

# **State of Alaska FY2012 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 communities statewide.

### Core Services

- Alaska One - statewide public television (outside of Anchorage area) originating at KUAC Fairbanks distributed by satellite and broadcast throughout the state, providing rural viewers with Alaskan and national non-commercial programming.
- 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 more than 200 communities across Alaska with public television's educational programming, along with news and information, important statewide events, and commercial television programming. The State of Alaska owns and operates ARCS.
- State and Federal Emergency Alert Service (EAS) - delivery of transmitted tests of the Emergency Alert System statewide to bush, rural and urban communities as provided for in the State of Alaska's plan for emergency preparedness.
- Public Radio Services - delivery of programming by six different public radio stations and the Alaska Public Radio Network (APRN) to the 26 individual local stations and their translators 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.

### Key Component Challenges

Maintenance: Over the past six years, village based equipment repair and replacement has been funded by APBI's Denali Commission grant, a grant that as of June 30, 2010, has been completed and closed out. Individuals at remote sites continue to provide maintenance and troubleshooting labor on a volunteer basis. Their communities provide free space and power for antennas and electronics. The fleet of 4.5 meter Cband satellite dish antennas, having been in service for over 20 years, is in remarkably good shape, albeit with some striking exceptions where weather and conditions have conspired to render some of them unserviceable and in need of replacement. No state funds are currently designated to pay for parts, labor or shipping costs associated with maintenance of the ARCS system.

DTV Conversion: In September the FCC announced that, "low power television stations should now begin to focus their time and resources on developing and implementing a digital conversion plan." They have inferred that the deadline to complete such a conversion may fall between 2012 and 2015. In either case, time is of the essence while federal funds are still available to reimburse the equipment costs of transitioning. A major benefit of converting ARCS to digital is the multi-channel nature of DTV, offering viewers increased public service TV channels from a single transmitter. The state should move expeditiously to meet the impending deadline, take advantage of any available funds, and embrace the opportunity to expand public service programming for bush residents.

New Standard for Emergency Alerts: The Federal Emergency Management Agency (FEMA) has announced the adoption of a new digital message format for the next generation emergency alert and warning network. As a participant in the State of Alaska Emergency Alert System (EAS) Plan, ARCS maintains a membership role in the Alaska State Emergency Communications Committee (SECC). The ARCS satellite signal is a designated Monitoring Assignment choice available to all Alaska broadcasters, while the ARCS LPTV signals in bush communities provide year round 24/7 access to emergency information for rural viewers.

APBI will continue to help the State identify alternatives and or gain cost efficiencies for this component. The current high rate of change in digital technology will continue to eclipse the functionality of the State owned infrastructure within this component. All of the original uplinking infrastructure equipment was replaced as it had reached an age where the manufacturer support had ceased. The new equipment was fully implemented in FY07. This equipment and system design work was coordinated by APBI and funded through grants from the Denali Commission resulting in no expense to the State. This core technology should be adequate for another 5-7 years.

## Significant Changes in Results to be Delivered in FY2012

With the completion of the Denali funded ARCS/Satellite Infrastructure Revitalization Project, the burden of paying for future repair, refurbishment and replacement of failed equipment falls to the individual communities as they become affected by service outages. While APBI will continue to coordinate and facilitate this work, each community will be asked in turn to provide funding as it applies to their specific needs. Communities will undoubtedly request funding piecemeal through their legislative representatives in the form of discrete capital grants resulting in redundancies at the bureaucratic level and loss of efficiency and increase in cost of execution due to the lack of economies of scale. At length some communities will be able to keep their ARCS service operational while others will not, contributing to the overall degradation of the system.

Should the State of Alaska decide to move forward with the DTV conversion project, in addition to expanding viewer service, all of the remote electronics at each site converted will be replaced with new. Equipment costs will be reimbursable from the US Department of Commerce. Additionally, the new equipment will carry warranties of 1 to 2 years negating the need for associated repair costs during that time period.

## Major Component Accomplishments in 2010

APBI successfully managed and coordinated the statewide ARCS television program service, as well as the satellite infrastructure that delivers that service to over 200 communities, throughout 2010 without any major system-wide shutdowns, failures or outages. In the course of the year APBI handled over 610 contacts from 100 locations around Alaska, restoring ARCS service in over 35 cases.

ARCS programming highlights include the annual week-long AFN broadcast, live coverage of the Lu Young funeral, the Senator Ted Stevens Memorial, sports championships including the ASAA High School tournaments for boys and girls teams in all four divisions, the Governor's State of the State address, and Alaska's Congressional Delegation addresses to the Joint Legislative Session. These and many other programs were delivered into the homes of thousands of Alaskans watching ARCS in communities where other alternatives are either too expensive or simply do not exist.

APBI successfully managed the satellite infrastructure responsible for delivering the ARCS service, the Alaska One statewide PBS service and the University of Alaska's educational channel, UATV, along with several public radio channels including the Alaska Public Radio Network.

APBI successfully participated in all of the State of Alaska Emergency Alert System (EAS) monthly exercises as well as all real emergency alerts. In January APBI participated in the first ever test of the live EAN code as part of the national EAS plan, including planning sessions with FEMA, the State of Alaska Division of Emergency Services, and the Alaska Broadcasters Association. APBI's office was one of several official monitoring points for the exercise, and subsequently video recordings of observations during the test were made available online for proof of performance and demonstration purposes. The ARCS television system is one of three broadcast entities that distribute such alerts statewide, but it was the only one to successfully receive and relay the alert statewide.

APBI's engineering staff developed and installed a content delivery system for receiving National Public Radio (NPR) programming at KUAC in Fairbanks. This equipment is used to access NPR programming for retransmission via the state satellite to public radio stations in far western Alaska that are unable to see the NPR satellite.

## Statutory and Regulatory Authority

AS 44.21.305-330 Telecommunications

**Contact Information**

**Contact:** Jamie Waste, Executive Director

**Phone:** (907) 586-1600

**Fax:** (907) 586-5692

**E-mail:** jamie@akpb.org

**Satellite Infrastructure  
Component Financial Summary**

*All dollars shown in thousands*

	FY2010 Actuals	FY2011 Management Plan	FY2012 Governor
<b>Non-Formula Program:</b>			
<b>Component Expenditures:</b>			
71000 Personal Services	0.0	0.0	0.0
72000 Travel	0.0	0.0	0.0
73000 Services	887.7	902.1	902.1
74000 Commodities	0.0	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
<b>Expenditure Totals</b>	<b>1,047.7</b>	<b>1,171.0</b>	<b>1,171.0</b>
<b>Funding Sources:</b>			
1004 General Fund Receipts	847.7	847.3	847.3
1007 Inter-Agency Receipts	200.0	100.0	100.0
1108 Statutory Designated Program Receipts	0.0	223.7	223.7
<b>Funding Totals</b>	<b>1,047.7</b>	<b>1,171.0</b>	<b>1,171.0</b>

**Estimated Revenue Collections**

Description	Master Revenue Account	FY2010 Actuals	FY2011 Management Plan	FY2012 Governor
<b>Unrestricted Revenues</b>				
None.		0.0	0.0	0.0
<b>Unrestricted Total</b>		<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Restricted Revenues</b>				
Interagency Receipts	51015	200.0	100.0	100.0
Statutory Designated Program Receipts	51063	0.0	223.7	223.7
<b>Restricted Total</b>		<b>200.0</b>	<b>323.7</b>	<b>323.7</b>
<b>Total Estimated Revenues</b>		<b>200.0</b>	<b>323.7</b>	<b>323.7</b>

**Summary of Component Budget Changes  
From FY2011 Management Plan to FY2012 Governor**

*All dollars shown in thousands*

	<u>Unrestricted Gen (UGF)</u>	<u>Designated Gen (DGF)</u>	<u>Other Funds</u>	<u>Federal Funds</u>	<u>Total Funds</u>
<b>FY2011 Management Plan</b>	<b>847.3</b>	<b>0.0</b>	<b>323.7</b>	<b>0.0</b>	<b>1,171.0</b>
<b>FY2012 Governor</b>	<b>847.3</b>	<b>0.0</b>	<b>323.7</b>	<b>0.0</b>	<b>1,171.0</b>

**Component Detail All Funds**  
**Department of Administration**

**Component:** Satellite Infrastructure (2349)  
**RDU:** Public Communications Services (30)

	FY2010 Actuals	FY2011 Conference Committee (Final)	FY2011 Authorized	FY2011 Management Plan	FY2012 Governor	FY2011 Management Plan vs FY2012 Governor	
71000 Personal Services	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
72000 Travel	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
73000 Services	887.7	902.1	902.1	902.1	902.1	0.0	0.0%
74000 Commodities	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
75000 Capital Outlay	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
77000 Grants, Benefits	160.0	268.9	268.9	268.9	268.9	0.0	0.0%
78000 Miscellaneous	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
<b>Totals</b>	<b>1,047.7</b>	<b>1,171.0</b>	<b>1,171.0</b>	<b>1,171.0</b>	<b>1,171.0</b>	<b>0.0</b>	<b>0.0%</b>
<b>Fund Sources:</b>							
1004 Gen Fund	847.7	847.3	847.3	847.3	847.3	0.0	0.0%
1007 I/A Rcpts	200.0	100.0	100.0	100.0	100.0	0.0	0.0%
1108 Stat Desig	0.0	223.7	223.7	223.7	223.7	0.0	0.0%
<b>Unrestricted General (UGF)</b>	<b>847.7</b>	<b>847.3</b>	<b>847.3</b>	<b>847.3</b>	<b>847.3</b>	<b>0.0</b>	<b>0.0%</b>
<b>Designated General (DGF)</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0%</b>
<b>Other Funds</b>	<b>200.0</b>	<b>323.7</b>	<b>323.7</b>	<b>323.7</b>	<b>323.7</b>	<b>0.0</b>	<b>0.0%</b>
<b>Federal Funds</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0%</b>
<b>Positions:</b>							
Permanent Full Time	0	0	0	0	0	0	0.0%
Permanent Part Time	0	0	0	0	0	0	0.0%
Non Permanent	0	0	0	0	0	0	0.0%

**Change Record Detail - Multiple Scenarios With Descriptions**  
**Department of Administration**

**Component:** Satellite Infrastructure (2349)  
**RDU:** Public Communications Services (30)

Scenario/Change Record Title	Trans Type	Totals	Personal Services	Travel	Services	Commodities	Capital Outlay	Grants, Benefits	Miscellaneous	Positions		NP
										PFT	PPT	
***** Changes From FY2011 Conference Committee (Final) To FY2011 Authorized *****												
<b>FY2011 Conference Committee</b>												
	ConfCom	1,171.0	0.0	0.0	902.1	0.0	0.0	268.9	0.0	0	0	0
1004 Gen Fund		847.3										
1007 I/A Rcpts		100.0										
1108 Stat Desig		223.7										
<b>Subtotal</b>		<b>1,171.0</b>	<b>0.0</b>	<b>0.0</b>	<b>902.1</b>	<b>0.0</b>	<b>0.0</b>	<b>268.9</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
***** Changes From FY2011 Authorized To FY2011 Management Plan *****												
<b>Subtotal</b>		<b>1,171.0</b>	<b>0.0</b>	<b>0.0</b>	<b>902.1</b>	<b>0.0</b>	<b>0.0</b>	<b>268.9</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
***** Changes From FY2011 Management Plan To FY2012 Governor *****												
<b>Totals</b>		<b>1,171.0</b>	<b>0.0</b>	<b>0.0</b>	<b>902.1</b>	<b>0.0</b>	<b>0.0</b>	<b>268.9</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>

**Line Item Detail**  
**Department of Administration**  
**Services**

**Component:** Satellite Infrastructure (2349)  
**RDU:** Public Communications Services (30)

Line Number	Line Name		FY2010 Actuals	FY2011 Management Plan	FY2012 Governor
73000	Services		887.7	902.1	902.1
Expenditure Account	Servicing Agency	Explanation	FY2010 Actuals	FY2011 Management Plan	FY2012 Governor
<b>73000 Services Detail Totals</b>			<b>887.7</b>	<b>902.1</b>	<b>902.1</b>
73152		IT Consulting	80.4	80.4	80.4
		IT professional services for the support and maintenance of the state's satellite infrastructure.			
73157		Television	807.3	817.8	817.8
		Transponder costs.			
73668	Enterprise Technology Services	Room/Space	0.0	3.9	3.9
		Space and power costs.			

**Line Item Detail**  
**Department of Administration**  
**Grants, Benefits**

**Component:** Satellite Infrastructure (2349)  
**RDU:** Public Communications Services (30)

Line Number	Line Name		FY2010 Actuals	FY2011 Management Plan	FY2012 Governor
77000	Grants, Benefits		160.0	268.9	268.9
			<b>FY2010 Actuals</b>	<b>FY2011 Management Plan</b>	<b>FY2012 Governor</b>
<b>Expenditure Account</b>	<b>Servicing Agency</b>	<b>Explanation</b>			
<b>77000 Grants, Benefits Detail Totals</b>			<b>160.0</b>	<b>268.9</b>	<b>268.9</b>
77437	General Government		160.0	268.9	268.9

**Restricted Revenue Detail**  
**Department of Administration**

**Component:** Satellite Infrastructure (2349)  
**RDU:** Public Communications Services (30)

<b>Master Account</b>	<b>Revenue Description</b>	<b>FY2010 Actuals</b>	<b>FY2011 Management Plan</b>	<b>FY2012 Governor</b>
51015	Interagency Receipts	200.0	100.0	100.0

**Detail Information**

<b>Revenue Amount</b>	<b>Revenue Description</b>	<b>Component</b>	<b>Collocation Code</b>	<b>AKSAS Fund</b>	<b>FY2010 Actuals</b>	<b>FY2011 Management Plan</b>	<b>FY2012 Governor</b>
59450	University Of Alaska RSA 0200813, University of Alaska Fairbanks transponder fee.	Fairbanks Campus	2300200	11100	100.0	0.0	0.0
59450	University Of Alaska Alaska transponder fee for University of Alaska Fairbanks RSA.	Fairbanks Campus	2309202	11100	100.0	100.0	100.0

**Restricted Revenue Detail**  
**Department of Administration**

**Component:** Satellite Infrastructure (2349)  
**RDU:** Public Communications Services (30)

Master Account	Revenue Description	FY2010 Actuals	FY2011 Management Plan	FY2012 Governor
51063	Statutory Designated Program Receipts	0.0	223.7	223.7

**Detail Information**

Revenue Amount	Revenue Description	Component	Collocation Code	AKSAS Fund	FY2010 Actuals	FY2011 Management Plan	FY2012 Governor
55922	Stat Desig -Contract		2300200	11100	0.0	223.7	223.7

**Inter-Agency Services**  
**Department of Administration**

**Component:** Satellite Infrastructure (2349)  
**RDU:** Public Communications Services (30)

Expenditure Account	Service Description	Service Type	Servicing Agency	FY2010 Actuals	FY2011	
					Management Plan	FY2012 Governor
73668	Room/Space	Space and power costs.	Intra-dept Enterprise Technology Services	0.0	3.9	3.9
<b>73668 Room/Space subtotal:</b>				<b>0.0</b>	<b>3.9</b>	<b>3.9</b>
<b>Satellite Infrastructure total:</b>				<b>0.0</b>	<b>3.9</b>	<b>3.9</b>
<b>Grand Total:</b>				<b>0.0</b>	<b>3.9</b>	<b>3.9</b>