



UNIVERSITY  
*of* ALASKA  

---

*Many Traditions One Alaska*

Proposed  
FY10 Capital Budget Request

Reference #3

Board of Regents  
October 31, 2008  
Fairbanks, Alaska

Prepared by Statewide Planning & Budget  
450-8180

## **Table of Contents**

Introduction.....	1
FY10 Capital Budget Request for State Appropriation .....	3
Capital Budget Request Summary by Campus.....	4
Renewal and Renovation (R&R) Proposed Distribution Methodology .....	5
Priority Renewal and Renovation (R&R) Projects by MAU.....	6
FY10 Capital Request Project Narratives.....	10
UAF Life Sciences Fact Sheet .....	37
UAS Auke Lake Way Fact Sheet.....	38
UAA Sports Center Fact Sheet .....	39
Capital Budget Request v. State Appropriation FY00-FY09 .....	41
Capital Budget Request v. State Appropriation (chart) .....	42
State Appropriation Summary by Category/MAU FY00-FY09.....	43
Average State Appropriations by Category (chart) .....	44
FY10 Approved Capital Budget Guidelines.....	45

**University of Alaska**  
**Proposed FY10 Capital Budget Request**  
**Introduction**

This capital budget request presents requests in two categories, 1) Facility capital needs and 2) Project and equipment requests. The two categories combined will require state funding of approximately \$500 million; however, at the time of this writing, the figures regarding the engineering buildings at UAA and UAF still need refinement, and will be presented to the Board at the October meeting. The facility capital needs category includes the recommended highest priority needs: annual renewal and renovation (R&R) requirement, UAF Life Sciences Innovation and Learning, UAS Auke Lake Way Campus Entry Improvements & Road Alignment, UAA Sports Arena, Planning for New Facilities, and Reducing Major R&R and Deferred Maintenance Backlog. Projects in these categories are detailed below. In addition to these facility capital priorities, this budget request proposes a new emphasis on strategically important requests related projects and equipment. Requests include projects specific to Alaska's interest in energy and climate, and education policy. Also included are requests for a 5-year comprehensive administrative and academic equipment refresh and project investments related to implementing compliance/business efficiency solutions throughout the University system.

- UA's Annual Facility Renewal, Renovation (R&R) and Code Compliance request of \$50M from state funds represents approximately 3 percent of UA's facilities adjusted value. Major renewals include the Science Building Renewal in Anchorage, repairs to the sanitary waste lines and critical electrical distribution in Fairbanks, and the hangar code corrections in Sitka. This amount of funding is the minimum annual level of funding necessary for UA to avoid adding to the deferred maintenance backlog. In addition to pursuing UA's annual R&R requirement, long term solutions will also be pursued -including lump sum funding of \$850 million, a \$1 billion endowment-type solution to provide \$50 million annually, and a constitutional amendment dedicating future gas royalties to fund R&R on State-owned facilities.
- UAF's Life Sciences Innovation and Learning is an alternate approach to meeting the needs of the Biological and Computational Sciences (BiCS) Program, which has been one of UA's highest capital priorities since FY02. UAF has modified its approach to meeting the goals of the primary research and teaching facility, reducing the number of faculty and graduate spaces and creating a smaller biomedical and life science research program. In conjunction with reducing the scope of the construction, UAF has also proposed an alternate funding plan to reduce the amount of state funding required: proposing general funds for the teaching space and UA funded revenue bonds for half the research programs. The original BIOS concept requested in FY08 and FY09 is the right solution to meet the needs of these programs and if funded via all general funds, would create a much healthier research enterprise. However, UAF has developed this alternative approach as the minimum necessary to address UAF's immediate life science instruction and research space needs. Keep in mind, this alternative does not provide for program growth, merely immediate needs. This approach provides modern and expanded life sciences classrooms and labs, replacing the 1965 era labs in the Bunnell building. More importantly, it provides integration of teaching and research by locating the classroom and labs in the West Ridge core. UAF's research success is dependent on immediate funding for the Life Sciences Innovation and Learning Facility. This is proposed as UA's highest priority new construction project. Additional information is on page 37.
- UAS's Auke Lake Way Campus Entry Improvements and Road Realignment request will remove public vehicular traffic from the center of the Juneau academic core and reconstruct the existing roadway to a pedestrian greenway. Addressing this road alignment in conjunction with the Anderson Building renovation (currently underway) is the most effective and timely approach to both projects. Additional information is on page 38.

- UAA's Sports Arena request will greatly reduce the current major shortfall in square footage devoted to athletics: from intercollegiate to academics to intramural and community recreational use. The arena will include a 3,500 seat performance gymnasium for basketball, volleyball, and other university and community events that transforms into three multi-use courts. There will also be a gymnastics facility, and another two-court auxiliary gym. A one-eighth mile running track will circle the main gymnasium. Additionally, there will be significant support space for teams, faculty, and staff. This project received funding for design and site development in FY09. Additional information is on page 39.
- New Facilities Planning funds are requested for facilities necessary to accommodate instruction and research program growth, campus services, and improve energy efficiency. Planning funds are proposed for an engineering instruction facility at UAA, an engineering facility expansion and an energy technology facility at UAF, a co-generation heat and power plant at UAA in conjunction with Providence Hospital and Anchorage Municipal Light and Power (MPL), and a fire station and housing facility replacement at UAF. Also included is a funding request for a feasibility study on new facilities requested by community campuses. There were several new facilities requested by community campuses in FY10. Given the high cost of construction, maintenance and utilities, and the changing demographic at many of these sites a more thorough analysis of the facility needs is warranted.
- UA's Major R&R and Deferred Maintenance Reduction plan request of \$150M is necessary to reduce the deferred maintenance and R&R backlog. This amount, coupled with the \$50M annual R&R requirement, provides the necessary funding to begin to address the need to bring UA's facilities to appropriate standards, codes, and programmatic needs.

The separate category in the capital budget request for projects and equipment is new to UA's request in FY10. The capital project requests are aligned with UA's key operating priorities and more importantly with state policy priorities and entities. Each of these capital project requests are discreet projects that as implemented with state capital funding may leverage other funding for on-going operations or serve as start-up and proof of concept for an on-going program, as they are complete in two to five years.

- Energy projects include rural power solutions, energy data network, transportation fuel initiative, carbon sequestration options, biomass fuel options, and Alaskan coal utilization as well as funding to address projects that emerge from the state's energy plan.
- Climate projects proposed are structured to implement recommendations from the Legislative Commission on Climate and recommendations expected from the Governor's subcabinet. Examples of climate projects include digital mapping of Alaska, sea ice forecasts, natural hazard monitoring, improved weather predictions, and impact on commercial fisheries.
- The education policy project is initial policy analysis funding and start-up of a University Center for Alaska Education Policy Research at UAA.
- The administrative and academic equipment refresh and investments in projects related to implementing compliance/business efficiency solutions is a comprehensive 5-year plan to address needs throughout the University system. Year 1 includes funding necessary for health simulators, welding and heavy equipment simulators and other equipment for high demand programs. Also included is a marine davit platform, engineering, research, and information technology equipment to advance instruction effectiveness.

**University of Alaska**  
**Proposed FY10 Capital Budget Request Summary**  
**October 31, 2008**  
**(in thousands)**

	State Approp.	Receipt Authority	Total
<b>FY10 Facility Capital Needs</b>			
Maintaining Existing Facilities R&R Annual Requirement <i>Funding will be used for major renewal and renovation (R&amp;R) projects at UA's main and community campuses throughout the state, see page 5 for a distribution summary. For a list of MAU priority R&amp;R projects, please refer to pages 6-9.</i>	50,000.0		50,000.0
UAF Life Sciences Innovation and Learning	82,195.0	20,625.0	102,820.0
UAS Auke Lake Way Campus Entry Improvements & Road	4,130.0		4,130.0
UAA Sports Arena	65,000.0	10,000.0	75,000.0
UAF Alaska Region Research Vessel		90,000.0	90,000.0
Federal Receipt Authority		15,000.0	
New Facilities Planning			
UAA Engineering	TBD		TBD
UAF Engineering and Energy Technology	TBD		TBD
UAA Cogeneration Plant (PROV/MLP)	2,000.0		2,000.0
UAF Fire Station and Student Firefighter Training Center	1,000.0	500.0	1,000.0
Feasibility Studies Community Campuses New Facilities	4,000.0		4,000.0
Reducing Major R&R and Deferred Maintenance Backlog <i>Funding will be used for major renewal and renovation (R&amp;R) projects at UA's main and community campuses throughout the state, see page 5 for a distribution summary. For a list of MAU priority R&amp;R projects, please refer to pages 6-9.</i>	150,000.0		150,000.0
<b>FY10 Facility Capital Needs</b>	<b>358,325.0+</b>	<b>136,125.0</b>	<b>468,950.0+</b>
<b>FY10 Project and Equipment Requests</b>			
Energy Projects	20,950.0		20,950.0
Climate Projects	21,500.0		21,500.0
Alaska Education Policy Project	700.0		700.0
University Equipment Refresh (Administrative & Academic)	90,000.0		90,000.0
Compliance/Business Efficiency Solutions	10,000.0		10,000.0
	<b>143,150.0</b>	<b>0.0</b>	<b>143,150.0</b>

**University of Alaska**  
**Capital Budget Request Summary by Campus**  
**FY10**  
(in thousands)

	<b>State Approp.</b>		<b>Proposed FY10</b>
	<b>FY00-FY09</b>		<b>Capital Request</b>
Anchorage Campus	245,435.4	52.8%	120,557.1
UAA Community Campuses	26,740.2	5.8%	11,071.0
Kenai Peninsula College	Soldotna		
Kachemak Bay Campus	Homer		
Kodiak College	Kodiak		
Matanuska-Susitna College	Palmer		
Prince William Sound CC	Valdez		
	<b>UAA</b>	<b>272,175.6</b>	<b>58.6%</b>
			<b>131,628.1</b>
Fairbanks Campus & TVC	137,871.9	29.7%	268,513.5
UAF CRCD	12,093.1	2.6%	8,726.0
Bristol Bay Campus	Dillingham		
Chukchi Campus	Kotzebue		
Interior-Aleutians Campus	Various		
Kuskokwim Campus	Bethel		
Northwest Campus	Nome		
	<b>UAF</b>	<b>149,965.0</b>	<b>32.3%</b>
			<b>277,239.5</b>
Juneau Campus	30,883.6	6.6%	10,135.1
UAS Community Campuses	7,286.4	1.6%	5,790.0
Ketchikan Campus	Ketchikan		
Sitka Campus	Sitka		
	<b>UAS</b>	<b>38,170.0</b>	<b>8.2%</b>
			<b>15,925.1</b>
Statewide	4,441.0	1.0%	4,422.8
Systemwide			72,259.5
	<b>SW</b>	<b>4,441.0</b>	<b>1.0%</b>
			<b>76,682.3</b>
<b>Grand Total</b>	<b>464,751.6</b>	<b>100.0%</b>	<b>501,475.0</b>

**University of Alaska  
Renewal and Renovation Request  
Proposed Distribution Methodology based on Age and Value of Facilities  
FY10**

Location	Number of Buildings	Average	Weighted	Gross	Adjusted	Index*		FY10			
		Age (Years)	Avg. Age (Years)	Square Footage	Value (thousands)			R&R Model	Annual R&R Requirement	R&R Backlog	
Anchorage Campus	53	24.7	25.0	1,931,116	462,466.9	11.6	21.4%	9,022.4	11,400.0	32,136.6	
UAA Community Campuses	27	24.6		312,848	92,338.4	2.5	4.6%	1,922.7	1,922.7	6,848.3	
Kenai Peninsula College	Soldotna	10	27.7	30.0	95,373	27,354.6	.8				
Kachemak Bay Campus	Homer	2	11.5	19.3	18,360	6,394.1	.1				
Kodiak College	Kodiak	5	31.8	32.5	44,981	13,919.3	.5				
Matanuska-Susitna College	Palmer	6	23.3	24.3	103,169	34,115.0	.8				
Prince William Sound CC	Valdez	4	16.0	22.9	50,965	10,555.3	.2				
UAA Total		80			2,243,964	554,805.3	14.1	26.0%	10,945.1	13,322.7	38,984.9
Fairbanks Campus & TVC	232	34.4	37.8	3,241,077	897,849.6	33.9	62.7%	26,415.5	28,921.1	94,089.4	
UAF CRCD	27	26.8		113,738	44,594.9	1.2	2.2%	926.0	926.0	7,800.0	
Bristol Bay Campus	Dillingham	1	41.6	27.0	10,523	6,277.3	.2				
Chukchi Campus	Kotzebue	1	32.0	32.0	8,948	4,863.0	.2				
Interior-Aleutians Campus	Various	4	25.8	29.1	21,715	9,953.8	.3				
Kuskokwim Campus	Bethel	7	24.3	23.0	51,699	18,690.7	.4				
Northwest Campus	Nome	14	27.9	29.8	20,853	4,810.0	.1				
UAF Total		259			3,354,815	942,444.5	35.1	64.9%	27,341.5	29,847.1	101,889.4
Juneau Campus	34	30.2	22.5	441,637	110,276.6	2.5	4.6%	1,933.3	2,850.0	3,155.1	
UAS Community Campuses	5	39.0		115,908	27,761.1	1.3	2.4%	1,016.5	2,940.0	2,850.0	
Ketchikan Campus	Ketchikan	4	32.3	33.3	47,850	16,119.3	.5				
Sitka Campus	Sitka	1	66.0	66.0	68,058	11,641.8	.8				
UAS Total		39			557,545	138,037.7	3.8	7.0%	2,949.8	5,790.0	6,005.1
Statewide	12	42.9	22.9	159,810	49,213.2	1.1	2.1%	876.1	1,040.2	3,120.6	
UA Total	390			6,316,134	1,684,500,635	54.1	100%	42,112.5	50,000.0	150,000.0	

\* Index is calculated by taking the adjusted value times the weighted average age

42,112.5 2.5% of Adjusted Value

Building Inventory from 2007 UA Facilities Inventory

**University of Alaska**  
**FY10 Priority R&R Projects by MAU**  
**(in thousands)**

	<b>Campus</b>	<b>State Approp.</b>	<b>Cumulative Total</b>	<b>\$50M</b>	<b>\$150M</b>
<b>UA Anchorage Campus</b>					
Science Building Renewal	Anchorage	11,400.0	11,400.0	x	
Beatrice McDonald Building Renewal	Anchorage	10,300.0	21,700.0		x
Engineering Building Renewal	Anchorage	3,500.0	25,200.0		x
Consortium Library Upgrades	Anchorage	1,650.0	26,850.0		x
Fire Alarm Panel Upgrade	Anchorage	500.0	27,350.0		x
Fine Arts Mechanical System Renewal	Anchorage	7,500.0	34,850.0		x
Campus Roof Replacement	Anchorage	5,000.0	39,850.0		x
Campus HVAC Upgrades	Anchorage	1,000.0	40,850.0		x
EM1 and EM2 Piping Replacement	Anchorage	1,500.0	42,350.0		x
Campus Roads, Curbs and Sidewalks	Anchorage	6,400.0	48,750.0		x
Mechanical/Electrical Systems Renewal	Anchorage	1,500.0	50,250.0		
Electrical Feeder/Panel Upgrade	Anchorage	280.0	50,530.0		
Elevator Safety/Code Upgrades	Anchorage	750.0	51,280.0		
MAC Housing Renewal	Anchorage	12,000.0	63,280.0		
Cuddy Phase II	Anchorage	11,000.0	74,280.0		
Social Sciences Building Phase II	Anchorage	8,000.0	82,280.0		
Classroom & Lecture Hall Lighting Upgrades	Anchorage	2,500.0	84,780.0		
Building Automation System Renewal	Anchorage	1,000.0	85,780.0		
Bookstore/Student Union Renewal (\$1M UAR)	Anchorage	11,500.0	97,280.0		
Bookstore Air Conditioning	Anchorage	1,000.0	98,280.0		
Wendy Williamson Auditorium Renewal - Phase 2	Anchorage	1,000.0	99,280.0		
Campus Wayfinding - Phase II	Anchorage	750.0	100,030.0		
Emergency Generator Upgrades / Replacements	Anchorage	1,000.0	101,030.0		
<b>UAA Community Campuses</b>					
KPC Kenai River Campus Water connection to City Water System	Kenai	600.0	600.0	x	
Community Campus Fire Systems Upgrade	Multiple	1,000.0	1,600.0	x	
Community Campus Code ADA Projects	Multiple	1,000.0	2,600.0	x	
Community Campus Cable Plant Renewal Phase II	Multiple	1,000.0	3,600.0		x
PWSCC Wellness Center/Student Life Renewal	PWSCC	3,600.0	7,200.0		x
Mat-Su HVAC, Boiler and Exhaust Fan Replacement	Mat-Su	2,440.0	9,640.0		x

\* MAU list represents the identified highest priority renewal and renovation needs. This is only a subset of the MAU's identified R&R need. For additional projects please refer to the FY10 Major Renewal and Replacement Inventory Book, available November 2008.

**University of Alaska**  
**FY10 Priority R&R Projects by MAU**  
(in thousands)

	<b>Campus</b>	<b>State Approp.</b>	<b>Cumulative Total</b>	<b>\$50M</b>	<b>\$150M</b>
Kodiak College Campus Renewal	Kodiak	3,880.0	13,520.0		
Kachemak Bay Campus Renewal	Kenai	600.0	14,120.0		
KPC Kenai River Campus Boiler/HVAC Renewal	Kenai	540.0	14,660.0		
Mat-Su Student Services Remodel	Mat-Su	580.0	15,240.0		
PWSCC Parking and Security Upgrades	PWSCC	1,665.0	16,905.0		
Mat-Su Science Lab Renewal Phase II	Mat-Su	570.0	17,475.0		
Mat-Su Card Key Access	Mat-Su	555.0	18,030.0		
KPC Kenai River Campus Academic Center/Classroom Renewal	Kenai	1,200.0	19,230.0		
PWSCC Campus Renewal	PWSCC	3,900.0	23,130.0		
KPC Kenai River Campus Exterior Renewal	Kenai	3,500.0	26,630.0		
Kodiak Entrance Road Realignment and Exterior Lighting	Kodiak	5,550.0	32,180.0		
PWSCC Doors and Locks Upgrade	PWSCC	555.0	32,735.0		
Mat-Su Bridge Enclosure	Mat-Su	600.0	33,335.0		
Mat-Su Restroom Upgrades	Mat-Su	500.0	33,835.0		
Mat-Su Parking/Road/Circulation Renewal	Mat-Su	1,500.0	35,335.0		
PWSCC Housing Renewal	PWSCC	5,000.0	40,335.0		

**UA Fairbanks Campus**

Fairbanks Campus Main Waste Line Repairs	Fairbanks	3,000.0	3,000.0	x	
Critical Electrical Distribution	Fairbanks	10,000.0	13,000.0	x	
Atkinson Power Plant Critical Utilities Revitalization	Fairbanks	20,500.0	33,500.0	x	
West Ridge Energy Conservation	Fairbanks	15,000.0	48,500.0	x	
Atkinson Power Plant Boiler and Turbine Replacement	Fairbanks	5,000.0	53,500.0	x	
TVCC 604 Barnette Space Revitalization Phase 4	Tanana Valley	5,000.0	58,500.0	x	x
Headbolt Outlet Energy Conservation	Fairbanks	500.0	59,000.0		x
Elvey Building Renewal	Fairbanks	2,000.0	61,000.0		x
Upper Dormitory Emergency Egress Code Corrections	Fairbanks	1,750.0	62,750.0		x
Eielson/Signers' Hall Code Corrections	Fairbanks	7,700.0	70,450.0		x
Campus Wide Housing Sprinklers	Fairbanks	1,000.0	71,450.0		x
Fairbanks Main Campus Wide Roof Replacement	Fairbanks	2,725.0	74,175.0		x

\* MAU list represents the identified highest priority renewal and renovation needs. This is only a subset of the MAU's identified R&R need. For additional projects please refer to the FY10 Major Renewal and Replacement Inventory Book, available November 2008.

**University of Alaska**  
**FY10 Priority R&R Projects by MAU**  
**(in thousands)**

	<b>Campus</b>	<b>State Approp.</b>	<b>Cumulative Total</b>	<b>\$50M</b>	<b>\$150M</b>
Lola Tilly Food Refrigeration Emergency Power	Fairbanks	350.0	74,525.0		x
University Park Building Deferred Renewal	Fairbanks	4,500.0	79,025.0		x
ADA Compliance Ongoing Campus Wide	Fairbanks	1,750.0	80,775.0		x
Building Envelope Energy Conservation	Fairbanks	5,000.0	85,775.0		x
Elevator Safety and Modernization Upgrades-Phase 4 of 7	Fairbanks	500.0	86,275.0		x
Patty Center Revitalization	Fairbanks	1,100.0	87,375.0		x
Campus Wide Building Electrical Safety and Code Compliance	Fairbanks	1,400.0	88,775.0		x
Arctic Health Research Building Deferred Renewal - Phase 3 of 4 for Initiative	Fairbanks	10,500.0	99,275.0		x
Campus Wide Asbestos Abatement - Phase 2 of 8	Fairbanks	400.0	99,675.0		x
Student Services Renewal -Student Union and Original Bookstore	Fairbanks	275.0	99,950.0		x
Original Duckering Ventilation Completion	Fairbanks	1,650.0	101,600.0		x
Salisbury Theatre Renovation	Fairbanks	2,650.0	104,250.0		x
Power Plant Code Corrections Phase 3 of 3	Fairbanks	3,900.0	108,150.0		x
North Tanana Loop Road Completion	Fairbanks	3,850.0	112,000.0		x
Campus Wide Fire Alarms	Fairbanks	900.0	112,900.0		
Kodiak FITC Renewal	Kodiak	977.0	113,877.0		
Exterior Light Energy Conservation	Fairbanks	1,750.0	115,627.0		
Renovation/Reclamation Machine Room B, Bunnell	Fairbanks	100.0	115,727.0		
Irving 1 Code Corrections	Fairbanks	550.0	116,277.0		
Gruening Code Corrections	Fairbanks	550.0	116,827.0		
Palmer Farm Seed Building Seismic and Building Code Upgrade	Mat-Su	2,200.0	119,027.0		
Physical Plant Code Corrections - Phase 3 of 3	Fairbanks	4,650.0	123,677.0		
Fine Arts Code Corrections Phase 3 of 3	Fairbanks	550.0	124,227.0		

\* MAU list represents the identified highest priority renewal and renovation needs. This is only a subset of the MAU's identified R&R need. For additional projects please refer to the FY10 Major Renewal and Replacement Inventory Book, available November 2008.

**University of Alaska**  
**FY10 Priority R&R Projects by MAU**  
(in thousands)

Campus	State Approp.	Cumulative Total	\$50M	\$150M
<b>UAF Community Campuses</b>				
Kuskokwim Campus Facility Critical Deferred Renewal -- Phase 2 of 4	Kuskokwim	7,800.0	7,800.0	x
Community Campus Energy Conservation Chukchi	Multiple	570.0	8,370.0	x
Interior-Aleutians & Associated Centers				
Kuskokwim				
Northwest				
Northwest Campus Critical Deferred Renewal	Nome	307.0	8,677.0	x
Chukchi Campus Renewal	Kotzebue	264.0	8,941.0	
Interior Aleutians Campus Deferred Renewal	Tok	740.0	9,681.0	
<b>UA Juneau Campus</b>				
Hendrickson Remodel and Renovation	Juneau	2,850.0	2,850.0	x
Juneau Campus Roof Replacement	Juneau	1,920.0	4,770.0	x
Technology Education Center Diesel Lab Renovation	Juneau	490.0	5,260.0	x
Whitehead Computer Room Upgrade	Juneau	310.0	5,570.0	x
<b>UAS Community Campuses</b>				
Sitka Hangar Code Corrections	Sitka	5,790.0	5,790.0	x
<b>Statewide</b>				
OIT Butrovich Computer Facility Backup Power	Fairbanks	2,000.0	2,000.0	x
Go "Green" Butrovich Computer Facility/Phase I: Prelim Design	Systemwide	50.0	2,050.0	x
Electrical Redundancy: Butrovich Computer Facility/Phase 1: Prelim Design	Systemwide	50.0	2,100.0	x

\* MAU list represents the identified highest priority renewal and renovation needs. This is only a subset of the MAU's identified R&R need. For additional projects please refer to the FY10 Major Renewal and Replacement Inventory Book, available November 2008.

## **Maintaining Existing Facilities and R&R Annual Requirement and Backlog Reduction**

UA's Annual Facility Renewal and Renovation (R&R) and Code Compliance request of \$50M from state funds represents approximately 3 percent of UA's facilities adjusted value. UA's Deferred Maintenance (DM) Reduction plan request of \$150M is necessary to reduce the deferred maintenance and R&R backlog. The \$50M annual funding and the \$150M backlog funding enables UA to begin addressing projects to bring UA's facilities to appropriate standards, codes, and programmatic needs. The highest priority projects by MAU are listed below.

### **UA Anchorage Campus**

**Distribution (Annual: \$11,400.0, Backlog: \$32,136.6)**

- **UAA Science Building Renewal**

FY10 (GF: \$11,400.0, Total: \$11,400.0)

UAA's existing Science Building was built in 1983. When the Integrated Science Building (ISB) opens in 2009, many of the functions currently housed in the Science Building will relocate to ISB. The backfill plan for the ISB project shows that various dry labs that serve the science curriculum will be located in the Science Building along with some science programs currently located in the Engineering Building. The building will require remodeling, systems renewal, and tenant improvements for its redefined function. During the spring of 2008 consultants have reviewed the building and the backfill program plan and have developed a renovation plan for the building. This project will completely renovate the existing Science Building to provide offices, classrooms, instructional labs and modernized restrooms. The mechanical and electrical systems will be upgraded to extend the life of the building, ensure code compliance and improve efficiencies of pumps, motors, lights, elevator, restroom plumbing and fixtures, fire systems, elevator and building automation controls. In some instances fume hoods and associate upstream equipment will be removed because they will not be necessary in the repurposed building. The building envelope will be improved thermal efficiency.

- **UAA Beatrice McDonald Building Renewal**

FY10 (GF: \$10,300.0, Total: \$10,300.0)

UAA's existing Beatrice McDonald Hall was built in 1970. When the Integrated Science Building (ISB) opens in 2009, many of the functions currently housed in Beatrice McDonald Hall will relocate to ISB and the existing Science Building. The backfill plan for the ISB project shows that ENRI and its associated labs will be relocated from 707 "A" St. to the Beatrice McDonald Hall and reuse several of the existing labs. These labs will need minor refitting to meet the program requirements. The other labs and classrooms within the building will be renovated for expansion of the other programs located in the building as well as improve the office areas to make them more efficient. The architectural, mechanical, and electrical systems need to be updated to bring them into code compliance, vastly improve their energy efficiency, and extend the useful life of the building. This building has chronic problems with maintaining a comfortable environment. In the spring of 2008 consultants reviewed the building and the backfill program plan and have developed a renovation plan for the building. Where possible, existing furnishings, fixtures, and components will be reused.

- **UAA Engineering Building Renewal**

FY10 (GF: \$3,500.0, Total: \$3,500.0)

This project will renovate portions of the Engineering Building vacated by science programs and allow for them to be reconfigured for program expansion needs of the School of Engineering. These renovations will provide new offices, classrooms, and instructional labs.

- **UAA Consortium Library Upgrades**

FY10 (GF: \$1,650.0, Total: \$1,650.0)

This project will provide a major overhaul or full replacement of all HVAC equipment including boilers, supply/exhaust fans, heating/cooling coils, and humidification systems within the 4 cores (101,000 gsf) of the existing Consortium Library facility. Current incompatibilities between the original Library and 2004 Library addition HVAC controls and VAV boxes will also be addressed.

- **UAA Fire Alarm Panel Upgrade**

FY10 (GF: \$500.0, Total: \$500.0)

FY11-FY15 (GF: \$2,500.0, Total: \$2,500.0)

The majority of the buildings on the UAA campus are currently operating with the original fire alarm systems that were installed when the buildings were constructed. Buildings on West Campus are approaching 35 years old. The existing fire alarm systems do not provide the benefits of today's technology. Replacement components of the existing systems are no longer manufactured and/or the components no longer carry UL listings. Notification system requirements under the Americans with Disabilities Act cannot be easily retrofitted into the existing systems. The analog addressable fire alarm systems have superior features and flexibility for future code requirements. These systems also allow sensitivity adjustments of individual devices from the control panel, reducing the incidences of nuisance alarms and will reduce maintenance time locating a single malfunctioning sensor.

- **UAA Fine Arts Mechanical System Renewal**

FY10 (GF: \$7,500.0, Total: \$7,500.0)

The project scope involves the refurbishment/replacement of the mechanical systems (HVAC) serving the 92,000 gsf. facility. Work includes, but is not limited to, demolition; installing/modifying system piping; enlarging/remodeling existing boiler rooms; removing/replacing central MAU systems; installing separate, stand-alone HVAC systems; remodeling central fan room/constructing new central fan rooms; installing new central air handling systems with mixing boxes, pre-heat coils, filter sections, heating/cooling coils, steam humidification, variable speed fans, silencers and custom discharge plenums; replacing relief air fan systems; modifying/reconfiguring supply, exhaust, return air, outside air intake ductwork; installing new variable air volume terminal units; sealing air transfer openings; installing/replacing unit heaters; installing new fume hoods/dust collection systems; replacing the existing pneumatic control system with DDC Building Automation System (BAS); updating fire alarm/fire sprinkler system components; duct cleaning; and system balancing.

- **UAA Campus Roof Replacement**

FY10 (GF: \$5,000.0, Total: \$5,000.0)

FY11-FY15 (GF: \$25,000.0, Total: \$25,000.0)

UAA will systematically address roofing replacement by re-roofing five percent of its buildings each year. FY10 funds will address the most severe roofing needs as outlined in a Roofing Replacement Study that was done in the summer of 2007.

- **UAA Campus HVAC Upgrades**

FY10 (GF: \$1,000.0, Total: \$1,000.0)

FY11-FY15 (GF: \$5,000.0, Total: \$5,000.0)

This project will replace boilers, fans, VAV boxes and building automation system controls in a number of campus buildings on the West Campus and the Administration Building on East Campus. Air-conditioning in the Allied Health Sciences Building and many of the student computer labs would be resized and replaced to meet the needs of these areas.

- **UAA EM1 and EM2 Piping Replacement**

FY10 (GF: \$1,500.0, Total: \$1,500.0)

FY11-FY15 (GF: \$1,500.0, Total: \$1,500.0)

The project will remove and replace approximately 6,000 lineal feet of 4 inch, 6 inch, and larger underground piping and associated valves/fittings/couplings/etc. serving the connected buildings. Work also includes the replacement of the 2 inch natural gas feeder line with new PVC gas line and the addition of a 4 inch conduit sleeve for future electrical/telecommunications use. Work shall include, but is not limited to, the design, site investigation, site work including excavation, trenching, backfill and compaction; demolition; system drainage and refill; system cleaning; system inspection and testing; installation of pipe, associated fittings and components and pipe insulation; area clean-up and debris removal; and all associated work for a complete and usable system.

- **UAA Campus Roads, Curbs and Sidewalks**

FY10 (GF: \$6,400.0, Total: \$6,400.0)

This project includes repair and resurfacing of roads, resurfacing and/or expansion of existing sidewalks and curb/gutters as well as additional construction where required by traffic, new construction, or code.

## **UAA Community Campuses**

**Distribution (Annual: \$1,922.7, Backlog: \$6,848.3)**

- **UAA KPC Kenai River Campus Water connection to City Water System**  
FY10 (GF: \$600.0, Total: \$600.0)  
This project will allow for completion of the on-property water utility connections to the campus buildings, installation of the necessary interior plumbing, and abandonment of the existing water well.
  
- **UAA Community Campus Fire Systems Upgrade**  
FY10 (GF: \$1,000.0, Total: \$1,000.0)  
The existing generation of fire detection and alarm systems at community colleges are no longer supported by the manufacturer and cannot be upgraded. This project replaces components to an addressable fire alarm system. These systems have superior features and flexibility for code requirements.
  
- **UAA Community Campus Code/ADA Projects**  
FY10 (GF: \$1,000.0, Total: \$1,000.0)  
This request is for funds to address minor code and ADA projects at the community campus sites. The projects include items such as air quality improvements in a welding lab, replacement of ADA door closures, ADA compliant signage, emergency call box/telephones, and stair rail replacement. (The approximate funding distribution would be as follows: KPC \$.5M, PWSCC \$.3M, MSC \$.1M, and KOC \$.1M)
  
- **UAA Community Campus Cable Plant Renewal Phase II**  
FY10 (GF: \$1,000.0, Total: \$1,000.0)  
This project will complete the consolidation of existing separate telephone and data network cable systems into a single converged physical copper/fiber network at the community campuses.
  
- **UAA PWSCC Wellness Center/Student Life Renewal**  
FY10 (GF: \$3,600.0, Total: \$3,600.0)  
This project will allow for upgrades to the electrical and mechanical systems, repair of water damaged interior finishes, abatement of asbestos materials and mold, and reconfiguration of the space to make it more efficient.
  
- **UAA Mat-Su HVAC, Boiler and Exhaust Fan Replacement**  
FY10 (GF: \$2,440.0, Total: \$2,440.0)  
This project will provide a new roof-top mounted air handling unit, boilers, exhaust fans, and a VAV system to provide adequate air exchanges to meet current code requirements and to improve work and study conditions in the building.

- **UAF Fairbanks Campus Main Waste Line Repairs**

FY10 (GF: \$3,000.0, Total: \$3,000.0)

FY11-FY15 (GF: \$5,250.0, Total: \$5,250.0)

Much of the sanitary and storm sewer main piping on campus is original woodstave or clay piping dating back nearly 60 years. These mains, though not at full capacity, have far exceeded their useable life. Campus growth and an ever-changing regulatory environment require the modification and upgrade of the waste water handling infrastructure. Based on the June 1, 2005 EPA MS-4 permit regarding storm water discharge UAF will be required to install storm water collection infrastructure for buildings and streets by 2009. This requirement also includes modifications to the sanitary waste lines to ensure complete separation of the two systems. The project will replace several thousand feet of waste line main piping with new modern materials with a life that exceeds 60 years.

- **UAF Critical Electrical Distribution**

FY10 (GF: \$10,000.0, Total: \$10,000.0)

FY11-FY15 (GF: \$21,000.0, Total: \$21,000.0)

The existing electrical distribution system at UAF is nearly 50 years old. With the completion of several new facilities, the antiquated equipment could be stretched beyond its capabilities and begin to fail. To ensure campus power is not shutdown, major upgrades must be made to replace the ancient switchboard and cabling to bring the campus distribution back into code compliance.

- **UAF Atkinson Power Plant Critical Utilities Revitalization**

FY10 (GF: \$20,500.0, Total: \$20,500.0)

FY11-FY15 (GF: \$18,000.0, Total: \$18,000.0)

The UAF power plant is a co-generation facility that provides electrical power, domestic and firefighting water, and steam for heating buildings. The plant is over 40 years old and many components have exceeded their useful life. This project will address revitalization of the highest priority utilities deficiencies on the UAF Main Campus. Power Plant renewal items will include the steam and electrical system and water system. The items were identified in the 2006 Utility Development Plan as needing “immediate action.” Avoiding a major utility catastrophe is the primary project objective.

- **UAF West Ridge Energy Conservation**

FY10 (GF: \$15,000.0, Total: \$15,000.0)

Chilling of buildings on the West Ridge is currently accomplished using electric driven chillers. This electric load generates excess steam from the power plant that then needs to be condensed. The energy efficiency of making chilled water can be significantly increased by installing absorption chillers that use steam instead of electricity. Annual savings are estimated to be approximately \$400,000. The new centralized chilling facility would provide chilled water to individual buildings using a piping system in the utilidor.

- **UAF Atkinson Power Plant Boiler and Turbine Replacement**

FY10 (GF: \$5,000.0, Total: \$5,000.0)

FY11-FY15 (GF: \$140,000.0, Total: \$140,000.0)

The 2006 Utilities Development Plant identified the preferred option for providing current and future energy (electric and building heat) as replacing and expanding the current coal fired combined heat and power (CHP) plant. New efficient coal boilers represent the lowest life cycle cost as well as the lowest carbon footprint of the options explored. The existing steam turbine has reached the end of its useful life and needs to be replaced prior to experiencing a catastrophic failure.

- **UAF TVCC 604 Barnette Space Revitalization Phase 4**

FY10 (GF: \$5,000.0, Total: \$5,000.0)

FY11-FY15 (GF: \$14,300.0, Total: \$14,300.0)

The UAF Tanana Valley Campus Center at 604 Barnette Street in Fairbanks, Alaska (formerly the Fairbanks Courthouse) is in critical need of continuing major upgrades to ensure the reliable and efficient delivery of TVC programs focused on key Alaskan industries. The facility was designed and constructed in 1962-63. Since taking ownership in 2003, the University has completed two State-funded projects and two additional projects funded by the Denali Commission. The State funded Phase 3, the Exterior Envelope, the project that is scheduled for 2009 construction. FY10 funding will complete the fourth floor revitalization for Allied Health programs and upgrade antiquated elevator lift systems and cars. The UAF TVCC facility is in need of continuing major revitalization of interior spaces and the exterior grounds and parking. These needs are reflected in the continued phasing for construction in subsequent years.

- **UAF Headbolt Outlet Energy Conservation**

FY10 (GF: \$500.0, Total: \$500.0)

This project will replace existing non-cycled and manually cycled parking headbolt outlets with smart headbolt controllers. These intelligent parking lot controllers allow for easy retrofit of existing circuits and provide energy savings near 65% over non cycled lots by providing electricity only as needed. The units also greatly reduce maintenance and trouble calls to existing circuits.

- **UAF Elvey Building Renewal**

FY10 (GF: \$2,000.0, Total: \$2,000.0)

FY11-FY15 (GF: \$61,000.0, Total: \$61,000.0)

Constructed in 1970, the Elvey Building is home to the UAF Geophysical Institute. The institute is a major center for many state emergency preparedness programs such as the Alaska Volcano Observatory and the Alaska Earthquake Information Center. These two programs track and disseminate information pertinent to the health and welfare of every Alaskan. Other organizations that call Elvey home include NASA, the US Department of Defense, US Geological Survey, and portions of the International Arctic Research Center. Since constructed, the facility and its key infrastructure components have passed their 30 year life expectancy and major renewal of the facility must occur. This request represents the first phase of renovation.

- **UAF Upper Dormitory Emergency Egress Code Corrections**

FY10 (GF: \$1,750.0, Total: \$1,750.0)

Current egress from the upper dormitories is obstructed by failing doors, stain glass windows, and deteriorating sidewalks and stairs. Currently no ADA access exists for the upper dorms at the main entrance. When disabled students and community members arrive they must be dropped off at the side of the building, which places them several hundred feet from the main entrance.

- **UAF Eielson/Signers' Hall Code Corrections**

FY10 (GF: \$7,700.0, Total: \$7,700.0)

As the two oldest facilities on the UAF campus, Eielson and Signers' do not have ventilation systems and experience problems maintaining comfortable temperatures in occupied zones. Other code corrections will provide adequate exit pathways for building occupants and students. The facilities are specifically utilized for student admissions, registrar functions, financial aid, and campus administration.

- **UAF Campus Wide Housing Sprinklers**

FY10 (GF: \$1,000.0, Total: \$1,000.0)

In 1991, the UAF Fire Marshal and State Fire Marshal cited several residential facilities for a lack of a fire suppression system. In Fiscal Year 2006, UAF received limited funding to begin installation of sprinkler systems in the residence halls. Several small facilities have been completed with the limited budget, but the large apartment complexes are still on the list to be completed. Fire sprinklers are 99% effective in eliminating property damage during a fire.

- **UAF Fairbanks Main Campus Wide Roof Replacement**

FY10 (GF: \$2,725.0, Total: \$2,725.0)

FY11-FY15 (GF: \$1,550.0, Total: \$1,550.0)

UAF's last major roof replacement project started in 1994, over 13 years ago. Although that project replaced several roof systems on major buildings, there are many large campus structures that still have their original roof systems. As buildings on campus age and do not receive adequate R&R funding, roofing system repairs only offer a band-aid solution to a long-term problem. Funding is required for a multi-year project to replace roofs that have surpassed their useable life and are at risk of complete failure.

- **UAF Lola Tilly Food Refrigeration Emergency Power**

FY10 (GF: \$350.0, Total: \$350.0)

During a power outage, freezers around campus must be connected to emergency power backup generators to preserve the contents whether they are related to dining, research, or archival. Lola Tilly Commons, the main source of dining for students, does not have provisions for connection to emergency power and the potential for losing valuable food is extremely high. The project will provide means for backup power to be connected to the cooling units to ensure the preservation of the stored goods.

- **UAF University Park Building Deferred Renewal**

FY10 (GF: \$4,500.0, Total: \$4,500.0)

FY11-FY15 (GF: \$4,500.0, Total: \$4,500.0)

This project will renovate and revitalize the 50 year old school which currently houses the Fire and Police Academy, Cooperative Extension offices, and other programs for the Tanana Valley Campus. The building is vital to the training and education of Alaska's future fire fighters, medics, and police officers.

- **UAF ADA Compliance Ongoing Campus Wide**

FY10 (GF: \$1,750.0, Total: \$1,750.0)

FY11-FY15 (GF: \$8,250.0, Total: \$8,250.0)

This project, with multiple phases, will make modifications to include accessibility improvements such as installation of new elevators, renovations to restrooms, improvements to accessibility routes, replacing drinking fountains, and modifying stairwell handrails. Buildings being addressed include Signers' Hall, AHRB, Cooperative Extension, Elvey, Gruening, Eielson, O Neill, Irving and Constitution Hall.

- **UAF Building Envelope Energy Conservation**

FY10 (GF: \$5,000.0, Total: \$5,000.0)

FY11-FY15 (GF: \$25,000.0, Total: \$25,000.0)

In order to help curb the rising energy costs, the university's facilities need to be retrofit with newer, more energy efficient building envelopes to include insulation, roofs, external skins, exterior doors, and windows.

- **UAF Elevator Modernization Upgrades - Phase 4 of 7**

FY10 (GF: \$500.0, Total: \$500.0)

FY11-FY15 (GF: \$1,700.0, Total: \$1,700.0)

UAF Facilities Services manages the operation and maintenance for a fleet of more than 50 elevators and lifts with an average age of over 25 years. With the help of an FY01 audit, 28 elevators were identified as needing modernization upgrades. This request represents the fourth phase of a multi-year modernization plan and will address ADA, code, and deferred maintenance improvements to two elevators.

- **UAF Patty Center Revitalization**

FY10 (GF: \$1,100.0, Total: \$1,100.0)

FY11-FY15 (GF: \$48,250.0, Total: \$48,250.0)

Constructed in 1963 to replace an existing 40 year old gym, the Patty Center now houses sports and recreational space for five NCAA Division 2, and two NCAA Division 1 sports. This includes both men's and women's teams that are a vital part of the UAF Campus Life Master Plan. The construction project will correct an abundant list of code citations and extend the life of the 45-year-old facility. The facility must be upgraded to meet basic competition standards.

- **UAF Campus Wide Building Electrical Code Compliance**

FY10 (GF: \$1,400.0, Total: \$1,400.0)

FY11-FY15 (GF: \$1,350.0, Total: \$1,350.0)

Electrical systems of campus buildings constructed prior to the 1980s are nearing the end of their operational life and/or have sustained damage during their life and should be replaced as soon as possible. Additionally, some equipment in these facilities does not meet current electrical codes and/or is no longer supported by the manufacturer.

- **UAF Arctic Health Research Building (AHRB) Deferred Renewal - Phase 3 of 4 for Initiative Programs**

FY10 (GF: \$10,500.0, Total: \$10,500.0)

FY11-FY15 (GF: \$42,650.0, Total: \$42,650.0)

Built over 40 years ago, AHRB has an ever increasing list of deferred renewal projects that are now affecting critical research and teaching in the building. Major renewal and renovation work must occur now to keep the building available for occupation and full use. Phase 1, funded in FY07, completed a revitalization of the eastern wing of the building by January 2008. Phase 2 work renovated portions of the building scheduled to be vacated in 2009 by the State of Alaska Public Health Lab and the recently vacated animal holding quarters. Phase 3 will renovate the south wing and some additional virology space to include offices, labs and mechanical spaces. Renewal of the entire building is key to teaching the next generation of resource managers and agricultural scientists. Fisheries teaching and research performed in the south wing of the building is specifically connected to Alaskan coastal and Bering Sea regions and provides managers and fishermen significant information about the health and population of many harvested species. Other labs in this wing provide teaching space for large animal species such as reindeer and caribou.

- **UAF Campus Wide Asbestos Abatement - Phase 2 of 8**

FY10 (GF: \$400.0, Total: \$400.0)

FY11-FY15 (GF: \$2,375.0, Total: \$2,375.0)

Currently asbestos pipe insulation, floor tile, mastic, and fire wall exists in nearly one third of all campus facilities. The asbestos needs to be removed because it adds significantly to the costs and timeliness of renovation and construction projects and creates a serious health hazard to the campus community.

- **UAF Student Services Renewal -Student Union and Original Bookstore**

FY10 (GF: \$275.0, Total: \$275.0)

FY11-FY15 (GF: \$23,200.0, Total: \$23,200.0)

As part of the recently completed Campus Life Master Plan and in support of UAF Strategic Plan 2010, the Wood Center and Constitution Hall must be renewed to provide more efficient and effective services to the students.

- **UAF Original Duckering Ventilation Completion**

FY10 (GF: \$1,650.0, Total: \$1,650.0)

During the 1999 renovation of the Duckering Building, funding was not available to complete required ventilation upgrades to the north wing of the facility. New construction work will install code compliant ventilation to the labs and offices in the north wing.

- **UAF Salisbury Theatre Renovation**

FY10 (GF: \$2,650.0, Total: \$2,650.0)

The UAF Fine Arts Complex, including the Salisbury Theatre, was built in 1970 and has never had a complete renovation. The renovation of the complex was partially funded in 1998 for the first of three phases of work. The Music Wing was renovated in 2002. The Art Wing is being renovated in 2008. Funding for the third phase of the work is on the capital request list. Renovation of the Salisbury Theatre is an important part of the Theater Wing renovation. Maintenance costs on the seating alone are justification for proceeding with this work immediately.

- **UAF Power Plant Code Corrections - Phase 3 of 3**

FY10 (GF: \$3,900.0, Total: \$3,900.0)

The Power Plant Code Corrections project will complete the code construction to bring the facility into code compliance. The work includes relocation of the plant control room for egress, partial automatic sprinkler system in the building, and other code upgrades to the HVAC, Electrical, and fire alarm components.

- **UAF North Tanana Loop Road Completion**  
 FY10 (GF: \$3,850.0, Total: \$3,850.0)  
 This project will complete the northern link of Tanana Loop, the roadway that circles the campus. The project will also create efficient and attractive pedestrian walkways close to the roadway for non-motorized users. Existing roads will be resurfaced and sidewalks will be replaced to maintain ADA compliance.
  
- **UAF Campus Wide Fire Alarms**  
 FY10 (GF: \$900.0, Total: \$900.0)  
 FY11-FY15 (GF: \$1,450.0, Total: \$1,450.0)  
 Campus Fire Alarm Systems in many facilities are over 20 years old and either no longer can be serviced or are now non-code compliant. Systems in residential housing are extremely important to correct. The project will repair or replace the systems with the highest risk for failure.
  
- **UAF Kodiak FITC Renewal**  
 FY10 (GF: \$977.0, Total: \$977.0)  
 The Kodiak Fishery Industrial Technology Center Renewal Project will address items critical to the mission of the facility, including energy conservation initiatives. Expected annual savings on utility costs is \$25,000.
  
- **UAF Exterior Light Energy Conservation**  
 FY10 (GF: \$1,750.0, Total: \$1,750.0)  
 FY11-FY15 (GF: \$1,100.0, Total: \$1,100.0)  
 Improved lighting provides for pedestrian/vehicle interface zones and reduces the unlit or shadowed areas adjacent to pathways and outdoor seating areas.
  
- **UAF Renovation/Reclamation Machine Room B, Bunnell**  
 FY10 (GF: \$100.0, Total: \$100.0)  
 FY11-FY15 (GF: \$390.0, Total: \$390.0)  
 This renovation and reclamation project is expected to save \$200,000 annually in electrical cooling costs at UAF and reclaim Bunnell Machine Room B, Room 230 as usable classroom and support space for UAF upon decommissioning as a computer machine room. FY10 funding will provide for upgrading the infrastructure for telecommunications. FY11 funding will make additional capital renovations and improvements.
  
- **UAF Irving I Code Corrections**  
 FY10 (GF: \$550.0, Total: \$550.0)  
 FY11-FY15 (GF: \$20,000.0, Total: \$20,000.0)  
 Currently, the Irving Building complex has over 100 code citations. These code citations must be addressed as quickly as possible to avoid the fire marshal closing the facility.

- **UAF Gruening Code Corrections**

FY10 (GF: \$550.0, Total: \$550.0)

FY11-FY15 (GF: \$8,200.0, Total: \$8,200.0)

The Gruening building contains more students and staff than any other building on campus and is in need of significant code required upgrades to the existing fire exits, HVAC, and electrical panels, in addition to upgrades for ADA compliance.

- **UAF Palmer Farm Seed Building Seismic and Building Code Upgrade**

FY10 (GF: \$2,200.0, Total: \$2,200.0)

FY11-FY15 (GF: \$1,650.0, Total: \$1,650.0)

The seed lab at the Palmer Farm is a critical part of UAF's agricultural sciences mission, providing farmers in Alaska with critical information. The current facility was built in two parts and the structures were never reinforced against earthquakes. The project will provide the needed expansion joints and shear walls to correct the condition. The project will also include code corrections for electrical corridor exiting issues.

- **UAF Physical Plant Code Corrections - Phase 3 of 3**

FY10 (GF: \$4,650.0, Total: \$4,650.0)

This project reconfigures the Physical Plant building to correct existing code and operational deficiencies and to accommodate the maintenance and operations shops within Facilities Services. This is the final phase of work to complete the code and operational deficiencies within the administrative areas of this 1964 facility that is the core of operations for the maintenance work at UAF.

- **UAF Fine Arts Code Corrections - Phase 3 of 3**

FY10 (GF: \$550.0, Total: \$550.0)

FY11-FY15 (GF: \$16,100.0, Total: \$16,100.0)

Built in 1970, the Fine Arts Complex has never had a major renovation. The Fine Arts Complex houses the music, theatre and art wings, Davis Concert Hall, Salisbury Theatre, KUAC and Great Hall at UAF. This request includes modifications and corrections to the heating and ventilation systems and the electrical distribution panels that are in critical need of replacement.

## **UAF Community Campuses**

**Distribution (Annual: \$926.0, Backlog: \$7,800.0)**

- **UAF Kuskokwim Campus Facility Critical Deferred Renewal - Phase 2 of 4**  
FY10 (GF: \$7,800.0, Total: \$7,800.0)  
FY11-FY15 (GF: \$16,900.0, Total: \$16,900.0)  
Current operating maintenance and repair funding levels are not sufficient to meet the critical maintenance needs at the rural campuses. Critical needs include repairing railings and boardwalks, upgrading electrical systems, boiler replacements, interior wall finishes, floor finishes, and ventilation issues.
  
- **UAF Community Campus Energy Conservation**  
FY10 (GF: \$570.0, Total: \$570.0)  
FY11-FY15 (GF: \$6,430.0 Total: \$6,430.0)  
Energy cost are rising throughout the state, but especially in rural communities. In order to help curb the rising costs, the university's facilities need to be assessed, updated and retrofit with newer, more energy efficient systems on the Chukchi, Kuskokwim, Northwest and Interior-Aleutians campuses.

## **UA Juneau Campus**

**Distribution (Annual: \$2,850.0, Backlog: \$3,155.1)**

- **UAS Hendrickson Remodel and Renovation**  
FY10 (GF: \$2,850.0, Total: \$2,850.0)  
This project will renew and remodel the Hendrickson Building and the Hendrickson Annex to provide more effective use of the space, replace building heating and ventilation systems, interior finishes, and pave the gravel parking lot.
  
- **UAS Juneau Campus Roof Replacement**  
FY10 (GF: \$1,920.0, Total: \$1,920.0)  
FY11-FY15 (GF: \$770.0, Total: \$770.0)  
This project will replace several roofs on the Juneau campus. The FY10 amount is intended to replace the original Egan Library roof membrane and the original student housing apartment metal roofing. The FY12 amount is intended to replace the original Technology Education Center membrane.
  
- **UAS Technology Education Center Diesel Lab Renovation**  
FY10 (GF: \$490.0, Total: \$490.0)  
This project will move and enlarge the diesel engine classroom and lab in the Technology Education Center in Juneau. Growing enrollment and industry training demands are overtaxing the current teaching spaces.

- **UAS Whitehead Computer Room Upgrade**

FY10 (GF: \$310.0, Total: \$310.0)

This project will configure and renovate HVAC and power services to the UAS main computer center in the Whitehead Building. The Whitehead building secure machine room houses the primary computing and network equipment for the Southeast region. This equipment is critical for services both local to UAS and on a statewide level. These include all academic and administrative servers, television broadcasting for UATV and Gavel-to-Gavel, the Juneau campus telephone system, and building security control systems. The electrical and cooling systems in the room are unable to meet current demands, especially during the summer months. Unstable power and excessive temperatures have already caused equipment failure. Continued growth is expected as both campus and statewide systems require additional equipment. The current situation presents substantial risk for UAS from an operational and public relations perspective.

**UAS Community Campus**

**Distribution (Annual: \$2,940.0 Backlog: \$2,850.0)**

- **UAS Sitka Hangar Code Corrections**

FY10 (GF: \$5,790.0, Total: \$5,790.0)

This project will construct area separations between conflicting vocational spaces, construct an exit corridor through the hangar and install code compliant mechanical, electrical, and fire systems in the open hangar area of the Sitka Campus facility.

**Statewide**

**Distribution (Annual: \$1,040.2 Backlog \$3,120.6)**

- **Statewide OIT Butrovich Computer Facility Backup Power**

FY10 (GF: \$2,000.0, Total: \$2,000.0)

This project will provide self-contained backup power for the UA Butrovich Computer Facility. This system will provide a total 1,250 kW of uninterruptible power to the computers, communications systems and computer facility equipment in the event of a utility power loss. Backup power will ensure the continued operation of the computer facility and allow for extended operation without a catastrophic loss of hardware, software or data.

- **Statewide Go "Green" Butrovich Computer Facility/Phase I: Prelim Design**

FY10 (GF: \$50.0, Total: \$50.0)

Funding this project will allow for the investigation and selection of a preliminary design for energy-efficient methods of providing cooling for the Butrovich Computer Facility. The existing in-place technology, though commonly used throughout the industry, is energy-intensive and energy-expensive. This project will identify the viability and cost of energy-efficient cooling technologies that take better advantage of the local climate.

- **Statewide Electrical Redundancy: Butrovich Computer Facility/Phase 1: Prelim Design**  
FY10 (GF: \$50.0, Total: \$50.0)

Funding this project will allow for investigation and provide preliminary design for redundant electrical buss architecture. This equipment will eliminate the remaining single-points-of-failure, allow for full online maintenance, and eliminate the need for downtime to computing and network resources for facility maintenance.

### **New Construction & Additional Facility Capital Needs**

- **UAF Life Sciences Innovation and Learning**

FY10 (GF: \$82,195.0, NGF: \$20,625.0, Total: \$102,820.0)

The Life Sciences Innovation and Learning project will provide critical instructional classrooms and research lab space for life science programs; the most popular programs for degree seeking students, and one of the largest biology research programs in the country. The life science programs include biological sciences, biology, botany, wildlife management, wildlife biology, zoology, biological chemistry and molecular biology. Facilities for life science programs have not been modernized since the Bunnell building was built in 1959, and these facilities do not meet current needs. Since 2001, UAF has requested funding to meet these needs. Biological Sciences (BIOS) was proposed as the solution to the demands of the programs. Recognizing the urgency, UAF has scaled down its request and will internally reallocate funds to assist in making this project a reality. Alaska is located in a unique setting that enhances the abilities of teaching and research. The particular location of UAF allows for life science programs are unlike those of any other campus in the United States. The climate, animals, and indigenous peoples provide key elements of a worldwide effort to discover new solutions to new and old problems. By constructing life science components in the interior of Alaska, the distinctive science intensive space will create a center for advancing life sciences learning and discovery. This would position Alaska to become a world leader in biological sciences and medical research. Funding will complete design, construction and build-out of the much needed program space.

- **UAS Auke Lake Way Campus Entry Improvements & Road Realignment**

FY10 (GF: \$4,130.0, Total: \$4,130.0)

This project will remove public vehicular traffic from the center of the Juneau academic core and reconstruct the existing roadway to a pedestrian greenway. The work involves creating new pedestrian paths, installing new site lighting, signage, landscaping, planting, and drainage modifications. This project was a prominent recommendation of the 2002 UAS Campus Master Plan.

- **UAA Sports Arena**

FY10 (GF: \$65,000.0, NGF: \$10,000.0 Total: \$75,000.0)

Funding this request will enable UAA to construct a new Sports Arena. In FY 09, the Alaska State Legislature appropriated \$15M for planning and site development for this new facility. This \$65M state request will be used to construct a 130,000 gross square foot facility featuring a three-court gymnasium that can be transformed into a 3,500 seat performance gym for basketball, volleyball, and other university and community events. The facility will also house a gymnastics facility, and a two-court auxiliary gym for additional student, academic, and community use. A one-eighth mile running track will circle the performance gymnasium. The facility will also house a fitness center, training room, locker rooms, academic classrooms, and administration offices and storage. Currently, UAA has extremely inadequate space for athletics: from intercollegiate to academics to intramural and recreational use. The Wells Fargo Sports Complex (WFSC) has one basketball court, a pool, a practice hockey rink, and a small weight training area converted from racquetball courts. Additionally, there are very limited locker rooms and administration offices. WFSC opened in 1978 as a recreational facility for a community college with no collegiate athletics, physical education academic program, or on-campus housing. Today there are 14,000 commuter students, 1000 on-campus student residents, 300 Health, Physical Education, and Recreation (HPER) academic program students, 11 college Division I and Division II athletic teams, 168 men and women student-athletes, seven head coaches, 14 assistant coaches, 19 other athletic staff personnel, and thousands of community members trying to share this space. This small facility is overwhelmed and is used every available hour of every day. It can handle up to 2000 customers a week and would easily attract an additional 2,500-3,000 customers a week if there were space.

- **UAF Alaska Region Research Vessel Additional Receipt Authority**

FY10 (NGF: \$90,000.0, Total: \$90,000.0)

In FY05, UAF was given receipt authority up to \$80M for National Science Foundation funding to purchase a new research vessel. The NSF funding became available in the fall of 2007 and has increased to accommodate inflation and changes in scope of work over the past few years. Additional receipt authority is needed to accept the NSF funding and the new research vessel. This amount is pending initial NSF approval.

- **Federal Receipt Authority**

FY10 (NGF: \$15,000.0, Total: \$15,000.0)

This request is an estimation of potential federal receipt authority needed for FY10-FY15 projects at the main and community campuses. Prior small project federal receipt authority was used for the UAS Sitka Welding Lab Renovation (FY08), and the IAC Tok Center Renovation – Phase II (FY08).

## **Planning for New Facilities (not prioritized)**

(TBD)

New Facilities Planning funds are requested for facilities necessary to accommodate instruction and research program growth, campus services, and improve energy efficiency. Planning funds are proposed for an engineering instruction facility at UAA, an engineering facility expansion and an energy technology facility at UAF, a co-generation heat and power plant at UAA in conjunction with Providence Hospital and Anchorage Municipal Light and Power (MPL), and a fire station and housing facility replacement at UAF. Also included is a funding request for a feasibility study on new facilities requested by community campuses. There were several new facilities requested by community campuses in FY10. Given the high cost of construction, maintenance and utilities, and the changing demographic at many of these sites, a more thorough analysis of the facility needs is warranted.

- **UA Engineering & Energy Buildings**

FY10 TBD

### **UAA New Engineering Building**

UAA engineering is experiencing dramatic growth in its enrollments with a near doubling of the entire program in the past five years. New engineering programs were created to meet industry demand and have been one of the driving forces for the enrollment increases. The existing engineering building was built in the early 1980's and was undersized for engineering needs before the large enrollment growth of recent years. Two sites are currently being considered. One site is north of the existing Engineering Building and would require the realignment of Mallard Lane into its existing right of way. The other site is directly south of the Bookstore and would connect with the new Health Science Bldg across Providence Drive. Both sites will be investigated and reviewed as part of the planning process.

### **UAF Engineering and Energy Technology**

Since the combination of the School of Engineering and the School of Mineral Engineering, space in the Duckering building has become short in supply and high in demand. During the last semester, freshmen enrollment doubled, putting further strain on the over-utilized facility. A critical need exists for expanded teaching and research laboratory space as both programs continue to grow. Completion of a new engineering and energy facility project will foster continued growth in engineering academics, research, and job training for future engineers to benefit Alaska's construction, oil, and gas industries. New space will also be allocated to the Alaska Center for Energy and Power as they work to find solutions for communities across the state. This project will be the single most important key to meeting the State's demand of doubling the number of graduating engineers by 2012.

- **UAA Cogeneration Plant (PROV/MLP)**

FY10 (GF: \$2,000.0, Total: \$2,000.0)

FY11-FY15 (GF: \$20,000.0, Total: \$20,000.0)

This project includes the planning, programming, design and construction of a 10 megawatt Central Heating and Power Plant as a joint venture between UAA, Providence Hospital and Anchorage Municipal Light and Power (ML&P). UAA would provide the site, building and associated real property components while ML&P would provide the natural gas fired turbine generators and staff to maintain and operate them. Additional capital resources would be provided by Providence Hospital. UAA is currently working with Providence Hospital and Anchorage Municipal Light and Power (ML&P) to develop a Central Heating and Power Plant on the UAA South Campus which will provide power to UAA, Providence and the community. The exhaust heat generated by the generators will provide steam to Providence and hot water to UAA for heating purposes. The facility will be located on UAA property and in a UAA owned building with ML&P providing and maintaining the natural gas turbine generators. Providence and UAA would supply their own infrastructure to harvest the waste heat of the generators and transport it to their respective campuses. Electrical power would be distributed through the existing power infrastructure. The use of the exhaust heat from the generators will result in a significant cost savings to the University of approximately \$2 M/year and would reduce the University's carbon footprint by nearly 1/3. Co-generation is the simultaneous production of thermal energy and electric power from a single fuel source. It is more efficient to produce electric power and thermal energy (steam/hot water) together than electric power alone. The project will increase energy efficiency and reduce overall energy usage and cost. Jointly we anticipate submitting a proposal for a State of Alaska Renewal Energy grant to help get the project started.

- **UAF Fire Station and Student Firefighter Training Center**

FY10 (GF: \$1,000.0, NGF: \$500.0 Total: \$1,500.0)

FY11-FY15 (GF: \$15,500.0, Total: \$15,500.0)

Constructed in 1964, the Whitaker Building is the current home for the University Fire Department, University Police Department, and University Dispatch center. Critical in nature, the current facility fails to meet current seismic building codes and is in need of replacement. An expanded facility is required to meet the increasing demand placed on its emergency services due to increasing call volume and population. The new building will enhance the current academic programs in Fire Science by providing a large training classroom, hands-on training with working fire apparatus, and an outside area for practical firefighting applications.

- **Feasibility Studies Community Campuses New Facilities**

FY10 (GF: \$4,000.0, Total: \$4,000.0)

Funding for this project would allow for a feasibility study on new facilities requested by community campuses. There were several new facilities requested by community campuses in FY10. Given the high cost of construction, maintenance and utilities, and the changing demographic at many of these sites, a more thorough analysis of the facility need is warranted. Projects at UAA community campuses may include: KPC Kenai River Campus Career and Technical Education Center, Kodiak Vocational Technology and Warehouse Facilities, Kachemak Bay Classroom Building, Mat-Su Trunk Road Access and Entrance Sign, Mat-Su Balley Center for Art and Learning, PWSCC Lecture Hall/Classroom Addition, Mat-Su Paramedic Program/Classroom Addition, Kachemak Bay Campus Hesketh Island Site Development, Kodiak Longhouse, KPC Kenai City Joint Venture Water System Loop Connection, and the KPC Cultural Arts and Research Center. At the UAF community campuses projects may include: Consortium Learning Centers at Chuckchi, and Northwest campuses, and the Interior Aleutians Campus Aleutians/Pribilof Center.

**Energy Projects**

**(GF: \$20,950.0)**

- **UAF ACEP - AEA Partnership for Energy Solutions**

FY10 (GF: \$10,000.0, Total: \$10,000.0)

Funding this project will allow ACEP to fill this gap by working in close coordination with AEA to serve as the State's research and development arm for testing emerging energy technologies. This will be accomplished in part with test beds for assessment of technologies or products that could be deployed in Alaska in the short and mid-term (1-5 years). The emphasis will be placed on technologies applicable to rural Alaska. By funding ACEP as AEA's partner in energy technology, Alaska has the opportunity to truly become a leader on the world stage in energy development in a manner that can provide stable, affordable energy throughout the state while simultaneously developing economic opportunities for its residents and its industries. It is, by taking this type of balanced approach between forward-thinking policy, investment in cost-effective projects, and investment in research to 'peer over the horizon' at emerging technologies that will provide future energy solutions, that this goal can be realized.

- **UAF Immediate Testing Facility Requirement**

FY10 (GF: \$500.0, Total: \$500.0)

Energy technology development and testing requires a facility that has heated space, adequate wiring, and fire protection. The space does not need to be customized except to have a garage door for loading and unloading equipment, and a high-bay area for large testing equipment. There is presently no space in which this type of testing can be done at UAF without some renovation or space rental. The unheated space in the MIRL Annex would facilitate such a testing facility provided some improvements. The Alaska Center for Energy and Power is presently occupying the office space in the MIRL Annex. While the renovation will not be a permanent fix to the space needs of energy research at UAF, it will serve to meet capacity in the interim. Energy research is critical to the state. A testing facility is needed to evaluate new technologies. While paper studies will benefit many aspects of energy research and development, only physical testing can provide many answers needed in rural communities seeking to adopt new energy technologies.

- **UAF Rural Power Projects**

FY10 (GF: \$1,700.0, Total: \$1,700.0)

Funding this project will allow UA to help Rural Alaska with the energy crisis. This applies to heating, transportation and electrical power. This initiative focuses on power generation. The funding will be used to support a researcher, staff and equipment/supplies/travel for 5 years to be dedicated to the development of rural power options. ACEP has already been asked to assist with rural power projects in hydrokinetic, geothermal, wind and biomass energy for communities, schools, and corporations. As these relationships develop, funding is needed to build and support capacity.

- **UAA - Energy Data Network**

FY10 (GF: \$1,100.0, Total: \$1,100.0)

The purpose of this project is to establish and maintain for 5 years the Alaska Energy Data Network within ISER. Through this initiative ISER will collect, compile, maintain, and make readily available a comprehensive database on energy use and supply within Alaska at the community, regional and statewide level. Currently there is no comprehensive data whatsoever on energy use and cost at the community level. State and federal energy policy is being made largely in an information vacuum. Even basic publications such the “Alaska Electric Power Statistics” have not been published regularly for more than a decade. Just as ISER’s Man-in-the Arctic Program (MAP) economic database provides authoritative economic data, the UA Alaska Energy Data Network will provide consistent and authoritative energy data. These data will be publicly available over the Web and can be used directly to inform decisions or for further analysis.

- **UAF - Transportation Fuels Initiative**

FY10 (GF: \$780.0, Total: \$780.0)

Funding this project will enable ACEP to focus on finding solutions to Alaska's energy needs. Alternative fuels for transportation is a significant concern for Alaskans.

Transportation fuels are a specific need that cannot directly be satisfied with renewable sources. While much attention is currently being paid to reducing the cost of electricity and heating fuel, the cost of transportation fuel is increasing the cost of goods and services across the state. In a state that relies on transportation for many products to and from the state, a new approach to transportation fuels is needed.

- **UAF - Sustainable Infrastructure/CCHRC Collaboration**

FY10 (GF: \$1,000.0, Total: \$1,000.0)

Funding this project would allow for the sustainable infrastructure of the Cold Climate Housing Research Center that has been on the University of Alaska Fairbanks campus for 2 years. During that time, INE and CCHRC have sought to develop projects together. While some projects have been very fruitful, there is a great need for funding dedicated to developing this partnership. The funding would allow for faculty, students, and equipment to be dedicated to sustainable infrastructure. The bulk of this work would focus on housing, however, other infrastructure, such as commercial and industrial facilities will be investigated. This work will be part of the Alaska Center for Energy and Power.

- **UAF - Alaskan Coal**

FY10 (GF: \$1,020.0, Total: \$1,020.0)

Funding this project will allow UA to investigate coal technologies that can allow Alaska to take advantage of its rich resources. Alaskan Coal is one of the most significant known sources of energy in the United States. Between 25 and 50% of US coal is in Alaska. UAF's niche for coal is not with the fundamental research in gasification or coal to liquids technologies, but in the application of these technologies. The project will address: coal preparation technology (such as ultra clean coal treatment), coal conversion technology (such as gasification) and coal product technologies (such as hydrogen from syngas used in fuel cells or conversion to liquids). Alaska's primary export may eventually shift from petroleum to coal as the petroleum resource is diminished. Funding this initiative will best position the state to build Alaska coal into its energy portfolio now and in the future.

- **UAF - Carbon Sequestration Options**

FY10 (GF: \$1,125.0, Total: \$1,125.0)

Funding this project will allow the geological and geotechnical characterization of two suitable sites in Alaska for the permanent storage of carbon dioxide emissions from stationary power plants. The permanent sequestration is accomplished through the reaction of carbon dioxide with the major constituent minerals of mafic volcanic rocks (basalts) to form the calcium, magnesium and iron carbonate minerals calcite, dolomite, and siderite, respectively. Mafic volcanic rocks are formed at high temperatures (>1000 centigrade) and thus are unstable at the lower temperatures of the earth's surface and near surface. In the presence of carbon dioxide and water vapor, the constitute minerals naturally alter by the chemical weathering process to form more stable forms including the carbonates and clay minerals. Under natural conditions at the earth's surface, these reactions occur over time periods of hundreds of years; however at the temperature of power plant emissions and at depths of a few hundred meters these reactions occur nearly instantaneously. Furthermore, these reactions are exothermic and thus generate heat.

- **UAF - Biomass Energy Program**

FY10 (GF: \$3,725.0, Total: \$3,725.0)

Funding this project will answer five questions if biomass is to play a role in Alaska's energy future: 1) what is the amount of biomass resource available for use as an energy source, 2) what is the physical and chemical make-up of that biomass, 3) what fuel format is appropriate, 4) can technologies perform efficiently, and 5) are our systems financially and environmentally sound. The successful use of biomass as a part of a sustainable energy supply in Alaska requires a combination of expertise, facilities and outreach to explore the ways Alaskan species and waste products can be best used in the production of heat, electricity, and bioproducts. This approach must account for the diverse geographical and climatic regions of the state, the technical aspects of fuel production, social and economic implications, and educational and outreach needs to ensure adoption of new technologies and sustainable use of natural resources and waste products. Biomass will play an efficient and effective role in Alaska's energy future and in the short-term.

## **Climate Projects**

**(GF: \$21,500.0)**

- **UAF - Ocean Acidification**

FY10 (GF: \$1,000.0, Total: \$1,000.0)

Funding this request will enable UA to establish a project that will quantify the potential effects of ocean acidification in Alaskan marine waters. This emerging problem is little understood in Alaskan waters, but has the potential of a very large impact on the marine ecosystems that support the extraordinary fishery resources. Through this initiative IMS will conduct an assessment of the degree of acidification of Alaskan marine waters, especially the Bering Sea. The project will collect, compile, maintain, and make readily available a comprehensive database on the pH and its potential effect on biological resources within Alaska waters at the community, regional and statewide level. This project will investigate the potential impact of changing ocean acidification on Bering Sea fishery.

- **UAF - Commercial Fisheries**

FY10 (GF: \$1,000.0, Total: \$1,000.0)

Funding this request will enable UA to characterize the impact that changing climate is having upon Alaskan salmon and other commercial species in Alaskan waters. Through this initiative the Fisheries Division will conduct an assessment of the impact that changing climate is having upon Alaskan salmon and other commercial species in Alaskan waters. The project will collect, compile, maintain, and make readily available a comprehensive database on the findings and their potential effect on fisheries resources within Alaska waters at the community, regional and statewide level. This project will investigate the extent that Climate change is being documented as a factor in changing distribution patterns and ranges, in periods of the runs, and in the species mix harvested as catch and bycatch. For example, the pollock fishing fleet vessels are finding it necessary to travel farther north each season for their catch. This increases fuel costs and presents more hazardous weather and sea conditions.

- **UAF - Improving Sea Ice Forecasts**

FY10 (GF: \$1,500.0, Total: \$1,500.0)

Funding this project will improve reliability of sea ice projections (time scales of seasonal to 10s to 100s of years). The purchase of a state-of-the-art electromagnetic sensor to measure thickness from aircraft will provide data in near real-time to initialize sea-ice forecasts and validate long-term projections. Acquisition of this sensor will help us leverage additional funds from federal agencies and the private sector. The inadequacy of presently available information on future sea ice conditions has recently been apparent in the background information available to agencies involved in endangered species listings. The wide variance among climate model projections of future sea ice variations calls for a coordinated program of observations and modeling to quantify the oceanic and atmospheric drivers of sea ice variations, to more precisely incorporate the driving mechanisms into sea ice prediction systems, and to use observational information to enhance the ice-ocean modules used in global climate models.

- **UAF - Alaska Statewide Digital Mapping Initiative**

FY10 (GF: \$6,000.0, Total: \$6,000.0)

Funding this request will improve our ability to detect, mitigate and understand changes in the Alaskan ecosystem by establishing base-line maps of essential geographic characteristics. This program includes requests for support of a satellite receiving station, airborne sensors and mapping activities. UAF has an excellent space-borne program and field-based program, but we are almost completely lacking in the middle-scale-airborne capacity. With an airborne program, we can bridge this scale gap. Possible projects include flying geophysical sensors like lidar, NDVI, cameras (optical, IR, etc) and magnetics. These projects would support climate change studies, engineering, mining and mapping. These mapping efforts should begin with high-resolution coastline delineation, but then be expanded to include water resources (including lakes and wetlands), ecosystems and geology. In many cases, a quantitative assessment of our existing physiography has never been completed, so it is difficult to assess change.

- **UAF - Permafrost Dynamics**

FY10 (GF: \$1,000.0, Total: \$1,000.0)

Funding for this project will address long-term infrastructure fidelity and water resources availability as influenced by changing permafrost conditions and atmospheric circulation. Funding would build capacity by which permafrost science, engineering, economics, and related fields are organized at the University of Alaska in a way that would bridge basic research and applications to meet user needs in Alaska and the broader Arctic. This end-to-end capability, encompassing basic permafrost research, engineering, and the social sciences, would enable the University of Alaska to assume world leadership in the planning and adaptation to changing environmental conditions in the North. Climate change and coastal erosion will affect our infrastructure situated in places where flooding, erosion, and permafrost damage are most acute. This will include accelerated degradation of structures, roads, runways, and water-sewer systems.

- **UAF - Improving Weather Predictions**

FY10 (GF: \$1,000.0, Total: \$1,000.0)

Funding this project will improve weather predictions utilizing the Weather Research and Forecasting (WRF) computational model for Alaska. Enhance capabilities and extend existing applications of WRF to allow for more forecast products to be applied to climate systems in the Alaska region, including aviation conditions in remote and urban parts of the state, marine surface state conditions, occurrence and degree of temperature inversions, and occurrence (location and height) of wildfire smoke. WRF is the dominant US weather forecast model used by NOAA, state agencies, and commercial forecasters. However, the WRF model has not yet been fully developed or well tuned to Alaskan conditions such as long-duration snow cover, ocean ice influences, and extended periods of light and darkness that are not found in the lower 48. Better prediction of weather phenomena will have distinct economic impact on industries dependent on weather, such as: logistical support for resource extraction; air transportation of people, services and goods; fisheries and seagoing navigation; and tourism.

- **UAF - Coastal Erosion, Inundation**

FY10 (GF: \$1,000.0, Total: \$1,000.0)

Funding for this project will address the coastal degradation that is the paramount near-term climate impact in the state. In two recent reports to the state – “Recommendations Report to the Governor's Subcabinet on Climate Change” and the Final Report of the Alaska Climate Impact Assessment Commission – call for immediate action to mitigate coastal impacts were made. At this point in time the detailed information about frequencies and magnitudes of storms, waves, and inundation events – upon which response plans are developed and engineering structures designed – is simply not available. An understanding of the coastal processes driving of erosion and inundation is less mature compared to terrestrial / oceanographic / atmospheric studies because, at the coast, all must be considered together. Ice affected areas are even less well understood yet are far more complex. Improved understanding requires a firm basis of observational data.

- **UAF - Climate Data Management**

FY10 (GF: \$1,000.0, Total: \$1,000.0)

Funding this project will enable UA to develop a data base that will link to research in energy security, food and fiber security, and clean and reliable water supplies to climate change data and the ability to provide compiled data sets of driving data for modeling specific system components. These data sets will be used to develop down-scaling algorithms to obtain climate projections tailored to the needs of users in specific locations (river discharge, soil wetness, snow loads, timing of freeze-up and break-up, sea level, and wave height, among many others). The Alaska Climate Impact Assessment Commission has identified a need to better communicate, manage, coordinate, and disseminate the aggregation of research projects among institutions in Alaska. This central data inventory / resource would be beneficial to efficient community planning and land and infrastructure management. This program would establish linkages among existing data archives in Alaska and elsewhere to enable analyses of environmental and social responses to a wide array of climate drivers.

- **UAF - Natural Hazards Monitoring**

FY10 (GF: \$1,000.0, Total: \$1,000.0)

Funding this request will allow UA to address the lack of natural hazards monitoring in the state. Alaska is seismically and volcanically active with attendant risks of injury, death and destruction due to earthquakes, tsunamis, and volcanoes. Since 1988, with the inception of the State Seismology Laboratory and the Alaska Earthquake Information Center at the Geophysical Institute (GI), and with a federally funded partnership with the US Geological Survey (USGS), many of the most seismically active areas have been instrumented. Typically 50 new earthquakes are added to the State Catalog each day. For each event over magnitude 3.5 near Alaskan cities, a shake map is prepared which contours areas of strong seismic disturbance for use, if emergency action is required. With a new partnership with the National Oceanic and Atmospheric Administration, this has been extended to include tsunami information and evaluations.

- **UAF - Frost Effects Laboratory**

FY10 (GF: \$4,500.0, Total: \$4,500.0)

Funding this request will allow UA to further investigate frost action that is a critical engineering consideration in all engineered structures in northern climates. To date most of our knowledge concerning frost action has come from forensic engineering and small scale laboratory testing. Further, existing facilities do not allow us to explore freezing and thawing of layered soils. Large scale testing will allow us to evaluate and understand design and failure mechanisms related to frost action. A large scale frost effects laboratory provides the ability to test methods to reduce damage to roadways in the spring, evaluate the impacts of soil freezing and thawing on cold and warm pipelines and other utilities and evaluate seismic response of structures on frozen materials. The impacts of freezing and thawing on civil structures is often dramatic. There are numerous cases of complete destruction of structures due to settlement, frost heave or thaw weakening.

- **UAF - Responding to Emerging Requests from the Climate Change Subcabinet**  
FY10 (GF: \$2,500.0, Total: \$2,500.0)

Funding this request will allow UA to investigate our rapidly changing communities and investigate better methods of adaptation. We do not yet fully understand how the climate drivers and receptors interact, but our existing capabilities and facilities have drawn researchers from across the globe to the University of Alaska to collaborate in developing this understanding. A list of research needs has been formulated by the Governor's Subcabinet committee on climate change and this program will be responsive to those directives. UA has considerable expertise and visibility in its research on climate change ranging from field experiments across the Arctic, to modeling future changes as well as quantifying shifts in society land and resource use patterns. This consortium will coordinate, strengthen, enhance and expand the research and outreach capacity of UA's climate change research endeavors with a specific purpose to address Alaskan needs with respect to a changing climate.

**Alaska Education Policy Project**

**(GF: \$700.0)**

- **UAA - Alaska Education Policy Project**  
FY10 (GF: \$700.0, Total: \$700.0)

This request will establish and operate the Center for Alaska Education Policy Research (CAEPR) within the Institute of Social and Economic Research and drawing on the expertise of UA's schools and colleges of education and of UA faculty in other areas. The CAEPR will coordinate with the State Department of Education and Early Development, school districts across Alaska, and other interested agencies and parties to provide policy advice to the Governor, Legislature, and other decision makers to promote peer-reviewed research on education policy that is relevant to Alaska. Alaska faces numerous challenges related to education policy, including teacher retention, high dropout rates, finance, and access to education in rural areas. There remains a significant need for more policy research, both focused on policy making and on the link between policy and practice. This work needs to encompass the entire range of education settings and ages. The proposed center will serve as the intellectual focal point for statewide education policy research.

**University Equipment Refresh (Administrative & Academic)**

**(GF: \$90,000.0)**

- **Administrative Equipment**

Funding for this request is necessary to replace systems and infrastructures used in the transmission and retrieval of information. Advances in technology have made the way in which the university administers its electronic information obsolete and inefficient. This request would fund projects that would enhance program delivery to students, support research, and promote data security. Projects to be addressed with this funding would include an emergency alert notification system, replacement of video-conferencing and enterprise server equipment, and a data center contingency plan.

- **Academic Equipment**

To meet the growing demands to train Alaskans for today's jobs, instructional equipment and equipment to support portable teaching technologies for several vocational and technical programs is needed systemwide. Training for high demand jobs is a high priority for the UA system. Several new programs have been instituted in transportation, engineering, health, and education; and departments across the system provide the general education and discipline specific support classes that enable students to complete their certificates and degrees at all levels. Projects such as an upgrade to the statewide digital archives, laboratory equipment to support high demand job programs, instructional equipment for vocational and technical programs and technologies to support distance delivery applications will be addressed.

**Compliance/Business Efficiency Solutions**

**(GF: \$10,000.0, Total \$10,000.0)**

The University is automating processes throughout its system. These automations align with the strategic priorities of the University to improve its emergency response capability, increase efficiencies, contain costs, improve responses to legislature requests, and demonstrate responsible stewardship of the treasures of the state with which the University is entrusted. The automations include new accountability strategies for travel management reporting as well as technologies to enhance the University's community support.

# Life Sciences Innovation and Learning



## Meeting teaching and research needs for life sciences

### Goals:

- Address a critical shortage of instructional classrooms and research lab space for life sciences programs; the most popular programs for degree seeking students.
- Meet the goals of the UAF Strategic Plan by providing required infrastructure for research and academic programs.
- Provide space to attract and retain talented research investigators to secure competitive research grants.



### Background

The University of Alaska Fairbanks life science programs include; biological sciences, biology, botany, wildlife management, wildlife biology, zoology, biological chemistry and molecular biology. Life sciences facilities have not been modernized since the Bunnell building was built in 1959, and do not meet the current programs' needs. Since 2001, UAF has requested funding to meet these needs. Biological Sciences (BIOS) was proposed as the solution to the programs' demands. Recognizing the urgency, UAF has scaled down its request and will internally reallocate funds to assist in making this project a reality.

The Life Sciences project is different from BIOS:

- ◆ Reduced square footage by 20,000
- ◆ Reduced project cost by approximately \$20M (BIOS currently estimated at \$125M)
- ◆ Reduced number of principal researchers from 18 to 12
- ◆ Reduced number of office spaces
- ◆ The university will fund a portion of costs from non general funds

To maintain high standards of instruction, training and research, UAF must develop modern facilities to accommodate research and teaching in the life sciences. Life science programs provide wildlife resource management, biomedical research and foster collaborative agreements with businesses, research institutions and the Alaska community.

### Project Scope

Life Sciences will feature modern academic space for over 600 biology and wildlife degree

students and 1,500 students that take a biology courses each year. Research space will feature a series of labs that serve up to 12 lead researchers who also employ 7-10 scientists each. Life Sciences will utilize a two component approach to provide flexibility for construction. The solution will integrate 37,200 gsf of academic and 50,000 gsf of research space. Once complete, functionally obsolete space in other buildings will become available for renovation and backfill for other programs, creating a domino effect on campus that will benefit all students and faculty at UAF.

Funding will also expand steam capacity to West Ridge and Life Sciences, providing the required heat source for the project and eliminating the need for a previously required satellite heating plant.

### Impact

This project will foster opportunities for students to participate in hands-on research at every level. Scientists at UAF are conducting collaborative research and teaching in some of the state's top challenges that include; environment changes, invasive species and emerging diseases. Significant life science research at UAF is currently gaining a better understanding of public health problems that affect us all: sudden infant death syndrome, avian influenza, Alzheimer's disease, stroke and Parkinson's disease.

Estimated Total Project Cost	
New construction	\$82.195 M GF
New construction	\$20.625 M NGF
<b>Capital Request</b>	<b>\$102.82 M</b>

# Auke Lake Way Campus Entry Improvements & Road Realignment



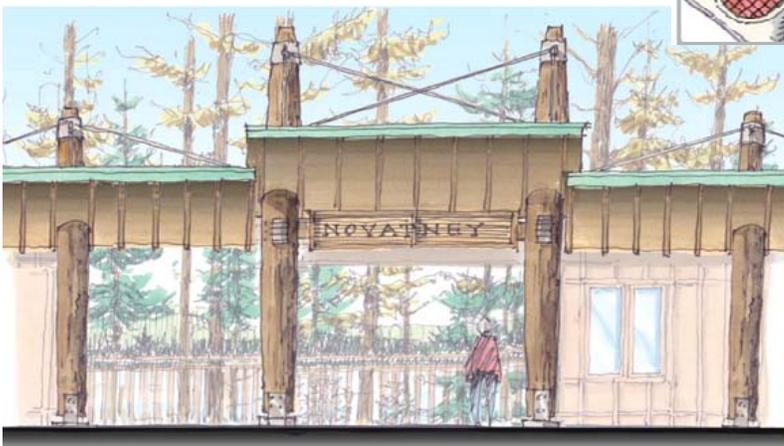
## **Need:**

- Provide Service/Emergency Access
- Reduce pedestrian / vehicle conflicts
- Enhance the pedestrian environment
- Improve site drainage
- Accommodate future building development
- Connect existing pedestrian sidewalks and trails
- Establish new entry circulation routes



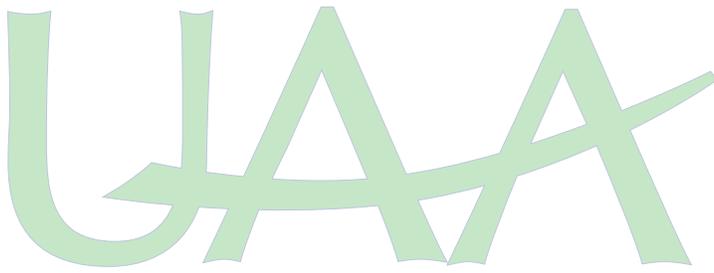
## **Features:**

- Enhanced building entry nodes
- New covered pedestrian spine
- New informal gathering /recreational areas within a "campus green"
- New energy efficient site lighting
- Celebration of the culture and environment of the region
- Enhanced access to Auke Lake views



## **Funding:**

FY10 Capital Request: \$4.13 M



# Sports Arena

**FY10 funding request:**

\$65M state funding for arena construction  
\$10M university receipts

**FY09 funding received:**

\$15M for design and site preparation

*In FY09 the Alaska legislature provided the University of Alaska Anchorage (UAA) with \$15M for a new sports arena. This funding is being used for project design and site preparation. Our FY10 request of \$65M will be used for the arena’s construction, which would begin during the summer of 2010.*

*The on-campus student recreation activities and varsity athletics currently share space in the Wells Fargo Sports Complex (WFSC) on the Anchorage campus. Built more than 30 years ago for much smaller student population, the WFSC does not provide adequate classroom, recreation, or spectator-sports space for UAA’s rapidly growing student body. With the support of the Alaska legislature, community members and business partners, UAA is moving forward with its plan to address these deficiencies in the construction of a new on-campus sports arena.*

**What the new sports arena will do for UAA**

- Provide support for UAA’s athletics teams.
- Help to attract and retain students.
- Serve as a community event venue.
- Provide adequate spectator seating for athletic events.
- Create a sustainable on-campus facility.
- Help to support UAA’s health, physical education and fitness curriculum.
- Enhance UAA’s competitive edge in student-athlete recruitment.
- Provide additional student recreation space.
- Enhance academic programs.
- Improve campus life.

## Proposed sports arena floor plan

### Performance gymnasium

- Spectator seating for approx. 3,500.
- Concession stands.

### Athletic administration and team support facilities

- Locker rooms for UAA's athletics teams.
- Locker rooms for officials.
- Locker rooms for visiting teams.
- Fitness and training facilities.
- Offices for coaches and athletic administration.
- Auxiliary gym.
- Equipment storage and laundry facilities.
- Meeting rooms.
- Academic support space.
- AV production space.

### Gymnastics facility

- Practice and performance gym.
- Spectator seating.

### Construction timeline and specs

- 2008-09: design and site preparation.
- 2010-11: facility construction.
- Building area: approx. 130,000 gross square feet.
- Total project budget: \$80M.



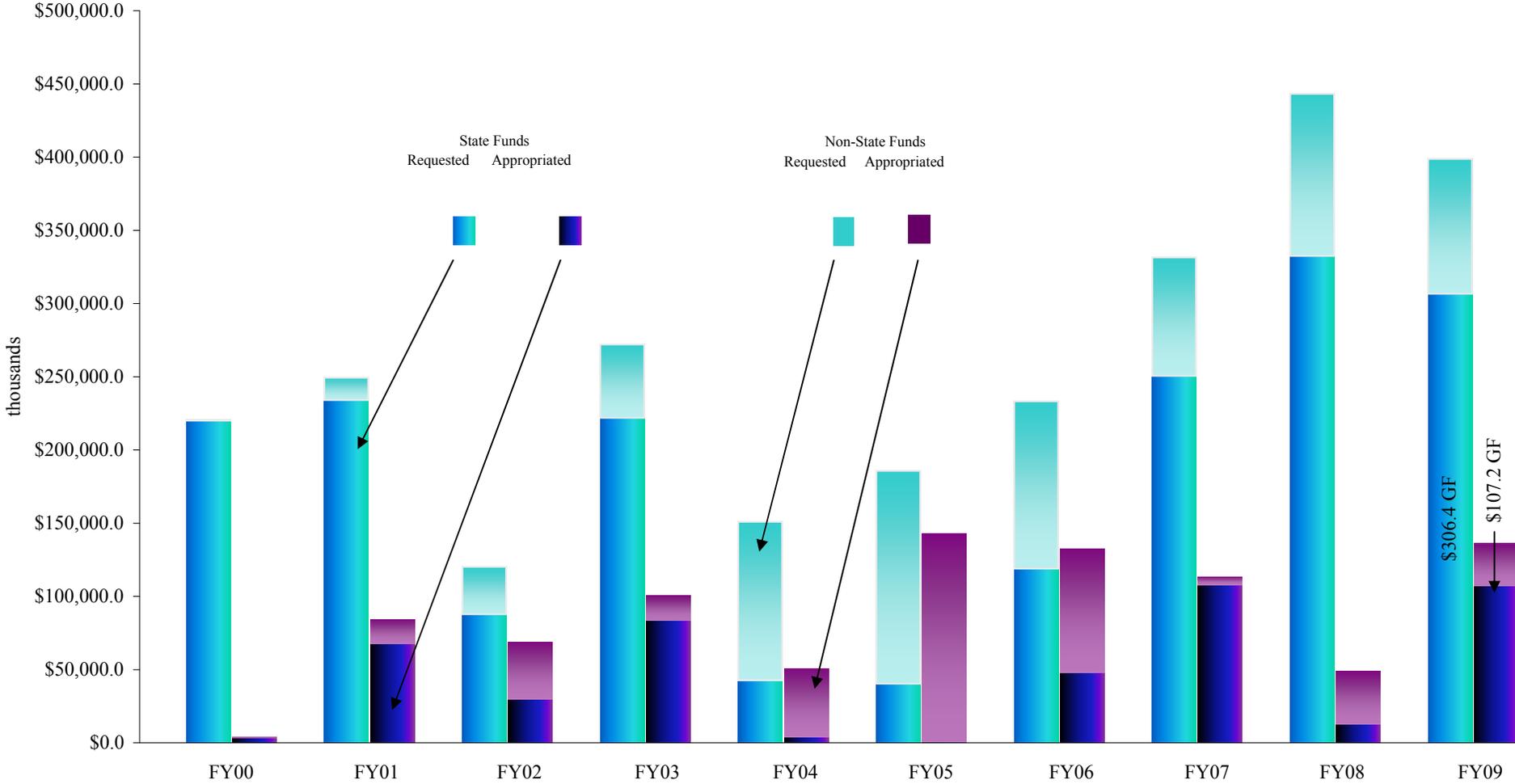
University of Alaska  
 Capital Budget Request vs. State Appropriation  
 FY00 - FY09  
 (thousands)

<b>Request</b>	<b>Code, ADA, R&amp;R</b>	<b>Additions/ Expansions</b>	<b>New Facilities</b>	<b>Equipment</b>	<b>SBDC, Other</b>	<b>Total</b>
FY00	162,030.6	7,182.2	42,680.0	7,500.0	450.0	219,842.8
FY01	128,515.1	24,522.6	72,414.3	7,500.0	900.0	233,852.0
FY02	26,372.1	18,342.7	37,261.2	5,272.3	450.0	87,698.3
FY03	36,917.1	14,000.0	162,685.0	7,658.1	565.0	221,825.2
FY04	14,007.0	3,400.0	19,515.5	4,141.5	1,405.0	42,469.0
FY05	10,055.0		26,550.0	3,111.3	550.0	40,266.3
FY06	40,753.5	2,600.0	70,536.0	4,403.4	550.0	118,842.9
FY07	87,520.0	9,650.0	135,983.0	16,721.9	550.0	250,424.9
FY08	131,016.0	6,395.0	186,500.0	7,874.7	550.0	332,335.7
FY09	114,000.0	2,000.0	163,870.0	26,000.0	550.0	306,420.0
<b>Total</b>	<b>751,186.4</b>	<b>88,092.5</b>	<b>917,995.0</b>	<b>90,183.2</b>	<b>6,520.0</b>	<b>1,853,977.1</b>
<b>10 yr. Avg.</b>	<b>75,118.6</b>	<b>8,809.3</b>	<b>91,799.5</b>	<b>9,018.3</b>	<b>652.0</b>	<b>185,397.7</b>

**Appropriation**

FY00		3,000.0			450.0	3,450.0
FY01	22,288.0	5,000.0	39,500.0	400.0	450.0	67,638.0
FY02	14,136.5	9,425.0	3,429.0	2,225.0	450.0	29,665.5
FY03	9,490.0	5,094.0	66,620.0	1,650.0	500.0	83,354.0
FY04	3,641.5				450.0	4,091.5
FY05					450.0	450.0
FY06	8,100.0	1,950.0	35,700.0	1,750.0	550.0	48,050.0
FY07	48,725.0	1,500.0	57,000.0		715.0	107,940.0
FY08	8,475.0		3,750.0		640.0	12,865.0
FY09	45,822.6		61,300.0		125.0	107,247.6
<b>Total</b>	<b>160,678.6</b>	<b>25,969.0</b>	<b>267,299.0</b>	<b>6,025.0</b>	<b>4,780.0</b>	<b>464,751.6</b>
<b>10 yr. Avg.</b>	<b>16,067.9</b>	<b>2,596.9</b>	<b>26,729.9</b>	<b>602.5</b>	<b>478.0</b>	<b>46,475.2</b>

University of Alaska  
 Capital Request and Appropriation Summary  
 FY00-FY09

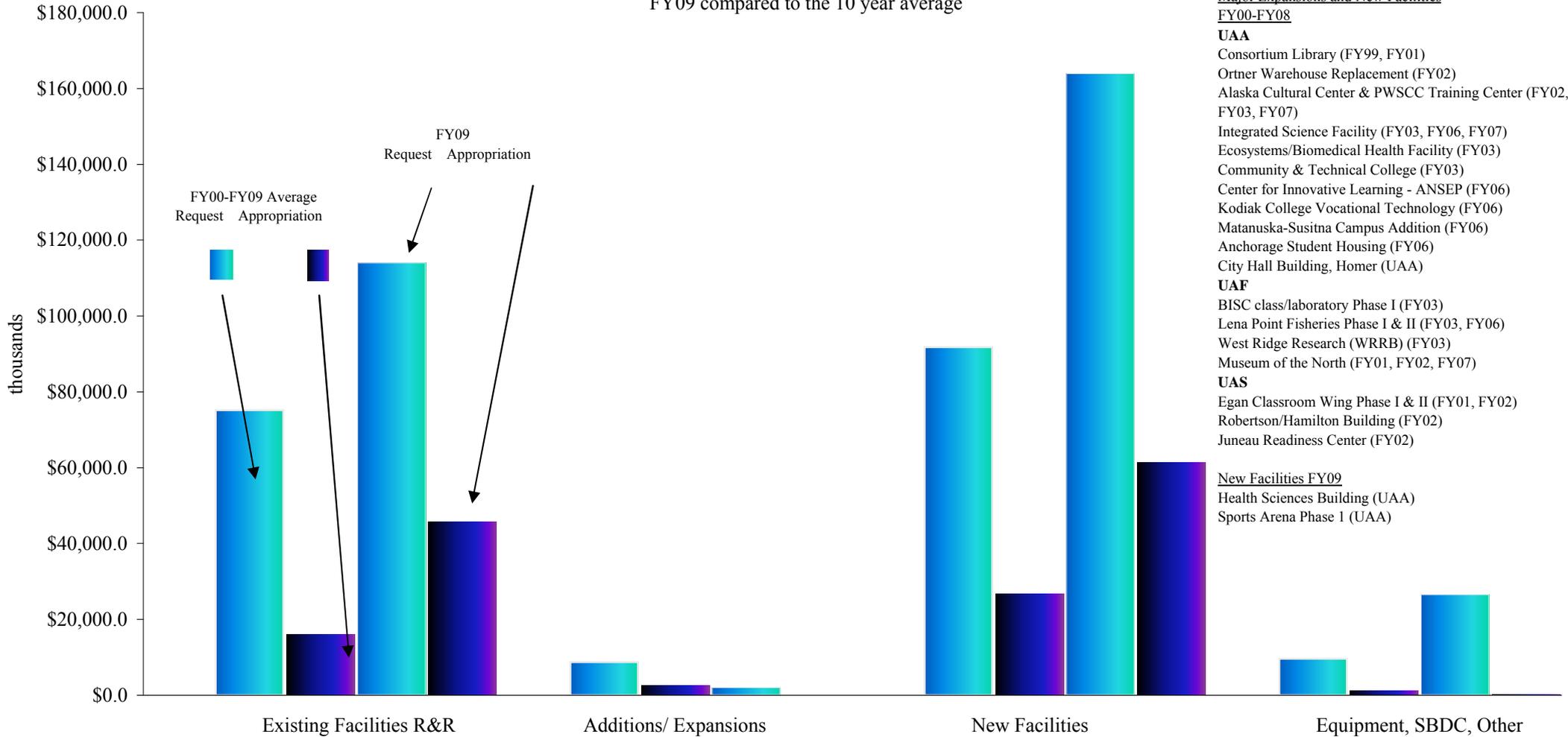


\* State funds include: AHFC Bonds, General Obligation Bonds, Tobacco Settlement Bonds and Alaska Capital Income Funds

University of Alaska  
State Appropriation Summary by Category  
FY00-FY09  
(thousands)

	Location	Code/ADA, R&R		Additions/ Expansions		New Facilities		Equipment	SBDC, Other		Total	
	Anchorage Campus	Anchorage	40,745.2	25.4%		199,650.0	74.7%	640.0	4,400.0	46.6%	245,435.3	52.8%
	Kenai Peninsula College	Soldotna	4,436.9		850.0	3,000.0		27.5			8,314.4	
	Kenai Peninsula College - Kachemak Bay Branch	Homer	222.3		3,750.0	2,500.0			215.0		6,687.3	
	Kodiak College	Kodiak	1,481.9	6.4%		350.0	4.3%			2.8%	1,831.9	5.8%
	Matanuska-Susitna College	Palmer	2,139.7			1,004.0		55.3			3,199.0	
	Prince William Sound Community College	Valdez	2,007.6			4,700.0					6,707.6	
	<b>UAA</b>		<b>51,033.8</b>	<b>31.8%</b>	<b>4,600.0</b>	<b>211,204.0</b>	<b>79.0%</b>	<b>722.8</b>	<b>4,615.0</b>	<b>49.4%</b>	<b>272,175.6</b>	<b>58.6%</b>
	Fairbanks Campus	Fairbanks	63,686.8		9,500.0	23,500.0		1,020.1	75.0		97,781.9	
	Fairbanks Campus	Juneau		39.6%		19,000.0	15.9%			10.1%	19,000.0	25.1%
	Fairbanks Campus	Palmer										
	Fairbanks Campus	Seward										
	Tanana Valley Campus	Fairbanks	13,000.0	8.1%	8,000.0						21,000.0	4.5%
	Fairbanks Campus (CES)	Kenai							90.0		90.0	
	Bristol Bay Campus	Dillingham			3,329.0						3,329.0	
	Chukchi Campus	Kotzebue	580.0								580.0	
	Interior-Aleutians Campus	Fairbanks	240.0	5.5%						0.8%	240.0	2.6%
	Interior-Aleutians Campus	Fort Yukon										
	Interior-Aleutians Campus	Tok										
	Kuskokwim Campus	Bethel	4,254.1								4,254.1	
	Northwest Campus	Nome	3,690.0								3,690.0	
	<b>UAF</b>		<b>85,450.9</b>	<b>53.2%</b>	<b>20,829.0</b>	<b>42,500.0</b>	<b>15.9%</b>	<b>1,020.1</b>	<b>165.0</b>	<b>11.0%</b>	<b>149,965.0</b>	<b>32.3%</b>
	Southeast Campus	Juneau	16,947.5	10.5%		13,595.0	5.1%	341.1		3.2%	30,883.6	6.6%
	Ketchikan Campus	Ketchikan	6,316.4	4.2%							6,316.4	1.6%
	Sitka Campus	Sitka	430.0		540.0						970.0	
	<b>UAS</b>		<b>23,693.9</b>	<b>14.7%</b>	<b>540.0</b>	<b>13,595.0</b>	<b>5.1%</b>	<b>341.1</b>		<b>3.2%</b>	<b>38,170.0</b>	<b>8.2%</b>
	Statewide		500.0	0.3%				3,941.0		36.5%	4,441.0	1.0%
	Systemwide											
	<b>SW</b>		<b>500.0</b>	<b>0.3%</b>				<b>3,941.0</b>		<b>36.5%</b>	<b>4,441.0</b>	<b>1.0%</b>
	<b>Grand Total</b>		<b>160,678.6</b>	<b>100%</b>	<b>25,969.0</b>	<b>267,299.0</b>	<b>100%</b>	<b>6,025.0</b>	<b>4,780.0</b>	<b>100%</b>	<b>464,751.6</b>	<b>100%</b>
			34.6%		5.6%	57.5%		2.3%				

University of Alaska  
 Average Capital Request by Category compared to Average Appropriation  
 State Funds  
 FY09 compared to the 10 year average



Major Expansions and New Facilities  
 FY00-FY08

**UAA**

- Consortium Library (FY99, FY01)
- Ortner Warehouse Replacement (FY02)
- Alaska Cultural Center & PWSCC Training Center (FY02, FY03, FY07)
- Integrated Science Facility (FY03, FY06, FY07)
- Ecosystems/Biomedical Health Facility (FY03)
- Community & Technical College (FY03)
- Center for Innovative Learning - ANSEP (FY06)
- Kodiak College Vocational Technology (FY06)
- Matanuska-Susitna Campus Addition (FY06)
- Anchorage Student Housing (FY06)
- City Hall Building, Homer (UAA)

**UAF**

- BISC class/laboratory Phase I (FY03)
- Lena Point Fisheries Phase I & II (FY03, FY06)
- West Ridge Research (WRRB) (FY03)
- Museum of the North (FY01, FY02, FY07)

**UAS**

- Egan Classroom Wing Phase I & II (FY01, FY02)
- Robertson/Hamilton Building (FY02)
- Juneau Readiness Center (FY02)

New Facilities FY09

- Health Sciences Building (UAA)
- Sports Arena Phase I (UAA)

**University of Alaska**  
**Approved FY10 Capital Budget Request and**  
**FY10-FY15 Capital Improvement Plan**

**Development Guidelines**

The goal of the Board of Regents' University of Alaska (UA) FY10-FY15 Capital Plan is to ensure that the necessary facilities, equipment and infrastructure are in place for the continued growth, refinement and improvement of the University as prescribed in the UA Strategic Plan. A six-year capital plan that mirrors the needs of the University provides the Board, President, executive staff and university community a clear understanding of the needed resources for capital projects and the annual operating costs associated with those projects. The six-year capital plan, which is based on the assumption of full funding by the State, will balance the required capital improvements with realistic expectations of UA's ability to systematically implement such improvements.

The guidelines are organized in the following sections: Background, Guiding Principles, General Development Process, Capital Project Categories, and Capital Project Scoring Criteria.

**Background**

- Facility renewal and replacement (R&R), deferred renewal, code corrections, and upgrades for University facilities are significant capital budget priorities. UA maintains nearly 400 buildings worth in excess of \$1.6 billion. These facilities comprise 6.3 million gross square feet and have annual depreciation totaling \$57 million. More than half of UA's buildings are more than 30 years old. UA must assure adequate funding requests for major renewal and replacement and deferred renewal projects for University facilities. Given the magnitude of its facilities, UA requires an annual minimum of \$50 million for facility renewal and replacement. UA has received an average of \$12.8 million over the last nine years.
- Through its operating budget, UA currently funds over \$27 million approximately (1.5% of adjusted facility value) annually for facilities maintenance and repair (M&R). National industry standards prescribe two-four percent of current replacement value as the appropriate annual investment for M&R. Factors such as the age of the buildings, level of building use, and climate will determine the specific percentage.
- In November 2002 the State approved a significant General Obligation (GO) Bond, the first in over 20 years. As a result of the GO Bond, UA received partial funding for three major science facilities. Since that time, full funding has been appropriated for the UAA Integrated Sciences Facility (2006 and 2007); and for the UAF School of Fisheries and Ocean Sciences Lena Point facility in Juneau (final \$6.8 million in non-state funding received in FY08). Additional funding is still required for the UAF Biosciences Research and Teaching Facility in Fairbanks (FY09 request \$66 million, FY10 request \$47 million).
- Prior to FY07, an average of \$7 million in state capital funding was appropriated for maintaining existing facilities, thus elevating UA's deferred maintenance need from \$200 million in 2000 to over \$700 million as of August 2007. In FY07, the Board requested, as its highest capital budget priority, \$98 million for maintaining existing facilities and equipment. The legislature appropriated \$49 million toward those priorities.

- State funding for UA’s capital project priorities averaged \$39.7 million annually in the nine year period 2000 to 2008. Since 2000, UA has received \$357.5 million of state capital funding; nearly one-third of that total was received in FY07.
- The current six year capital plan totals \$1.6 billion. The UA FY09 Capital Budget Request totaled \$398.8 million, with \$306.4 million requested from state funding and \$92.4 million from receipt authority. Of the \$306.4 million request, \$120 million was requested for maintaining existing UA facilities and equipment.

### **Guiding Principles**

- Project requests addressing Renewal, Replacement, Deferred Renewal, and Code Corrections for existing University facilities will be the highest priority for funding in the FY10 capital request and the six year capital plan.
- New facility project requests included in UA’s current six-year capital plan for which partial funding has been appropriated, will be the second highest priority.
- Consistent with the Board of Regents’ strategic plan and the MAU’s academic and research plan, key strategies will include:
  - Preparing Alaskans for the state’s high demand jobs
  - Enhancing competitive research and taking advantage of UA’s position in the International Polar Year and benefits of research as an industry in Alaska
  - Enhancing student success and college readiness with an emphasis on increasing student enrollment
- Project requests to be fully funded through university-generated revenue (UA Revenue Bonds or Partnership Funding) will be categorized separately from project requests requiring partial or full State funding.
- The FY10-FY15 capital plan total cost will reflect the actual amounts of total project needs based on the best available project budget information at the time of the request.
- Project requests requiring university-generated revenue must be accompanied by an appropriate business plan, which includes review of the debt payment impact on the operating unit, the MAU, and on UA’s operating budget.
- Facilities used primarily for instructional and administrative activities that have limited revenue generating capacity should be contingent upon State funding. Facilities used primarily for sponsored research or auxiliary enterprises that have moderate to significant revenue generating capacity must evaluate a funding plan that includes university-generated funding.

## **General Development Process**

- The capital budget will be developed in accordance with the timeframe set forth in the budget development calendar.
- Each MAU will submit its capital request bifurcated between main and community campuses and will rank the projects from the highest to lowest in terms of MAU priority.
- Submitted projects will be reviewed, scored and ranked system-wide by appropriate councils including the Facility Council, Business Council, System-wide Academic Council and Information Technology Council. Sufficient time will be allocated in the process to allow for appropriate input from the chancellors.
- Based on this input the President will submit a draft of the six-year plan—including details of any changes to the current plan—to the Board of Regents for review at the September meeting.
- Code and ADA projects will be requested only for the current year.
  - Each MAU will submit projects in this category.
  - Projects will be bifurcated between main and community campuses.
  - In addition to the review for all projects, SW Risk Management will provide input on the urgency of each project in this category.
- All projects proposed for the FY10 budget request will have obtained the requisite project approval in accordance with Board of Regents' Policy P05.12.

## **Capital Project Categories**

Projects will be presented in draft form to the Board of Regents using these categories:

- Code and ADA
- Essential Renewal and Replacement of Academic (including technical) Equipment and Administrative (communications) Equipment
- Renewal and Renovation (includes deferred renewal)
- New Construction
- Land, Property and Facilities Acquisition

New construction projects for the present year will be scored and ranked. The final draft will be presented to the administration for approval in the thematic approach.

## **Capital Project Scoring Criteria**

In addition to the specific category criteria below, projects demonstrating responsiveness to programs and services directed at the following goals will be given priority consideration:

- Preparing Alaskans for the state's high demand jobs
  - Enhancing competitive research and taking advantage of UA's position in the International Polar Year and benefits of research as an industry in Alaska
  - Enhancing student success and college readiness
- Code and ADA will address the following criteria without scoring:

- Code and ADA requirements
  - Impact on students, programs, faculty, and staff
  - Impact on meeting accepted performance goals
  - Impact on accountability and sustainability efforts
  - Impact on existing and planned space utilization
  - MAU/Campus priority
  - Reduction of legal liability; general improvement of well being; consequences of not proceeding with the project
- Renewal and Renovation will address the following criteria without scoring:
    - Impact on students, programs, faculty, and staff
    - Impact on meeting accepted performance goals
    - Impact on accountability and sustainability efforts
    - Impact on existing and planned space utilization
    - MAU/Campus priority
    - Developed plan/project readiness/ability to execute
    - Demonstrates responsiveness to UA Strategic Plan 2009 and state needs
    - Potential for non-state funding
    - Actual non-state funding in hand
- New Construction will address the following criteria with scoring:
    - Impact on students, programs, faculty, and staff
    - Impact on meeting accepted performance goals
    - Impact on accountability and sustainability efforts
    - Impact on existing and planned space utilization
    - MAU/Campus priority
    - Developed plan/project readiness/ability to execute
    - Responsiveness to UA Strategic Plan 2009 and state needs
    - Potential for non-state funding
    - Actual non-state funding in hand
- Academic and Administrative Equipment
    - Impact on students, programs, faculty, and staff
    - Impact on meeting accepted performance goals
    - Impact on accountability and sustainability efforts
- Land, Property and Facilities Acquisition
    - Conformance with the UA Strategic Plan 2009, Campus Master Plan and campus land acquisition plan
    - Likelihood of adverse development/redevelopment by another party versus time horizon before campus use

### **Criteria Descriptions**

- Addresses Code and ADA requirements
  - Does this project correct immediate code or ADA requirements issues? Those projects that address code issues will rate higher than those that do not.
  - The extent to which a project addresses health and code issues for students, faculty, staff and the general public.

- Impact on students, programs, faculty, and staff
  - To what extent does the project enhance the students' educational experience and how many students will be served by the technology/service/new facility? A project that a large number of students will benefit from will rate higher than a project that benefits few students.
  - To what degree does the project enhance the ability to deliver programs and how many programs will be served by the technology/ service/new facility? A project impacting several programs will rate higher on this criteria than a project benefiting few programs. Programs may be instructional, research, outreach or administrative in nature.
  - To what extent will the project enhance the faculty/staff career/employment experience and strengthen the ability to recruit and retain faculty and staff?
  - To what extent does it strengthen research competitiveness?
  - To what extent will this project align with community and student demographic trends?
- Impact on meeting accepted performance goals
  - To what extent will the project enhance the MAU's ability to meet its accepted performance goals?
  - Which performance measures does this project impact?
- Impact on accountability and sustainability efforts
  - To what extent will the project enhance the MAU's efforts toward efficiency and cost savings?
- Impact on existing and planned space utilization
  - To what extent will the project enable the MAU to maximize its existing space?
  - What is the MAU existing space utilization?
  - Has an analysis of space utilization determined that this project is the best solution to meet the space needs?
- MAU/Campus priority
  - To what extent does the project meet the priority goals and objectives of the MAU academic/service plan? A project high on the MAU (campus) list will rate higher on this criteria than a project lower on the campus priority.
- Developed plan/ project readiness/ability to execute
  - What stage of the planning process is the project currently in (i.e. an identified project concept/vision/idea, project scope has been developed, the schema is developed, the project is bid ready)? A bid ready project will rate higher than a project in the idea stage. Additionally, added weight will be given to projects, which clearly demonstrate all operating cost and potential sources of funding for these costs.
- Demonstrates responsiveness to UA Strategic Plan 2009 and state needs
  - The extent to which the project supports the delivery of programs in strategic initiative areas and objectives outlined in the UA Strategic Plan 2009. Projects that support identified goals addressed in academic initiatives, strategic plans or other goal setting processes will rate higher than projects that do not.
- Potential for non-state funding
  - What are the potential NGF funding sources (both construction and operating costs)?
  - What level of participation is expected?
  - What is the current commitment of partners?

- Strategic plan, campus master plan and campus land acquisition plan conformance
  - What is the necessity of the project within the framework of appropriate MAU and system goals and objectives as articulated in the UA Strategic Plan 2009 and MAU planning documents?
  
- Likelihood of adverse development/redevelopment by another party versus time horizon before campus use
  - What is the possibility that this acquisition will not be available if not included in the current six-year capital plan or one year capital budget request?