

**Project Report**  
**Alaska Public Broadcasting, Inc.**  
**Project Number No. 174-05**  
**April 1, 2008 – June 30, 2008**

**Project Title & Summary**

Four project work scopes are embodied in this grant award. The majority of the award is dedicated to two work scopes, the Capital Grant Program and radio digital conversion.

**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: April 1, 2008 – June 30, 2008**

Progress and activity during the second quarter of 2008 occurred within two work scope components: the facilities and equipment modernization project and the digital conversion project. .

### **Facilities & Equipment Modernization Project – Capital Grant Program**

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:**

#### 2005

- Development of grant program concept and materials: overview, guidelines, priorities, procedures and panel review process, including development of application paperwork and administrative systems.
- Announcement of the Round I 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 I proposals and make recommendations resulting in seventeen projects being awarded \$815,529 toward a total project cost of \$1,228,990. Collectively, the stations funded 34% of 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 I award announcements were made October 31, 2005.

## 2006

- Announcement of the Round II 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 II received seventeen proposals requesting \$998,290 in financial assistance toward total project costs of \$1,170,232. Collectively, the stations funded approximately 15% of 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. All three proposals were resubmitted and awarded grants.

## 2007

- An update of the system wide assessment was completed in August, 2007. Although many needs have been met since the original assessment in 2004, the system reports approximately \$36 million in unmet capital needs.
- Announcement of Round III of the grant program occurred August 17, 2007. Applications were distributed electronically to all eligible entities. Deadline for application was October, 19, 2007. Sixteen proposals were received by the deadline requesting \$916,371 toward a combined total project cost of \$1,179,703. Collectively, the stations funded approximately 17% of the total project costs. The proposals were reviewed by a grant panel on November 15-16, 2007.
- Round III grant award announcements were made in early December, 2007. The panel recommended that five proposals be funded with no conditions attached and eight 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. One of the three proposals has been resubmitted and was awarded a grant following additional panel review.

## 2008

- As reported above, Round III grant award announcements were made in early December, 2007. The panel recommended that five proposals be funded with no conditions attached and eight be funded with conditions attached. All of these projects are now underway. 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. One of the three proposals has been resubmitted and was awarded a grant following additional panel review.

- Round IV will be announced in October 2008 with panel review in mid-January 2009 and award announcements in early February 2009.

APBI continues to monitor grantee compliance for all projects through quarterly reporting requirements. The overall grant program will be evaluated in advance of announcing Round IV in order to identify any adjustments or revisions to improve the effectiveness of the program.

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## **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. Twenty public radio stations in Alaska have fully converted to digital broadcast technology. Four stations are mostly converted with final installation activity scheduled by the end of 2008. The remaining stations are 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 report and detail April 1, 2008 – June 30, 2008:**

Conversion of stations to HD digital radio is continuing. APBI engineers traveled to several AM transmitter sites to install the digital transmitting equipment, adjust the equipment to meet FCC and Ibiqity specifications, conduct listening tests, and instruct station personnel in operation of the new equipment.

- 1) **KUHB-FM, Saint Paul**
  - a) **HD Installation Problems:**
    - i) The transmitter is in a room attached to the main studio in the City of Saint Paul Building. Local maintenance workers have installed ductwork into the room to allow proper ventilation of the transmitter hot cooling air. The system leaves a great deal to be desired and they have ordered the necessary parts to rectify the ventilation problem.
    - ii) There was no AC power service into the room for power cable and circuit breaker to serve the new transmitter. There was no local licensed electrician to install the service. APBI provided an electrician that installed a fused disconnect and all proper wiring. This was a difficult job because of the age of the building and the pervious installation of wiring that was not up to code.
  - b) **Transmitter Installation:**
    - i) We installed a RF transfer panel. This allows the old analog transmitter to be placed into service very quickly by local personnel if the new HD transmitter or associated equipment fails. As far as I know this is the only public radio station in Alaska to have such a system. We designed this system because it is so difficult to get to Saint Paul if they go off the air for some reason.
    - ii) The school would eventually like to start use of a second HD channel in the transmitter for training High School Students in Broadcast Operations.
  - c) **Power Cost Increases and Building Problems:**
    - i) Fuel costs are extremely high with home heating oil nearly five dollars a gallon. Diesel fuel for the power plant is nearing six dollars a gallon. KUHB will struggle to afford the cost of digital transmission.
  - d) **Audio Testing:**
    - i) The audio quality is extremely good and coverage is improved over the previous transmitter.
- 2) **KZPA-AM, Fort Yukon:**
  - a) **HD Equipment Installation:**
    - i) All went well until we attempted final alignment when we found a defect in a unit called a Dexstar Exporter. This required the unit to be returned to the factory for repair and we had to leave without completing the installation. We returned to the site with a repaired unit in July and finished the installation.
- 3) **KUAC-FM, Fairbanks:**
  - a) **Equipment Installation:**
    - i) We installed all the equipment except for the transmitting antenna. The installation was complicated by the fact that some of the equipment was installed at the studio and the signal had then to be relayed though another building via fiber, before it was transmitted via a STL radio link to the transmitter site on Ester Dome. When we attempted to install the antenna at the transmitter site, we discovered that thieves cut the lock on a gate and stole the copper cable that fed the antenna. New cable was ordered and arrived in July and the HD transmitter is now operating at low power pending the resolution of an antenna issue.