ANNUAL PERFORMANCE PROGRESS REPORT FOR SUSTAINABLE BROADBAND ADOPTION

General Information

1. Federal Agency and Organizational Element to Which Report is Submitted Department of Commerce, National Telecommunications and Information Administration	2. Award Identification Number 06-43-B10584	3. DUNS Number 047120084

4. Recipient Organization

University of California, Davis 1850 Research Park Drive, STE 300, Davis, CA 95618

5. Current Reporting Period End Date (MM/DD/YYYY) 12-31-2010	6. Is this the last Annual Report of the Award Period? ◯ Yes ◉ No

7. Certification: I certify to the best of my knowledge and belief that this report is correct and complete for performance of activities for the purposes set forth in the award documents.

7a. Typed or Printed Name and Title of Certifying Official Sandra Stevens	7c. Telephone (area code, number and extension)
	7d. Email Address smstevens@ucdavis.edu
7b. Signature of Certifying Official Submitted Electronically	7e. Date Report Submitted (MM/DD/YYYY): 01-28-2011

PROJECT INDICATORS

1. Does your Sustainable Broadband Adoption (SBA) project foster a particular broadband technology or technologies? If so, please describe this technology (or technologies) (600 words or less).

For healthcare providers to effectively participate in a technology-enabled healthcare system, a reliable and cost effective broadband infrastructure must be developed and sustained. Rural and low-income urban communities frequently do not have the resources or technical expertise to monitor broadband implementation, negotiate ongoing services, and ensure network security and privacy. Successful broadband adoption also requires implementation of broadband-dependent applications that add value to healthcare organizations, businesses and consumers. This requires that clinicians and consumers are broadband application literate.

California is coordinating multiple, funded initiatives that will create a reliance on broadband applications, particularly in rural/low income regions, including electronic health records, telehealth, distance education, e-prescribing, home monitoring, and health information exchange that collectively establish a sustainable business model for providers, insurers, and consumers.

The core of the project is to leverage a medical-grade network that aggregates demand for broadband and incorporates security and Quality-of-Service features, key to health care and disaster response applications. This technology platform is required for expansive adoption of eHealth applications. The CTN broadband architecture is comprised on an IP-based, MPLS-routed Virtual Private Network with explicit quality of service, privacy and security. It incorporates a high speed, high capacity fiber core network that connects to multiple ILEC/CLEC/ provider-based landline local loop services. Access to external networks is provided through peering points with various regional, statewide and national network service providers. The CTN will provide state-of-the-art, peer to peer, MPLS, broadband services to healthcare sites (predominately rural and many serving low income consumers), county health offices and academic health centers throughout California and will be operated by a vendor, selected through a competitive bid process.

2a. Please list all of the broadband equipment and/or supplies you have purchased during the most recent calendar year using BTOP grant funds or other (matching) funds, including any customer premises equipment or end-user devices. If additional space is needed, please attach a list of equipment and/or supplies. Please also describe how the equipment and supplies have been deployed (100 words or less).

Manufacturer	Item	Unit Cost per Item	Number of Units	Narrative description of how the equipment and supplies were deployed
N/A	0	0	0	None at this time
Totals		0	0	

Add Equipment	Remove Equipment

2b. To the extent you distribute equipment/supplies to beneficiaries of your project, please describe the equipment/supplies you distribute, the quantities distributed, and the specific populations to whom the equipment/supplies are distributed **(600 words or less).**

None at this time.

3. For SBA access and training provided with BTOP grant funds, please provide the information below. Unless otherwise indicated in the instructions, figures should be reported underlined cumulatively from award inception to the end of the most recent calendar year. For each type of training (other than open access), please count only the participants who underlined completed the course.

Types of Access or Training	Number of People Targeted	Number of People Participating	Total Training Hours Offered
Open Lab Access	0	0	0
Multimedia	0	0	0
Office Skills	0	0	0
ESL	0	0	0
GED	0	0	0
College Preparatory Training	0	0	0
Basic Internet and Computer Use	0	0	0
Certified Training Programs	0	0	0

Types of Access or Training	Number of People Targeted	Number of People Participating	Total Training Hours Offered
Other (please specify): No trainings have been conducted at this time.	0	0	0
Total	0	0	0

4. Please describe key economic and social successes of your project during the past year, and why you believe the project is successful thus far (600 words or less).

Receiving the BTOP funding was an economic success.   The grant funding provided the resources required to optimize the vision of the California Telehealth Network (CTN). Stabilizing the CTN in this manner addressed a significant economic barrier to success faced by the CTN. Staff positions have been retained and preparations have been made to hire additional staff.

Since the awarding of the grant, September 23, 2010, a successful collaboration has been built between academia, community-based organizations and educators, instructional design experts and tribal representatives. The project fosters the continuing collaboration of a number of organizations in California committed to advancing health through broadband enabled healthcare. The collective strengths of the project partners will ensure a robust, accessible training program and a transformation to a technology-enabled delivery system.

Early work and the awareness campaign has inspired communities to escalate their thinking about technology based healthcare. For example, a Native American healthcare organization has engaged in specific conversations to prepare to take their eHealth applications to the next level.

5. Please estimate the level of broadband adoption in the community(ies) and/or area(s) your project serves, explain your methodology for estimating the level of broadband adoption, and explain changes in the broadband adoption level, if any, since the project began.

5a. Adoption Level (%):	**Narrative description of level, methodology, and change from the level at project inception (600 words or less).**
0	**Measuring the level of adoption is not applicable for this project. The project is health focused and the metrics for broadband adoption relating to the CTN differ from those noted above.**

6. Please describe the two most common barriers to broadband adoption that you have experienced this year in connection with your project. What steps did you take to address them (600 words or less)?

The network design of the CTN is very innovative and challenging. More than $26M of funds from the Federal Communication Commission's (FCC) Rural Health Care Pilot Program has established the CTN. One of the major challenges has been leveraging the resources necessary to complement the FCC's substantial infrastructure investment with funding to support the initial implementation of CTN operations.

Technical support for the sites and populations served by the CTN is also needed. The target audiences are very resource constrained and have limited technical resources. Technical training for member sites will be made available with funding from the BTOP grant.

7. To the extent that you have made any subcontracts or sub grants, please provide the number of subcontracts or sub grants that have been made to socially and economically disadvantaged small business (SDB) concerns as defined by section 8(a) of the Small Business Act, 15 U.S.C. 647, as modified by NTIA's adoption of an alternative small business size standard for use in BTOP. Please also provide the names of these SDB entities. (150 words or less)
No subcontracts have been initiated.

8. Please describe any best practices / lessons learned that can be shared with other similar BTOP projects (900 words or less).
Given that the grant was awarded in September 2010, it is still too early to identify and/or report on best practices.