

University of Alaska
FY14 Capital Budget Request Summary
UA Board of Regents' compared to Governor's Proposed
(in thousands of \$)

	UA Board of Regents'				Gov's Proposed Budget		
	State Approp.	Receipt Authority	New Legislation	Total	State Approp.	Receipt Authority	Total
Deferred Maintenance(DM)/ Renewal & Repurposing(R&R)	37,500.0			37,500.0	37,500.0		37,500.0
<i>UAA Main Campus</i>	<i>9,105.0</i>			<i>9,105.0</i>			
<i>UAA - Community Campuses</i>	<i>1,879.0</i>			<i>1,879.0</i>			
<i>UAF Main Campus</i>	<i>22,161.0</i>			<i>22,161.0</i>			
<i>UAF - Community Campuses</i>	<i>970.0</i>			<i>970.0</i>			
<i>UAS Main and Community Campuses</i>	<i>2,771.0</i>			<i>2,771.0</i>			
<i>UA - Statewide</i>	<i>614.0</i>			<i>614.0</i>			
Additional DM	75,000.0			75,000.0			
Backlog Reduction							
<i>UAF Cogen Power Plant</i>	<i>22,000.0</i>			<i>22,000.0</i>			
<i>UAS Hendrickson Remodel and Renovation</i>	<i>3,600.0</i>			<i>3,600.0</i>			
<i>DM Projects Systemwide</i>	<i>49,400.0</i>			<i>49,400.0</i>			
Annual Renewal & Repurposing Sustainment Initiative			50,000.0	50,000.0			
New Starts/Continuation							
UA Engineering Building Completion	108,900.0	10,000.0		118,900.0			
UAF Cold Climate Housing Research Center Sustainable Village Phase 2-4		1,300.0		1,300.0		1,300.0	1,300.0
Research for Alaska							
UAF Alaska Chinook Salmon Production and Decline	3,100.0	6,200.0		9,300.0			
UAF Partnership to Develop Statewide Energy Solutions	5,500.0	3,000.0		8,500.0			
<i>Energy Technology Testing and Development</i>	<i>3,500.0</i>	<i>3,000.0</i>		<i>6,500.0</i>			
<i>Energy Analysis</i>	<i>1,000.0</i>			<i>1,000.0</i>			
<i>Comprehensive Fossil Fuel Research</i>	<i>1,000.0</i>			<i>1,000.0</i>			
UAF Improving Arctic Oil Spill Response through a Dedicated Oil Spill Science and Technology Center	1,500.0	2,000.0		3,500.0			
UAF Enhance Base Maps for Alaska Resources	1,900.0			1,900.0			
Other Capital Requests							
SW Replace Wide Area Network Components	500.0			500.0			
Total FY14 Capital Budget	233,900.0	22,500.0	50,000.0	306,400.0	37,500.0	1,300.0	38,800.0

FY14 Capital Budget Request Project Descriptions

Projects in the Governor's Proposed Capital Budget

UA Deferred Maintenance (DM) and Renewal & Repurposing (R&R)

Deferred Maintenance (DM) / Renewal & Repurposing (R&R)

FY14 (GF: \$37,500.0, Total: \$37,500.0)

UA's FY14 Deferred Maintenance requests of \$37.5 million will continue to exclusively address the huge, Systemwide maintenance backlog. This will be the fourth year of the Governor's 5-year plan to reduce the State's DM backlog. The highest priority DM and R&R projects at the main campuses are the UAA Beatrice McDonald Building in Anchorage, UAF Cogen Heating Plant Required Upgrades to Maintain Service in Fairbanks, and UAS Auke Lake Way Campus Entry Improvements and Road Realignment in Juneau.

UA New Starts/Continuation

UAF Cold Climate Housing Research Center Sustainable Village Phase 2-4

FY14 (NGF: \$1,300.0, Total: \$1,300.0)

In 2008, Chancellor Rogers' Transition Team identified the need to create a more sustainable campus at UAF. Since then the Office of Sustainability was created as a partnership between the Chancellor's Office and the UAF student body with this as a shared goal. This housing project will further the goal of sustainability at UAF through a partnership with the Cold Climate Housing Research Center's (CCHRC) Sustainable Northern Communities program. Each phase will construct four houses to accommodate 16 students. The houses are designed to test sustainable, durable, healthy, and cost effective building technologies for people living in the Circumpolar North. Another \$2 million of additional receipt authority will be required in the short-term.

Projects in the Board of Regents' Budget not Included in the Governor's Proposed Budget

UA Deferred Maintenance (DM) and Renewal & Repurposing (R&R)

Additional DM Backlog Reduction

FY14 (GF: \$75,000.0, Total: \$75,000.0)

FY15-FY18 (GF: \$210,000.0, Total: \$210,000.0)

An additional DM Backlog Reduction request of \$75 million is absolutely necessary in order to have any hope of reducing UA's untenable DM growth rate. This level of DM will also significantly minimize the expenditures for emergency response maintenance; this kind of maintenance is universally much more expensive and disruptive than performing preventative maintenance, routine maintenance, and capital reinvestment on a planned basis. This additional DM backlog funding will be able to fund, or partially fund, large deferred maintenance projects like UAF's Cogen Power Plant for \$22M (project description on page 30) and UAS Hendrickson Remodel and Renovation for \$3.6M (project description on page 45).

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Annual Renewal & Repurposing Sustainment Initiative

FY14 (GF: \$50,000.0, Total: \$50,000.0)

Annual Renewal and Repurposing (R&R) Sustainment Initiative funding of \$50 million is approximately 2.5% of the UA's facilities adjusted value...an industry standard.

Programmatically funding regular annual R&R is essential to prevent adding to the R&R/DM backlog.

The University is pursuing legislation for the University Building Fund (UBF) that would model the State's Alaska Public Building Fund. The new legislation would establish base state R&R appropriation funding for the UBF.

UA New Starts/Continuation: Continuation funding is being requested to complete both the Engineering Buildings at UAA and UAF. New Start requests that have already received some planning funds are included in the 10-Year Capital Improvement Plan for early consideration of future capital budget requests.

UAA Engineering Building Completion

FY14 (GF: \$60,600.0, Total: \$60,600.0)

The School of Engineering spent over \$500K in FY10 for the use of temporary facilities including; two 1,000 gsf portable buildings located north of the Engineering building; rental of a warehouse off campus for use as a design studio; and the temporary reallocation of the University Lake Building (ULB) Annex for Engineering program needs. The State of Alaska moved out of the ULB Annex space in late July 2009 and it was intended for University Police and IT system backup to occupy this space. These dispersed, on and off campus, facilities of about 14K gsf help meet the current program needs, but are extremely inefficient for effective program delivery and still are substantially less than peer institutions.

UAA engineering is experiencing dramatic growth in its enrollments with a near doubling of the entire program in the past five years now at nearly 1,000 students. New baccalaureate engineering and related associate and certificate 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 1980s and is currently undersized. The selected site for the new building is directly south of the Bookstore and would connect with the new Health Science Building across Providence Drive. The site selected for the parking garage is north of the existing Engineering Building and will require the realignment of Mallard Lane into its existing right of way.

UAF Engineering Building Completion

FY14 (GF: \$48,300.0, NGF: \$10,000.0, Total: \$58,300.0)

The University of Alaska Fairbanks, responding to the 100% increase in student enrollment and graduation of baccalaureate trained engineers, called for in the University of Alaska Statewide Engineering Expansion Initiative is proposing a new UAF Engineering Facility at the Fairbanks campus. The proposed new UAF Engineering Facility responds to the initiative to graduate more engineering students, enhances the student experience for engineering students and other students campus wide with a visible and interactive learning environment, integrates UAF's successful engineering research and graduate programs, and addresses critical classroom needs.

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The proposed facility of 116,900 gross square feet (gsf) is ideally situated adjacent to the existing Duckering Building currently housing the College of Engineering and Mines (CEM) and provides the opportunity to complete Cornerstone Plaza with an attractive and functional focal point at the far side of the UAF main campus. The new facility will have five floors blending with surrounding buildings while standing out as a new and exciting campus destination. In addition, the new facility maintains full connectivity to the existing Duckering building and programs and connects to the nearby Bunnell Building. Duckering will still require renovations to approximately 23,000 gsf to provide a functional connection with the new building and to allow efficient use to better serve the needs of the engineering program.

Research for Alaska: Includes funding to support research efforts that address critical state needs in the areas of salmon production and decline, energy alternatives and policy, Arctic oil spill response, and enhancing digital and multispectral maps of Alaska.

UAF Alaska Chinook Salmon Production and Decline (supports the Fisheries, Seafood and Maritime Initiative)

FY14 (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. Our current limited understanding of annual variations in abundance of Chinook salmon comes in part from a discontinuous time series of data that is generated from subsistence harvest estimates, in-river commercial catch and effort data, test fishery catch rates, tributary weir counts, counts of spawning salmon made from aerial surveys, and mark-recapture estimates of abundance. Accordingly, 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.

UAF Partnership to Develop Statewide Energy Solutions

FY14 (GF: \$5,500.0, NGF: \$3,000.0, Total: \$8,500.0)

FY15-FY16 (GF: \$5,000.0, Total: \$5,000.0)

The University of Alaska Fairbanks has significant capabilities to assist the State of Alaska, Alaska communities, and Alaska industries in making informed decisions about energy technology, analysis, and development. The University of Alaska Fairbanks can serve as a neutral information broker to impartially assess a wide range of potential energy options from numerous perspectives. This will inform Alaska's decision makers, industries, businesses, and residents who seek to develop and use Alaska's energy resources. As leaders in multidisciplinary

FY14 Capital Budget Request Project Descriptions

energy research, the University of Alaska Fairbanks can provide key stakeholders with a trusted, multidisciplinary source of analysis, research, and technology development. Additionally, the university can leverage resources through an extensive national and international research network including national laboratories other universities, and private non-profit organizations.

The purpose of this request is to leverage the energy technology testing and development success of the Alaska Center for Energy and Power (ACEP) and to advance research in target areas of energy analysis and fossil fuel research. This request will leverage other funding to optimize existing capacity at the University of Alaska Fairbanks and add capacity where needed in three critical research areas: 1. Energy technology testing and development, 2. Energy analysis and decision making, and 3. Establishment of an integrated fossil fuels program.

UAF Improving Arctic Oil Spill Response through a Dedicated Oil Spill Science and Technology Center

FY14 (GF: \$1,500.0, NGF: \$2,000.0 Total: \$3,500.0)

FY15-FY16 (GF: \$500.0, Total: \$500.0)

UAF is building a Center for Oil Spill Prevention and Preparedness in the Arctic by focusing the subject matter experts across the University on research applicable to Arctic oil spills. UAF is partnering with State and Federal agencies, industry, and other academic institutions to support wise decision-making concerning Arctic oil spill response and prevention by working to fill gaps in existing knowledge.

UAF Enhance Base Maps for Alaska Resources

FY14 (GF: \$1,900.0, Total: \$1,900.0)

FY15-FY16 (GF: \$1,050.0, Total: \$1,050.0)

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 the 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.

Other Capital Requests

SW Replace Wide Area Network (UA Core Network) Components

FY14 (GF: \$500.0, Total: \$500.0)

FY15-FY16 (GF: \$600.0, Total: \$600.0)

The existing routing hardware used to interconnect UAA, UAF, and UAS is rapidly approaching the end of its life and will not support the growing bandwidth demands of the University. This will replace this aging technology with state of the industry routing hardware and software.