

2018

STATE OF THE **SILICON PRAIRIE** REPORT

RELEASED FEBRUARY 1, 2019

[/siliconprairienews](#)

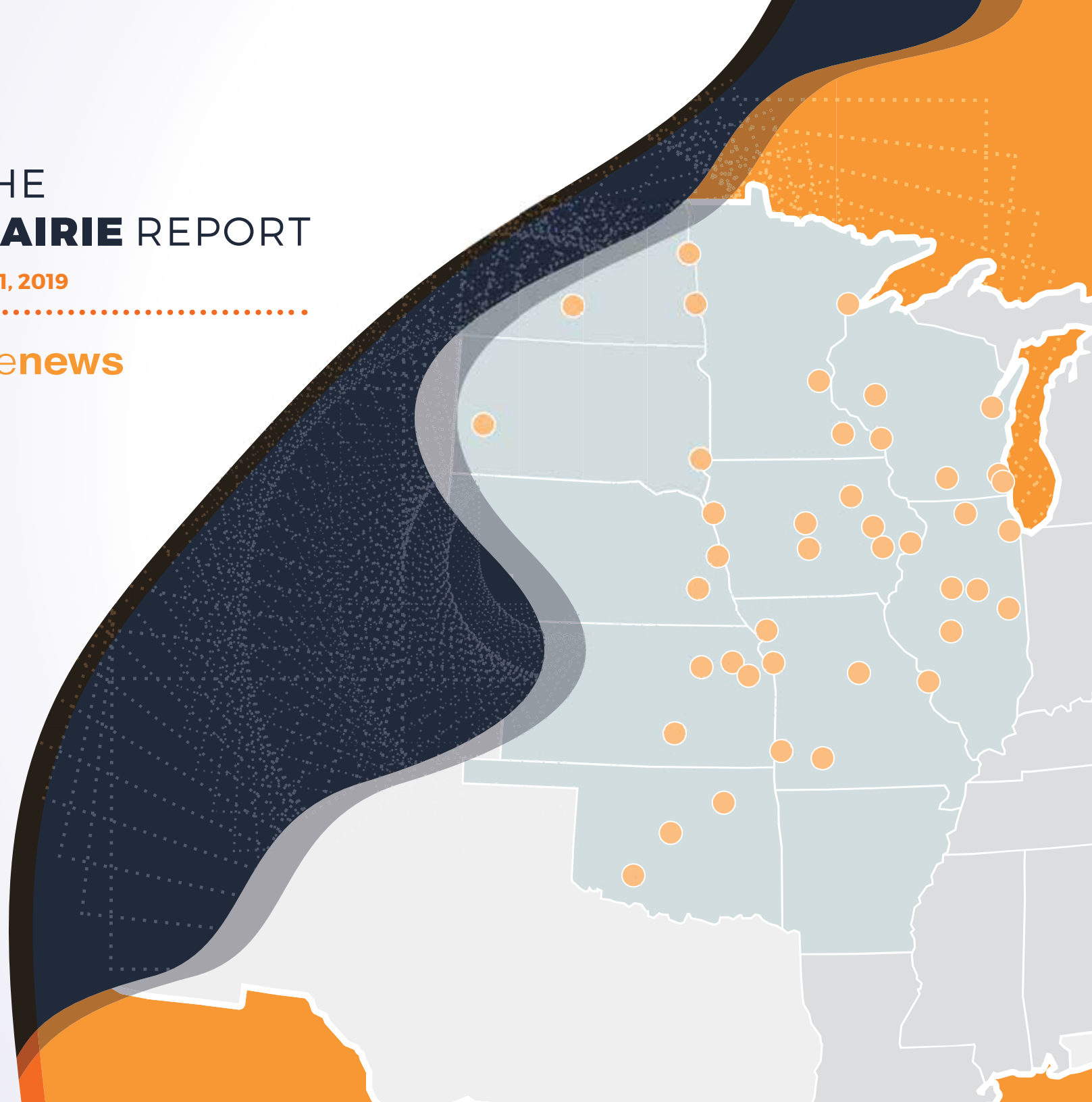


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Our Mission

The mission of Silicon Prairie News is to grow, connect and inspire the tech innovation communities of Nebraska, Iowa, Missouri and Kansas.

WE DO THAT BY

Raising Awareness of activity in our region through our media publications

Welcoming new people into the community and pointing them in the right direction

Inspiring current and future entrepreneurs, investors, tech talent and creative talent to start, invest in, and/or join innovative tech ventures

Connecting people within the community in order to build partnerships, collaborate, and innovate.

PART OF THE AIM FAMILY

SPN is a division of the AIM Institute, an innovative not for profit that grows, connects and inspires the tech talent community through career development and educational programs.

WHERE WE COVER

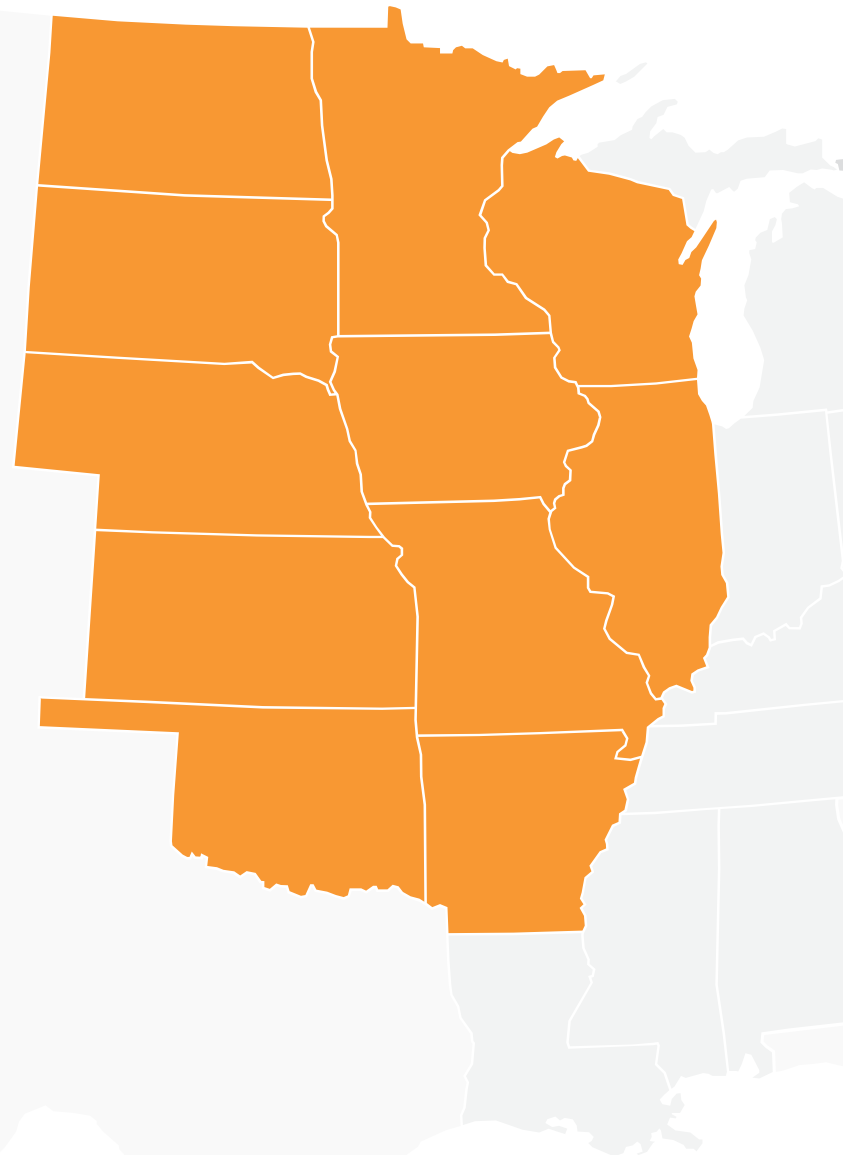
We cover Nebraska, Iowa, Kansas and Missouri. Our primary focus is the Omaha-Kansas City-Des Moines triangle and surrounding communities.

Nebraska – Omaha, Lincoln

Kansas – Wichita, Overland Park, Topeka, Olathe, Lawrence

Iowa – Des Moines, Cedar Rapids, Iowa City

Missouri – Kansas City, St. Louis, Columbia



Methodology

Chapman and Company, who compiled this report, uses a proprietary methodology for reporting – which is code for “This is probably not going to give you enough information.” The methodology is rooted in the belief that ecosystems have eight specific components; Chapman and Company attempted to measure those components using relatively near-term measurements. Thus, some of the measurements are not accurate compared to what will be discovered in five years – but the report attempts to focus on having metrics that matter today.

COMPONENTS MEASURED:

- 1. Small Business Activity** | SBA Loans from your region – both the number and amount
- 2. Cool Jobs** | STEM graduates and jobs, and additional jobs from categories 15-0000, 17-0000, 19-0000 from the Occupational Employment Survey of the Bureau of Labor Statistics
- 3. Sustaining Companies** | Inc. 5000 dollars and number of companies
- 4. Structure** | corporate broadband offerings (available from the federal government), incubators, accelerators, universities, and university research dollars
- 5. Innovation** | SBIR/STTR grants and award size, and number of patents of the region’s five largest patent holders

6. Venture Investment | Pitchbook venture dollars and number of investments

7. Community Spirit | the survey deployed in November and December 2018

8. Connectivity | entrepreneurial meetups as listed on common websites – meetups.org, for example

A WORD FROM THE REPORT AUTHORS, CHAPMAN AND COMPANY

Is this a good measuring tool? Yes and no. The challenge in measuring startup activity and entrepreneurship is that there is always a desire for more accuracy – but more accuracy usually occurs at the cost of time or comparables. For example, many communities may feel that the report missed a deal because of our data set, or that we failed to account for a meetup because it was not on meetups.org.

This challenge is true of all of the communities measured in the report. At some level, failure to measure a single deal in every community becomes a wash. That said, however, it is true that certain communities record their deals or enter the Inc. 5000 application at higher velocities.

Our response to the challenge of accounting for what is happening in communities is that engagement and transparency are both indicators

¹ We have created an economic impact tool – called LAUREA – that we will likely deploy for individual communities in the future. This tool uses some of the same collection but highlights economic impact and job creation more directly.

of a better ecosystem – they are inherently difficult to measure. Thus, our selection of near-term tools is also validating communities that do a good job of getting their companies out and recorded in common sites. We are not the only people that read these types of data sites. Venture capitalists, banks, and other entrepreneurs look at those sites also.

We believe that our measuring system is as good or better than anything currently deployed specifically to measure ecosystem level activity, particularly in communities under one million people¹. But, all told, researching, reading, and writing this report was hundreds of work hours. It is not perfect – but it is our best effort at providing an accurate measuring stick against all of the differences in the region.

In addition, we stand by our eight measuring areas as being the right data points to measure. These are not vanity metrics and they are not intended to measure data in order to move a certain community ahead or behind. We place higher value on certain data because we believe it reflects the quality and strength of the ecosystem. This does mean that certain “wins” are worth more for a community, but it also provides a vehicle for new ecosystem builders to think about how to move the needle quickly. For example, we highly recommend to all parties to work on getting more Inc. 5000 applications in during the February/March 2019 timeline. This will help your ecosystem. It will also help your ranking. But don't do it to move up a couple places in this report, do it for your community.

Finally, we know that our report overvalues college towns and larger population. We attempt to correct for those things in our algorithm, but it is not a perfect science. In particular, we would like to be more selective regarding how we measure connectivity and structure. However, we have not yet found common measurements that we

think are as accurate as we would like. These would both provide better weighting to cities that do not have a university. Simply put, with more variables and when comparing Chicago to St. Joseph, MO, there are going to be some impossible comparisons that lead to certain attributes being more highly valued.

But, we are proud of our work, and we appreciate you reading this year's report.

Disclaimer: Chapman and Company was responsible for gathering the data and writing this report. The references of “we” or the “team” in this report represent views of Chapman and Company, not necessarily the views of Silicon Prairie News or its affiliates.



Venture Capital

State of the Silicon Prairie Analysis

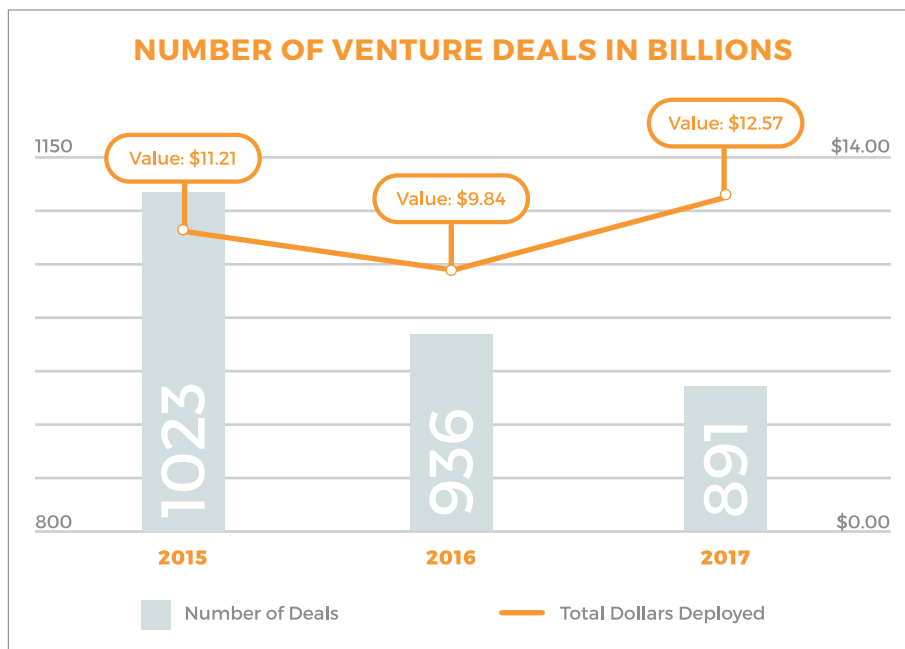
Funding Activity

Venture Capital funding activity in the region increased by 28% from 2016 to 2018 despite the decreasing number of companies receiving funding. Chicago was a significant spur for the region – but other communities such as Lincoln, Nebraska and Champaign, Illinois provided valuable community funding growth.

Lincoln’s funding growth was driven by two large deals – Hudl and Virtual Incision, whereas Champaign and Madison had many deals (even in a down year for Madison). St. Louis and Minneapolis’ funding was weighted toward biotechnology funding with numerous

companies in these cities receiving tens of millions of dollars. Chicago’s venture funding included biotech and also a range of software applications and software development technologies. Across the region, there were a number of notable fundings (see graphic). This is not an exhaustive list of fundings, but one theme that was clear was that the number of Series A, Seed, and Pre-seed funding activities dominate the number of deals.

Not surprisingly, the region had significant ag-related biotechnology and software funding activity. Moreover, the region tended toward enterprise software rather than consumer applications. Finally, St. Louis, Minneapolis, and Chicago are strong leaders when it comes to the number of fundings and dollars; the other large cities in the region are significant laggards.



COMPANY	REVENUE	CITY
Bright Health	\$160 mm	Minneapolis
Uptake	\$117 mm*	Chicago
Tempus	\$70 mm	Chicago
Raise	\$60 mm	Chicago
Spothero	\$31.2 mm	Chicago
Yello	\$31 mm	Chicago
New Leaf	\$30 mm	St. Louis
Hudl	\$30 mm	Lincoln
Equipment Share	\$29 mm	Columbia
Farmobile	\$18.1 mm	Kansas City
Virtual Incision	\$18 mm	Lincoln
HealthMyne	\$11 mm	Madison

Delta: Why Silicon Prairie Communities should be thinking about where they should be, not just where others are.

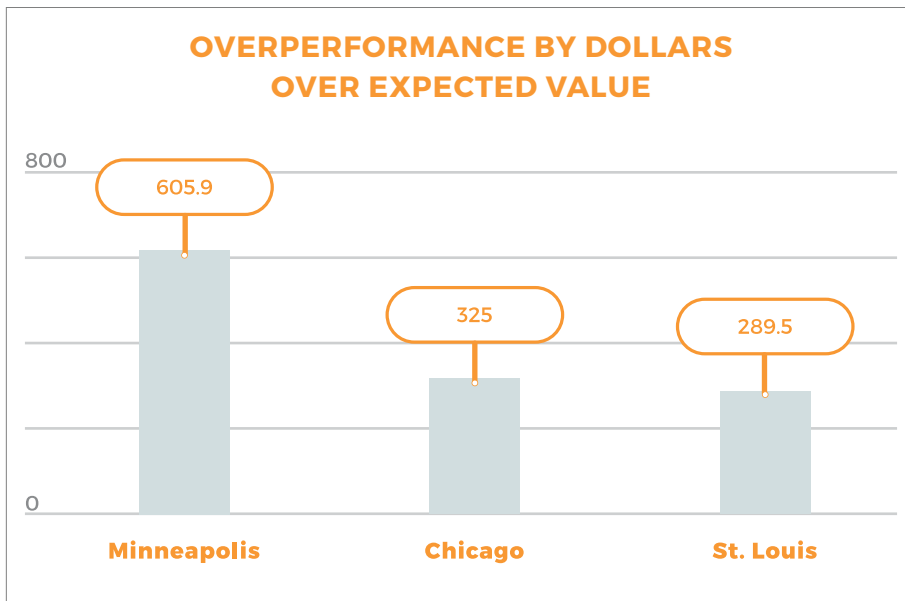
However, this first impression was flawed on further examination. Three dominant themes emerged as the data was scrutinized.

The first big takeaway is that the three largest communities in the Midwest dominate the investments in the region. Chicago, Minneapolis, and St. Louis have the most deals and also significantly overperform their expected value. These communities each had more than \$500 million dollars in investment – but they also exceeded the expectations of what a community of their size should produce based on the rest of the region. Minneapolis specifically had an impressive 2017 with multiple large deals – particularly in health care technology and health care software. The region overall performed admirably with over \$3 billion in investment activity during the year of 2017-2018, and indications for 2019 suggest another great year for investment in the Midwest.



The second big takeaway from the data is that the next six cities dramatically underperformed against their expected values from a population perspective. Kansas City, in particular, was a surprise with the relative scarcity of dollars invested in the ecosystem in 2018. Kansas City had roughly \$100 million in investment, falling short of the expected \$200 million based on previous analysis. It is therefore not the case that investments and company creation are not occurring in Silicon Prairie cities. Rather, these mid-sized communities are underperforming against the expected value that their comparatively greater populations would suggest. The picture looked different in many ways five years ago. Chicago and St. Louis had not yet built an ecosystem as robust as it is at present. The expected value based on similarly situated Midwest cities was lower at the time. The rest of the region is now underperforming based on the data, given the current success of these cities.

The third big takeaway is the success of college towns as magnets for venture capital investments. The significant overproduction of companies that create venture investment is noteworthy. The top five college towns in the Silicon Prairie are Champaign (University of Illinois), Madison (University of Wisconsin), Lincoln (University of Nebraska), Columbia (University of Missouri), and Iowa City (University of Iowa). These communities interestingly have significant dollars tied to venture investing, though in many instances the startup companies are not, in fact, university spin outs. Thus, the correlation may have more to do with other factors regarding these towns, such as transient populations, alumni networks in richer venture capital environments, and access to well-qualified human capital, for example. However, this correlation between a greater number of startups and venture deals, or more investment money per startup in those cities may also be due to the nature of being located in a



CITY	VALUE
Omaha	-17.53318239
Wichita	-21.82197854
Tulsa	-31.2242766
Milwaukee	-94.58038315
Kansas City	-97.34543739
Oklahoma City	-112.0989553

university town, even if the investment or innovation creation is not causally related to the university; the greater investment and creation may nonetheless be tied to the university in some way.

In conclusion, venture deals are a good metric for measuring venture activity. These deals are one measurement of an ecosystem – but not the only measurement. Failure to consider population when measuring venture deals across cities can result in a distorted view of true investment landscape in these communities. Measuring venture deals also often reveals other trends – such as success of venture-raising in college towns compared to those towns’ population. In short, considering the correlation of investments to population is a better way to view venture capital in your community. Viewing the metrics in this way (in this case the Midwest’s similarly situated communities), rather than simply raw numbers, provides a more accurate approach to ascertaining the health of each city’s individual startup ecosystem health.

VC DEALS 2017



State Expected Venture Values in the Midwest

Following the publication of an article regarding expected values in cities, Silicon Prairie News received multiple requests for more information. There were three primary questions regarding the data.

THE FIRST QUESTION IS WHERE AND HOW WE OBTAINED THE INFORMATION FOR THE REPORT? Silicon Prairie News and its partner organizations use Pitchbook and FormDs.com to identify companies that have received funding during a specific period of time. Pitchbook is a national database that is the pre-eminent provider of early stage financial information in the world. Pitchbook provides data not just about funding amounts, but other data that includes information about the companies, such as who are the founders, who are the executives, who are the funders, etc.

This is one of the ways that SPN provides timely information about funding in the region. The other, and primary way for most deals, is that SPN actively looks at the Securities and Exchange Commission (SEC) filings that early stage companies provide. These filings typically come from the Form D exemption filing made by companies seeking to exempt themselves from direct SEC rules. These filings are public. They are “required” but are often not completed.

Inevitably, in every community, companies receive investment without filing a Form D. SPN, through its research and expertise, believes that these happen frequently, but that they also do not happen in a consistent way where projecting non-filed paperwork makes much sense. However, SPN is always interested in companies receiving investment money and want to help tell those companies’ stories. These companies should feel free to reach out at:
editor@siliconprairienews.com.

THE SECOND QUESTION IS WHAT IS AN EXPECTED VALUE OF VENTURE DOLLARS? To preface a response, it is important to understand what data can and cannot tell us. Data provides a means for seeing information behind the data. The goal of SPN’s stories is to provide information. This information necessarily requires inferences. A common false inference when it comes to measuring communities is that every community is created equally. Community indices will value counting statistics and will thereby indicate that California has a better startup ecosystem than Vermont, for example. It does – but it seems pretty unfair to compare radically different states in this manner. Instead, it seems more relevant to try to normalize key contributors to the differences.

SPN’s partner Chapman and Company believes that city density and population have non-linear effects on startup ecosystems. Comparing Chicago directly to the rest of the region is unfair to both Chicago and

the rest of the region. No one benefits from that type of comparison. However, it is also true that no model Chapman and Company built does an adequate job of providing a dynamic scoring system for each community or state. The expected value is the Bill James first version of sabermetrics. Startups matter when it comes to valuing an ecosystem, and within startups, funding appears to also matter. It is important to consider the ways in which to begin to get our arms around an improved collective understanding of this information.

Chapman and Company provided a tiered system to differentiate smaller cities from bigger cities in the communities article. The company compared only those that seemed relevant – same size and smaller tiers – to normalize. Thus, a comparison that included Chicago would have produced underperformance for every other community. Clearly, that would not be correct. Instead, Chapman and Company compared communities in these tiers. The expected values in the state version that follows this explanation are broken into three tiers: big states (Illinois and Ohio), medium sized states (Michigan, Wisconsin, Indiana, Minnesota, and Missouri), and small states (Oklahoma, Arkansas, Iowa, Kansas, Nebraska, South Dakota, North Dakota). The goal was to provide meaningful data – not just a score sheet – regarding how a state is performing relative to comparable communities. A more refined version would include longitudinal data from the last five or so years, but this is a time intensive task and report for another time.

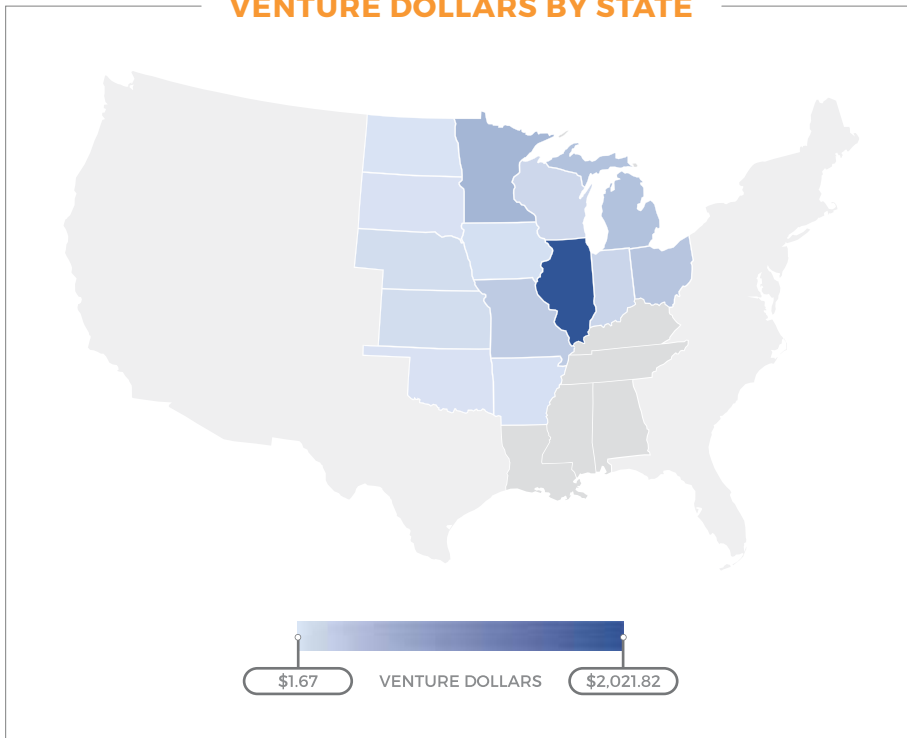
FINALLY, STATES AND CITIES MADE MULTIPLE PHONE CALLS, EMAILS, AND REQUESTS TO SEE STATE-BASED DATA.

These requests were primarily sent from policymakers seeking a way to compare their jurisdictions to other jurisdictions and get a flavor for how they are doing. Chapman and Company is glad to help in this regard, but they strongly caution that they believe city-states (Metropolitan Statistical Areas (MSAs)) are the most effective unit of measurement when it comes to measuring entrepreneurial ecosystems because these systems don't abide by arbitrary

jurisdictions. Thus, Chicago, St. Louis, Kansas City, Fargo, and Omaha communities overlap multiple states as units of measurement. For this reason, Chapman and Company suggests that this report be used as it was intended—to provide an additional view of data that helps inform. Each of these elements are rightish, but none correctly reveals the ecosystem. They are all flawed. Therefore, if your city or state fairs poorly in a particular ranking, metric, etc., don't become discouraged per se. Instead, understand what was measured and whether or not it is a true revelation of your ecosystem. This does not mean that communities and states should use vanity metrics – only that metrics can be fundamentally flawed when they try to do too much story-telling. More data and information are almost always helpful in providing a fuller picture of the ecosystem. Thus, Chapman and Company relies on multiple metrics, sources, and stories to help shape

STATE	VENTURE DOLLARS	EXPECTED VALUE
North Dakota	\$1.67	(\$12.36)
South Dakota	\$10.04	(\$5.98)
Nebraska	\$92.52	\$57.23
Kansas	\$92.30	\$38.50
Arkansas	\$31.43	(\$23.87)
Iowa	\$58.40	\$0.39
Oklahoma	\$18.71	(\$147.32)
Minnesota	\$650.49	\$416.90
Wisconsin	\$168.15	(\$76.39)
Missouri	\$345.12	\$87.28
Indiana	\$207.20	(\$73.49)
Michigan	\$458.33	\$38.19
Ohio	\$443.21	(\$270.44)
Illinois	\$2,021.82	\$1,235.22

VENTURE DOLLARS BY STATE



an understanding for reports such as the Silicon Prairie Annual Report.

The state expected value report reflects the community report produced previously for Silicon Prairie News. Chicago is the dominant Midwest regional ecosystem. It produces more startups than over a quarter of all venture-funded startups in the region. Thus, it is not surprising that Chicago wins in all counting statistics and performs well in expected value.

The surprising states (to all of us on this side of the report) were Missouri, Nebraska, and Kansas. Missouri's success was driven by St.

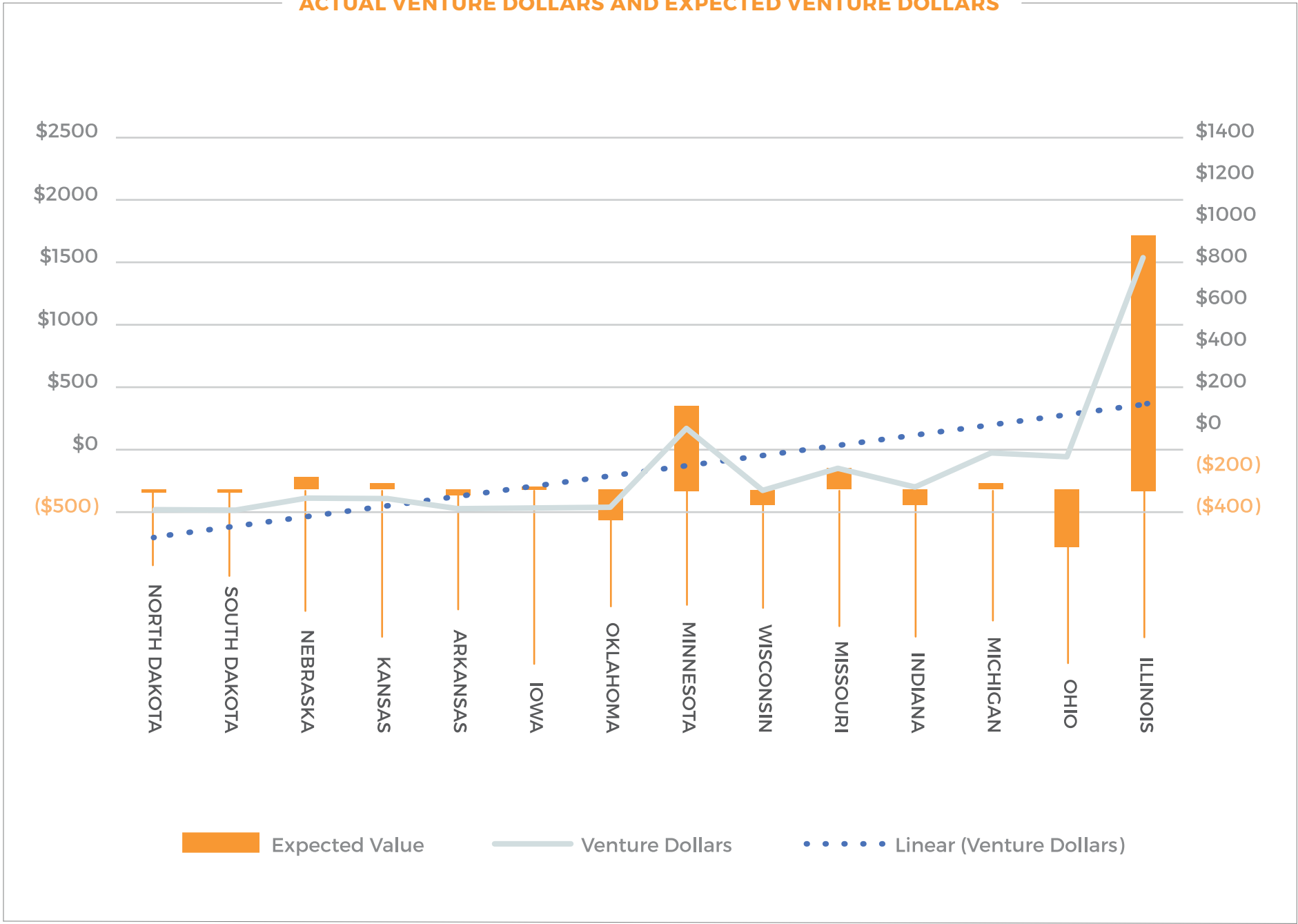
Louis. Kansas' success was driven by Kansas City. And Nebraska's success was driven by Lincoln and Omaha. While Omaha was a slight underperformer in its city score – in combination with Lincoln in a small population state, the two create a significantly overperforming state. Moreover, Kansas City underperformed as a community in the state rankings – but this is attributable to the fact that much of the venture activity is on the Kansas side of the border, not the Missouri side. Thus, the Kansas side of Kansas City created an overperformance for the small state of Kansas, while the St. Louis hammer produced the success for Missouri.

Ohio was expected to score better from an underperformance perspective. Much of this underperformance, Chapman and Company believes (i.e. we did not do the statistical research so this is a hypothesis), is tied to its top tier status and its relative underperformance in some of its larger cities. Cities in Ohio, Michigan, Indiana, or Arkansas were not analyzed while considering the city-based analysis.

In addition, it is noteworthy that Madison's relative success was not enough to prop up Wisconsin's general state-wide dearth of deals. However, Lincoln, Champaign, and Columbia were all significant contributors to their states' overperformance. Thus, having strong college towns as centers of venture capital does seem to be a strong path for many communities. The relative strength of Michigan and Ohio on its face does appear to include strength in Ann Arbor and Columbus, whereas Indiana had relatively weak totals from their multiple college towns (lots of deals – 40 in number, but less than \$25 million in VC money deployed).¹ Thus, from a policy perspective, having a strong university town driving venture development and innovation has worked in many successful states (by our measurements).

¹ West Lafayette (home of Purdue is a good example). The community produced 29 deals but with many \$10,000 and \$20,000 deals – yielding only \$8.6 million. The region had additional deals – but the point is that where Ann Arbor, Madison, Champaign and Lincoln are producing \$50 million. This is a relatively small yield for a high-end research university city. Bloomington (7 deals, \$3.39 million invested) and South Bend (4 deals, \$11.25 million invested) both fared worse in our opinion. Thus, the primary driver of the Indiana score was actually Indianapolis – which is not surprising based on ecosystem rankings, but a little surprising when one considers the academic and tech transfer power in the State of Indiana.

ACTUAL VENTURE DOLLARS AND EXPECTED VENTURE DOLLARS





CITY RANKINGS

Silicon Prairie Cities Ordered by Rank

RANK	CITY	CITY TIER
1	Chicago	1
2	Champaign	4
3	Minneapolis	1
4	St. Louis	1
5	Madison	3
6	Ames	5
7	Kansas City	1
8	Milwaukee	2
9	Iowa City	5
10	Columbia	5
11	Omaha	2
12	Lincoln	3
13	Des Moines	3
14	Oklahoma City	2
15	Cedar Rapids	4
16	Lawrence	5
17	Springfield, IL	4
18	Manhattan	5
19	Fargo	4
20	Bismarck	5
21	Tulsa	2

RANK	CITY	CITY TIER
22	Green Bay	3
23	Springfield, MO	3
24	Grand Forks	5
25	Rochester	4
26	Wichita	3
27	Bloomington	5
28	Rapid City	5
29	La Crosse	5
30	Peoria	3
31	Sioux Falls	4
32	Duluth	4
33	Eau Claire	5
34	Davenport	3
35	Waterloo	5
36	Racine	5
37	Topeka	4
38	Rockford	3
39	Sioux City	5
40	Lawton	5
41	Joplin	5
42	St. Joseph	5



CITY TIERS

Silicon Prairie Cities Ordered by Population

Tier Categories

TIER	POPULATION RANGE
Tier 1	2 mil +
Tier 2	900k-2mil
Tier 3	300k-900k
Tier 4	200k-300k
Tier 5	>200k

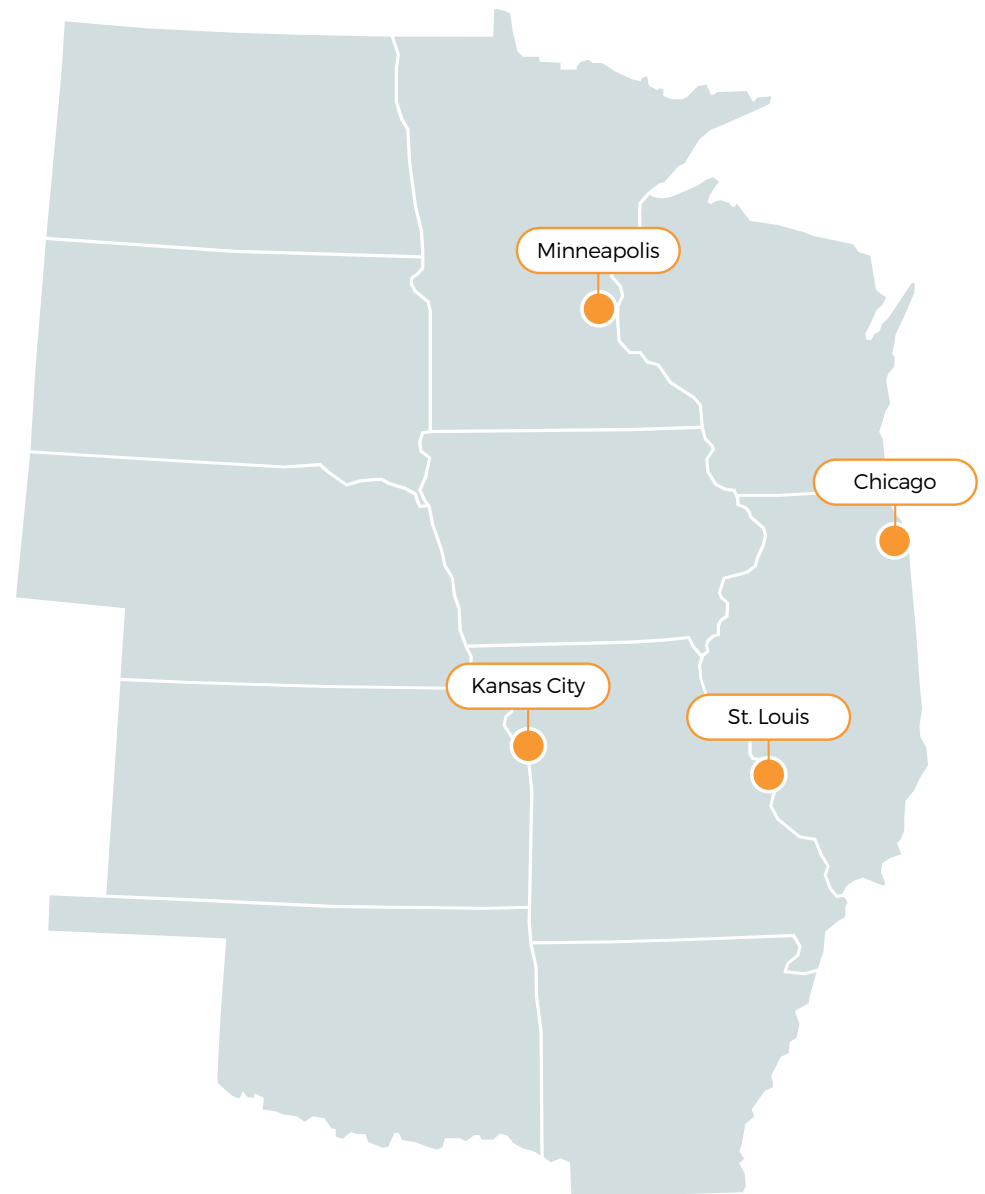


Tier 1 Cities

(population of more than 2 million)

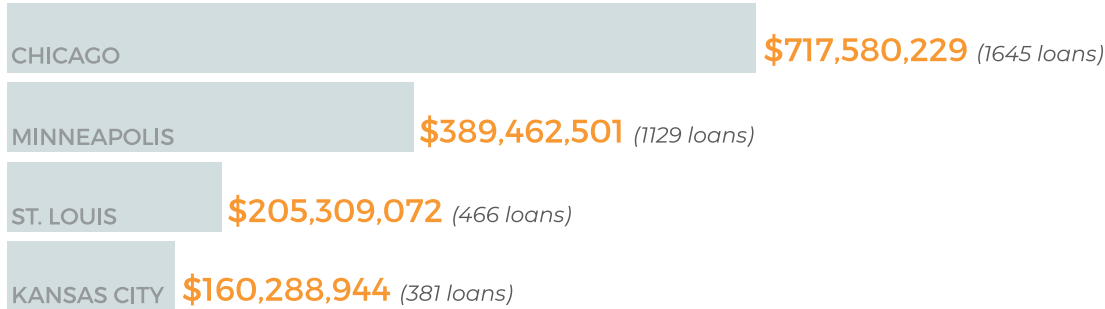
Tier 1 *(population of more than 2 million)*

CITY	POPULATION
Chicago	9,533,040
Minneapolis	3,600,618
St. Louis	2,807,338
Kansas City	2,128,912

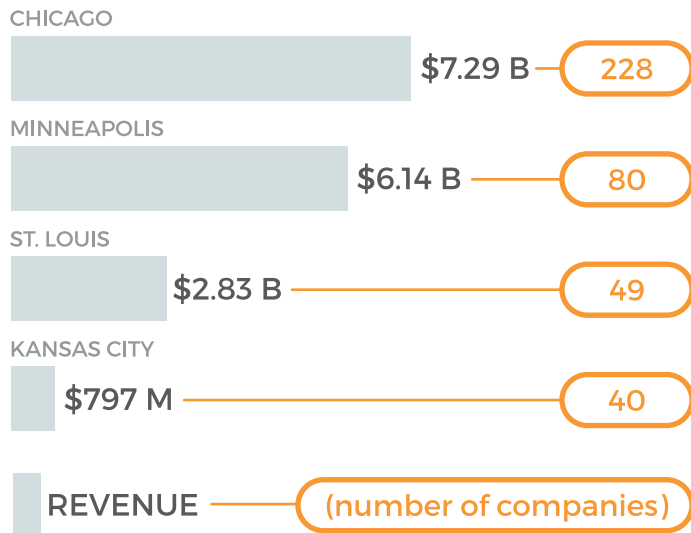


Community Stats

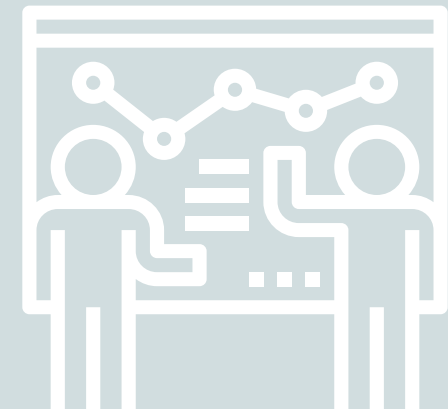
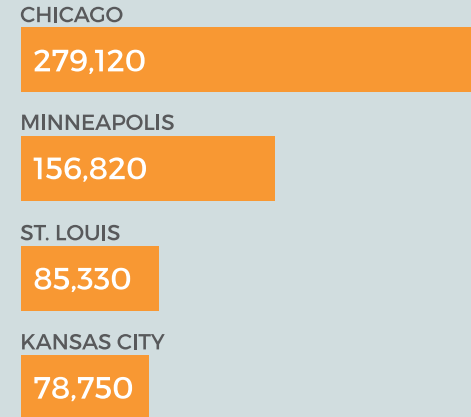
SBA LOANS



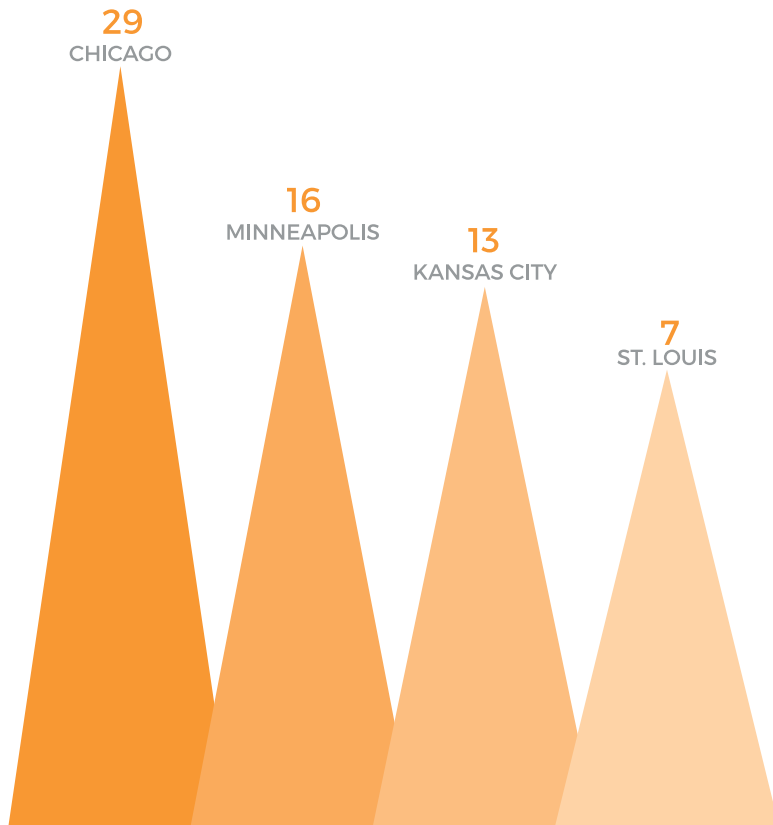
INC. 5000 COMPANIES



STEM JOBS



INCUBATORS + ACCELERATORS



Chicago, IL

Chicago is the largest entrepreneurial ecosystem in the Midwest. To most, this is not a surprise. What is surprising is the ecosystem's growth and change over the last decade. Since the founding and sale of Groupon, Chicago's entrepreneurial ecosystem has transformed. The community now consistently boasts hundreds of startup fundings per year. The community currently boasts more than 1,500 SBA loans (by far the most), and the community has strong structural components – such as 1871, code schools, and broad, local venture capital support.

Chicago must continue to grow are its workforce. The city's LQs on STEM jobs remain below 1.0, suggesting that there are still fewer technology jobs than in the average community. The second area for improvement for Chicago lies in helping companies go beyond venture capital funding and to growth. The community's Inc. 5000 revenue was significantly below what is expected. Those, however, are small nitpicks. Chicago is by far the largest ecosystem in the region and in 2018, it was the best.

TOP START-UPS



Seed CX

yello

UPTAKE™



ShipBob

RECOMMENDATIONS

Chicago should continue to build out its workforce by seeking to add technologists and technology jobs to go with the significant output of students in the region who view Chicago as a potential place to live and work.

Chicago should focus on improving visibility of the companies that are rapidly growing in its midst – beyond just those that are venture funded, but also those that are bootstrapped.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	A
Cool Jobs	A
Structure	A
Innovation	A
Funding	A
Connectivity	A
Community Spirit	B
City Rank	1

Minneapolis, MN

When building this report, we adjust our algorithm and look at multiple ways of valuing different data sources. In some of those scenarios, Minneapolis is the top ecosystem in the Silicon Prairie. It is a big city with lots of everything that this report values – venture capital (particularly in healthcare), innovation, cool jobs, infrastructure, etc. However, when it was said and done, Minneapolis is one-third the size of Chicago or smaller in most key metrics. While we agree there is a scale that should be considered, having three times the amount of venture activity, Inc. 5000 companies, and SBA loans matters to us.

Ultimately, while Minneapolis overperformed its expected curve, Chicago still has significantly more going on. Thus, we gave the nod to Chicago over Minneapolis. However, we were particularly impressed with the healthcare efforts of the region – patents, companies, capital, and innovation are on display at a depth not present anywhere else in the region, including Chicago. Minneapolis is a hotbed for startup healthcare hardware and software companies with applications that cross into many other sectors including insurance, finance, and even e-commerce. The region is a shining light that does not receive enough recognition by coastal investors and international publications for its strong entrepreneurial ecosystem.

TOP START-UPS



RECOMMENDATIONS

Tell the Minneapolis story more broadly – particularly around healthcare – so that the world knows that this is the place that many new technologies are created and built.

Build even stronger connections to health technology funding hubs – such as San Diego, San Francisco, Boston, and DC (federal grants).

Be a bridge for good regional health tech startups from Rochester and the broader Silicon Prairie to reach new customers and destinations becoming the de fact Midwest hub for healthcare.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	A
Cool Jobs	A
Structure	A
Innovation	A
Funding	A
Connectivity	A
Community Spirit	C
City Rank	3

St. Louis, MO

St. Louis is #4 in the Silicon Prairie Annual Rankings. St. Louis was #1 last year in our smaller rankings, and the community has actually improved most of its peripheral measurements since that time. St. Louis overperforms in venture capital and is laying the foundation for a long-term sustainable entrepreneurial ecosystem. The community has strong leaders – in corporate (Monsanto, Ascension Health), venture (Cultivation, Rivervest), and startups (LockerDome, Summersalt, and many more).

St. Louis' ITen and T-Rex programs have helped build the ecosystem, but for it to continue, more attention must be paid to the under-represented minority groups in urban St. Louis and East St. Louis. Finding ways to build bridges into urban St. Louis is very important to its long-term success. Accomplishing this in entrepreneurship and technology seems doubly so. More corporate participation is a key area in which St. Louis could improve. Finding ways for the large healthcare players to be the first and early companies of healthcare technologies coming out of the region is an additional great way to continue to build on the city's existing strengths. Commercializing more SBIR/STTR and corporate orphan technologies is another.

TOP START-UPS



BENSON•HILL
BIOSYSTEMS™

FINLOCKER®

SUMMERSALT

RECOMMENDATIONS

Focus on building deeper ties to healthcare customers, healthcare organizations, and regional health technology users. Establishing strong partnerships between Minneapolis and St. Louis makes sense based on their industrial and innovation proclivities.

Find a way to be more inclusive. Like many big cities on this list, there appear to be significant parts of the community that have limited startup activity (including SBA and CDFI activity). Build programs to help change that in 2019.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	B
Cool Jobs	A
Structure	A
Innovation	A
Funding	A
Connectivity	A
Community Spirit	B
City Rank	4

Kansas City, MO

Kansas City is #7 in our Silicon Prairie Annual Ranking. The community boasts the fastest broadband speed and is competitive in most of the other categories. However, this city appears to struggle with respect to producing large, high growth companies. Its Inc. 5000 numbers are far behind other Tier I cities in the survey – particularly regarding revenue of the companies. Kansas City also massively underperforms on venture capital metrics. Both indicators signal that KC needs to grow outside of its borders and serve broader customer groups. The economic impact and growth of the community should include more successful high growth businesses for a city of its size.

St. Louis' 49 Inc. 5000 companies, for example, produce revenue of \$2.8B, while Kansas City's 40 Inc. 5000 produce only \$797mm. This variance between these cities, using a rough expected jobs calculation, equates to the difference of 8000-9000 jobs. This disparity is further exacerbated by the two communities' differences in venture capital. St. Louis overperformed with \$545mm in venture capital deployed – an overperformance of nearly \$300 million. Kansas City only produced \$96 million in venture capital – an underperformance of nearly \$100 million. Again, this is a sizable difference in bets-on-the-table and high-growth chances for large employment. Kansas City, for all of its resources, should be doing better in producing successful, high growth companies.

TOP START-UPS



RECOMMENDATIONS

Find more entrepreneurs that have big ideas. Help them find early customers and the funding to build large and successful wealth engines.

Focus on building relationships with funders and customers in other markets in the Midwest – Chicago, Minneapolis, St. Louis, and Milwaukee being four key cities in this regard.

Beating Wichita and Omaha in rankings should not be enough – these communities represent 25-40% of the KC metro area population. Be a GREAT big city in the Midwest.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	B
Cool Jobs	A
Structure	B
Innovation	B
Funding	D
Connectivity	A
Community Spirit	C
City Rank	7

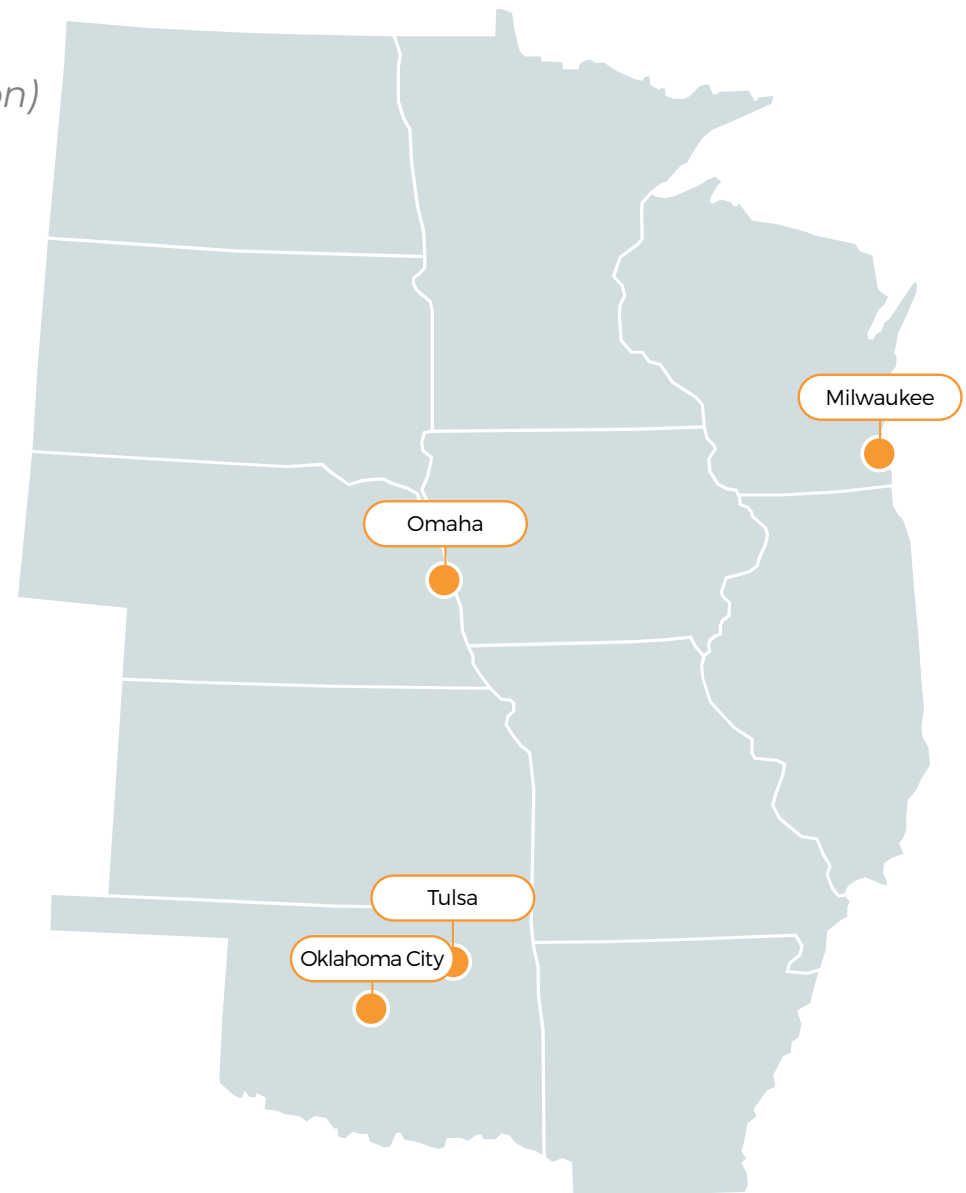


Tier 2 Cities

(population is between 900k -2 million)

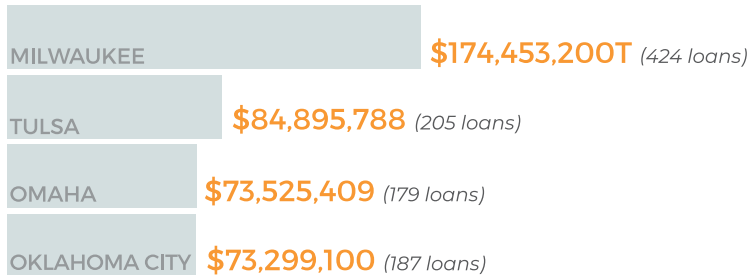
Tier 2 *(population is between 900k - 2 million)*

CITY	POPULATION
Milwaukee	1,576,236
Oklahoma City	1,383,737
Tulsa	990,706
Omaha	933,316

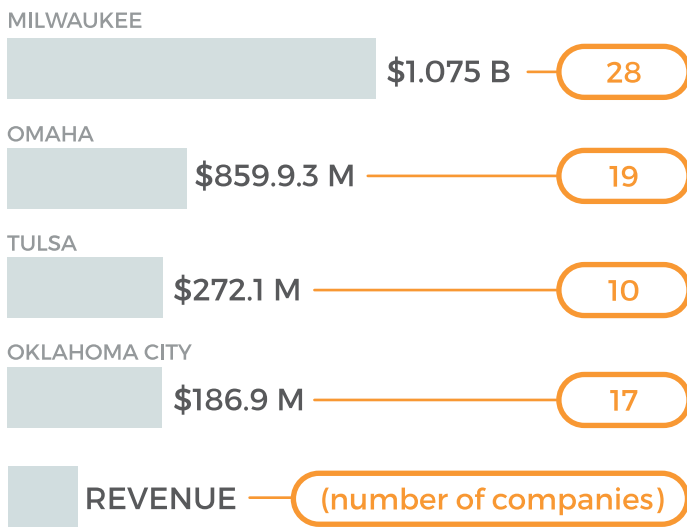


Community Stats

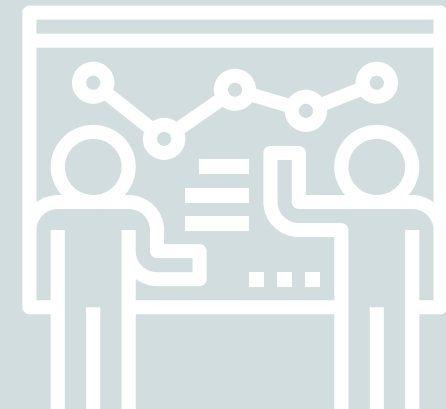
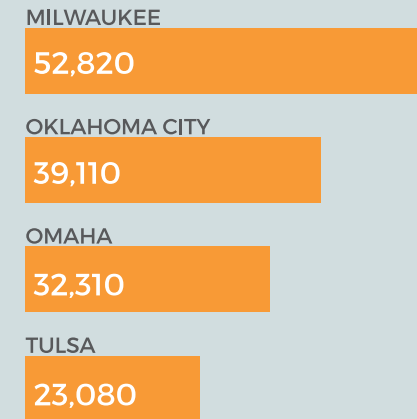
SBA LOANS



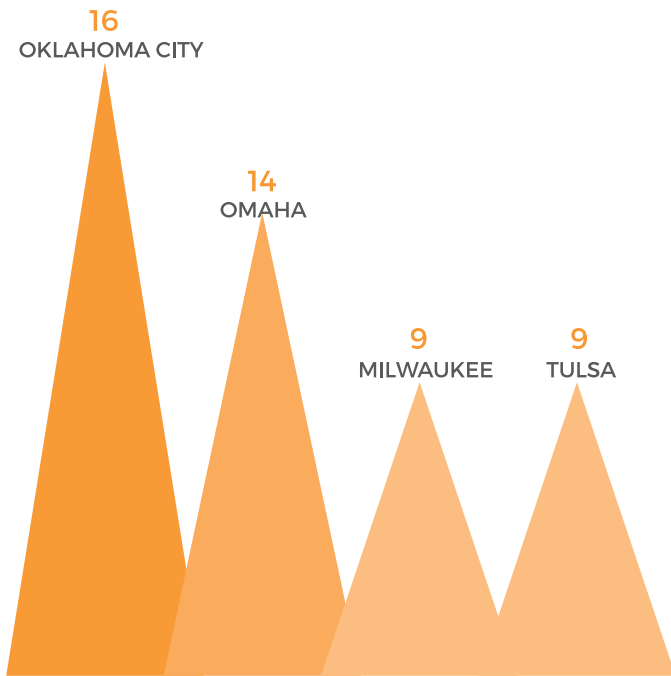
INC. 5000 COMPANIES



STEM JOBS



INCUBATORS + ACCELERATORS



Milwaukee, WI

Milwaukee finishes #8 in our Silicon Prairie annual ranking. Against its peer cities, under two million, it finishes first. This is more where we draw the line than its actual ranking. Milwaukee, compared against cities above one million in population, is second to last. The communities above one million people finish in the order of their population. This is not to say that Milwaukee is bad, simply that the measurement that is useful for many communities (our ranking) is less so in Milwaukee's case.

Milwaukee has some very strong attributes – SBA loans surpass Oklahoma City and Kansas City both in dollar amount and number. This suggests that the banking system in Milwaukee is highly engaged and attempting to grow new businesses. It has a good set of sustainable businesses in the Inc. 5000 – including seven companies that have been on the list more than five times. Most of these companies are service or construction. Most of its peripheral metrics perform near average. The point is that the signals of technology, innovation, and high-growth are muted in Milwaukee.

The city needs to insert some verve into the community that can create large, compelling companies that go beyond just service in the local market. This would be signaled by increasing venture capital in the community, or even companies raising larger sums. Since 2009, Milwaukee has had two companies raise more than \$10 million in a round. Madison has had six. Kansas City has had fourteen. St. Louis has had 23. The point is that a city the size of Milwaukee should be producing big fundings, exits, and a larger number of venture deals. It is sitting below its high growth capacity despite having many building blocks.

TOP START-UPS



RECOMMENDATIONS

Find high growth entrepreneurs and help them find customers in Chicago, St. Louis, and Minneapolis.

Build venture capital capacity and understanding. Specifically, find ways to leverage the mechanical and technical expertise of manufacturers and unique features of Milwaukee's industrial complex – water systems, for example.

Tell more stories about Milwaukee's entrepreneurial heroes.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	A
Cool Jobs	B
Structure	B
Innovation	A
Funding	D
Connectivity	A
Community Spirit	B
City Rank	8

Oklahoma City, OK

Oklahoma City is building an entrepreneurial ecosystem. For a long time, this was in doubt, but with recent moves to help facilitate the growth of companies such as Whiteboard Technology, Oseberg, and others, the community clearly has a plan. This plan of attack has been slow to develop for a number of reasons including relatively low venture activity and venture capital dollars available. With both Oklahoma State University and the University of Oklahoma, however, the community has a strong pool of young talent to help pull it forward.

Oklahoma City's two strongest scores in our ranking were associated with students and connectivity. Next to Kansas City, Oklahoma City had the strongest set of commercial broadband offerings. The community needs to continue to grow its presence – and in particular, healthcare seems like a viable strategic industry. Sensulin, Tetherex, and others have successfully been growing in Oklahoma City, but much of the initial research and personnel have been placed elsewhere. Finding ways to increase the talent flow to these types of companies is probably the biggest single things that Oklahoma City can do better in 2019.

TOP START-UPS



RECOMMENDATIONS

Tell the stories of entrepreneurs more effectively. The community has a bunch of great stories but most only know the big companies in the region. Tell the story at their roots and find new heroes about whom to tell stories.

Organize capital – even if it takes baby steps. The community needs a broader, more diverse set of funders.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	C
Cool Jobs	B
Structure	A
Innovation	B
Funding	D
Connectivity	A
Community Spirit	C
City Rank	14

Tulsa, OK

Tulsa is our lowest Tier 2 community – scoring below Omaha, Oklahoma City, and Milwaukee. For a community with so many assets and so much wealth, Tulsa could be doing a better job of building its entrepreneurial ecosystem. Specifically, Oklahoma City seems to have taken the lead over Tulsa in the state when it comes to innovation and startups. Two areas where Tulsa is still ahead of Oklahoma City (based on the numbers) is in building bigger, stronger small businesses.

Tulsa leads in SBA loans by number and dollars, and Tulsa has a much higher average size of companies in the Inc. 5000. Building more is not always the answer, but it appears that Tulsa does need more high-growth at-bats. For a community of its size, it is not producing a high number of venture-backed startups. And unlike Oklahoma City, it does not have the federal research and natural innovation throughput of the state's two largest universities. This means that the commercial side of Tulsa needs to play a bigger role in creating innovation. That appears possible as Tulsa's top five patent holders hold more patents than Oklahoma City – but far fewer than either Milwaukee or Omaha. To grow, Tulsa needs to be better organized and focus on the baby steps of ecosystem building – not just swinging for the fences with a single big company or effort. Build stories, capital sources, and customer connections in the Midwest and Texas.

TOP START-UPS



Exaeris Water
Innovations™



RECOMMENDATIONS

Build stronger relationships with Kansas City, the Midwest, and Texas. This can act as a way to pull-in investors, customers, and mentors.

Focus on creating more high-growth startups. The peripheral numbers in SBA loans and other startup numbers suggest that there may be opportunities that become small players but have big unrealized potential. Find them and help them grow.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	B
Cool Jobs	C
Structure	C
Innovation	C
Funding	D
Connectivity	A
Community Spirit	D
City Rank	21

Omaha, NE

Omaha is ranked 11 in our 2018 Silicon Prairie Annual Report. The region has seen a sharp decline in first-round fundings since 2011-2013. With the changes at the Startup Collaborative and other early stage company producers, perhaps that will be changing. However, the report still acknowledges that Omaha is behind its expected funding by a significant margin – about 50% below its expected value of \$32.5 million. However, the city performs particularly well in sustaining businesses once founded. Omaha produced nineteen Inc. 5000 companies with revenue of more than \$850 million, as an example. This translates to more than 1000 jobs created by these fast-growing companies. Omaha lags a bit on its innovation numbers but has above-average connectivity and broadband. Overall, the community seems to provide a good – but not great – ecosystem for its residents.

TOP START-UPS



RECOMMENDATIONS

Increase the amount of translated research from large corporations. Large companies in Omaha are not participating at the level that they should regarding spin-outs and translational research. ACI Worldwide remains a strong creator of new companies, and West Corporation has the most patents.

Increase the amount of funding. One way these larger companies could help is by following the leads of other insurance and fintech companies by creating medium size seed and Series A funds.

Start more companies. Omaha's most fundamental issue right now is that more new technology-based, scaling companies must be started. There simply are not that many.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	B
Cool Jobs	B
Structure	C
Innovation	B
Funding	C
Connectivity	A
Community Spirit	A
City Rank	11

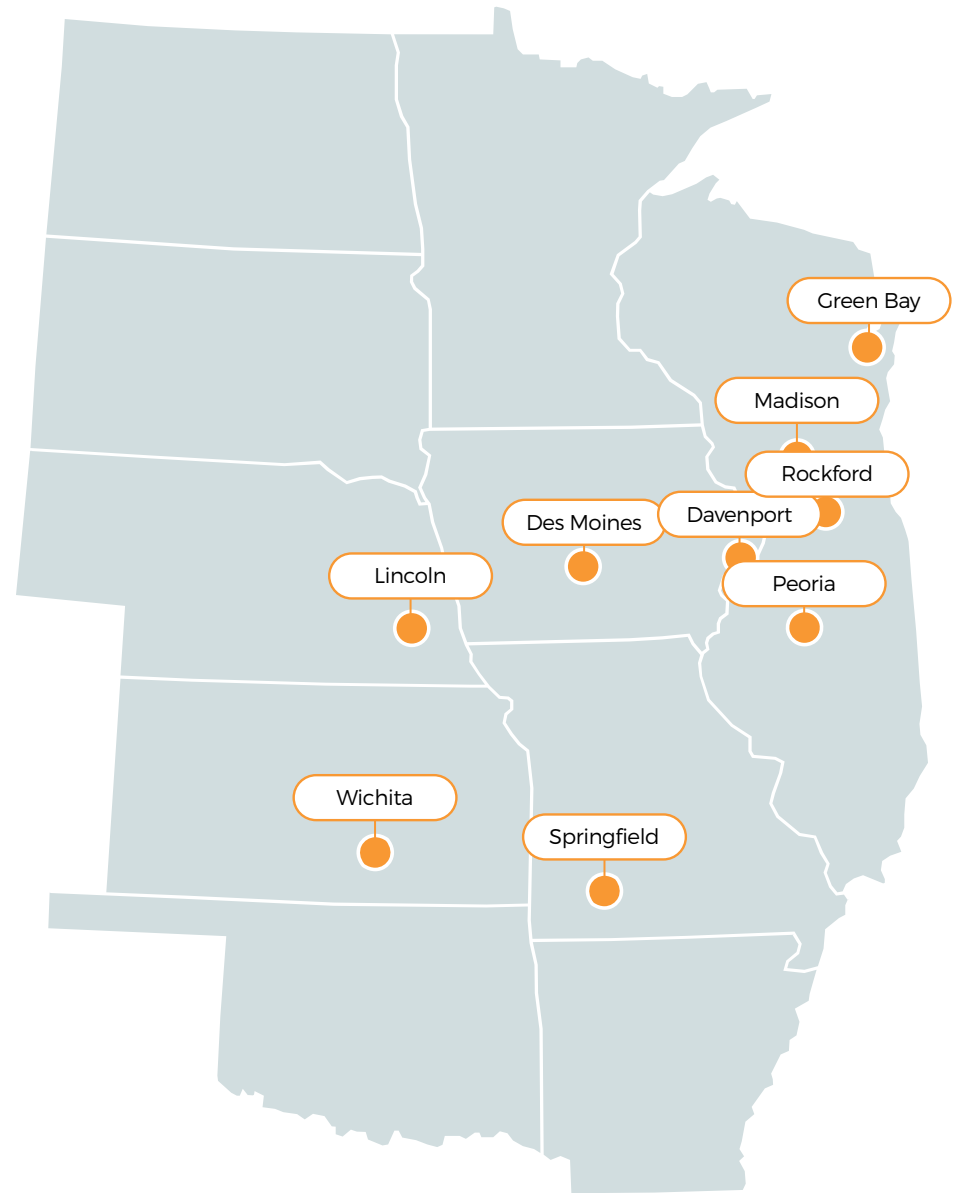


Tier 3 Cities

(population is between 300-900k)

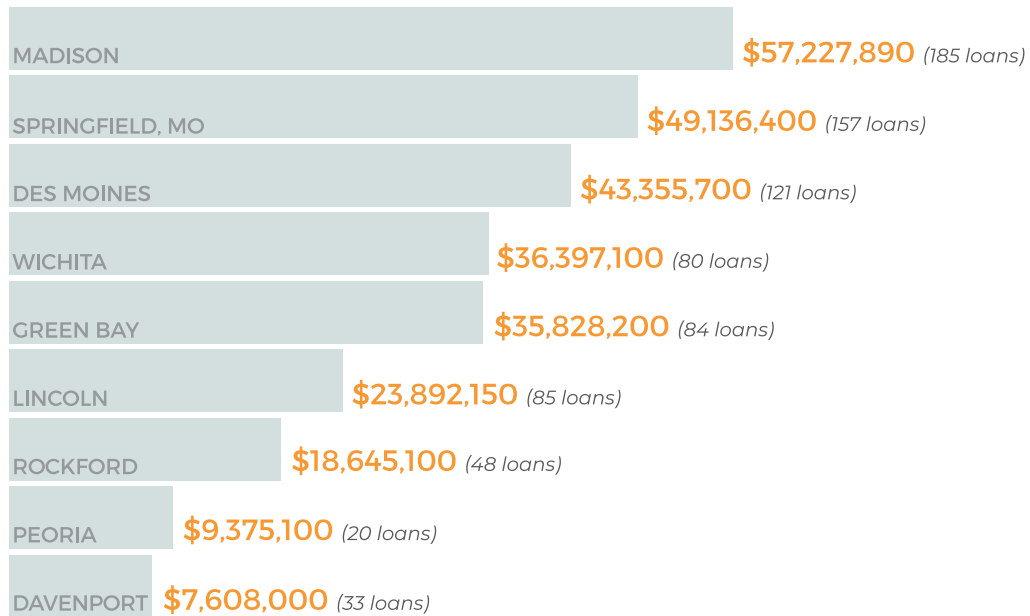
Tier 3 *(population is between 300-900k)*

CITY	POPULATION
Madison	654,230
Des Moines	645,911
Wichita	645,628
Springfield, MO	462,369
Davenport	382,263
Peoria	372,427
Rockford	338,291
Lincoln	331,519
Green Bay	320,050



Community Stats

SBA LOANS



STEM JOBS

MADISON

42,640

DES MOINES

23,260

WICHITA

14,870

PEORIA

12,920

LINCOLN

11,960

DAVENPORT

10,090

GREEN BAY

5,360

SPRINGFIELD, MO

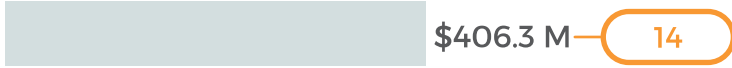
8,380

ROCKFORD

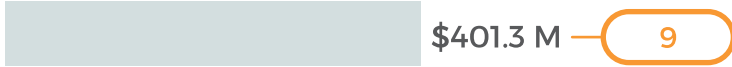
5,010

INC. 5000 COMPANIES

MADISON



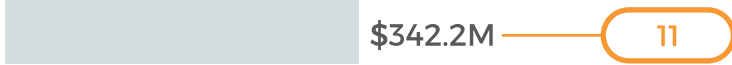
WICHITA



ROCKFORD



SPRINGFIELD, MO



DES MOINES



LINCOLN



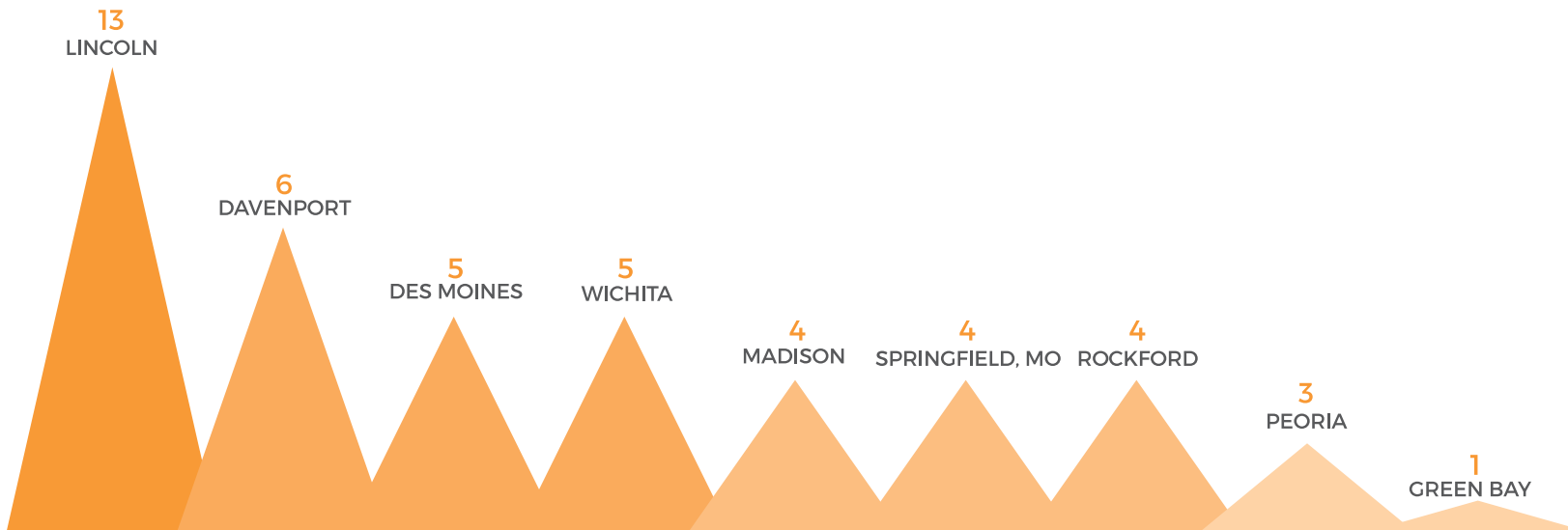
GREEN BAY



PEORIA



INCUBATORS + ACCELERATORS



Madison, WI

In what some have described as an off-year in Madison, the community finishes #5 in our rankings. Pound for pound, Madison may be the best ecosystem in the middle part of the country. But the simple girth of St. Louis, Chicago, and Minneapolis overwhelm the smaller Madison. There is not a single metric where Madison underperforms, except the community is slightly below average regarding commercial broadband access. Three things are notable about Madison. First, the University of Wisconsin and WARF are major players in building a portfolio of technologies that have been transferred. While these groups are down from their heyday of the early 2000s, the community still produced a number of SBIR/STTR grants, university research, and companies that have spun directly or indirectly out of UW. Second, the range of industries in the startup ecosystem is significant.

Healthcare technologies, e-commerce, video games, and software applications thrive in Madison. This depth and breadth suggest a well-functioning ecosystem. Finally, despite having limited home-grown capital (American Family being the exception), the region has built strong angel networks, ties to venture capital around the region, and broader capital sources available to startups in the region. Together, these help explain why Madison is home to the fastest growing company in the country – SwanLeap – and another in the top 10 – Exact Sciences Corp – according to accounting firm Deloitte.

TOP START-UPS



HealthMyne



RECOMMENDATIONS

Tell your story nationally. Madison should be in the conversation with emerging ecosystems – such as Boulder and Austin. Its not quite in that rarefied air – but it will be in the next couple of years.

Madison needs to keep growing companies – not just become a haven for the Googles that are looking for an inexpensive place to open a development shop. Avoid the lure of recruiting big names, and instead, focus on building wealth for the people, community, and the state of Wisconsin.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	B
Cool Jobs	A
Structure	A
Innovation	A
Funding	A
Connectivity	A
Community Spirit	B
City Rank	5

Des Moines, IA

Des Moines' startup ecosystem continues to be dominated by Dwolla. This fact is good because the company continues to generate significant venture investment, but it is bad because it creates a shadow over the other numerous wins occurring in Des Moines. For example, the city was one of the few mid-size communities that over-produced venture capital. Clay & Milk continues to be a leading voice for startup stories. However, the region does not produce much commercial and university innovation such as patents and SBIR grants. It is incumbent on the region to examine ways to integrate new technologies from Ames, Iowa City, and other parts of the region into their economy. This diversification would provide the community a mechanism to build on its current ecosystem. Finding ways to grow its agtech scene in particular seems to be a good next step for the region.

TOP START-UPS



RECOMMENDATIONS

Focus on small business-related SBA loans for manufacturing and tech transfer – drawing companies from Ames and Iowa City to Des Moines.

Building more tech transfer partners is important. The Global Insurance Accelerator and other similar programs are critical in this effort.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	B
Cool Jobs	B
Structure	D
Innovation	B
Funding	A
Connectivity	A
Community Spirit	B
City Rank	13

Wichita, KS

Wichita is #26 on in the report. When we look at the activity for Wichita and the peripherals, the city should score higher in our ranking – but it does not produce many companies in our metric categories. Wichita’s SBA portfolio is two-thirds that of Des Moines (which has an MSA that is almost exactly the same size). It had only \$.69 million in Venture Capital activity. It graduates nearly 1000 more technology workers than does Des Moines but has 10,000 fewer tech jobs. Some of this speaks to the quality of Des Moines, but it also suggests that Wichita needs to find a way to be stickier to graduates and more compelling to regional investors.

The area south of Kansas City and north of Dallas appears to need a dramatic connection upgrade. The three communities of Oklahoma City, Tulsa, and Wichita produce less venture capital activity than Omaha/Lincoln by 5 times, though they are three times the size. The point of this is that Wichita has many building blocks, and companies are beginning to grow and thrive (9 companies are in the Inc. 5000 with more than \$400 million in revenue), but a more consistent focus on transitioning ideas into high growth companies is needed.

TOP START-UPS



RECOMMENDATIONS

Lend more focus on finding entrepreneurs and building relationships with Tulsa and Oklahoma City which have similar connectivity problems.

Find ways to leverage local wealth to build up venture connections and angel connections.

Double down on the Pipeline Entrepreneurs relationship – push more entrepreneurs and mentors to join and be active.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	C
Cool Jobs	B
Structure	B
Innovation	B
Funding	D
Connectivity	A
Community Spirit	B
City Rank	26

Springfield, MO

Springfield, Missouri comes in at almost exactly the middle of the Silicon Prairie Annual Reports rankings. The community boasts a strong tie to automobiles through Dayco. This industry and deep expertise in engines may be a mechanism to help build new types of technology for the 21st Century. One little known asset of the Springfield region is Mayhem Development, a development shop that works for equity in many instances.

This industry dynamic has enabled companies, such as Eagle Speak and Rural First, to be built. These investments and the process by which a small development shop is able to blend grants, investments, and development work into a path for new technology startups are a good example of the ways that many smallish cities are attempting to rebuild their workforce and their economic development strategies.

Many of the companies in their portfolio have identified problems with rural flavors that technology is able to fix well. Springfield still needs to work on its entrepreneurial ecosystem game. In particular, the community needs to find better pathways to customers and other markets. This may mean building relationships with other Tier III and Tier IV cities or finding specific niche cities, though customers are king when it comes to startups. Springfield startups need more relationships upon which to build their businesses.

TOP START-UPS



RECOMMENDATIONS

Build connections to other Tier III and Tier IV communities – particularly those that will innovate and buy similar types of products. Commerce goes both ways.

Focus on identifying startups and telling their stories. Silicon Prairie News is one way – but local blogs, and even traditional news channels (tv, radio, and newspaper) are good starting points as well.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	A
Cool Jobs	C
Structure	D
Innovation	D
Funding	C
Connectivity	B
Community Spirit	D
City Rank	23

Davenport, IA *(Quad Cities)*

The Quad Cities have a number of cool jobs and a significant number of technology graduates from the universities and tech schools in the region, but they do not create many companies. They have a low number of SBA loans, venture-backed startups, and Inc. 5000 companies. However, they do have a relatively strong industrial base with more patents in their top five holders than both Cedar Rapids and Ames. This is suggestive of having a good base of industry from which startups could grow. The community should spend more time focusing on startup growth and identify companies and individuals that have the “bug.” More than any other this community appears to have very little startup activity given its underlying building blocks. The pieces are in place for Davenport and the Quad Cities to rapidly improve in these rankings – but the community must embrace and focus on entrepreneurship as a wealth driver and job creator.

TOP START-UPS



RECOMMENDATIONS

Boost local programming on both sides of the river to pull in cool startups from Peoria, Rockford, Iowa City, and Cedar Rapids. Be the regional draw that unites Iowa to Illinois.

Focus on building companies and finding entrepreneurs. The other building blocks are in place – now go out and discover who is building something in the labs, garages, etc.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	D
Cool Jobs	B
Structure	B
Innovation	C
Funding	C
Connectivity	B
Community Spirit	D
City Rank	34

Peoria, IL

Peoria is known for Caterpillar. The index reflects this strength in the number of patents filed by CAT. More than the patents, however, it is the companies that are tied to CAT indirectly that strengthen the Peoria startup ecosystem. There are a number of construction technology companies, such as Tada Software and GovPermit that call Peoria home.

The community's history also reflects its roots in manufacturing, and new technologies beyond software continue to grow. Natural Fiber Welding is a particularly strong early-stage company that is reshaping the face of textiles. However, the Peoria community has a long way to go. Specifically, angels and venture money are hard to find. Thus, stronger links with the venture and funding communities in Chicago and St. Louis seem to be intelligent next steps. Like many Silicon Prairie communities, telling stories is very important. For example, the community recently had a significant exit – AutonomouStuff – with very little external coverage.

TOP START-UPS



RECOMMENDATIONS

Focus on building from the ground up with small grants, organizing angel money, and building stronger seed-stage funding relationships.

Build into strengths – such as construction technology and autonomous vehicles.

Tell your story more effectively by highlighting startups, scaleups, and exits.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	D
Cool Jobs	B
Structure	C
Innovation	B
Funding	C
Connectivity	B
Community Spirit	C
City Rank	30

Rockford, IL

Rockford is a medium-sized city in Northern Illinois. The community is often overshadowed by its eastern neighbor, Chicago. However, the technology community has deep roots on this river city. Rockford continues to have a strong presence from Hamilton Sunstrand, a defense contractor responsible for many aerospace innovations of the twentieth century. This firm continues to lead Rockford in patents developed in the city.

Rockford's engineering strength likely explains the high number of patents in this city. Nonetheless, Rockford has had limited entrepreneurial success as measured by SBA loans, Inc. 5000 companies, and venture capital when compared to similarly situated communities. Thus, the city has been devoid of many strong entrepreneurial stories. That may be changing as the ecosystem and its leaders are starting to emerge, but this year is simply too early for a high ranking in our report.

TOP START-UPS



RECOMMENDATIONS

Find entrepreneurs. Tell their stories rather than pushing forward university and community leaders as the story.

Identify ways to commercialize technologies residing at large employers in the region.

Build out the finance ecosystem – particularly with small grant writing, an angel group, and more commercial lending.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	C
Cool Jobs	D
Structure	D
Innovation	B
Funding	C
Connectivity	B
Community Spirit	D
City Rank	38

Lincoln, NE

Lincoln is ranked 12th in our 2018 Silicon Prairie Annual Report. The region's biggest strengths are its handful of successful, high-growth companies – Virtual Incision, Hudl and Spreetail. These companies continue to generate jobs and investment at a tremendous pace. The problem is that there are not enough of them. There are a many SBA loans per capita – but for very few dollars. The number of Inc. 5000 companies – 7 – is average, but the amount of revenue is below-average. Lincoln needs to generate more jobs and investment from companies outside of their super start scale-ups. NelNet is a shining example of a corporate innovation and funding partner. The expansion of Allo in the region is a good example of how this corporate innovation partner can benefit a region. Overall, the community is doing well – but needs to keep building new first financed businesses (where the region lagged) and build more capital sources.

TOP START-UPS



RECOMMENDATIONS

Help established small businesses grow into regional players by selling products outside of Lincoln only. Lincoln starts a good number of businesses, but like many college towns, it needs to build bridges to customers in other markets.

Increase the amount of funding from sources outside of NelNet and Invest Nebraska. NelNet is an incredible investment player, as is Invest Nebraska. However, the region has reached the point where more and different organized capital is necessary and beneficial.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	B
Cool Jobs	B
Structure	A
Innovation	A
Funding	A
Connectivity	B
Community Spirit	B
City Rank	12

Green Bay, WI

According to the Green Bay Press Gazette, during a recent Rise of the Rest tour stop in Green Bay, Steve Case stated: "I'm intrigued by what's happening in Green Bay. It seems like there's good momentum happening. I want to shine a spotlight on what's happening for investors on the coasts." The metrics collected for this report suggest the same thing. Green Bay comes in at #22 ahead of most similarly sized cities.

Green Bay has strong metrics in many areas – broadband and SBA loans being two examples. However, it seems to have some of the classic Midwestern ecosystem challenges – limited capital and limited growth businesses in which to place the capital. In addition to these, talent looks like a challenge for Green Bay. It is significantly below average on its cool jobs index and falls pretty low regarding the number of technology graduates.

However, what is interesting is that Green Bay has some industrial uniqueness – particularly in paper, packaging, and transportation. This suggests an environment that would be excellent for the box company trend of the last decade and other e-commerce related startups. Moreover, the logistics and packaging businesses are ripe for green tech disruption. Thus, Green Bay appears to be sitting on opportunities to build big, scaling businesses. Unfortunately, venture capital has not yet found its way to the frozen tundra. Exactly one investment was made in 2017...by Rise of the Rest during their tour stop. It is critical that Green Bay build some local sources of capital and build on its industrial depth.

TOP START-UPS

3E

 lanehub

RECOMMENDATIONS

Build connections in markets beyond Wisconsin. Find industrial clusters in paper, logistics, packaging, etc. For example, becoming a design and packaging hub would make it critical to work with New York and LA. Whereas paper might require connections in the timberlands of the southeastern United States.

Tell your stories more effectively. Specifically, most of the blogs and coverage of the region appears to be sporadic. Consistency around even a handful of companies would be useful for external sources – like those mentioned by Steve Case.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	A
Cool Jobs	C
Structure	B
Innovation	C
Funding	C
Connectivity	A
Community Spirit	D
City Rank	22

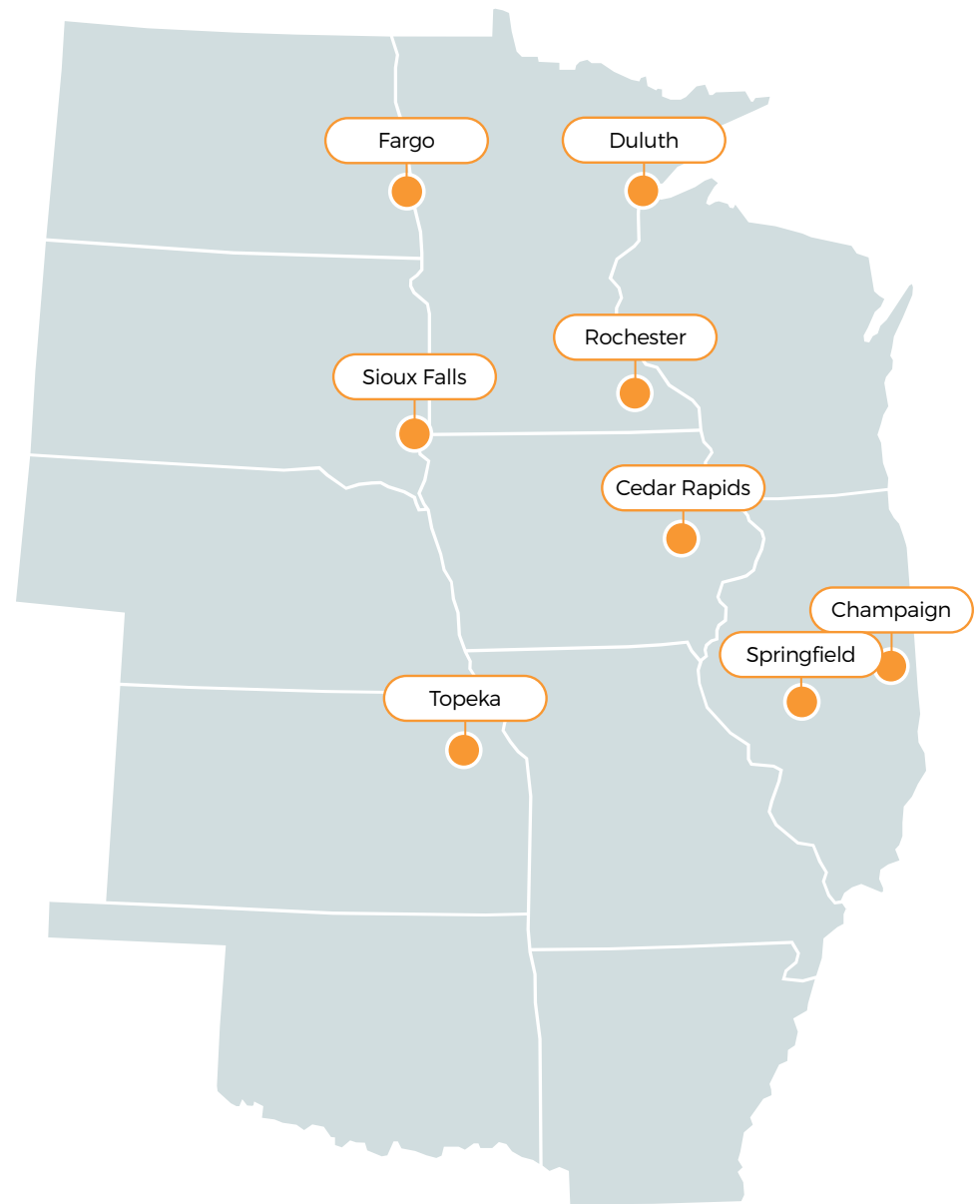


Tier 4 Cities

(population is between 200-300k)

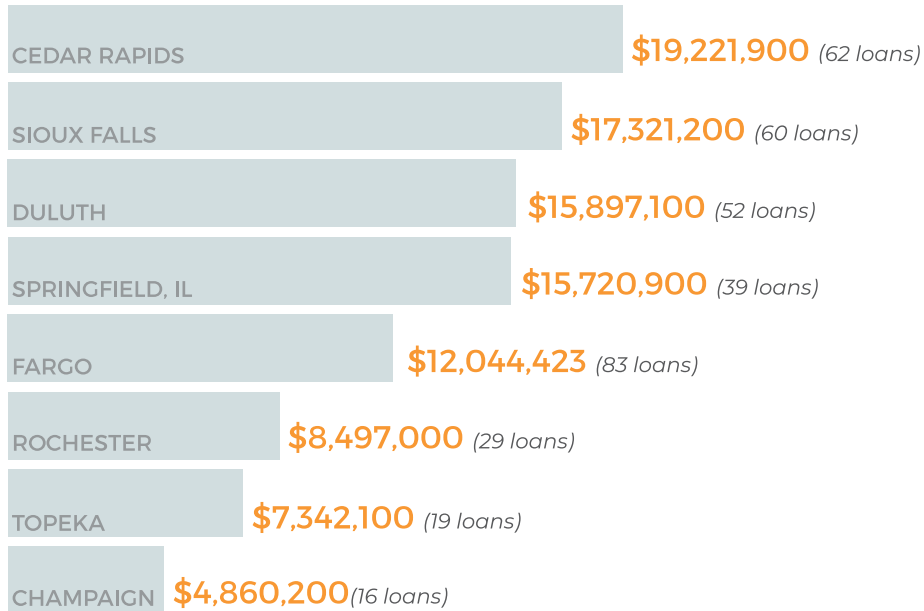
Tier 4 *(population is between 200k-300k)*

CITY	POPULATION
Duluth	278,782
Cedar Rapids	270,293
Sioux Falls	259,094
Fargo	241,356
Champaign	239,124
Topeka	233,149
Rochester	218,280
Springfield, IL	208,697



Community Stats

VALUE OF SBA LOANS



STEM JOBS

CEDAR RAPIDS

12,300

FARGO

9,230

SIoux FALLS

7,750

CHAMPAIGN

7,500

ROCHESTER

6,880

SPRINGFIELD, IL

5,420

DULUTH

5,360

TOPEKA

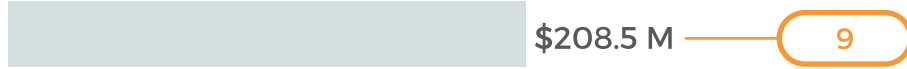
5,080

INC. 5000 COMPANIES

CEDAR RAPIDS



SIOUX FALLS



FARGO



CHAMPAIGN



ROCHESTER



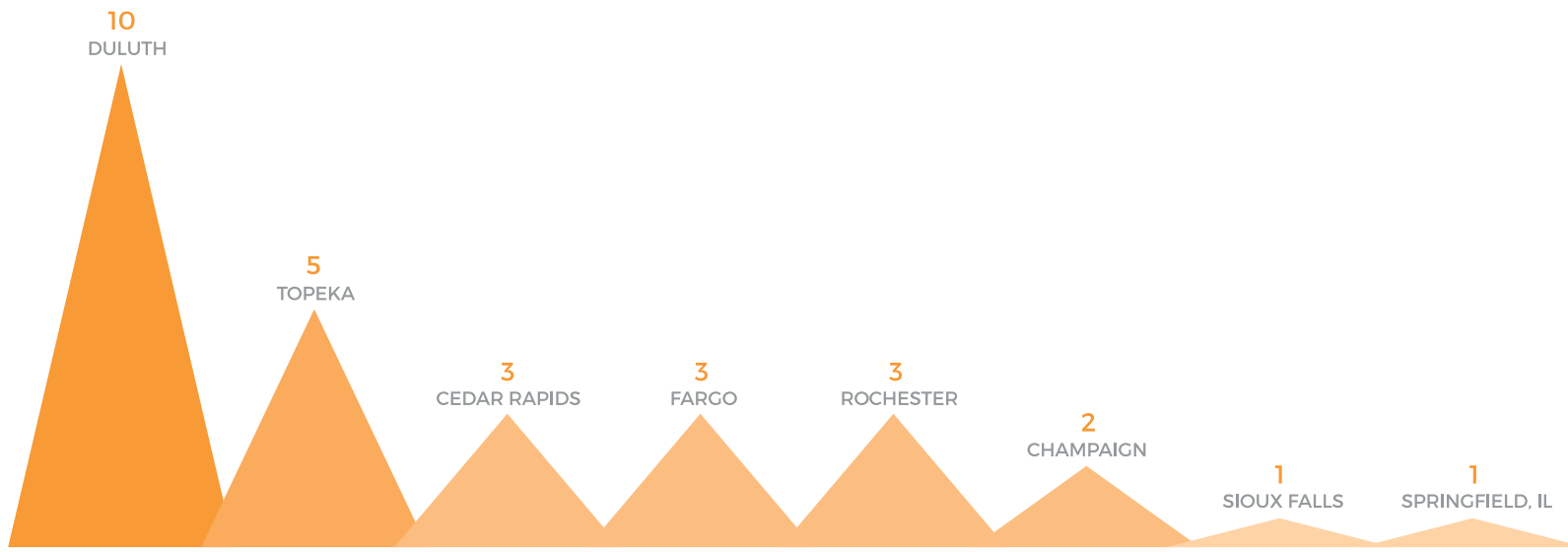
DULUTH



TOPEKA



INCUBATORS + ACCELERATORS



Duluth, MN

Duluth appears to be slightly below average for most of our measurements. This is good and bad. It's bad because it means that the community finishes with an overall below-average ranking. However, it's good because it suggests that each component of its ecosystem has some life. It does fairly well per capita on SBA loans and technology graduates. Those are very good building blocks – and should be leveraged to help build businesses. In addition, the community has received more venture capital than many communities on this list, including bigger cities, such as Wichita. However, the path is tricky for Duluth because its industrial LQs and patent holding companies are in more traditional logistics and manufacturing industries. Thus, the community must strongly consider how to find ways to leverage this expertise into a new economic outlook. In particular, finding ways to leverage its port and logistics seem like potential paths for this community.

TOP START-UPS



RECOMMENDATIONS

Build stronger relationships with other Great Lakes port cities – Green Bay, Milwaukee, Chicago, etc. This may open up customer avenues for new technologies and new startup companies coming out of Duluth.

Champion the wins. Duluth has actually had some success over the last five years – but few outside of Duluth probably know this. Tell the story of companies that are succeeding.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	B
Cool Jobs	C
Structure	B
Innovation	D
Funding	C
Connectivity	B
Community Spirit	D
City Rank	32

Cedar Rapids, IA

Cedar Rapids continues to expand its entrepreneurial ecosystem. The community does particularly well in SBA loans. With a third of the population of Des Moines, the region has half the number of SBA loans and roughly half the dollars produced. Moreover, Rockwell Collins and other technical jobs drive a strong workforce – with a 1.3 LQ in technical jobs. The region also does well with 11 companies reaching the Inc. 5000. However, the region does not have a strong pool of venture-backed companies. Those types of companies tend to congregate in Iowa City around the University of Iowa.

Finding ways to continue to build the Corridor is critical long-term for that part of the state to over-produce high-growth, economic-driving companies. Cedar Rapids must continue to discover ways to transfer technologies and build out its agtech infrastructure, but overall, Cedar Rapids growth over the last decade has been noteworthy. Cedar Rapids, at #15, is the highest ranked small city (below 300k) without a large public research university.

TOP START-UPS

 **CARGOFY**



RECOMMENDATIONS

Continue to build the corridor brand and tools that cross between Cedar Rapids and Iowa City.

Focus on building agtech relationships in other communities in the region as both seller and buyer. Customers are a great way to draw in new companies that are interested in building a business around first customers.

NewBoCo is a huge asset. Figure out how to double down.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	A
Cool Jobs	A
Structure	C
Innovation	B
Funding	C
Connectivity	A
Community Spirit	A
City Rank	15

Sioux Falls, SD

The strength of the Sioux Falls ecosystem is that it has a strong economy. The community continues to grow rapidly, and this has created opportunities for many small businesses. Sioux Falls had sixty SBA 7(a) loans in 2017 – this surpasses similarly-sized cities quite dramatically. Moreover, these loans have translated over the years to a strong sustainability for new companies in the region. Sioux Falls has nine companies in the Inc. 5000 rankings. This fact suggests that the traditional businesses that are starting in Sioux Falls are benefitting from the overall strength of the economy. However, Sioux Falls lags on other indicators.

The city has a low LQ score for STEM jobs (.78) and low venture numbers, underperforming by about \$4 million annually. Thus, despite some South Dakota-based venture funds, the state's largest city needs more opportunities for capital to be deployed. In short, Sioux Falls has a good ecosystem, but not a great ecosystem, which is why the city comes in at #31. Finally, it is noteworthy that one of Sioux Falls' exciting new startups – Farmers Transmission Network – left for California in 2017.

TOP START-UPS

EQUINOX



RECOMMENDATIONS

Identify true high growth opportunities in financial technology and related sectors where the community is strong, in order to build a hub of innovation.

Leverage the state's relatively small population size to establish unique and beneficial startup programs in the state legislature – particularly related to large corporate (domiciled HQs) orphaned technologies.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	A
Cool Jobs	C
Structure	D
Innovation	C
Funding	B
Connectivity	B
Community Spirit	D
City Rank	31

Fargo, ND

Fargo has one of the best startup scenes in the region. Emerging Prairie is excellent at putting on conferences and building the following of the region around the Startup banner. For example, Fargo's One Million Cups is the top in the country. Unfortunately, the startups and ecosystem have not yet caught up to the vision and programming in other respects.

Fargo's top indicators are STEM LQs and STEM graduates – partly because it is the home of North Dakota State University. However, the city lags behind in venture capital – underperforming by nearly \$4 million despite strong North Dakota state support and good venture firms, such as Arthur Ventures.

The city recently pushed its chips behind robotic agriculture and drones, and these seem to be smart bets. The long-term reality is that Fargo needs to start more businesses with more financial support behind them. Fargo businesses, for example, received more SBA loans than did Sioux Falls businesses – 83 to 60, respectively. However, Sioux Falls businesses received nearly 33% more dollars than did Fargo businesses. This trend appears to be the same case in many Fargo metrics – not bad but underperforming when it comes to cash.

TOP START-UPS



RECOMMENDATIONS

Build connections into other markets, particularly St. Louis, the Twin Cities, and Wichita, in order to find customers and ways to leverage the deeper economy in agriculture, robotics, and aerospace.

Continue building the best events in the region but do more to attract people from around the region to come experience Fargo's quality programming.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	A
Cool Jobs	B
Structure	B
Innovation	B
Funding	B
Connectivity	B
Community Spirit	D
City Rank	19

Champaign, IL

Champaign, Illinois, home of the University of Illinois, dramatically overperforms expectations based on population – finishing in the Top Five. For example, in 2017 the community had 21 venture fundings for nearly \$75 million dollars. There were also 37 SBIR/STTR grants in the region. These elements suggest that early stage companies and research are generating hundreds of jobs in Champaign (between 390-620). In addition, the university produces strong levels of graduates. There are nearly 4500 graduates in STEM related fields and only 7500 total jobs in the region in these fields.

However, the community still lags a bit when it comes to small businesses. Only 16 small business received SBA loans in 2017; Chapco expected a higher number in a market creating so many venture related jobs. Also, Champaign only had one Inc. 5000 company for the period. Engaging and retaining students to start companies in Champaign has been a long running problem in Champaign – see PayPal and Netscape/ Mosaic. However, with the increasing numbers, is it possible that Champaign is finally becoming the sort of place where entrepreneurs stick around?

TOP START-UPS



RECOMMENDATIONS

Increase the availability and understanding of the SBA process to ensure small business creation.

Focus on finding ways to plug students into situations where they will interact with strong local founders and companies.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	D
Cool Jobs	A
Structure	A
Innovation	A
Funding	A
Connectivity	A
Community Spirit	A
City Rank	2

Topeka, KS

Topeka has 233,000 residents. Sadly, few of them are technologists. Many work for the State of Kansas which has cut back its technology support and expenditures. The large Kansas communities in the study reflect this degradation of financial and technological support. Topeka had zero venture investments during the time period measured and a relatively low score in SBA loans. Topeka had a low innovation score at least in part because its five largest patent holders hold a mere total of six patents. The high points for Topeka were that the community has an Inc. 5000 (Custom Tree Care) company and relatively strong community meetups and programming. Building around this programming and discovering entrepreneurs is critical. The region boasts nearby educational institutions as well as the Kansas City market; finding ways to leverage its proximity to K-State and KU, and all of the Kansas City assets is likely to be a winning strategy.

TOP START-UPS



RECOMMENDATIONS

Tap into Kansas City as a means to find great speakers, talent, and potential opportunities to learn from a place with entrepreneurs, capital, and customers.

Work on re-building the State's innovation policy network. The degradation of K-Tec and the Kansas Biosciences activity has harmed not just Topeka but all of Kansas' innovation pipelines.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	C
Cool Jobs	C
Structure	B
Innovation	D
Funding	C
Connectivity	B
Community Spirit	D
City Rank	37

Rochester, MN

Considering the prestige of the Mayo Clinic, we would have expected the region to do better in technology transfer. It has an incredible patent portfolio – but relatively limited startup activity. Thus, we would mark Rochester, MN as a place where innovation takes place but where companies are created. It underperformed on venture activity and produced relatively few SBA loans. For example, Columbia, Missouri, not necessarily a city with an institution as esteemed as Mayo, had more SBA loans, venture activity, Inc. 5000 companies, and basically the same percentage of Cool Jobs. That suggests that Rochester has a significant opportunity to improve its overall economy by betting more heavily on tech transfer out of Mayo and into new startup companies.

TOP START-UPS



RECOMMENDATIONS

Use Mayo and proximity to the strong Minneapolis health tech market to build new companies and transfer technology.

Leverage the reputation of Mayo to bring in strong tech talent as follow-along spouses who can start and build companies.

Transfer more technology to startup companies – not just big corporations. This may require a significant reconstruction of the technology transfer protocols at the Mayo.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	C
Cool Jobs	B
Structure	A
Innovation	A
Funding	A
Connectivity	B
Community Spirit	D
City Rank	25

Springfield, IL

Springfield was a surprise. In the last couple of years, the region has had a string of venture-backed startups that continue to grow. These companies have not yet reached sustainability for the tech ecosystem – but it is beginning to show through. The SBA numbers are strong as is the technology talent pool. Overall, the two areas that the region needs to continue to grow are technology transfer – relatively few patents for the region – and creating long-term sustainable companies – at present, there are zero Inc. 5000 companies. These are probably next phase growth items for a community that has started to discover its entrepreneurs and is now producing noticeable job growth tied to these entrepreneurial ventures. Continuing to connect to Chicago, St. Louis, and even Nashville (due to the healthcare part of their regional startup mix) makes a lot of sense.

TOP START-UPS



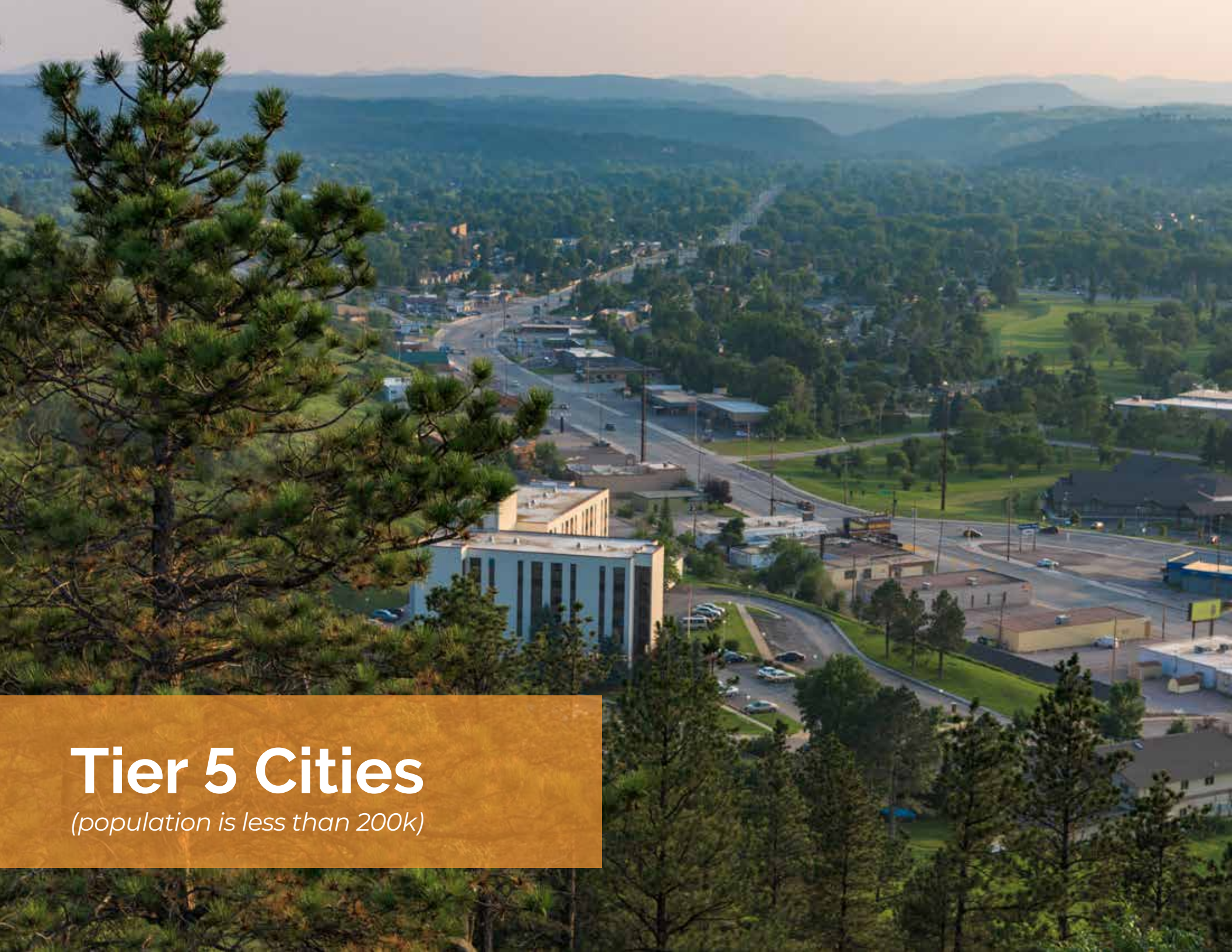
RECOMMENDATIONS

Build stronger ties to regional talent and capital hubs – such as Chicago, St. Louis, Minneapolis, and Nashville.

Work on identifying companies on the verge of entering the Inc. 5000 – tell those stories via traditional and social media – such as Silicon Prairie News.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	A
Cool Jobs	B
Structure	C
Innovation	D
Funding	B
Connectivity	B
Community Spirit	D
City Rank	17

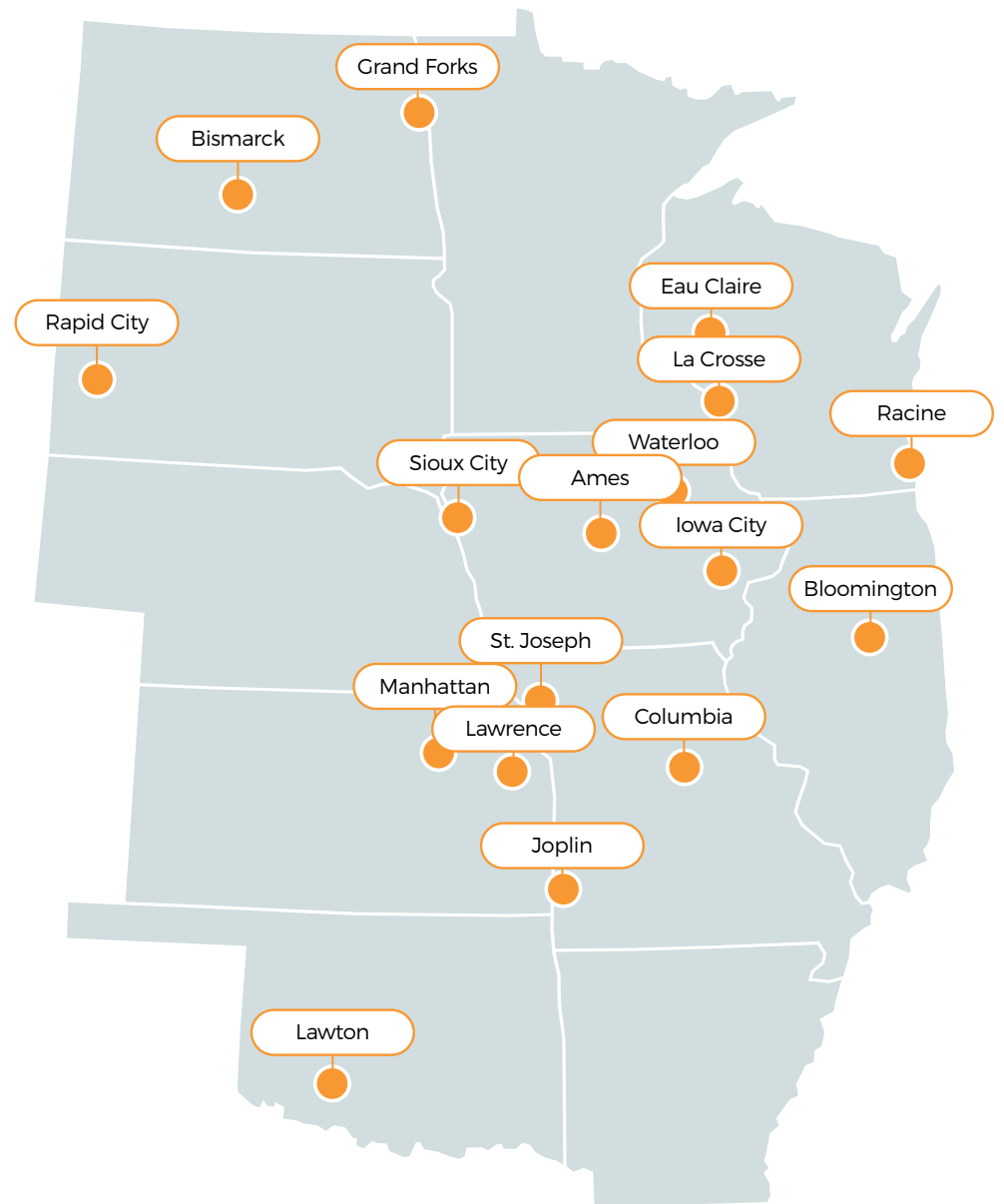


Tier 5 Cities

(population is less than 200k)

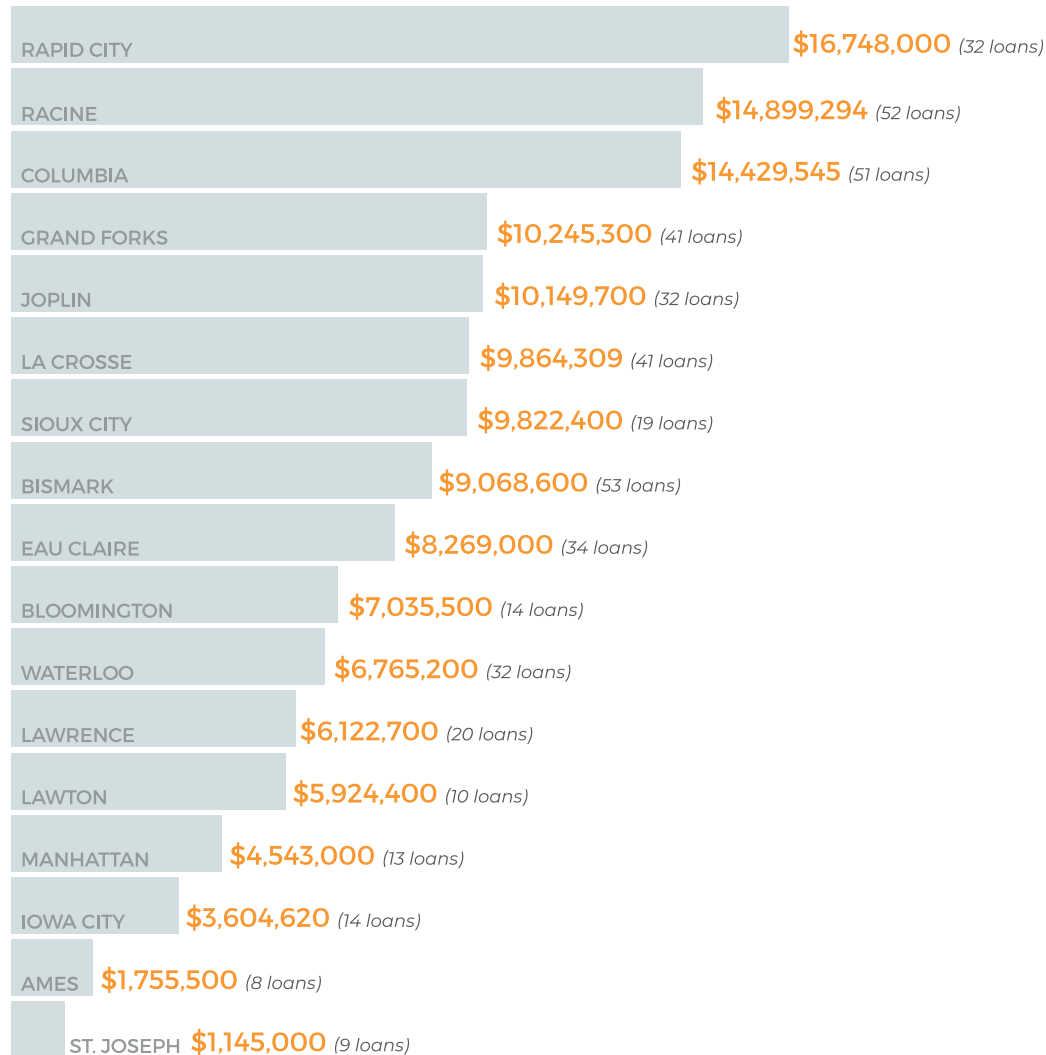
Tier 5 *(population is less than 200k)*

CITY	POPULATION
Racine	196,071
Bloomington	188,232
Joplin	178,507
Columbia	178,271
Iowa City	171,491
Waterloo	169,892
Sioux City	168,618
Eau Claire	167,484
Rapid City	146,850
La Crosse	136,934
Bismarck	132,142
Lawton	127,349
St. Joseph	126,935
Lawrence	120,793
Grand Forks	102,414
Manhattan	98,080
Ames	97,502



Community Stats

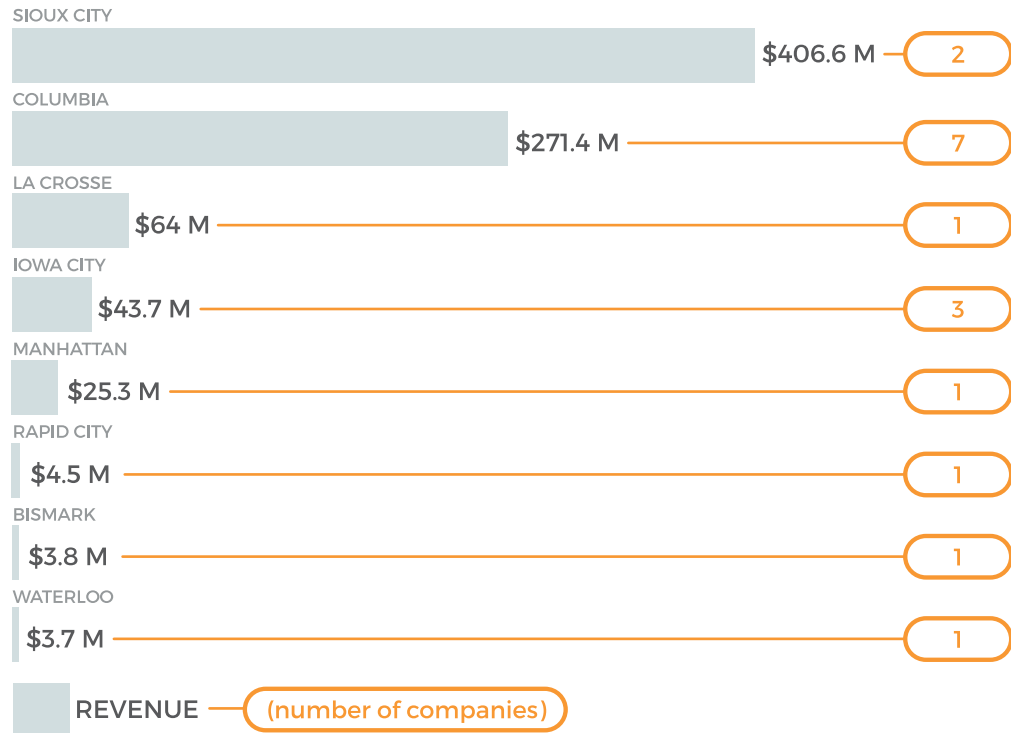
VALUE OF SBA LOANS



STEM JOBS



INC. 5000 COMPANIES



INCUBATORS + ACCELERATORS



Racine, WI

Racine is part of the Combined Statistical Area of Milwaukee, and so it may not be completely fair to rank it separately from the gravitational pull of its primary city. But, we did it anyway. Racine as a stand-alone community is in the bottom quartile of the ranking. However, it has some real advantages due to its proximity to Milwaukee AND Chicago.

Because of its location, Racine should be a leading community for connecting activities. Specifically, Racine could utilize spaces for connecting events on a weekly basis and find ways to help entrepreneurs meet customers and contacts in Racine. This would allow it piggy-back its own startup scene of Chicago and Milwaukee.

Racine's actual scene seems more tied to small business creation than high growth startups. The region has a good SBA loan base – surpassing similarly sized Rockford, Eau Claire, and La Crosse. It has strong infrastructure including spaces, broadband, and land – possibly explaining the decision by Foxconn to locate in nearby Mount Pleasant. However, Foxconn should also be a warning about how re-locating businesses can potentially be stunting for entrepreneurial ecosystems. Many of the state's and regional resources will flow to this company and project – rather than to homegrown entrepreneurs. Thus, while the jobs may appear attractive, it may ultimately produce less wealth in the end.

TOP START-UPS



RECOMMENDATIONS

Focus on building connectivity in Milwaukee and Chicago – and then utilize these relationships to position Racine as the connecting city with events, competitions, and meetups.

Use the Foxconn projects to build global relationships. International companies will be coming in and out of the region – make sure you get meetings and opportunities for your entrepreneurs. This will also help with #1 above. We would recommend using a program of work similar to Fargo's Midnight Breakfasts.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	A
Cool Jobs	D
Structure	B
Innovation	C
Funding	B
Connectivity	A
Community Spirit	D
City Rank	36

Bloomington, IL

Bloomington, Illinois is a Tier 5 community in Central Illinois that boasts some significant startup assets. In particular, the region has a high number of technology related people – the LQs for the region related to technology range from 1.2-2.5. This suggests a significant workforce in technology and technology-related fields. However, despite the workforce, the region did not produce a high number of companies in 0. There were no venture-backed startups, only 14 SBA loans, and no INC. 5000 companies.

The scarcity of companies is a critical gap for any startup ecosystem – but particularly in a town of Bloomington’s size. There are limited signals of activity as well – Illinois State University appears to produce trained students but not research that can be commercialized– based on SBIR data and the relatively small number of overall research grants. In short, Bloomington needs to ramp up its engagement of students and technologists at ISU (red) to produce companies. Otherwise, the community will simply be exporting graduates to Chicago and the region’s other big cities.

TOP START-UPS

D | B B E E

RECOMMENDATIONS

Find your startups – particularly those that may be keystone startups.

Use this new startup knowledge to program accordingly – focusing on solving needs, such as customer discovery and scale building.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	C
Cool Jobs	A
Structure	B
Innovation	B
Funding	B
Connectivity	B
Community Spirit	D
City Rank	27

Joplin, MO

St. Joseph and Joplin, Missouri are our two bottom-ranked communities on this list. Rather than individually admonish them, we will simply say that they both have a significant amount of work to do to improve their entrepreneurial ecosystems.

Joplin's strength appears to be in its ability to build small businesses. The city has relatively strong SBA activity – 32 loans (c. \$10 million in loan amount) as compared to St. Joseph's 9 loans (c. \$1.3 million). Joplin has a relatively strong patent position with L&P Property Management. Specifically, many of these patents are tied to the furniture-making business of which Joplin has a relatively strong cluster. Finding ways to build technology, innovation, and new businesses may be a strong mechanism for differentiation and long-term growth in Joplin.

St. Joseph finished near the top of that category in commercial broadband offerings with its relatively strong broadband infrastructure. Moreover, St. Joseph has good production capabilities in both livestock processing and biopharmaceuticals. This reinforces some of St. Joseph's natural geographical strengths – on a river, in the middle of the country, connected by numerous transportation networks, and at relatively low cost. Finding ways to leverage these benefits to build more early-stage innovation and potential tech transfer-type businesses is a way for the community to potentially add more cool jobs and increase the overall wealth of the community.

TOP START-UPS

Local Races

RECOMMENDATIONS

Focus on finding entrepreneurs in your community and tell their stories. Who is succeeding and why are they succeeding?

Establish regular meet-ups for those interested in technology, innovation, and entrepreneurship. This relationship-building need not be about the next Facebook; companies with simpler offerings such as a new type of outdoor recliner or biopharmaceutical delivery device for livestock, for example, are ripe for either region – and are not likely to emerge in Silicon Valley.

Look for things that are locally-made and businesses that are locally-owned. This discovery process will help reveal undercurrents of potential opportunities to build clusters and start more businesses.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	B
Cool Jobs	D
Structure	C
Innovation	D
Funding	B
Connectivity	B
Community Spirit	D
City Rank	41

Columbia, MO

EquipmentShare.com is an incredible success for any community – but particularly a college town. Many believe that college towns only produce technologies out of the university. This is often NOT the case. While many college towns do well in our rankings, often their success is premised on businesses having the spirit of entrepreneurship that young people, transience, and new ideas can generate. College towns do well in our ranking partly because of their proximity to a college, though often this success is not driven by the college, which appears to be the case in Columbia.

The last couple of years have illustrated this trend through the various commercial successes including Equipmentshare – a construction leasing software – and advertising/marketing/design companies that have succeeded. In addition, Columbia helped bring the world Zapier and other technology startups. In fact, the community has a great entrepreneurial vibe that goes beyond just the University of Missouri, making it one of the reasons that Columbia is ranked #10.

Columbia overperforms in venture capital, although there are only five total deals. This is a signal that the university needs to start pushing out technology. The metrics that tend to be more tightly tied to universities – SBIR/STTR, university research, and student graduation – are only average to slightly above venture capital. Columbia will move up in its ranking and represent a community on the move for entrepreneurship if the University of Missouri and Columbia can find a way to generate more technology transfer.

TOP START-UPS



RECOMMENDATIONS

Leverage more of the university's resources. Transfer more technology. Create more research and develop it into companies.

Don't fall prey to the belief that the ecosystem is ripe simply because of a few successes. Continue to build programming from the ground up that will help burgeoning entrepreneurs in Columbia.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	A
Cool Jobs	A
Structure	A
Innovation	A
Funding	A
Connectivity	B
Community Spirit	C
City Rank	10

Iowa City, IA

Iowa City is #9 in our ranking this year. This success is driven by its high number of technology graduates and very strong venture numbers. Like many of the college towns on this list, Iowa City has built a community premised on big bets for hard problems – specifically, much of their venture capital investment is in healthcare IT. IDx, Corvida, and others are big opportunities to transform the region.

While they have taken time to get to their current stages, the region is being noticed for its production of these types of technologies. That being said, Iowa City is not filling in its small business gaps. It has low numbers in both SBA loans and Inc. 5000 companies. This fact suggests a need to improve the city's local programming for these types of businesses. Therefore, while the university is beginning to transfer technology into interesting opportunities, the SBDC and other players appear to need to improve their game to increase the amount of small business starts. Both are necessary for a community to remain vibrant.

TOP START-UPS



RECOMMENDATIONS

Build programming for non-science graduates looking to start non-technical businesses that fill out the ecosystem.

Look for opportunities to work with Des Moines (finance and insurance) and Cedar Rapids (manufacturing and tech transfer). Be proactive in building these relationships.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	C
Cool Jobs	A
Structure	A
Innovation	A
Funding	A
Connectivity	A
Community Spirit	C
City Rank	9

Waterloo, IA *(Cedar Falls)*

Waterloo exports its talent. That is a problem for this city's ecosystem. The community produces a high number of STEM graduates and has sticky programs – such as the UNI accelerator. However, the LQ for cool jobs is just .51; this fact suggests that most of the graduates either are forced to or choose to relocate to find their cool job. Building a pipeline of cool startups that retains that talent in the Cedar Falls/Waterloo region is an important economic development strategy. The region produces a relatively strong portfolio of SBA companies and boasts an Inc. 5000 company, unlike most similarly-sized communities on this list. The region, however, appears to lack venture capital and early-stage risk capital. Similar to Ames, Iowa City, and other college towns, Cedar Falls should be thinking about how to start an angel fund using university faculty, research, and connections to potentially stimulate the creation of said fund.

TOP START-UPS



RECOMMENDATIONS

Reach out to technology alumni and understand why they are leaving the region. Where do they go? Consider ways to help facilitate tech transfer and startup creation through an alumni angel group – similar to the Irish Angels out of Notre Dame.

Make the accelerators stickier regarding retention of talent and companies to the region. The region boasts strong building block tools – but limited success. Evaluate and redirect the accelerators toward optimal programming.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	B
Cool Jobs	D
Structure	A
Innovation	C
Funding	B
Connectivity	B
Community Spirit	D
City Rank	35

Sioux City, IA

Sioux City appears to be doing better than last year, but it still has a long way to go. Specifically, the community needs to build more startup companies. Sioux City does not have the signals of strong company creation across all measurements. Two examples bear this out; Sioux City does not have an accelerator/incubator – comparable city Cedar Falls/Waterloo has four. Sioux City has 19 SBA loans; Cedar Rapids, also a comparable city, has 62. One of the reasons that this lag may be happening is that Sioux City's cool jobs index is .39 (where 1 is average). This is a significant problem. The community needs to be producing and recruiting talent at a significantly improved rate.

TOP START-UPS

lienwaivers.io

chatterkick

RECOMMENDATIONS

Build a code school and focus on IT technical training, not just undergraduate training. We recommend focusing on elements that would provide the region an advantage. The presence of SAP, Salesforce, or another cloud/ERP type company where uniqueness and 40-60 new employees per year are added would be a magnet for startups and other businesses.

Build an accelerator and focus on services to all small businesses – not just high-growth businesses. Sioux City must radically change the conversation regarding success – in order to succeed.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	C
Cool Jobs	D
Structure	D
Innovation	D
Funding	B
Connectivity	B
Community Spirit	C
City Rank	39

Eau Claire, WI

Eau Claire is located 90 minutes east of Minneapolis-St. Paul. For the community to succeed, the proximity to the Twin Cities may be a long-term strategy. The Twin Cities have significant capital resources, customers for services and products, and is a transportation hub. Eau Claire appears to be lacking in a number of these elements. It had limited venture activity, funding activity, and other peripheral startup structure. However, it does have some interesting local industry. Nordson companies makes commercial and industrial products related to adhesives. Wood and nonmetal mining are big in the region (compared to the rest of the Silicon Prairie).

When a city with these building blocks considers its strategy, it should include product development, prototyping, and other types of manufacturing processes – not just starting a tech incubator/accelerator. Wisconsin as a state seems full of mid-size communities such as Eau Claire that can rebuild their manufacturing base around innovation and technologies for which their communities and regions are uniquely prepared and trained.

TOP START-UPS



RECOMMENDATIONS

Find ways to leverage existing corporate expertise and talent. A means of prototyping products through city grants or angel money would potentially help spur a new class and type of local entrepreneur

Leverage the proximity to Minneapolis/St. Paul to find unsexy problems that the big city needs a little city to prototype and build.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	B
Cool Jobs	C
Structure	B
Innovation	D
Funding	B
Connectivity	B
Community Spirit	D
City Rank	33

Rapid City, SD

Rapid City produces a high number of technology graduates, but its startup ecosystem remains nascent. The community lags behind other communities in most reported indicators. The city boasts good SBA loan numbers, but it lags behind in venture capital, infrastructure, and other indicators. The city is known for the Black Hills and Mount Rushmore, and its largest traded cluster is hospitality and tourism; lesser known is the South Dakota School of Mines and Technology. This school is a secret gem for the state. The school and its associated research helped drive the strong showing in SBIR/STTR research – comparing favorably to most similarly-sized communities in these rankings. Using the school and its initial research to further the long-term growth of the region is critical for Rapid City to improve its ranking.

TOP START-UPS



RECOMMENDATIONS

Focus on translating the research coming out of the School of Mines – particularly that which is receiving SBIR/STTR grants.

Attract corporate innovators to use this research both in startups and scaleups. Current top-five patent holders for the region is the near minimum of seven.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	A
Cool Jobs	C
Structure	D
Innovation	B
Funding	B
Connectivity	B
Community Spirit	D
City Rank	28

La Crosse, WI

La Crosse anchors the Seven River Region of Wisconsin and Minnesota. For a community of 130k, LaCrosse does pretty well in our ranking. And in digging deeper, the wider region has been able to build a number of strong companies in rural communities. For example, while not technically in the region, the Inc. 5000 has recognized two, billion-dollar companies growing rapidly in the area – MacDonald and Owen and Willet Hauser Architectural Glass. Both are manufacturing businesses, but they provide the playbook for how to grow rapidly in manufacturing in smaller cities in the Midwest. For the community to continue to build high-growth businesses, it needs to retain its talent. It produces nearly 700 high technology graduates per year, but it has a low ranking regarding cool jobs.

Finding a way to bridge that production – retention gap on talent is a critical one for the region. The community also needs to find ways to improve access to capital. While its SBA numbers are fine, the community does not appear to have many startup activities that would allow a new venture to find a banker, angel, or venture capitalist. That’s one of the reasons the Idea Fund of Wisconsin is a really good idea. La Crosse might consider adding startup activities – such as an inventor’s club, a one million cups, or other similar weekly/monthly event bringing innovators out of their machine sheds and garages, off campus, and into places to drink beer. This is a good, common strategy for many communities because it allows the environment to reduce the social hierarchy, makes it less formal, and often is an attractive distraction from another late-night working on something that you are not sure if anyone will ever love as much as you love it (i.e. your invention or startup).

TOP START-UPS

LIVING STORY



WILLOW SKATEBOARDS

RECOMMENDATIONS

Build on the community’s industrial strength. Find ways to publicize cool new innovations and growing companies in the region. Use this to help catapult the next generation of startups to success.

Identify ways to create local connecting activities to ensure that all of La Crosse is on the same page regarding the great new companies in the works. This might be a way to also leverage the town’s significant beer brewing culture – by having an event in one of the breweries focused exclusively on entrepreneurship.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	A
Cool Jobs	B
Structure	B
Innovation	D
Funding	B
Connectivity	B
Community Spirit	D
City Rank	29

Bismarck, ND

Like the other two North Dakota communities in this report, Bismarck produces a significant number of STEM graduates. However, it fails to retain them. Bismarck's strengths appear to be around organizing activities and loans. Bismarck does well in our community spirit metrics and the city has nearly as many dollars in SBA loans as does Fargo. However, the community failed to build a company that received venture funding in 2017; looking back in past years in North Dakota's Form D filings for technology reveals that Bismarck has not produced a company other than CoSchedule that has received risk capital in some time. In better news, CoSchedule is a significant success for the community and should be lauded for its fast growth - #153 on the Inc. 5000 list. This company has grown to employ more than 60 with more than \$4.8 million in revenue. Bismarck must continue to find ways to increase its company creation by using CoSchedule as the model.

TOP START-UPS



RECOMMENDATIONS

Events seem to be a strength in North Dakota. Find ways to get more angel investors involved.

Partner with Fargo and Grand Forks to build stronger early-stage public policy to retain STEM talent and start companies. One idea might be to mimic the Nebraska prototyping fund.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	A
Cool Jobs	B
Structure	C
Innovation	D
Funding	B
Connectivity	B
Community Spirit	D
City Rank	20

Lawton, OK

Lawton is #40 in our Silicon Prairie ranking. Lawton is not a very large place, so this ranking may be unfair in that expectations are low. However, they may be too low. The community has more than 120k people, but its top five patent holders have five total patents. It has a low number of cool jobs. It has limited capital activity. It does have some assets. Fort Sill is based in Lawton, and with it an extensive array of field artillery and GPS related expertise.

Moreover, the community has a strong set of meet-ups and technical tie-ins such as active user groups in PhP, WordPress, and other languages. This suggests an underground start-up scene that may be ready to begin. Lawton, however, needs to find ways to build an ecosystem that plays to its strengths. One weird strength is vulcanized materials with a significant Goodyear plant (and peripheral businesses) located in the town. Perhaps building on this strength would provide good ways to build SBIR/STTR grant based companies and tie-ins to the OKC based universities.

TOP START-UPS



RECOMMENDATIONS

Focus on finding ways to leverage tie-ins to the military and Fort Sill. There are a number of business development facilities in the city – perhaps specific military tie-ins.

Find your potential entrepreneurs and help facilitate their decision to start something.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	C
Cool Jobs	D
Structure	B
Innovation	D
Funding	B
Connectivity	B
Community Spirit	D
City Rank	40

St. Joseph, MO

St. Joseph and Joplin, Missouri are our two bottom-ranked communities on this list. Rather than individually admonish them, we will simply say that they both have a significant amount of work to do to improve their entrepreneurial ecosystems.

Joplin's strength appears to be in its ability to build small businesses. The city has relatively strong SBA activity – 32 loans (c. \$10 million in loan amount) as compared to St. Joseph's 9 loans (c. \$1.3 million). Joplin has a relatively strong patent position with L&P Property Management. Specifically, many of these patents are tied to the furniture-making business of which Joplin has a relatively strong cluster. Finding ways to build technology, innovation, and new businesses may be a strong mechanism for differentiation and long-term growth in Joplin.

St. Joseph finished near the top of that category in commercial broadband offerings with its relatively strong broadband infrastructure. Moreover, St. Joseph has good production capabilities in both livestock processing and biopharmaceuticals. This reinforces some of St. Joseph's natural geographical strengths – on a river, in the middle of the country, connected by numerous transportation networks, and at relatively low cost. Finding ways to leverage these benefits to build more early-stage innovation and potential tech transfer-type businesses is a way for the community to potentially add more cool jobs and increase the overall wealth of the community.

TOP START-UPS



RECOMMENDATIONS

Focus on finding entrepreneurs in your community and tell their stories. Who is succeeding and why are they succeeding?

Establish regular meet-ups for those interested in technology, innovation, and entrepreneurship. This relationship-building need not be about the next Facebook; companies with simpler offerings such as a new type of outdoor recliner or biopharmaceutical delivery device for livestock, for example, are ripe for either region – and are not likely to emerge in Silicon Valley.

Look for things that are locally-made and businesses that are locally-owned. This discovery process will help reveal undercurrents of potential opportunities to build clusters and start more businesses.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	C
Cool Jobs	D
Structure	C
Innovation	D
Funding	B
Connectivity	B
Community Spirit	D
City Rank	42

Lawrence, KS

Thirty-five minutes from Kansas City is Lawrence, Kansas – home of the University of Kansas (KU). Last year, the region did not score particularly well in this report. However, the picture in the region appears to be improving. The year showed an uptick in SBA loan activity and venture activity. Research, patents and other building blocks also increased. In short, the community is turning its game around. Lawrence must continue to work on finding more entrepreneurs and retaining more talent even though Kansas City has a strong gravitational pull, making recruitment and retainment more difficult, but not impossible..

Lawrence’s commercial broadband offerings were the worst in the entire Silicon Prairie region. For a university town, this seems to be an anomaly – but it definitely is something that local policy makers should recognize and attempt to rectify. University students need to “Netflix and Chill” and also need the internet to build companies. This is a primary wealth driver in the 21st century. Kansas City’s average commercial speed was 4 times that of Lawrence in the offerings that we could find in federal databases.

TOP START-UPS

AINSTEIN

RECOMMENDATIONS

Improve the physical infrastructure of the city. Beyond broadband, Lawrence needs the amenities and spaces that keep entrepreneurs and technologists happy.

Find ways to keep students in Lawrence through ties to Kansas City that are not leashes that only pull one way.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	B
Cool Jobs	A
Structure	B
Innovation	B
Funding	A
Connectivity	B
Community Spirit	D
City Rank	16

Grand Forks, ND

Despite producing a significant number of STEM graduates at the University of North Dakota, Grand Forks does not retain very many. The STEM LQ is .69, which is notably low. This scarcity of technology jobs affects other areas where the community underperforms – particularly SBIR/STTR grants and patent-holding companies. However, the community has one of the highest SBA loan values and does relatively well in other metrics.

While the community underperforms in venture capital, it is a slight underperformance, and the Dakota Venture Group is a good example of making lemonade out of lemons. This firm has made a bunch of investments and is completely student-run. This is a good way for a college community to grow an educated investor class that understands how to build a venture capital portfolio. The community needs to continue to grow its company-creation efforts and find ways to translate research into companies and deals – but overall Grand Forks does fine, finishing #30. One way to achieve this growth may be to tap into its fast broadband speeds.

TOP START-UPS



RECOMMENDATIONS

Do more with Fargo. The two communities are relatively close in proximity (about an 80-minute drive) and neither is large enough to build a true stand-alone ecosystem.

Figure out how to use current assets more effectively to translate research and build more ideas.

Continue the strong SBA loan efforts.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	A
Cool Jobs	D
Structure	B
Innovation	C
Funding	B
Connectivity	B
Community Spirit	D
City Rank	24

Manhattan, KS

Manhattan, home of Kansas State University, is similar to Lawrence in many demographic ways. Indeed, the two cities are not particularly far off in our rankings - #16 (Lawrence) and #18 (Manhattan). Manhattan has larger SBIR grants and better infrastructure. They also have an Inc. 5000 company (CivicPlus). However, the community has no venture money and retains its tech talent at a much lower rate. Manhattan's biggest difference from Lawrence is in venture capital activity. Where Lawrence performs above the average, Manhattan had zero deals in the measurement period. This difference accounts for virtually the entire difference between the two communities in our ranking.

Thus, finding a way to add venture capital and other capital funds to KSU tech transfer and other Manhattan start-ups is a smart step for the community. We also recommend that the community look at ways to lock students in through accelerators and incubators that tie to technical degrees and tech transfer opportunities. K-State is particularly well known for animal-related technology. Based on the Silicon Prairie's agtech funding and startup growth, it appears that finding ways to tap into the region's financial strength and awareness would be a good growth strategy.

TOP START-UPS

ADVISE ME

RECOMMENDATIONS

Identify animal related agtech and find ways to get that technology in front of venture capitalists.

Build stronger building block tools tied to the university and tech transfer – pitch programs, accelerators, small funding opportunities, etc. Leverage these to attract companies and students to stay and grow their business in the Little Apple.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	C
Cool Jobs	A
Structure	A
Innovation	B
Funding	B
Connectivity	B
Community Spirit	D
City Rank	18

Ames, IA

Ames has consistently finished high in our rankings because of Iowa State and the significant technology that transfers from the university. Moreover, the area does a great job of building technology companies such as Workiva and Tractor Zoom. These companies need talent - ISU provides talent. These companies are tied to compliance and agtech. Ames knows where it can win, and it continues to produce great companies with employees who love being there. Ames would benefit from building more traditional businesses that receive SBA loans and establishing more early stage capital.

In general, Iowa produces a ton of technology throughout the state, but as a state, it continues to appear under-capitalized in its highest impact regions - college towns and the metropolitan areas. Perhaps the answer is to build stronger connections to Minneapolis and Chicago, though Ames must think of itself as a separate entity from Des Moines as a fundraising engine. It therefore cannot rely on Des Moines to draw in VC and other early stage monies.

TOP START-UPS



RECOMMENDATIONS

Focus on building strong customer and capital connections between Ames and the Tier I Silicon Prairie communities.

Identify small business gaps and opportunities to continue to make Ames a strong place for early-stage businesses to grow. Building business that can grow into the Inc. 5000 is important.

2018 SCORE CARD

SCORE CATEGORY	GRADE
Real Companies	C
Cool Jobs	A
Structure	B
Innovation	B
Funding	A
Connectivity	A
Community Spirit	C
City Rank	6

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