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Exploring the Role of Microbusinesses in Economic Growth and Recovery for US Cities

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A white paper based on the Milken Institute's "Best-Performing Cities Index" and data on microbusinesses from the GoDaddy Venture Forward Initiative

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EXECUTIVE SUMMARY

Cities drive economic growth nationwide. They are the primary locations where businesses create new jobs and workers earn higher wages, keeping the United States competitive in the global economy. However, metro areas are also incredibly diverse. Each has unique characteristics generated through a combination of investment and policy choices that influence the community's economic outcomes.

The Milken Institute's Best-Performing Cities (BPC) index provides a means for comparing metro areas' recent performance with a focus on job growth, wage growth, and high-tech GDP growth. Additional measures of broadband access and housing affordability were added to the index this year to reflect metro areas' level of inclusive economic development.

The GoDaddy Venture Forward (VF) Initiative aims to quantify the contributions to local economic growth that come from microbusinesses with an online presence. Its research on microbusiness density across US metro areas provides great insight into the opportunities that the online economy can provide to residents of local communities.

This paper marks a groundbreaking collaboration to understand better the contemporary landscape of economic opportunity across the United States. By comparing the rankings of nearly 400 metro areas across the country on the BPC Index and VF rankings of microbusiness density, we have developed a unique illustration of the relationship between the two and a set of recommendations for consideration by local policymakers.

By properly understanding the value of their economic assets and taking steps to increase the level of microbusiness density, communities can enhance their existing growth trajectory or generate new opportunities that provide a foundation for economic growth and recovery.

INTRODUCTION

The Milken Institute's Best-Performing Cities (BPC) index tracks the economic performance of approximately 400 metropolitan statistical areas (MSAs) across the United States. It uses an outcomes-based set of metrics to help explain the geography of economic opportunity and evaluate the performance of these cities relative to their peers, indicating where employment is stable and expanding, wages and salaries are increasing, and businesses are thriving. The best-performing metro areas bring together skilled workers, investment capital, and consumer demand, providing a framework to sustain local economic growth—particularly in high-tech sectors.

The past year clearly demonstrated that the success of local economies is subject to the influence of national economic trends, as shown by the nationwide spike in unemployment due to local business closures during the COVID-19 pandemic. However, the top-performing metro areas leveraged their assets to remain competitive and generate inclusive economic opportunities for residents.

In this year's edition of the BPC index, high-ranking large and small cities demonstrated relatively strong concentrations of high-tech industry relative to their peers, as well as strong job growth. Among large cities, in particular, the top performers also performed better than the median on measures of housing affordability and short-term job growth. These measures were often a strong indicator that access to opportunity was resilient in the face of the economic shock presented by the pandemic. However, the BPC index does not account for other characteristics of local economies that can provide this foundation, such as a dynamic small-business ecosystem.

During the pandemic, some lower-ranking metros on the BPC index had high levels of activity among microbusinesses and entrepreneurs, but these did not register on the high-tech economic indicators included in the index calculation. More than any previous crisis, the pandemic showed that these businesses are a valuable measure of economic prosperity and essential to the fabric of communities across the nation. However, many of these businesses still do not have a prominent voice in local policy, thus limiting their contributions to discussions about economic recovery.

IMPROVING ECONOMIC OPPORTUNITY THROUGH MICROBUSINESS

In light of these trends, the Milken Institute Center for Regional Economics worked with the GoDaddy Venture Forward (VF) team to analyze how the characteristics of metro area microbusinesses shaped their communities' resilience to economic shocks and their potential for future growth.

GoDaddy's Venture Forward initiative was established in 2019 as a multiyear research effort to quantify the economic impact of approximately 20 million microbusinesses across US counties, metro areas, and zip codes. The digital microbusinesses included in their research are commercial endeavors, nonprofits, and issue-specific campaigns that have web domains with attached services, such as an online store. As the VF initiative seeks to understand the role of microbusinesses in local economies, its research shows that such businesses contribute substantially to overall growth rates, raising median household incomes above the national average and mitigating the fallout from downturns such as the one experienced during the COVID-19 pandemic. And while some microbusinesses have a brick-and-mortar presence, their online activity can also provide a much broader scope of economic opportunity because it does not necessarily rely on physical proximity to customers.

The VF initiative also ranks communities by microbusiness density, defined as the number of microbusinesses per 100 people. This is a groundbreaking effort because many microbusinesses are not typically included in nationwide statistics on business formation and job creation. By comparing metro areas' VF rankings for microbusiness density with their rankings on the BPC index, we can produce a more complete picture of metro area economies and the opportunities available to residents, developing better strategies for economic recovery and sustainable growth in the long term.

COMPARING HIGH-TECH GROWTH AND MICROBUSINESS DENSITY

We analyzed 383 large and small metro areas using data from the BPC index rankings in 2021 and data from the VF microbusiness density rankings in Q4 2020. From this group, 125 metro areas, or 33 percent, were "high-ranking" (above the median) on both sets of rankings, and 116 metro areas, or 30 percent, were "low-ranking" (below the median) on both sets of rankings, as shown in **Table 1**. Almost two-thirds of metro areas included in the evaluation thus appeared to demonstrate a significant degree of correlation between microbusiness density and patterns of high-tech growth, whether in high-ranking or low-ranking cities.

Table 1: Comparing BPC and VF Rankings

Number of cities per quadrant

High BPC–High VF		High BPC–Low VF	
Large Cities	68	Large Cities	25
Small Cities	57	Small Cities	42

Low BPC–High VF		Low BPC–Low VF	
Large Cities	32	Large Cities	58
Small Cities	43	Small Cities	58

Source: Milken Institute and GoDaddy analysis (2021)

An additional 75 metro areas, or 20 percent, were low-ranking on BPC and high-ranking on VF, while 67 metro areas, or 17 percent, were high-ranking on BPC and low-ranking on VF. These two groups of cities demonstrated relatively little or no correlation between their level of microbusiness density and their level of high-tech growth.

What Characterizes Different Types of Metro Areas?

Based on this comparison, we explored the sets of cities where these two sets of rankings "agreed," or were similar, and "disagreed," or differed. This analysis focused specifically on identifying characteristics that were common to cities in each of the four quadrants defined in Table 1:

- **High–High** metro areas ranked high on both BPC and VF
- **Low–Low** metro areas ranked low on both BPC and VF
- **Low–High** metro areas ranked low on BPC and high on VF
- **High–Low** metro areas ranked high on BPC and low on VF

Our research compared a wide range of indicators for cities in each quadrant, including indicators used to calculate both sets of rankings, as well as several others that were not included in the ranking calculations, such as broadband subscriptions for very low-income households,[1] the percentage of metro area residents with college degrees, and the distribution of metro area employment by industry.[2] In comparing these indicators, we identified some key differences across the four quadrants, as shown in **Table 2**.

Table 2: Variation in Key Indicators

Mean percentages for metro areas in each quadrant

Quadrant	Number of Metro Areas	Households with Broadband Subscription	Very Low-Income Households with Broadband Subscription	Population with College Degree	Population with Advanced Degree	Employment in Agriculture	Employment in Finance	Employment in Manufacturing	Employment in Professional Sectors
High–High	125	71.2	59.5	20.4	12.6	2.0	6.0	9.4	11.2
Low–Low	116	61.9	50.8	14.9	8.6	2.9	4.9	11.8	8.0
Low–High	75	69.5	56.4	19.3	12.8	1.6	6.1	11.3	9.5
High–Low	67	63.4	53.6	16.3	9.7	2.9	4.9	12.3	8.7

Source: Milken Institute and GoDaddy analysis (2021)

As anticipated, the High–High quadrant demonstrated the highest levels of broadband access and education, as well as a larger concentration of the local workforce in finance and professional fields. These characteristics are strongly correlated with the high-tech growth measured by the BPC index and the increase in microbusiness density measured by the VF initiative. The Low–Low quadrant also demonstrated a number of anticipated characteristics, such as a higher concentration of workers in agriculture and manufacturing as well as relatively lower measures of human capital, which are broadly correlated with lower levels of high-tech growth and may also constrain the online expansion of local microbusinesses.

Although broadband is necessary for microbusiness growth, it is insufficient for generating positive economic outcomes unless paired with education and training that expand the skills of local entrepreneurs. Low–High metro areas, which lagged in high-tech growth but were ahead of the curve in microbusiness density, performed relatively better concerning broadband access and demonstrated little to no difference from High–High metro areas with respect to education levels. The combination of online presence and entrepreneurial skill sets is a cornerstone of microbusiness density in these communities, which could potentially be poised for rapid growth as these businesses mature. Meanwhile, High–Low metro areas had the largest shares of the local population in both agriculture and manufacturing, thus providing relatively less infrastructure and human capital support for an increase in microbusiness density.

WHERE DO THE RANKINGS AGREE AND DISAGREE?

In addition to these differences among each of the quadrants, we sought to identify a specific subset of cities from each quadrant that had relatively common characteristics and that included both small and large cities. We noted that the High–High quadrant included a number of cities from the Intermountain West and the southern United States and that the Low–Low quadrant included several metros on the Gulf Coast and in Appalachia. Low–High cities were largely concentrated in the industrial Midwest, whereas

High–Low cities were distributed across various regions of the western United States, including many regions with significant agricultural and agribusiness industries.

After considering these broad geographic trends and the specific metro-level data for the indicators outlined above, we selected the cities listed in **Table 3** for more in-depth analysis, since they presented a mix of cities that were broadly representative of the economic and geographic characteristics of each quadrant, as well as several cities that differed from nearby metro areas in the same regions. For example, multiple Midwest metros fit in the Low–High category, but Saginaw, Michigan, ranked low on both BPC and VF, and Madison, Wisconsin, ranked high on both. Meanwhile, Lake Charles, Louisiana, differed substantially from other Low–Low Gulf Coast metros due to its higher ranking on VF, whereas Daphne, Alabama, stood out due to its high rankings on both.

Table 3: Metro Areas Highlighted in Each Quadrant Rankings

Rankings on BPC 2021 and VF 2020

High–High	Size	BPC Rank	VF Rank
Daphne, Alabama	Small	5	20
Logan, Utah	Small	2	39
Madison, Wisconsin	Large	34	49

High–Low	Size	BPC Rank	VF Rank
College Station, Texas	Small	21	147
Fresno, California	Large	60	177
Jonesboro, Arkansas	Small	14	178
Yuma, Arizona	Small	66	183

Low–High	Size	BPC Rank	VF Rank
Chicago, Illinois	Large	152	7
Cleveland, Ohio	Large	173	62
Detroit, Michigan	Large	188	23
Lake Charles, Louisiana	Small	166	32

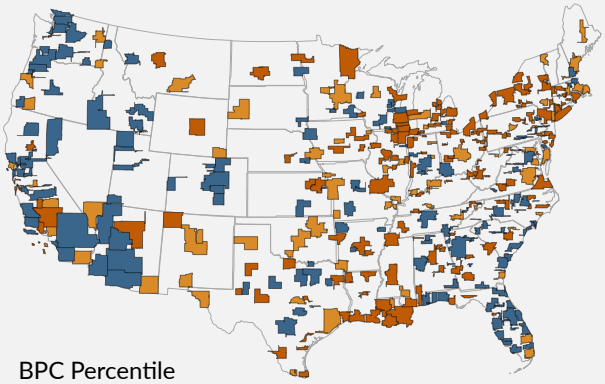
Low–Low	Size	BPC Rank	VF Rank
Corpus Christi, Texas	Large	199	175
New Orleans, Louisiana	Large	195	128
Saginaw, Michigan	Small	182	145

Source: Milken Institute and GoDaddy analysis (2021)

Finally, based on the Milken Institute's assessment of specific factors influencing the BPC and VF rankings, we also considered the implications of these characteristics for regional policymakers and developed a set of policy alternatives for each quadrant that we believe merit further consideration. Our policy findings generally line up with the main recommendations of the Venture Forward initiative, which support the adoption of broadband, access to skills training, access to benefits, and access to capital as the pillars of a strategy to support microbusiness growth in their communities.[3]

As metro areas evaluate their existing assets, strategies for broad-based economic growth should consider the relative benefits of high-tech clusters and microbusiness density. Metro areas with strong job creation can support microbusiness growth as a complementary form of economic opportunity, particularly for residents outside of regionally dominant industries. And cities with strong microbusiness ecosystems can help compensate for a lack of high-tech dynamism by promoting access to more opportunities in the digital economy, particularly for lower-income residents.

Figure 1. BPC 2021 Rankings



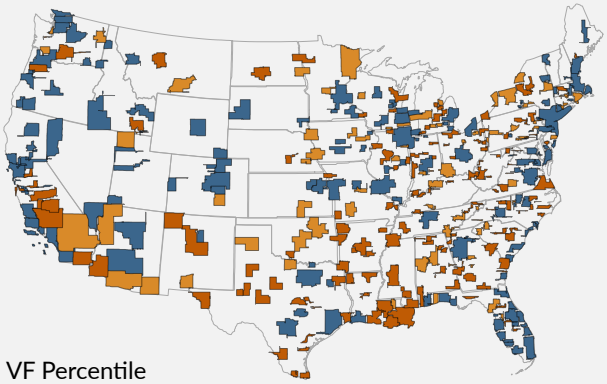
BPC Percentile Group, 2021

- 60th percentile and above
- 40th to 59th percentile
- 39th percentile and below

Note: BPC groups are calculated by percentile ranking (separately for small and large cities) and include MSAs and MDs

Source: Milken Institute analysis of Best-Performing Cities data (2021)

Figure 2. VF 2020 Rankings



VF Percentile (Q4 2020)

- 60th percentile and above
- 40th to 59th percentile
- 39th percentile and below

Note: VF groups are calculated by percentile ranking (separately for small and large cities) and include only MSAs (not MDs).

Source: Milken Institute analysis of Venture Forward data (2021)

WHERE DO THE RANKINGS AGREE?

HIGH BPC AND HIGH VF

Table 4. Characteristics of High–High Metro Areas

Percentages for Metro Areas

Metro Areas	Households with Broadband Subscription	Very Low-Income Households with Broadband Subscription	Population with College Degree	Population with Advanced Degree	Employment in Manufacturing	Employment in Professional Sectors
Mean All (125)	**71.2**	**59.5**	**20.4**	**12.6**	**9.4**	**11.2**
Mean Large (68)	**73.8**	**60.2**	**22.1**	**13.8**	**8.6**	**12.9**
Madison, WI	75.5	64.2	27.7	18.3	10.2	12.6
Mean Small (57)	**68.0**	**58.6**	**18.3**	**11.1**	**10.3**	**9.1**
Daphne, AL	59.8	48.1	21.0	10.8	9.2	10.3
Logan, UT	69.4	69.7	24.2	11.8	16.9	11.5

Source: GoDaddy analysis of 5-Year American Community Survey (2014-2019)

High–High cities rank near the top on both BPC and VF and have several distinct advantages relative to metro areas in other quadrants, including more extensive broadband access and more highly educated residents. While no city in the United States completely escaped the downturn caused by the COVID-19 pandemic, a number of cities that performed well on both rankings posted strong employment recovery numbers. This may be because these same characteristics (broadband access and higher education) also permitted a relatively larger proportion of their residents to work from home during the pandemic, thus limiting job losses due to business shutdowns.

More than 71 percent of households in High–High cities have broadband access, and this level is even higher in large cities, at nearly 74 percent. Broadband access is a key component of the high-tech growth measured by the BPC index and a cornerstone of the infrastructure required for local microbusinesses to expand their online presence. However, the broadband landscape in High–High cities still presents some challenges. Most notably, there is a gap in access for low-income households earning $20,000 or less per year, among which just 60 percent have access.

High–High cities also tend to outperform other quadrants on education. On average, 20 percent of residents in these metro areas have a college degree, and 13 percent have an advanced degree (though highly educated residents tend to be more concentrated in large cities than in small cities).

Higher levels of education support knowledge-based economic growth in high-tech sectors because they provide the expertise required to generate technological breakthroughs—which can also produce entrepreneurs who start small businesses and online microbusinesses.

Table 5. Comparing High–High Metro Areas

Rankings on BPC 2021 and VF 2020

	Daphne, AL	Logan, UT	Madison, WI
BPC Overall (2021)	**5 (Small)**	**2 (Small)**	**34 (Large)**
Job growth (2018-19)	7	23	105
Job growth (2014-19)	5	19	115
Wage growth (2018-19)	2	7	43
Wage growth (2014-19)	6	12	58
Short-term job growth (10/2019-10/2020)	45	9	85
High-tech GDP growth (2018-19)	104	41	13
High-tech GDP growth (2014-19)	54	39	10
High-tech GDP concentration (2019)	164	12	28
Number of high-tech industries (2019)	74	5	48
Broadband access (2019)	58	18	36
Affordable housing costs (2019)	64	126	73
Affordable housing costs (2014-18)	71	110	82
VF Microbusiness Density (2020)	**20**	**39**	**49**

Source: Milken Institute and GoDaddy analysis (2021)

DAPHNE

ALABAMA

- **Ranked fifth among small cities** on BPC 2021, up from No. 14 in 2020
- **Highest rankings:**
  - One-year job growth (3.2 percent, seventh) and five-year job growth (18.8 percent, fifth)
  - One-year wage growth (8.3 percent, second) and five-year job growth (18.8 percent, fifth)
- **Lowest rankings:** One-year high-tech GDP growth (104th) and high-tech concentration (164th)
- **Ranked 20th in microbusiness density** in 2020: 5.48 microbusinesses per 100 people

Daphne lies on the eastern shore of Mobile Bay, near the much larger manufacturing center found in Mobile, Alabama's third-largest city. Major employers include Baldwin County Board of Education, Walmart, Infirmary Health, Collins Aerospace, and Columbia Southern University. Daphne is also home to workers from the nearby Mobile Aeroplex at Brookley, which is home to Airbus, Continental Aerospace, and VT Aerospace Mobile.[4]

Daphne stands out from many of its neighboring Gulf Coast metros, many of which fall into the Low–Low quadrant. As shown in **Table 6**, its February 2021 unemployment rate of just 3.3 percent was substantially lower than other cities, which was likely due to its large skilled workforce with college and advanced degrees. The presence of high-tech jobs, particularly in the aerospace industry, helped Daphne resist the same sharp downturn that other regional metros experienced during the pandemic.

Table 6. Comparing Gulf Coast Metro Areas

Percentages of Metro Area Population

Metro Areas	Quadrant	BPC Rank	VF Rank	Unemployment	Broadband subscription	College Degree	Advanced Degree
Daphne	High–High	5	20	3.3	59.8	21.0	10.8
Corpus Christi	Low–Low	199	175	9.4	62.0	13.8	7.1
New Orleans	Low–Low	195	128	8.6	65.3	19.0	11.3
Lake Charles	Low–High	196	32	7.3	61.8	14.6	7.3

Source: Milken Institute and GoDaddy analysis of US Bureau of Labor Statistics (2020)

LOGAN

UTAH

- **Ranked second among small cities** on BPC 2021, up from third in 2020
- **Highest rankings:**
  - One-year wage growth (7.5 percent, seventh) and five-year wage growth (33.6 percent, 12th)
  - Short-term jobs growth (0.8 percent, ninth)
  - Number of high-tech industries (six, fifth)
- **Lowest rankings:** Housing affordability (one-year: 72.2 percent, 126th; five-year: 72 percent, 110th)
- **Ranked 39th in microbusiness density** in 2020: 4.77 microbusinesses per 100 people

The **Logan** metro area stretches from Cache County in northern Utah to Franklin County in southern Idaho, and the city plays a prominent role in Utah's thriving high-tech economy. The region's largest employers are Utah State University, Icon Health and Fitness (a fitness equipment designer and manufacturer), and Cache County School District. A number of high-tech companies are headquartered in Logan, including Campbell Scientific (scientific instruments), New Dawn Technologies and Con Service (software), and S&S Power (amusement park ride manufacturer).

In addition to the state's business-friendly environment, the metro area provides additional support for small business growth through the Logan Small Business Development Center, which runs in partnership with Utah State University.[5] Verizon also named Logan one of the 10 best small cities in the United States to start a small business based on a combination of factors such as broadband access, educated workforce, tax environment, and access to loans.[6]

Although the overall level of microbusiness density in Logan was relatively lower than the mean for High–High metro areas, as shown in **Table 7**, the level of growth last year was more than twice as high. Microbusiness density could improve further as more local brick-and-mortar businesses enhance their online presence, thus complementing the already robust presence of fully online businesses found in the region.

Table 7. Logan Microbusiness Characteristics

Metro Areas	Microbusiness Density	Brick and Mortar	Professional Services	Commercial Endeavor	Change in 2020
High–High (Average)	7.2	54.9%	35.9%	86.2%	0.84%
Logan, UT	4.8	34.2%	25.1%	95.8%	1.96%

Source: GoDaddy analysis (2021)

- **Ranked 34th among large cities** on BPC 2020, up from No. 93 in 2020
- **Highest rankings:** High-tech GDP (five-year: 55.6 percent) and high-tech concentration (LQ: 1.3)
- **Lowest rankings:** Five-year job growth (7.2 percent)
- **Ranked 49th in microbusiness density** in 2020: 5.98 microbusinesses per 100 people

MADISON

WISCONSIN

Madison is the state capital of Wisconsin and a prominent center of government, economic, and academic activity in the Midwest. The metro area has a thriving high-tech economy and is the seat of a number of company headquarters, including American Family Insurance and Exact Sciences. As the home of the University of Wisconsin-Madison, it also harbors the affiliated University Research Park, a research and technology hub supporting businesses in engineering, life sciences, and other high-tech industries, which contributes more than $825 million annually to Wisconsin's economy.[7] Epic Systems (a software company), the Wisconsin state government, and the University of Wisconsin Hospital are also major employers.

The city is also known for having one of the highest rates of tertiary education in the country, with 27.7 percent of the workforce having at least a college degree, and 18.3 percent having an advanced degree. This level of education supports a thriving high-tech workforce and powers innovation in Madison's core industries. The metro area also outpaces many of its Midwest counterparts in terms of broadband access, both overall and for very-low-income households, though it ranks slightly below both Chicago and Detroit on VF.

UW-Madison also hosts a Small Business Development Center, and surrounding Dane County made nearly $30 million in grants available to small businesses over the course of the pandemic, with 40 percent going to minority-owned businesses and 61 percent going to women-owned businesses.[8]

LOW BPC AND LOW VF

Table 8. Characteristics of Low–Low Metro Areas

Percentages for Metro Areas

Metro Areas	Households with Broadband Subscription	Very Low-Income Households with Broadband Subscription	Population with College Degree	Population with Advanced Degree	Employment in Manufacturing	Employment in Professional Sectors
Mean All (116)	**61.9**	**50.8**	**14.9**	**8.6**	**11.8**	**8.0**
Mean Large (58)	**63.5**	**51.4**	**16.2**	**9.4**	**11.1**	**8.9**
New Orleans, LA	65.3	47.9	19.0	11.3	5.7	11.6
Corpus Christi, TX	62.0	51.8	13.8	7.1	6.6	8.8
Mean Small (58)	**60.4**	**50.3**	**13.7**	**7.7**	**12.6**	**7.1**
Saginaw, MI	62.0	54.0	13.3	7.5	16.2	8.3

Source: GoDaddy analysis of 5-Year American Community Survey (2014-2019)

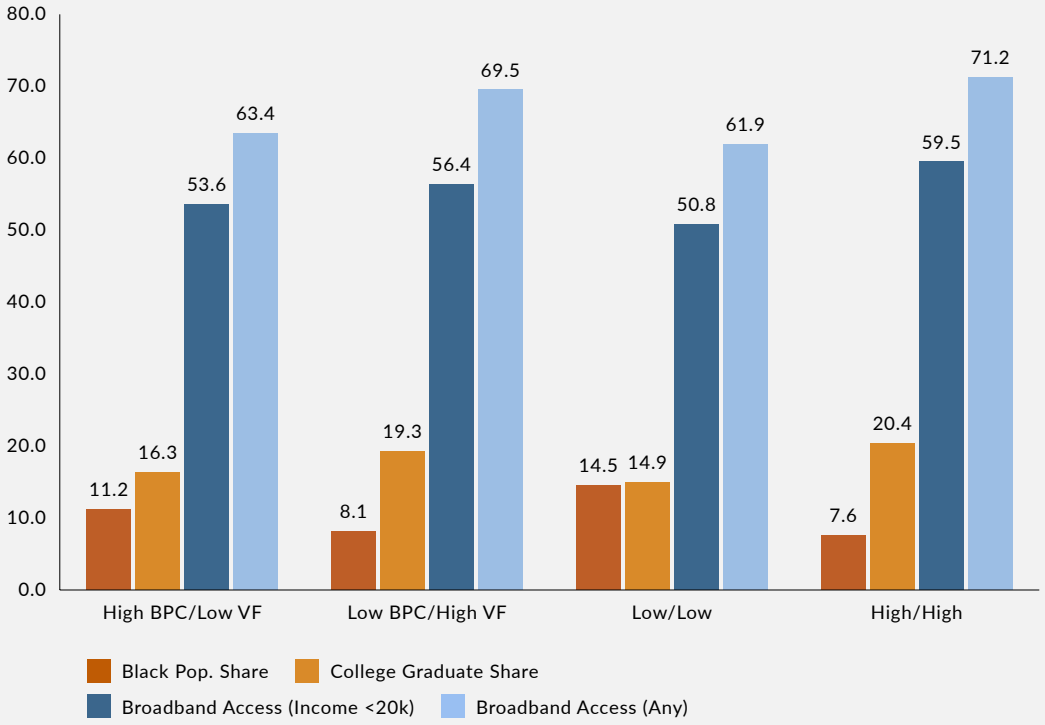
The 116 cities that ranked low on both BPC and VF face two significant challenges. The first is slow economic growth. Low–Low cities have experienced very little job creation (both short-term and medium-term) paired with below-average levels of wage growth. Many jobs in these cities are in industries that require reporting to work in person, such as hospitality, construction, and food service. These dynamics proved particularly challenging during the pandemic when a nationwide decline in service-sector activity led to massive job losses. Because Low–Low cities also have relatively lower levels of high-tech industry concentration, fewer residents were able to maintain their jobs (including by working from home) when the sharpest part of the pandemic downturn took hold and their regions' dominant industries were slow to recover.

The second challenge is access and inclusion. Levels of overall broadband access (62 percent) and broadband access among very low-income households (51 percent) are particularly low, leaving these cities at a disadvantage in offering tools for individuals and communities to stay connected. And differences in educational attainment deepened this disconnect. On average, only 15 percent of Low–Low metro area residents are college-educated, and only 9 percent possess an advanced degree.

Racial divisions also have broad implications for access in Low–Low metro areas, as they have roughly double the Black population of High–High metro areas, and Black entrepreneurs face substantially higher barriers to accessing capital. For example, one study showed that White applicants for Paycheck Protection Program (PPP) small business loans had a success rate of 60 percent, compared to 29 percent for Black applicants.[9] In the absence of significant policy reforms that expand capital access more broadly, the microbusiness economy can provide key tools for residents of these metro areas—including people of color—to obtain other types of opportunities.

Figure 3. Low–Low Cities Marked by Limited Access to Broadband and Education

Percentage of Population



Source: Milken Institute and GoDaddy analysis of 5-Year American Community Survey (2014-2019)

Low–Low metro areas are certainly not devoid of assets. Despite a relative dearth of high-tech research and manufacturing facilities, they have tremendous cultural and historical wealth as well as strategic assets in other areas, such as transportation and logistics. Nonetheless, without the digital and educational tools required to sustain knowledge-based growth, they are more likely to struggle to share in the benefits of economic recovery.

Table 9. Comparing Low–Low Metro Areas

Rankings on BPC 2021 and VF 2020

	New Orleans, LA	Corpus Christi, TX	Saginaw, MI
BPC Overall (2021)	**195 (Large)**	**199 (Large)**	**182 (Small)**
Job growth (2018-19)	121	164	172
Job growth (2014-19)	169	191	157
Wage growth (2018-19)	177	160	150
Wage growth (2014-19)	186	195	121
Short-term job growth (10/2019-10/2020)	183	152	173
High-tech GDP growth (2018-19)	98	182	178
High-tech GDP growth (2014-19)	185	186	106
High-tech GDP concentration (2019)	185	191	72
Number of high-tech industries (2019)	136	168	74
Broadband access (2019)	166	143	91
Affordable housing costs (2019)	128	131	115
Affordable housing costs (2014-18)	152	91	108
VF Microbusiness Density (2020)	**128**	**175**	**145**

Source: Milken Institute and GoDaddy analysis (2021)

CORPUS CHRISTI

TEXAS

- **Ranked 199th among large cities** on BPC 2021, down from No. 185 in 2020
- **Highest rankings:** Five-year housing affordability (69.7 percent) ranked in the top half of large metros
- **Lowest rankings:** Five-year job and wage growth (0.2 percent and 8.8 percent, respectively) were in the bottom 10 percent of all large metros
- **Ranked 175th in microbusiness density** in 2020: 1.83 microbusinesses per 100 people

Situated along the Gulf Coast of Texas, **Corpus Christi** specializes in energy and resource extraction, from oil and gas production to petrochemicals, petroleum refining, engineering services, and pipeline construction. Major employers in Corpus Christi include Bay Ltd., CITGO, First Data Corporation, Flint Hills Resources, H-E-B, Kiewit Offshore Services, and Valero Refining.[10] Although employment in energy production pays well, it forms a relatively smaller share of total jobs than service-oriented sectors such as government, health care, construction, accommodation and food services, or retail.[11] Like these sectors, however, it was also deeply affected by short-term job losses during the pandemic.

The metro area lacks high-tech activity outside of architectural and engineering services, and its low ranking on both BPC and VF is likely tied to a lack of reliable broadband infrastructure. And despite being home to a university campus (Texas A&M-Corpus Christi), maintaining an educated workforce has been a challenge without a wider range of local jobs for graduates to fill. Providing a larger role for microbusiness expansion and working with local universities to incubate startups and entrepreneurs could leverage existing resources to reduce the region's so-called “brain drain.” The creation of a manufacturing district for small firms could also help the region provide more opportunities for entrepreneurship and small business growth.[12]

NEW ORLEANS

LOUISIANA

- **Ranked 195th among large cities** on BPC 2021, down from No. 181 in 2020
- **Highest rankings:** One-year high-tech GDP growth ranked in the top half of large cities (5.3 percent)
- **Lowest rankings:** Five-year job and wage growth rates (2.9 percent and 11.9 percent, respectively) were in the bottom quarter of all large metros
- **Ranked 128th in microbusiness density** in 2020: 3.1 microbusinesses per 100 people

While **New Orleans** remains a key center of shipping and trade at the mouth of the Mississippi River, it has also developed a culturally rich service sector that includes sizeable leisure and business tourism industries.[13] Jobs in these industries often pay relatively low wages,[14] and pandemic-induced travel and business shutdowns further exacerbated the weaknesses of the local economy through significant job losses. The Crescent City struggled to mitigate the downturn due to its relative lack of high-tech economic sectors and the fact that a primary high-tech industry, motion picture and film production, also saw extremely limited activity during the pandemic.

Many of the same issues that caused problems for New Orleans last year were also responsible for relatively slow rates of long-term job and wage growth. As with a number of Low–Low metro areas, Black workers in New Orleans—especially those without a college education—remain least likely to access high-wage job opportunities.[15] And many individuals struggle to access digital opportunities because of limited broadband access, particularly for very low-income households.

Nonetheless, recent trends in the microbusiness economy may bode well for the future of New Orleans. As shown in **Table 10**, metro area microbusiness density grew at a rate of 3.75 percent in 2020, far above the national average of 0.78 percent. This growth also appears set to change the overall landscape of the city's online microbusinesses toward a more business-oriented mix. Expanding access to digital opportunities and empowering entrepreneurs to participate in the vibrant cultural economy could help empower residents of New Orleans despite their community's continued challenges.

Table 10. New Orleans Microbusiness Characteristics

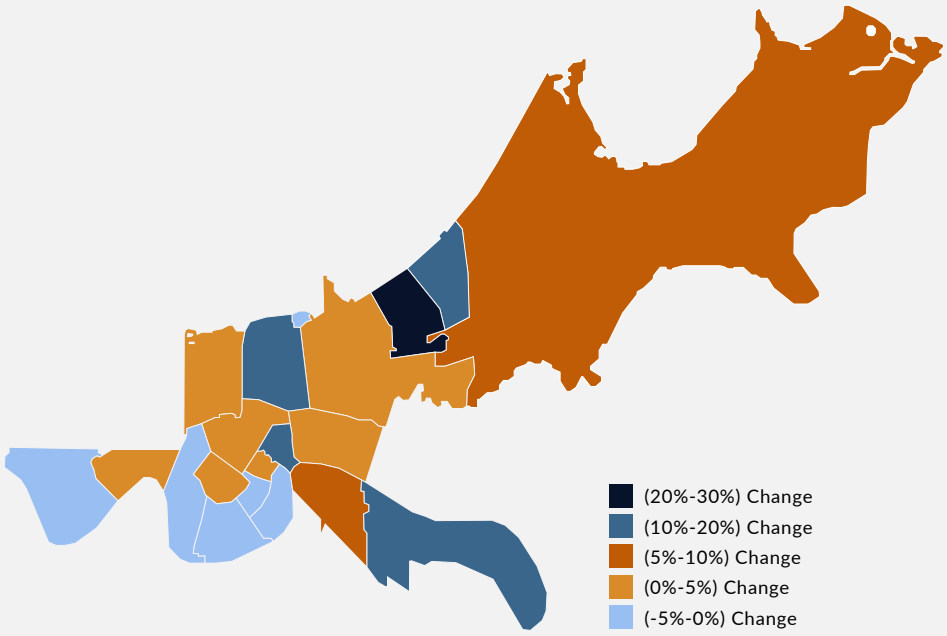
Metro Areas	Microbusiness Density	Brick and Mortar	Professional Services	Commercial Endeavor	Change in 2020
Low–Low (Average)	1.9	37.9%	23.9%	75.0%	0.56%
New Orleans, LA	3.1	35.3%	26.7%	72.8%	3.75%

Source: GoDaddy analysis (2021)

The areas of the city that experienced the highest levels of microbusiness density growth in 2020 are shown as the darkest shaded areas of the map in **Figure 4**. Of these areas, East New Orleans was notably the site of three Opportunity Zones created by the Tax Cuts and Jobs Act of 2017, and last year it also received a $500,000 grant from the US Commerce Department's Economic Development Administration to fund a resilience-based economic development strategy[16] —demonstrating the potential for local microbusiness growth to act as a catalyst for opportunities in the region.

Figure 4. New Orleans Geography of Microbusinesses by Zip Code

Percent Change in Microbusiness Density per 100 Residents, January–December 2020



Source: GoDaddy analysis (2021)

SAGINAW

MICHIGAN

- **Ranked 182nd among small cities** on BPC 2021, down from No. 169 in 2020
- **Highest rankings:** Two local high-tech industries with relatively high levels of concentration (telecommunications and medical equipment manufacturing)
- **Lowest rankings:** Short-term job growth (–8.2 percent) was in the bottom quarter of small metros
- **Ranked 145th in microbusiness density** in 2020: 2.08 microbusinesses per 100 people

Saginaw, located in Mid-Michigan, has a long industrial heritage with an above-average share of workers continuing in manufacturing—though the metro area's largest employers span a range of industries, including automotive, travel, retail, health care, and telecommunications.[17] The region has undergone significant structural economic changes over the past 20 years, with a substantial drop in durable goods manufacturing employment—historically, a source of high-paying jobs—in favor of an expansion in lower-wage service sectors.[18] These trends have been highlighted by General Motors' plant closures and job cuts at Dow Chemical in nearby Midland,[19] and the exodus of highly educated engineers and managers has also had an impact on overall education levels, as shown in **Table 11**.

Table 11. Comparing Midwest Metro Areas

Percentages of Metro Area Population

Metro Areas	Quadrant	BPC Rank	VF Rank	Broadband subscription	Very Low-Income Broadband	College Degree	Advanced Degree
Madison	High–High	34	49	75.5	64.2	27.7	18.3
Chicago	Low–High	152	7	72.4	54.8	23.0	15.0
Cleveland	Low–High	173	62	69.6	51.8	18.9	12.3
Detroit	Low–High	188	23	70.2	52.5	18.7	12.5
Saginaw	Low–Low	182	145	62.0	54.0	13.3	7.5

Source: Milken Institute and GoDaddy analysis of US Bureau of Labor Statistics (2020)

Additionally, residents' ability to access the higher-wage work that exists is not equal. Although educational attainment in Saginaw lags relative to the rest of Michigan, the gap is worse for Black residents. Only 9.8 percent of Black residents have a college degree (versus 17.5 percent statewide), compared with 22.6 percent of White residents (and 30 percent statewide).[20] Further, just over half of very low-income residents have broadband internet access, which limits their opportunities in the digital economy.

Lower incomes—and less capacity for discretionary spending—help explain the metro area's relative lack of microbusiness activity. However, Saginaw's manufacturing industries are strong assets, as is Saginaw Valley State University, a public university with more than 8,500 students. Regional collaboration by key stakeholders can help foment new growth, particularly through targeted investments in retaining local skilled workers and reducing barriers to entrepreneurship.

WHERE DO THE RANKINGS DISAGREE?

LOW BPC AND HIGH VF

Table 12. Characteristics of Low-High Metro Areas

Percentages for Metro Areas

Metro Areas	Households with Broadband Subscription	Very Low-Income Households with Broadband Subscription	Population with College Degree	Population with Advanced Degree	Employment in Manufacturing	Employment in Professional Sectors
Mean All (75)	**69.5**	**56.4**	**19.3**	**12.8**	**11.3**	**9.5**
Mean Large (32)	**72.3**	**55.7**	**21.3**	**13.8**	**11.1**	**11.2**
Chicago, IL	72.4	54.8	23.0	15.0	11.7	13.4
Detroit, MI	70.2	52.5	18.7	12.5	19.4	11.5
Cleveland, OH	69.6	51.8	18.9	12.3	14.3	10.5
Mean Small (43)	**67.5**	**56.9**	**17.9**	**12.0**	**11.5**	**8.2**
Lake Charles, LA	61.8	48.5	14.6	7.3	10.6	7.3

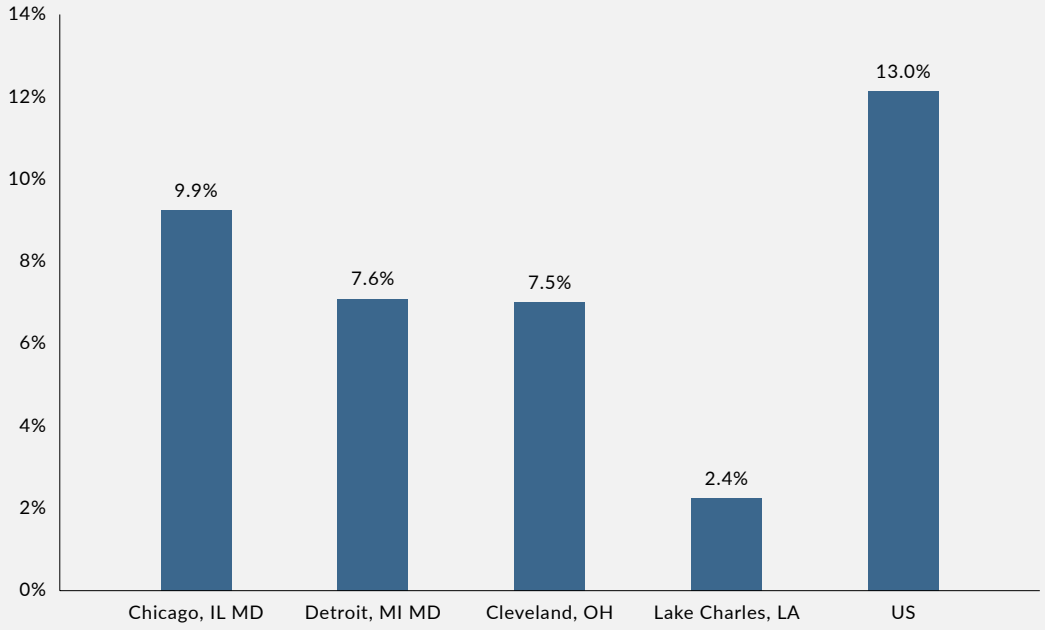
Source: GoDaddy analysis of 5-Year American Community Survey (2014-2019)

Metro areas with low BPC and high VF rankings have a mix of characteristics that reflect the most influential components of each. These cities ranked low on BPC due to below-average wage and job growth over the medium term as well as above-average short-term job losses in 2020. Meanwhile, they ranked high on VF due to high average levels of broadband access (70 percent) and education (19 percent have college degrees and 13 percent have advanced degrees).

Low–High metros also tended to have two key distinguishing characteristics that demonstrate the broader context of their BPC and VF rankings. First, as shown in **Figure 5**, they have low levels of high-tech concentration compared to the national average, which highlights the challenges of continuing to create local jobs, particularly in regions that have long depended on manufacturing as a cornerstone of the local economy.[21] Second, they have relatively high levels of small business density: 7.3 small businesses per 100 residents on average, compared to 6.3 small businesses per 100 residents in low-ranking VF metros.[22] This is likely due, at least in part, to the predominance of large consumer populations.[23]

Figure 5. Low–High Cities Have Limited Concentration of High-Tech Industry

High-Tech Industry GDP Share for Select Metros, 2019 (Percent)



Source: Milken Institute analysis of US Bureau of Economic Analysis (2019)

These metros also have a number of assets—institutions of higher education, infrastructure connecting them to the global economy, and large and diverse populations—that can be particularly valuable for sustaining microbusiness growth over time. What remains for these Low–High cities to determine is the direction and the strength of the relationship from their microbusiness economies to the broader scope of opportunities for economic growth (particularly in high-tech industries). Careful policy choices and coordinated investments can help residents leverage these assets to establish a strong long-term trajectory of business formation and job creation.

Table 13. Comparing Low–High Metro Areas

Rankings on BPC 2021 and VF 2020

	Chicago, IL[24]	Detroit, MI[25]	Cleveland, OH	Lake Charles, LA
BPC Overall (2021)	**152 (Large)**	**188 (Large)**	**173 (Large)**	**166 (Small)**
Job growth (2018-19)	147	115	122	200
Job growth (2014-19)	134	120	156	11
Wage growth (2018-19)	150	165	158	198
Wage growth (2014-19)	115	134	163	3
Short-term job growth (10/2019-10/2020)	139	189	165	200
High-tech GDP growth (2018-19)	96	183	91	172
High-tech GDP growth (2014-19)	96	174	159	161
High-tech GDP concentration (2019)	90	121	124	193
Number of high-tech industries (2019)	86	136	110	167
Broadband access (2019)	100	182	185	133
Affordable housing costs (2019)	151	126	80	69
Affordable housing costs (2014-18)	157	142	77	34
VF Microbusiness Density (2020)	**7**	**23**	**62**	**32**

Source: Milken Institute and GoDaddy analysis (2021)

CHICAGO

ILLINOIS

- **Ranked 152nd among large cities** on BPC 2021, down from No. 118 in 2020
- **Highest rankings:** High-tech concentration in four industries (86th): data processing and hosting, commercial and service industry machinery manufacturing, audio and video equipment manufacturing, and computer systems design
- **Lowest rankings:** Housing affordability (65.6 percent for 2014-2018; 157th)
- **Ranked seventh in microbusiness density** in 2020: 6.5 microbusinesses per 100 people

Chicago historically developed as a transportation and logistics hub, boasting an advantage in strong links to the agricultural production from the Upper Midwest and a dynamic manufacturing economy of its own.[26] Several of its most concentrated high-tech industries are manufacturing-oriented; aviation and transportation-related activities account for many local jobs.[27] However, with the decline of manufacturing in the US, the trade sector—tied to products and services for export, which tend to pay higher wages—has become relatively less important.[28] Consequently, Chicago's overall rate of job creation from 2014 to 2019 (5.8 percent) was just over half the rate found in similar-size cities such as New York (10.1 percent) and Los Angeles (9 percent).

Despite a large population of skilled workers and several top-tier universities, maintaining a high-tech job base in the Windy City has proved challenging. According to one report, the area lost roughly 12,600 innovation jobs between 2005 and 2017.[29] Chicago-area universities account for a majority of academic R&D spending in Illinois,[30] but the state's research universities receive relatively fewer R&D funds than peer institutions in other states,[31] potentially limiting opportunities to connect human capital formation to job creation.[32]

Nonetheless, regional microbusiness trends give cause for greater optimism. GoDaddy data showed that Chicago had one of the highest microbusiness densities in 2020 and the highest overall growth rate over the last year. Growth was particularly strong in the later months, particularly as brick-and-mortar businesses moved online to counteract dropping foot traffic due to pandemic restrictions and winter weather.

CLEVELAND

OHIO

- **Ranked 173rd among large cities** on BPC 2021, up from No. 175 in 2020
- **Highest rankings:** Housing affordability ranked above the median for large cities on both one-year (72.8 percent) and five-year (70.9 percent) indicators
- **Lowest rankings:** Household broadband access (MSA: 82 percent; 185th)[33]
- **Ranked 62nd in microbusiness density** in 2020: 5.15 microbusinesses per 100 people

Like many large Midwestern metro areas, **Cleveland** has a strong legacy of manufacturing activity.[34] Its most concentrated job occupations include foundry mold and coremakers; machine setters, operators, and tenders; and engine assemblers.[35] And its three most concentrated high-tech industries are also in manufacturing: commercial/service industry, aerospace, and medical equipment.

However, the high-tech sector's relatively small share of total output has also contributed to slower job and wage growth rates (4.2 percent and 15.9 percent over five years, respectively). And the metro area's main sources of employment have moved into the health-care or government sectors, with the largest employers including the Cleveland Clinic, University Hospital, US Office of Personnel Management, and Giant Eagle Inc food and pharmacy retailer.[36]

In large part, Cleveland's relatively high level of microbusiness density appears to be supported by the state's broader entrepreneurial climate. According to a recent report, Ohio boasts an above-average share of "opportunity entrepreneurs," who were not looking for work or unemployed when they began their new microbusinesses, as well as an above-average early startup survival rate.[37] This is also seen in data from Venture Forward's national surveys, which show that more than 70 percent of online microbusinesses begin while the owner is either still employed somewhere else or left a job to start the new business, and about one in four microbusiness owners are otherwise not active members of the workforce (such as students, stay-at-home parents, and retirees).

Data on Cleveland's local climate is similar: Startups have added employees at faster rates than the national average,[38] and the city ranks fourth in the Midwest in attracting medical startup investment.[39] Housing affordability is also a boon to microbusiness activity. Because Cleveland is generally affordable (relative to local incomes), residents can afford the costs of living while supporting their microbusinesses.

DETROIT

MICHIGAN

- **Ranked 188th among large cities** on BPC 2021, down from No. 159 in 2020
- **Highest rankings:** Job growth was around average nationwide (one-year growth of 1 percent and five-year growth of 6.8 percent)
- **Lowest rankings:** High-tech GDP growth over the past five years (10.9 percent) ranked in the bottom 20 percent of large metros
- **Ranked 23rd in microbusiness density** in 2020: 5.8 microbusinesses per 100 people

Detroit remains a preeminent global center of automotive manufacturing, even as the local economy—and the industry nationwide—draw attention for their economic struggles. Roughly one in five workers in the metro area are still employed in manufacturing, and a substantial proportion is concentrated in occupations such as mechanical and industrial engineering, even as US manufacturing continues to experience an overall decline.[40] Nonetheless, other sectors such as health care, retail, and education have surpassed automotive manufacturing as the largest sources of local employment.[41]

As the region's non-tradable industries take on greater importance, many businesses that serve residents have sought to leverage Detroit's legacy of production and innovation. Despite these assets, however, the metro area has low levels of broadband access and relatively few college-educated workers. Efforts to support more business formation and job creation adjacent to the automotive cluster offer promise, as shown by the city's high microbusiness density and large proportion of microbusinesses in travel and transportation (6.7 percent as of 2020).

Given the strength of the metro area's microbusiness economy, small businesses are likely to play a central role in post-pandemic recovery. The proportion of online microbusinesses flagged as a business fell from 84 percent in November 2019 to 79 percent in April 2021, the height of the COVID-19 pandemic, likely due to a significant number of business closures. Following a relatively tepid initial recovery, this figure stood at just 80 percent at the close of 2020, as shown in **Table 14**.

Table 14. Detroit Microbusiness characteristics

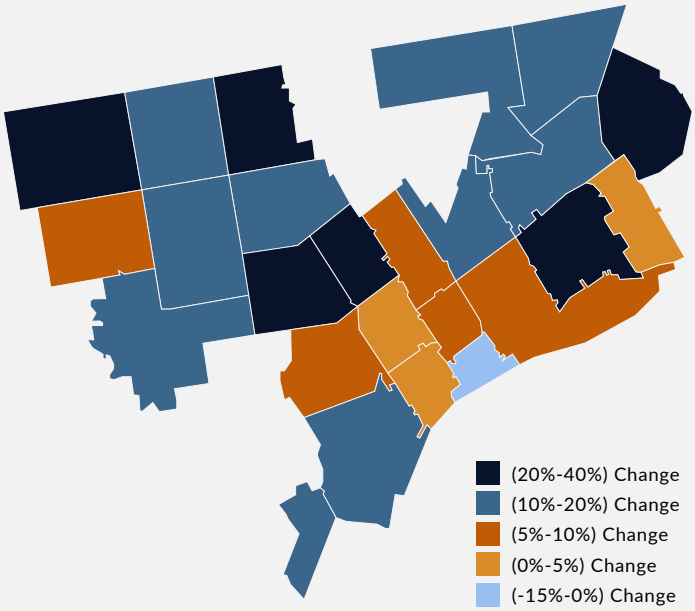
Metro Areas	Microbusiness Density	Brick and Mortar	Professional Services	Commercial Endeavor	Change in 2020
Low–High (Average)	4.8	42.8%	27.8%	79.2%	0.73%
Detroit, MI	5.8	52.9%	36.1%	80.0%	1.74%

Source: GoDaddy analysis (2021)

The overall growth of microbusinesses in Detroit remains promising, reaching 1.7 percent last year—just over twice the national average of 0.78 percent. As shown in **Figure 6**, this growth expanded beyond downtown neighborhoods that have been the locus of major redevelopment efforts in recent years, such as Corktown, Midtown, and New Center, to reach a number of relatively lower-income areas of the city.

Figure 6. Detroit Microbusinesses by Zip Code

Percent Change in Microbusiness Density per 100 Residents, January–December 2020



Source: GoDaddy analysis (2021)

LAKE CHARLES

LOUISIANA

- **Ranked 166th among small cities** on BPC 2021, down from No. 37 in 2020
- **Highest rankings:** Five-year job and wage growth (16.1 percent and 41.1 percent, respectively) were in the top 10 for small cities
- **Lowest rankings:** Job growth measured by one-year (–3.4 percent) and short-term (–18 percent) ranked last among small cities
- **Ranked 32nd among small cities in microbusiness density:** 4.9 microbusinesses per 100 people

Before 2020, **Lake Charles** boasted one of the highest job growth rates in the nation, thanks to massive local investments in the energy sector (particularly liquefied natural gas).[42] However, the region had little high-tech industry. The largest industries were primarily consumption-oriented, including construction, health care, food services, and retail trade,[43] which were all hit hard by the pandemic—as was the area's large gambling industry.[44] Moreover, the region also weathered a battery of recent natural disasters, including two category-4 hurricanes that caused total damages of roughly $12 billion[45] and a rare severe winter storm.[46]

One consequence of the severe weather events was a shrinking population. Lake Charles experienced the largest out-migration of any metro area in 2020, losing 6.7 percent of its total population[47] and the lowest short-term job growth (–18 percent) of any small metro area. In the long term, efforts to restore the metro area's prior growth levels will still require more job creation in resilient industries. Investment in areas such as broadband infrastructure (particularly for low-income households) can play a role in improving the long-term outlook. Workforce development programs like those currently offered by McNeese State College and SOWELA Technical Community College, which train professionals in petrochemical production and support services,[48] can be adapted to expand the region's skilled workforce further. And regional coordination efforts to support small business microbusinesses—including partnerships among the City of Lake Charles and Southwest Louisiana Economic Development Alliance—can help further diversify the range of opportunities available to local entrepreneurs.[49]

HIGH BPC AND LOW VF

Table 15. Characteristics of High–Low Metro Areas

Percentages for Metro Areas

Metro Areas	Households with Broadband Subscription	Very Low-Income Households with Broadband Subscription	Population with College Degree	Population with Advanced Degree	Employment in Manufacturing	Employment in Agriculture
Mean All (67)	**63.4**	**53.6**	**16.3**	**9.7**	**12.3**	**2.9**
Mean Large (25)	**66.8**	**55.2**	**17.5**	**10.3**	**11.7**	**2.7**
Fresno, CA	62.7	54.8	14.0	7.1	6.8	9.7
Mean Small (42)	**61.4**	**52.6**	**15.5**	**9.3**	**12.6**	**3.0**
College Station, TX	61.6	65.0	20.6	16.9	6.3	3.5
Jonesboro, AR	58.3	57.8	14.9	8.5	14.9	3.2
Yuma, AZ	58.5	52.6	9.8	5.2	4.6	11.7

Source: GoDaddy analysis of 5-Year American Community Survey (2014-2019)

Many of the metro areas that ranked high on BPC and low on VF have a single industry that supports an outsized proportion of the city's job creation and wage growth. These cities include agribusiness and food processing centers as well as aerospace and automotive manufacturing hubs. Unsurprisingly, these cities also tended to have relatively lower levels of broadband access, particularly for very low-income households, and many High–Low cities also lagged in educational attainment (despite the presence of several metro areas that have universities with strong technical programs).

Concentrated agribusiness and manufacturing industries also contribute to the agglomeration of relatively larger immigrant populations. The average Hispanic population of High–Low metros (15.3 percent) was the highest of any quadrant, and several cities that are relatively close to the US–Mexico border also had large numbers of foreign-born residents (including Yuma at 26.3 percent and Fresno at 21.2 percent). Given the relatively lower average wages in agricultural and manufacturing work, residents are also likely to have relatively lower average incomes—partially reflected by the low costs of living in many High–Low metros—and thus less disposable income with which to start a business or consume products offered by local microbusinesses.

Table 16. Comparing High–Low Metro Areas

Rankings on BPC 2021 and VF 2020

	College Station, TX	Fresno, CA	Jonesboro, AR	Yuma, AZ
BPC Overall (2021)	**21 (Small)**	**60 (Large)**	**14 (Small)**	**66 (Small)**
Job growth (2018-19)	14	33	21	29
Job growth (2014-19)	20	27	13	40
Wage growth (2018-19)	43	34	17	42
Wage growth (2014-19)	33	42	26	42
Short-term job growth (10/2019-10/2020)	27	117	7	73
High-tech GDP growth (2018-19)	38	48	29	195
High-tech GDP growth (2014-19)	49	72	129	170
High-tech GDP concentration (2019)	59	172	181	132
Number of high-tech industries (2019)	131	110	167	131
Broadband access (2019)	146	183	73	142
Affordable housing costs (2019)	188	188	123	135
Affordable housing costs (2014-18)	184	184	76	125
VF Microbusiness Density (2020)	**147**	**177**	**178**	**183**

Source: Milken Institute and GoDaddy analysis (2021)

COLLEGE STATION

TEXAS

- **Ranked 21st among small cities** on BPC 2021, down from No. 16 in 2020
- **Highest rankings:** Five-year jobs growth (12.8 percent) and wage growth (26.9 percent)
- **Lowest rankings:** Low housing affordability (Five-year: 64.2 percent)
- **Ranked 147th in microbusiness density** in 2020: 2.21 microbusinesses per 100 people

College Station houses the main campus of Texas A&M University, which has a student population of more than 60,000 and hosts research projects funded by NASA, the National Institutes of Health, the National Science Foundation, and the Office of Naval Research. The city is also home to a number of business parks, including the Business Center at College Station, Spring Creek Corporate Campus, Crescent Pointe, and the Texas A&M University Research Park. The city's largest employers are the Texas A&M system, Bryan Independent School System, St. Joseph Regional Health System, and Sanderson Farms.

Like a subset of High–Low cities, College Station's university presence enhances the relative education of residents, who are nearly twice as likely to have an advanced degree as the metro average for the quadrant. And while around 61 percent of the population has broadband access, with a relatively higher rate (65 percent) among the very low-income population (likely explained by the metro area's large population of college students), this is still low relative to the level of access found in other quadrants.

FRESNO

CALIFORNIA

- **Ranked 60th among large cities** on BPC 2021, down from No. 32 in 2020
- **Highest rankings:** Five-year jobs growth (15.7 percent) and wage growth (31.1 percent)
- **Lowest rankings:** High-tech concentration (LQ: 0.4), broadband access (82.1 percent), and housing affordability (Five-Year: 60.7 percent)
- **Ranked 177th in microbusiness density** in 2020: 1.82 microbusinesses per 100 people

Fresno is the largest city in California's Central Valley and was the nation's top city for agricultural production in 2019.[50] The industry is the greatest source of local employment, accounting for almost one-third of regional jobs,[51] though other large local employers include institutions in education, health care, and public administration such as Community Medical Centers, the City of Fresno, Saint Agnes Medical Center, Kaiser Permanente, CSU Fresno, and State Center Community College.[52]

Despite the prevalence of relatively lower-wage agricultural and service-sector jobs, the metro area stands out for its high housing costs. Average rents rose more than 35 percent over the last four years, the largest increase in the country, and more than 10 percent from February 2020 to February 2021, ranking second nationwide.[53] In addition to the limited disposable income caused by low wages and high rents, access to information and education are also constraints on the growth of the local microbusiness economy, as shown by Fresno's relatively low levels of broadband access and lower-than-average numbers of college graduates.

These constraints on microbusiness density growth were illustrated quite clearly during the pandemic, as Fresno's rate of microbusiness growth was only slightly above the national average (0.95 percent vs. 0.78 percent, respectively), as shown in **Table 17**. Fresno's overall level of microbusiness density at the end of 2020 remained below pre-pandemic levels.

Table 17. Fresno Microbusiness characteristics

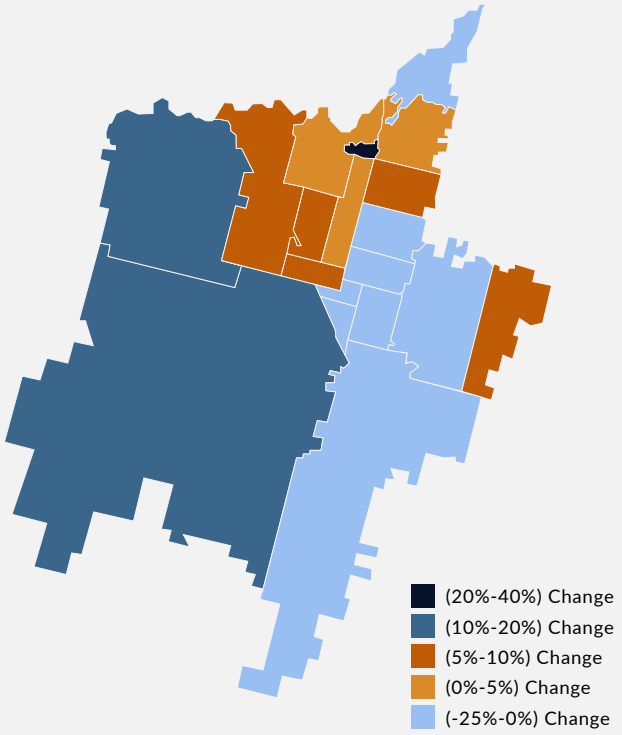
Metro Areas	Microbusiness Density	Brick and Mortar	Professional Services	Commercial Endeavor	Change in 2020
High–Low (Average)	2.2	35.2%	25.3%	74.2%	0.31%
Fresno, CA	1.82	38.2%	30.0%	72.1%	0.95%

Source: GoDaddy analysis (2021)

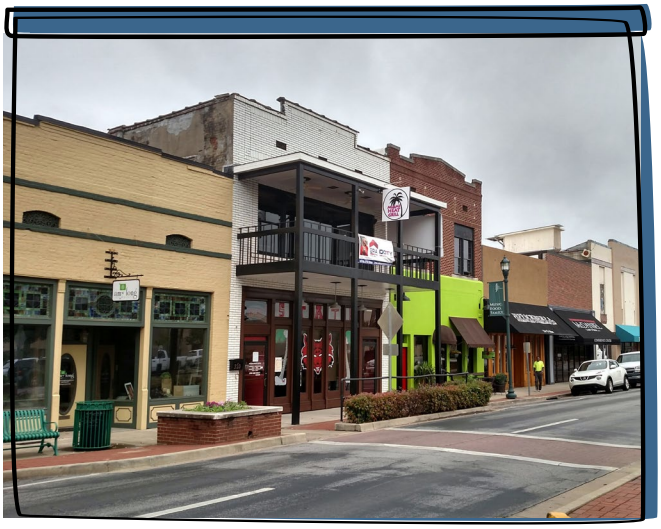
As shown in **Figure 7**, much of the growth in Fresno's microbusiness density over the past year was concentrated on the west side of the city. Given that this section of the metro area has traditionally been characterized by lower average incomes and higher levels of poverty,[54] the development of microbusinesses here could potentially present a new range of opportunities for the region's most disadvantaged residents.

Figure 7. Fresno Microbusinesses by Zip Code

Percent Change in Microbusiness Density per 100 Residents, January–December 2020



Source: GoDaddy analysis (2021)



JONESBORO

ARKANSAS

- **Ranked 14th among small cities** on BPC 2021, up from No. 52 in 2020
- **Highest rankings:** Short-term job growth (7.7 percent) ranked in the top 10 for small cities
- **Lowest rankings:** High-tech concentration (LQ: 0.22) and number of high-tech industries (0)
- **Ranked 178th in microbusiness density** in 2020: 1.65 microbusinesses per 100 people

Jonesboro has a long history as the primary manufacturing center in Northeast Arkansas, though the metro area has transitioned from furniture and clothing production to food processing in recent years. The metro area hosts a large Nestlé frozen foods processing plant, opened in 2002,[55] and facilities operated by Frito-Lay, Butterball, Post, Riceland Foods, and Millard's Refrigerated Services.[56] The city is also home to Arkansas State University, one of the city's top employers alongside St. Bernard's Medical Center, NEA Baptist Health System, Walmart, City of Jonesboro, Ritter Communications, Quebecor World, Jonesboro Public Schools, and Thomas & Betts.[57]

While these characteristics have generally supported strong job creation and wage growth figures, the area's extremely low level of high-tech concentration limits the potential for further expansion. And Jonesboro's local economy, like many High–Low metros, lacks key technological and educational resources, including broadband access, that could help increase microbusiness density and create more opportunities for local entrepreneurs.

Image source: Brandonrush, CC BY-SA 4.0 <https://creativecommons.org/licenses/by-sa/4.0>, via Wikimedia Commons

YUMA

ARIZONA

- **Ranked 66th among small cities** on BPC 2021, down from No. 64 in 2020
- **Highest rankings:** One-year (2.1 percent) and five-year job growth (9.3 percent)
- **Lowest rankings:** High-tech GDP growth (Five-Year: 3.8 percent)
- **Ranked 183rd in microbusiness density** in 2020: 1.59 microbusinesses per 100 people

The dry and sunny climate of Southwest Arizona makes **Yuma** an attractive destination for retirees; agriculture remains the principal cornerstone of the regional economy. The region is responsible for 90 percent of all leafy vegetables grown November through March in the United States;[58] there are more than 450 family-owned agricultural companies in the area.[59] The military is also an important component of the local economy due to the presence of Marine Corps Air Station (MCAS) Yuma and the US Army Yuma Proving Ground.[60] Additional large employers include Yuma Union High School District, Yuma Regional Medical Center, TRAX International, and Advanced Call Center.[61]

Despite a strong performance in jobs and wage growth, Yuma scores poorly in all indicators related to high-tech industries: Its rates of educational attainment are well below the averages for High–Low metros, and it also has low rates of broadband access. The area's limited digital infrastructure and human capital are likely to restrict local entrepreneurship opportunities despite the resources offered by the Small Business Development Center at Arizona Western College, so additional investments will likely be required to expand the foundation of the region's microbusiness economy.

CONSIDERING THE POLICY IMPLICATIONS

CAN MICROBUSINESS DENSITY COMPLEMENT EXISTING GROWTH PATTERNS?

High–High Cities

Metro areas with high levels of broadband access and educational attainment demonstrate the capability of high-tech growth and microbusiness activity to complement one another in various ways.

In some metro areas where the expansion of high-tech sectors supports relatively higher average incomes, residents' disposable income generates ample opportunities for microbusinesses to take advantage of any increase in local demand for their products and services. These microbusinesses may include businesses in service sectors (such as restaurants and shops) that expand their online presence to share information with customers or enable local delivery. In other metro areas, the expansion of educational programs and broadband access directly generates new opportunities for microbusinesses to partner with larger high-tech firms as suppliers of key services and/or inputs. These microbusinesses may include businesses competing for R&D grants from the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs run by the US Small Business Administration.

Given the growth potential provided by these dynamics, the best policy alternatives for High–High cities are likely to be those that improve coordination among local businesses, public agencies, and institutions of higher education. These metros can leverage public investment in educational programs and broadband access to establish local startup incubators that in turn identify entrepreneurs whose ideas have the greatest long-term potential for commercial growth and job creation.

High–Low Cities

Many of the cities that rank high on BPC and low on VF do not necessarily demonstrate concentrated high-tech growth. Instead, these cities are frequently characterized by local industries (particularly agriculture) with relatively high levels of job and wage growth, both according to the one- and five-year measures used to calculate the BPC index rankings. Given the predisposition toward highly concentrated forms of economic development, a complementary increase in microbusiness density could serve as a type of reinforcement for the metro area's growth trajectory. By aiming to increase their VF ranking, metro areas could potentially generate other sources of economic opportunity in the event that predominant industries did not continue to produce jobs and raise wages at the same rates.

However, increasing microbusiness density in High–Low metro areas is likely to require substantial investment in education and digital infrastructure. As shown by the cities featured in this report, relatively limited numbers of college graduates and residents with broadband access are major restrictions on entrepreneurship. Among those workers who elect to leave lower-wage agriculture and manufacturing jobs to start a business, access to benefits (particularly health care) should also be a core consideration for policymakers, in light of the additional risks assumed by these entrepreneurs.

Because one is also likely to encounter relatively larger numbers of Hispanic and foreign-born residents in many of these metros, efforts to

expand access and inclusion should also be culturally competent and attentive to their particular needs. The Milken Institute found that Hispanic essential workers in California (including but not limited to the Fresno metro area) are more likely to be required to report for work in person and less likely to receive health insurance or access to unemployment benefits.[62] Focusing on social programs to support these residents is fundamental to the outlook for microbusiness density and helps make workers in these communities more resilient to the effects of broader economic downturns.

CAN MICROBUSINESS EXPANSION OVERCOME EXISTING GROWTH CONSTRAINTS?

Low–High Cities

Low–High metro areas present a dichotomy: on one hand, low levels of job creation, wage growth, and high-tech concentration (shown by a low ranking on BPC), and on the other, high levels of small business dynamism and digital activity (shown by a high ranking on VF). This divergence could show that metro area economic growth is limited by non-high-tech sectors such as manufacturing, but that cities still have key assets to support entrepreneurship. Strong VF rankings may also indicate that their local economies are growing more resilient to economic shocks (such as the COVID-19 pandemic) by providing residents with opportunities, even as traditionally dominant industries struggle to keep pace in the 21st century.

For large cities in this quadrant, the challenge lies in establishing incentives for additional microbusiness activity that can help strengthen the high-tech ecosystem in the long run. Through other policy initiatives and partnerships with existing industries, businesses can leverage the presence of human capital assets (such as a skilled manufacturing workforce) to extend their online activity into the production of goods and services. This requires expanding access to the capital that microbusinesses need to grow and access to stable benefits (including health care) that would enable more employees with breakthrough ideas to make the leap into entrepreneurship.

Furthermore, greater investments in expanded broadband access and affordable housing construction can ensure that these opportunities are accessible to all community residents. Improvements to the infrastructure of Low–High metro areas can reduce existing pressures on residents' incomes. This frees up not only more funds required by entrepreneurs to start microbusinesses but also more disposable income for residents to purchase goods and services from local microbusinesses.

Low–Low Cities

The primary goal for Low–Low cities should be to expand the range of opportunities for residents at the base of the pyramid, generating as many paths to prosperity as possible. Creating a foundation for growth will require giving more tools to vulnerable populations and those that have been excluded from higher-income opportunities—particularly in industries responsible for knowledge-based growth. These tools include the infrastructure provided by education and broadband access, but may also include more public grants and contracts for microbusinesses that can directly stimulate job creation.

Because Low–Low metros also tend to have the lowest costs of living of any quadrant, gains for the lowest-income residents will have an outsized impact on prosperity, with the potential for building on these gains through a cycle of positive reinforcement: more jobs created for residents, more residents with incomes to support consumption, and more spending to support local businesses. And as these positive returns accumulate, policymakers can consider how best to utilize the tax revenues to support additional programs and initiatives that further expand the reach of the microbusiness economy, thus helping stimulate longer-term job and wage growth.

HOW CAN METRO AREAS SUPPORT AN INCREASE IN MICROBUSINESS DENSITY?

Broadband provides a tool for expanding opportunity. The notable positive difference in broadband access in High–High cities compared to the other three quadrants appears to further demonstrate its value as a tool for generating economic opportunity via microbusiness activity. High–High metros not only had higher levels of broadband access overall, but notably had the highest levels of access among low-income households—just 2.4 percentage points lower than the overall level of access in Low–Low metros.

Education and training provide residents with the skills they need to be flexible. Policies that support greater investment in broadband infrastructure do not operate in a vacuum. Education and training are crucially important tools for entrepreneurs to leverage the power of the internet, enabling the formation of new e-commerce businesses as well as helping brick and mortar businesses to move some of their business online.

Existing businesses can expand in the digital space. The pandemic demonstrated the particular value of an online presence for even the best-established businesses. As different parts of the nation face unique paths to economic recovery, an online presence can allow business owners to reach consumers in geographically distant markets that may be recovering more quickly.

Lower costs can help attract entrepreneurs. Many communities that ranked lower on VF (both Low–Low and High–Low cities) also had relatively lower costs of living and starting a business. These may be paired with additional initiatives to make these cities more attractive places for residents with greater educational attributes, thus providing several key elements required to increase microbusiness density.

TECHNICAL APPENDIX

BPC METHODOLOGY

The Milken Institute's annual Best-Performing Cities index measures economic vitality in 400 metro areas across the United States. Cities are ranked by using the outcomes-based metrics listed in **Table 18**:

Table 18. Components of the Best-Performing Cities Index

Measure	Weight	Data Source
Job growth (I=2014)	0.118	Bureau of Economic Analysis via Moody's Analytics (2020)
Job growth (I=2018)	0.118	Bureau of Economic Analysis via Moody's Analytics (2020)
Wage and salary growth (I=2014)	0.118	Bureau of Economic Analysis via Moody's Analytics (2020)
Wage and salary growth (I=2018)	0.118	Bureau of Economic Analysis via Moody's Analytics (2020)
Short-term job growth (Oct. 2019-Oct. 2020)	0.118	Current Employment Statistics via Moody's Analytics (2020)
High-tech GDP growth (I=2014)	0.0585	Milken Institute Analysis of Moody's Analytics (2020)
High-tech GDP growth (I=2018)	0.0585	Milken Institute Analysis of Moody's Analytics (2020)
High-tech GDP location quotient (2019)	0.0585	Milken Institute Analysis of Moody's Analytics (2020)
Number of high-tech industries with GDP LQ>1 (2019)	0.0585	Milken Institute Analysis of Moody's Analytics (2020)
Household access to broadband (2019)	0.0585	US Census 2019 ACS (1-Year)
Households with affordable housing costs (2014-18)	0.0585	US Census 2018 ACS (5-Year)
Households with affordable housing costs (2019)	0.0585	US Census 2019 ACS (1-Year)

Notes: "I" refers to the beginning year of the period to which data are indexed. Weights do not add up to 1 due to rounding.

Source: Milken Institute analysis (2021)

For each variable, the relevant value is calculated (for instance, job growth from 2014 to 2019) and then indexed to aggregate US data (job growth in the US from 2014 to 2019), resulting in indexed values that reveal a metro's performance relative to the US overall. Cities are then split into "large" and "small" based on population. The largest 200 form the "large" cities index, and the smaller 200 form the "small" cities index. Following the split by population, each component variable is weighted by using the following values to arrive at overall rankings.

In analyzing the economies of the 400 metro areas, **Table 19** outlines the full list of industries that are considered "high-tech."

Table 19. High-Tech Industries Included in the Best-Performing Cities Index

NAICS Code	Industry Description
3254	Pharmaceutical and Medicine Manufacturing
3333	Commercial and Service Industry Machinery Manufacturing
3341	Computer and Peripheral Equipment Manufacturing
3342	Communications Equipment Manufacturing
3343	Audio and Video Equipment Manufacturing
3345	Navigational, Measuring, Medical, and Control Instruments Manufacturing
3344	Semiconductor and Other Electronic Component Manufacturing
3346	Manufacturing and Reproducing Magnetic and Optical Media
3364	Aerospace Product and Parts Manufacturing
3391	Medical Equipment and Supplies Manufacturing
5112	Software Publishers
5121	Motion Picture and Video Industries
5122	Sound Recording
517	Telecommunications
518	Data Processing, Hosting, and Related Services
5191	Other Information Services
5413	Architectural, Engineering, and Related Services
5415	Computer Systems Design and Related Services
5417	Scientific Research and Development Services
6215	Medical and Diagnostic Laboratories

Source: Milken Institute analysis (2021)

BPC GEOGRAPHIES

We employ the geographic terms and definitions used by the Office of Management and Budget (OMB), most recently updated after the 2010 US census. These define a metropolitan statistical area (MSA) as a region comprising a large population nucleus and adjacent territory with a high degree of economic and social integration, as measured by community ties. There are 381 MSAs that fit these parameters.

If specific criteria are met, an MSA with a single nucleus and a population of 2.5 million or more is further divided into geographic areas called metropolitan divisions (MDs), of which there are currently 31. For example, the Los Angeles–Long Beach–Anaheim, California MSA comprises two metropolitan divisions: the Los Angeles–Long Beach–Glendale, California Metro Division and the Anaheim–Santa Ana–Irvine, California Metro Division. We include smaller MDs in the index to reflect more detailed geographic growth patterns.

VF GEOGRAPHIES

GoDaddy's Venture Forward initiative reports microbusiness data findings for all 383 of OMB's defined metropolitan statistical areas. However, it does not report those data at the same metro division level. For those 31 metro divisions, we use the primate metro division's BPC ranking and compare it with the MSA's overall ranking for microbusiness density. For instance, in the case of Chicago, we compare the BPC rankings for the Chicago–Naperville–Evanston, Illinois metro division (the primate city) with the Chicago–Naperville–Elgin, Illinois-Indiana-Wisconsin MSA's performance on microbusiness density.

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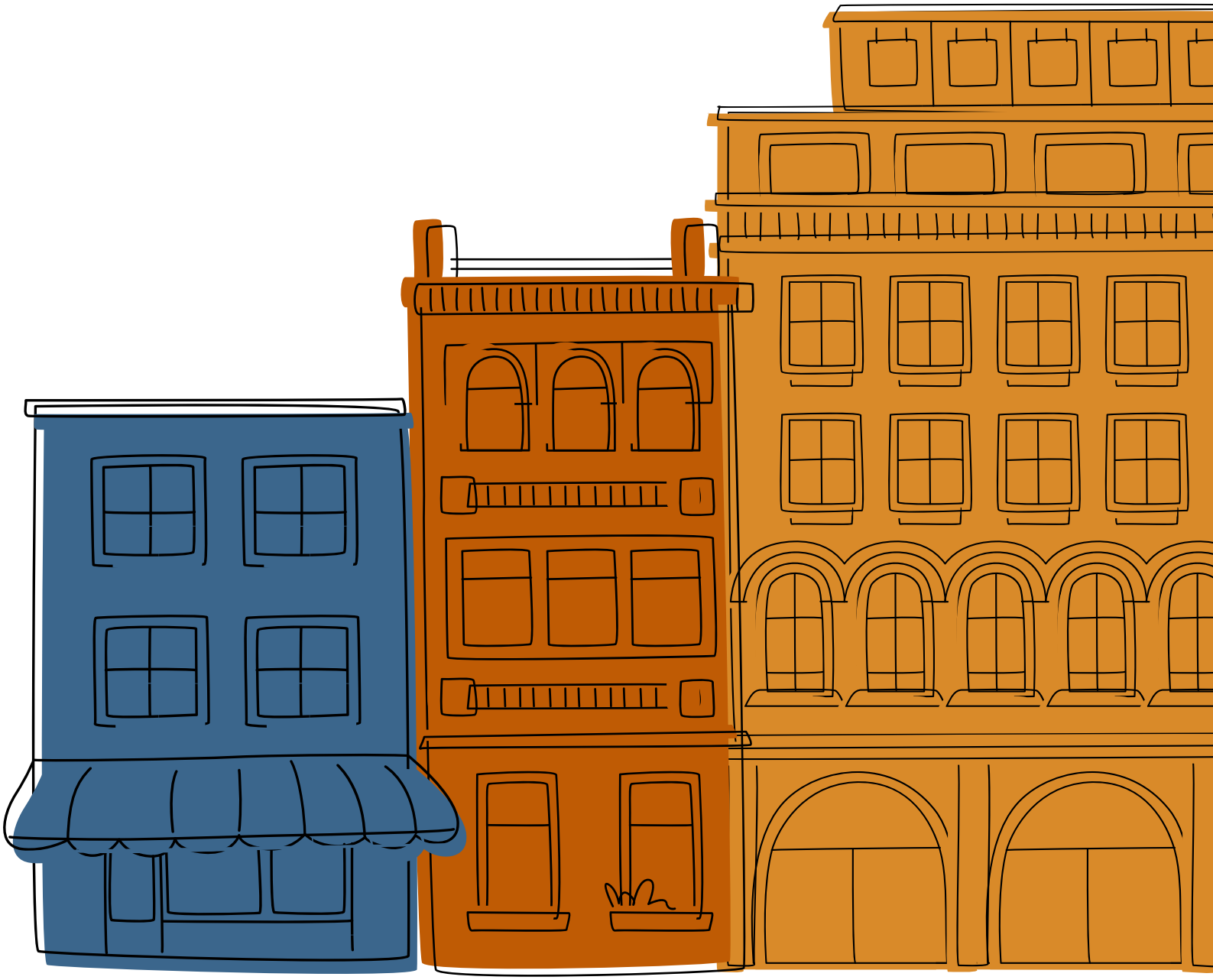

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