Broadband USA Applications Database

**Applicant Name:** TVC ALBANY, INC

**Project Title:** Tech Valley Community Convergence Project (TVCCP)

**Project Type:** Comprehensive Community Infrastructure

_______________________ Executive Summary _____________________

Tech Valley Communications (TVC) is requesting $12,933,621 in BTOP funding for the $20.8 million Tech Valley Community Convergence Project (TVCCP) on behalf of itself, the two lead partners (Hudson Valley Community College (HVCC) and The County of Albany, NY), and 29 supporting partners. The funding will be used to create a needed, scalable, highly accessible middle-mile infrastructure in a challenging economic climate. TVC has a proven history in developing critical converged solutions essential to transformative partner projects for government services, health care, education, public safety, energy conservation, and the competitive positioning of New York State businesses in the global economy. This Critical Community Infrastructure project will result in the creation of a converged fiber optic infrastructure to provide middle mile access in 8 upstate New York counties (Albany, Columbia, Greene, Rensselaer, Saratoga, Schenectady, Warren, and Washington) that have varying levels of last mile coverage, and little-to-no middle mile interconnection or affordable, bi-directional, symmetrical high capacity service options. The New York State Office of General Services, Procurement Services Group identifies qualified contractors to provide authorized users with various telecommunication services statewide and/or by county. The most recent New York State Comprehensive Telecommunications Contract let by NYSOGS verifies there is inadequate, affordable middle mile capacity in the proposed Service Areas. Access to gigabit capacity is sparsely available, and in the limited instances of availability, cost-prohibitive for most anchor institutions (see Competitor Data template). TVCCP will address the severe limitations on critical broadband capacity within the proposed service areas and is designed to support: full network interoperability, enabling community anchor institutions to integrate their service delivery regionally; public safety interoperability; regulatory compliance, disaster recovery planning and resource sharing; broadband-intensive applications (medical imaging, videoconferencing, data replication, etc.); last mile competition (through 25 interconnection points in support of last mile service providers); new technologies, symmetrical broadband access speeds, and last mile competition addressed by the new FCC National Broadband Plan. Specifically, TVCCP will provide high-count fiber (216 count and greater), with 25 interconnection points, encompassing 294 miles of middle mile infrastructure, in eight (8) Upstate NY counties, which includes over 900 anchor institutions, 262,956 households, and 14,322 businesses in 10 middle mile service areas. This project satisfies all of the BTOP priorities via substantially upgraded, open access connections to community anchor institutions and last mile areas to enable the following: - Deliver diverse and accessible middle mile fiber optic infrastructure for Internet and private networks, providing affordable, bi-directional (symmetrical) gigabit capacity not currently available or accessible without interconnection points in the proposed service areas. The specific services are: 'Internet Access: Basic Symmetrical Internet (10 meg); High Speed Symmetrical
Internet (50 meg); Premium Symmetrical Internet (100 meg) 'Network Access (point-to-point): 10
Gigabit Linear; 1 Gigabit Linear; 100 Megabit; 10 Megabit 'Wholesale Transport: OC-3 Linear; OC-12
Linear; 1 Gigabit Lambda Linear; 2.5 Gigabit Lambda Linear; 10 Gigabit Lambda Linear - Interconnect the
four regional Community Colleges in a private education network at bi-directional, multi-gigabit speeds
to support their programs, distance learning, evolving Internet requirements, and access to the Internet
2 research network. This capacity can also be deployed to numerous other educational institutions in
the eight county region. During his visit to HVCC, in September, 2009, President Obama commented: 'I
understand, as all of you do, the power of these institutions to prepare students for 21st century jobs,
and to prepare America for a 21st century global economy. And that's what's happening right here at
Hudson Valley Community College.' In its partnership role within this TVCCP, HVCC will lead the effort to
share applications and initiatives with the other community colleges and regional educational
institutions. An estimated 227 job years will be created or saved by TVCCP. - Provide a fully
interoperable public safety network capable of integrating with existing copper, fiber and wireless
technologies throughout the eight-county region. TVC has successfully deployed this type of
interoperable network for Albany County's 13-site Public Safety Answering Point (PSAP) network. This
will extend interoperability to the seven adjacent counties, thereby improving collaboration, reducing
costs, and increasing access to advanced technology applications such as Computer Aided Dispatch
(CAD) and Police Records Management System (RMS). In the current economy, public safety entities in
these communities cannot afford such services without sharing resources and costs. - Support the
delivery of diverse, accessible middle mile infrastructure for Internet access and private networks
connecting healthcare institutions. This project will enable telemedicine initiatives (vital to our many
remote communities), and provide the foundation for the strategic action plan on information
technology modernization efforts introduced by CMS for large and small medical facilities. - Support
State, County and local agencies in their development of applications for training, collaboration and
convergence in their efforts to retain and develop jobs, and further economic growth. TVCCP will
motivate new economic development projects, such as the acclaimed $4.2 billion dollar Global
Foundries chip fabrication facility by attracting and/or supporting hundreds of service, tool, supply
chain, human resource and other related 'cluster' companies, as well as other manufacturing plants of
similar scale. - Non Profit, traditional business and last mile carriers will benefit from the high availability
of interconnection points to deliver scalable broadband services, particularly regionally significant virtual
workforce training. Moreover, TVC's collaborations with and support for local chambers of commerce,
the Columbia/Greene Partnership, and the Center for Economic Growth will facilitate awareness and
adoption of this new infrastructure, maximizing the benefit to the region. - Allow for interconnection of
high capacity services with previous BTOP awardee (ION), new applicants such as CBN Connect (see
Other Applications section), and numerous last mile providers, including the NYS Office for Technology,
to enable affordable interconnects throughout the region. - Provide middle mile broadband to at least
three national or regional last mile wireline and/or wireless providers: Paetec Communictions,
LogicalNet, and Hudson Valley Wireless. TVC and its partners are highly qualified to readily execute on
this project, and create a positive impact on the local economy and employment. TVC is a profitable,
facilities-based CLEC that has successfully served the region for a decade, and is a recipient of numerous
awards, including the coveted 'highest quality of service award' by the NYS Public Service Commission
for the past 5 years. This project is not a trial in a marketplace but rather a necessary extension of
middle mile facilities (connecting to the hundreds of miles TVC currently supports) into underserved areas, to preserve and create jobs while supporting the constantly evolving technological requirements of the community. While TVC will leverage current engineering, physical plant and Network Operations Center staff, the other TVCCP partners will leverage their administrative, programming, development, planning and IT resources to guarantee successful application implementations among other anchor institutions.