Broadband USA Applications Database

Applicant Name: NEW MEXICO HIGHLANDS UNIVERSITY

Project Title: Providing Video-Conferencing to New Mexico

Project Type: Sustainable Broadband Adoption

Executive Summary

Introduction: New Mexico Highlands University seeks funds to re-engineer and expand its distance education network to promote broadband use in New Mexico. We will increase bandwidth and install high-definition video-conferencing equipment at several rural sites throughout the state. We have multiple partners from vulnerable populations who are planning several innovative uses for the equipment and network. Problem/Need: There are compelling problems in New Mexico that can be addressed by linking communities together through broadband. 1. Long distances between communities. We are serving some of the least-populated areas in the country with a population density of less than 10 individuals per square mile as determined by the U.S. Census Bureau. 2. Lack of services. There are fewer hospitals, fewer emergency response agencies, fewer social service agencies and fewer businesses to serve these populations. 3. Lower income levels and higher unemployment than the rest of New Mexico or the intermountain West. In New Mexico, the rural per capita income is $27,000 while the statewide average is $31,000. The rural poverty rate is 20%, but only 15% in urban areas. 25% of high school students don't finish high school in rural areas, while only 19% don't finish in urban areas. Unemployment in 2008 was 4.2% in rural areas and 4.1% in urban (data source: www.raonline.org/states/newmexico.php). 4. Lack of broadband access. Only 78% of New Mexicans have access to digital subscriber line service, and only 77% have access to cable modem service, much less than national averages of 82% and 96%, respectively (http://broadbandbreakfast.com/2008/08/new-mexico-infrastructure-report-fails-to-incorporate-broadband-access/). Overall approach: New Mexico Highlands University will link New Mexico residents with other communities and services via broadband. We will provide high-definition video-conferencing equipment and broadband connectivity to tribal, educational and emergency management partners to improve education, quality of life and emergency response. We will also deliver undergraduate and graduate degree programs to remote, rural sites. Innovation: Our proposal is innovative in five different ways: 1. Develop public involvement in emergency management through the Crisis Camp model 2. Use the resulting network to deliver courses and services to school districts based on the Professional Development School model of teacher education 3. Install high-definition video equipment 4. Collaborate closely with school districts to help students complete high school 5. Develop a wide range of uses for video-conferencing Areas/populations/demographics: We will be serving rural and remote areas of New Mexico. Our 13 public school districts and three Pueblo Indian community partners are located in small towns, the largest of which has a population of 14,000. The majority of the K-12 and university students we will serve are Hispanic and Native American. We will locate a few distance education sites in larger communities to better serve vulnerable populations located there. Our
emergency management partners are also located in rural areas. New users/numbers: Our partners and our video-conferencing sites are located throughout the state of New Mexico. They are located in 12 of New Mexico’s 33 counties, with a total population of 1.17 million individuals, or 59% of the state’s total population (U.S. Census, 2008 estimates). We expect to reach 5% of the population or 59,000 individuals, and we anticipate 5% of these, or 3,000 people, will become new subscribers. NMHU will carefully track the users at each of our video-conferencing sites to determine new user data. We will carry out comprehensive surveying and network data analysis at the initiation of our project and throughout program delivery. We will measure the number of participating users, the duration of use and the type of use. At first point of contact with us, we will ask our users if they have broadband connections at home, the office, or other locations, and we will ask them during and at the end of the project whether they have acquired it and whether their decision was influenced by their participation in our program. Our qualifications: New Mexico Highlands University is capable and prepared to execute this project. We were founded in 1893 and have been in existence for 117 years. We first deployed distance education networks in 1997, so we have 13 years of experience with video-conferencing. We have received many federal grants from a variety of agencies over the years. Most recently, we received a Public Telecommunications Facilities Program grant from NTIA in 2005, which has been successfully completed. The Educational Outreach Office (EOS), with a staff of 13, will be responsible for project management. Jobs saved/created By means of this project we expect to create or save jobs in the following numbers and categories: a) job-years directly resulting from this project = 154, b) indirect jobs created/saved by this project = 52, and c) created/saved jobs induced by this project = 295. We have derived our direct job-years estimate by multiplying the number of full-time equivalent (FTE) jobs created by the applicant and its partners in this project by the number of years guaranteed by the grant. NMHU and its partner will create 29.5 direct FTE jobs for five years, or for 147.5 job years. An additional 6.5 job years will be created by this project for contractors directly involved with developing and implementing the project infrastructure. Indirect jobs figures were derived by assuming one FTE job saved or created for every $30,000 spent by the project for equipment and broadband infrastructure. Induced jobs were derived by assuming 0.5% of persons reached by our project will create broadband connectivity based on enhanced business employing at least one person. Overall cost: Our total budget for this project is $3,939,398. We seek $2,295,926 from the NTIA BTOP grant program to fund our project. We will match this federal funding with $1,643,472 from our own resources, both monetary and in-kind, for a 42% match. We have derived our budget using specific quotes and advertised rates for equipment costs, for broadband service costs and for contract services. We have derived salaries, fringe, travel and other personnel expenses from prevailing occupation pay standards, U.S. General Service Administration regional per diem standard, and industry best practices. Our indirect cost rate is derived from the percentage NMHU has negotiated with U. S. Health and Human Services Department ‘ a copy of our Negotiated Rate contract is attached with our supporting documents. Partners/Community Anchors: NMHU’s partners are in five major groups: Southwestern Indian Polytechnic Institute (SIPI) and three Pueblo Indian communities, the Northeast Regional Education Cooperative (NREC) and the six school districts it represents, the High Plains Regional Education Cooperative (HPREC) and the seven school districts it represents, and emergency managers with San Miguel County, Eddy County and the Permian Basin Regional Training Center. The general public is also our partner. An important and innovative new use for NMHU’s video-conferencing equipment will be to develop public involvement in
emergency management, promoting the use of the equipment for the "Crisis Camp" model. This model, newly developed in 2009, seeks volunteers from the general public, from non-profit groups, business and government and actually puts them to work on disaster response. These groups are self-organized; that is, they can operate without the need of supervision by emergency responders who are focusing on the immediate needs of saving lives and infrastructure. But they can still make significant and lasting contributions to disaster response. Hundreds of Crisis Camps have been organized, most recently focusing on responding to the earthquakes in Haiti and Chile. Vulnerable populations: A majority of the individuals who will benefit from this project are members of vulnerable populations. NMHU is a federally recognized Hispanic-Serving Institution (HSI) and is 'majority-minority,' with minority students representing a majority of the student body population. Our two regional educational partners serve a large number of Hispanic students. Students at our regional educational partners are also overwhelmingly low-income. Native Americans represent 6% of NMHU’s student population. We'll be providing distance education facilities to the Southwestern Indian Polytechnic Institute in Albuquerque, a National Indian Community College with a majority Native American population. Video-conferencing facilities are also planned for three Pueblo Indian communities: Santa Clara, Okhay Owingeh and Jemez.