

Capital Budget

Request Summary & Narrative



August 2012



	State Approp.	Receipt Auth.	Total
Annual Requirement for Maintenance	27,600.0	-	27,600.0
& Reducing Deferred Maintenance			
<i>Cogen Heating Plant Upgrades to Maintain Service & Code Corrections (Ph3)</i>	2,000.0		2,000.0
<i>Critical Electrical Distribution</i>	6,550.0		6,550.0
<i>West Ridge Research Revitalization including LS Backfill</i>	4,000.0		4,000.0
<i>Fine Arts Vapor Barrier</i>	2,800.0		2,800.0
<i>West Ridge Storage Solution</i>	5,000.0		5,000.0
<i>Lower Campus Backfill Renovations</i>	1,250.0		1,250.0
<i>Patty Center Revitalization</i>	1,000.0		1,000.0
<i>Salisbury Theater Renovation</i>	2,100.0		2,100.0
<i>Tilly Commons DM and Repurpose</i>	2,000.0		2,000.0
<i>Kuskokwim Campus Facility Critical Deferred and Voc-Tech Renewal</i>	900.0		900.0
Scheduled R&R and Repurposing	9,900.0	-	9,900.0
<i>Fairbanks Campus Main Waste Line Repairs</i>	2,000.0		2,000.0
<i>Fairbanks Campus Wide Roof Replacement</i>	1,000.0		1,000.0
<i>Student Services Renewal - Wood Center Student Union</i>	3,250.0		3,250.0
<i>ADA Compliance Campus Wide: Elevators, Ramps, Restrooms</i>	1,900.0		1,900.0
<i>Elevator Scheduled Upgrading and Replacement</i>	500.0		500.0
<i>Campus Roads, Sidewalks, Curbs, Gutters, and Ramps</i>	750.0		750.0
<i>Campus Wide Fire Alarms Survey</i>	500.0		500.0
New Construction	78,300.0	45,000.0	123,300.0
<i>Engineering Building</i>	48,300.0	10,000.0	58,300.0
<i>P3 Campuswide Housing (not required if forwarded on operating request)</i>	30,000.0	35,000.0	65,000.0
Planning and Design for Construction	23,550.0	1,000.0	24,550.0
<i>Cogen Heating Plant Replacement Planning</i>	22,000.0		22,000.0
<i>UFD/CTC Fire Station Replacement and Training Center</i>	500.0	1,000.0	1,500.0
<i>Parking Garage South Bunnell (P3 Concept)</i>	350.0		350.0
<i>CRCO - Kuskokwim Campus Consortium Learning Center</i>	700.0		700.0
Land and Facilities Acquisition	1,500.0	-	1,500.0
Academic and Administrative IT Equipment	4,425.0	-	4,425.0
Capital Research	20,050.0	11,200.0	31,250.0
		-	
Total FY14 Capital Needs Request	165,325.0	57,200.0	222,525.0

UAF FY14 Capital Request Package

Capital Research Summary

August 2012

CAPITAL RESEARCH REQUESTS			State Appropriation	Receipt Authority	Total
Enhancing Competitive Research and the Benefits of Research as an Industry in Alaska					
	Partnership to Develop Statewide Energy Solutions	1	\$ 10,500.0	\$ 3,000.0	\$ 13,500.0
	Research Chinook Salmon Production & Decline	2	3,100.0	6,200.0	9,300.0
	Improving Arctic Oil Spill Response Through Dedicated Science and Technology Center	3	2,000.0	2,000.0	4,000.0
	Enhance Base Maps for Alaska	4	2,950.0	-	2,950.0
	Research Equipment Matching Fund	5	1,500.0	-	1,500.0
	Research Total		\$ 20,050.0	\$ 11,200.0	\$ 31,250.0

UAF FY14 Capital Budget Research Request Narratives

Partnership to develop Statewide Energy Solutions

(GF \$10,500.0, NGF \$3,000.0, Total \$13,500.0)

The University of Alaska Fairbanks has significant capabilities to assist the State of Alaska and Alaska communities in making informed decisions about in-state energy development. Funding for a university hosted integrated in-state energy policy center will bring together in one place the ability to objectively and critically analyze energy options and projects in order to provide policy makers and stakeholders detailed decision support tools and options for optimizing in-state energy alternatives. The university can serve as a neutral information broker to impartially assess a wide range of potential options from numerous perspectives on efforts to develop new capacity on a broad range of conventional and unconventional energy sources and potential projects including diesel, wind-diesel hybrid and hydrokinetic, biofuels, geothermal, wind, and ocean power. Additionally, the University will supply assessments of options for natural gas development; proposed coal-to-liquids and gas-to-liquids projects; large hydropower; carbon sequestration along with assistance in developing strategies for new uses of existing oilfield facilities after the end of their production lifetime. This will inform decision makers and help ensure Alaska's resources are developed in a prudent manner to the optimum economic benefit for the state and its residents.

Research Chinook Salmon Production & Decline

(GF \$3,100.0, NGF \$6,200.0, Total \$9,300.0)

Chinook salmon support important subsistence, personal use, commercial, and recreational fisheries in Alaska. However, recruitment of Chinook salmon has been highly variable throughout Alaskan drainages over the last century. Recruitment failures, coupled with poor markets for wild salmon, have caused severe economic hardship for Alaskan residents,

particularly in the Yukon-Kuskokwim drainages. Continued concern over Chinook salmon returns in the Yukon River, particularly related to meeting escapement goals to Canadian tributaries up-river, indicate that fishery restrictions and closures will be frequent in the future. As a result, biologists, managers, and stakeholders all seek to better understand the factors affecting Chinook salmon returns in Alaskan waters. Researchers trying to understand the mechanisms that regulate variation of Chinook salmon abundance in Alaska drainages have been hindered by not having a reliable time series of data on the number of fish returning each year to spawn or the impacts of variations in biotic and abiotic factors on abundance, growth, and survival. Therefore, addressing this information gap is a critical step in developing a better understanding of the causes for the recent declines in Alaska Chinook salmon stocks. This understanding that will positively and directly impact the lives of those dependent on the food source.

Arctic Oil Spill Response through Science Technology Center

(GF \$2,000.0, NGF \$2,000, Total \$4,000)

On April 20, 2010, the Deepwater Horizon exploded and sank in the Gulf of Mexico with 11 souls on board. The resulting well-blowout flowed for nearly 4 months and resulted in one of the largest manmade oil spills ever on Earth. Given the huge offshore circum-arctic resource potential, oil development in the Arctic is a critical issue for the US, specifically, Alaska. UAF is uniquely situated to create a center focused on Oil Spill Prevention and Preparedness in the Arctic to fill gaps in existing knowledge and arctic appropriate technology. Subject matter experts across the University are currently engaged in numerous leading edge research projects applicable to Arctic oil spills. This center will allow UAF to partner with State and Federal agencies, industry, and other academic institutions to support wise decision-making concerning Arctic oil spill response and prevention.

Enhance Base Maps for Alaska

(GF \$2,950.0)

Alaska's Statewide Digital Mapping Initiative (SDMI) is an interagency program producing updated high-resolution imagery and elevation model data for the entire state. The base imagery and elevation mapping program is well underway, with a new, high resolution satellite image of the entire state to be complete in 2014. Elevation mapping statewide is projected to be complete within the decade. This proposed effort will be directed at providing much needed information critical for assessment and potential development of Alaska's resources. Increased capability to monitor and document land surface conditions and characteristics will improve our ability to detect and respond to the changing environment, assess resources, and plan new development. Such monitoring is particularly needed in regions of rapid change, such as in areas changed by wildfires, along coast lines, near glaciers and in zones of rapidly degrading permafrost.

Research Equipment Matching Fund

(GF \$1,500.0)

Modern scientific and engineering instrumentation is essential to competitive research, but the cost of such instruments can be very high, far more than individual UAF research units can allocate for that purpose. The National Science Foundation and several other federal agencies

offer competitive grants for major research instrumentation, normally for instruments that cost \$100,000 or more. There are also foundations that provide similar grant opportunities (e.g., M.J. Murdock Charitable trust). However, most such grants require or request matching funds from the institution, usually between 30% and 50% of the total cost of the instrument. When the instrument is very costly, that match can be difficult or impossible for UAF to provide, so such grant opportunities are often missed. The request is for a matching fund that would be used to cover the UAF contribution to successful grant proposals.

Appropriation Name	FY14		FY15		FY16		FY17 - FY19		Total Funding Request
	State General Fund	Receipt Authority	State General Fund	Receipt Authority	State General Fund	Receipt Authority	State General Fund	Receipt Authority	
Deferred Maintenance and Renewal and Replacement	37,500.0	-	37,500.0	-	37,500.0	-	137,295.0	-	249,795.0
New Construction	78,300.0	45,000.0	11,000.0	14,000.0	-	-	-	-	148,300.0
Planning (out-year new construction projects)	23,550.0	1,000.0	21,900.0	700.0	243,900.0	14,800.0	46,200.0	15,500.0	367,550.0
Land, Property and Facilities Acquisition	1,500.0	-	5,000.0	-	5,000.0	-	-	-	11,500.0
Other (Academic Equip/Administrative IT Equip/Capital Research)	24,475.0	11,200.0	4,500.0	-	4,500.0	-	13,500.0	-	58,175.0
Total	165,325.0	57,200.0	79,900.0	14,700.0	290,900.0	14,800.0	196,995.0	15,500.0	835,320.0

Project ID	Priority		Project Balance	FY14	FY15	FY16	FY17 - FY19	Remaining Project Balance	FY14-19 Funding Request
(167)	1	Cogen Heating Plant Required Upgrades to Maintain Service and Code Corrections (Ph3) ⁽¹⁾	39,770.0	2,000.0	4,200.0	4,000.0	29,570.0	-	39,770.0
(275)	2	Critical Electrical Distribution	16,175.0	6,550.0	3,125.0		-	-	9,675.0
(261)	3	Fairbanks Campus Main Waste Line Repairs*	12,350.0	2,000.0	2,000.0	2,000.0	6,000.0	350.0	12,000.0
(209)	4	Fairbanks Main Campus Wide Roof Replacement DM (Irving II, Skarland) *	8,568.0	1,000.0	1,000.0	1,000.0	3,000.0	2,568.0	6,000.0
(481)	5	West Ridge Research Revitalization including LS backfill ⁽³⁾	85,000.0	4,000.0	5,400.0	9,000.0	25,950.0	40,650.0	44,350.0
(267)	6	Student Services Renewal - Wood Center Student Union	12,000.0	3,250.0	7,450.0	1,300.0	-	-	12,000.0
(489)	7	Fine Arts Vapor Barrier	2,800.0	2,800.0			-	-	2,800.0
(41)	8	ADA Compliance Campus Wide: Elevators, Ramps, Restrooms ^{(2)*}	9,319.0	1,900.0	2,000.0	2,000.0	3,419.0	-	9,319.0
(126)	9	Elevator Scheduled Upgrading and Replacement*	3,000.0	500.0	500.0	500.0	1,500.0	-	3,000.0
(496)	10	West Ridge Storage Solution	5,000.0	5,000.0			-	-	5,000.0
(426)	11	Lower Campus Backfill Renovations per 2010 Masterplan (Bunnell, Constitution, etc)	14,650.0	1,250.0	1,800.0	4,050.0	6,600.0	950.0	13,700.0
(266)	12	Patty Center Revitalization	49,350.0	1,000.0	1,100.0	4,000.0	14,756.0	28,494.0	20,856.0
(142)	13	Campus Infrastructure: Roads, Sidewalks, Curbs, Gutters and Ramps	7,350.0	750.0	750.0	750.0	2,250.0	2,850.0	4,500.0
(216)	14	Campus Wide Fire Alarms Survey*	3,000.0	500.0	500.0	500.0	1,500.0	-	3,000.0
(488)	15	Salisbury Theater Renovation**	4,100.0	2,100.0			-	-	2,100.0
(480)	16	Tilly Commons DM & Repurpose	14,000.0	2,000.0	6,775.0		2,225.0	3,000.0	11,000.0
(166)	17	Eielson/Signers' Code Corrections	7,700.0			2,000.0	1,450.0	4,250.0	3,450.0
(69)	18	UAF Community and Technical College Center Space Revitalization ⁽⁴⁾	10,100.0			3,400.0	2,275.0	4,425.0	5,675.0
(492)	19	Student Services Renewal - Constitution/Original Bookstore	11,500.0				11,500.0	-	11,500.0
(478)	20	Bartlett Hall Plumbing and Piping Replacement	8,500.0				8,500.0	-	8,500.0
(271)	21	Kodiak SFOS Renewal	7,500.0				5,500.0	2,000.0	5,500.0
(479)	22	Moore Hall Plumbing and Piping Replacement	7,500.0				3,600.0	3,900.0	3,600.0
	23	Original Museum Exhibit Space Renovation	2,000.0				-	2,000.0	-
							-	-	-
(39)	1	Kuskokwim Campus Facility Critical Deferred and Voc-Tech Renewal -- Phase 2	17,700.0	900.0	900.0	2,000.0	4,000.0	9,900.0	7,800.0
(493)	2	Northwest Campus Facility Critical Deferred Renewal	10,000.0			1,000.0	3,700.0	5,300.0	4,700.0
(1) Retubing existing boilers in FY18/19 will not be necessary if new cogen heating plant is constructed									
(2) FY14 Elevators: CTC, Rasmuson Corridor, Lathrop, Bunnell, AHRB W Cargo, Moore, FA Theater Stage									
(3) O'Neill, Irving I & II, Elvey, AHRB, WRRB, Akasofu, Museum Reichardt, BiRD									
* Annual scheduled R&R.									
**Donor opportunity									
Total				37,500.0	37,500.0	37,500.0	137,295.0		249,795.0

New Construction			FY14		FY15		FY16		FY17 - FY19		Total Funding Request	
Project ID	Priority	Project Name	State General Fund	Receipt Authority	State General Fund	Receipt Authority	State General Fund	Receipt Authority	State General Fund	Receipt Authority		
170	1	Engineering Facility	48,300.0	10,000.0					-	-	58,300.0	
272	2	Campuswide Housing*	30,000.0	35,000.0					-	-	65,000.0	
420	3	Energy Technology Facility			11,000.0	14,000.0			-	-	25,000.0	
497	4	CCHRC Sustainable Village Phase 2 - 4		1,300.0	500.0	1,000.0		500.0	1,000.0	-	-	4,300.0
Total			78,300.0	45,000.0	11,000.0	14,000.0	-	-	-	-	148,300.0	

Planning for New Construction			FY14		FY15		FY16		FY17 - FY19		Total Funding Request
Project ID	Priority	Project Name	State General Fund	Receipt Authority	State General Fund	Receipt Authority	State General Fund	Receipt Authority	State General Fund	Receipt Authority	
385	1	Cogen Heating Plant Replacement	22,000.0				175,000.0		-	-	197,000.0
155	2	UFD/CTC Fire Station Replacement and Training Center	500.0	1,000.0			12,500.0	4,000.0	3,500.0	-	21,500.0
498	3	Parking Garage South Bunnell (P3 Concept)	350.0				4,000.0	4,000.0	-	-	8,350.0
499	4	BiRD/Virology Buildout			10,000.0				-	-	10,000.0
181	5	West Ridge Research Building 2 (50,000sf)			3,700.0		33,300.0		-	-	37,000.0
202	6	Patty Sports Complex Weight Training Facility ⁽¹⁾			500.0		2,000.0	1,000.0	-	-	3,500.0
429	7	West Ridge Auditorium and Dining ⁽¹⁾			500.0	500.0	5,000.0	2,000.0	-	-	8,000.0
347	8	Honors House				200.0		2,800.0	-	-	3,000.0
500	9	Troth Yeddha'/Alaska Native Studies Building Placeholder					500.0	500.0	9,500.0	9,500.0	20,000.0
501	10	Stevens Wing at Rasmuson Library Placeholder					500.0	500.0	6,000.0	6,000.0	13,000.0
299	11	Mathematical Sciences Facility Expansion and Classroom Utilization ⁽²⁾					2,100.0		20,200.0	-	22,300.0
502	1	CRCD-Kuskokwim Campus Consortium Learning Center	700.0		6,500.0				-	-	7,200.0
302	2	CRCD-Chukchi Campus Consortium Learning Center			700.0		8,300.0		-	-	9,000.0
353	3	CRCD-Interior Aleutians Campus Aleutians / Pribilof Center					700.0		7,000.0	-	7,700.0
Total			23,550.0	1,000.0	21,900.0	700.0	243,900.0	14,800.0	46,200.0	15,500.0	367,550.0

Land, Property and Facilities Acquisition			FY14		FY15		FY16		FY17 - FY19		Total Funding Request
Project ID	Priority	Project Name	State General Fund	Receipt Authority	State General Fund	Receipt Authority	State General Fund	Receipt Authority	State General Fund	Receipt Authority	
382	1	Land, Property, Facilities Acquisition (purchase commercial property within close proximity to UAF Fairbanks, Rural & CRCD programs)	1,500.0		5,000.0		5,000.0		-	-	11,500.0
Total			1,500.0	-	5,000.0	-	5,000.0	-	-	-	11,500.0

Other (Academic Equipment/Administrative IT Equipment/Capital Research Requests)*			FY14		FY15		FY16		FY17 - FY19		Total Funding Request
Project ID	Priority	Project Name	State General Fund	Receipt Authority	State General Fund	Receipt Authority	State General Fund	Receipt Authority	State General Fund	Receipt Authority	
156	1	Upgrade UAF Network / Telecommunications Infrastructure / Campus Technology	2,000.0		1,000.0		1,000.0		3,000.0	-	7,000.0
173	2	Instructional Equipment - Fairbanks, Rural & CRCD	2,000.0		2,000.0		2,000.0		6,000.0	-	12,000.0
185	3	UAF Outdoor Wireless Connectivity Infrastructure	425.0						-	-	425.0
Capital Research Requests*									-	-	-
179	1	Partnership to Develop Statewide Energy Solutions	10,500.0	3,000.0					-	-	13,500.0
188	2	Focused Research to Uncover the Key Factors in Chinook Salmon Production and Decline	3,100.0	6,200.0					-	-	9,300.0
178	3	Improving Arctic Oil Spill Response	2,000.0	2,000.0					-	-	4,000.0
187	4	Enhanced Base Maps for Alaska	2,950.0						-	-	2,950.0
109	5	Research Equipment Matching Funds	1,500.0		1,500.0		1,500.0		4,500.0	-	9,000.0
Total			24,475.0	11,200.0	4,500.0	-	4,500.0	-	13,500.0	-	71,675.0

(1) Potential donor opportunity

(2) Integrate with Copper Lane Housing (P3)?

(3) Confirm CRCD New Construction priorities

*Assumes capital subsidy. If GF operating funds lease payment, this would not be needed.

**Statewide database includes all Academic Equipment, Administrative IT Equipment, and Capital Research Requests within the "Other" category.