

# THE CASE FOR RURAL: RED WING, MINNESOTA

A CASE STUDY BY THE CENTER ON RURAL INNOVATION  
AND RURAL INNOVATION STRATEGIES, INC.

BUILDING INNOVATION IN RURAL AMERICA  
FROM THE GROUND UP



JANUARY 2022



This case study investigates how a rural community can promote tech entrepreneurship and tech-centric workforce development by working as part of a larger regional ecosystem. Local economic development leaders can help to connect the dots for organizations across a rural region so that entrepreneurs, school leaders, and industries can understand who to turn to when they come across a problem or need a resource related to tech-based economic development. Through the lens of Red Wing, Minnesota, we seek to inform rural economic development leaders about the importance of collaboration across and between rural towns and cities.



*(Red Wing, Minnesota; courtesy Rural Innovation Strategies, Inc.)*



# UNDERSTANDING THE RURAL-URBAN OPPORTUNITY GAP

The Great Recession exacerbated a growing opportunity gap between urban and rural economies. This was largely driven by gains in the digital economy, which enabled major urban areas to recover from the economic shock. Between 1997 to 2017, the digital economy grew more than four times faster than the overall American economy. In 2017, the digital economy represented 6.9% of GDP; in 2018, it accounted for 10.6% of real value-added ([BEA, 2019](#)). Following the recession, rural economies were not as resilient, and as the growing tech sector concentrated in urban areas, small towns were left without a path to sustainable 21st-century employment. Five major metropolitan areas accounted for 90% of innovation sector job growth between 2005 and 2017 ([Atkins, Muro & Whiton, 2019](#)). Although rural regions represent at least 15% of the workforce (using the CBSA rural definition), only 5% of computer and math occupation employment is located in rural counties. The goal is to bridge that gap and increase the number of tech jobs in rural areas to be 15% of the total rural workforce.

This growing geographic inequality has significant consequences for rural areas, as tax bases shrink and young people move to urban areas searching for aspirational jobs. But with the right tools and assets, small towns can participate in the innovation economy, owning and driving the means of production in today's digital marketplace. This case study, the fourth in a series of five, seeks to show the strategic work being done across rural America in grassroots efforts to foster the creation of digital economy ecosystems and tech-based economic development.



## Understanding Tech-Based Economic Development and Digital Economy Ecosystems

In telling the story of Red Wing, it is important to have a grasp on a few terms relevant to the context. First is the difference between the **tech-based economy** and the **digital economy**. While those in the tech-based economy use specialized technologies as part of their day-to-day work — like those in high-tech assembly lines or in research and development — the work of those in the digital economy is centered on the development of computer-based automation technologies to make processes and markets more efficient. Professions in the digital economy can include computer programmers, cybersecurity analysts, IT specialists, data scientists, network engineers, and other tech-powered roles that are resilient in the face of automation.

(Andy Vig; Rochester, Minnesota; courtesy Rural Innovation Strategies, Inc.)



# Tech-Based Economies in Rural America

In 2010, federal spending in rural counties was an average of \$683 less per person than in urban counties, and between 1994 and 2001, rural areas received half as much investment per capita from the federal government as compared to urban areas ([Bishop, 2012](#); [WK Kellogg Foundation, 2004](#)). The same goes for philanthropic foundations: Between 2005 and 2010, the average real value of grants given to rural areas was half as much as that given to urban areas ([Pender, 2015](#)). The U.S. Economic Development Administration's (EDA) Build to Scale program supports organizations and initiatives that unlock equity capital to further inclusive investment, operate programs to accelerate sector growth, and/or enable technology commercialization to spur the next generation of industry leading companies. Within that program, EDA aspires to award at least 40% of funds to rural areas ([RISI, 2021](#)). Build to Scale is one of several grant opportunities that rural communities can access to pursue regional innovation, but the 1:1 match requirement to apply can prove to be a barrier. Rural organizations have to navigate the ins and outs of local funders, regional agencies, and private donors as well, often having far more limited staff capacity and access to resources than their urban peers based on sheer numbers.

It is also essential to recognize the difference between tech-based economic development and developing digital economy ecosystems.

## Tech-Based Economic Development

When we talk about tech-based economic development, we are referring to how a community's economy evolves to center on technology and innovation. Tech-based economic development incorporates a broad range of enterprises, from converting traditional manufacturing to highly automated manufacturing of the same product, to research initiatives on new materials, to the assembly of technology equipment, to app development by entrepreneurs. Tech-based economic development can involve strategies like recruiting large tech companies to locate a data center in a community, and can require preparation like building a perimeter road at an industrial park, gaining access to water for cleaning manufactured parts, and obtaining available land for construction.

## Developing Digital Economy Ecosystems

When we talk about developing digital economy ecosystems, we are referring to how organizations in a community work to align around the common goal of increasing tech employment, and as a byproduct, promote greater economic inclusion in rural communities. An ecosystem involves more open collaboration between many different startups, companies, and entrepreneurs, as opposed to having companies operating in silos. This can be supported by building coworking spaces, creating a coalition of tech-focused investors and support organizations, or holding an accelerator program for local entrepreneurs. The ecosystem, when functioning properly, creates a cycle of regenerative benefits for investment, training, collaboration, mentorship, and growth.



Not all tech-based economic development involves developing digital economy ecosystems. But developing digital economy ecosystems is one approach to tech-based economic development – one that involves a more inclusive form of capitalism and is part of what it takes to establish a collaborative culture that supports technological innovation. Workers on an assembly line at a computer chip manufacturer may be contributing to the tech-based economy; yet assembly-line workers who use coding skills learned from a local boot camp to develop a new robotic system to do their repetitive work are a part of the digital economy.



*(Tammy Lee; Red Wing, Minnesota; courtesy Rural Innovation Strategies, Inc.)*

These workers may go on to turn their innovation into a growing startup that trains and employs more line workers, launch a hackathon to identify weaknesses in its software, and subsequently spur new innovations and activity in the community. In short, these workers are part of creating that cycle of local ownership of production, learning, and growth in an age of automation.

Red Wing is just one community of many across the United States that tell the story of how bringing together partners across sectors and social divides can lead to the positive growth of a digital economy ecosystem and tech-based economic development in rural America.

### **The Rural Innovation Initiative**

The Rural Innovation Initiative (RII) is a digital economy ecosystem development program that supports rural communities that are seeking to implement strategies for creating digital jobs and fostering more home-grown tech startups. Powered by [Rural Innovation Strategies, Inc.](#) (RISI) and its sister organization, the [Center on Rural Innovation](#) (CORI), RII was launched in 2018 through a cooperative agreement between RISI and the EDA. It stemmed from the understanding that while many rural communities had the assets and potential needed to grow tech-based economies, they often struggled to access – or even be aware of – the funding that could help make that a reality.

Red Wing was a part of RII's first cohort in 2019, which helped it apply to the EDA's Regional Innovation Strategies (RIS) Program (now known as [Build to Scale](#)). In 2018, RISI staff members came across a news article about how Red Wing was the only rural community to be selected as a [Smart Gigabit Community](#) by [US Ignite](#), a program which was founded in 2012 to provide capacity building, funding support, national visibility, and networking options to communities seeking to grow their innovation infrastructure. Red Wing's early efforts aligned with CORI and RISI's mission, prompting Executive Director Matt Dunne to reach out to former Red Wing Ignite Executive Director, Neela Mollgaard. This led to Red Wing Ignite's decision to apply to the RII. In 2019, Red Wing Ignite's application to RIS was successful, and it received funding to create its [Entrepreneurs First](#) (E1) ecosystem across southeastern Minnesota, which is also funded in part by a Minnesota Department of Employment and Economic Development (DEED) [Launch MN Innovation Grant](#).

This case study is part of a more extensive series intended to illustrate the array of possible ways that digital economy ecosystems can be constructed in rural America. Although the focus of this is on just one small, rural city, the Red Wing's experience in southeastern Minnesota can serve as a model for regional cooperation for other rural communities.



# COMMUNITY CONTEXT

Red Wing is a city of about 16,500 residents along the Mississippi River in southeastern Minnesota, located on the land of the Mdewakanton people of the [Prairie Island Indian Community](#) and about an hour from the metropolitan areas of the Twin Cities and Rochester. Given its position on the Mississippi, Red Wing is home to one of only four active ports in the state, and the city has an economic history embedded in manufacturing and innovation. Between the 1870s and 1908, Red Wing was a center of limestone and lime quarries at its local bluffs ([Friends of the Bluffs, 2013](#)). [Red Wing Stoneware and Pottery](#) was established in the late 1800s by taking advantage of the natural clay pits in the area; and [Red Wing Shoes](#) was founded in the city in 1905 – which is still the second largest employer in the city to date. Other major manufacturing companies in Red Wing include [Xcel Energy](#), [3M](#), [Cargill](#) and [SCS Elevator Products](#). Today, 21% of all jobs in Red Wing are in manufacturing, although the single largest employer is [Treasure Island Resort and Casino](#) ([TCB, 2019](#); [RWI, 2019](#)). Red Wing is also the location of the Goodhue County Adult Detention Center and the Minnesota Correctional Facility, and manufacturers in the region often employ both incarcerated and recently incarcerated people with human resources and training support from local institutions.

Demographically, Red Wing's residents are 89.1% white, 5.9% Latinx, 3.6% two or more races, 2.8% Black, 1.6% Indigenous, and 0.7% Asian. In 2019, the median household income was \$54,785, a number which is significantly lower than the state median of \$71,306. About 82% of households in Red Wing have a broadband internet subscription, which is just two percentage points lower than the state average ([ACS, 2019](#)). This is significant because rural communities across the country have disproportionately low access to high-speed broadband as compared to urban areas. In 2012, the City of Red Wing began working with [Hiawatha Broadband Communications](#) (HBC) to contract the construction of fiber-optic cables that would provide gigabit-speed internet to the community ([HBC, 2012](#)). The gigabit internet access would open the door to tech-based economic development for the community and spawned the inspiration for the creation of Red Wing Ignite.



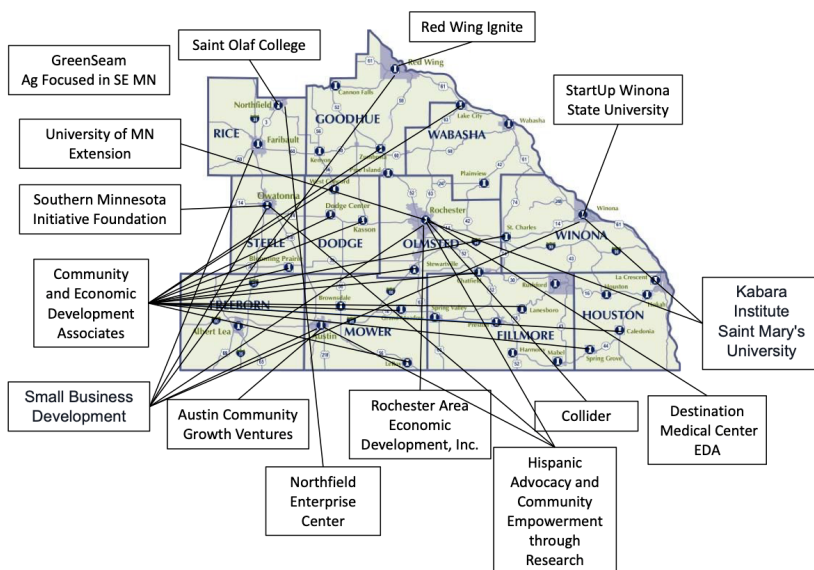
(Red Wing, Minnesota; courtesy Rural Innovation Strategies, Inc.)



# THE LOCAL DIGITAL ECONOMY ECOSYSTEM

Red Wing is unique in that while it has one central, leading organization – Red Wing Ignite (RWI) – it is connected to organizations across southeastern Minnesota through resources, finances, and relationships. The existence of relationships with regional organizations is not new, but the development of E1 and the formalization of these regional relationships to promote tech-based economic development are. The E1 Collaborative strives to support this sector of the economy from an entrepreneurial perspective, even though not all the entrepreneurs that work with E1 are focused on tech.

Southeast Minnesota Entrepreneurs 1<sup>st</sup> Network



(Courtesy E1 Collaborative)

The goal is to support entrepreneurs regardless of their stage of development, an effort that includes a wide range of entrepreneurial recruitment and support activities. The major actors in the local digital economy ecosystem can be best described as part of a “hub-and-spoke” model, where Red Wing Ignite is the “hub,” and the other regional organizations in E1 account for the “spokes.”

## **The Hub: Red Wing Ignite**

Following the construction of the fiber optic cables throughout Red Wing, a group of local public and private stakeholders met and discussed how they wanted to continue to see a greater level of economic growth in Red Wing. They decided that building upon the new broadband would be a successful way to do so, and in 2013, Red Wing Ignite (RWI) was born. RWI soon became a central institution: It developed a coworking and meeting space, incubator and accelerator programs for entrepreneurs, a makerspace, pitch competitions, and hands-on education programs for students from around the region. RWI developed three main goals that drive its work in growing the digital economy ecosystem and supporting tech entrepreneurs: advancing innovators and entrepreneurs, enhancing regional connectivity, and cultivating the workforce of the future. To do so, its work is divided into two central interconnected but unique aspects: supporting tech entrepreneurs, and promoting workforce development in tech, relying heavily on its regional partnerships to bring its vision to fruition. Since its creation, RWI has served more than 350 entrepreneurs and provided more than 1,500 hours of one-on-one mentoring and coaching ([Red Wing Ignite, 2021](#)).

In large part due to its reliable, high-speed internet access, Red Wing was selected as a US Ignite Smart Gigabit Community in 2017. This designation meant that Red Wing would receive resources and network support to promote digital app development in the city – with a particular focus on agricultural, clean energy, healthcare, education, and advanced manufacturing applications ([HBC, 2017](#)).



## **The Spokes: The Entrepreneurs First (E1) Collaborative**

The E1 Collaborative, an endeavor created by RWI, is an entrepreneurship ecosystem of 15 organizations across rural southeastern Minnesota designed to provide wraparound support services to entrepreneurs. RWI serves as the central coordinator, and helps connect all these organizations to each other and to local entrepreneurs. The entrepreneurial support services provided by E1 partners range from education to incubator and accelerator support, mentorship, and funding guidance that support entrepreneurs from early ideation through long-term business strategy and beyond.

The Collaborative was created out of what RWI considered a necessity: RWI felt that it could only make so much impact as one organization, but by providing the resources and connections with entities having niche knowledge about a variety of entrepreneurial and educational topics, they could have a much broader reach and provide higher-quality support to more tech entrepreneurs. E1 partners across the region were selected based upon their unique ability to provide support around different stages of the entrepreneurial process, from education, to ideation, to acceleration, to networking support.

To get to where it is today, E1 has gone through several iterations of growth, and garnered more and more funding to expand on its mission:

- The first was in 2018, when RWI received a seed grant of \$20,000 from the Southern Minnesota Initiative Foundation (SMIF) to bring together five organizations to explore how they could support each other by sharing resources and skills.
- The second came in 2019, after working with the RII technical assistance program. RWI won a grant through the 2019 EDA Regional Innovation Strategies program grant (now known as Build to Scale), which gave E1 the monetary support it needed to expand to include 15 organizations, hire a staff member to manage workforce development projects, and continue to develop educational curriculum for local entrepreneurs.
- The third phase occurred more recently, when RWI was named as the Hub for southeast Minnesota under the state government's Launch MN program, an initiative to help grow Minnesota's startup ecosystem. At present, E1 is funded in part through the EDA grant, and in part through a DEED Launch MN Innovation Grant to support and expand the efforts of this entrepreneurial system.



*"We truly work together – it's an effort to break down silos of these different organizations and get to know one another," said Stacy Nimmo, the Executive Director of Red Wing Ignite. "We work to discover the types of programming that each of the partners offer, and we now know who to pick up the phone and call if we [or our entrepreneurs] are needing particular types of services or resources."*







## Who is a part of the E1 Collaborative?

The E1 Collaborative created by Red Wing Ignite is significant because it brings together partners across sectors and cities in the region as a way to support local tech entrepreneurs. Red Wing Ignite serves as the regional hub, and connects 14 other regional organizations:

- Rochester, MN: Collider; Destination Medical Center (DMC); Rochester Area Economic Development Inc. (RAEDI)
- Winona, MN: St. Mary's University of Minnesota – Kabara Institute for Entrepreneurial Studies; Winona State University / Startup Winona State
- Austin, MN: Austin Community Growth Venture
- Northfield, MN: Northfield Enterprise Center; St. Olaf College
- Owatonna, MN: Southern Minnesota Initiative Foundation (SMIF)
- Operating within multiple cities and towns in the region: Hispanic Advocacy and Community Empowerment Through Research (HACER); Small Business Development Center (SBDC); Community and Economic Development Associates (CEDA); University of Minnesota Extension (an EDA University Center since 2008); GreenSeam

*(Photo: Red Wing, Minnesota; Courtesy Rural Innovation Strategies, Inc.)*



# RURAL REGIONAL CONNECTIVITY: LESSONS FROM RED WING, MINNESOTA

A major piece of Red Wing's success in building out its regional network, and what makes it work, is that so many people, institutions, and entrepreneurs buy into the regional model. The regional collaboration comes through both formal and informal mechanisms. For some, this involves structured collaboration by being a part of the E1 Collaborative or other consortium models in the state. For others, it comes through just realizing how collaboration with regional partners is highly effective in supporting regional entrepreneurs and tech-based economic development. Organizations and individuals in southeastern Minnesota pride themselves on regional partnerships they have with educational institutions and industry partners, highlight if they are a part of the E1 Collaborative, and underscore how the collective model has scaled up across the state. In more than half a dozen conversations with E1 partners and other regional actors, partaking in regional collaboration was described as a point of pride.

That being said, it was not a simple process to build a regional collaboration endeavor like E1. Stacy Nimmo at RWI said that although this work has been going on for three-plus years, there is still some work to do in helping certain stakeholders see and understand the value of a regional approach. Some stakeholders questioned the value that a regional model could hold for their own city or town, or for their direct constituents. This component has been an obstacle for all E1 partners, and not RWI alone. Understandably, local institutions want to see the best for their own communities, and taking a regional approach was something new and different for some of the organizations in Red Wing. Yet Nimmo and the E1 partners are starting to see some skeptics come around to recognize the impact of how working across the region will have positive run-on effects for Red Wing and other individual communities. "What kinds of dots can we connect as an organization for the benefit of the city, showing that we can only have these benefits because of our regional relationships?" Nimmo said. Taking a regional approach has enabled hubs like RWI and their entrepreneurs to come up with solutions they wouldn't have been able to accomplish on their own.

Through the experience of Red Wing, this section will explore four reasons why, once it is adopted, a regional approach to rural tech-based economic development can be so effective.



(Red Wing, Minnesota;  
Courtesy Rural Innovation Strategies, Inc.)



## **REASON 1: A regional approach can break down the silos between organizations, create greater trust, and facilitate knowledge sharing.**

In both rural and urban places, institutions often operate in silos, keeping information internal to themselves and not necessarily working in close collaboration with others operating in a similar sector. The reasoning for this has a logic to it: competition for money. Other organizations may be your direct competitors for grants or clients or participants, but when local governments or stakeholders work together across a region, studies find that it leads to positive economic outcomes, including information spillover, overcoming limited resource challenges, higher quality of life and local economic growth ([Meléndez et. al., 2015](#); [Lee, Feiock & Lee, 2012](#); [Heniford, Pu & Loomis, 2018](#)). This is particularly true when there is an anchor institution like Red Wing Ignite, serving as an intermediary to make the collaboration work. Furthermore, collaborations in rural regions in which organizations share many of the same collaborators are found to be more successful because of greater trust, shared norms, and mutual dependence ([Malecki, 1997](#); [Ofem, Arya & Borgatti, 2018](#)). Red Wing recognized that it did not have all the resources it needed to support tech entrepreneurship and digital skill development, and neither did the surrounding rural communities. This, in short, was the impetus to create the regional E1 Collaborative.

Stacy Nimmo at RWI serves as a lead communicator and convener amongst all the different partners of the Collaborative. She indicated that organizations were at first hesitant to delve into the collaboration, as E1 was a different type of institution than had existed prior. To be effective, a foundation of trust needed to be built through relationships to encourage information sharing across institutional lines. Nimmo and the other E1 partners regularly vocalize the guiding principle of their regional work as a way to build this trust across the region: Are we putting the entrepreneur first? “It comes up at every meeting because by nature, asking that question asks us to look at our own internal motivators,” Nimmo said. “Are we initiating (or not initiating) programming because we think it will be good, or are we doing it because it is mandated?” Coming to terms with the shared interest and mutual trust across organizations has been essential to the process.

Regional coworking spaces and pitch competitions are two mechanisms to promote this trust and knowledge sharing. Andy Vig took advantage of both. Vig is a co-founder of [Shrpa](#), an online platform that enables people to share ideas for local outings and adventures in small towns. Vig has worked remotely for the last 11 years and decided to join [Collider](#), a co-working space in Rochester, about an hour south of Red Wing, that is part of the E1 Collaborative. He met his co-founder, Chris Lukenbill, at Collider, and they began building out Shrpa in 2019. A year later, Shrpa was named the winner of the [E1 Ignite Cup](#), the pitch competition created by Red Wing Ignite – and went on to compete in the statewide [MN Cup](#) pitch competition. “Learning about entrepreneurship is something that you almost either stumble into, or you have a connection to,” Vig said. “These ecosystem builders [at E1] are an amazing way to remind people that you can try out an idea and see where it goes, and give you the connections to help make you successful.”



## **REASON 2: A regional approach builds a broader network of contacts, entrepreneurs and tech-centric people who can support each other, creating a virtuous cycle.**

Another major challenge to rural entrepreneurship relates to the common narrative about entrepreneurship: it happens in cities, where resources are proximate and plenty. Building regional connectivity serves as a way to connect tech entrepreneurs, both students and veterans alike, in an effort to establish an ecosystem of support in innovation.

The benefits of regional connectivity are something that local colleges and universities in southeast Minnesota have grasped onto. Within E1, there are three higher education institutions: Winona State University, St. Mary's University of Minnesota, and St. Olaf College, all of which have students across disciplines who are interested in entrepreneurship. "A major barrier to students staying in the area [after graduation] and continuing to work on an entrepreneurial idea is the ability to get plugged into the broader community," said Christine Beech, the Director of the Kabara Center for Entrepreneurship at St. Mary's University in Winona. "If a student's only connections are at the university, then that's a problem." The E1 network has been beneficial in that way, as it can plug these entrepreneurial students into a broader established network. Beech, who also serves as one of the higher education representatives on the statewide board for Launch Minnesota, emphasized how entrepreneurship can also help to bridge the social gap known as the "town-gown" divide, where there is a stark social and economic separation between those in the university communities and the residents of the surrounding town. "There's nothing like someone saying they want to start a business in the town, because it is a statement of saying there is value for them there," she said. A similar mindset exists in Northfield, 45 minutes west of Red Wing. Margaret Bransford, the Associate Director of Entrepreneurship and Outreach at St. Olaf College in Northfield, described how students don't think of Northfield as a place to be an entrepreneur. "Through the connections and branding around the E1 collaborative from RWI, it has helped to tell that story differently," she said.

This type of broader network and knowledge sharing is proving its value on the secondary- school level as well. Patrick Paulson is a Professor of Management Information Systems at Winona State University, a small public university about an hour south of Red Wing that is part of E1. He also sits on the Academic and Student Affairs Technology Council for Minnesota. Over the past few years, he noticed that new high school graduates were coming from rural areas with fewer technological skills, which he attributes to budget cuts that make it cheaper to supply schools with Chromebooks or tablets as compared to more advanced computers. In his position with the state council, Paulson had the opportunity to talk with a school superintendent from the region about the digital divide when it comes to some of his students graduating from rural high schools. This superintendent appreciated the insight and wanted to further a regional communication pathway – "The superintendent said, 'You're telling me our students have to make up deficiencies, and I'd like to get some feedback from somebody at Winona State to tell us where those are and what we need to do,'" Paulson described.

Both through formal channels like E1 and through informal conversations, regional collaboration in Red Wing has elevated a process of identifying roadblocks to tech-based economic development and working towards solutions.



### **REASON 3: A regional approach creates a wider array of opportunities for those seeking to pursue a career in the tech space, and support those in need of digital skills.**

RWI, the [Minnesota State IT Center of Excellence](#), and [Workforce Development, Inc.](#), did a study to identify the key barriers to entry in the tech field, and found that the largest barriers to tech-related work lie in the pre-entry and entry-level stages. These results indicated that work needed to be done in the education, skilling, and workforce development sectors across the region. This would involve working with partners across the region at the high school, post-secondary, and industry level. Furthermore, it emphasized the importance of being inclusive in outreach to those of a wide variety of ages, races, socioeconomic backgrounds, and digital literacy levels.

The Perkins V Career and Technical Education (CTE) program is one organization that seeks to address these issues, and it works closely with Red Wing Ignite through its workforce development initiatives. Across the U.S., these federally-funded programs are designed to create a pathway between high school students and the workforce, offering high school students the ability to take hands-on, skill-based coursework across a wide variety of subjects from information technology, to operations management, to marketing research, to manufacturing production process development. In Minnesota, the CTE programs operate under a consortium model, with the goal of maintaining and building strong, lasting partnerships with local workforce development leaders in southeastern Minnesota. "One reason why we try to partner with our area organizations like E1 is because in a lot of cases, they can access either the knowledge, the dollars, or the future partnerships that Perkins just can't," said Brian Cashman, Secondary Coordinator for the Southeast Perkins Consortium in the Goodhue County Education District.

There are numerous programs in the southeast Minnesota region that seek training and digital skilling to get more people involved in the technology workforce – or to just get a job more generally, as technological skills are becoming increasingly essential for manufacturing jobs as well. Burke Murphy supports RWI's [Learn-and Earn](#) program, a grant from the Minnesota Department of Labor and Industry that places high school students in worksite learning experiences – and which are increasingly focusing on the tech space. Another center of tech workforce development is Minnesota State College Southeast, where Red Wing Ignite's makerspace is housed. Outside of the makerspace, Minnesota State College Southeast offers a wide variety of different training programs for the public – from accelerated welding, to computer numeric control (CNC), to manufacturing 101. These programs are targeted towards marginalized groups including low-income people, women of color, and incarcerated and formerly incarcerated people. For all of these 40-hour courses, there is a mandated 8-hour Northstar Digital Literacy requirement, a curriculum which provides basic computer skills such as Microsoft Excel, Microsoft Word, and email. "Some of this is very basic, but we want to make sure everyone has this knowledge to be able to communicate with potential employers," said Katie Hardyman, the Director of Business Relations at Minnesota State College Southeast. "Everything is computerized, and there is a minimum level of digital literacy that almost everyone has to have. Manufacturing is no different." From programs with high school students to marginalized adult populations, regional relationships are important to accomplish the goal of enabling people to get the digital skills that are necessary to get the jobs they want, and the jobs that are needed.





(Red Wing, Minnesota; Courtesy Rural Innovation Strategies, Inc.)

## **REASON 4: A regional approach can influence the way that money flows to entrepreneurs, tech education, and digital skilling programs.**

One thing that is unique about Red Wing, and about Minnesota more broadly, is its value of collaboratives and consortiums. These collaborations not only help to connect people and ideas, but also to build monetary power in rural regions. Burke Murphy, the Workforce Lead at Red Wing Ignite, has been working to develop relationships between industry partners and secondary and post-secondary education institutions. “I view [Red Wing] Ignite as a neutral broker,” Murphy said. “One of the ways in which I develop partners is through grant development that engages these institutions across these systems to work together.” Murphy views RWI’s role as creating a critical density of resources, expertise, and capital that can reach people across the geographically distant landscape out southeast Minnesota. For example, Murphy was able to serve as a connector between the Minnesota state college system and the Workforce Development Bank, fostering a partnership to look into barriers of entry for those seeking entry into an IT career pathway.

Most recently, in 2019, Launch Minnesota emerged as a consortium modeled off of the design of E1. Neela Mollgaard, the former Executive Director of RWI, worked as part of a team to come up with the idea for E1. Once it was off the ground — and its success became apparent — Mollgaard was pulled to the state level to set up similar models across Minnesota. The growth of Red Wing’s digital economy was apparent to others around the state, and the idea was to have a regional central leader for entrepreneurship in every part of the state. By the end of 2020, it had created seven hubs, 60-plus program partners across the state, provided training to 380 entrepreneurs, and awarded 63 startups roughly \$2 million in innovation grants ([Launch MN, 2020](#)). As E1 did before it, Launch Minnesota is proving how regional collaborations in rural areas can make a tangible impact on tech-based economic development.





(Susan Langer, Red Wing, Minnesota; courtesy Rural Innovation Strategies, Inc.)



(Red Wing, Minnesota; courtesy Rural Innovation Strategies, Inc.)

## COMMUNITY PROGRESS AND BENEFICIARIES

More and more tech entrepreneurs are benefitting from the support of the regional collaboration across southeast Minnesota. Their stories show how taking advantage of the support from a wide variety of resources can make tech-based economic development come to fruition. Below are the stories of two of those people.

### SUSAN LANGER

Susan Langer is the founder of [Live.Give.Save.](#), Inc., a financial technology company that seeks to help consumers either save or donate money to charity as they spend. Langer was born in Red Wing, and raised across the Mississippi River in Bay City, Wisconsin. Like many who grow up in rural communities, she was determined to leave for a big city as soon as she graduated high

school, and lived in multiple places around the country, working in development for several organizations, including the international NGO [World Vision](#), before coming back to Red Wing in her early 40s to be closer to her family. Upon her return, Langer came across Red Wing Ignite. “It changed everything for me — I had broadband, I could actually get connectivity, I could have an office, I would actually look like a professional and have professional engagement with other groups and individuals and investors,” Langer said. “It was just amazing to see that and discover that in Red Wing.”

In developing Live.Give.Save., Langer took full advantage of the regional connectivity in southeast Minnesota: She utilized the services of the Small Business Development Center (SBDC), received investment from [Golden Triangle Angel Fund](#), and participated in the [E1 Ignite Cup](#) pitch competition. She tapped into the student networks at local colleges and has hired local college graduates as employees. “When I moved to Red Wing, in the back of my mind, I’m like, ‘How can I start a startup out of a rural community, let alone a [financial tech firm] in the midwest at age 50?’” Langer said. “But those connections made it richer for me being in a rural community than being in the Twin Cities.”

Live.Give.Save. was recently acquired by Michigan State University Federal Credit Union and is now known as [Spave, LLC](#). Langer’s story was applauded by E1 partners across the region, and highlights how a network of institutions can support tech entrepreneurship in a rural community.





(Sievers Creative; Red Wing, Minnesota; courtesy Rural Innovation Strategies, Inc.)

## ROGER, RENEE, AND JESSICA SIEVERS

Roger, Renee, and Jessica Sievers are the co-founders of Sievers Creative, a marketing and design agency based in Red Wing. Roger and his sister, Jessica, grew up about 30 minutes north of Red Wing. Now, he and his wife, Renee, are based in Red Wing. Roger worked at a local newspaper for years, and described himself as a “digital marketing geek,” and Renee went to school to be a designer. Neither of them had any intention of becoming an entrepreneur, but in 2006, Roger started to do some digital marketing work on the side of his newspaper job to help pay off his student loans. By 2014, his sister, Jessica, started working with him, and in early 2017, Roger, Renee, and Jessica began working on Sievers Creative full time. At that point, all of their work — from design to meetings with clients — was taking place at their kitchen table. They then learned about Red Wing Ignite. “It was the first place outside of the home where we had an office and a mailing address and a



professional place to do seminars and meet with clients,” Roger said. Red Wing Ignite was where they were able to focus on rebranding and bring the company to a new level of professionalism and growth.

The Sievers view the fact that they run their business out of a small rural town as a major asset to their work. They have clients from all across the region. “They need our service, but they don’t necessarily want to go to the city and just be another person in a giant agency’s roster,” Jessica said. “They want that personal connection, so I think our location far enough from the [Twin Cities] attracts a wider range of clients, geographically.”

Sievers Creative was able to take advantage of the resources and space of a tech entrepreneurial hub in a rural community, and as a result, bring together clients from across southeastern Minnesota. Their experience shows how both tech entrepreneurs and rural economies more broadly can benefit from regional collaboration and outreach.





## CONCLUSION

Today, Red Wing is recognized locally, regionally, and nationally as a rural community that is developing a strong digital economy ecosystem. It has the physical infrastructure in the form of high-speed broadband, a coworking space and a maker space, and is continuously developing the social infrastructure throughout the region through the E1 Collaborative. Regional collaboration occurs in both formal and informal ways, and in both cases, the ability to foster information sharing and networking is essential for successful tech-based economic development. The case of Red Wing shows that such regional collaboration can take years of regular communication and community engagement, but is an investment that can support entrepreneurs and rural economies across a wide-reaching area.

## THE RURAL ECONOMIC DEVELOPMENT TOOLKIT: APPROACHES TO STRATEGIC FUNDING

Red Wing charted a path to constructing a digital economy ecosystem through partnerships with organizations across southeast Minnesota. Based on the realities of their experience, CORI and RISI created a checklist of suggestions and questions for other rural community leaders to follow. This checklist is one in a series of five, and it is recommended to be used alongside the others. It can be used as a tool to support those considering applying for a Build to Scale grant or other funding opportunities, and is ideally used several months before the Notice of Funding Opportunity (NOFO) is released:

### 1. Understand the industry makeup of your region:

- a. Who are the leading companies?
- b. What are the leading industries/sectors?
- c. What are the types of businesses or industries that complement the work you do?
- d. What types of businesses or industries overlap with the work you do?
- e. What are the workforce trends that are impacting your community and your region?

### 2. Think about the coalitions or collaborations that already exist:

- a. What types of formal structures exist to bring groups of organizations together?
  - i. What types of issues do they address?
- b. What types of informal networks exist to bring groups of organizations together?
  - i. What types of issues do they address?
- c. What types of spaces – physical or online – are used to bring groups together?
  - i. What types of issues do they address?

### 3. Seek to understand and build relationships with other regional organizations:

- a. What organizations, businesses, or institutions do you:
  - i. Have formal partnerships with?
  - ii. Have informal relationships with?
  - iii. Not yet have relationships with?
- b. Who are the leaders or contacts at these institutions to best contact?
- c. How can your current partnerships and organizational relationships help you network across the region?



## REFERENCES

- American Communities Survey. (2019). Quick Facts: Red Wing city, Minnesota. United States Census Bureau.
- Atkins, R., Muro, M. & Whiton, J. (2019). The case for growth centers: How to spread tech innovation across America. Brookings.
- Bishop, B. (2012). Federal Spending in Rural Lags Cities. The Daily Yonder.
- Bureau of Economic Analysis. (2019). Measuring the Digital Economy: An Update Incorporating Data from the 2019 Comprehensive Update of the Industry Economic Accounts.
- City of Red Wing. (2019). Red Wing 2040 Community Plan – Chapter 9: The Economy.
- Friends of the Bluffs. (2013). Memorial Park.
- Heniford, D., Pu, J. & Loomis, J. (2018). US Regional Collaboration and Economic Growth: a Midwestern Case Study and a National Cross-Sectional Analysis. The London School of Economics and Political Science.
- Hiawatha Broadband Communications (HBC). (2012). HBC Red Wing Office Open for Business.
- Hiawatha Broadband Communications (HBC). (2017). U.S. Ignite Names Red Wing Ignite a Smart Gigabit Community.
- Launch Minnesota. (2020). First-Year Progress Report.
- Lee, I.W., Feiock, R. & Lee, Y. (2012). Competitors and Cooperators: A Micro-Level Analysis of Regional Economic Development Collaboration Networks. *Public Administration Review*, 72(2), 253-262.
- Malecki, E. J. (1997). Technology and economic development: The dynamics of local, regional, and national change (SSRN Scholarly Paper ID 1496226). Social Science Research Network.
- Meléndez, E., Borges-Mendez, R., Visser, M. A., & Rosofsky, A. (2015). The restructured landscape of economic development: Challenges and opportunities for regional workforce development collaborations. *Economic Development Quarterly*, 29(2), 150–166.
- Ofem, B., Arya, B., & Borgatti, S. P. (2018). The drivers of collaborative success between rural economic development organizations. *Nonprofit and Voluntary Sector Quarterly*, 47(6), 1113–1134.
- Pender, J. (2015). Foundation Grants to Rural Areas from 2005 to 2010: Trends and Patterns. USDA Economic Research Service.
- Rebeck, G. (2019). Regional Reports: The Turning Tides of Red Wing. Twin Cities Business.
- Red Wing Ignite. (2021). Community Impact.
- W.K. Kellogg Foundation (2004). Routes of Change, Issue 23: White Paper Documents Lagging Federal Investment in Rural America.





*(Red Wing, Minnesota; courtesy Rural Innovation Strategies, Inc.)*

## LEARN MORE

[www.ruralinnovation.us](http://www.ruralinnovation.us)

## STAY CONNECTED

[Sign up for our newsletter](#)

## FOLLOW ALONG



This case study was written by:

Dani Douglas, Research and Policy Associate at Rural Innovation Strategies, Inc.

*(Cover image: Red Wing, Minnesota; courtesy Rural Innovation Strategies, Inc.)*

*This content was prepared by Rural Innovations Strategies, Inc. using Federal funds under award ED20HDQ3120070 from the U.S. Economic Development Administration, U.S. Department of Commerce. The statements, findings, conclusions, and recommendations are those of the author(s) and do not necessarily reflect the views of the U.S. Economic Development Administration or the U.S. Department of Commerce.*

