

## Broadband USA Applications Database

**Applicant Name:** OneCommunity

**Project Title:** Rural = Urban: From Rust Belt to Tech Powerhouse

**Project Type:** Middle Mile

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### Executive Summary

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The 'Rural = Urban: From Rust Belt to Tech Powerhouse' project is a fully "shovel-ready" project to create a seamless, interconnected, broadband superhighway. Once completed, we will span a 58 County region with a total population of 8 million (2 million rural), including 3,360,000 households, nearly 600,000 businesses, and nearly 4 million subscribers served by last mile providers. The geographic area covered by the open and carrier neutral urban/rural (existing and planned) middle mile transport network for OneCommunity and its partner, Com Net (anchor middle mile provider in Western Ohio for a coalition of CLEC and cable providers), is North and Central Ohio. Our network expansion (and current network) is an open, carrier neutral network, which provides services to over 35 last-mile providers. Once an Ohio regional network is complete, synchronous traffic will move at connections up to 10 Gbps without ever exiting the region. In order to accelerate the speed of fiber network buildout to "underserved" areas, the companies will supplement the buildout with standards-based wireless technologies such as WiMax. We will provide direct interconnection services to rural institutions, among institutions and to their urban "peers." Full Internet access and service, plus direct connectivity to National Lambda Rail and Internet2 will also be available. We will offer improved access to broadband service by public safety agencies. We also firmly believe that bringing advanced network services to rural communities will stimulate rural economies and create new job opportunities. Community anchor institutions will receive significant benefits and direct access to higher speed services at lower costs. We use Dense Wave Division Multiplexing (DWDM), in network management to provide for secure regional government and shared HIPAA compliant healthcare services (including advanced telemedicine, public safety, emergency response, voice, video and real-time information exchange). The advanced security features essentially creates a Virtual Private Network (VPN) platform for our clients' use. This project builds upon a prior FCC \$11 million dollar award to extend high-speed broadband access to medically underserved areas (MUA) for enhanced telemedicine services and electronic medical record capture. Today, we connect over 1500 schools and hundreds of State, county, municipal and public safety agencies. We will expand our community anchor institution subscriber base by thousands. We will add hundreds of rural hospitals, clinics and critical care facilities for direct network connection and they will leverage our shared services and platforms. OneCommunity's HealthNet provides connectivity to over 100 urban and rural hospitals. We anticipate end user adoption either directly (through last mile providers) or indirectly (through government, healthcare and schools) of nearly 500,000 within 3 years. We also anticipate the number of anchor institutions with direct connectivity will rise to over 3000. Our estimates are based on past sales performance; relationships with last mile providers; and market, demographic, and institutional use data. We are among the few organizations in the United States that

currently own and operate an open and carrier-neutral network that is fully compliant with the letter, spirit and intent of the FCC Broadband Policy Statement and the Non-Discrimination, Interconnection, Choice of Provider and Network Management requirements. Both companies will level the competitive landscape and enhances the ability of Tier 1, Tier 2, CLECs, cable and wireless providers to deliver last mile services. This project will reduce the capital expenditure requirements for market expansion activities, providing customers greater freedom of choice, pricing and access. Our design centers on a foundation of fiber ring/segment infrastructure spanning a large geographic region composed of 144 'best-in-class' fibers for present and future growth, using the latest in Dense Wave Division Multiplexing (DWDM), layer 2 Metro Ethernet Multi-Protocol Layer Switching (MPLS) connecting providers and their institutional and consumer users through a layer 3 MPLS Internet Protocol Switching to the Internet. Our technically advanced plan is designed to handle significant and scalable transport capacity, which supports expanded carrier requirements for multi-data services such as voice, video and Internet. This layered technology will enable local providers to aggregate and serve thousands of regional education, health care, government, civic and social service institutions, businesses and consumers on a single interconnected network. In remote and difficult to serve areas, our design anticipates both "fixed" and "mobile" wireless technologies that cover both licensed and unlicensed spectrum. This provides providers the flexibility to connect segments of the network and anchor tenants to the core network. Our design uses unlicensed spectrum in the 900 MHz, and 5.0 GHz band and licensed Spectrum in the 2.5 GHz, 3.65 GHz and 4.9 GHz bands, providing over 100 MHz in mixed use spectrum. It also incorporates Point-To-Point and Point-To-Multipoint WiMax technologies - using multi-sector designs to create efficient use of the spectrum. These layered wireless offerings serve the needs of middle mile backhaul, public safety, anchor tenants and public use. The mixed spectrum use addresses some of the mixed morphology and topology of the region which transverses from flat land to heavy foliage, trees and rolling hills. OneCommunity has a five year record of delivering world-class network infrastructure solutions in NE Ohio. Our core management team consists of Scot Rourke, CEO; Mark Ansboury, CTO; Charles Berry, COO; Chuck Girt, VP of Engineering/Senior Network Architect; David Corrado; Director of Project Management Office; David manages our major builds and quality control practices. Scot and Charles run day-to-day operations for the network and business. Our existing high speed, fiber optic network infrastructure will be expanded with a seamless 2827 miles of new, operational fiber, which are connected to 149 wireless towers that will reach many of Ohio's "underserved" communities. Project grant, loan and BTOP "matching" funds are about \$163 million. Mark, Chuck and David will be directing the activities for the build, permitting, implementation, testing and turn-up of the middle mile network. David recently managed our build-out and cut-over for our Cuyahoga County project (largest and most populous county in Ohio), which involved the movement of all voice and data connectivity for Cuyahoga County's government operations (including 911) onto the OneCommunity network. Com Net's core management team has six to ten years of world-class experience; including: Timothy Berelsman, CEO; Randall Plaisier, CTO; David Ward, Network Operations Manager; and Diane Kahn, Regulated-Services Operations Manager. Randall Plaisier and David Ward have a track record of success in construction, architecture and vendor/last mile carrier management. Rich Dugger, OneCommunity's Director of Sales, is a specialist in designing flexible and cost-effective high-speed broadband solutions for community anchor institutions. Com Net's Timothy Berelsman is an expert in partnering with last mile providers, and directs all sales and partnership activities. We will reach thousands of community anchors; provide

new anchor services; and be available to millions of end users. OneCommunity and Com Net leverage an innovative business model for partnering with unaffiliated organizations in the project area from the public, non-profit and private sectors. We leverage an open, carrier neutral (providing middle mile transport for over 35 last mile providers) and multi-stakeholder approach that aggregates community investments from multiple sources to increase availability, capacity and value-added services. This lowers the total cost of ownership while increasing the social value of the communities' involvement. Our approach for community anchor institutions is focused on: a. Reducing the burden of government: OneCommunity and Com Net have deep partnerships with the State of Ohio, port and economic development authorities, and hundreds of county and municipal governments. We work closely on economic development initiatives, infrastructure planning, and interconnecting local government I-Nets on a regional level for collective cost reductions. b. Creating 21st century learning environments through robust middle-mile transport solutions for the local and regional K-12 school systems and higher education institutions, including fiber to the building solutions. There are over 1500 K-12 schools and universities using our networks. c. Enabling electronic medical record adoption and telemedicine services through direct fiber interconnectivity between urban and rural health care providers. OneCommunity's 10 Gbps HealthNet connects to over 100 hospitals in Northern Ohio, including world renowned and MUA hospitals, FQHCs, and critical care facilities in rural areas. HealthNet enables remote diagnostic services, advanced telemedicine, and remote specialties (e.g. pathology, neurology), collapsing costs and increasing the quality of patient care. OneCommunity has used the methodology developed by the Information Technology and Innovation Foundation (ITIF) to calculate the jobs estimated to be created through the Rural = Urban: From Rust Belt to Tech Powerhouse Project. The methodology and tool were published under "The Digital Road to Recover: A Stimulus Plan to Create Jobs, Boost Productivity and Revitalize America," provides detailed analysis and estimates of the job impacts from broadband networks, the Smart Grid, and health IT. Using the methodology, the estimated new jobs created will be: Direct Jobs: 449 Indirect Jobs: 1,411 Network Effect Jobs: 2,177