

## Broadband USA Applications Database

**Applicant Name:** Agavue LLC

**Project Title:** Agavue New Mexico North

**Project Type:** Last Mile Non-Remote

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### Executive Summary

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1.0 A Description of the project Agavue LLC is an ISP currently serving customers using dial-up and DSL technology platforms in over 140 rural and economically challenged towns in New Mexico, Texas and Colorado. Agavue seeks funding assistance to improve its service offerings and by providing high speed internet access and VOIP services to existing and additional customers in rural and economically challenged communities in New Mexico.

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 of all the proposed communities are categorized as follows: Public Safety, Health Care, Education and Economic Impact. Public Safety Broadband funding means lives will be saved. Each 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, broadband funding would improve communications among law enforcement agencies. Health Care With the funding obtained through this application, broadband capability will allow local medical clinics/rescue squads 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 a specialist at a distant location to examine a rural patient and make recommendations to the local physician. Education More and more of today's college degrees are acquired through on-line courses. Online education becomes more of a necessity than a luxury for rural communities given the extensive distances and travel requirements. 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 a rural student to take a real-time instructed college course remotely without the cost and time constraints of commuting. Economic Impact No significant business today would relocate to a community without broadband service. Funding of this application would allow rural communities to attract corporations. A growing trend today among many businesses is allowing its employees to work from home. In addition, 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 is a viable options for rural residents without broadband services.

3.0 A General Description of the Proposed Funded Service Areas This application proposes to cover (towns & other areas) 59 communities in 24 service areas underserved and unserved Service Areas consisting of rural and economically challenged areas of New Mexico. Without federal assistance these communities might not be afforded broadband services.

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: 123,551 Total Population: 300,842 Total Number of Business Passed: 3,707 Total No. of Census Blocks: 18,884

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 a significant show of support. Each of these critical community facilities will be offered broadband services up to a 50% discount. The total number of estimated facilities is 450 which include the following: 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. Make pricing consistent with Service Offers Residential service Business Service

Service	Min Price	Max Price
High Speed Internet	\$34.95	\$69.90
Voice over IP (VOIP)	\$14.95	\$24.95
High Speed Internet	\$59.50	\$89.50

The broadband services described above will accommodate a variety of applications such as 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). Agavue 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 be part of standard employee orientation. The design herein calls for interconnections to the public internet avoiding a private network. Agavue shall, where technically feasible, offer interconnections at reasonable rates for both public internet access and exchange traffic. Agavue 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 Agavue 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 the proposed service areas. 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. WiMAX infrastructure costs are also expected to be well below those of any alternative technologies available today. WiMAX costs are typically around \$200 per HHP in rural deployments. Also, with advantages of scalable architecture, high performance throughput, low-cost of deployment and wide industry support WiMax is an ideal infrastructure to use to deploy high speed internet service in underserved rural areas. More detail can be seen in the System Design section of this application.

9.0 Qualifications of the Applicant Agavue (and its predecessor companies SkyWi/One Connect and ZiaNet) have been providing internet access services since 2004. In 2007, the ISP operations now owned by Agavue had over 10,000 rural internet and VOIP subscribers and revenues of \$9.2 million. Key members of Agavue's management team also have been partners for several years in rural cable television companies, including, among others, (i) Blackstone Cable with over 42,000 subscribers in eight States and (ii) LB Cable with over 50,000 subscribers in ten States. In addition to experience at Agavue and the rural cable

companies described above, Agavue's engineering staff and project managers worked together at AT&T Bell Laboratories and Lucent. Finally, Agavue has significant financial resources. Agavue's majority owners have over \$120 million of committed capital. They have invested over \$2 million in Agavue as of the date hereof and have committed to invest up to \$3-5 million more as part of this project.

10.0 Overall Infrastructure Cost The total infrastructure cost for New Mexico North is \$17,297,474. With over 123,551 HHP this equates to a cost of approximately \$140 per household passed.

11.0 Overall Subscriber Projections Residential Broadband Internet Subscribers: 28,417 Business Broadband Internet Subscribers: 853 Critical Community Facility Subscribers: 177

12.0 Estimated Number of Jobs Created or Saved Through research national studies, local research and feedback from the third parties listed below, Agavue estimates the following affect on job creation and job retention over a three year timetable.

New Businesses & Corporations Relocating to the Area 48 Work from Home Job Opportunities 17 Home-based Businesses 40 Agavue Long Term Positions 50 Total Long Term Jobs Created 155 Saved Existing Businesses/Jobs Due to Broadband Availability 72 Engineering Firm 2 Equipment Manufacturers 1 Construction Personnel 12 Temporary (36 months or less) Jobs Created 15