ANNUAL PERFORMANCE PROGRESS REPORT FOR SUSTAINABLE BROADBAND ADOPTION

General Information

1. Federal Agency and Organizational Element to Which Report is Submitted	2. Award Identification Number	3. DUNS Number
Department of Commerce, National Telecommunications and Information Administration	02-43-B10566	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)	6. Is this the last Annual Report of the Award Period?
12-31-2012	◯ 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	7c. Telephone (area code, number and extension)
John Monahan	00000
	7d. Email Address
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7b. Signature of Certifying Official	7e. Date Report Submitted (MM/DD/YYYY):
Submitted Electronically	01-28-2013

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 is to promote highspeed "broadband" connectivity. The secondary objective of the project is to develop access to the internet at any connectivity speed in rural Alaska. Concurrently, the project promotes awareness and training opportunities in the use of technologies that emphasize the value of being connected to the internet.

As increased connectivity options advance into rural Alaska, the project has 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 an 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.

The project is seeing a much higher emphasis and use of iPads in the school settings. The Alaska Association of School Boards is sponsoring a legislative initiative to provide a digital device for each Alaska teacher and student. The BTOP project is supportive of this initiative from the perspective that it will increase awareness, desire and usage of broadband.

The project continues to play a critical role in the community purchase of hardware, software, and video equipment. As a collaborative purchase between the project partners, the Bridging the e-Skills Gap in Alaska provides 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 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 can publish the content for general viewing or restrict it for a selected group of participants. The lecture will be presented to the viewer as if they were in the room watching the live event.

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 2012 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 provides the ability for presentation capture and on-demand playback. The purchase of Mediasite is 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 will be coordinated in cooperation with the University of Alaska Video Conferencing Services. The five mobile video capture kits will be in constant use by the partners.

The Mediasite server documents that between January 1 - December 31, 2012 that 117 hours of content was made available, which represents 228 presentations and has been viewed 1090 discrete times.

In the summer of 2012 the project loaned 25 ipads 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.

Included in the 2013 Alaska Governors budget is a "1-to1" access to technology initiative using iPad mobile devices. As mobile devices such as the iPad become more integrated into the schools, the project will continue to emphasis to freedoms and flexibility of quick device access.

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 <u>cumulatively</u> 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 <u>completed</u> 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	1,981	1,981	11,276
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	158	158	17,760
Other (please specify): Library Network Alaska Tech Prep KCAN-TV	26,239	26,239	23,706
Total	28,378	28,378	52,742

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 is successfully promoting broadband awareness and training opportunities in rural Alaska. Of the 62,691 documented activities of providing broadband awareness and training, 28,378 of the discreet sessions (participants) account for 52,742 hours of training.

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:

For 2012, 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 and 3319 hits from 664 registered users (not including public access).

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.

As a collaborative purchase between the project partners, the Bridging the e-Skills Gap in Alaska will provide 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 will store 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 can publish the content for general viewing or restrict it to a select group of participants. The lecture will be presented to the viewer as if they were in the room watching the live event.

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).
36	**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 being 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). Based on**

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 Sustainable Broadband Adoption project is exceeding the expectation goal of generating awareness and desire for broadband, but access to internet connectivity continues to remains elusively unattainable to the general public.

Several of the Broadband Technology Opportunity Program (BTOP) and Broadband Initiatives Program (BIP) Infrastructure projects are complete, and while 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. This effectively makes the connection less robust then a 56kbps dial-up line.

Always a primary consideration for residence access to highspeed broadband is "cost". In 2012 GCI reports that the average package for cable modem access was $67.96 (down from $75.85 in 2010)

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.

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 has twenty-two partners (eleven fiscal and eleven collaboration partners) that have 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.

The project is using iPads to collect video updates from the project partners. Partners have 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 can then be shared between partners. The newly implemented Mediasite program also has the capability of being used on the iPads.