HOW CITIES CAN IDENTIFY THE BEST BUSINESSES FOR LOCAL ECONOMIC GROWTH

A NEW APPROACH TO INCREASING LOCAL PRODUCTIVITY AND PREVENTING DECLINE

enDeavor
INSIGHT

EXECUTIVE SUMMARY

This report is designed to offer city leaders practical solutions for increasing local economic growth. Its authors have gathered findings from existing research and analyzed recent data to identify local factors and practices that support increased productivity and job creation. This yielded four major conclusions.

1 THE TYPICAL ECONOMIC DEVELOPMENT STRATEGIES USED BY U.S. CITIES ARE NOT SUFFICIENT FOR GENERATING GROWTH.

U.S. cities have been diverging economically.*A small number of metro areas have grown rapidly while many others have seen local incomes and productivity stuck at levels far below the national average.

The authors of this study reviewed the economic plans of more than 100 U.S. cities.[†] This revealed that almost all local economic officials pursue the same three strategies: **small business support, local resource development, and industry attraction and cultivation**.

Unfortunately, analyses indicate that the outcomes targeted by these approaches are unlikely to significantly improve a city's economic productivity on their own. With the onset of the COVID-19 crisis in the United States, city leaders are facing unprecedented challenges and will need new solutions for addressing unemployment and preventing further decline in their communities.

2 THE "BEST" BUSINESSES — THOSE THAT ARE BIG, ENTREPRENEURIAL, SUPER-PRODUCTIVE, AND TECH-ENABLED — ARE HIGHLY ASSOCIATED WITH LOCAL ECONOMIC GROWTH.

Endeavor Insight's new research highlights the characteristics of companies that make the largest contributions to local job creation and productivity growth. Businesses with the four traits listed below benefit local economies in important ways.

- ▶ **Big:** Companies that grow to have 50 or more employees create the majority of new jobs and pay workers higher salaries, on average.

- ▶ **Entrepreneurial:** Businesses led by local entrepreneurs reinvest more in their communities and help other local companies to grow.

- ▶ **Super-Productive:** Businesses in industries like advanced manufacturing, specialty research and consulting, and software generate more productivity per employee.

- ▶ **Tech-Enabled:** Companies with more technology workers are projected to grow faster in future years.

Recent data has made it possible to examine the impact of the companies that combine all four of these traits. This shows that the "BEST" businesses — those that are big, entrepreneurial, super-productive and tech-enabled — are highly associated with local economic growth.

The more of the BEST businesses a city has, the more productive it is, on average. The most productive metro areas have double the number of the BEST businesses that are found in low-productivity cities, even when adjusting for differences in population size.

3 TOP-PERFORMING CITIES CONTINUALLY GENERATE MORE OF THE "BEST" BUSINESSES.

Cities that consistently generate the BEST local businesses have more diverse economic foundations and are better protected from risk. **Analyses also show that there is a strong relationship between an increase in the number of the BEST businesses founded in a city and future growth in a local economy.**

The benefits of increasing the number of the BEST businesses can be seen in data from the years of recession and slow recovery that followed the 2008 financial crisis. The top-performing cities produced an average of 2.7 new BEST businesses per 100,000 residents between 2008 and 2012. These metropolitan areas went on to grow by an average of 6.8 percent from 2012 to 2016. Bottom-performing cities added fewer than one BEST business per 100,000 residents, on average, between 2008 and 2012, and subsequently grew by 4.4 percent from 2012 to 2016.

4 CITIES SHOULD USE THE STRATEGY OF ENTREPRENEUR-LED ECONOMIC DEVELOPMENT TO SUPPORT THE "BEST" BUSINESSES AND GENERATE ECONOMIC GROWTH.

Metropolitan areas with large numbers of the BEST businesses tend to share an important trait. In these cities, successful entrepreneurs from established BEST businesses play important leadership roles by identifying local strengths, constructing support networks for upcoming companies, and increasing the supply of local resources that businesses need to grow.

Decision makers who wish to generate more of the BEST businesses in their communities should complement their existing strategies with a new approach that facilitates these types of leadership. Endeavor Insight and other partners have developed a strategy to enhance the leadership of successful entrepreneurs within a city. This approach, referred to as "Entrepreneur-Led Economic Development," is made up of four components.

- ▶ Identify the entrepreneurial businesses that have been growing in the region and the local strengths they represent.

- ▶ Encourage successful entrepreneurs to build effective networks of support for local businesses that can grow.

- ▶ Partner with the leaders of growing businesses to increase the supply of the resources that local entrepreneurs need most.

- ▶ Measure data on growing entrepreneurial businesses to track results and regularly share findings with the community.

Data suggests that if the typical city had a small increase in the number of BEST local businesses — usually just five to ten more — it would see significant GDP growth. The strategy of Entrepreneur-Led Economic Development can help decision makers follow the example of top-performing cities to better support these companies and increase local economic growth.

THE TYPICAL ECONOMIC DEVELOPMENT STRATEGIES USED BY U.S. CITIES ARE NOT SUFFICIENT FOR GENERATING GROWTH.

U.S. CITIES ARE DIVERGING ECONOMICALLY — LEAVING LEADERS SEARCHING FOR SOLUTIONS TO PREVENT FURTHER DECLINE.

American cities have been moving in opposite directions. A small number of communities such as Nashville, Pittsburgh, and San Jose have generated greater levels of productivity and income than the average metropolitan area, while others have seen productivity stuck at levels far below the United States as a whole.[*,1]

Size and geography have offered no guarantee of protection. The list of cities that have been falling behind includes metropolitan areas with populations that range from 100,000 to more than 4 million. Though a large number of declining communities are found in the "heartland" across the middle of the country, many are also located directly on the coasts.[2]

The effects of this divergence go beyond productivity. Low-growth metropolitan areas have greater poverty rates, on average.[3] Economic decline has also been linked to other issues, such as the rise of the opioid epidemic.[4] These challenges can grow larger over time and worsen during economic downturns.

With the onset of the COVID-19 crisis in the United States, city leaders are now facing unprecedented challenges and will need new solutions for addressing unemployment and preventing further decline in their communities. Even before the pandemic, many officials noted that surprisingly little attention was paid to providing answers to the decision makers in cities. This was one of many findings gleaned from interviews with over 40 local economic development officials conducted for the study. Most reports on improving economic performance are written for academic audiences or focused on potential federal government programs that require a decade or more to implement.[†] Research on effective ideas for local decision makers to increase economic growth is hard to find.

This report is designed to offer leaders practical solutions for increasing productivity and incomes in their cities. Its authors have gathered findings from dozens of research studies and created analyses of recent data on factors linked to local growth. It seeks to answer two questions:

- What are the most productive metro areas doing differently to grow their economies?

- How can local decision makers take action to increase economic growth in their communities and prevent future decline?

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* Unless noted otherwise, the names of individual cities are used to refer to the metropolitan areas of which they are a part.
† Examples of long-term federal programs can be found in the recently published book "Jump-Starting America," by Jonathan Gruber and Simon Johnson or the December 2019 report "The Case for Growth Centers," by Robert D. Atkinson, Mark Muro, and Jacob Whiton.

TYPICAL ECONOMIC DEVELOPMENT STRATEGIES FOUND IN U.S. CITIES

More than 80 percent of local economic development plans include the following three strategies.

Type of Strategy	Example Programs	Suggested Outcome Metrics Targeted for Increase
Small Business Support		
Existing Small Business Assistance	Grants, subsidized loans, and executive coaching	Number of local small businesses
New Startup Company Assistance	Incubators, accelerators, pitch sessions, and business plan competitions	Number of local startups
Local Resource Development		
Intellectual Capital Development	Creation of innovation districts and funding for commercializing academic research	Number of patents generated in the community
Financial Capital Development	Angel investment tax incentives and matching funding for local venture capital firms	Number of local venture capital deals
Human Capital Development	Funding for local universities, workforce training centers, and coding academies	Number of college and university students educated in the community
Industry Attraction and Cultivation		
Corporate Location Incentives	Relocation tax credits or payments, and assistance with manufacturing site selection	Number of local "satellite" facilities of companies headquartered elsewhere
Sector-Specific Support	Industry councils, infrastructure funding, and building construction (e.g., tech parks)	Amount of direct foreign investment

Source: Endeavor Insight analysis of the most recently published economic development plans from more than 100 U.S. metropolitan areas, 2019.

MOST LOCAL ECONOMIC DEVELOPMENT STRATEGIES FALL INTO THREE CATEGORIES.

The analyses for this study began with a review of the economic development plans from more than 100 U.S. metro areas.* This revealed that almost all local economic development officials pursue the same three strategies.

1 SMALL BUSINESS SUPPORT

More than 95 percent of local economic development plans contain initiatives to assist small businesses. This is usually divided into programs for existing small companies and support for new, "startup" small businesses.

Common initiatives in this area include grants, subsidized loans, and executive coaching for existing small companies along with incubators, accelerators, and business plan competitions for startups. Economic development officials suggested several metrics for measuring the outcomes expected from these programs, such as increases in the number of small companies in their cities, as well as growth in the number of new startups.

2 LOCAL RESOURCE DEVELOPMENT

Initiatives to increase the supply of resources for local businesses are found in over 80 percent of the economic plans created by cities. These programs are typically focused on generating more intellectual, financial, and human capital in local regions.

Resource development programs include initiatives designating specific neighborhoods as "innovation districts," efforts to attract funding to research centers, programs to commercialize academic research, tax credits for early stage investments in local businesses, as well as funding for specific degree programs at local educational institutions and workforce training centers. One state has even started to offer highly skilled, remote workers a $10,000 payment to move into one of its communities.[5] The metrics suggested for measuring the success of these initiatives include changes in the number of local venture capital deals, the proportion of university students educated in the community, and the number of patents awarded to local researchers.

3 INDUSTRY ATTRACTION AND CULTIVATION

About 80 percent of local economic development plans also mention industry cultivation and attraction efforts. These efforts are usually focused on payments to individual corporations willing to move a portion of their operations into the region and activities that support specific local sectors as a whole.

Common programs in these areas include tax credits for opening satellite offices or factories, direct payments to corporations that relocate jobs, assistance with manufacturing site selection, as well as industry councils, industry-specific infrastructure funding, and construction of buildings or tech parks designed for targeted sectors. The outcomes of these programs can be measured by metrics such as the number of local "satellite" facilities of companies headquartered elsewhere and the amount of direct foreign investment coming into the community.

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* Data was collected in 2019, prior to the onset of the COVID-19 crisis. The findings are, therefore, based on the plans made before cities faced impacts from the pandemic.

EXPLANATORY POWER: PRODUCTIVITY DIFFERENCES AMONG MAJOR METROPOLITAN AREAS

To what extent can typical economic development strategies explain the difference in local GDP per capita?
(Outcomes with the highest explanatory power)

SMALL BUSINESS SUPPORT

Number of Local Small Businesses Per Capita — 24%

Number of New Startups Per Capita — 14%

LOCAL RESOURCE DEVELOPMENT

Number of Utility Patents Per Capita — 30%

Number of Venture Capital Deals Per Capita — 27%

Number of R1 & R2 University Students Per Capita — 20%

INDUSTRY ATTRACTION & CULTIVATION

Number of "Satellite" Offices and Factories Per Capita — 29%

Amount of Foreign Direct Investment Received Per Capita — 7%

0%   25%   50%   75%   100%
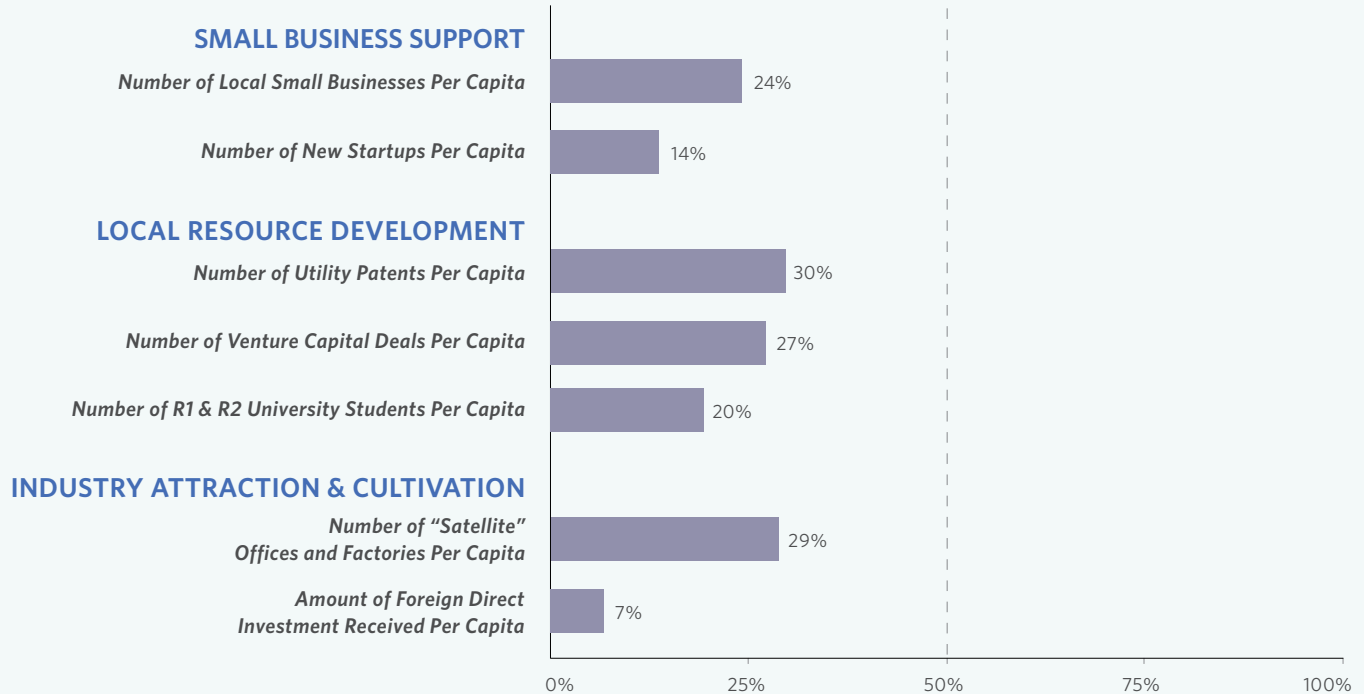
Note: The values for explanatory power above are equivalent to the R^2 values from regression analyses in which each variable's 2017 value was tested to predict for 2017 GDP per capita among all U.S. metro areas with 250,000 or more in population, except for venture capital deals, which is based on the 139 of these metro areas where data was available.
Sources: U.S. Census Bureau; U.S. Bureau of Labor Statistics; U.S. Patent and Trademark Office; PwC MoneyTree; National Center for Education Statistics; Dun & Bradstreet.

THE OUTCOMES TARGETED BY THE TYPICAL STRATEGIES DO NOT EXPLAIN WHY SOME CITIES ARE MORE PRODUCTIVE THAN OTHERS.

Endeavor Insight gathered data on dozens of suggested outcome metrics expected from the typical economic development strategies. Each was analyzed to see how well it could help explain the differences in productivity found among U.S. metro areas. The results for the highest performing outcome in each category are shown above.

As the chart illustrates, none of these outcomes could explain more than 30 percent of the productivity differences found among major U.S. cities, as measured by Gross Domestic Product (GDP) per capita.* The data on average income shows similar results. The strongest outcomes targeted by typical economic development strategies could explain less than 40 percent of the income differences found among the same metro areas.

This indicates that the most productive cities are not generating much larger numbers of small businesses or startups. They do not have more patents, venture capital deals, or even university students on a per capita basis. Nor do they attract significantly more satellite offices and factories or foreign investment.

This leads to a simple conclusion. **Even if programs targeting small business support, local resource development, and industry attraction achieve their goals, they are unlikely to significantly improve local productivity on their own.**

This finding would not shock many local officials who have seen the results of these economic development strategies first hand. As one former administrator said in an interview, "It's obvious that the current strategies don't produce much economic growth, but many people still want to believe that they will magically start doing things that they can't."

There are many reasons why this is the case. Efforts to support small companies have a natural limit to what they can accomplish since most small business owners do not want to hire new employees.[6] In addition, educating large numbers of university students is no guarantee that they will stay in the same community. Every spring, thousands of graduates receive degrees that are quickly packed into moving vans.

The early stage investments targeted by tax credits — typically venture capital and angel investments — are only used in a very small group of industries. Government programs that give

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* "Major metropolitan areas" and "major cities" are metropolitan areas with 250,000 or more residents.

incentives to individual companies to relocate or build satellite facilities also have major challenges. They often attract the wrong types of businesses — those that only want to extract value from a community with no real concern for its long-term health. A national study recently found that these incentives have no positive impact on local economic growth.[7]

This does not mean that all programs targeting the typical economic development strategies are a waste of time. Many officials interviewed for this project reported that initiatives in these areas were designed to achieve other goals besides increasing local productivity and incomes. Support programs for small businesses, for example, were often cited as tools for improving local quality of life, while financing for local research centers was mentioned as a way to attract federal matching funds that support local public-sector jobs.

Objectives like these illustrate how programs can provide value to communities in many different ways. **However, leaders should make sure that the results they expect from initiatives to support small businesses, resource development, and industry attraction match what these strategies can actually accomplish.**

So, what should decision makers do if they want to generate local economic growth? The next section of this report will highlight several factors that are associated with increased productivity and job creation in cities. These elements can help point the way to a new strategy for local economic development that complements existing programs and generates greater levels of local growth.

THE "BEST" BUSINESSES — BIG, ENTREPRENEURIAL, SUPER-PRODUCTIVE, AND TECH-ENABLED COMPANIES — ARE HIGHLY ASSOCIATED WITH LOCAL ECONOMIC GROWTH.

Endeavor Insight's new research highlights the characteristics of local companies that are associated with job creation and economic growth. This work confirms what many decision makers already understand from their on-the-ground experience, but have lacked evidence to prove. Businesses with the four traits outlined below benefit local economies in important ways.

1 **BIG COMPANIES — THOSE THAT GROW TO HAVE 50 OR MORE EMPLOYEES — CREATE THE MAJORITY OF NEW JOBS.**

Most new companies are low-productivity microbusinesses that will never grow to have more than 10 employees.* As the chart below illustrates, more than half of these companies cease operating before they are five years old. Even when they survive, these companies make a relatively small contribution to the economy. Low-productivity microbusinesses that are 11 to 15 years old generate less than 20 percent of the total jobs created by businesses started in the same time period.

Companies that grow big — defined here as reaching at least 50 employees — have a much greater economic impact. **Though less than 2 percent of businesses become big by the time they are 11 to 15 years old, these companies produce the majority of the jobs created among businesses in their age group.** Most companies that grow to have 50 employees continue to expand. The typical U.S. business that grows big employs around 400 workers.[8]

These companies create more than just a large number of jobs. As they grow, they become more efficient by taking advantage of economies of scale. In most industries, the small number of businesses that become big generate the majority of revenues.[9] Companies with 50 or more employees also tend to pay workers higher average salaries when compared to smaller firms in the same industries.[†] Studies have even found that fast-growing companies like these are more likely to hire workers from underrepresented groups.[10]

COMPANY GROWTH AND JOB CREATION OVER TIME
The small number of companies that grow to be big create the majority of new jobs.

COMPANIES ONE YEAR OLD   COMPANIES 5 YEARS OLD   COMPANIES 11 TO 15 YEARS OLD
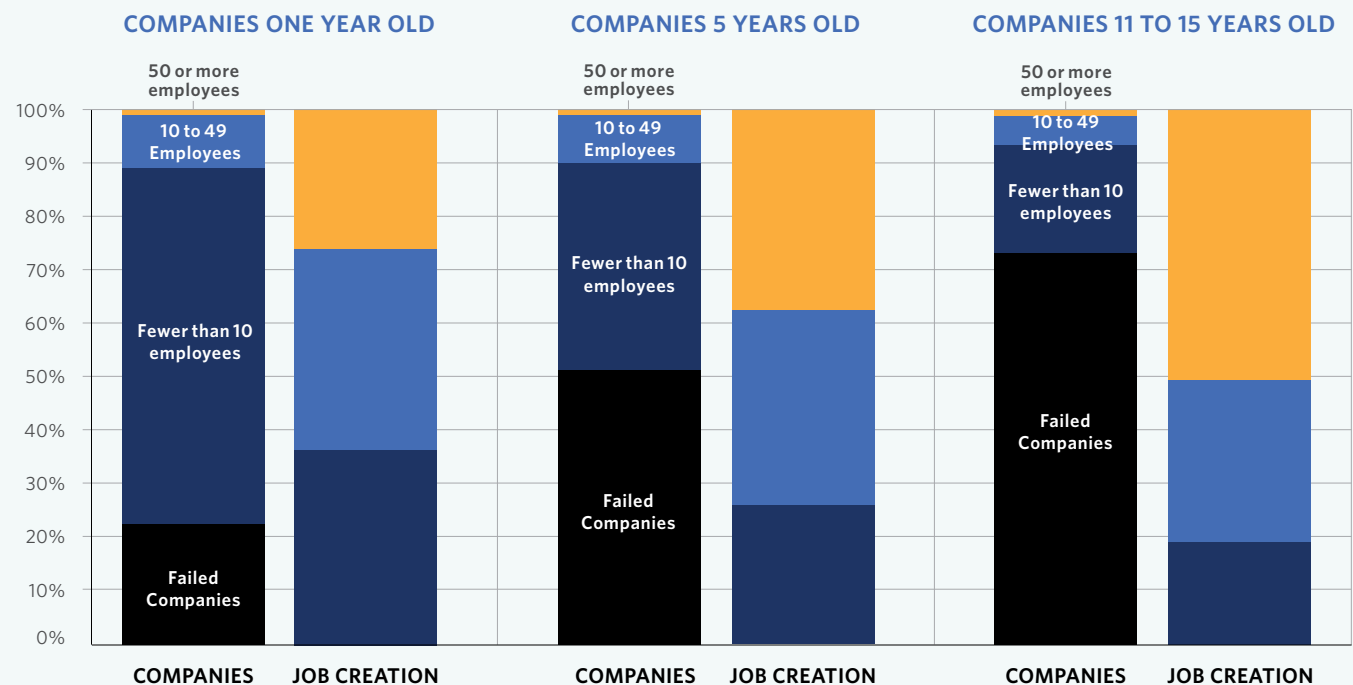
Note: The data above represents the outcomes for each age group of U.S. firms as of 2014.
Source: U.S. Census Bureau, Business Dynamic Statistics.

* These analyses only include companies that have at least one employee. If legally incorporated businesses with no employees were to be included (e.g., LLCs set up to purchase real estate or for individuals doing part-time consulting work), the proportion of companies that never grow beyond 10 employees would be even greater.
† More data on the impact of companies that grow to be big can be found in Appendix 1 on page 24.

2 ENTREPRENEURIAL, "HOMEGROWN" BUSINESSES REINVEST MORE IN THEIR COMMUNITIES, AND OFTEN PROMOTE PHILANTHROPY AND THE GROWTH OF OTHER FIRMS.

Businesses that are created and led by local entrepreneurs offer a number of benefits to cities. They reinvest more earnings back into their communities compared to the satellite offices or franchise locations of corporations in other cities and regions.[11] "Homegrown" businesses that grow also tend to keep their headquarters offices in the cities where they started out. This means that a large share of the high-paying jobs they create — in positions such as senior management, strategy, and research — will be in the same metro area.

Investors in high-growth companies are usually based in the same community that the business is located in as well.[12] If a business is successful enough to be acquired or go public, the participation from local investors helps a large percentage of the profits to be recycled back into the area. This recycling effect is even greater when homegrown companies offer stock options to local employees.

Another benefit that can come from successful entrepreneurs is seen in examples across the country: philanthropic giving. Entrepreneurs like Ewing Kauffman and J. Irwin Miller built companies that grew big and went on to create large foundations and other civic institutions that continue to support their communities to this day.[13]

Entrepreneurial firms that grow big also have the potential to spawn other local successes in their cities. This comes primarily through former employees who go on to become entrepreneurs themselves.[14] When former employees of a successful business start new companies, studies have shown that these new businesses are more likely to succeed.[15] Successful founders can also serve as valuable mentors and investors for upcoming entrepreneurs in their communities, and act as local role models.[*]

3 SUPER-PRODUCTIVE COMPANIES GENERATE MORE ECONOMIC VALUE PER EMPLOYEE.

In terms of local entrepreneurship, some industries are much more productive than others. Many of the most common local businesses, such as restaurants, retail stores, and hotels, are not incredibly productive. Most businesses in these areas generate less than $70,000 of total value in products or services per worker each year.[16]

Other sectors produce far more. Companies in industries like software and financial services generate an average of more than $150,000 of value in products or services per worker every year.[17] This makes the "super-productive" companies in these sectors especially important to local economies.

The industries of super-productive businesses can be classified into four groups:

▶ Advanced manufacturing sectors including those that design and produce electronics, machinery, medical devices, pharmaceuticals, and specialty chemicals;

▶ High-value research and consulting such as those that provide consumer research, engineering and environmental services, IT consulting, and management consulting;

▶ Software-based sectors including companies working in cybersecurity, data analytics, e-commerce, and software-as-a-service; and

▶ Other high-productivity sectors such as lending-based businesses, investment banking, oil and gas extraction, and logistics providers.[†]

Since these types of businesses are more productive, they tend to create high-quality jobs that pay employees higher-than-average salaries. They are also valuable to local regions because of where their customers are located. While less productive businesses like restaurants tend to sell almost exclusively to local customers, super-productive companies are usually in industries that sell primarily to customers in other cities and countries. This means that the growth of these businesses helps to significantly increase the size of the local economy.

4 TECH-ENABLED BUSINESSES ARE BETTER POSITIONED FOR GROWTH IN THE FUTURE.

Super-productive sectors are also well-positioned to expand in the future, since they have a larger proportion of STEM workers than other businesses, on average. (STEM workers are those with occupations related to science, technology, engineering and math.)[18] This means that this set of industries can also be referred to as "tech-enabled" since most super-productive sectors rely heavily on new technologies and workers in knowledge-intensive STEM occupations.
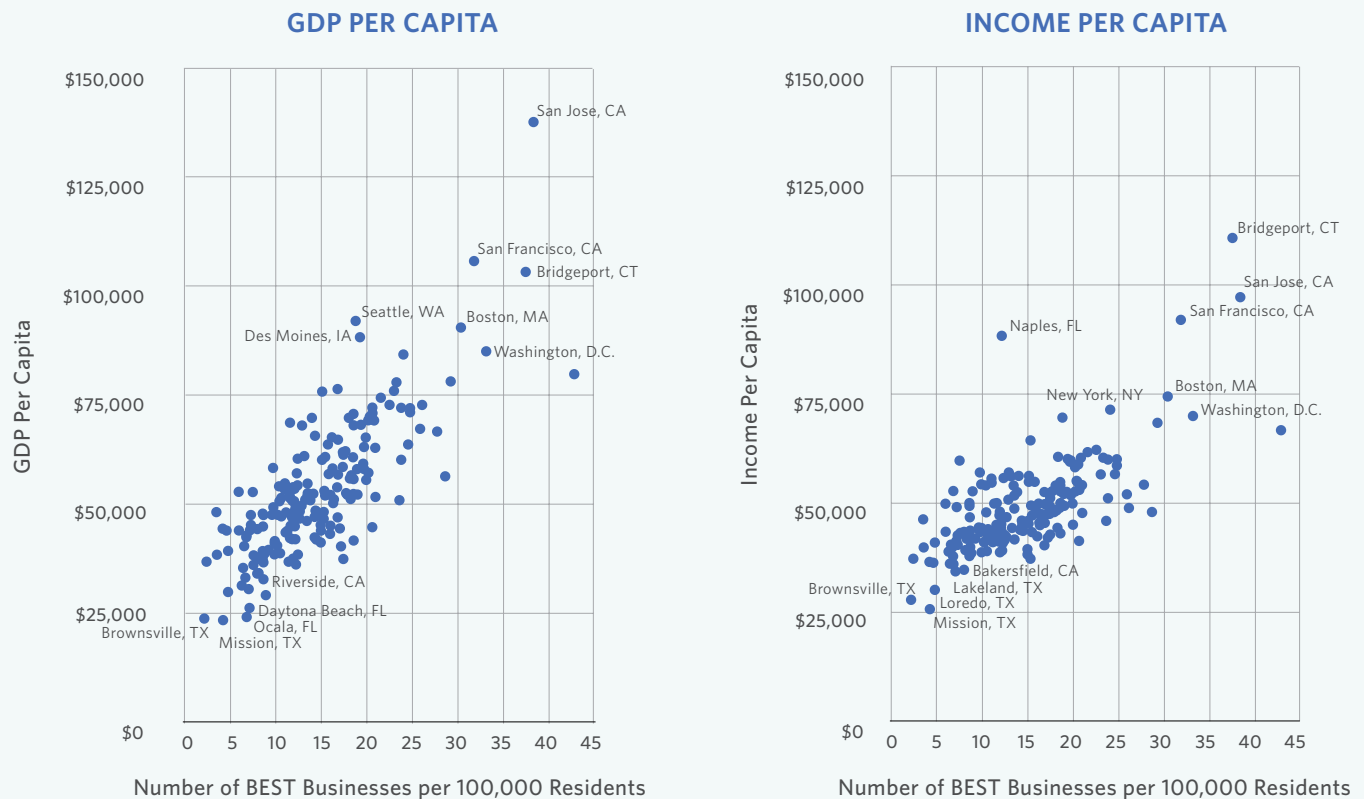
Companies that employ more STEM workers are expected to have much greater productivity growth than other businesses. Across the entire United States, the output generated by companies with large numbers of employees in STEM occupations is projected to grow by 20 percent on average during the next eight years, compared to 14 percent for all other businesses.[19]

THE "BEST" BUSINESSES AND ECONOMIC PERFORMANCE IN MAJOR METROPOLITAN AREAS

Cities that generate more of the BEST businesses have greater productivity and higher incomes.

GDP PER CAPITA

Number of BEST Businesses per 100,000 Residents

INCOME PER CAPITA

Number of BEST Businesses per 100,000 Residents

Note: The R^2 for the model on the left is 0.63, while the R^2 for the model on the right is 0.49. Major metropolitan areas are those with populations of 250,000 or more. Data on the number of the BEST businesses, GDP, income, and population size are based on 2017 figures.

Sources: Endeavor Insight analysis, U.S. Census Bureau, U.S. Bureau of Economic Analysis, and Dun & Bradstreet.

THE "BEST" BUSINESSES CAN EXPLAIN MOST OF THE PRODUCTIVITY DIFFERENCES AMONG U.S. CITIES.

The characteristics highlighted on the previous pages are individually associated with job creation, productivity, and future growth. Recent data has made it possible to examine a unique group of companies that combine all four of these traits.

The "BEST" businesses — those that are big, entrepreneurial, super-productive and tech-enabled — can effectively explain the differences in GDP per capita and income found among U.S. cities.* The strength of the relationship between developing more of the BEST businesses and these measures of economic growth can be seen in the graphs above. Metropolitan areas with the highest GDP and income per capita, such as San Francisco, Boston, and Ann Arbor, are home to many of these companies. Poorer communities like Flint, Michigan and Riverside, California contain very few.

The most productive cities have double the number of the BEST businesses that are found in the least productive cities, even when adjusting for differences in population size.[†,20] As the chart on the following page illustrates, the BEST businesses are also far better at explaining the local productivity differences than the outcomes targeted by typical economic development strategies.

There are a number of reasons why these relationships are so strong. Private-sector businesses generate most of the nation's productivity and pay most of workers' wages. Businesses that grow to be big generate the majority of the private sector's sales and worker pay, so it makes sense that cities with more big companies would thrive.

Other research has shown that the more highly educated workers a community has, the better it performs economically.[21] However, college graduates do not necessarily remain in a community. People with college degrees move to new cities far more frequently than other U.S workers.[22] In an effort to retain or attract educated workers in their cities, some civic leaders feel they must spend millions of dollars on sports stadiums and other expensive attractions.
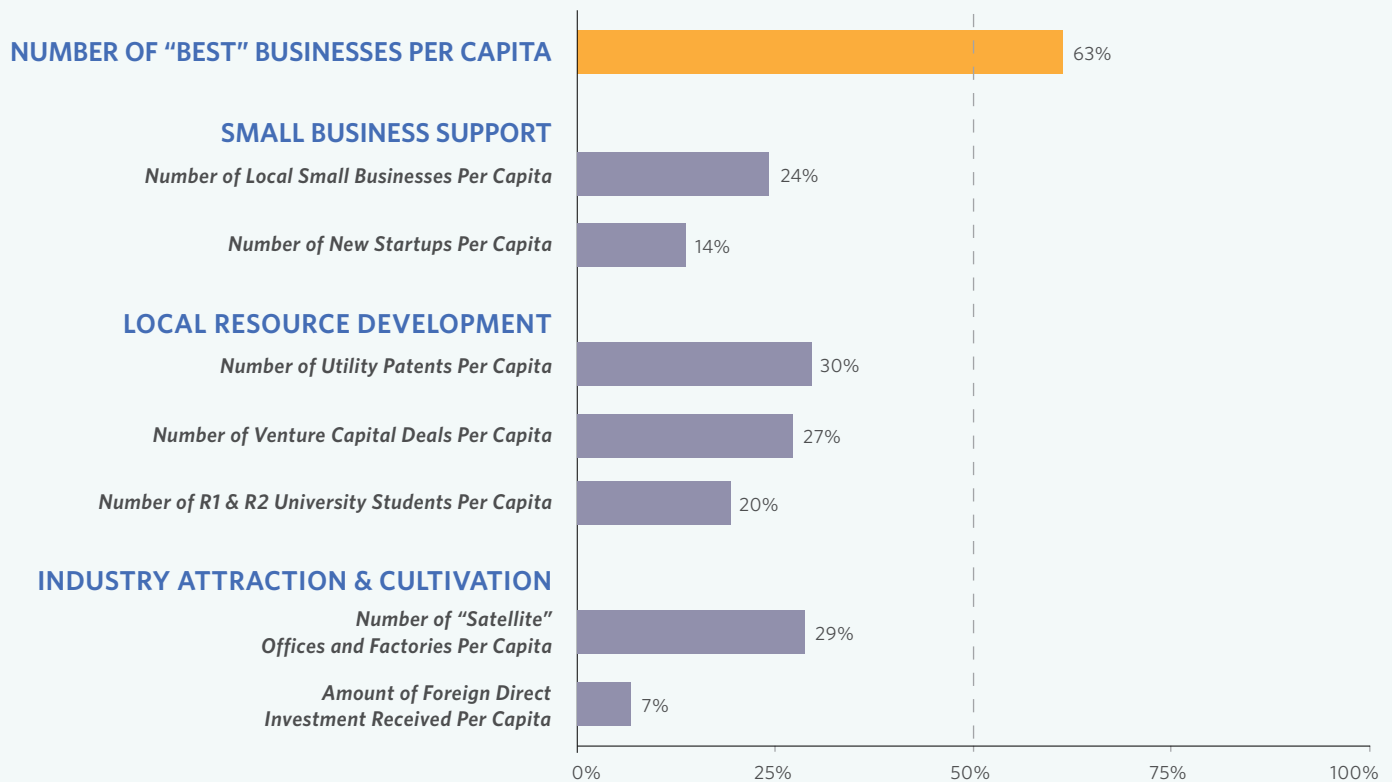
But why do highly educated workers actually move? According to the Census Bureau, the most common reason workers with college degrees make long distance moves is for a job.[23] This highlights another benefit of the BEST businesses: as they grow and hire large numbers of knowledge-intensive workers, they attract and retain highly educated residents who promote economic growth.

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* The criteria that define the BEST businesses are listed on the previous pages and explained in the methodology on page 21. Previous Endeavor Insight research on similar types of firms referred to those companies as large, high-value, entrepreneurial (LHVE) companies. Though the definitions for the BEST businesses and LHVE companies are not exactly the same, they overlap considerably.

† The most productive cities are defined as those in the top-tercile of GDP per capita performance among major metro areas in 2017. The least productive cities are those in the bottom tercile.

EXPLANATORY POWER: PRODUCTIVITY DIFFERENCES AMONG MAJOR METROPOLITAN AREAS

To what extent can typical economic development strategies explain the difference in local GDP per capita?
(Outcomes with the highest explanatory power)

NUMBER OF "BEST" BUSINESSES PER CAPITA — 63%

SMALL BUSINESS SUPPORT
- *Number of Local Small Businesses Per Capita* — 24%
- *Number of New Startups Per Capita* — 14%

LOCAL RESOURCE DEVELOPMENT
- *Number of Utility Patents Per Capita* — 30%
- *Number of Venture Capital Deals Per Capita* — 27%
- *Number of R1 & R2 University Students Per Capita* — 20%

INDUSTRY ATTRACTION & CULTIVATION
- *Number of "Satellite" Offices and Factories Per Capita* — 29%
- *Amount of Foreign Direct Investment Received Per Capita* — 7%

(Axis: 0%, 25%, 50%, 75%, 100%)

Note: The values for explanatory power above are equivalent to the R^2 values from regression analyses in which each variable's 2017 value was tested to predict for 2017 GDP per capita among all U.S. metro areas with 250,000 or more in population, except for venture capital deals, which is based on the 139 of these metro areas where data was available.
Sources: Dun & Bradstreet; U.S. Census Bureau; U.S. Bureau of Labor Statistics; U.S. Patent and Trademark Office; PwC MoneyTree; National Center for Education Statistics.

DEFINITION OF THE "BEST" BUSINESSES

Big	Entrepreneurial	Super-Productive & Tech-Enabled
Big companies are those that grow to have at least 50 employees. Though less than 5 percent of U.S. businesses grow to reach this size, these companies generate the majority of new jobs created among businesses in their age group. Most big companies that grow to become big have far more than 50 employees. The typical business that grows big employs more than 400 workers. The small number of businesses that grow big generate the majority of revenues across most major industries and pay workers higher average salaries when compared to smaller firms. Fast-growing companies like these are more likely to hire workers from underrepresented groups.	**Entrepreneurial businesses are those created and led by local founders. These "homegrown" companies tend to reinvest more earnings back into their communities and promote local philanthropy.** Entrepreneurial firms that grow big also have the potential to spawn other local successes in their cities. This comes primarily through former employees who go on to become entrepreneurs themselves, and when successful founders serve as mentors and investors for other upcoming entrepreneurs in their communities.	**Super-productive businesses are those in industries with at least $100,000 in average productivity per employee each year. These companies can also be referred to as "tech-enabled" since they employ more STEM workers than other businesses, on average.** These knowledge-intensive companies attract more revenues from outside their communities. They are found in industries that include: • Advanced manufacturing sectors, • High-value research and consulting, • Software-based sectors, and • Other productive industries like investment banking and logistics. The full list of industries they operate in can be found in Appendix 2.

TOP-PERFORMING CITIES CONTINUALLY GENERATE MORE OF THE "BEST" LOCAL BUSINESSES.

ECONOMIC GROWTH AND STABILITY ARE LINKED TO CONSISTENTLY GENERATING MORE OF THE "BEST" BUSINESSES.

The BEST businesses can be found in metropolitan areas all over the country, as the tables on the following page demonstrate. There is also a strong relationship between an increase in the number of the BEST businesses founded in a city and future growth.
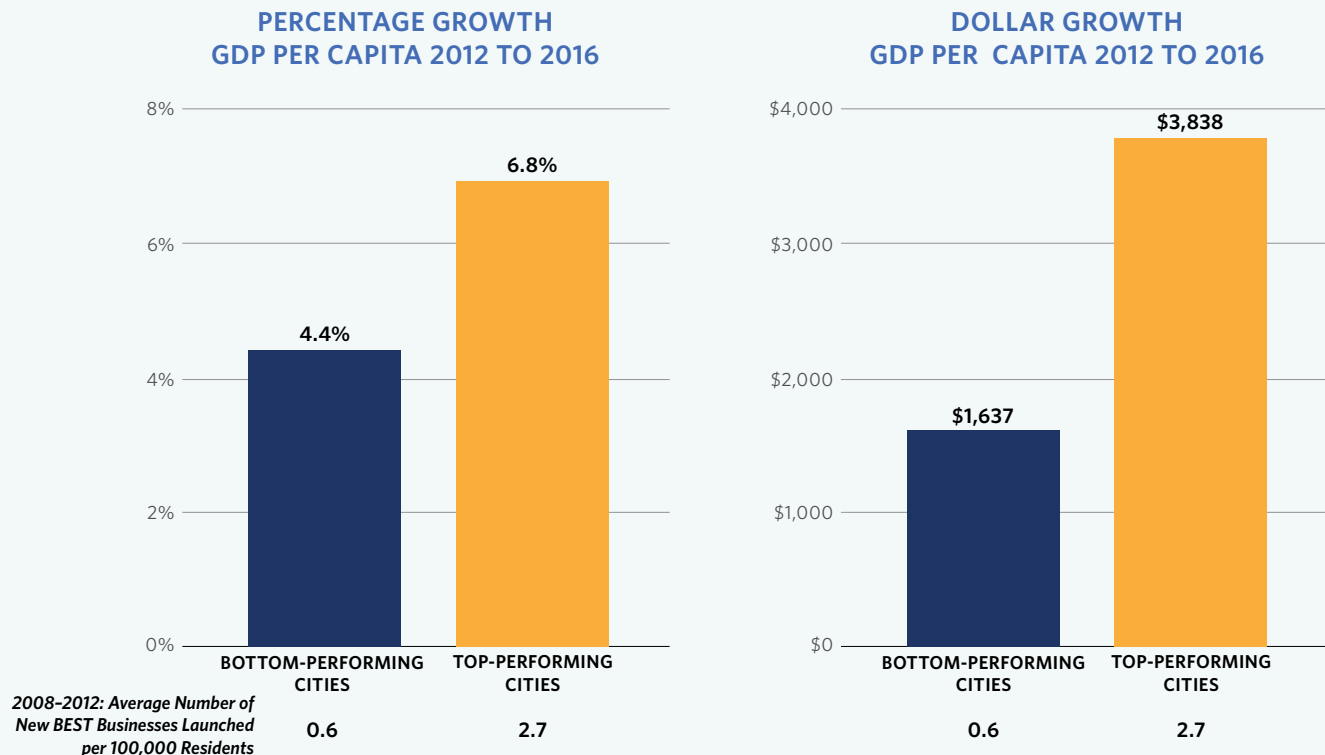
Analyses of data on large U.S. cities from 1998 to 2017 offers an indication of how quickly these companies accelerate economic growth. **This shows that if the number of BEST businesses per 100,000 residents in a city increased by one during a four-year period, it was associated with more than $1,000 in local GDP per capita growth in the following four years.**[*] For a metropolitan area of one million people, this means that adding 25 more of the BEST local businesses would increase annual GDP more than $2.5 billion.

The impact of increasing the number of the BEST businesses can also be seen in data from the period of recession and slow recovery that followed the 2008 financial crisis. The top-performing cities added an average of 2.7 new BEST businesses per 100,000 residents between 2008 and 2012. These areas went on to grow by an average of 6.8 percent from 2012 to 2016. Bottom-performing cities added fewer than one BEST business per 100,000 residents, on average, between 2008 and 2012, and subsequently grew by 4.4 percent from 2012 to 2016.[†,24]

Continuously generating more of the BEST businesses also helps to protect communities from risk. Many underperforming U.S. cities spent years relying on a small number of very old, local companies to provide economic growth. When these companies failed or were bought out by competitors headquartered in other cities, their communities suffered serious consequences. Consistently generating large numbers of the BEST businesses helps cities avoid this fate by creating a more diverse and secure economic foundation.

ECONOMIC GROWTH FOLLOWING THE RECESSION AND SLOW RECOVERY OF 2008 TO 2012

Cities that generated more of the BEST businesses between 2008 and 2012 grew faster from 2012 to 2016.

**PERCENTAGE GROWTH
GDP PER CAPITA 2012 TO 2016**

	BOTTOM-PERFORMING CITIES	TOP-PERFORMING CITIES
GDP % growth	4.4%	6.8%

2008–2012: Average Number of New BEST Businesses Launched per 100,000 Residents

	BOTTOM-PERFORMING CITIES	TOP-PERFORMING CITIES
	0.6	2.7

**DOLLAR GROWTH
GDP PER CAPITA 2012 TO 2016**

	BOTTOM-PERFORMING CITIES	TOP-PERFORMING CITIES
GDP $ growth	$1,637	$3,838

	BOTTOM-PERFORMING CITIES	TOP-PERFORMING CITIES
	0.6	2.7

Sources: Endeavor Insight analysis, U.S. Census Bureau, U.S. Bureau of Economic Analysis, and Dun & Bradstreet.

[*] This calculation was determined to be highly significant using a fixed effects model on panel data from 1998 to 2017 for all 107 metro areas with 500,000 or more in population with adjustments made to account for heteroskedasticity and autocorrelation.
[†] This analysis was conducted among metropolitan areas with 250,000 or more in population. The top-performing cities are those in the top tercile in terms of the number of new BEST businesses generated per 100,000 residents between 2008 and 2012. The bottom-performing cities are those in the bottom tercile by the same measure.

EXAMPLES OF THE "BEST" BUSINESSES
The BEST businesses can be found in every major U.S. city in a wide variety of super-productive sectors.
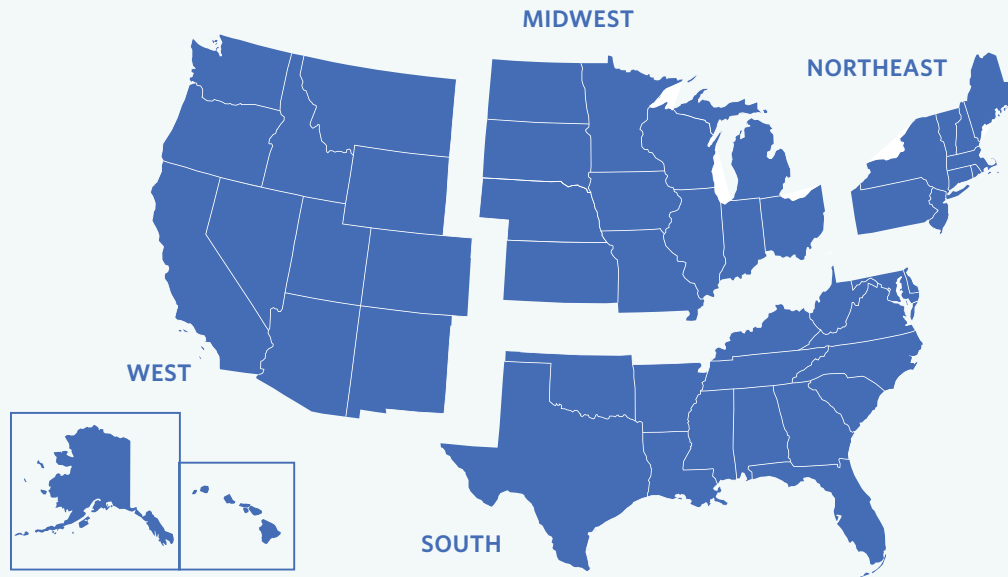
WEST

Metropolitan Area	Example of Local BEST Business
Albuquerque, NM	Lavu
Bakersfield, CA	Prosoft Technology
Boise City, ID	Cradlepoint
Colorado Springs, CO	Skyline Products
Denver-Aurora-Lakewood, CO	Intellisource
Fresno, CA	ERI
Las Vegas-Henderson-Paradise, NV	Rimini Street
Los Angeles-Long Beach-Anaheim, CA	Hulu
Modesto, CA	G3 Enterprises
Ogden-Clearfield, UT	Gura Gear
Phoenix-Mesa-Scottsdale, AZ	GoDaddy
Portland-Vancouver-Hillsboro, OR-WA	Simple
Provo-Orem, UT	Qualtrics
Riverside-San Bernardino-Ontario, CA	K&N Engineering
Sacramento-Roseville-Arden-Arcade, CA	ModSquad
Salt Lake City, UT	Instructure
San Diego-Carlsbad, CA	Brain Corp
San Francisco-Oakland-Hayward, CA	Square
San Jose-Sunnyvale-Santa Clara, CA	Zoom
Seattle-Tacoma-Bellevue, WA	Zipwhip
Spokane-Spokane Valley, WA	etailz
Stockton-Lodi, CA	MSRCOSMOS
Tucson, AZ	Lazel
Urban Honolulu, HI	Kona Brewing Company
Wichita, KS	TWG

MIDWEST

Metropolitan Area	Example of Local BEST Business
Akron, OH	Medic Management Group
Chicago-Naperville-Elgin, IL-IN-WI	Grubhub
Cincinnati, OH-KY-IN	Empower
Cleveland-Elyria, OH	Athersys
Columbus, OH	CoverMyMeds
Dayton, OH	Cdo Technologies
Des Moines-West Des Moines, IA	CN Utility Consulting
Detroit-Warren-Dearborn, MI	Drought
Grand Rapids-Wyoming, MI	Blue Medora
Indianapolis-Carmel-Anderson, IN	ExactTarget
Kansas City, MO-KS	PayIt
Madison, WI	Redox
Milwaukee-Waukesha-West Allis, WI	Telkonet
Minneapolis-St. Paul-Bloomington, MN-WI	Code42
Omaha-Council Bluffs, NE-IA	TotalWellness
St. Louis, MO-IL	Asynchrony Labs
Toledo, OH	OnPoint Group
Youngstown-Warren-Boardman, OH-PA	Turning Technologies

NORTHEAST

Metropolitan Area	Example of Local BEST Business
Albany-Schenectady-Troy, NY	Amri
Allentown-Bethlehem-Easton, PA-NJ	Computer Aid, Inc.
Baltimore-Columbia-Towson, MD	Millennial Media
Boston-Cambridge-Newton, MA-NH	Wayfair
Bridgeport-Stamford-Norwalk, CT	Booking Holdings
Buffalo-Cheektowaga-Niagara Falls, NY	ACV Auctions
Harrisburg-Carlisle, PA	Ritter Insurance Marketing
Hartford-West Hartford-East Hartford, CT	SCIO Health Analytics
Lancaster, PA	Primitives by Kathy
New Haven-Milford, CT	Arvinas
New York-Newark-Jersey City, NY-NJ-PA	MongoDB
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	goPuff
Pittsburgh, PA	DuoLingo
Portland-South Portland, ME	Shipyard Brewing Company
Providence-Warwick, RI-MA	Upserve
Rochester, NY	CloudCheckr
Scranton-Wilkes-Barre-Hazleton, PA	Pepperjam
Springfield, MA	Disability Management Services
Syracuse, NY	Terakeet
Worcester, MA-CT	Victory Productions

SOUTH

Metropolitan Area	Example of Local BEST Business
Atlanta-Sandy Springs-Roswell, GA	QASymphony
Augusta-Richmond County, GA-SC	Medac
Austin-Round Rock, TX	Q2ebanking
Baton Rouge, LA	Pod Pack International
Birmingham-Hoover, AL	Fleetio
Cape Coral-Fort Myers, FL	NeoGenomics Lab
Charleston-North Charleston, SC	Benefitfocus
Charlotte-Concord-Gastonia, NC-SC	LendingTree
Chattanooga, TN-GA	FreightWaves
Columbia, SC	Softdocs
Dallas-Fort Worth-Arlington, TX	Mercado Labs
Deltona-Daytona Beach-Ormond Beach, FL	DuvaSawko
Durham-Chapel Hill, NC	Zaloni
El Paso, TX	Transtelco
Fayetteville-Springdale-Rogers, AR-MO	Collective Bias
Greensboro-High Point, NC	Elm Street Technology
Greenville-Anderson-Mauldin, SC	ChartSpan

Metropolitan Area	Example of Local BEST Business
Houston-The Woodlands-Sugar Land, TX	Cardtronics
Jackson, MS	Total Transportation
Jacksonville, FL	Web.com
Knoxville, TN	PerfectServe
Lakeland-Winter Haven, FL	Draken International
Lexington-Fayette, KY	Viamedia
Little Rock-North Little Rock-Conway, AR	First Orion
Louisville-Jefferson County, KY-IN	El Toro
McAllen-Edinburg-Mission, TX	Rental World
Memphis, TN-MS-AR	Diversified Conveyors International
Miami-Fort Lauderdale-West Palm Beach, FL	NovoPayment
Nashville-Davidson-Murfreesboro-Franklin, TN	SmileDirectClub
New Orleans-Metairie, LA	Lucid
North Port-Sarasota-Bradenton, FL	Voalte
Oklahoma City, OK	Paycom Software

Metropolitan Area	Example of Local BEST Business
Orlando-Kissimmee-Sanford, FL	XYMOGEN
Palm Bay-Melbourne-Titusville, FL	Aerodyne Industries
Raleigh, NC	Pendo
Richmond, VA	Impact Makers
San Antonio-New Braunfels, TX	Rackspace
Tampa-St. Petersburg-Clearwater, FL	KnowBe4
Tulsa, OK	Capsire
Virginia Beach-Norfolk-Newport News, VA-NC	DOMA Technologies
Washington-Arlington-Alexandria, DC-VA-MD-WV	Evolent Health
Winston-Salem, NC	Inmar

Note: Companies were identified in early 2020 prior to the onset of the COVID-19 crisis.
Source: Endeavor Insight analysis.

CITIES SHOULD USE THE STRATEGY OF ENTREPRENEUR-LED ECONOMIC DEVELOPMENT TO SUPPORT THE "BEST" BUSINESSES AND GENERATE ECONOMIC GROWTH.

SUPPORTING THE "BEST" BUSINESSES REQUIRES A DIFFERENT APPROACH TO ECONOMIC DEVELOPMENT.

It is clear that the most productive metropolitan areas separate themselves from other cities by consistently generating more of the BEST local businesses. Endeavor Insight has studied how these communities encourage this growth. They tend to share an important characteristic. **In top-performing cities, entrepreneurs from the BEST businesses play critical leadership roles by doing three things:**

1. **Demonstrating where local entrepreneurial strengths exist through the growth of their companies;**

2. **Constructing networks that enable successful entrepreneurs to effectively support the growth of upcoming companies; and**

3. **Taking action to increase the supply of the resources that local companies need to grow.** [*]

These types of entrepreneurial leadership are more difficult to find in less-productive metropolitan areas. However, this does not have to be the case. Decision makers who wish to generate more of the BEST businesses can help to encourage these actions.

The authors of this report have worked with a number of partners to design a new strategy that enhances the leadership of local entrepreneurs at successful companies like the BEST businesses. [†] This approach, referred to as "Entrepreneur-Led Economic Development," is different from many other economic programs because it requires decision makers to act as facilitators for entrepreneurs, rather than to take charge themselves.

Entrepreneur-Led Economic Development promotes and enhances the leadership of entrepreneurs who have already built successful businesses in order to support the growth of more local companies. It is made up of four components that can help decision makers follow the effective practices found in top-performing cities.

The focus on helping businesses grow is critical to this strategy, since this is how companies generate the new jobs and revenues that increase the size of their local economies. Without growth, entrepreneurs cannot contribute to local economic development.

Decision makers can use this approach to take advantage of one of their most valuable economic assets: entrepreneurs who already know how to build successful companies in their local communities. The unique experiences, skills, and connections that these successful entrepreneurs possess can help other local companies grow faster.

The four components summarized briefly in this section can be used to support all types of growing entrepreneurial companies. However, Entrepreneur-Led Economic Development is likely to be most effective when it is focused primarily on the BEST local businesses since these companies create high-value jobs and significantly boost productivity as they grow.

THE FOUR COMPONENTS OF ENTREPRENEUR-LED ECONOMIC DEVELOPMENT

① IDENTIFY THE ENTREPRENEURIAL BUSINESSES THAT HAVE BEEN GROWING IN THE REGION AND THE LOCAL STRENGTHS THEY REPRESENT.

In order to support entrepreneurs at growing companies, decision makers need to know who they are. It is also important to identify these founders because they offer examples of the types of businesses that can succeed in the local community.

Successful entrepreneurial companies tend to concentrate in specific cities and regions with other high-performing businesses in the same industry. Many fast-growing financial technology companies are located in New York City, for example, while Minneapolis has a large number of successful medical device companies, and Seattle is home to many large software businesses. These groups of companies represent distinct competitive advantages in entrepreneurship for each of these cities.

Data from successful local entrepreneurs can show decision makers where similar advantages already exist or are starting to emerge in their own communities. Identifying these advantages allows decision makers to follow the lead of entrepreneurs when determining the types of businesses to support. It can also help communities avoid common mistakes found in cities where entrepreneurship programs are not built on existing strengths.[*] (A case study demonstrating how this can be done for the BEST local businesses is found on page 16.)

Entrepreneurs at growing businesses do more than just lead by example. Identifying the entrepreneurs at growing businesses is also the first step that decision makers must take before pursuing the following two components.

② ENCOURAGE SUCCESSFUL ENTREPRENEURS TO BUILD EFFECTIVE NETWORKS OF SUPPORT FOR LOCAL BUSINESSES THAT CAN GROW.

Research has shown that local businesses grow faster when their founders are connected to entrepreneurs who have experience leading companies that have grown to be big.[†,25] These connections can occur in a variety of different ways. Many founders work as employees of successful entrepreneurial businesses before going off to start their own companies. Others are fortunate to have successful entrepreneurs acting as their mentors or investors.[26]

Effective entrepreneurship networks enable the leaders of businesses with the most growth potential to build relationships like these with successful entrepreneurs in their communities. Through the work of these successful investors, mentors, and former employers, upcoming founders gain access to knowledge, connections, and resources that can help their businesses grow.

Successful local networks tend to be a mix of formal programs and informal one-on-one relationship building. They are most effective when they properly match successful entrepreneurs with growing companies that can make the greatest use of their time. The amount of overall connectivity can be either a positive or negative sign depending on the types of people being connected and how well they are matched together. There is also evidence that networks tend to specialize by sector. It is common to see several distinct entrepreneurship networks operating within different super-productive sectors in the same city.

Decision makers will also benefit from thinking broadly when working to facilitate entrepreneurship networks. There are often opportunities to build valuable relationships with founders of growing businesses and "expats," who formerly lived in the community, but have since moved away and had success. Many small- and mid-sized cities can also benefit from working with neighboring cities to support entrepreneurs as a region with greater network resources than any one city possesses individually. Last but not least, those working to develop local networks should make sure that founders from underrepresented groups are included as well. Great entrepreneurial talent can come from anywhere and communities are stronger when they are more inclusive.

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* These common mistakes include the "Myth of Quantity," which suggests that increasing the total quantity of startups, support organizations, or resources will automatically generate more productivity. This can be harmful since it limits support for sectors with the highest potential, often promotes unqualified leaders, and spreads limited resources so thin that they have little effect.
† Research shows that senior executives at entrepreneurial companies can also provide a great deal of value by acting as mentors and investors to the founders of upcoming companies likely because they share similar knowledge and connections that come from growing businesses and leading large organizations. For more information, see the Endeavor Insight report "Fostering Productive Entrepreneurship Communities" available at endeavor.org/fpec.

③ PARTNER WITH THE LEADERS OF GROWING BUSINESSES TO INCREASE THE SUPPLY OF THE RESOURCES THAT LOCAL ENTREPRENEURS NEED MOST.

What do entrepreneurs at growing businesses need from their local communities? Endeavor Insight has interviewed thousands of entrepreneurs at fast-growing companies to answer this question.

According to these interviews, entrepreneurs at growing businesses need governments to provide a fair and supportive business environment. This does not necessarily mean ultra-low taxes and extremely lax regulatory enforcement — many of the cities with the highest proportion of the BEST businesses are places like San Francisco and Boston that have relatively high taxes and strict regulations. However, entrepreneurs do value consistency and fairness. Unpredictable policy enforcement and business incentives that benefit individual out-of-state companies can make it harder for growing businesses to compete.

Entrepreneurs also need cities to provide good quality of life for local residents. Great founders want to live in great places. When asked why they chose to start their companies in the specific cities where they are located, entrepreneurs at fast-growing companies reported that their top reasons were connections to other people in the community and local quality of life.[27] Ensuring that cities are great places to live also helps founders recruit the high-skill employees that are critical for the growth of their businesses.

One final need is something that is often overlooked. **Entrepreneurs at fast-growing companies need communities that help them solve problems accessing the resources they need to grow.** These issues tend to be highly specific to individual industries. They can be as simple as local governments addressing unintended code restrictions that prevent laboratory construction or allowing greater density in areas where office space is limited. Other problems may require more long-term collaboration to increase the supply of workers from local schools trained in specific skills or to build new infrastructure. However, the only way that decision makers can learn about these types of problems is to build relationships with entrepreneurs at growing companies, and make efforts to listen and work together to address these needs.

④ MEASURE DATA ON GROWING ENTREPRENEURIAL BUSINESSES TO TRACK RESULTS AND REGULARLY SHARE FINDINGS WITH THE COMMUNITY.

The strengths, networks, and resource needs addressed by Entrepreneur-Led Economic Development can change rapidly within a city. Decision makers need to analyze data in each of these areas to adapt their approaches and evaluate the performance of their efforts.

Data can also be useful for highlighting the jobs and other economic outcomes created by the growth of entrepreneurial companies supported by local programs. The ideal set of information for decision makers to use is a combination of brief interviews with leading local entrepreneurs, as well as data from public and private databases focused on entrepreneurship and economic growth.

Decision makers can help align the work of different local organizations that are involved in supporting growing entrepreneurs by sharing the results of their analyses. **The most effective way to use data to build local consensus is to share it frequently and use it as a platform to encourage discussions that help to elevate the voice of local entrepreneurs who are growing businesses.**

CONCLUSION: COMMUNITIES HAVE AN OPPORTUNITY TO SUPPORT THE "BEST" BUSINESSES AND INCREASE FUTURE GROWTH.

It does not take a large number of the BEST businesses to make a difference in a community. Data suggests that if the typical city had a small increase in the BEST local businesses — usually just five to ten more — it would see significant GDP growth.

The strategy of Entrepreneur-Led Economic Development can help decision makers follow the example of top-performing cities to generate more of these companies. This approach can complement the typical economic programs already found in most U.S. cities since it requires no changes in the way existing initiatives are conducted.

Entrepreneur-Led Economic Development also brings the benefit of speed. Since the successful entrepreneurs it empowers are already living and working in their local communities, each of these four components can be implemented very quickly and at a relatively low cost.

Analyses of U.S. cities indicate that results can come swiftly as well. There is a strong relationship between an increase in the number of the BEST businesses in a community and growth in a local economy over the next few years.

MIAMI'S COMPETITIVE ADVANTAGES IN ENTREPRENEURSHIP

CITIES CAN BUILD ON THEIR ENTREPRENEURIAL ADVANTAGES.

A city's competitive advantages in entrepreneurship can be found by identifying groups of companies that meet two criteria: 1) the local concentration of the BEST businesses is greater than the proportion found in the rest of the United States, and 2) the continued dynamism of those local businesses can be confirmed by identifying one or more examples of the BEST businesses founded in the last ten or twenty years.

These advantages are often an indication that the cycles of reinvestment and the spawning of new generations of big companies are well underway. Their presence can also help leaders to identify undiscovered economic strengths that entrepreneurs are using to build growing businesses. Though leaders should support the growth of all types of the BEST businesses that emerge in their communities, initiatives that increase or build on existing competitive advantages will likely be more effective than most other programs.

ANALYSES IDENTIFIED SIX COMPETITIVE ADVANTAGES IN ENTREPRENEURSHIP IN MIAMI.

The Greater Miami metro area is fortunate to have a diverse set of competitive advantages in entrepreneurship that can be found in six types of the BEST local businesses. They are:

- Passenger Transit and Transportation Services Companies;

- Financial Intermediary Businesses;

- Consulting Firms;

- Pharmaceuticals and Medical Device Companies;

- Software and Software-Enabled Companies; and

- Advertising Firms.

As the table on the next page illustrates, the local concentration of these types of the BEST businesses is up to 2.9 times greater than what is found in the rest of the United States. Local dynamism among these companies is also equal to or greater than that found in the rest of the country. Overall, the BEST businesses in the city are much younger than the ones found in other major metro areas, on average.

The prominent subsectors identified in the table indicate the areas in which entrepreneurs in Miami stand out the most compared to other cities with similar advantages. In software, for example, a number of the BEST local businesses specialize in selling software-as-a-service (SaaS). These companies include e-Builder, a construction management platform that was acquired for $500 million, and Farelogix, a SaaS company supporting the airline industry that was sold for more than $350 million in 2018. eCommerce is another area where Miami's BEST businesses stand out. The online pet retailer Chewy.com is the most prominent local example, since it went public last year. The nine-year-old company is currently worth more than $10 billion and has over 9,000 employees.

Businesses like these are critically important to Greater Miami since they tend to hire greater numbers of college graduates than companies in other sectors. These knowledge-intensive jobs offer the community an important opportunity to build on its existing strengths. The average wage paid by these groups of the BEST companies is more than $75,000 per year, which is $20,000 above the average personal income of local residents.

ANALYSES: MIAMI'S COMPETITIVE ADVANTAGES IN ENTREPRENEURSHIP

TYPES OF COMPANIES AND PROMINENT SUBSECTORS	LOCAL CONCENTRATION OF THE "BEST" BUSINESSES VS. THE REST OF THE U.S.	LOCAL DYNAMISM OF THE "BEST" BUSINESSES VS. THE REST OF THE U.S.	LOCAL NUMBER OF THE "BEST" BUSINESSES IN GREATER MIAMI
Passenger Transit and Transportation Services Companies *Passenger Airlines, Aviation-Related Services, Specialty Cargo and Freight*	2.9x	Greater Than Average	40+
Financial Intermediary Businesses *Investment Banking, Digital Payments and Loans, Retail Banking*	1.4x	Average	50+
Consulting Firms *Healthcare Consulting, Financial Services Consulting, IT Consulting*	1.3x	Greater Than Average	50+
Pharmaceutical and Medical Device Companies *Prescription Drugs and Treatments, Medical Devices, Other Manufacturing including Supplements and Vitamins*	1.3x	Greater Than Average	15+
Software and Software-Enabled Companies *SaaS, eCommerce*	1.2x	Greater Than Average	50+
Advertising Firms *Online Marketing, Advertising and Branding Agencies*	1.1x	Greater Than Average	15+

Source: Endeavor Insight analysis.

ATTRIBUTION

ENDNOTES

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METHODOLOGY FOR IDENTIFYING THE "BEST" BUSINESSES

DETERMINING SECTORS: Endeavor Insight identified industries that met several criteria, including: (1) those with $100,000 or more in GDP per worker, i.e. "super-productive"; and (2) those that tend to sell products or services to customers outside their immediate geographies. The sectors were then tested as a group to ensure the selection was "tech-enabled," with higher than average proportions of employment in STEM occupations than the national average. The full list of super-productive, tech-enabled sectors appears in Appendix 2.

DATA COLLECTION: Endeavor Insight analyzed data from Dun & Bradstreet to identify companies with 50 or more employees operating in super-productive, tech-enabled sectors (using the North American Industry Classification System), and that are located within each metro region in the United States. To narrow the data to entrepreneurial businesses we omitted nonprofits, public sector entities, subsidiaries, branches, and franchises.

LIMITATIONS: There are aspects of the available data on entrepreneurial companies that limited the analysis. A review of the data from Dun & Bradstreet revealed inconsistencies and inaccuracies. The authors assumed that variations were consistent across metropolitan areas and sectors. In addition, there were specific factors that may have clouded results. These include:

▶ Indistinguishable Entrepreneurial Origins: The available Dun & Bradstreet search fields allow for ruling out nonprofits, public sector entities, subsidiaries, branches, and franchises. This does not, however, affirm that the company is entrepreneurial, i.e. founded by a person in the local metropolitan area as opposed to other scenarios, for instance, mergers and spinouts from corporations or universities. As a part of the process for verifying the data from Dun & Bradstreet, it also became clear that the reported year founded for companies can often reflect activity such as private equity buyouts and mergers, rather than the original entrepreneurial start of a company.

▶ Inconsistent Geographic Delineations: Due to limitations of the Dun & Bradstreet infrastructure the geographic delineations for metropolitan areas is out of date. This impacts the results for BEST businesses per capita as population data is based on 2017 and 2018 delineations from the U.S. Census Bureau.

GLOSSARY

▶ **Big Companies:** Companies with 50 or more employees.

▶ **Competitive Advantages in Entrepreneurship:** Groups of the BEST businesses in a similar industry and given geographic area identified by their concentration and dynamism.

▶ **Dynamism:** A measure based on the number of BEST businesses founded within the 10 or 20 years.

▶ **Entrepreneurial Companies:** Companies that are founder-led and headquartered locally. This excludes entities such as governments and charitable organizations operating outside the for-profit legal framework, as well as satellites of companies headquartered elsewhere.

▶ **Corporate Satellites:** Plants, secondary offices, and franchise locations of corporations, often located in different cities or countries than the corporate headquarters.

▶ **Gross Domestic Product (GDP):** The market value of goods and services produced by labor and property in the United States, regardless of nationality. (U.S. Bureau of Economic Analysis.)

▶ **Major Cities:** Metropolitan statistical areas with 250,000 or more in population.

▶ **Metropolitan Statistical Area:** A geographic area defined by the U.S. Census Bureau with at least one urbanized area of 50,000 or more inhabitants.

▶ **Microbusinesses:** Companies employing 10 or fewer people.

▶ **Productivity:** Economic output most measured in this report as GDP per capita.

▶ **Projected Growth:** Rates provided by the U.S. Bureau of Labor Statistics indicating expected employment growth or output dollars for industries.

▶ **Startups:** New companies less than one year old with at least one employee.

▶ **STEM:** Science, technology, engineering and math. STEM Occupations are designated by the U.S. Bureau of Labor Statistics.

▶ **Super-Productive Industries:** Sectors that produce high levels of value in products or services per worker.

▶ **Support Organizations:** Organizations offering skill development programs, investment, mentoring or other support for entrepreneurs and startups. These include incubators, accelerators, and forums.

▶ **Tech-Enabled Industries:** Sectors that have large proportions of STEM workers, on average.

▶ **Venture Capital:** A type of equity investment typically for early stage businesses that have high growth potential. Venture capitalists often provide advice in addition to capital.

BIG BUSINESSES SHARE OF SALES, EMPLOYMENT, AND PAYROLL

Comparative of Firms with 50 or More Employees Across the United States
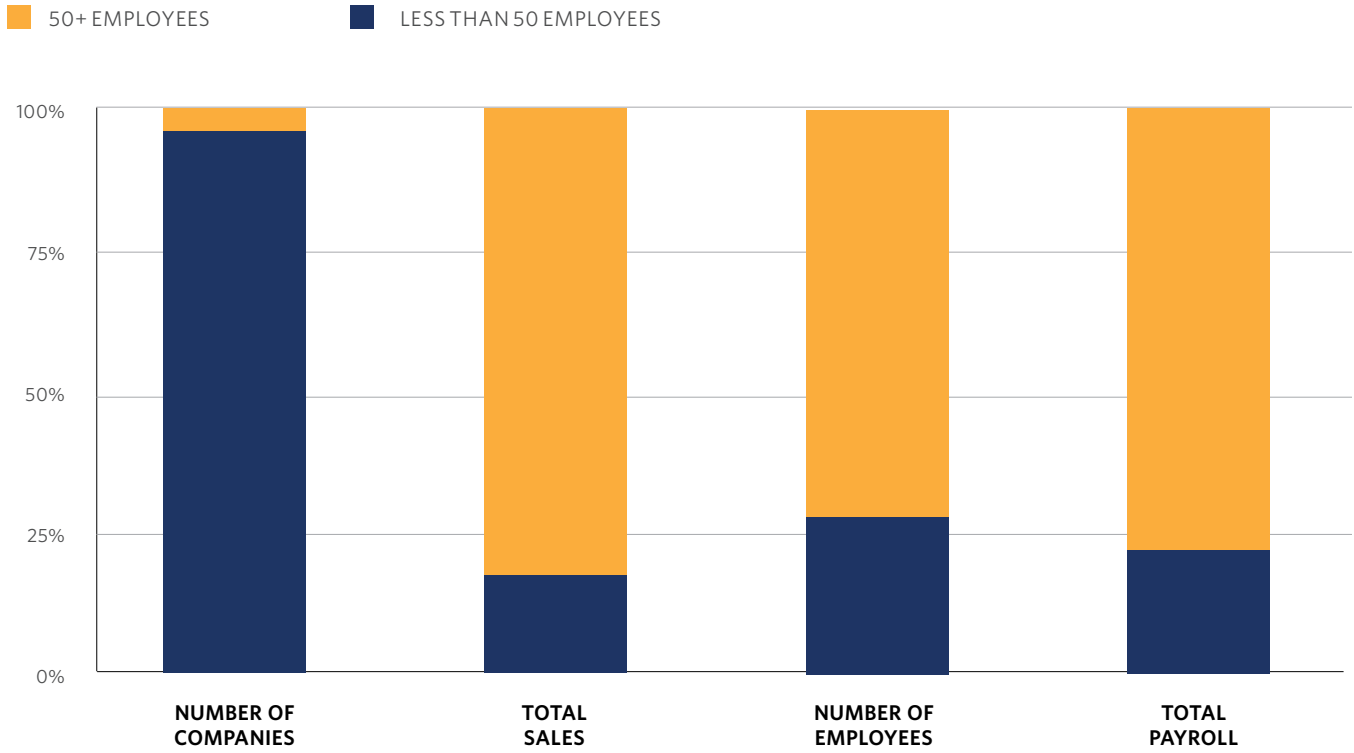
Source: Endeavor Insight analysis; Business Dynamic Statistics, U.S. Census Bureau.

INDUSTRIES OF SUPER-PRODUCTIVE, TECH-ENABLED BUSINESSES

Based on the 2017 North American Industry Classification System

Forestry and Logging

Fishing, Hunting and Trapping

Support Activities for Agriculture and Forestry

Oil and Gas Extraction

Mining (except Oil and Gas)

Support Activities for Mining

Food Manufacturing

Beverage and Tobacco Product Manufacturing

Paper Manufacturing

Petroleum and Coal Products Manufacturing

Chemical Manufacturing

Nonmetallic Mineral Product Manufacturing

Primary Metal Manufacturing

Machinery Manufacturing

Computer and Electronic Product Manufacturing

Electrical Equipment, Appliance, and Component Manufacturing

Transportation Equipment Manufacturing

Miscellaneous Manufacturing

Air Transportation

Water Transportation

Pipeline Transportation

Publishing Industries (except Internet)

Motion Picture and Sound Recording Industries

Broadcasting (except Internet)

Telecommunications

Data Processing, Hosting, and Related Services

Other Information Services

Credit Intermediation and Related Activities

Securities, Commodity Contracts, and Other Financial Investments and Related Activities

Insurance Carriers and Related Activities

Funds, Trusts, and Other Financial Vehicles

Rental and Leasing Services

Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)

Professional, Scientific, and Technical Services