

Executive Project Summary

Project: Heartland-Ireton (Rural)

Proposed Project:

The proposed Project by Heartland Telecommunications Company of Iowa (“Heartland”) aligns perfectly with the Governor’s Empower Rural Iowa Initiative recommendation of targeting **Future Ready** connectivity that we’ll need tomorrow – not just the level of connectivity we need today thru a state-of-the-art, fully Fiber to the Premise (“FTTP”) architecture where every location within the Targeted Service Area (“TSA”) will have access to dedicated fiber facilities. The fiber optic cable infrastructure will be designed in a manner that permits Heartland to utilize various technologies such as Active Ethernet, Gigabit Passive Optical Network (“GPON”), or various other next-generation technologies such as Next Generation – Passive Optical Network 2 (“NG-PON2”).

The proposed FTTP network architecture will not only provide delivery of Broadband service, but also allows for the delivery of voice and video services across the broadband access platform. Heartland will utilize redundant Ethernet uplinks from its FTTP aggregation point to its existing softswitch to facilitate voice services. While the existing softswitch contains existing connections to the public switched telephone network (“PSTN”) that will be required for this voice services implementation, Heartland will complete any interconnection work and associated call translations to ensure proper availability of voice services. Heartland will also utilize redundant Ethernet uplinks from its FTTP aggregation point to provide access to its Internet Protocol television (“IPTV”) signal which will provide customers within the TSA with a competitive video solution from Heartland for the first time. Finally, Heartland will implement redundant Ethernet uplinks from the proposed FTTP aggregation point to its core data network. These redundant connections ensure highly reliable Broadband data communications services. Heartland will utilize its existing data network routers, Internet uplinks, and ISP services to support new customers in the TSA.

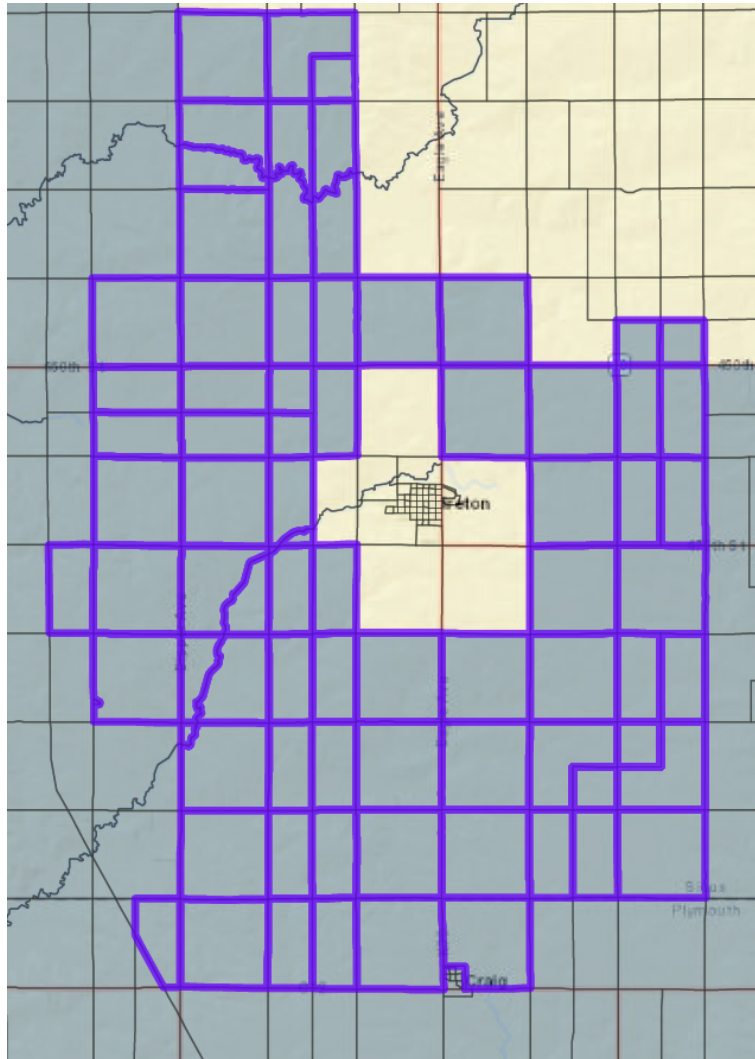
The proposed FTTP network architecture isn’t designed to provide the bare minimum 25 Mbps download and 3 Mbps upload broadband speeds, but is the most state-of-the-art, future-proof network design available providing speeds to each location within the TSA of 1 Gbps download and 1 Gbps upload (including raw data and Ethernet overheads) today and speeds well beyond 1 Gbps in the future with only electronic upgrades necessary to realize those higher speeds. Not only does a FTTP network design provide the best throughput in terms of Broadband speeds available today, but this type of terrestrial technology, using pulses of light to transmit its traffic, results in one of the fastest possible transmission paths, thus creating a very low latency network.

As the incumbent local exchange carrier in the TSA, Heartland is best positioned to provide this state-of-the-art FTTP Broadband network to each and every location within the TSA in the most cost-effective manner possible giving the state of Iowa the best “bang for its buck”. Finally it should be noted that if Heartland is awarded this grant, it will not only build to the locations within the TSA, but it will also build to the rest of the locations not within the TSA, but within its existing Ireton exchange boundaries. To be clear, Heartland will only use grant dollars awarded in eligible TSA’s and will only report actual costs that were within eligible TSA’s; however, award of this grant will not only unleash investment in the specific

TSA's detailed below and throughout this grant application, but will also deliver broadband investment in the remaining census blocks within the Ireton exchange. This means that if our request for \$303,653.10 in grant dollars is awarded, it will not only leverage investment by Heartland of \$1,720,700.90, but an additional investment of over \$1,300,000 in the surrounding rural areas!

Geographic Area:

The geographic area in which the Project will occur is within the TSA outlined in blue in the map below:



Estimated Start and Completion Dates:

Heartland anticipates the Project will commence on August 1, 2019, construction will be completed by the end of 2019 and that customers will be cut-over to the fiber network by the end of May, 2020 which will mark Project completion.

Compliance with Terms, Conditions and Requirements of NOFA:

Project Completion: Heartland is fully capable of completing this Project by the date identified in Section 4 of its Qualitative Attributes Form as it has shown it has the financial capability to fund the Project and its management team has been successfully overseeing and implementing on-time FTTP overbuilds for over 10+ years, always refining its project management processes to grow from lessons learned. Heartland is also very capable of complying with field testing compliance measures implemented by the Office of the Chief Information Officer as it is successfully implementing the Federal Communications Commission's ("FCC") broadband performance testing measures that go into effect July 1, 2019.

Payment Procedures: As a cost company, as defined by the rules and regulations of the FCC, Heartland has been required to track expenses in detail for years; thus, it has policies & procedures in place to track allowable expenses and keep the appropriate documentation on file for the required retention period. It has also been subject to random audits by the Universal Service Administrative Company ("USAC") for expenditures made and Universal Service Funds received and it has always been found in material compliance with the rules and regulations in place at the time.

Record Retention/Access to Records: As stated previously, Heartland has policies, procedures and software in place to be in full compliance with the record retention and access to records requirements in the Notice of Funding Availability ("NOFA") Grant Agreement. It also has years of experience in complying with both the FCC and USAC's record retention requirements.

Compliance with Law: Heartland has and will continue to comply with all applicable federal, state, foreign and local laws, rules regulations, codes, standards, ordinances and orders both generally and in connection with the performance of the Grant Agreement. The NOFA grant agreement was reviewed by Heartland's outside general counsel to ensure legal compliance. Heartland reviews (annually) and updates its corporate employee handbook and internal compliance programs to meet applicable federal, state and local requirements.

General/Other Provisions: Heartland has read, and had its general counsel review the remaining terms, conditions, and requirements of the NOFA Grant Agreement and is able to comply with all remaining provisions. It has significant experience with contractual compliance as it has been successful in multiple other government programs either itself or through its affiliated companies, in addition to hundreds of other contracts it has entered into over the years with other private entities. To the best of its knowledge, Heartland has never been in breach of any contract.