

State of Alaska FY2008 Governor's Operating Budget

Department of Administration Satellite Infrastructure Component Budget Summary

Component: Satellite Infrastructure

Contribution to Department's Mission

To sustain the key satellite infrastructure used for the delivery of audio and video news, public affairs, legislative and other state government content, public service information, entertainment, education, and state and federal emergency alert services to bush, rural and urban communities statewide.

Core Services

The State's satellite infrastructure provides for the delivery of the following key services to listeners and viewers across Alaska:

Alaska One - statewide public television originating at KUAC Fairbanks distributed by satellite and broadcast throughout the state, providing rural viewers with Alaskan programming, reducing overhead and significant duplication of effort.

Gavel to Gavel Alaska - coverage of the Legislature and other government activities originating from KTOO Juneau, distributed by satellite, accessible to 80% of Alaskans.

UATV - Distance education from the University of Alaska, distributed by satellite and reaching 100 communities and UA's rural campuses.

Alaska Rural Communications Service (ARCS) - reaching some 230 communities across Alaska with public television's educational programming, along with news and information, important statewide events, and commercial television programming.

State and Federal Emergency Alert Service (EAS) - delivery of transmitted tests of the Emergency Alert System statewide to both urban and rural communities as provided for in the State of Alaska's plan for emergency preparedness.

Public Radio Services - delivery of programming by eight (8) different public radio stations and the Alaska Public Radio Network (APRN) to the 26 individual local stations and their networks of radio signal translators, thereby reaching a total of 95% of Alaska's population.

Technical monitoring and system maintenance of the satellite infrastructure is managed by Alaska Public Broadcasting Inc. APBI provides comprehensive management support and trouble shooting services at the statewide and community levels.

APBI also provides information and advice to DOA/ETS on public telecommunications policy issues, public broadcasting needs and issues and responds to requests for service from DOA or ETS on various other telecommunications issues, as requested.

FY2008 Resources Allocated to Achieve Results

FY2008 Component Budget: \$2,046,000	Personnel:	
	Full time	0
	Part time	0
	Total	0

Key Component Challenges

APBI continues to help the State of Alaska identify alternatives and/or gain cost efficiencies for this component. The

current high rate of change in digital technology is eclipsing the functionality of the State owned infrastructure within this component. Much of the current equipment is being replaced as it has reached an age where the manufacturer support has ceased. Design changes to address this challenge began in 2005 and should be fully implemented during FY07. This new equipment and system design work is being coordinated by APBI and funded through grants from the Denali Commission resulting in no expense to the State.

Significant Changes in Results to be Delivered in FY2008

The Alaska satellite infrastructure management group will continue to work to maintain cost effective services for all users. Improvements in the breadth of service offerings, reliability of the delivery system and new opportunities for public private partnerships will continue to be pursued by APBI. Funds for the following projects have been made available to APBI through the Denali Commission and will be used to modernize the State owned infrastructure at no cost to the State of Alaska.

Those grants provide for projects as summarized below:

ARCS/Satellite Infrastructure Revitalization: Launched in March of 2004, this project restores community television systems to reliable service by repairing or replacing the low power TV infrastructure and satellite encoding suites; we now control the ARCS program stream, improving its broadcast delivery; continue to examine options for digital multi-channel, over the air public telecommunications program services via ARCS and consolidation of the uplinking requirements from three locations to one.

Data Distribution Network: APBI continues to work on the deployment of the interconnection of Alaska's public broadcasting stations with a contemporary digital data network using the public internet and virtual private network technologies to provide voice, data, video and audio programming. Analysis of satellite based dedicated circuits for system connection is underway. The network operations center is now operational and co-located with UA Data Center in Fairbanks and the network administration center is located at APBI in Anchorage. Three regional hub sites are operational and located in Anchorage, Fairbanks, and Juneau, and will eventually serve the 26 public radio stations and 4 public television stations. Work began in March, 2004 and the plan is to be fully functional in FY07.

APBI and the University of Alaska are moving the satellite uplink suite for UATV to Fairbanks from Juneau in order to take advantage of the additional facilities and resources of the University's public television station KUAC-TV and the information technology staffs of both UAF and the UA Statewide office. When the reconfiguration of the delivery system is complete, all three main campuses of the University, Anchorage, Fairbanks, and Juneau will be contributing content to UATV by both satellite delivery and an active fiber optic link thereby increasing the amount and variety of distance education opportunities for Alaskans. This consolidation of uplinking into a single point will also include Gavel to Gavel and ARCS; reducing the number of uplink locations from three to one, when accomplished, will result in some immediate savings for the State. Replacing the equipment with new, state of the art equipment, will allow for some new additional capacity without immediately increasing costs.

Major Component Accomplishments in 2006

APBI provides for program expansion with little or no additional cost to the State of Alaska or the system users. APBI works closely with our Congressional delegation to secure capital funds for investment in new technology and basic infrastructure repair and replacement.

In close cooperation with the Enterprise Technology Services, APBI has accepted the responsibility for the management and coordination of the statewide ARCS television program service. APBI also has the responsibility for the satellite infrastructure management, governance and system technical oversight.

This past year, APBI handled approximately 900 technical service calls from 130 individual rural Alaskan communities. Service was restored in more than 30 communities, some off for years, including Sleetemute, Stony River, Marshall, Craig, Delta Junction and Talkeetna. System-wide issues ranged from tracking failures in the Juneau uplink path, to coordinating and facilitating satellite frequency moves for both Fairbanks and Anchorage uplinks. A major refresh of the satellite uplink infrastructure is underway and another frequency move on the satellite is scheduled. APBI was also instrumental in tracing satellite interference caused by over-modulating uplinks in the lower 48 and reporting offenders to AT&T and SES-Americom, owners of the State satellite.

APBI has replaced many of the functions formerly provided by the State, including management assistance, engineering

and technical advice, training of local staff and boards, and liaison with numerous governmental entities.

APBI implemented a technical plan it developed in late FY01 and early FY02 to reduce the required bandwidth for the satellite delivery of the four television services, thereby reducing potentially huge cost increases stemming from new tariffs. This planning continues today targeting expanded program delivery at no additional cost. This technical change was implemented at the state's three satellite uplink sites in Anchorage, Juneau and Fairbanks by an outside contractor, managed and funded by APBI at no cost to the State of Alaska.

Statutory and Regulatory Authority

AS 44.21.305-330 Telecommunications

Contact Information
<p>Contact: Mike Callahan, Director, Enterprise Technology Services Phone: (907) 269-5744 Fax: (907) 269-5562 E-mail: mike_callahan@admin.state.ak.us</p>

**Satellite Infrastructure
Component Financial Summary**

All dollars shown in thousands

	FY2006 Actuals	FY2007 Management Plan	FY2008 Governor
Non-Formula Program:			
Component Expenditures:			
71000 Personal Services	0.0	0.0	0.0
72000 Travel	0.0	0.0	0.0
73000 Services	1,141.1	1,777.1	1,777.1
74000 Commodities	0.1	0.0	0.0
75000 Capital Outlay	0.0	0.0	0.0
77000 Grants, Benefits	160.0	268.9	268.9
78000 Miscellaneous	0.0	0.0	0.0
Expenditure Totals	1,301.2	2,046.0	2,046.0
Funding Sources:			
1004 General Fund Receipts	841.1	822.3	822.3
1007 Inter-Agency Receipts	213.1	100.0	100.0
1108 Statutory Designated Program Receipts	247.0	1,123.7	1,123.7
Funding Totals	1,301.2	2,046.0	2,046.0

Estimated Revenue Collections

Description	Master Revenue Account	FY2006 Actuals	FY2007 Management Plan	FY2008 Governor
Unrestricted Revenues				
None.		0.0	0.0	0.0
Unrestricted Total		0.0	0.0	0.0
Restricted Revenues				
Interagency Receipts	51015	213.1	100.0	100.0
Statutory Designated Program Receipts	51063	247.0	300.0	1,123.7
Restricted Total		460.1	400.0	1,223.7
Total Estimated Revenues		460.1	400.0	1,223.7

**Summary of Component Budget Changes
From FY2007 Management Plan to FY2008 Governor**

All dollars shown in thousands

	<u>General Funds</u>	<u>Federal Funds</u>	<u>Other Funds</u>	<u>Total Funds</u>
FY2007 Management Plan	822.3	0.0	1,223.7	2,046.0
FY2008 Governor	822.3	0.0	1,223.7	2,046.0