

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 02-43-B10566	3. DUNS Number 615245164
4. Recipient Organization University of Alaska, Fairbanks Administrative Services CTR RM 109, Fairbanks, AK 99775		
5. Current Reporting Period End Date (MM/DD/YYYY) 12-31-2013	6. Is this the last Annual Report of the Award Period? <p style="text-align: center;"> <input checked="" type="radio"/> Yes <input type="radio"/> No </p>	
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 John Monahan	7c. Telephone (area code, number and extension) 00000	
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7b. Signature of Certifying Official Submitted Electronically	7e. Date Report Submitted (MM/DD/YYYY): 12-03-2013	

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).

The primary objective of the Bridging the e-Skills Gap Sustainable Broadband Adoption project in Alaska was to promote highspeed "broadband" connectivity. The secondary objective of the project was to develop access to the internet at any connectivity speed in rural Alaska. Concurrently, the project promoted awareness and training opportunities in the use of technologies that emphasized the value of being connected to the internet.

As broadband connectivity options advance into rural Alaska, the project progressively promoted and supported the integration of mobile devices, i.e., cellular smart phones and mobile tablets, into the lives of individuals and communities. This allows those individuals and communities to have a familiarity and comfort level with the digital devices as they become available. In addition to an increase in terrestrial access there has been more Alaskan bush communities (103 total) that have gained access to cellular service.

During the life of the project a much higher emphasis was placed on the use of mobile devices. Mobile devices are more economical and accessible for school and community members and there has been a substantial increase in their numbers in rural Alaska. The project promoted an increased awareness, desire and usage of broadband using mobile devices.

A training emphasis was placed on the incorporation of technology and broadband access in the classroom setting for grades K-12. One such training strategy was the incorporation of Digital storytelling training for teachers, students and community members.

As a collaborative purchase between the project partners, the grant funds provided the equipment necessary to record, deliver, watch and manage an organization's training sessions, knowledge base, and special events. The equipment purchased includes five mobile recording kits (Mediasite) and a compliment of servers that store the recordings, provide an editor feature, and a searchable catalog for on-demand playback. Each Mediasite kit automatically recorded and synchronized high resolution video with slides and content captured on any device, including a laptop, tablet, whiteboard, or document camera. These elements were then delivered to the servers for cataloging, where each partner could publish the content for general or restrict viewing to a selected group of participants.

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	No equipment was ordered during the 2013 year
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).

Mediasite is a product of the Sonic Foundry Corporation that provided the ability for presentation capture and on-demand playback. The purchase of Mediasite was a collaborative effort between the project partners and an in-kind maintenance contribution by the University of Alaska Office of Information Technology. The installation and housing of the servers, along with the maintenance of the product software was coordinated in cooperation with the University of Alaska Video Conferencing Services. The five mobile video capture kits were in constant use by the partners.

During the life of the project the Mediasite server documents that 188 hours of content was made available, which represents 432 presentations and were viewed 2013 discrete times.

In the summers of 2012 and 2013 the project loaned a mobile library kit to the Della Keats Health Sciences Summer program, operated through the WWAMI School of Medical Education at the University of Alaska Anchorage. The Della Keats Camp provides aspiring students an introduction to various aspects of the medical profession in a six week on campus setting. Because the students are immersed in college life, they gain valuable independence and college study skills.

The project loaned the mobile device kit to the 2013 Upward Bound Summer program. During the academic year the mobile device kits were on loan to student teachers who incorporated them into classroom teaching units.

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 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 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	3,768	3,768	21,424
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	316	316	35,520
Other (please specify): Library Network Alaska Tech Prep KCAN-TV	40,478	40,478	37,412
Total	44,562	44,562	94,356

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).

The Bridging the e-Skills Gap Sustainable Broadband Adoption in Alaska successfully promoted broadband awareness and training opportunities in rural Alaska. Of the 81,935 documented activities of providing broadband awareness and training, 44,562 of the discreet sessions (participants) account for 94,356 hours of training.

During the span of the project, the conservative estimate in the level of broadband adoption shows an increase in rural adoption levels from 13% to 37%.

At the height of the project there were 15 jobs that were fully or partially funded by the project and the project is credited with sustaining 8.75 full-time equivalent positions.

The social benefits of the project are numerous, especially the modeled communication that has occurred across market sectors that normally would not collaborate or exchange resources. For example, project partners in education and the medical field have worked together to purchase video lecture/capture playback equipment that no single agency had the economic resources to acquire independently.

Examples of the activities initiated by the project that benefit Alaska and the Nation include:

At the conclusion of the project the Alaska Federal Health Care Access Network and the University of Alaska will continue offering:

Course One - Telehealth Fundamentals

Course Two - Beyond the Basics: Becoming a Certified Telehealth Coordinator

Course Three - Certified Telehealth Program Manager

These workforce development courses are offered via distance learning through the University of Alaska, Southeast, online Blackboard system. Each of the courses lasts a total of ten weeks, and provides health practitioners the skills necessary to become a certified Telehealth Coordinator or with more advanced knowledge and skills to become a Telehealth Program Manager. Using expanded broadband access and an online classroom, students participate in live class sessions, small group activities, and posted discussions to learn about telehealth and complete the course requirements.

The Digital Sandbox is a repository of learning artifacts (educational materials) prepared by students and teachers across the State. A highlight of the Sandbox is that it is completely focused on education and provides teachers the means to access materials that school districts and other providers that filter certain websites (YouTube, for example) the ability to access the posted learning artifacts, even if that artifact includes a YouTube video. Cumulatively, there have been 350 items loaded into the repository from 850 registered users (not including public access).

The Alaska Vocational Technical Education Center will incorporate the Alaska Village Internet Agent curriculum into the IT program and the Office training programs.

The Alaska Library Network provides access to the "Live Homework Help" and the "Testing and Education Reference Center". Over the course of the academic year, Alaskan students seeking homework assistance online climbs from a low number during the summer school months to a higher number as the fall term progresses. The effect of advertising and outreach, which included distributed flyers, stickers and bus advertisement dramatically increased the number of participants. During the life of the grant, Live Homework Help served 36,767 student sessions; this represents a total of 726,499 minutes. ALN also provided the "Testing and Education Reference Center" program, which provided help to students and Alaskan citizens in taking a variety of academic and occupational tests. During the life of the grant, 8833 sessions were recorded using this service.

As a collaborative purchase between the project partners, the grant funds provided the equipment necessary to record, deliver, watch, and manage an organization's training sessions, knowledge base, and special events. The equipment purchased includes five mobile recording kits (Mediasite) and a compliment of servers that stores the recordings, provide an editor feature, and a searchable catalog for on-demand playback. Each Mediasite kit can automatically record and synchronize high resolution video with slides and capture any device, including a laptop, tablet, whiteboard, or document camera. These elements are delivered to the servers for cataloging, and each partner published the content for general (or restricted) viewing to a select group of participants. The lecture is presented to the viewer as if they were in the room watching the live event. As of August 30, 2013, 432 presentations were recorded and uploaded to the MediaSite server, representing 188 hours of content and had received a total of 2013 views.

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).
37	A very conservative number, based on quantitative and qualitative data, based on voluntary telephone and satellite company service subscription data, Alaska BIP/BTOP Infrastructure project reports, 4 doctoral dissertation preliminary findings, Alaska Telco Security and Exchange Commission Quarterly Reports (Form 10-Q), SBA partner interviews, 2011 census data (311,201 housing units), school district technology Director interviews, 350,000 Ookla.com speed test results for rural Alaska, Department of Education Title II annual report and survey results and University of Alaska Video Conference Services annual report of services has been analyzed and is continuously being triangulated for validity against secondary sources of confirmatory data (findings are presented to small technology/broadband focus groups to determine if the findings appear valid and pass the "red-face test" and to gleam any additional sources of broadband access availability that can be gathered). For purposes of this report, the level of broadband adoption represents the increase in Cable Modem subscriptions, which generally is the highest broadband speed available in the area, but is not an absolute assurance that it meets the minimum Federal definition of broadband. But, because Cable Modem was not available previously, it is an absolute assurance that broadband in some configuration is being utilized at a rural location where it was not available previously.

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 Broadband Technology Opportunity Program (BTOP) and Broadband Initiatives Program (BIP) Infrastructure projects dramatically increased the awareness and access to internet connectivity, but broadband speed and cost continue to be barriers to household subscriptions.

Generally internet connectivity is available in most rural Alaska at a rate between 56k - 256k, there is not a consistent connection that meets the minimum federal definition of broadband (786kbps download speed and 200kbps upload speed, FCC, 2010). Even the larger anchor institutions in the bush areas that report having access to T1 lines are forced to fractionalize the line with all the users in the school and the library, which sometimes makes the connection less robust then a 56kbps dial-up line.

Always a primary consideration for residence access to high-speed broadband is cost. In 2013 GCI reports that the average package for cable modem access was \$76.88.

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)

N/A

8. Please describe any best practices / lessons learned that can be shared with other similar BTOP projects (900 words or less).

A major benefit and strength of the project continues to be the diversification of partners and the collaborations that have transpired across career market sectors (education, health and medical, for-profit and not-for-profit businesses, and media networks). The project

partners meet quarterly to share project advancements and discuss additional ways that they can mutually benefit one another.

Some strategic advantages of diversifying the project partners is the ability to approach sustainable broadband adoption through a wider variety of anchor institution end users. Each of the partners has a select focused group of end users that would not typically be accessible by another agency. For example, schools do not normally work with the same end users as the Native Corporations or Regional Hospitals.

The project used iPads to collect video updates from the project partners. Partners received initial training on the use of the video capabilities of the iPads and how to upload their videos in a Box.com account. The videos could then be shared between partners. The newly implemented Mediasite program also has the capability of being used on the iPads.

Another advantage is that the agencies can emphasize their work during different times of the day and on different calendars. For example, school districts and education agencies commonly take major holiday breaks and are less active during the summer months. Because the project has partners that are in the medical and non-profits fields who work during these times, the lull for training and promotional activities does not occur.

The Alaska project had eleven fiscal partners that all contributed expertise and energy to the objective of increased awareness and training for broadband growth. The eleven partners that received funding would not have been able to initiate their "passion" projects due to fund restrictions. With this initial funding, the agencies were able to add projects that leveraged the enthusiasm and interest of program directors.

A complete copy of the BTOP Final Report that highlights the partners accomplishments is attached or available at:
<http://akdec.alaska.edu/final-report/>