

Broadband USA Applications Database

Applicant Name: ZERODIVIDE

Project Title: Tribal Digital Village Broadband Adoption Program

Project Type: Sustainable Broadband Adoption

Executive Summary

Problem Statement: The National Congress of American Indians estimates that only 5-8% of Native Americans living on tribal lands have residential broadband access. A 2007 US Census Bureau study reported that broadband adoption rates by American Indians and Native Alaskans was 30%, the lowest adoption rate of any ethnic group. A 2009 study by Native Public Media concluded that broadband adoption efforts must accompany deployment of infrastructure and be driven by the Native American tribal community. Geographic isolation and cultural differences make tribal communities especially vulnerable to disparities in broadband deployment and adoption. In addition, telecommunications companies are not interested in deploying internet to these communities due to the limited financial return on investment. Consequently some tribal entities, such as the Southern California Tribal Chairmen's Association (SCTCA), have been forced to build and operate their own broadband networks. Through their Tribal Digital Village (TDV), SCTCA maintains a high-speed wireless broadband network linking community anchor institutions of 19 Tribal reservations. This network serves as the only internet access point for thousands of tribal members. TDV has begun a major effort to expand its network to 2,000 tribal homes. However other barriers continue to prevent adoption-including affordability, lack of training, perceived lack of relevance to their lives, and lack of linguistic and culturally appropriate content. These barriers perpetuate the digital divide and an 'opportunity' divide that must be overcome to correct disparities in health, education, civic engagement and economic status among tribal members.

Solution: Since 2006, ZeroDivide has partnered with TDV to expand broadband access and adoption among the SCTCA tribal communities. The proposed TDV Broadband Adoption Program will increase broadband adoption among the 8,900 Tribal community members from the current 17% baseline to 70% usage. The program will augment TDV's deployment of a residential Tribal broadband network to 2,000 tribal homes through a comprehensive four-component broadband adoption strategy: 1) Outreach and Public Awareness, 2) Basic and Advanced Digital Literacy Training, 3) Creation of Meaningful Content, and 4) Sustainability. This program addresses the BTOP goals of 1) providing improved access to broadband service to consumers residing in unserved and underserved areas of the country; 2) providing broadband access, education, awareness, training, equipment, and support to community anchor institutions and organizations serving vulnerable populations; and 3) stimulating the demand for broadband.

Approach/Innovation: TDV and ZeroDivide propose a comprehensive approach to increasing and integrating broadband adoption by tribal members. Our program addresses multiple barriers to broadband adoption, utilizes the resources of the community anchor institutions on the reservations, supports the cultural heritage of tribal communities, increases technology job skills, and links community members to resources, networks, and activities via the internet. In addition, a major

outcome of this program is a viable business model to sustain the broadband access and adoption activities beyond the BTOP grant. Program components are: 1) Outreach and Public Awareness: A multi-faceted public awareness campaign utilizing traditional methods of communication among tribal members to promote both the availability of new wireless networks and broadband training sessions. 2) Basic & Advanced Digital Literacy/Technology Training: 40'60 training sessions teaching broadband application skills conducted in 31 community anchor institutions. Participants will also have the option to obtain a free computer from the San Diego Futures Foundation. In addition, the TDV Shadow Project will train and mentor 10 community youth to deploy and operate the TDV wireless broadband network. 3) Creation of Relevant and Meaningful Content: TDV will redesign its website to support distribution of more robust content, tribal government services, and community content. In addition, the program will train participants in advanced broadband applications including digital video production, sound engineering, graphics, website development and the use of social media. 4) Sustainability: ZeroDivide, has successfully invested in several social enterprises since 1997, will work with TDV to test its emerging ISP business model that will sustain TDV's wireless broadband service and related adoption efforts beyond the life of the BTOP grant.

Areas to be Served: The reservations of 19 federally recognized tribes that are members of the Southern California Tribal Chairmen's Association. The reservations are primarily located in San Diego County, California, and are scattered within an area beginning in southern Riverside County, California, and stretching southward 150 miles to the U.S.-Mexico border.

Target Population: 8,900 enrolled tribal members of 19 Native American tribes in Southern California and 2,000 residents living in communities adjacent to the tribes.

Demographic Information: The vast majority of the target population is Native American, including 8,900 enrolled tribal members. The additional 2,000 residents living in communities near the tribes are Native American and Hispanic. Based on year 2000 Census figures, 77.94% of the population was born on the reservations. 68.39% of the population is not in the work force and 26.85% is employed. 41.47% of the population has an income less than \$24,999 and 29.73% of the people live at or below the poverty line. 26.05% of the people at the poverty line are families with children. 41.33% of the population is under 18 years old and 11.74% is over 55. 35.14% are ESL (English as second language). 16.14% of the population is disabled. Of those with disabilities, 28.64% live at or below the poverty line.

Qualifications: ZeroDivide is a 501(c)(3) public foundation supporting technology adoption in underserved communities. Established by community leaders from California's most underserved populations, Zerodivide has expertise in overcoming barriers to technology adoption in disadvantaged communities. In the past 10 years, ZeroDivide has worked to build technology capacity among nearly 450 community anchor institutions and increase technology (including broadband) adoption in the communities it serves. In addition to the technology outcomes of our programs, we have increased graduation rates among low-income and at-risk youth in Long Beach; increased access to health care for limited English proficient and low-income individuals in San Francisco; and media content distributed via broadband networks throughout California to better reflect the state's diverse populations. ZeroDivide has the management staff and qualifications to replicate and scale models, including:

- a. Technical, organizational and financial capacity
- b. Ability to leverage experience and philanthropic/corporate relationships
- c. A track record in stimulating broadband demand and adoption in vulnerable communities

Tribal Digital Village was established in 2001 through a community planning process among the SCTCA tribes, initiated by their successful application for a 3 yr, \$5 million grant from the Hewlett Packard Company (HP). As a result, TDV was established to deploy a high-speed wireless

internet data network linking the major community anchor institutions of 19 Tribal reservations throughout Southern California. TDV led the construction and deployment of the network, trained tribal youth to participate in building and creating the network, and trained staff and residents on computer and internet use. Over the last 9 years they have continued to maintain the network, providing customer service and troubleshooting everyday network issues. This staff also manages the network recovery from major disasters such as the San Diego fires in 2008. The TDV staff are from tribal communities. HP funding ended after three years, further underscoring the need for BTOP monies to provide sustainability in this dramatically underserved population. SCTCA is applying for a BIP grant to support the expansion of its wireless broadband network infrastructure (TDVNet Tribal Home Deployment). Outcomes: This program will result in 4,000 new broadband users at 2000 tribal homes, 750 new users at community anchor institutions, and 50 new business users-for a total of 4,800 new users. Combined with the existing 1,500 broadband users, there will be a total of 6,300 broadband users at the end of this program. Job Creation: 11 jobs saved or created (using Nat'l Council of Economic Advisors method) Overall Cost: ZeroDivide proposes an overall project budget of \$986,060. Of this amount, ZeroDivide requests \$686,157 in BTOP Sustainable Broadband Adoption funds and will provide \$299,903 in cash match for 30.4% of the project costs.