Broadband USA Applications Database

Applicant Name: TROY CABLEVISION, INC.

Project Title: Southeast Alabama SmartBand - Rural Broadband for Economic Development and Energy Management

Project Type: Comprehensive Community Infrastructure

_______________________ Executive Summary _______________________

The Opportunity Crenshaw, Pike, Coffee and Dale Counties in southeast Alabama are known for their country character and legacy of overcoming adversity. Fifteen rural communities, dotting the 2,521 square mile landscape are working to achieve growth and compete in the global economy. They strive to establish a sense of community and place amidst a backdrop of economic, education, healthcare, safety and energy challenges. Broadband adoption has all but been out of reach in these rural, underserved communities. The Solution Southeast Alabama SmartBand (SmartBand) recognized the communities' needs and established a partnership of private, non-profit and public leaders who could make a difference in these communities. SmartBand represents talent: Troy Cablevision, Inc. (TCV), a privately-held, majority woman-owned SDB broadband service provider, Southeast Alabama Electric Cooperative (SAEC), a non-profit electric cooperative, the Cities of Enterprise, Ozark and Troy, Troy University and the area's community colleges. Together, SmartBand plans to build and operate a fiber optic ring connecting the rural communities to an innovative, sustainable, forward-looking Middle Mile broadband network. TCV will build, own and operate the network. SAEC will drive marketing and SmartGrid energy applications. The public sector will advise and stimulate economic development initiatives. This partnership leverages TCV's 25 year track record operating advanced cable and telecom networks in the region, SAEC's 73-year history serving its electric coop members, and the local governments' commitment to public service. This partnership began between TCV and SAEC for SmartGrid applications and leverages TCV's experience with economic developers, schools, colleges and healthcare to serve the public's interest in creating jobs for the current and future workforce. The SmartBand business model fashions itself after 'smart grid' and 'smart growth' expectations of innovation, regional view, sustainable, modern and forward-looking policies to establish 'Smart [broad]Band'. Demographics SmartBand's four county network covers 136,106 people, 53,809 households, 3,681 businesses and 673 critical community institutions and public safety entities. The community institutions include 76 schools (K-12), 19 libraries, 222 medical and healthcare providers; 81 public safety entities, 8 community college campuses, 36 public housing facilities, Troy University, 116 community support organizations, and 114 other government facilities. The network will offer broadband transport, redundancy, and diverse routing/business continuity for strategic community applications and wholesale services for Last Mile providers. Strategic institutions and applications include Alabama's Connecting Classrooms, Educators and Students Statewide (ACCESS), healthcare including mental health initiatives led by Southwest Alabama Mental Health's USDA's 'Joining Hands', Organized Community Action Program (OCAP) HeadStart and public housing, New Horizons Enterprise Public Computer Center, Troy University's...
worldwide Distance Learning, wireless hot spots and interoperability for public safety officials. Services and Applications SmartBand will offer fiber optic access, transport, and backhaul wholesale services. Access services range in capacity from 1 Mbps to 1 Gbps (increments of 1, 5, 10, 20, 50, 100, 250, 500 and 1Gbps). Additional Internet, voice and video processing equipment enables direct connections to community anchor institutions and businesses, as well as interconnections with future Last Mile service providers. Transport services to Montgomery and Dothan, AL enables Tier 2 interconnection and transport handoff to Atlanta enables Tier 1 interconnection. SmartBand will offer broadband backhaul to existing and new Last Mile providers in the four county region. Network Openness SmartBand is an open network that will feature approximately 21 interconnection points on its Middle Mile ring. Last Mile providers will be encouraged to avail themselves of the SmartBand network’s high capacity, reasonable interconnect rates and non-discriminatory practices. TCV currently interconnects with several Last Mile providers in the region, including two independent telephone companies that are RUS borrowers. TCV will serve as the agent of the interconnection access, taking responsibility for displaying non-discriminatory and network neutralitiy policies and managing the relationships. Several Last Mile providers have expressed interest in interconnecting with SmartBand, paving the way for competition, consumer options and economic growth in the region. Broadband System Design / Technology The proposed SmartBand fiber optic ring uses a scalable, standards-based open architecture optical system. There are three elements to the SmartBand network: direct connections to anchor institutions and businesses, Middle Mile transport and backhaul. The network will upgrade TCV’s 1 Gbps Middle Mile ring to 10 Gbps connecting the master headend to nine remote hubs in Brundidge, Ozark, Midland City, Daleville, Enterprise 1, Enterprise 2, Elba, Brantley and Luverne. A multiservice access platform at each hub will support Metro Ethernet, Active Ethernet and SONET/TDM connections. Internet, video and voice servers will support Last Mile service providers. New DWDM equipment at each site will initially support two OC-48 wavelengths and two 10 Gbps Ethernet wavelengths and will easily scale to much higher capacity. SmartBand will construct 10Gbps fiber links from TCV’s master headend north to Montgomery and from Daleville and Ozark hub sites south to Dothan. Public Safety backhaul will be achieved with a MetroEthernet connection at 1 Gbps. Qualifications Troy Cablevision and its partners are qualified and prepared, with substantial experience building and operating telecom networks. Partner Southeast Alabama Electric Cooperative brings more than a century of electrical utility management experience needed for the network’s SmartGrid application. Public-sector partners, including the Cities of Ozark, Troy and Enterprise, Troy University and three community college systems, are engaged in economic development initiatives on a daily basis. A SmartBand Advisory Board for partner-members has already begun collaborating efforts in the planning of the network Infrastructure Cost The overall infrastructure cost of the SmartBand network is $41,592,056. Smartband and its partners are making cash and in-kind match contributions equal to 30% of the total project cost. Subscriber Projections SmartBand projects annual subscriber growth beginning with 7 anchor tenants and 37 businesses at the end of year 1. By the end of the funding period in year 3 the forecast is 147 anchors and 397 businesses. In year 8 the plan is 323 anchors and 966 businesses. Number of Jobs Estimated Based on the Council of Economic Advisors, Estimates of Job Creation From the American Recovery and Reinvestment Act of 2009, estimates for job-years created indicated that approximately $92,000 of spending yield one job-year, 64% represent direct and indirect effects and 36% are induced
effects. Accordingly, SmartBand has an overall cost of $41,592,056 therefore it is estimated the SmartBand project will create 452 jobs of which 289 are direct/indirect jobs and 163 induced jobs.