The intent of this report is to provide a snapshot review of the Silicon Prairie and its communities in Iowa, Kansas, Missouri, Nebraska, and southeast South Dakota.

Silicon Prairie News asked Tom Chapman of Chapman and Company, a regional consulting firm, to assist in creating an annual report outlining the state of the Silicon Prairie. Chapman was an ideal consultant for this new project due to his experience and finely-tuned expertise measuring entrepreneurial ecosystems.

Chapman’s consulting practice provides solutions to startups seeking revenue and funding and he works with numerous national groups including the Startup Champions Network to grow local and regional ecosystems. His area of expertise and focus within the firm is on measuring startup ecosystems.

Chapman was also one of the first actors in the Silicon Prairie’s nascent entrepreneurial scene and has a long memory regarding its challenges and successes. From the first Big Omaha to Startup America to connecting with regional funders, Chapman has a wide range of first-hand knowledge regarding the region. He has worked with, visited, presented, and networked in all of the ecosystems featured in this report.

MAIN GOALS

1. Identify interesting startups in the reader’s community.
2. Provide a 2016 assessment of the current state of the Silicon Prairie.
3. Set a baseline for some key metrics for each community.
4. Start the discussion regarding how to improve the individual ecosystems of cities in the Silicon Prairie.
**METHODOLOGY**

Our report measures communities by Metropolitan Statistical Area (MSA) as opposed to cities, counties, or states. Growing research from organizations such as the Kauffman Foundation suggests that the MSA is an appropriate measurement size because it is inclusive of activity that may fall outside of a city proper or across state or county lines, and it allows the measurer to avoid arbitrary, non-economic boundaries.

This type of data requires some additional work to gather, but once found, reveals some interesting information about the Silicon Prairie. One downside to the data, particularly for cities that have strong collaboration like Cedar Rapids and Iowa City, is that the data is still segmented between two cities that should perhaps be counted together.

**THE REPORT FORMAT**

Chapman and Company was asked to look at the Silicon Prairie as a whole, and then fourteen specific cities within it.

Part I of this report provides a broad overview and context regarding these cities.

Part II provides more detail for each community with a snapshot of some individual data and data-informed commentary that is subjectively backed by information collected from a survey sent out between January 17-29, 2017 via SPN and other social channels.

Part III provides general information and recommendations for the entire Silicon Prairie. The goal of these recommendations is to highlight ways that the region can realize a greater level of success by acting together.
INTRODUCTION

There is no perfect way to create a report that evaluates the status of startup ecosystems.

Certain communities test particularly well because they have particular attributes that outweigh their overall performance. Other communities score below the average due to a variety of unique data challenges and factors including population and the definition of certain workers in the community’s workforce.

Because of these challenges, Chapman and Company created an algorithm that measures a wide variety of attributes with the intent of identifying significant building blocks for all ecosystems, and weighing those building blocks against one another. Not all information is provided in its raw form due to the weighing methods.

Comparing an MSA between two cities with significantly varying sizes like St. Louis and Sioux Falls is difficult. The report attempts to mitigate some of the issues caused by size differences by providing a RAW score and a CAP score. The RAW score is intended to provide a straight comparison between two cities and the CAP score attempts to use a weighting tied to population to make the score more equivalent based on MSA population.

Multiple data sources were used to evaluate individual community metrics including:

- National Venture Capital Association (start-ups)
- Inc. Magazine (sustainability)
- SEC Filings (fundings)
- SBIR/STTR database (innovation)
- Broadband Measurements by the FCC (infrastructure)
- Population Measurements from the US Census (per capita)
- Bureau of Labor Statistics Data (workforce)

In addition to these and other public databases, Chapman and Company had access to SPN Survey data1 and some other usage information privately gathered.

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1 If you did not take the survey, but would like to, SPN will open the survey for one week to ensure maximum 2016 information. This information is useful in itself but it will also set the baseline for some pieces of future Annual Reports.
PART I: THE RANKINGS
THE RANKINGS

If you did not take the survey, but would like to, SPN will open the survey for one week to ensure maximum 2016 information. The rankings are broken into two categories. The raw category simply ranks the communities based on their total data “points”. This ranking is helpful to get an idea of total size of an ecosystem and generally will provide a more reliable ranking.

The per capita category reweights some of a community’s characteristics and reevaluates them based on population. This enables the comparison between cities like St. Louis, Missouri, to Manhattan, Kansas.

The reality is that neither measurement is more correct than the other. Research methodologies around ecosystem measurement are still evolving, but the goal of the measurement is to give communities some insights on areas for improvement. Part II will go into some specifics regarding each individual community.

<table>
<thead>
<tr>
<th>PER CAPITA RANKING</th>
<th>COMMUNITY</th>
<th>PER CAPITA SCORE</th>
<th>RAW SCORE (with raw ranking)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ames</td>
<td>9.83</td>
<td>9.44 (10)</td>
</tr>
<tr>
<td>2</td>
<td>Kansas City</td>
<td>8.83</td>
<td>184.38 (2)</td>
</tr>
<tr>
<td>3</td>
<td>St. Louis</td>
<td>8.23</td>
<td>231.48 (1)</td>
</tr>
<tr>
<td>4</td>
<td>Lincoln</td>
<td>7.34</td>
<td>23.75 (5)</td>
</tr>
<tr>
<td>5</td>
<td>Des Moines</td>
<td>6.97</td>
<td>43.39 (3)</td>
</tr>
<tr>
<td>6</td>
<td>Iowa City</td>
<td>6.29</td>
<td>10.47 (7)</td>
</tr>
<tr>
<td>7</td>
<td>Columbia</td>
<td>5.67</td>
<td>9.92 (8)</td>
</tr>
<tr>
<td>8</td>
<td>Omaha</td>
<td>4.40</td>
<td>40.24 (4)</td>
</tr>
<tr>
<td>9</td>
<td>Sioux City</td>
<td>4.14</td>
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<td>Sioux Falls</td>
<td>9.83</td>
<td>9.74 (9)</td>
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<tr>
<td>11</td>
<td>Lawrence</td>
<td>3.52</td>
<td>4.15 (13)</td>
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<td>12</td>
<td>Manhattan</td>
<td>3.24</td>
<td>3.19 (14)</td>
</tr>
<tr>
<td>13</td>
<td>Cedar Rapids</td>
<td>3.16</td>
<td>8.40 (11)</td>
</tr>
<tr>
<td>14</td>
<td>Wichita</td>
<td>2.26</td>
<td>14.58 (6)</td>
</tr>
</tbody>
</table>
PART II: COMMUNITY DETAILS
On a per capita basis, Ames does very well because of its strong research prowess. Iowa State University has created multiple companies, including some very well-funded ones, that have allowed the community to carve out an engineering, energy, and IT footprint that is far larger than its population and workforce would suggest.

Ames was a late addition to the report so the community does not have complete survey related data from which to pull information and insight. However, the shadow of Des Moines looms large over Ames and it is important for the community to continue to build technology based startups, even if they need to partner with another community like Iowa City to find talent, mentoring, and collaborative partners.

RECOMMENDATIONS

Knock down walls with the rest of Iowa (they need Ames’ abilities and Ames needs their connections), public policy to support SBIR and early stage prototype funding would be beneficial, build on the university’s strengths.

NOTEWORTHY STARTUPS

Tourney Machine

Workiva
Because of its size, central location, and the fact that the Kauffman Foundation is located there, Kansas City has emerged as the heart of the Silicon Prairie.

The city has excellent scores across the entire spectrum but no #1 leading indicator except in the actual startup category. Kansas City scored particularly well in this category, particularly with respect to SBA lending, but the community still lags in its expected outcomes regarding high growth startups.

The community did not score poorly in any individual level. What was particularly noteworthy was that Kansas City’s survey respondents think that the Kansas City ecosystem is doing really well. Kansas City and Lincoln tied in the survey for most positive community self-review. Within the reviews, the survey results also strongly point to momentum in factors such as infrastructure (Google Fiber). Even so, the infrastructure ratings did not indicate leadership, but rather significant improvement to a level of above average.

Kansas City seems to know itself and is good at such a broad array of things that it is well positioned for success in the next decade as a startup community.

**RECOMMENDATIONS**

Increase local startup risk capital, partner with the Kansas university towns (particularly Lawrence) to build strong innovation partnerships, continue to build on the innovation success of Cerner.

**NOTEWORTHY STARTUPS**

2 Based on its population and other communities around the country, Kansas City should produce significantly more high-growth startups than it does.
St. Louis is the top ecosystem in the Silicon Prairie, however, no ecosystem in the region is less a part of the region.

The St. Louis metropolitan area had the highest scores in financing, sustaining companies, and creative jobs and was second in terms of a number of other metrics. However, it underperformed in infrastructure and in the community’s self-ranking.

While it exceeds the smaller markets in the region, St. Louis does not compare favorably to true top and second tier innovation markets and larger ecosystems, such as Austin or Boulder, that it compares itself to. St. Louis tends to hold itself apart from the Midwest, preferring to be seen as a singular entity from which magnetism is exerted. This survey data is not the only signal of this viewpoint.

The region itself does not look to St. Louis as the leader either; instead, Kansas City is the most commonly identified leader of the Silicon Prairie. St. Louis should strongly consider leading the Silicon Prairie because its density, connectivity, and diversity metrics are quite outstanding and could be used to augment the community’s underlying ecosystem strengths.

**RECOMMENDATIONS**

Leverage the leadership role in the region to establish a regional brand, continue to build the health startup ecosystem, focus more on the wider community, improve the broadband speed in the city, get corporate partners more engaged and push them towards innovation.

**NOTEWORTHY STARTUPS**

- swizzle
- lockerdome
- aisle411

**Benson Hill Biosystems**
Lincoln rocked the reporting period of 2016, particularly the survey. The community has very successfully built a #bangthedrum campaign around their startups that allows them to compete outside of their weight class. Lincoln’s multiple big fundings and great startups establish a community that is clearly on the rise and one of the highlights of the Silicon Prairie.

However, Lincoln drags a bit on corporate innovation and building sustainable companies despite having one of the most innovative large companies in the region, Nelnet.

The community’s ranking is tied closely to the growth spurred by strong scaling companies such as Hudl, but Hudl is now past the ten-year point. In order for the community to sustain its high level of startup notoriety, other startups and scaleups need to help continue the rise of Lincoln. The emergence of a next class of very successful entities is necessary.

RECOMMENDATIONS

Do not stand pat on Hudl, keep building startup companies, build better ties to the University and to large corporates in the area.

NOTEWORTHY STARTUPS
Des Moines’ startup community has been in a “holding pattern” for a couple of years so some might consider its #3 ranking to be a mistake. It’s not—but the ranking is also strongly misleading.

The community’s ranking is driven by the success of a single company. In 2016, the Inc. 5000 listed Athene Holding, an Iowa domiciled insurance company, as having 158% growth on $2.6B in revenue. This one company is disproportionately large for the ranking which can be subtly shifted by even small movements.

Without this company and its singular rating, Des Moines actually would have finished #4 in the overall raw rankings and #13 in the per capita rankings with a score of 2.71. This type of single variable success/failure can be a signal of fragility in a startup ecosystem—something that was also mentioned in the survey and from various public sources.

Des Moines is lagging in most categories of the report despite having a good ecosystem, strong builders, and intent. In particular, it is noteworthy that Des Moines is not creating many high growth startups. Over the last five years, the NVCA listed only six venture capital deals. Ames, which some might consider a part of Des Moines, had five itself despite being one-fifth the size.

RECOMMENDATIONS

Start more companies, get the insurance companies engaged as first customers for the insurance accelerator, build stronger innovation bridges with Ames and Iowa City.

NOTEWORTHY STARTUPS

- FliteBrite: Smart Flights
- Igor
- UpCraftClub
- Gain Compliance
Iowa City, led by startups out of the University of Iowa, had the second strongest innovation index in the study (only behind St. Louis). The city produces significant SBIR grants and companies and has strong research based startup activity. According to our survey, the folks in Iowa City believe that their community is on the rise.

Iowa City's challenge appears to be in sustaining companies and helping them grow via finance—not just VC money, but also SBA loans. The community scored particularly low in areas that had impact from finance related metrics.

**RECOMMENDATIONS**

Build a stronger angel network, look at potential public policy to double down on the research based startup success stories, build stronger regional connections.

**NOTEWORTHY STARTUPS**

- **Pear Deck**
- **TelePharm**
- **Swinetech**
Columbia was probably the startup ecosystem with the most surprising results. There is a lot going on in Columbia—it is varied and interesting and cool. The community scored particularly well in sustaining and starting companies. In particular, the growth (and exit) of multiple companies tied into advertising and digital marketing, like Division-D, True Media, and AdKarma, is a real shining star in the region.

However, the rest of the ecosystem was not as strong. Financing, innovation, and cool jobs are below the average of the overall pool, which is surprising for a community with a public university and some noteworthy exits in the last couple of years.

RECOMMENDATIONS

Build an angel network tied into University of Missouri, establish stronger ties to the broader Silicon Prairie, tell the community’s story more broadly.

NOTEWORTHY STARTUPS
2016 was the downside of Omaha’s startup wave. Omaha and Lincoln are operating counter-cyclically regarding startup activity, keeping startup activities relatively constant and growing in the state. When Omaha has been strong, Lincoln lagged behind and vice versa.

The city’s strength continues to be its ability to translate startups into sustainable companies. Omaha’s Inc. 5000 ranking is consistently high for a community of its size, as are other rankings of large companies (Fortune 1000, etc.), but the community lacks capital at key inflection points. The State of Nebraska’s prototype grant has helped fund firms in the sub $100k range, but finding early stage capital is challenging. Numerous companies have had to seek capital at $2 million from outside the area because of a lack of viable local providers.

Omaha’s general opinion of its own ecosystem is positive, but muted. The enthusiasm in Omaha is significantly less pronounced than in Lincoln, and there are those that are concerned that Omaha’s ecosystem is unbalanced with few access points for capital, inclusion and success. Overall, the community is doing fine for the region but it is no longer the beacon that it was a couple of years ago.

RECOMMENDATIONS

Engage corporate partners more deeply, build capital and capital connections.

NOTEWORTHY STARTUPS

- Flywheel
- OpsCompass
- Banking
- buildertrend
Despite having very limited indicators of startup activity in Sioux City, survey respondents identifying themselves as from the ecosystem were very enthusiastic about the scene.

Sioux City does not have many startups and its ecosystem desperately needs leadership and early stage funding for programming and space—Springboard Coworking is an example of that. Putting more resources behind Startup Sioux City would be a strong move to upgrade the efforts in building the local ecosystem.

**RECOMMENDATIONS**

Identify food production technology companies and partner with them, import change agents to talk, speak, and empower, build stronger Iowa partnerships.

**NOTEWORTHY STARTUPS**

lienwaivers.io
Sioux Falls, South Dakota, appears to be a traditional economic developer’s dream with low taxes, great infrastructure, and a good keystone startup, Farmers’ Business Network. It is the only company in the Silicon Prairie to appear on Fast Company’s exclusive Most Innovative Companies’ list.

However, the community simply does not start very many companies. Those that do start do not have the financial backing that represents a fully-actualized startup ecosystem, despite having multiple angel groups and funds in the region. This suggests that there is a disconnect between funders’ desires and the startups that are being created.

RECOMMENDATIONS

Build a stronger mentor network to push startups closer to fundable opportunities, double down on ag and produce multiple strong startups, look to Fargo to learn about branding from Emerging Prairie and their team.

NOTEWORTHY STARTUPS
Unfortunately, Lawrence did not score well in 2016. Despite KTEC (Kansas Technology Enterprise Corporation) and the KBA (Kansas Bioscience Authority) creating a number of successful ventures since their inceptions, the shift in public policy in Kansas has hurt Lawrence’s (and Manhattan’s) startup ecosystems. This can be seen in the decline in the number (and quality) of business start-ups and the reduction in business support structures at their respective universities. Lawrence in particular has seen multiple companies shift their operations to other communities, particularly Kansas City.

Lawrence scored relatively low in a number of indicators—startups, sustainable companies, and funding being three examples where the city was near the bottom. It is unfortunate that Lawrence’s late 2000s growing ecosystem has seemed to dwindle. The data shows that there is very little happening right now in Lawrence, although it does suggest that companies are still starting there, but then quickly shifting operations to Kansas City. In the past, companies were sprouting and leveraging Kansas City, not just moving to Kansas City.

One spot that continues to shine in Lawrence (although not as much in Manhattan) is SBIR grants. In 2016, Lawrence was home to seven grant winners. This is a building block for a community that could be much more.

**RECOMMENDATIONS**

Build with Kansas City, identifying ways to partner (without losing cool stuff to Kansas City’s gravity), work on local angel/funding networks, partner with other regional universities on best practices for commercialization.

**NOTEWORTHY STARTUPS**

*mycroft*
Manhattan has strong research and industry. For example, Manhattan’s leading (highest) location quotient is the plastics industry. And, Kansas State University has a strong research reputation. This depth of research and industry creates a unique building block for the Manhattan MSA. From the data, this does not appear to be adding depth and value to the startup ecosystem. Kansas State University has also had strong SBIR/STTR programs historically (although they had 0 grants in 2016).

IronClad and the Fellow are good starting points and entrepreneurial ecosystems can turn around quickly.

**RECOMMENDATIONS**

Build on your student culture (empower and engage), look at opportunities in plastics – particularly with existing potential early customers, find ways to partner with other parts of Kansas (mentoring, funding, etc.), start funding groups tied back to Kansas State University.

**NOTEWORTHY STARTUPS**

3. An economics term for density of businesses in one community versus the overall country.

4. Bungii and Campstake have both relocated outside of Manhattan.
Cedar Rapids’ ecosystem is growing rapidly, taking them from Cowtown to Boomtown. There are a number of very positive indicators for the community despite its position on this list. Its ecosystem has great foundational components like coworking spaces, smart leaders and good early companies.

The community also has a great talent pool with Rockwell Collins and other larger high-tech employers. The short drive between Cedar Rapids and Iowa City should continue to shrink, merging the two communities’ already overlapping workforces and roles in the innovation ecosystem. Finding ways to continue to work together strengthens both areas while still allowing each to retain a separate identity.

Cedar Rapids does not start many companies, it has one of the lower rankings on startups and fundings. Cedar Rapids and Iowa City compliment each other quite well and their collaboration can continue to invigorate this ecosystem. Talent, infrastructure, and leadership in Cedar Rapids is bolstered by research, ideas, and innovation in Iowa City.

RECOMMENDATIONS

Build with Iowa City, not alone, funding networks are critical, keep starting companies.

NOTEWORTHY STARTUPS

![CareDrop](#)  
![Involta](#)
Wichita’s ecosystem seems to be the slowest to grow despite being one of the larger cities in the Silicon Prairie. It does not do well across most measures included in this analysis, particularly on a per capita basis. However, there are some bright spots in the data. Wichita has done a good job of building sustainable companies and has a strong talent pool, particularly aerospace engineers which number more than 2,000.

Despite relatively disappointing data points, the survey suggested that people in Wichita are very excited about the trajectory of the Wichita ecosystem. With the creation of new strong ecosystem players such as e2e and Startup Wichita, the community seems to be establishing some key building blocks.

**RECOMMENDATIONS**

More corporate and university innovation, start more companies, link with capital sources in other towns (Dallas, Kansas City, St. Louis, and Denver).

**NOTEWORTHY STARTUPS**

- Filimin
- Recurrency
- Nitride Solutions
PART III: FINAL RECOMMENDATIONS
CONCLUSION

The Silicon Prairie has exciting companies and communities and a regional brand that is recognized nationally.

Outside entities recognize the region’s success in creating awareness for itself through discussing and highlighting what is taking place here. However, there continues to be opportunities for the region to improve both its branding and its substantive company creation.

We recommend the following actions across the region:

1. College towns need to step it up. Communities with large universities need to be intentional: bring back alumni, import some folks who have strong affiliations to town and leverage the magnetism of universities to create important sales, investment, and research connections for the whole region. We also need to do a better job of reinforcing entrepreneurship in these places with ecosystem building blocks like startup weekends, coworking, angel groups, and mentor networks.

2. Sister Cities need to work together. Some example sister communities that are still largely underdeveloped include Cedar Rapids and Iowa City, Lawrence and Kansas City, Omaha and Lincoln, and Ames and Des Moines. Building together will create denser networks and a better overall ecosystem for both markets. In many instances, cities have a history of not working together because of state or regional issues. However, when it comes to entrepreneurship, the Prairie and its individual sister cities have an opportunity to build local/regional alliances that bolster their area beyond what is possible as a singular actor. This does not mean that individual sister communities cannot have separate identities, it means that angel groups, mentor networks, customer awareness, and true collaboration should happen across fictional boundaries.

3. St. Louis should be recognized as the Gateway to the Silicon Prairie and establish itself as a leader in the region. In turn, the region needs to embrace St. Louis as a Silicon Prairie hub. Funding groups in St. Louis should look beyond their borders and companies in St. Louis should look to share their stories with their Prairie brethren. The benefit to St. Louis’s ecosystem would be significant if it could leverage the productivity and excellence of the entire region.

4. A reinvigorated effort to brand and build the Silicon Prairie as a region. The fourteen communities in this report would benefit from working together because, collectively, they constitute a large geographic footprint and a large population. Their collaboration requires attention to communication, intentionality, and leadership that reaches beyond what is best for each respective community. The collective members of the Silicon Prairie community must also be willing to sacrifice and toil, on behalf of the entire region, in order to earn national recognition and legitimacy as an influential entrepreneurial region.