

## Broadband USA Applications Database

**Applicant Name:** ENVENTIS TELECOM, INC.

**Project Title:** Greater Minnesota Broadband Collaborative

**Project Type:** Comprehensive Community Infrastructure

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### Executive Summary

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The Greater Minnesota Broadband Collaborative proposal, led by Enventis Telecom (Enventis), details a Comprehensive Community Infrastructure (CCI) category, middle mile project to build a high-capacity Ethernet fiber network directly connecting community anchor institutions throughout Minnesota with 100MB and greater Ethernet service. Within the state of Minnesota, there are two broadband communication environments: the Twin Cities of Minneapolis and St. Paul (Twin Cities) metro area and greater (or rural) Minnesota. The Twin Cities of Minneapolis and St. Paul residential customers, businesses, and local service providers have multiple choices for low-cost, high capacity broadband services. Multiple Tier 1 Internet backbone networks converge in the Twin Cities of Minneapolis and St. Paul offering choice and competition while keeping prices low. Greater Minnesota customers including rural last mile service providers are either dependent on resellers of Internet service or are faced with very high middle mile transport costs to reach the Tier 1 Internet backbone networks located in the Twin Cities of Minneapolis and St. Paul. The ability to obtain new high capacity Ethernet services of 100MB or greater is simply unavailable or unaffordable for many communities in rural Minnesota. The proposed Enventis network plan seeks to increase access to affordable high-capacity broadband services for customers in Minnesota's rural communities by connecting them to a high-capacity Ethernet fiber network. Enventis provides leading edge high capacity fiber-based transport and access services to a widely varied customer base including regional and national telecommunications carriers, LECs, ISPs, wireless carriers, other service providers and small to medium businesses. The core of our service is an extensive statewide fiber network and community access rings, supported by a 24x7x365 Network Operations Center. Enventis began in 1997 and has continued to grow despite tough economic environments. We excel at planning, deploying and managing innovative networking solutions that support business-critical bandwidth requirements and applications and we differentiate our service by utilizing a consultative approach in developing innovative and flexible solutions to deliver the best overall value. Enventis is a wholly owned subsidiary of HickoryTech Corporation, a diversified communications company with headquarters in Mankato, Minnesota. HickoryTech is in its 111th year of operation with its roots in the local telephone exchange business. Enventis has collaborated with its partners, the State of Minnesota Office of Enterprise Technology (OET), the University of Minnesota Office of Information Technology (OIT), and the Mayo Clinic, to identify community anchor institutions and partner facilities requiring 100MB Ethernet service connections for delivery of high-capacity Internet or Ethernet private line service using the proposed Enventis high-capacity Ethernet network. The enhanced Enventis Ethernet fiber network will serve the State of Minnesota by connecting public safety organizations such as county sheriff, emergency management and local police departments to the

core State of Minnesota-operated fiber network. It will also provide for transport of high-definition video Telepresence Distance Learning for schools/libraries. The proposed network will serve the Minnesota State College and University (MnSCU) system by connecting community colleges to the main network. The proposed network includes construction of a new 213 mile fiber optic network route connecting the main University of Minnesota campus in the Twin Cities of Minneapolis and St. Paul with the University of Minnesota Duluth (UMD). The new construction will provide the University of Minnesota access to dark fiber connecting its campuses with high capacity 10GB Ethernet service today and higher capacity 40GB and 100GB service in the future. The proposed fiber network facilities installed for the University will also be used by agencies of the State of Minnesota under a cooperative sharing arrangement with the State of Minnesota Office of Enterprise Technology (OET). Eventis is also proposing to provide 100MB Ethernet connections to 12 Mayo Clinic rural health care facilities throughout southern Minnesota and connect them to its Rochester, Minnesota headquarters. This high-capacity network will enable the Mayo Clinic to provide distance health care training, education and remote telemedicine-based clinical care services to its rural Minnesota patients and health care providers. Eventis' proposal leverages its existing 2400 mile self-healing physically diverse fiber network and enhances it with the construction of 418 new fiber miles equipped as a 10GB Dense Wave Division Multiplex (DWDM) network. DWDM provides economy of scale to deliver high bandwidth at low cost per bit. The new construction will include two fiber builds ' Twin Cities of Minneapolis and St. Paul to Duluth and Brainerd to Moorhead ' and includes the extension of middle mile fiber laterals to serve partner sites of interest along the new and existing network. On the middle mile laterals, Eventis will deploy equipment compatible with its existing 40-channel ROADM-based DWDM technology enabling delivery of TDM and Ethernet services. Eventis will place appropriate equipment at partner sites to provide end users with private network services and access to the public Internet through Eventis or a provider of their choice. The Eventis Ethernet proposed network system is protocol agnostic allowing customers choice in deploying technology and provides carrier neutral access for rural last mile service providers to all Tier 1 Internet service providers and carriers using Eventis interconnection facilities in the Twin Cities of Minneapolis and St. Paul. The Layer 2 backbone services will be route-protected using ring topology, are capable of supporting 10GB per wavelength, and will be field-upgradable to 40GB to 100GB. Since its inception, Eventis has offered wholesale interconnections on a non-discrimination basis to all customers. This wholesale relationship has been managed by the use of mutually agreed upon Master Services Agreements (MSAs) commonly used by telecom carriers. Eventis' existing business practice complies with the requirement defined in the 2nd round NOFA to offer interconnection on a non-discrimination basis. This solution proposes to serve community anchors including healthcare/medical facilities, public safety organizations, state courts, libraries, K-12 schools, community colleges, and other higher education institutions. The new high capacity Ethernet statewide network will connect 36 rural Minnesota cities and towns in 23 counties; nine of these counties are rated as 'economically distressed' by the federal Bureau of Labor Statistics (BLS) and the Bureau of Economic Analysis (BEA). The proposed network will enable delivery of a minimum of 100MB of broadband Ethernet services to 74 community anchor institutions and provide access with these new services for 886,000 people living in 315,000 households and provide low cost, high capacity broadband access for over 74,000 small to medium businesses in rural Minnesota. Eventis and HickoryTech have 455 employees that provide 24x7x365 network and customer service from its offices in Duluth, Edina,

Mankato, Minneapolis, Plymouth and Rochester. The company has experienced strong growth, despite the recession, and continues to create new jobs. If the Enventis application is approved, Enventis will indirectly help create demand for jobs at suppliers that produce the materials and equipment used to support this project, will create new jobs for fiber optic network construction crews and hire new permanent employees to provide service for our larger statewide network footprint. Both Enventis and Hickory Tech are profitable companies and the corporate financials are reported to the public quarterly and annually. Enventis is applying for a \$16,833,617 grant from NTIA for the installation of the new broadband network. Enventis proposes to add a 30% match of \$7,214,407 for a total of \$24,048,024 for the planned network.