

Demonstrated Experience and Project Summary

Lockridge Networks is a southern Iowa owned and operated Internet Service Provider offering fixed wireless service to 350+ customers over the past 3 years. The Limited Liability Company is headquartered in Seymour, Wayne County, Iowa. Service started in Appanoose and Wayne Counties and has expanded to Monroe and Lucas Counties – with expansion projects supported by NOFA001 and NOFA003 grants. The service is delivered through over 40 existing towers and high elevation sites strategically placed in the counties. The company has invested heavily to deliver over 2 Gbps (expandable to over 20Gbps) of dedicated fiber and microwave backhaul capacity to provide efficient and redundant service to rural customers. Lockridge Networks are one of the only Iowa networks with geographically diverse, provider diverse, and route diverse backhaul to both Kansas City and St Louis, where the company is connected directly into Tier 1 internet exchanges. Since the start, Lockridge Networks has been delivered on an OSPF-based redundant network with automatic failover to reduce the impact of electric or other external disruptions. As the OCIO has identified, latency is critical, and current latency to the public Internet (1.1.1.1) via Kansas City is 11ms or better; latency to St Louis is 27ms or better.

The current average monthly residential price for Lockridge Network services is \$69 per month. Higher and lower speed services are available, but 25Mbps download is the most common package selected, with 30Mbps download being the second most common package selected. These options are less expensive than rural telephone-based DSL (at approximately \$88/mo), which offers typical speeds under 3Mbps and requires an often unwanted landline. Similarly, Lockridge Networks options are substantially cheaper and much faster than competitive \$150/mo satellite data services that offer 1Mbps speeds and 60GB monthly data caps. Many rural DSL and satellite customers have switched to Lockridge Networks and have found both higher speeds and significantly improved reliability, with no data caps or contracts.

Lockridge Networks is proud to have **no data caps, no contracts, and no monthly hardware rental or hidden fees**. The average customer upload speed is 20Mbps, which greatly improves performance in Zoom meetings, online classes, telehealth and telework. Satisfied Lockridge Networks' customers have shared their positive experiences with neighbors and expanded interest continues to mount well beyond current service regions. The maximum residential customer package provisioned today is 100Mbps download and 50Mbps upload. Commercial and custom packages are available at and above 100Mbps.

Lockridge Networks has also innovated in the use of novel technologies to expand service to previously unreachable areas in rural counties, including use of licensed radio frequencies, neighborhood relays, micropops, and underutilized high sites. Lockridge Networks customers say it best:

"Amazing to have Internet service. No other provider would help us, but Lockridge Networks delivered. We are delighted!" -Jeff F.

"We changed to Lockridge Networks and are very happy with it in our home." -Bob O.

"I highly recommend Lockridge. Living south of Chariton on gravel and I haven't had an issue yet!" -Kaitlyn W.

"We love Lockridge service. So much faster than our previous provider." -Sam S.

"We love our Lockridge internet service. When we had those downpours in May, we never lost the connection." -K.C.

"Thanks Lockridge Networks for the quick response in setting up equipment in our area to provide rural internet service." -Gene W.

"WOW you guys are fast! I will start recommending you right away. Thanks for getting rural Iowa online." -Jeff P.

"Lockridge service has been outstanding over the past year. Thanks for serving us in Russell." -Steve S.

"I have told everyone about your service and customer care. Hands down you guys are the best in the business, especially around here. Thank you so much for providing reliable internet!" -Melissa P.

Lockridge Networks is proposing to expand its fixed wireless service offering 100/20Mbps to Tier 1 TSA's in and adjacent to Ringgold and Union Counties in Iowa. Broadband service is more than an amenity, it is a requirement of daily life for many people, however, Internet access continues to be limited in availability to area residents of Ringgold and Union County. Lockridge Networks wants to change that, by providing fast, reliable broadband service for residents to have access to greater opportunities that could enhance their way of life. Impacts will affect job opportunities, businesses, farming operations, education delivery, enable telehealth and empower telework, as well as overall personal enrichment for residents. "Connectivity means access to healthcare, education, job creation, and everything. Broadband has to be there to ensure the virility and sustainability of the community. Previously, the vitality of America was based on infrastructure—roads and highways. Now it's broadband infrastructure. If people can't access reliable internet in an affordable way, they will be relegated to industries that are stagnating. Or they will move." https://www.cjr.org/special_report/midterms-2018-iowa-rural-broadband.php/

The proposed project would strive to "Connect Every Iowan" by strategically placing wireless access points on multiple towers in the 'Target Service Areas' (TSA) as identified by the Office of the Chief Information Officer. Ringgold and Union County have become our primary objective for this grant cycle. Ringgold County has a population of 4,894 residents which includes 706 students, spread across an area of 410 square miles. Union County has a population of 12,241

residents which includes 1,973 students. With the ongoing COVID-19 pandemic and the recent Delta variant, parents, students and teachers face a very uncertain upcoming school year. Providing teachers, parents and students with broadband is a responsibility that we take very seriously. For example, in Lockridge Networks' existing service area, we provided students living in rural areas of Wayne Community School District and Centerville Community School District free Internet access at home, for the 2020-2021 school year. We feel very strongly that regardless of where you live or how much money you make, access to broadband is essential to giving students the best possible opportunities to succeed.

In July 2020, Jodie Geist from Ringgold County Development (RCDC) approached Lockridge Networks to explore the best solutions to bring improved connectivity to Ringgold County and, critically, to solve the last-mile problem for the hardest to cover areas. Jodie introduced Lockridge Networks to Wayne Pantini of Union County Development Association who shared similar concerns about broadband needs within Union County. Over the past year, Lockridge Networks have conducted numerous surveys and led community broadband meetings to share possible designs to solve the coverage gap across the counties. With more and more residents working from home and students in distance learning, the needs in Ringgold and Union County are critical and, together with grant funding, these connectivity needs can be solved.

The proposed network design will leverage Lockridge Networks' experience building neighborhood level relays and micropops. The proposed network will expand west from current Chariton and Humeston locations via licensed microwave links to Ringgold and Union Counties, and distribute to other micropops and end customers using licensed and unlicensed fixed wireless access.

Ringgold County Development Corporation director Jodie Geist said: "In the past few months, I have seen an increase in people moving to Ringgold County and their need for broadband services in order to work from home. I see this need continuing to increase. Reliable broadband services are critical for economic growth in Ringgold County. Having retired from teaching at the beginning of the pandemic, I taught students remotely for 9 weeks. This was very challenging and again, I saw firsthand the need for broadband services, especially for students living in the rural areas."

Union County Development Association Executive Director Wayne Pantini states that business and industry have expressed the need for quality broadband connectivity for years. "Rural based manufacturers such as BSM Enterprises in Arispe, Iowa have had a challenge in downloading large files to read schematic plans for work orders. With only one option for connectivity, this presents a challenge for continuous operations and adds another challenge for companies in Iowa to grow and expand." Additionally, he states, "This is not just a business retention and recruitment issue, this is a workforce retention and recruitment issue as well. A broadband project such as this will help level the playing field for rural Iowa to improve the quality of place and turn around the population decline."

To meet the grant deadlines identified by the OCIO, Lockridge Networks will be using many existing structures on which to mount equipment. An agreement with Universal Farmers Coop (UFC) was reached to provide bandwidth and community access via grain legs in Chariton, IA and Humeston, IA. Lockridge Networks provides Internet service to these UFC offices today and would expand westward through UFC's locations to Ringgold and Union Counties. Similar agreements have been reached with owners of other high sites throughout Ringgold and Union Counties, including privately owned grain bins, existing radio towers and town owned water towers. To complete the network, a small number of additional lattice towers will be assembled at strategic locations. Building on experience gained from previous projects, including NOFA001 and NOFA003 grants, and supported by OCIO's grant funding in NOFA006, Lockridge Networks is uniquely qualified to quickly expand broadband across South Central Iowa's Ringgold and Union Counties using fixed wireless access.