Broadband USA Applications Database

Applicant Name:   DCN, LLC

Project Title:   DCN's CCI Broadband Project

Project Type:   Comprehensive Community Infrastructure

Executive Summary

North Dakota's underserved critical community anchors and public safety entities lack access to high speed broadband connections due to the state's primarily rural population. As a 60% rural state, it is imperative for ND to have a statewide broadband system to enhance service offerings of critical community anchors, public safety entities, government agencies and all levels of academia. DCN's Critical Community Infrastructure (CCI) Broadband Project will connect all of these groups with an enhanced broadband network, to create the foundation to spur economic development, empower impoverished regions of the state, create living wage jobs, and enhance quality of life. DCN will do this by upgrading broadband infrastructure with an Ethernet Core to overcome limitations of copper facilities and by collaborating with multiple public, private and government entities, and Round 1 BTOP and BIP awardees. DCN's BTOP application is 100% middle mile, focusing on backbone transport and connecting critical community anchors and public safety entities in the proposed funded service areas (PFSA) spread across ND in 80 areas consisting of 48 communities, five unincorporated areas and 27 rural locations. Of these 80 areas that make up DCN's PFSAs, only four have a population over 20,000 according to the 2000 Census data. The remaining 76 areas are rural and vastly underserved. DCN has formed 13 project partnerships to provide 582 ND critical community anchor institutions with access to broadband service. Of the 582 sites, 177 sites will be upgraded or expanded to as part of this project. All of DCN's local carrier project partners are committed to contributing 30% towards the matching requirements. These partners are eager to leverage non-federal resources with BTOP funding to expand ND's last-mile broadband infrastructure to reach the most rural areas of the state. Numerous local exchange carriers have endorsed their support for DCN's project based upon the subscriber benefits that will exist for their clientele. DCN is also working with five project partners that are submitting Round 2 RUS BIP applications. Even though DCN's project is not dependent on the award of these BIP funds, all companies have pledged to work together to coordinate the construction and delivery of broadband service to end users. DCN is also partnering with four Round 1 BIP and BTOP awardees. All three BIP awardees are ND companies with one serving a Native American reservation. The third entity is South Dakota Network, LLC which received more than $20 million in BTOP funding in Round 1. If awarded funding, DCN and SDN would be able to connect more than 1,000 critical community anchors and public service entities in ND and SD and across the upper Midwest. Government collaboration is another vital component to the success of DCN's BTOP project. Since 2000, DCN has worked with ND Information Technology Department (ND ITD), which manages the communications connectivity to state and county government agencies, K-12 schools, libraries, and community colleges and utilizes DCN for physical access. ND ITD plans to increase these entities to 10-100 Mbps broadband services. DCN has also
received support from the ND Department of Transportation, ND Dept. of Emergency Services and the ND Parks and Recreation District to connect their sites with increased bandwidth to expand public safety measures and rapidly increase response times. Currently DCN is working with ND ITD and the Health Information Technology (HIT) Advisory Committee to create a statewide healthcare network that may include telemedicine, teleradiology, teledermatology, telepharmacy, practice management systems, disease registries, clinical messaging, electronic health records and health information exchanges to improve the access to healthcare and records for all healthcare entities, especially rural, small-town facilities. All of these services require access to broadband and connectivity to each entity across the state or a central database. To create a solution, DCN will build a virtual private Healthcare Network by dedicating a 10 Gig Ethernet backbone exclusive to ND’s healthcare industry. Today, more than 10 healthcare agencies and healthcare facilities have endorsed written support for DCN’s project. Collectively, DCN and its project partners already connect with fiber 296 critical community facilities including 93 schools (K-12), four libraries, 93 Medical or Healthcare providers, 27 public safety entities, five community colleges, nine other institutions of higher education and 65 other government facilities. Additionally, 109 critical community facilities are connected through DCN’s project supporters including 19 schools (K-12), two libraries, 51 medical or healthcare providers, 14 public safety entities, two other institutions of higher education, and 21 other government facilities. If awarded BTOP funding, DCN will be able to economically upgrade 99 critical community facilities and pass an additional 78 critical community facilities for a total 177 critical community facilities passed. Additionally, DCN through its project partners and supporters currently serves 16 of the 21 public safety answering points (PSAP) in ND. Of these served PSAPs, three are served through supporters, 10 are connected with fiber, and three will be upgraded to fiber in this project. DCN will be passing one new PSAP with facilities in this application. The remaining four PSAP’s will be targets for DCN to build to in the future. The ND University System includes five state designated community colleges and has endorsed its support for DCN’s project. Three community colleges are served by project supporters with fiber today and two are fed with fiber by other service providers. Because of the backbone services offered to the state of ND, the two fed by other service providers are indirectly served by DCN. Additionally, ND has three Native American colleges with one currently fed with fiber today and a second to be fed with fiber by the end of 2010 by project partners. The third Native American college is fed by another service provider. Even though the proposed project will pass approximately 2,699 households and approximately 673 businesses, DCN’s business model is a transport provider, which means the company will not be serving any of the households or businesses passed. Since its inception in 1996, DCN has upheld ethical business and customer service practices and will continue to do so. DCN does not and will not unlawfully discriminate in its interconnection and service obligations, practices or policies. Its broadband policies and practices can be found on its website, which is updated regularly for customers. DCN has no customer or other complaints regarding service or other matters pending before federal or state regulators. DCN is well qualified to install and maintain the proposed high capacity Ethernet network. The management and engineering team have worked extensively with local exchange carriers and communities across the state and have a proven track record of satisfied customers and end-users. The overall team is ready to begin work immediately on DCN’s proposed CCI Broadband Project which will cost a grand total of $15,401,653 ($4,620,496 in 30% match, $10,781,157 in grant). This is not the largest project the team has worked on; however, it will be one of the most vital to the state of ND.
Based upon the reporting requirements of the Executive Office of the President's Council of Economic Advisers' Estimates of Job Creation from the American Recovery and Reinvestment Act of 2009 guidelines, DCN will create 167 job-years. Of the 167 job years created, 107 job-years represent direct and indirect effects and 60 of the job-years are induced effects. These jobs were calculated using the CEA's Simple Rule for Estimating Job-Years Created by Government Spending formula. These jobs will require a set skill base and provide above living wage salaries to residents in rural and urban ND. With the potential to create 167 jobs in ND, DCN's proposed BTOP project will have a positive impact on the economic development throughout the entire state. Additional jobs created by the local exchange carriers, health industry, public safety entities, and government and academia entities in ND cannot be calculated. However many of these entities will need to hire technical staff and support staff to handle the advanced broadband service offerings which translates into living wage jobs created throughout ND and importantly, rural ND. Even though as a state, ND has a low unemployment rate, there are numerous communities and counties that need advanced broadband connections to promote economic development. If awarded, this project will fill a vital void in the connectivity of healthcare and public safety entities, schools, and government agencies.