Executive Summary

Many communities in the upstate New York State Adirondack Park region and St. Regis Mohawk Reservation are among the most unserved and underserved regions in the country. CBN Connect is a not for profit corporation that has formed a public-private partnership to bring an 1023 mile, high capacity, affordable, open access broadband to rural northeast NY State. Our plan will succeed because it has sustainable metrics, the confidence of private service providers, an experienced management and partner team, and anchor institution involvement. The CBN Connect Comprehensive Community Infrastructure will create jobs and capital investment, and make broadband accessible to our rural citizens. CBN Connect can leverage an FCC-funded Rural Health Care Pilot Program fiber optic network currently under construction in Clinton, Essex, and Franklin counties. Our application is significantly strengthened having gone through NTIA Due Diligence in Round One. We believe that CBN Connect, after 7 years of preparation, can earn BTOP funding to create a national model. Problems 1. Private broadband service providers cannot afford to build infrastructure in the remote, rural parts of our six counties, leaving anchor institutions, businesses, and residents un/underserved. Where broadband is available, there is usually one provider (no choice), with high prices that discourage adoption and use. 2. Public safety agencies do not have critical broadband infrastructure interconnecting their county and state facilities to enable secure, redundant connections. Interoperability of wireless solutions is not possible due to lack of proper backhaul and redundancy. 3. Community colleges, health care facilities and other anchor institutions are limited by lack of high capacity, accessible and affordable broadband. This limits the college's outreach services and is problematic for health care facilities trying to adopt electronic medical records and deal with shortages of specialists in our rural area. 4. The St. Regis Mohawk Reservation does not have affordable, high capacity broadband to its border, to which it can connect its planned Last Mile network. 5. NTIA and NY State-funded networks and private and public networks in northern NY lack critical redundancy, leaving all broadband users in the region vulnerable. 6. Connections to innovative economic development services such as Clarkson University's "Forever Wired" business centers in remote areas are not available. Solutions 1. Combine BTOP and private funds in a 70/30 grant/match ratio to build an open access, high capacity fiber optic ring running to un/underserved communities and anchor institutions. 2. Make it financially feasible for private telecom providers to provide Last Mile services using wired and wireless connectivity, providing choice to end users, thus holding down subscriber costs and stimulating the demand for services, thus encouraging economic growth and job creation. 3. Build high capacity fiber between public safety 911 centers, providing secure, redundant connectivity between county and state entities. 4. Construct CBN Connect to the St Regis Mohawk Reservation border to support its RUS/BIP Last Mile application (#7311) by
providing affordable Internet connectivity. 5. Solve the redundancy problem by using CBN Connect to connect and close the gap between ION, DANC, NY State, and private networks. 6. Provide Clarkson University with open access fiber at two business centers to have a choice of service providers for telecommuters. Opportunities o Leverage an FCC-funded Rural Health Care Pilot Program fiber optic network currently under construction in Clinton, Essex, and Franklin counties by leasing 259 miles of dark fiber instead of overbuilding that network. CBN Connect’s lease of that fiber will sustain that network and is a win-win for the Telemedicine Network and CBN Connect. Using that dark fiber, CBN Connect can have its network running much sooner and use it as a core from which to expand to public safety agencies, community colleges, and other anchor institutions. o Provide interoffice transport and back haul services in six contiguous counties, connect anchor institution facilities and build community points of presence that will enable Last-Mile private carriers to bring broadband services to end users. o CBN Connect will advance New York State’s Universal Broadband Strategic Roadmap o CBN Connect provides an alternative to Verizon, the legacy middle mile wholesale carrier in part of our region, which has limited fiber capabilities and installation fees that are often cost prohibitive. General description of the proposed funded service areas Location: Clinton, Essex, Franklin, Hamilton, Warren, Washington Counties Number of communities 115 Population 355,752 Square miles 8,022 The counties contain many un/underserved communities, and are 100% rural. Large parts of each county (all of Essex, Hamilton) are in the Adirondack Park, the largest state park in the U.S. The Park’s 103 communities suffer from out-migration and lack of economic opportunity, and affordable broadband is a top priority. Stringent regulations discourage many types of economic development in the Park. Broadband is a compatible solution for a region economically constrained under its "Forever Wild" State protection. Number of households and businesses passed: Households 200,926; Businesses 7,887 Number of anchor institutions connected: 95 Five community college sites, 7 public safety agencies, 32 libraries, 43 health care facilities, 2 four-year colleges, 2 public housing, 2 telecommuter offices, a research facility and 2 museums. Services and applications for the proposed funded service area and users CBN Connect will carry private providers to bring a choice of Internet, voice, and video services to anchor institutions and comm. Data rates will be available up to 10 gigabits per second in the core network routes and increments of 1 gigabit per second in the distribution rings. Internet 2 will be available to hospitals, clinics and colleges with allied health curriculum. Approach to addressing the non-discrimination and interconnection obligations CBN Connect agrees to adhere to at least the minimum interconnection requirements as set forth in the NOFA. Type of broadband system that will be deployed CBN Connect will deploy a Middle Mile fiber optic network with ultra high capacity (10 gigabit) service using Ethernet and Internet Protocol (IPv4, IPv6), building fiber into anchor institutions. Each community will have a point of presence so retail service providers can extend Last Mile broadband to businesses and residents with additional splice points located throughout the region for easy access by service providers to reach all areas. Applicant's Qualifications and partnerships The staff of CBN Connect Inc. and its partner, Adesta, LLC, is highly qualified to plan, design, construct, and operate the proposed network to exceed standards for technological excellence and quality of service. CBN Connect and Adesta have worked closely for three years. The principals of CBN Connect, Howard Lowe, President, and Julie West, Chief Operating and Technology Officer, have assessed the broadband needs of anchor institutions, residents, and businesses, supervised the network planning and design, secured NY State certification as a facilities based provider of telecom services without authorization to provide local exchange service, and
regulatory and environmental approvals. Adesta produced the detailed technical design through a competitive bidding process and was integrally involved in the State and federal environmental and regulatory review process. Lowe and West are overseeing the construction of an FCC-funded fiber optic telemedicine network (Rural Health Care Pilot Program). Construction will begin in summer, 2010. Lowe and West are managing the construction of an HUD-funded wireless open access broadband project targeting very remote underserved areas which will use CBN Connect fiber to expand its reach. This is an example of a successful CBN Connect-led public/private partnership now underway Overall project cost: $39,972,104. Overall expected subscriber projections for the project We project that 100% of the anchor institutions connected by a BTOP award will subscribe to Internet, voice, or video services using private companies carried on CBN Connect. Service providers subscriber projections are an attachment in the uploads section. Number of jobs estimated to be created or saved as a result of the project Four hundred and twenty four (424) jobs are estimated to be created or saved in the six-county region due to the construction, operation, and availability of the CBN Connect network over the first five years. This data is from primary research conducted in the counties, supplemented by federal methodology