Broadband USA Applications Database

Applicant Name: City of Washington

Project Title: Washington Wilkes

Project Type: Last Mile Remote

_______________________ Executive Summary ______________

The PROJECT will bring revitalizing 21st century broadband services to Wilkes County (pop 10,262, 474 sq miles) in a rural region of the eastern part Georgia. The Mayor of Washington, Mayor Willie Burns, and the City Council have expressed a strong desire for the construction and implementation of the PROJECT in order to increase employment and economic development in Wilkes County. Communities within Wilkes are Washington (pop ~2100 country seat), Tignall (pop 635) and Rayle (pop 135). The remaining 7392 residents live areas outside of the three communities, and those that are employed are primarily engaged in agriculture. Wilkes County currently suffers from high and worsening unemployment, which as of Q1 2009 stood at 12%. Over the past 4 years the unemployment gap between Wilkes County and the US national average has grown from 1.8% to 3.3%. The lack of job opportunities and a median household income over 40% below the US average has been the primary contributor to a 5% decline in Wilkes County’s population since 2000. A key impediment to employment and economic growth in Wilkes County has been insufficient broadband speeds and services. It is estimated that over 50% of Wilkes county residents have limited or no access to broadband services, and only 38% or households subscribe to broadband services. According to David Jenkins, Director of Economic Development, Washington-Wilkes Employment Development Authority, “This grant funding is essential as we compete to replace the jobs we have lost in the past. Job creation is being hindered due to slow internet speeds and lack of broadband options.” The proposed high speed broadband network (HSBBN) will pass 7000 homes and 400 businesses, including all census blocks within the borders of Wilkes County GA. (see drawings in section 30) Community anchor institutions, public safety entities, critical community organizations passed and/or involved with project include the following: Guardian Center – Proposed new First Responder Training Facility. Education - Washington-Wilkes Middle School, Elementary School, Washington- Primary School, Wilkes County Alternative School, Mary Willis Library, Simpson Corner Day Care. Health Care - Wills Memorial Hospital, Wilkes County CDC, Georgia Respiratory Home Care. Airport - Washington-Wilkes. Community and Economic Development - Chamber of Commerce for Washington –Wilkes, Parks and Recreation, WC Community Partnership, Ron J. Booker Youth Center, GA Department of Veterans. County Court House. Fire and Law Enforcement - Fire Station WFD, Police Dept, Sheriffs Dept.. Public Utilities - City Water Warehouse, City Network Storage Tourism - Washington Museum, Callaway Plantation. Business examples – Burt Lumber Company, C.O.W Warehouse, Denard & Moore Constuction, Edwards Loan, Fairway Building Supply, Georgia Realty Sales Inc., Griggs Ficklen Insurance Agency, H & R Block, Kopecky & Roberts, Mclendon Funeral Home, Palmer Equipment, Rev. G L Avery, Ripple Building, Ruffin Flag Company, Sherita T. Campbell (Salon), Slaton Sales, South Star Propane, Style South Drapery, The Fountain, Tylers Machine
Shop, Verizon Wireless, Vicky Stevens CPA, Washington Ford Mercury, Wilkes Loan, Fievett Pharmacy. The Wilkes County HSBBN will provide critical connectivity to a new first responder training facility known as the Guardian Center. The Guardian Center is a proposed 1,100 acre site in Wilkes County designed to provide advanced and effective training that binds together DHS / FEMA goals with the state, local and National Guard units responsible for responding to significant natural and man-made disasters. This will be accomplished by employing leading edge technology and the building of a 40 acre, 21st century “cityscape” that has the capability to burn, flood and configure for any disaster scenario including collapsed buildings. It is essential for the Guardian center to have access to high broadband speeds to enable large video data file transfers necessary for creating the disseminating training to clients outside of the facility. In addition the HSBBN will provide enabling connectivity services to the institutions described here. Some of the latest applications that need to be considered by the next generation of network service providers are listed below. The networks could be capable of supporting applications specific to Public Safety, Utilities and governmental services. In addition, the RBC has the experience to apply “lessons learned” from the recently successful Public Services and Public Safety network project for the five major boroughs of New York City and apply them to Washington as appropriate. Special consideration will be made for APCO P25 and other developments in the public safety arena especially those related to interoperability. We have developed an all packet mode transport utilizing IMS and IP flow transport in native IP. This provides open and standardized interfaces between each layer, and in particular for the Control and Services layers in order to allow third parties to develop and create services independent of the network. The network also supports IMS 6.0 with migration to IMS 8.0 and both IPv4 and IPv6. It will also support legacy applications based on OSA/Parlay and Parlay/X. For the Access portion of this network we will use an all IP network using both Fiber-To-The-Home (FTTH) and Wireless. Throughout this application when we refer to FTTH we are also providing connectivity to businesses, cell towers, The FTTH technology will be GPON due to its high bandwidth and reliability, requiring no active components between the headend and the customer premise. The wireless technology will be 802.16D due also to its reliability, high capacity, and industry adoption. The Middle mile network will utilize next generation 10 Gbps Carrier Ethernet due to its ease of management and maximum utilization of bandwidth. The RBC team is well qualified to design, build, and manage the High Speed Broadband Network (HSBBN) and help Wilkes County achieve its growth and development goals. The RBC team is enhanced by specially selected members, including OFS (a manufacture and designer of passive optical networks), Capstone Systems (a designer and operator of wireless and fiber transport networks), ProCom Consulting (a developer of back office Operational Support Systems, OSS, and Billing support Systems, BSS), Byers Engineering (a Program Management organization that has implemented both fiber and wireless networks), and TrueBroadband (an organization established to provide management of the network including provision, sales, billing, and customer service). Moreover, the RBG brings a special understanding of the City of Washington’s vision and strategy that will keep the project focused on the greater goal of project which is economic development and new service offerings that expand the market, attract new businesses, attract and retain resident in Wilkes County including all economic and social strata. (See resumes and company information under sections __ and __ respectively) Most important is the RBC’s experience at minimizing CAPEX and OPEX, which saves substantial amounts of financial resources. We have a proven track record of helping new operations become successful. We also have a history of turning existing
losing operations into financially viable entities. a) Overall infrastructure cost of the broadband system. The overall infrastructure cost is $4.73 million. b) Overall expected subscriber projections for the project. The project is expected to acquire nearly 3400 customers over a five year period. This includes business and residential customers and represents between 45-50% market penetration. c) Number of jobs estimated to be created or saved as result of this project. The PROJECT, if funded, is estimate to create 335 jobs. It is estimated that the PROJECT will increase the broadband subscription rate from 38% to 60% by 2012 resulting in 315 new jobs from economic improvements, including increasing the competitiveness of Wilkes County businesses, additional public sector employment providing services with funding from an increased tax base, construction of new business facilities and residences, and increased healthcare employment. Additionally, 25 new jobs will be created through the direct effect of additional employment engaged in the manufacturing of fiber optic cable and accessories at the OFS facility in Nocross, GA, and the project management and installation of the fiber optic and