

Project Report
Alaska Public Broadcasting, Inc.
Project Number No. 174-05
July 1, 2006 – September 30, 2006

Project Title & Summary

Four project work scopes are embodied in this grant award. The majority of the award is dedicated to a single work scope, that being the Capital Grant Program.

Public Broadcasting Facilities & Equipment Modernization Project

The purpose of the Public Broadcasting Facilities & Equipment Modernization Project is to provide much needed capital revenue for addressing system-wide infrastructure and technology priorities. In 2004, a system-wide infrastructure and technology needs assessment, ranging from basic tools to new facilities, approximated \$38 Million. The project will be in partnership with the Rasmuson Foundation and potentially other foundations. Total Denali Commission funding: \$6,127,000

Public Radio Conversion to Digital Transmission

Alaska's 26 public radio stations have begun the process of changing their primary transmission equipment to the new standard for digital broadcasting. Funding the appropriate needs for all of the stations will cost approximately \$3 Million. The Corporation for Public Broadcasting (CPB) has already committed \$2.1 Million toward this total and the Rasmuson Foundation has committed some \$682,519 toward the total. This critical funding will assure the project has the capacity to meet anticipated as well as some unanticipated needs. Total Denali Commission funding: \$423,000

Digital Distribution Network

Public Broadcasting Data Network is to interconnect all of Alaska's public radio and television stations by means of a digital intranet and the internet. This project was originally funded by the Denali Commission in FY04. \$1.9 Million was set aside to build this modern telecommunications infrastructure. Additional funding is necessary for completion of this project. Total Denali Commission funding: \$100,000

Alaska Rural Communications Service (ARCS) & Satellite Interconnection Revitalization

Repair and replacement of existing broadcast infrastructure used to deliver public telecommunications services via radio and television to Alaskans all across the State. This project was originally funded by the Denali Commission in FY04. Additional funding is necessary for completion of this project. Total Denali Commission funding: \$100,000

Reporting Period: July 1, 2006 – September 30, 2006

Progress and activity during the third quarter of 2006 occurred entirely within two work scope components: the facilities and equipment modernization project and the digital conversion project.

Facilities & Equipment Modernization Project – Capital Grant Program

Overall progress to date includes successful development and implementation of this capital grant program. APBI modeled the grant program after three well established programs which are familiar to public broadcasters in Alaska:

1. Rasmuson Foundation.
2. Corporation for Public Broadcasting.
3. Public Telecommunications & Facilities Program, U.S. Dept. of Commerce.

We focused on the Rasmuson Foundation approach while incorporating some good ideas from the other two entities. We sought a high degree of integrity and accountability throughout development of the grant program.

Milestones reached since project inception:

- Development of grant program concept and materials: overview, guidelines, priorities, procedures and panel review process for the first two rounds; including development of application paperwork and administrative systems.
- Announcement of the Round One grant period occurred July 27, 2005. Applications were distributed electronically as well as via U.S. mail to all eligible entities. Deadline for the applications was September 30, 2005.
- A five person, independent grant panel met in Anchorage October 16-17, 2005 to review Round One proposals and make recommendations resulting in seventeen projects being awarded \$788,669 toward a total project cost of \$1,206,178. Collectively, the stations provided a 35% match toward the total project cost.
- The panel process went smoothly and produced a legitimate independent review of the proposals per the grant program priorities and guidelines. It was evident that the panel had read all proposals and had come to the meeting ready to identify and discuss the strengths and weaknesses of the proposals. Throughout the review, the APBI staff provided additional station and system information to the panel as requested.
- On October 26, 2005 the APBI board of directors approved the overall package of recommendations made by the panel and management. Round One award announcements were made October 31, 2005.

- Announcement of the Round Two grant period occurred March 10, 2006 Applications were distributed electronically as well as via U.S. mail to all eligible entities. Deadline for the applications was June 1, 2006.
- Round Two received seventeen proposals requesting \$958,315 in financial assistance toward total project costs of \$1,147,396. Collectively, the stations provided approximately 16% match toward the total project cost. Five proposals were for facility improvements and twelve were for equipment.
- A five person, independent grant panel met in Anchorage June 29-30, 2006 to review proposals and make recommendations. The panel recommended that eight proposals be funded with no conditions attached and six be funded with conditions attached. Three proposals were not funded although the panel recommended that the applicants be given an opportunity to resubmit their proposals in order to address panel concerns. Two out of three proposals have been resubmitted and awarded a grant.
- Target date for completion of the overall project is December 31, 2008.

Recent activity and next steps:

APBI staff met with new project officer Michelle O’Leary at the Denali Commission offices. Michelle has also made a site visit to the APBI office in Anchorage. APBI staff will meet with Michelle again in mid November to discuss participation in the Pre-Development and Training programs, as well as strategic discussions for FY07.

APBI representatives attended the Denali Commission’s October 25, 2006 quarterly meeting in Anchorage.

Round Three of the grant program is tentatively scheduled for summer 2007.

Public Radio Conversion to Digital Transmission

APBI continues to provide engineering advice, counsel and overall project management for the conversion to digital broadcasting in Alaska.

Milestones to date include:

- Installation and conversion of stations began in November 2005 in Southeast Alaska at KRBD Ketchikan and KSTK Wrangell; the first non-commercial digital broadcasters in Alaska.
- Conversion to digital radio continues to make progress. Six southeast Alaska stations are operating in both digital and analog. Stations in Kotzebue, Sand Point,

Homer and Valdez all have new digital transmitters installed but are only operating in analog at the moment. The Talkeetna transmitter is installed and will be turned on soon. Installation work is underway or scheduled soon in Chevak, Ft. Yukon, St. Paul, McGrath and Unalakleet. The remaining stations are either waiting for equipment or working on design and work scope issues.

- Coordination of group bids on behalf of twenty three out of twenty six stations has been completed. Coordination of group equipment purchases has proven to be cost efficient, with most items coming in below the original estimates per station. Competitive bidding for group equipment purchase has yielded an average discount of 26% thus far resulting in savings of \$468,000.
- Group purchasing also results in standardizing core transmission technology throughout the statewide system. This in turn fosters more efficient and cost effective technical support within the system today and in the future.
- Technical training on new equipment has occurred for some key station technical staff including four engineers who had a full week of digital transmission equipment training at Harris Broadcasters in Quincy, Illinois. Technical support for station design and installation work of their digital transmission facilities is on-going with all stations.

Activity detail July 1, 2006 September 30, 2006:

The Alaska public radio system is continuing its conversion to HD Radio.

A. Round I Radio Conversion

- a. Southeast Alaska Stations:** All five stations in the Coast Alaska region have completed installations of HD radio equipment. Starting in November, the stations will be installing the second generation of digital equipment. The prime vendor of the HD equipment will provide this new equipment at no cost to the stations.
- b. KCHU-AM, Valdez:** The transmitter, STL, and audio processor have been installed. There has been a most impressive increase in the coverage area and in the quality of the audio. The ATU (antenna tuning unit) has arrived in Valdez. Upon examination I found that a component had broken loose during shipping and had caused a good deal of damage. The manufacturer has provided replacement parts. I will install these parts within the next week or so. I doubt that the unit can be adjusted and installed as there is quite a bit of snow at the transmitter site. In a short time the road will be almost impassable.
- c. KYUK-AM, Bethel:** The completion of the project awaits the design and construction of a new broadcast tower. In AM broadcasting the tower is the antenna. The existing tower has severe structural deficiencies and is too short. This tower should be designed, fabricated, and installed in 2007.

B. Round II Radio conversion:

- a. Transmission Equipment:** Transmission equipment ordered from Harris has arrived at all stations.
 - i. KHNS-FM, Haines:** The digital conversion has been completed in Haines.
 - ii. All other Round 2 stations:**
 - 1.** Equipment has arrived at all of the stations and is in the process of being installed. We may get caught by winter weather at some of the stations which will cause a delay in installation.
- b. HD Radio Antenna Tuning Units:** Each AM station has a tower that acts as an antenna. It also has a device known as the Antenna Tuning Unit (ATU). One of these units has arrived at KCHU-AM, Valdez. It arrived in a damaged condition. The manufacturer has shipped replacement parts. We hope to have it installed shortly. Design and construction of the rest of the units will take most of the fall and winter.

The systems that were installed in Southeast Alaska have been performing according to designed specifications. KTOO in Juneau is the first station in Alaska to transmit two independent digital program streams. This program has given APBI a great opportunity to send qualified experienced engineers to stations in need of technical support. We have discovered engineering and safety issues which are now being addressed. A good deal of tower work has been accomplished as well as improvements in the electrical installations at some transmitter sites.