[246] Fees for the use of public-right-of-way, civil penalties, toll road revenue, legal settlements with tobacco, financial and telecom companies have all been used to fund rural broadband projects.

Rural industrial location strategies. Rural communities since the rise of labor unions in urban centers have long been a popular location for manufacturing corporate site location projects. These facilities with through global competition or automation of their workforce are not the economic force for rural America they were twenty years ago. That economic stimulus can be reborn again through global economic changes spurred by COVID 19 to bring back the domestic supply chain to U.S. shores to prevent current and future disruptions in key manufacturing, pharmaceutical, personal protective equipment (PPE) and other industries looking to reshore facilities. These rural markets are also strong candidates for energy-intensive advanced manufacturing projects like food processing and indoor agriculture and smaller logistics are good targets for rural industrial development. Logistics is a booming industry driven by the growth of the $340 B e-commerce industry expected to grow to $476 B by 2024[247] transforming the retail industry into the fulfillment center industry which will drive annual net industrial absorption to more than 333 million sq. ft. by 2022 continuing the expansion of the logistics industry.[248] No matter the industry focus, communities, developers and companies should prepare industrial and logistics sites with flexible zoning, public infrastructure, tax incentives and compensation agreements to support development investment, attract industry and fund impacted local governments and schools.

Implementing a corporate site location project in a rural market needs to first focus on traditional site development tactics to prepare the site through land use entitlements, infrastructure finance and tax incentives. Next federal and state grants and tax incentives targeting rural communities should be negotiated for and gained. Rural communities could be strong locations for the reshoring of supply chain products. Finally, rural communities are strong industrial targets for growing markets like indoor agriculture and food and beverage manufacturing.

Rural Industrial Corporate Site Location Strategies

- **Site Development**
- **Federal and State Funding**
- **Supply Chain Projects**
- **Indoor Agriculture Projects**
- **Food and Beverage Projects**

Industrial or logistics projects must have a site prepared for development through a multi-step process involving several levels of local government that designates permitted land use, develops required infrastructure, provides for needed tax incentives to attract end users and provides for tax revenues for local governments and schools impacted by the development.

Rural Real Estate Site Development Process

The property in question whether in a township or municipal boundary must be properly zoned. In an Ohio township, the Rural Zoning Commission is the first stop to seek a change in the zoning for a site. In many regions, specific industrial and logistics business development districts are set up with specific zoning standards to attract industrial and logistics developments. Zoning applications must be developed following the creation of engineering and consulting reports that outline the transportation and infrastructure investments need to permit the site to operate. Pre-zoning briefings with local government officials outline the scale and scope of the project as well as the transportation and infrastructure needed and the Return on Investment estimates for the local community. Approval will be sought with the local zoning and planning commission before a city council or township trustee board votes to approve of the zoning change.
If the site is in a township adjacent to a municipal corporation, the property will likely benefit from the formation of a Joint Economic Development District. This allows for the provision of infrastructure to be brought to the properties including sewer and water and roadwork. To tap into these services the property must apply to be included in the JEDD area. There is an income tax levied on employees who work in the JEDD which can be as high as 2.5% in Ohio. The JEDD is governed by a board of directors that approves the inclusion petition. Before the JEDD Board will approve the petition to be in the JEDD, the township trustees and village or city council must approve the request to be included in the JEDD and proper zoning needs to be in place. Ordinances and agreements will need to be negotiated that provide funding for site infrastructure and set income tax revenue splits and service arrangements between the local governments.

The site will also need to have a substantial tax abatement to attract industrial and logistics projects as these primarily compete on an interstate basis. In Ohio, a Community Reinvestment Area. Being in this area allows for the taxes on real property to be abated. Tangible personal property is not taxed in Ohio and in a township the County Commissioners and in a city the city council and mayor/manager have the authority to approve a CRA agreement. CRA's do not abate the taxes on the buildings; thus, the property tax value gain can be captured to use for Tax Increment Financing. Part of gaining a tax abatement is negotiating a compensation agreement with local governments- primarily local school districts. In Ohio, there must be revenue sharing with the school district in order to achieve 100%, 15-year abatement and several local models exist where the developer provides revenue sharing through a Tax Increment Finance District on the land that redirects the increased taxes on land to the school district with the CRA only abating taxes on the buildings.

Ohio law also allows Port Authorities to own property and lease it to private entities. The largest benefit for a private entity to use a port authority is for the exemption of sales tax on construction materials. Local port authorities do these transactions frequently and has an agreement with the county or city to provide port authority financing in the county will be required. This is another funding opportunities for local governments but also provides a substantial reduction in sales tax tied to a project's construction materials.

North Carolina offers an interesting rural economic development leadership model worthy of replication. The North Carolina Infrastructure Authority is a private body with a board appointed by the Governor and General Assembly of North Carolina that awards grants to North Carolina's rural and at-risk counties for building reuse, Community Development Block Grants, utility grants, Appalachian Regional Commission, Economic Development Planning, Rural Grants and Programs, Main Street Program, and Industrial Development Bond Fund.[249] In 2018-19, the North Carolina Rural Investment Authority plans to make $54M in grants to rural communities.[250] More recently, the North Carolina Rural Infrastructure Authority approved 21 grant requests

to local governments totaling $10,790,000.[251] The requests include commitments to create a total of 1,314 jobs, 515 which have previously been announced, and the public investment in these projects will attract more than $123.7 million in private investment.[252] Examples of North Carolina's Rural Infrastructure Grant Program awards cover grants for the state's Building Reuse Program to local governments to renovate vacant buildings, renovate and/or expand buildings occupied by existing North Carolina companies, and renovate, expand or construct health care facilities that will lead to the creation of new jobs in Tier 1 and Tier 2 counties and in rural census tracts of Tier 3 counties. Recent 2019 grants are outlined below.

Vacant Building Category

- Burke County: A $500,000 grant will support the reuse of a 206,522-square-foot building in Hildebran. SynergyLabs, a developer and manufacturer of pet and veterinary products, plans to move its manufacturing operations from Florida to this location. This project is expected to create 42 jobs and represents an investment of $12,241,700 by the company.
- Cleveland County: A $500,000 grant will support the renovation of a 140,000-square-foot building in Shelby. Greenheck Group, a supplier of air movement, control, and conditioning equipment for commercial, institutional, and industrial buildings, is locating its operations in the facility. While a total of 403 new jobs are expected to be created by the company with an investment of $58.8 million, 86 of those jobs and an investment of $832,100 are tied to this grant.

Existing Building Category

- Granville County: A $500,000 grant will support the renovation of a 112,000-square-foot building in Creedmoor occupied by Altec Industries. The company provides products and services to the electric utility, telecommunications, tree care, lights and signs and contractor markets. Its products include aerial devices, digger derricks, truck bodies and related equipment. The company plans to create 72 jobs and invest $8,245,000 in this project.
- Montgomery County: A $500,000 grant will support the renovation of a 120,000-square-foot building in Troy occupied by AmeriQual Aseptic, a food processing company that specializes in the development, processing, packaging, and distribution of shelf-stable foods. The project is expected to create 76 jobs with an investment of $23,315,327 by the company, as it adds a new product line.

Rural Health Category

- Camden County: A $50,000 grant will support the reuse of a 2,600-square-foot building in Camden, where Chesapeake Regional Medical Center plans to open a facility that will provide primary care services and lab services. The project is expected to create 5 jobs and attract $313,271 in private investment.
- Town of Scotland Neck (Halifax County): An $80,000 grant will support the renovation of a 217,800-square-foot building occupied by Our Community Hospital/Bryan Health & Rehabilitation Center. The 80-bed skilled nursing facility provides 24-hour nursing care. This renovation project is expected to add 8 jobs and attract $302,150 in private investment.

Community Development Block Grant

- Halifax County: A $750,000 grant will support major renovations to an existing industrial building in Weldon, to include construction of a mechanical tower, electrical improvements, construction of company offices, and mechanical and plumbing improvements. JBB Packaging, LLC, a plastic packaging manufacturer, plans to create 50 jobs at the facility, while investing $11,900,000 in the project.
- Town of Four Oaks (Johnston County): A $1 million grant will support the extension of public water and sewer infrastructure to an industrial site to meet sewer and fire protection needs for Broad River Retail, LLC, an Ashley HomeStore licensee. The company will locate a distribution center, retail store and corporate learning center at the site. The project is set to result in the initial construction of a 182,300-square-foot facility, the creation of 102 jobs and an investment of $16 million by the company. Overall, the new location is projected to create 161 jobs.

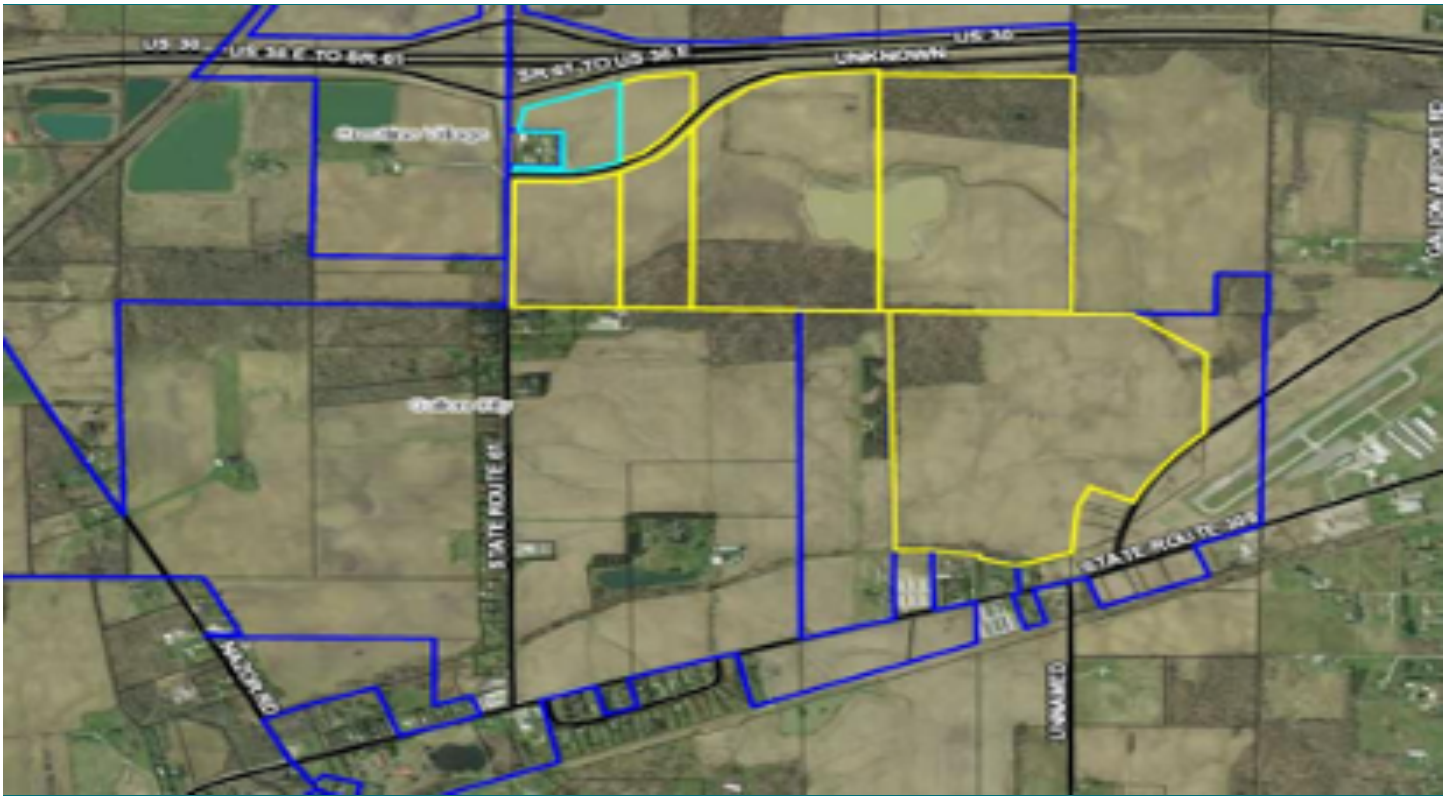
Industrial Development Fund - Utility Account

- Town of Oakboro (Stanly County): A $2.5 million grant will help the Town extend water and sewer infrastructure to support a site for industrial development.[253]

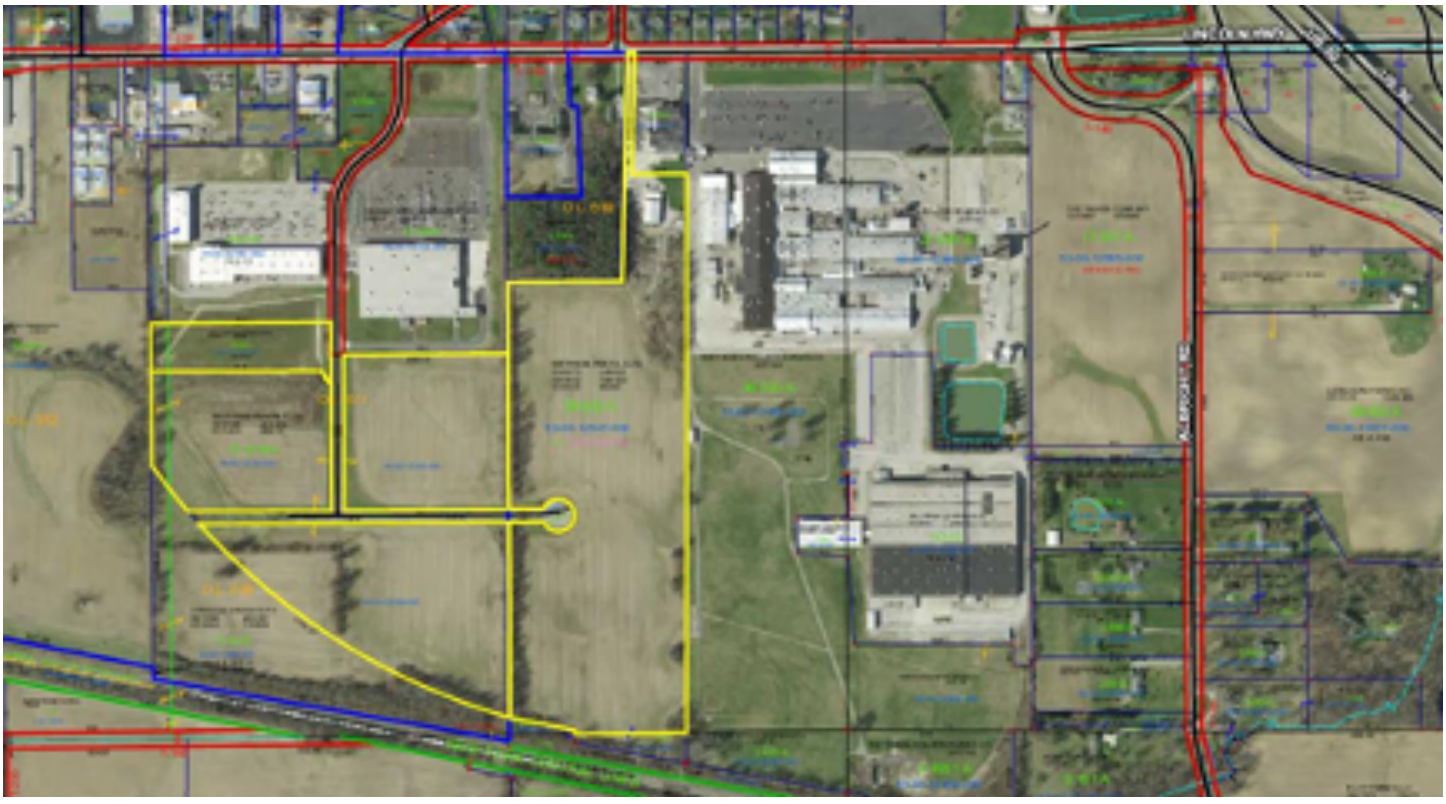
In essence, North Carolina uses a statewide port authority model to create a bond fund to provide additional infrastructure support and create a public-private-partnership to encourage community and economic development in rural counties.

Ohio created several programs designed to encourage economic development in rural communities. The Ohio Rural Industrial Loan Program is a model worthy or review and replication. With the support of Governor Mike DeWine, members of the Ohio General Assembly provided $25 M for the reinstituting of Ohio's Rural Industrial Park Loan Program. In conjunction with other programs in the state, most notably the site-ready program operated by Ohio's not-for-profit economic development entity JobsOhio, this program administered by the Ohio Development Services Agency will fill a gap in Ohio's efforts to attract and retain jobs in the rural parts of the state. An eligible applicant for the Ohio Rural Industrial Park Program includes a port authority, community improvement corporation, community-based organization or action group, any other nonprofit economic development entity; or a private experienced industrial developer. Loans may be up to $3,000,000 and will be made in targeted distressed counties as outlined in the Ohio Development Services Administration map to the left.

Crawford County, Ohio is focused on creating an Opportunity Fund focused on several certified Opportunity Fund industrial sites in Galion and Bucyrus, Ohio. These North Central Ohio communities are primarily rural in nature but have a long history based in manufacturing. Galion has focused its Opportunity Zone efforts on a 370-acre site that is north of town on State Route 61/ Wachs Rd. and US 30 with access to the Galion Municipal Airport to its east and CSX railroad to its west. The site is served by Galion for water, and sewer can be provided to the site through the extension of a line coming from Galion.



The City of Bucyrus is focusing its Opportunity Zone efforts on two sites; the first being a 78-acre site that has all utilities in place including a cul-de-sac industrial road that has access from Mansfield St. The site is less than one mile from US 30 and has direct rail access from the Genesee & Wyoming Railroad.



The second site in Bucyrus is along State Route 98 and US 30. The site has railroad access through the Norfolk Southern Railroad mainline. All utilities are available to the site. The site is directly west of the Ohio Crossroads Industrial Center, a SiteOhio Authenticated Site.

The Crawford Partnership developed the following for these sites:

- Industry cluster analysis to determine the industry that exists in the area that is likely to locate on these sites.
- Site development, infrastructure, and transportation analysis to determine the transportation and infrastructure for each site and the related costs to develop each site.
- Opportunity Zone attraction and marketing strategy to identify and attract new investment to these sites from developers and companies.
- Finance and incentive strategy to understand how to fund infrastructure and transportation on the sites and determine the incentives needed to attract OZ investment.
- Opportunity Zone Fund launch to prepare and stand up an Opportunity Zone Fund that is legally and financially able to attract new investment.
- Opportunity Zone Fund operation to coordinate a board of advisors, determine appropriate structures for OZ investment, market the OZ Fund and comply with federal OZ regulation.

The Crawford Partnership, Galion and Bucyrus have taken a huge step in attracting OZ investment to their sites. The OZ program is not the only reason that investors and companies will look to these sites, but the proper OZ structure, site development, and marketing strategy make it more palatable for OZ investment.

Supply Chain and rural industrial development. COVID 19 has illustrated the challenges created by a global supply chain for thousands of American companies. A supply chain is a network between a company and its suppliers to produce and distribute a specific product to the final buyer.[254] This network includes different activities, people, entities, information, and resources.[255] The supply chain also represents the steps it takes to get the product or service from its original state to the customer.[256] Companies develop supply chains so they can reduce their costs and remain competitive in the business landscape.[257] Supply chain management is the key to many companies' economic success. As noted by the graphic below, an Accenture survey of companies found major disruption of the supply chain created by COVID 19 that is generating negative economic results from companies that in many cases were not forced to close due to government regulation.

COVID 19 Supply Chain Opportunities

- **Accenture survey found**
  - 94% of Fortune 1000 companies are seeing supply chain disruptions from COVID-19
  - 75% of companies have had negative or strongly negative impacts on their businesses
  - 55% of companies plan to downgrade their growth outlooks (or have already done so)

Again, the survey by Thomas of over 1000 North American manufacturers found that 64% of manufacturers report they are likely to bring manufacturing production and sourcing back to North America — a 10% increase from the same sentiment reported in the March 2020 survey.[258]

Companies with a supply chain impacted by COVID 19 should focus on contracting their supply chain closer to U.S. domestic facilities to address these short term and long-term economic challenges. Companies considering a supply chain location contraction near domestic U.S. sites need to educate their supply chain on the regional site development process and opportunity for economic development incentives as many of these facilities will be new investments. The decision to move the supply chain closer to domestic production facilities needs to make financial sense and utilizing an effective site development process can make that happen. The site development process for a company's supply chain partner involves measuring the region's potential for economic growth, availability of skilled workers and cost of doing business, negotiating the land purchase/lease process, developing a project pro-forma, negotiating the land use land use entitlements such as zoning, and negotiations of tax incentives. The first step in the site development process is to understand the region's potential for economic growth, availability of a skilled workforce and the costs of doing business as compared to other regions and states of equal business value. Measures of economic growth will center on a comparison of GDP growth, personal income, COVID 19 infections, demographic measures such as population growth, poverty rates, median home values and other measures that define the equity of a region for a wide range of potential workers. Cost of doing business measures should also be created to better understand the wages key workers will require, the costs of real estate, taxes, utilities, and other major cost factors for competing regions.

Once the region survives the economic, workforce and cost of doing business comparison, a company's supply chain partner needs to move to negotiate local real estate options.

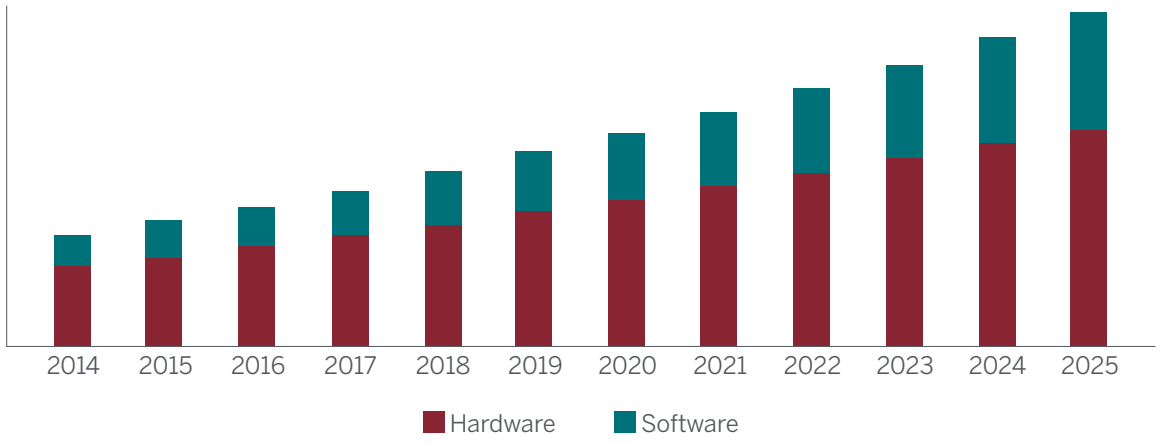
Working in conjunction with the negotiations of local and state incentives and land use regulations, supply chain partner projects may also involve the negotiations of local, state, and federal financing to prepare a site for development. Federal funding can be a source of financing for public infrastructure associated with economic development projects creating jobs and making capital investments. The Coronavirus Aid, Relief, and Economic Security (CARES) Act, signed into law on March 27, 2020, provides the Economic Development Administration (EDA) with $1.5 B for economic development assistance programs that help communities prevent, prepare for, and respond to the impacts of coronavirus. EDA has determined that all communities throughout the United States are eligible for CARES Act funding, the EDA created an approximate tenfold increase in the funding ceiling for EAA awards, taking the ceiling up to a maximum of $30 M for projects, but public works infrastructure funding from the EDA will still likely require a company end user to gain funding.

Indoor agriculture projects. Agriculture, food, and related industries contributed $1.109 trillion to the U.S. GDP in 2019, a 5.2-percent share, and, the output of America's farms contributed $136.1 billion of this sum—about 0.6 percent of GDP.[259] The overall contribution of agriculture to GDP is actually larger than 0.6 percent because sectors related to agriculture rely on agricultural inputs in order to contribute added value to the economy.[260] Sectors related to agriculture include: food and beverage manufacturing; food and beverage stores; food services and eating and drinking places; textiles, apparel, and leather products; and forestry and fishing.[261]

The global indoor farming market size was valued at USD 26.8 billion in 2018 and is expected to expand at a CAGR of 9.19% from 2019 to 2025.[262] Increasing consumer awareness regarding the advantages of consuming fresh and high-quality food and the expansion of medical marijuana and the legalization of marijuana across the United States with regulatory requirements about where this crop is grown.[263] A University of Missouri report found, based on the average production and the distribution of growers—indoor and outdoor— in Colorado, states like Missouri who recently adopted a medical marijuana law will need between 10 and 14 cultivators in 2020, 18 to 24 cultivators in 2021, and 24 to 29 cultivators in 2022, and, based on the growth of qualified patients over time, Missouri will support 85 infused-product manufacturers, perhaps in the first year of medical marijuana sales.

Many governments are encouraging indoor agriculture to deal with changing climatic conditions impacting soil degradation and groundwater depletion, affecting the food and agriculture production systems.[264]

North American indoor farming market size, by component, 2014-2025 (USD Billion)



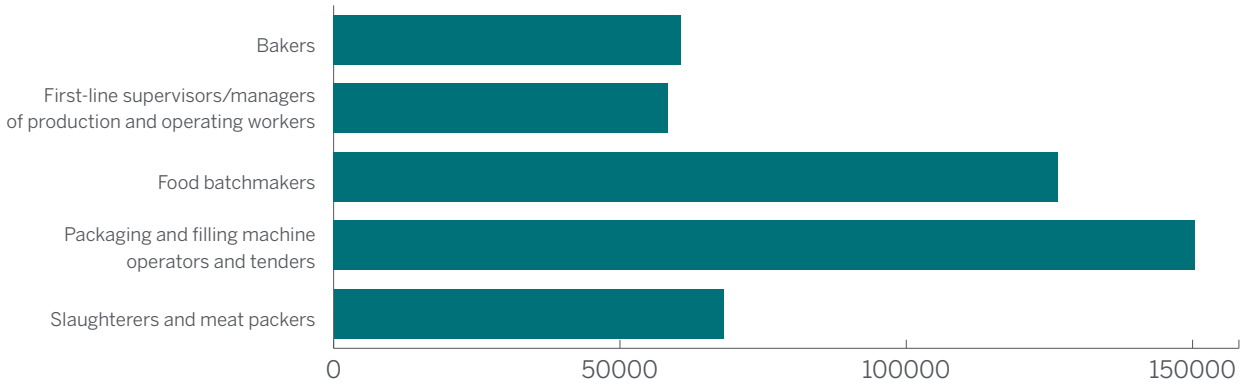
Also, development is overtaking traditional farmland and encouraging vertical farming.[265] The World Bank Group estimates the overall arable land per capita has declined from 0.197 hectares in 2013 to 0.192 hectares in 2016.[266] Indoor farms grow the total crop yield per unit area by using the stacked layers of potted seeds and these facilities are in small and large scale, use farming implements methods such as aquaponics and hydroponics and utilizes artificial lighting for adequate light levels and nutrients.[267] However, initial capital and energy costs need to be factored in when considering the overall economic benefit of an indoor agriculture corporate site location project.[268] Greenhouses are the prime indoor agriculture facility taking up 70% of the market in 2018.[269]

The vertical farm segment is expected to exhibit the fastest CAGR of over 18% from 2019 to 2025, owing to the growing adoption of environmentally-friendly production of fruits and vegetables and higher demand for locally grown and organic food.[270] Indoor agriculture facilities require hardware and software to control the climate, lighting, sensors and irrigation.[271] The fruits, vegetables, and herbs segment dominated the market for indoor farming and is estimated to continue leading over the forecast period but the flowers and ornamentals segment is expected to contribute significantly to market growth over the forecast period with a more than 25% market share.

Food & beverage projects. Food manufacturing or food processing is a growing industry whose prospects are even brighter for U.S. production as the "eat local movement" and COVID 19 creates food security issues has the potential to drive additional production of this industry to domestic locations. Industries in the Food Manufacturing subsector transform livestock and agricultural products into products for intermediate or final consumption.[272] The industry groups are distinguished by the raw materials (generally of animal or vegetable origin) processed into food products, and the food products manufactured in these establishments are typically sold to wholesalers or retailers for distribution to consumers, but establishments primarily engaged in retailing bakery and candy products made on the premises not for immediate consumption are included.[273] The food manufacturing subsector consists of these industry groups:

- Animal Food Manufacturing;
- Grain and Oilseed Milling;
- Sugar and Confectionery Product Manufacturing;
- Fruit and Vegetable Preserving and Specialty Food Manufacturing;
- Dairy Product Manufacturing;
- Animal Slaughtering and Processing;
- Seafood Product Preparation and Packaging;
- Bakeries and Tortilla Manufacturing; and
- Other Food Manufacturing.[274]

Food Processing Jobs, 2019



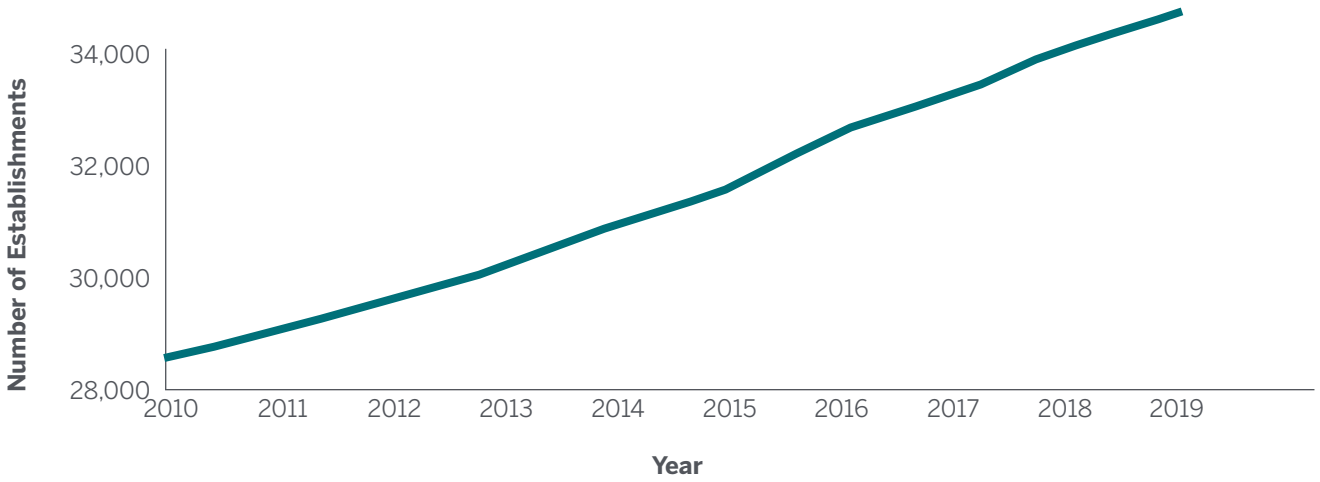
Source: U.S. Bureau of Labor Statistics

These occupations nearly all paid near the median average wage as outlined below:

- Bakers median annual wage is $28,300;
- First-line supervisors/managers of production and operating workers in food manufacturing median annual wage is $56,910;
- Food batch makers median annual wage is $31,560;
- Packaging and filling machine operators and tenders median annual wage is $32,140; and
- Slaughterers and meat packers median annual wage is $29,420.[275]

The U.S. Bureau of Labor Statistics found there are over 35,000 establishments or companies in the food manufacturing industry, and, as the chart below illustrates, food manufacturing facilities in the United States have continued to illustrate strong and steady growth.[276] A recent study suggested the global food processing solutions industry generated revenues worth USD 58,250.45 million in the year 2019 and is expected to register commendable growth between 2020 and 2026.[277] The growth is primarily attributed to focus among major companies towards adopting efficient and fast food processing and distribution systems.[278] In 2018, the U.S. food and beverage manufacturing sector employed more than 1.7 million people or just over 1 percent of all U.S. nonfarm employment.[279] In thousands of food and beverage manufacturing plants located throughout the country, these employees were engaged in transforming raw agricultural materials into products for intermediate or final consumption. Meat and poultry plants employed the largest percentage of food and beverage manufacturing workers, followed by bakeries, and beverage plants.

U.S. Food Manufacturing Establishments 2010-19



Source: https://data.bls.gov/pdq/SurveyOutputServlet

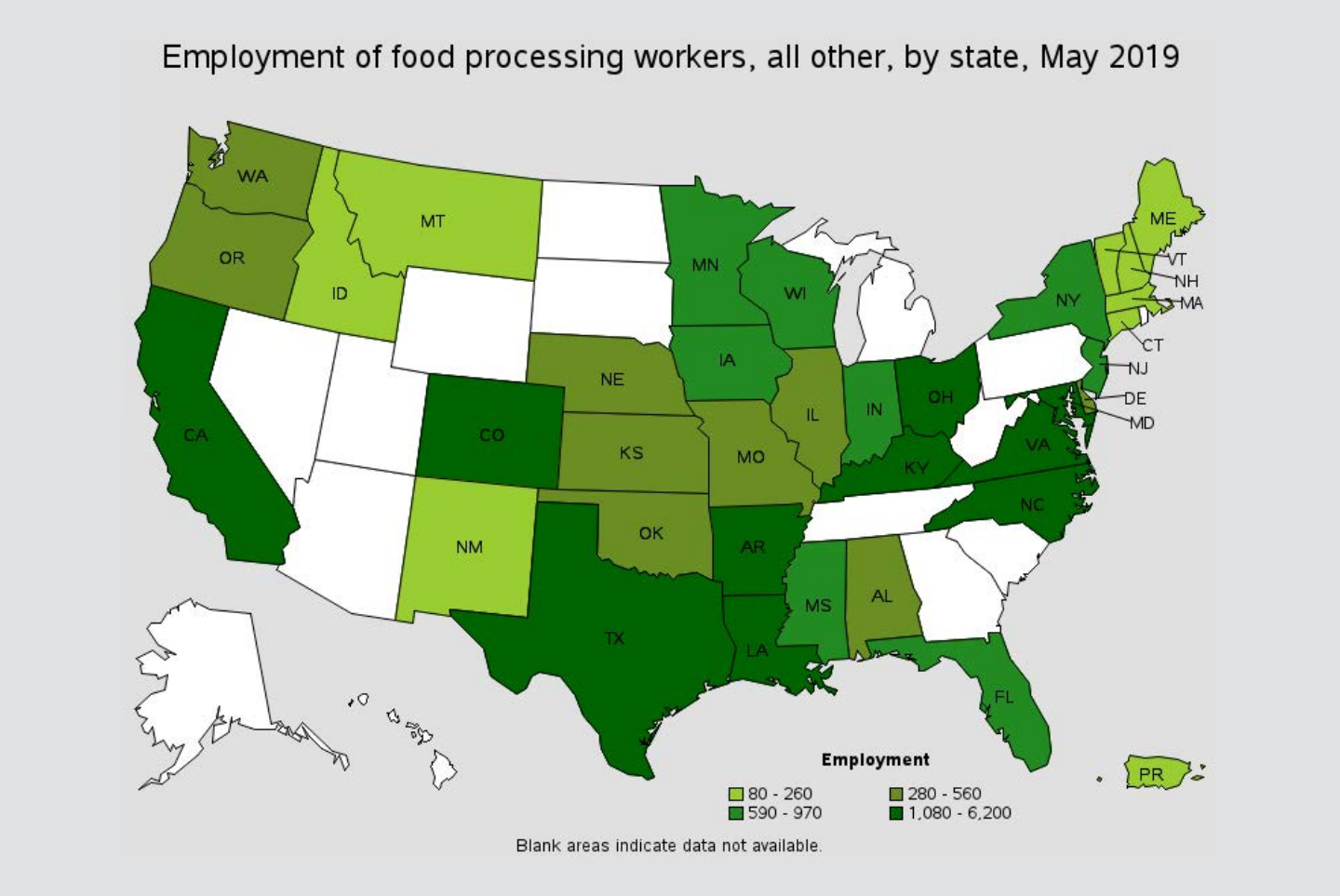
Food and beverage is a global and mature industry that includes household consumer brands as illustrated by the list of 10 largest food and beverage companies.

Top 10 Food & Beverage Companies

- PepsiCo Inc.
- Tyson Foods Inc.
- Nestle
- JBS USA
- Kraft Heinz Co.
- Smithfield Foods Inc.
- Anheuser-Busch InBev
- General Mills Inc.
- Coca-Cola Co.
- Mars Inc.

Source: Foodprocessing.com

The U.S. Bureau of Labor Statistics further defines food processing workers to number of 42,000 across the United States covering a range of industries and occupations. The map below outlines which states are leaders in the food processing industry based upon the number of workers they have in this industry.



Source: Bureau of Labor Statistics

APPENDIX A

Michigan	Missouri	North Carolina	Ohio
Alcona	Adair	Alexander	Adams
Alger	Andrew	Alleghany	Ashland
Allegan	Atchison	Anson	Ashtabula
Alpena	Audrain	Ashe	Athens
Antrim	Barry	Avery	Auglaize
Arenac	Barton	Beaufort	Belmont
Baraga	Bates	Bertie	Brown
Benzie	Benton	Bladen	Carroll
Branch	Bollinger	Brunswick	Champaign
Charlevoix	Buchanan	Burke	Clinton
Cheboygan	Butler	Caldwell	Columbiana
Chippewa	Caldwell	Camden	Coshocton
Clare	Callaway	Carteret	Crawford
Crawford	Camden	Caswell	Darke
Delta	Cape Girardeau	Chatham	Defiance
Dickinson	Carroll	Cherokee	Erie
Emmet	Carter	Chowan	Fayette
Gladwin	Cass	Columbus	Fulton
Gogebic	Cedar	Craven	Gallia
Grand Traverse	Chariton	Currituck	Guernsey
Gratiot	Christian	Dare	Hancock
Hillsdale	Clark	Davidson	Hardin
Houghton	Clinton	Davie	Harrison
Huron	Cole	Duplin	Henry
Ionia	Cooper	Edgecombe	Highland
Iosco	Crawford	Franklin	Hocking
Iron	Dade	Gates	Holmes
Isabella	Dallas	Graham	Huron
Kalkaska	Daviess	Granville	Jackson
Keweenaw	DeKalb	Greene	Jefferson
Lake	Dent	Halifax	Knox
Leelanau	Douglas	Haywood	Lawrence
Lenawee	Dunklin	Hertford	Logan
Luce	Franklin	Hoke	Madison
Mackinac	Gasconade County,	Hyde	Marion
Manistee	Missouri	Jackson	Meigs
Marquette	Gentry	Lee	Mercer
Mason	Grundy	Lenoir	Monroe
Mecosta	Harrison	McDowell	Morgan
Menominee	Henry	Macon	Morrow
Missaukee	Hickory	Madison	Muskingum
Montmorency	Holt	Martin	Noble
Oceana	Howard	Mitchell	Ottawa
Ogemaw	Howell	Montgomery	Paulding
Ontonagon	Iron	Moore	Perry
Osceola	Jasper	Nash	Pickaway
Oscoda	Johnson	Northampton	Pike
Otsego	Knox	Pamlico	Preble
Presque Isle	Laclede	Pasquotank	Putnam
Roscommon	Lafayette	Pender	Ross

Michigan	Missouri	North Carolina	Ohio
Sanilac Schoolcraft Shiawassee St. Joseph Tuscola Wexford	Lawrence Lewis Lincoln Linn Livingston McDonald Macon Madison Maries Marion Mercer Miller Mississippi Moniteau Monroe Montgomery Morgan New Madrid Newton Nodaway Oregon Osage Ozark Pemiscot Perry Pettis Phelps Pike Polk Pulaski Putnam Ralls Randolph Ray Reynolds Ripley St. Clair Ste. Genevieve St. Francois Saline Schuyler Scotland Scott Shannon Shelby Stoddard Stone Sullivan Taney Texas Vernon Warren Washington Wayne	Perquimans Person Pitt Polk Randolph Richmond Robeson Rockingham Rutherford Sampson Scotland Stanly Stokes Surry Swain Transylvania Tyrrell Union Vance Warren Washington Watauga Wayne Wilkes Yadkin Yancey	Sandusky Scioto Seneca Shelby Tuscarawas Union Van Wert Vinton Washington Williams Wyandot

ENDNOTES

1 Ibid.
2 Ibid.
3 Ibid.
4 Ibid.
5 file:///C:/Users/drobinson/Dropbox/Prospects/2020-business-tax-burden-study---final.pdf
6 Ibid.
7 Ibid.
8 https://economics.princeton.edu/2020/01/06/new-data-on-state-and-local-business-tax-incentives-across-the-u-s/
9 https://cost.org/globalassets/cost/state-tax-resources-pdf-pages/cost-studies-articles-reports/2020-business-tax-burden-study---final.pdf
10 Ian Pulsipher, Evaluating Enterprise Zones, (Washington, D.C., National Conference of State Legislatures, Feb. 26, 2008) retrieved from http://www.ncsl.org/programs/econ/evalentzones.htm.
11 https://www.ers.usda.gov/topics/rural-economy-population/rural-classifications/what-is-rural/
12 Ibid.
13 Ibid.
14 Ibid.
15 Ibid.
16 Ibid.
17 https://www.investinwork.org/-/media/Files/reports/strengthening-workforce-development-rural-areas.pdf
18 Ibid.
19 Ibid.
20 https://www.investinwork.org/-/media/Files/reports/strengthening-workforce-development-rural-areas.pdf
21 Ibid.
22 Ibid.
23 https://www.ers.usda.gov/webdocs/charts/98872/Rural_America_Figure_3-01.png?v=2133
24 Ibid.
25 Ibid.
26 Ibid.
27 Ibid.
28 Ibid.
29 Ibid.
30 Ibid.
31 Ibid.
32 Ibid.
33 Ibid.
34 See https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2020/10/20/covid-19-patients-swamp-rural-hospitals
35 Ibid.
36 https://www.nam.org/state-manufacturing-data/2019-united-states-manufacturing-facts/#:~:text=Manufacturers%20in%20the%20United%20States,was%20%242%2C334.60%20billion%20in%202018.
37 Ibid.
38 Ibid.
39 https://www.bls.gov/ooh/production/home.htm
40 Ibid.
41 Ibid.
42 https://www.michiganbusiness.org/49fab3/globalassets/documents/reports/fact-sheets/downtowndevelopmentauthority.pdf
43 Ibid.
44 https://www.michigandowntowns.com/tax_increment_financing.php
45 Ibid.
46 Ibid.

[47] Ibid.
[48] Ibid.
[49] Ibid.
[50] Ibid.
[51] Ibid.
[52] Ibid.
[53] Ibid.
[54] Ibid.
[55] Ibid.
[56] Ibid.
[57] Ibid.
[58] Ibid.
[59] Ibid.
[60] http://www.mml.org/resources/publications/one_pagers/2019-2-27-FS_Econ_Dev_Tools_DDAs-2019&Plus.pdf
[61] Ibid.
[62] Ibid.
[63] Ibid.
[64] Ibid.
[65] https://dda.downtowntc.com/your-dollars-at-work/
[66] Ibid.
[67] Ibid.
[68] Ibid.
[69] Ibid.
[70] https://www.novoco.com/sites/default/files/atoms/files/npsannualreport_htc_impact_18_092419.pdf
[71] Ibid.
[72] Ibid.
[73] Ibid.
[74] Ibid.
[75] Ibid.
[76] https://www.stlouis-mo.gov/government/departments/planning/cultural-resources/national-register-historic-places/Historic-Preservation-Tax-Credit-Programs.cfm
[77] Ibid.
[78] https://ded.mo.gov/sites/default/files/programs/flyers/HTC-ProgramSummary.pdf
[79] Ibid.
[80] Ibid.
[81] Ibid.
[82] https://www.stlouis-mo.gov/government/departments/planning/cultural-resources/national-register-historic-places/Historic-Preservation-Tax-Credit-Programs.cfm
[83] Ibid.
[84] Ibid.
[85] Ibid.
[86] Ibid.
[87] https://engagedscholarship.csuohio.edu/cgi/viewcontent.cgi?article=2336&context=urban_facpub
[88] Ibid.
[89] https://www.ohiohistory.org/preserve/state-historic-preservation-office/nationalregister/nrpacket/register-of-historic-places-general-information
[90] Ibid.
[91] https://development.ohio.gov/cs/cs_ohptc.htm
[92] Ibid.
[93] https://www.ncdcr.gov/about/history/division-historical-resources/state-historic-preservation-office/restoration-2
[94] Ibid.
[95] https://files.nc.gov/ncdcr/historic-preservation-office/NCHPO_2020_FullReport.pdf
[96] Ibid.
[97] https://www.jobsohio.com/revitalization/

98 Ibid.
99 Ibid.
100 Ibid.
101 Ibid.
102 Ibid.
103 Ibid.
104 https://www.jobsohio.com/vibrant-community-program/
105 Ibid.
106 Ibid.
107 Ibid.
108 Ibid.
109 Ibid.
110 https://www.northernlakes.net/michigan-department-of-agriculture-and-rural-development-grant/
111 Ibid.
112 Ibid.
113 Ibid.
114 https://www.sog.unc.edu/resources/microsites/building-assets-rural-future/advance-rural-workforce-development
115 Ibid.
116 Ibid.
117 Ibid.
118 Ibid.
119 Ibid.
120 https://www.novoco.com/sites/default/files/atoms/files/white_house_the_impact_of_opportunity_zones_an_initial_assessment_report_082220.pdf
121 Ibid.
122 Ibid.
123 https://www.novoco.com/notes-from-novogradac/opportunity-funds-raise-nearly-25-billion-date
124 Ibid.
125 Ibid.
126 Ibid.
127 Ibid.
128 Ibid.
129 Ibid.
130 Ibid.
131 Ibid.
132 https://www.forbes.com/sites/stevenbertoni/2020/02/05/winners-of-the-forbes-oz-20-impact-investors-sparking-change-in-la-alabama-colorado-erie-and-beyond/?sh=4d9fb72061b9
133 Ibid.
134 Ibid.
135 Ibid.
136 Ibid.
137 Ibid.
138 https://ruralinnovation.us/center-on-rural-innovation-launching-opportunity-zone-fund-focused-on-rural-operating-businesses/
139 Ibid.
140 Ibid.
141 Ibid.
142 https://opportunitydb.com/location/ohio/
143 Ibid.
144 Ibid.
145 https://opportunitydb.com/location/missouri/
146 Ibid.
147 Ibid.
148 https://opportunitydb.com/location/michigan/
149 Ibid.
150 Ibid.

[151] Ibid.
[152] https://opportunitydb.com/location/north-carolina/
[153] Ibid.
[154] https://public.nccommerce.com/oz/
[155] https://www.novoco.com/sites/default/files/atoms/files/white_house_the_impact_of_opportunity_zones_an_initial_assessment_report_082220.pdf
[156] Ibid.
[157] Ibid.
[158] Ibid.
[159] Ibid.
[160] Ibid.
[161] Ibid.
[162] Ibid.
[163] https://nmtccoalition.org/project/peterson-farms-2/
[164] Ibid.
[165] Ibid.
[166] https://nmtccoalition.org/project/mirac-inc/
[167] Ibid.
[168] Ibid.
[169] Ibid.
[170] https://www.investinwork.org/-/media/Files/reports/strengthening-workforce-development-rural-areas.pdf
[171] Ibid.
[172] https://www.investinwork.org/-/media/Files/volume-two/The%20Rural%20Dimensions%20of%20Workforce%20Development.pdf?la=en
[173] Ibid.
[174] Ibid.
[175] Ibid.
[176] Ibid.
[177] https://www.investinwork.org/-/media/Files/reports/strengthening-workforce-development-rural-areas.pdf
[178] https://mibiz.com/sections/economic-development/state-receives-17-8m-federal-grant-for-workforce-training-program
[179] Ibid.
[180] Ibid.
[181] Ibid.
[182] Ibid.
[183] Ibid.
[184] https://www.nefec.org/stem/partners/
[185] Ibid.
[186] Ibid.
[187] Ibid.
[188] Ibid.
[189] Ibid.
[190] Ibid.
[191] https://www.azcommerce.com/news-events/news/arizona-commerce-authority-announces-plan-to-train-and-certify-5-000-arizona-students-for-cloud-careers-by-june-2022/
[192] Ibid.
[193] Ibid.
[194] Ibid.
[195] Ibid.
[196] Ibid.
[197] Ibid.
[198] Ibid.
[199] Ibid.
[200] Ibid.
[201] https://www.cscc.edu/employee/faculty/teaching-professional-development/aws-academy.shtml

[202] Ibid.
[203] Ibid.
[204] Ibid.
[205] Ibid.
[206] Ibid.
[207] Ibid.
[208] Ibid.
[209] Ibid.
[210] https://pickawayworks.org/about-us/
[211] Ibid.
[212] Ibid.
[213] Ibid.
[214] Ibid.
[215] Ibid.
[216] https://www.bls.gov/ooh/computer-and-information-technology/home.htm#:~:text=Employment%20in%20computer%20and%20information,add%20about%20531%2C200%20new%20jobs.
[217] Ogutu1 & Kihonge, Impact of Business Incubators on Economic Growth and Entrepreneurship Development, International Journal of Science and Research, Volume 5 Issue 5, May 2016.
[218] Ibid.
[219] Ibid.
[220] Ibid.
[221] Ibid.
[222] Ibid.
[223] Ibid.
[224] Ibid.
[225] Ibid.
[226] Ibid.
[227] Ibid.
[228] Ibid.
[229] Ibid.
[230] Ben Cover, John I. Jones, and Audrey Watson, "Science, technology, engineering, and mathematics (STEM) occupations: a visual essay," Bureau of Labor Statistics, Monthly Labor Review, May 2011.
[231] Ibid.
[232] Ibid.
[233] Shouvik Sanyal, Mohammed Wamique Hisam, The Role of Business Incubators in Creating an Entrepreneurial Ecosystem: A Study of the Sultanate of Oman, Indian Journal of Commerce & Management Studies, December, 2018.
[234] https://clayandmilk.com/2019/09/09/jefferson-takes-big-leap-forward-with-opening-of-forge/
[235] Ibid.
[236] Ibid.
[237] https://www.desmoinesregister.com/story/money/business/2019/09/08/kim-reynolds-jeffersons-high-tech-initiative-could-national-model/2236796001/
[238] https://www.knightmoves.org/
[239] https://www.telecompetitor.com/economists-put-the-tab-at-61-billion-to-bring-fiber-broadband-to-rural-u-s/
[240] https://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2019/07/how-states-support-broadband-projects
[241] Ibid.
[242] Ibid.
[243] Ibid.
[244] Ibid.
[245] Ibid.
[246] Ibid.
[247] https://www.statista.com/statistics/272391/us-retail-e-commerce-sales-forecast/#:~:text=In%202019%2C%20U.S.%20online%20retail,dollars%20in%20revenue%20by%202024.

[248] https://www.cbre.us/research-and-reports/US-MarketFlash-Annual-Industrial-Demand-to-Hit-333-Million-Sq-Ft-by-2022
[249] https://www.ers.usda.gov/data-products/ag-and-food-statistics-charting-the-essentials/ag-and-food-sectors-and-the-economy/https://www.ncleg.net/documentsites/committees/JointAppropriationsNER/2015%20Session/2015_03_04/4.%203.04_Commerce_REDD_Legislative%20Presentation.pdf
[250] Ibid.
[251] https://www.nccommerce.com/news/press-releases/north-carolina-rural-infrastructure-authority-funds-approved-attract-more-1237
[252] Ibid.
[253] Ibid.
[254] https://www.investopedia.com/terms/s/supplychain.asp
[255] Ibid.
[256] Ibid.
[257] Ibid.
[258] Ibid.
[259] https://www.ers.usda.gov/data-products/ag-and-food-statistics-charting-the-essentials/ag-and-food-sectors-and-the-economy/https://www.ncleg.net/documentsites/committees/JointAppropriationsNER/2015%20Session/2015_03_04/4.%203.04_Commerce_REDD_Legislative%20Presentation.pdf
[260] Ibid.
[261.] Ibid.
[262] https://www.grandviewresearch.com/industry-analysis/indoor-farming-market
[263] Ibid.
[264] Ibid.
[265] Ibid.
[266] Ibid.
[267] Ibid.
[268] Ibid.
[269] Ibid.
[270] Ibid.
[271] Ibid.
[272] https://www.bls.gov/iag/tgs/iag311.htm
[273] Ibid.
[274] Ibid.
[275] Ibid.
[276] Ibid.
[277] https://www.globenewswire.com/news-release/2020/08/24/2082424/0/en/Global-food-processing-solutions-market-to-record-unprecedented-growth-by-2026.html
[278] Ibid.
[279] Ibid.