

Broadband USA Applications Database

Applicant Name: Techcore Consultants II, DBA Almega

Project Title: Techcore Consultants II, DBA Almega (Virginia)

Project Type: Last Mile Non-Remote

Executive Summary

The proposed project seeks funding assistance to expand an existing broadband network into some of the most rural communities across Virginia through strategically placed wireless base stations. Many of the communities proposed to receive broadband funding under this application are among the poorest and most isolated communities in the state. As part of USDA RUS Broadband Loan program, the majority of these towns were approved, however we decided to submit this application in order to change into a cost effective design to reduce cost per HHP significantly while increasing the coverage. Techcore Consultants II and Almega Cable have been the recipient of Community Connect broadband grants for several rural communities over the last couple of years. Please see attached supplement for RUS correspondence. 2.0 Opportunities To Be Addressed By This Application This application was prepared due to a multitude of needs that could be easily met through federally funded assistance as requested herein. The needs affect all of the proposed communities without prejudice and could be categorized as follows: Public Safety, Health Care, Education and Economic Impact. Public Safety Through funding provided under this application, the community's fire and rescue personnel would have the ability to receive virtual real-time warnings of storms and be equipped with improved communication during the aftermath in addition to improved communications among law enforcement agencies. In summary, broadband funding means lives will be saved. Health Care With the funding obtained through this application, broadband capability will allow for the local medical clinic/rescue squad to potentially connect to a medical specialist located in one of the major hospitals in a metropolitan area or across the country through the use of telemedicine equipment. This relatively new technology allows for the specialist at a distant location to examine the patient and make recommendations to the local physician. Education More and more of today's college degrees are acquired through on-line courses. With the travel requirements to the nearest higher learning center from these remote rural communities, online education becomes more of a necessity than a luxury. Discussions have also taken place with our engineer, ACRS 2000 Corp., to utilize some of the facilities proposed within the grant application to offer distance learning or interactive educational video courses through a connection with a local college. This would allow anyone to take a real-time instructed college course remotely without the cost and time constraints of commuting. Economic Impact No major business today would consider opening its doors or relocating to a community without broadband service. Funding of this application makes the opportunity of attracting major corporations to these rural communities a realistic prospect. The growing trend today among many of the major corporations is allowing its employees to work from home. Among the fastest growing businesses in the country are those started by individuals out of their homes. Neither self employed home based businesses nor working from home are viable options for

these rural residents without broadband services.

3.0 A General Description of the Proposed Funded Service Areas In all the application herein proposes to cover 22 communities and 8 service areas consisting of the most rural and economically challenged areas of the state. Without federal assistance these communities might not ever be afforded broadband services. The majority of these communities are located in the southeastern part of the state.

4.0 Number of Households and Businesses Passed Utilizing software obtained from the US Census Bureau, we have calculated the following: Total Number of Households Passed 34,197 Total Population 73,236 Total Number of Business Passed 2,197 Total No. of Census Blocks 2,838

5.0 Number of Community Anchor Institutions A complete survey was completed of all critical community facilities located within the proposed service areas. Contact with each of these facilities was made with an overwhelming show of support. Each of these critical community facilities will be offered broadband services up to 50% discount. The total number of facilities listed below estimated at 241. Town Halls Schools Local Law Enforcement Agencies Hospitals & Medical Facilities Fire Departments & First Responders Libraries & Community Centers

6.0 Proposed Services & Applications The following is a summary of the proposed services offered as part of this application.

Name of Tier	Advertised Speeds	\$ per month	Downstream	Upstream	Mbps	Mbps	Residential – WiMax High Speed Internet
Internet	1.0	1.0	\$34.95	High Speed Internet Premium	10.0	10.0	\$69.95
Voice over IP (VOIP)							\$14.95
Residential – HFC Basic Cable TV Service	NA	NA	\$34.95	Residential bundle: Digital TV/Internet (plus)	3.0	0.512	\$84.95
High Speed Internet	1.0	0.256	\$34.95	High Speed Internet Premium	10.0	5.0	\$69.95
Basic Phone Service			\$14.95	Business - WiMax Business Internet Plus	3.0	3.0	\$59.95
Business Internet Premium	10.0	10.0	\$89.95	Business VOIP	\$24.95	Business - HFC Business Basic Internet service	5.0 3.0 \$69.95
Business bundle: Digital TV/Internet (plus)	10.0	5.0	\$149.95	Business phone service	\$24.95	Critical Community Facilities - WiMax High Speed Internet Plus	3.0 3.0 \$24.98
High Speed Internet Premium	10.0	5.0	\$34.98	Business VOIP	\$7.48	Critical Community Facilities - HFC Basic cable TV service	NA NA \$17.48
Residential super pak: Digital TV/Phone/Internet(plus)	3.0	0.512	\$64.98	High Speed Internet	1.0	0.256	\$17.48
High Speed Internet Premium	20.0	5.0	\$34.98	Basic Phone Service	\$7.48	The broadband services above will accommodate a variety of applications like improved communications among critical community facilities, online training of law enforcement and medical personnel, distance learning, telemedicine and working from home.	

7.0 Approach to Addressing Non-Discrimination & Interconnection Obligations Training sessions will be implemented to ensure adherence to the FCC's Internet Policy Statement (FCC 05-151) and will post network management policies in a prominent location on the service provider's website and provide notice via e-mail and mail inserts to all customers of any changes to these policies. It shall be company policy not to favor any lawful internet application and content over others and such policies shall be contained within the company policy manual and part of employee orientation. The design herein calls for interconnections to the public internet avoiding a private network. Techcore shall, where technically feasible, offer interconnections at reasonable rates for both public internet access and exchange traffic. Techcore will work to ensure no duplication of services through interconnect requests in territories funded under the Rural Electrification Act. Trained technicians will ensure acceptable levels of service, bandwidth allocation, spam filters illegal connect and other harmful activities

8.0 Type of Broadband System to be Deployed Almega plans to build a Broadband Fixed Wireless network utilizing IEEE 802.16 WiMax standards. A centrally located wireless base station radio will provide excellent coverage throughout these communities. The fixed wireless base station will consist of six 60 degree radios operating at 900 MHz. The base station will provide full

coverage throughout the towns with broadband connection speeds capable of 3Mbps and beyond. Each user will have a 900 MHz subscriber unit to transmit and receive data via the central base station. New subscribers can easily be added to the network through installation of subscriber units on an as needed basis. We may also opt to upgrade our existing HFC systems.

9.0 Qualifications of the Applicant Techcore Consultants II, Inc started the franchise cable TV operation under the Almega Cable brand name in February of 2004 and the entire management team worked together since then. At present, the company owns and operates Cable TV franchise systems across the State of California, Oregon, South Carolina and Virginia. Prior to the cable TV/broadband1 businesses, the management team worked with AT&T and Lucent Cable Business Units. Based on the cable TV related experiences, Almega Cable was formed to provide the highest quality cable TV and internet services to rural customers, fostering community spirit and the local economy. After its acquisition of 43 rural franchise systems across four states, Almega more recently designed and deployed high speed broadband cable systems in their Shady Cove, Oregon system and a portion of the Santee, South Carolina systems.

10.0 Overall Infrastructure Cost Budget Category Loan Request Grant Request Total TOTAL \$4,091,016 \$3,930,584 \$8,021,601

11.0 Overall Subscriber Projections Total Internet Subscribers 8,106 Total Voice Subscribers 1,711 Total Video Subscribers 2,661

12.0 Estimated Number of Jobs Created or Saved Through research national studies, local re