

Broadband USA Applications Database

Applicant Name: Township High School District 211

Project Title: Northwest Suburban Network Consortium BTOP Infrastructure Project

Project Type: Middle Mile

Executive Summary

8. EXECUTIVE SUMMARY a. Opportunity the Proposed System Seeks to Address The NSNC was formed to explore the potential benefits and related cost of forming a regional high speed, broadband network (Network) that could meet the combined needs of local governments, school districts, library districts, park districts, a community college, a multi-governmental public safety dispatch operation, a major university, major hospitals in the area and a State agency. Initial efforts to expand individual NSNC member networks were too costly and as a result, a combined regional network concept was developed to share the initial infrastructure costs and expand the potential benefits that could be achieved through this collaborative approach. High-speed bandwidth is required to support the function of all of the member agencies while providing the capability for continued, affordable growth to support the future. Given our current economic environment and declining revenue, budget reductions and headcount reductions for some NSNC members, this Network will NOT be implemented and the benefits NOT gained without additional funding. This Network consisting of 177 facilities is a "middle mile" Infrastructure project that will provide "dark fiber" to all Consortium members. Through collaboration and based on successful projects in the past, this Network will provide the Members the opportunity to obtain broadband service from the provider of their choice at a significantly reduced rate. A map of the NSNC is presented in Q - 30 Network Diagram. This Network meets multiple statutory requirements and will enhance public safety, provide disaster recovery capabilities, improve service delivery to the citizens, students, library patrons, parks users, low income, aged, disabled and challenged, patients and businesses. This Network will serve as an economic stimulus to the area as the NSNC upgrades its infrastructure, creates local jobs and supports residents seeking employment and new training. b. General Description of Proposed Funded Service Areas The Consortium consists primarily of three Chicago suburbs of Hoffman Estates, Schaumburg and Palatine. This Network will also serve additional residents of the adjoining communities of Arlington Heights, Elk Grove, Hanover Park and Rolling Meadows. Several of the organizations, such as the Alexian Brothers Health Systems, Northwest Community Hospital, Northwest Central Dispatch Systems, Harper College, Northern Illinois University and the Illinois Century Network support a significantly larger population area as their facilities are regional in nature c. Number of Households and Businesses Passed The core Villages support the needs of approximately 200,000 residents, 77,020 households and over 6,200 businesses. d. Consortium Members The Consortium consists of 21 members and includes seven local governments, six school and park districts, two libraries, two major health care institutions, a public safety agency, a community college, one university and one state agency. A detailed listing of the Members is presented in Appendix B. Letters of Support are presented in Appendix G e. Proposed Services and Applications for Users The

Consortium was established to provide the Members with the required infrastructure and adequate bandwidth to service their users. The applications supported will include government operations, public safety, education, health care, library services, recreation and other services. Other community organizations will also benefit that provide job training, disabled and impaired computer users, support for children and adults with intellectual and developmental disabilities and other services. Schools, libraries and parks require increased bandwidth to accommodate the ever increasing number of users, access to the Internet for streaming video, video conferencing and distance learning. This Network will provide the required redundant connectivity and additional bandwidth for the Northwest Central Dispatch System which responded to 274,000 calls for service in 2008. Increased bandwidth will also help support video security monitoring of parking lots, bus loading areas, parks facilities and remote areas in individual buildings. Many Members also assist residents seeking employment, provide training and access to the Internet. Parks and libraries will be able to provide free internet and access to computer labs. Furthermore, this Network will expand the awareness and benefits to disabled constituents and computer access for challenged individuals. Hospitals require additional bandwidth as the country moves forward with electronic medical records and the development of integrated health information systems.

f. Non – Discrimination and Interconnection Obligations The Network will be totally open to all Consortium members and their respective end users and patrons. The Consortium will work with selected ISP's to insure compliance with Non- discrimination and Interconnection obligations.

g. Network Design This Network will be implemented in a timely manner, because the NSNC is expanding the existing infrastructure that has already been put in place by the Villages of Hoffman Estates, Schaumburg and Palatine. Each of the Villages has constructed fiber optic and high-capacity wireless networks to link many of their facilities. The NSNC has also leased fiber optic cable along the Illinois Tollway to link the NSNC to adjacent communities including the City of Elgin, Northern Illinois University and Community Consolidated School District 300. The Network consists of a 115 mile fiber optic network and three high speed wireless links connecting 177 facilities.

h. Consortium Qualifications The Consortium's skills and expertise with broadband networks is one of its strongest qualifications for this Network. Project Team members have installed over 240 miles of terrestrial and wireless high speed networks. A governance structure has been developed that will manage the Network to insure an on-time and on budget completion, while at the same time providing the organizational structure and sustainability to continue to provide these services well into the future. The Villages of Hoffman Estates, Schaumburg and Palatine will support the required maintenance of the infrastructure just as they support all existing utilities and infrastructure.

i. Overall Infrastructure Cost The Overall Infrastructure Cost for the Network is \$ 12.0 Million. The NSNC will provide \$ 2.4 Million in Cash over two (2) years totaling \$ 2.4 Million, an In-Kind Contribution of \$ 1.0 Million or an equivalent Matching Contribution of 28 %.

j. Overall Expected Subscriber Projections It is estimated that all 21 Consortium members will subscribe and share in the Network. Attachment H highlights that the Network will be rolled out to the 177 Member facilities that cover a major portion of the Northwest suburbs. Additionally, other adjacent communities have expressed interest in joining the Network during subsequent phases. Representative organizations include the Northwest Municipal Conference consisting of 47 communities and Choose DuPage consisting of 38 western suburbs.

k. Estimated Job Creation The majority of the new Network costs of \$ 7,900,000 are related to engineering, construction and professional services. These services could be provided by local firms to create jobs and serve as an economic stimulus to the region, while

providing much needed high speed communication capabilities. We estimate that this Network has the potential to directly create approximately 100 professional services and construction jobs, and indirectly a significant number of additional jobs related to the network components.