

Broadband USA Applications Database

Applicant Name: CITYNET, LLC

Project Title: West Virginia Broadband Initiative

Project Type: Comprehensive Community Infrastructure

Executive Summary

Introduction: The proposed Middle Mile CCI network is desperately needed in West Virginia. While the State of West Virginia has received a sizeable BTOP award to purchase MPLS services from Verizon, it is narrowly focused to enabling State organizations and agencies and provides no benefits to the businesses or citizens of the State. The award also does not provide competitive access to the planned assets. The only beneficiaries of the previously announced BTOP award are State based agencies that have the legal authority to purchase services under the State's MPLS contract with Verizon. This situation provides no broadband enablement capabilities or material improvements for the citizens and businesses in West Virginia. This point is made to emphasize that there remains a tremendous unmet need for broadband enablement in West Virginia. This Project seeks to achieve that goal through a 100% open-access, 100% user neutral and 100% carrier neutral solution. Citynet has a tremendous amount of experience in developing highly successful middle mile network systems. The Company is leveraging its expertise, know'how and local market knowledge to develop a CCI network that maximizes broadband enablement in the service area while exceeding NTIA objectives.

Opportunities Addressed: The proposed network represents an opportunity to broadband enable an 18 county service area in North-Central West Virginia. The network is comparable to building a highly advanced data turnpike system capable of providing cost effective services on a 100% open access basis. The network expands core Internet backbone facilities into the region and provides connectivity to key regional and national backbone systems. Constituents residing in the service area understand this region will remain broadband disadvantaged in the absence of a competitive Middle Mile network. The solutions outlined in this Project provide direct and material benefits to: community institutions, community colleges, universities, Last Mile providers, businesses, citizens, regional carriers, national carriers, incumbent telecommunication carriers, cable TV operators, and wireless service providers.

Service Area: The service area consists of an 18 county region in North-Central West Virginia that encompasses 130 individual communities. 95% of these communities are Unserved or Underserved and 97% of these communities are Rural. Households: 213,990 Population: 523,298 Businesses: 13,534 Community Institutions: 3,349 (broken down as follows) Medical Facilities: 1,939 Governmental Facilities: 697 Community Support Organizations: 282 Schools: 196 Public Safety Facilities: 157 Libraries: 33 Community Colleges: 21 Universities: 17 Public Housing Facilities: 7 Services and Applications: The CCI network is designed to provide a full suite of broadband transport and access technologies. These services include: Internet Access, Private Line Transport (Backhaul), Capacity Optical Wave, Ethernet , Gigabit Ethernet and Fiber Leasing. A one-size-fits-all service offering would greatly inhibit the utilization of any CCI network and this would materially negate many of the desired goals as established by the

NTIA. Applications provided include: Voice, Internet, Video, Wireless, Disaster Recovery, Private Intranets, Security, Surveillance, Distance Learning, Health Care, Telemedicine, Backhaul, Network Extensions, Internet 2, National Lambda Rail Access and many others. Non-Discrimination and Interconnection Obligations: The proposed network is designed to be 100% open access, 100% user neutral and 100% carrier neutral. In order to achieve this objective, the network will support open access on a non-discriminatory basis to all potential users. The network cannot be successful without open interconnection policies, and for this reason, this Project materially exceeds the NTIA's requirements in a manner that few others can equal. For Internet services, Citynet complies with, and emphasizes, 'net neutrality' in compliance with the FCC's Internet Policy Statement. Citynet will not discriminate with respect to Internet content, applications and/or services providers. Type of Broadband System: The proposed network is based on a fiber optic network which is further enabled with industry leading transport technologies, including: core Internet routers, a multi-service transport platform, and an optical transport platform. The fiber cables utilize advanced fiber technologies consisting of dense 144 strand count cables. The fiber density is critical to cost effectively enable the communities in the service area and minimizes capital requirements while maximizing continued growth of the system. The optical transport system is critical to providing a robust core of raw bandwidth while greatly reducing the equipment costs for the platform as a whole. The fiber and optical transport systems are further empowered by an industry leading multi-service transport solution (a SONET system). These SONET services are today's core consumable for all regional network systems and are required by the network's targeted end-users. The network also will deploy a system of Internet backbone routers to deliver a core Internet backbone into the region while extending connectivity to key regional and national Internet backbones. The combination of these technologies provides the full suite of broadband services necessitated by the targeted user base. This platform provides a balanced approach that minimizes cost while optimizing service flexibility and future growth. Qualification of Applicant: Citynet has a tremendous amount of experience in developing highly successful Middle Mile network systems that address the needs of underserved markets. From 2004 until 2008, Citynet developed a carrier-neutral middle mile network that spanned 13 states in the Mid-Atlantic United States (covering 8,000 route miles). This network established Citynet as a national technology and service leader that specialized in providing next-generation broadband solutions to underserved markets. This regional network was one of the most profitable and well respected regional networks in the nation. The network was sold in 2008 to a successful national carrier to allow Citynet to focus on broadband development in West Virginia. Citynet has already proven its ability to deliver successful Middle Mile systems and on a much broader and complex scale. Moreover, Citynet is a leading CLEC based in West Virginia and has extensive experience in addressing broadband challenges throughout the region. The Company is now prepared to leverage its knowledge, experience and existing business operations to tackle the more defined broadband challenges in West Virginia's rural communities. Citynet is the perfect broadband enablement partner for the NTIA and the State of West Virginia. Overall Infrastructure Cost: The total capital investment required to implement this regional network is \$43,112,922. Citynet developed the network with a minimalistic approach to capital investment balanced with an operating base to ensure sustainability. Thus, the initial capital investment delivers a sustainable core whereby subsequent cash flows will be reinvested for continued network expansion. 71% Construction of Fiber Routes (600 miles) 12% Transport Equipment 7% Customer Access Facilities 7% Network Construction Labor 1% Collocation

Improvements 1% Network Management Systems 1% Pre-application Expenses Expected Subscriber Projections: This CCI network is projected to serve: 119,834 households, 6,500 businesses, 1,613 community anchor institutions, and 50 or more third party service providers. The emphasis of this Project is to empower third party providers which functions as a key catalyst to subscriber growth and broadband consumption. Jobs: The proposed network will be the single largest economic development opportunity implemented in the region's history and will serve as a major catalyst to economic development throughout the region by enabling high-job creation businesses and institutions. And while it is difficult to calculate or contemplate these indirect benefits of economic development, it is clear the network will create hundreds of new jobs in the service area. Based on the methodologies established by the Council of Economic Advisors, this Project creates a total of 469 job years. Job Years Created ' Direct Jobs: 240 Job Years Created ' Indirect Jobs: 60 Job Years Created ' Induced Jobs: 169 Job Years Created ' Total: 469