

UAF FY15 Budget & Planning Overview and Executive Summary

August 2013

There is clear alignment between UAF accreditation core themes, strategic planning goals and the UA Strategic Direction Initiative (SDI). The UA system SDIs also represent the broad themes UAF and UA have used in budget and planning discussions with the State for FY15 requests. The State of Alaska Office of Management and Budget (OMB) has provided budget development guidance asking for a “hold the line” approach on existing statewide priorities, with targeted increases directed only toward “mission-critical” operations that support the Governor’s priorities of Resource Development, Education, Public Safety, Transportation/Infrastructure and Military Support.

UAF’s budget request for FY15 adheres to this message with a focus on preparing students for college and career success, attracting, retaining and advising students in order to effectively help them achieve degree completion, online and high demand education, research for Alaska including resource development areas such as engineering, mining and fossil fuel development, and effective partnerships with Alaska’s industries.

In response to current State conditions and in alignment with UA Strategic Directions Initiatives (SDI), UAF demonstrates prudent management of resources and practices strategic reduction and reinvestment procedures at every opportunity prior to requests for new funding. UAF’s FY15 fixed cost request is \$2.1M less than the FY14 budget request. The program request is \$104k less than in FY14 and represents a 2.5% increase as a percentage of the FY13 total authorized budget. Many of the request items were either partially funded in years past or have resubmitted because of significance to the institution. UAF is however, prepared to be aggressive in order to garner new funding in areas of strategic importance or where investments will have a large impact to the UAF community.

UAF Accreditation Core Themes	UAF Strategic Plan	UA Strategic Direction Initiatives
<p>Educate: Undergraduate and graduate students and lifelong learners</p> <p>Research: To create and disseminate new knowledge, insight, technology, artistic and scholarly works</p> <p>Prepare: Alaska’s career, technical and professional workforce</p> <p>Connect: Alaska Native, rural, and urban communicates by sharing knowledge and ways of knowing</p> <p>Engage: Alaskans through outreach for continuing education and community and economic development</p>	<p>Educate students to be informed, responsible, active citizens by incorporating real-world experiences and applications into the undergraduate curriculum.</p> <p>Promote UAF as Alaska’s premier research enterprise in partnership with state agencies, industry, and civic organizations.</p> <p>Enhance UAF’s competitive advantage by attracting and keeping the best and brightest students and faculty.</p> <p>Expand graduate programs in targeted areas of identified need and existing strengths.</p> <p>Improve assistance to students in making transitions across all phases of the education continuum.</p> <p>Serve Alaska’s diverse communities in ways that are more responsive and accessible and enhance the social, economic, and environmental well-being of individuals and communities.</p> <p>Develop innovative approaches to resource management that support the University’s mission and position UAF to meet the challenges of the future.</p>	<p>Student achievement and attainment</p> <p>Research and development to help build and sustain Alaska’s economic growth and productive partnerships</p> <p>Productive partnerships with schools, public entities and private industry</p> <p>Accountability to the people of Alaska</p>

UAF FY15 Budget Request - (\$GF/\$NGF; \$thousands)

PROGRAM ENHANCEMENT

Student Achievement and Attainment: \$1,736.8/\$562.2

- Alaska 2+2 Collaborative Veterinary Medicine Program w. Colorado State: \$200.0/\$243.0
- Essential Faculty Clinical-Community PhD & Undergraduate Psychology Program: \$453.8
- Nursing Faculty at Bristol Bay Campus: \$50.0/\$50.0
- Mandatory Comprehensive Student Advising (CRCD): \$197.0/\$14.0
- STEM Capacity & Student Success in General Chemistry - Gateway to Science & Engineering Careers: \$140.0/\$53.0
- E-Learning Expansion for Online High Demand Job Degree Areas: \$576.0/\$170.2
- Increase Engineering Graduates: \$120.0/\$32.0

Productive Partnerships with Schools: \$136.0

- Math Preparation Program in Rural High Schools: \$136.0

Productive Partnerships with Alaska's Public and Private Industries: \$1,044.2/\$345.0

- Chemical Engineering Program: \$500.0/\$120.0
- UAF Film Program Expansion: \$215.2/\$90.0
- Workforce Development - Expand Construction Trades Program: \$46.0/\$20.0
- Museum Curator for Alaska Native Cultural Artifacts & Asst. Professor: \$43.5/\$40.0

Fisheries Seafood and Maritime Initiative (FSMI): \$239.5/\$75.0

- Seafood Processing Quality Control Training: \$183.0
- Alaska Seafood Processors Leadership Institute (ASPLI): \$56.5/\$75.0

Research and Development to Help Sustain Alaska's Economic Growth: \$1,195.0/\$15,550.0

- Alaska Critical & Strategic Minerals, Fossil Fuels & Energy: \$495.0/\$500.0
- Commercialization of UAF Intellectual Property for Business Development: \$200.0/\$50.0
- Ship Time for Alaska Specific Research: \$500.0/\$15,000.0

Accountability to the People of Alaska: \$250.0

- Electronic Journal Subscriptions for Rasmuson Library: \$250.0

FIXED COSTS

Personal Services: \$4,930.0/\$4,930.0

- Fairbanks & Community Campus Adj: \$3,430.0/\$3,430.0
- Engineering, Technology & Science Faculty Market Adj: \$1,500.0/\$1,500.0

Non-Personal Services: \$2,030.0/\$2,020.0

- General Fixed Cost Increases: \$1,700 NGF
- UAF Smart Classroom Technology Refresh: \$160.0
- Rasmuson Library Electronic Subscriptions: \$250.0
- Cooperative Extension Service Natural Resource Fund Replacement: \$400.0/\$(400.0)
- Facilities M&R Estimate: \$1,220.0/\$720.0

Utilities (Est.): \$2,600.0/\$700.0

Facility Operations and Leases: \$365.0/\$65.0

- Bristol Bay Applied Science Center: \$65.0
- CTC Parking Garage: \$90.0/\$65.0
- Process Technology Program Lease & Facility Operations: \$210.0

Other New Development Estimated Lease Costs: \$5,000.0 NGF

- P3 Housing Development*: \$5,000.0 NGF
*UAF will continue to work through P3 development; depending on arrangements, future funding requests may be operating or capital. Feasibility studies are in progress as part of plan development.

CRITICAL CAPITAL INVESTMENTS

Annual Requirement for UAF Maintenance (Est. 62% of \$37,500.0): \$23,131.0

Deferred Maintenance and Renewal & Replacement (R&R): \$23,370.0

New Construction: \$233,300.0/\$120,000.0

- Engineering Facility: \$33,300.0/\$10,000.0
- Cogen Heating & Power Plant Boiler & Turbine Replacement: \$200,000.0/\$45,000.0
- Housing Receipt Authority*: \$65,000.0 NGF
 - *TBD P3 & UAF housing funded options; flexibility to determine least costly financing approach

Planning for New Construction: \$2,650.0

- University Fire Department Emergency Services & Management Facility Replacement: \$700.0
- CTC Emergency Services Training Center: \$900.0
- Parking Garage: \$350.0
- CRCD-Kuskokwim Consortium Learning Center: \$700.0

Land, Property & Facilities Acquisition: \$400.0

- Bunnell House Replacement: \$250.0
- Northwest Campus Realignment: \$150.0

Capital Research to Sustain Alaska's Economy: \$11,900.0/\$45,000.0

- Investments in University wide Research Areas of Opportunity: \$3,000.0/\$3,000.0
- Community Partnerships for Self-Reliance & Sustainability: \$1,000.0
- Improving Earthquake Prediction & Monitoring in Alaska: \$5,000.0/\$40,000.0
- Improving Arctic Oil Spill Response - Dedicated Science & Technology Center: \$1,000.0/\$2,000.0
- Mapping Alaska: \$1,900.0

Academic Equipment & Technology: \$5,966.5/\$1,157.5

- eLearning Technology: \$1,488.0
- Advanced Analytical Instrumentation for Resources R&D and Education: \$1,157.5/\$1,157.5
- Palmer Certified Test Kitchen and Outreach Center: \$700.0
- Welding Equipment for UAF IAC & CTC: \$174.0
- Digitization and Preservation of Alaska's Heritage: \$560.0
- Equipment for Energy R&D: \$1,462.0
- Wireless Connectivity Infrastructure: \$425.0

UAF FY15 BUDGET REQUEST - EXECUTIVE SUMMARY

Student Achievement and Attainment

Many of the student success items submitted in FY15 are items that have either been submitted in the past so are now critical to UAF programs and services; or have been partially funded in the past as a high priority program, and the remaining funds are needed to continue strategic expansion.

Specific to student achievement in Health/Biomedical, UAF received \$200.0 in FY13 for Veterinary Medicine, which was half of the requirement for full program expansion for a doctor of Veterinary Medicine degree program in Fairbanks. In FY15, UAF is requesting the remaining \$200.0 investment to build this joint "2+2" accredited program with Colorado State University.

Similarly, UAF is requesting funds for the joint Psychology PhD program, as well as undergraduate programs in Psychology, expanding the ability for graduates to become licensed for clinical practice in Community-Clinical Psychology. This is a rapidly growing program, and has increased 60% since 2006; however faculty support has not increased proportionally and is insufficient to serve this growing group of students. Additionally, UAF received \$55.0 for the Nursing program at Bristol Bay in an effort to reduce the wait list for nursing students and increase clinical lab space. This investment covers 50% of the faculty line at Bristol Bay. The remaining funds to cover 100% of this critical faculty member are requested in FY15.

In FY14, the State of Alaska put \$400.0 toward UAF and UAA for mandatory comprehensive student advising in community campus locations. As this was a partially funded request, UAF requests to fully fund this initiative in FY15. The focus is to expand advising support, specifically at Bristol Bay, Kuskokwim Campus, and CTC; UAF will target non-completing degree seeking students. Data has shown the six-year graduation rate for students with comprehensive advising support is nearly 19% higher than those without.

With a continued focus on STEM capacity, UAF recognizes General Chemistry is currently a bottleneck for student success. This course is an entry-level requirement for future engineering and life sciences (high demand) graduates. UAF hopes to remove this bottleneck with funding for a Chemistry Learning Center, additional capacity for labs, and dedicated mentoring for students.

In FY14, the State also invested in eLearning efforts with \$250.0 for online degree programs. In FY15, UAF requests additional funds to expand eLearning enrollment and degree completion in targeted areas of high demand. In collaboration with UAF academic departments, specifically the School of Management (SOM), the Bachelor of Business Administration (BBA) and Master of Business Administration (MBA) degrees have been the fastest growing on campus over the last decade but have been mostly limited to students who were physically attending on the Fairbanks campus. Partnered with eLearning, SOM can complete its effort to have its BBA and MBA degrees fully online allowing students in Alaska to have a choice between in-class education, hybrid (partially online) and fully online programs.

Additionally, UAF has maintained its focus on recruiting undergraduate Engineering students and has shown a 70% enrollment increase since FY07. UAF has recognized that peer tutoring is a cost-effective approach to increase student retention. In an FY15 request to Increase Engineering Graduates, UAF plans to fund an Engineering Tutoring Lab that will put Teaching Assistants in more lab course sections, in order to help better prepare students, improve retention in the Engineering program and move students toward completion.

Productive Partnerships with Schools

UAF is partnering with schools in several areas in FY15 and hopes to work with several school districts across Alaska to help better prepare students for college or successful post-secondary careers. A request for Math Preparation in Rural High Schools is a unique approach that will allow a high school student to complete college-level UAF courses, while still in high school. This is a joint effort between a college instructor and a district mathematics teacher to deliver high quality courses for this student group.

Productive Partnerships with Alaska's Public and Private Industries

There are several key areas UAF will focus on in the FY15 budget request related to productive partnerships with industries: Resource Development, the growing Alaska Film Industry, Alaska Native Cultural History Preservation, Workforce Development and Fisheries.

In 2010, Alaska's mineral industry opened 4,100 jobs with an average wage over \$100 thousand. In 2011, mineral exploration investment in Alaska was \$365 million, about one-third of the total spent in the US, but the state remains largely unexplored. In alignment with the minerals initiatives, UAF is asking for \$500.0 to build on the existing resources for Chemical Engineering. UAF has strong faculty in Chemistry and Petroleum Engineering; however, needs full time tenure-track faculty experts to grow the program to meet the needs of the State.

The Film Program is rapidly growing in the College of Liberal Arts and has created exceptional opportunities and visibility for UAF. In FY15, UAF requests funding for faculty to continue growth in conjunction with the Alaska film industry and meet student enrollment demands.

The UAF Interior-Aleutians Campus is requesting support for 50% of an Academic Program Head in Construction Trades Technology (CTT). This position will focus on supplying training and knowledge in constituent identified critical needs areas such as boiler installation and repair, efficient energy systems, and alternative energy generation. This position primarily impacts educational access and equity for students in rural communities.

With a focus on preservation of Alaska Native cultural history, the UA Museum houses the world's premier Arctic archaeology collection comprising one million archaeological objects that embody 14,000 years of Alaska Native heritage. Coupling this rich cultural heritage and research resource with university education connects Alaska's rich history with educational programs. This FY15 request for a faculty position will also serve as an Assistant Professor of Anthropology.

The University of Alaska Fisheries, Seafood and Maritime Initiative (FSMI) will engage with fisheries, seafood and maritime sectors and community partners. The goal of the initiative is to assess, develop and deliver programs, training and research that prepare Alaskans to meet current and emerging workforce, economic and scientific needs.

Research and Development to Help Sustain Alaska's Economic Growth

Alaska ranks in the top ten in the world for important minerals. There is great potential for exploration, development and processing of strategic and critical minerals, including rare earth elements as well as further discovery and development of extensive fossil fuel resources. In FY15, the Institute of Northern Engineering is requesting faculty expertise in this high demand area for research in energy and power, fossil fuel development and critical and strategic minerals. Two Geology Program faculty are also requested to train students and conduct research in mineral exploration and related technologies.

In FY14, UAF put forward requests for “Commercialization of University Intellectual Property for Business Development” and “Research Vessel Sikuliaq Shiptime”, with little success. These initiatives remain a priority in FY15, and have been reevaluated and improved to leverage partnerships across the State. As part of strategic planning efforts at UAF and the UA System, it is clear research partnerships and the ability to capitalize on research products and intellectual property may enable UAF to bring results to private business, fuel economic development, and create Alaskan jobs. UAF exceeds \$120 million in research annually. If research products can be licensed and sold to business entities; this investment would fund UA’s commercialization efforts.

In FY15, UAF included university generated funding for on-shore staff support for the Sikuliaq research ship, which became operational in 2013 for testing, and moves to scientific operations in 2014. UAF’s budget includes a request for Alaska issue-specific ship time. This provides UAF the ability to direct ship-time for Alaska based-research, student engagement, and community outreach.

Accountability to the People of Alaska

In FY15, the UAF Rasmuson Library is requesting funding for electronic subscriptions to popular and heavily used journals and information resources. Library resources have continued to move from paper to digital and expense for these subscriptions increases annually. As Alaska’s premier research university, desktop and remote access to the most current information resources and scientific knowledge is vital for UAF students, faculty, staff and researchers for exploration of subject matter and teaching in the classroom and the field. These resources directly impact instruction, grant funding, research and accreditation. The UAF Libraries are also responsible for the delivery of resources to the Kuskokwim, Nome and Kotzebue campuses and all e-learners. Without additional funding, reductions in popular and high-use subscriptions will be necessary which can reduce UAF’s ability to compete for grant funding, provide insufficient information resources for conducting cutting-edge research, and lessen UAF’s ability to attract and retain qualified faculty and students.

Capital Research Priorities

In FY14, UAF garnered legislative support for research initiatives that contribute to Alaskan issues. UAF received \$2.5M for the development of statewide energy solutions through the Alaska Center for Energy and Power (ACEP). UAF also partnered with the Alaska Department of Fish and Game (AKDF&G) for studying Alaska’s Chinook salmon production decline as part of a larger multi-year comprehensive research plan. In FY15, UAF has submitted five capital research projects of importance to the State.

As recommended by the Board of Regents, UAF is requesting \$3M in funding to increase research capacity and competitiveness. This will provide funding for university match agreements, state-of-the-art scientific equipment and start-up funds for faculty in critical and high-demand research areas.

UAF was also recently challenged to revise the way researchers work with rural communities. UAF, the Alaska Native Science Commission (ANSC) and four rural Alaska communities initiated the Community Partnership for Self-Reliance and Sustainability (CPSS). The objective of CPSS is to foster “inreach” from the communities to the university in order to develop collaborations that implement each community’s vision for self-reliance and sustainability. This request is for \$1M in support.

Alaska has the one-time opportunity to transform a temporary investment from the National Science Foundation (NSF) into a sustained earthquake monitoring and production network. NSF has funded a monumental project to blanket the United States with a transportable grid to record the vibrations of the Earth. The project is called EarthScope and includes a \$40M investment of equipment and infrastructure in Alaska. UAF has an opportunity to buy out the seismic stations, in place, at a fraction of the cost it will



take to install the infrastructure. The \$5M investment that is part of UAF's request will provide sustained comprehensive earthquake monitoring across Alaska.

UAF is also uniquely situated to create a center focused on oil spill prevention and preparedness. This Arctic Oil Spill Response Science Technology Center will allow UAF to partner with State and Federal agencies, industry and other academic institutions to support wise decision-making regarding oil spill prevention and response.

Finally, Alaska's Statewide Digital Mapping Initiative (SDMI) is an interagency program that produces updated high-resolution imagery and elevation model data for the entire state. The base imagery and elevation mapping program is underway with a new high resolution satellite image of Alaska to be complete in 2014; however, increased capability to monitor and document land-surface conditions will improve the ability to detect and respond to the changing environment, assess resources, and plan new development. UAF submits a request to enhance Alaska's Base Maps in order to improve monitoring in regions of rapid change including areas changed by wildfires, along coast lines, near glaciers, and in zones of degrading permafrost.

Capital Facility Priorities

In FY15, UAF's major capital priorities are deferred maintenance, the final phase of the Engineering Facility, and the Cogen Heating and Power Plant Boiler Turbine Replacement. UAF is generally distributed a percentage of the UA System Deferred Maintenance funds based on a formula using the adjusted value of the facility multiplied by the weighted average age of the facility. Deferred maintenance funds are utilized in areas of highest priority and include renewal and renovation (R&R), code, and ADA items. As the UAF campus is approaching its centennial anniversary (2015-2017), the aging facility needs are generally the highest in the UA System.

In FY13, UAF received \$46.3M for the first phase of the Engineering Facility. In FY14, UAF received \$7M to continue construction through the summer build season; however, final funding is needed to complete the project and make the facility available for engineering students. This facility supports engineering education and research throughout Alaska. The facility provides a new addition of 119,100 gross square feet of space for improved student learning and research.

In FY15, UAF is requesting the full amount required to replace the Cogen Heating and Power Plant. This request is critical as the boilers are identified as the most significant risk to UAF in the Risk Management Plan submitted to the Board of Regents. The Atkinson Heat and Power Plant provides electricity, heating and cooling for about 3 million square feet of academic, research, office and housing space at the University of Alaska Fairbanks. The plant's two main boilers were installed in 1964 and are nearing the end of their 50-year useful life. A failure of these boilers (either gradual or catastrophic) is a substantial risk to the University's mission and finances. This project will provide a flexible heat and power solution, reduced emissions and lower fuel costs, and will allow the university to use its financial resources for a long-term solution rather than temporary fixes on an aging plant that uses 1890's technology.

Planning for new construction includes a funding request to replace the University Fire Department Emergency Services and Management (EMS) Facility, which will provide space for apparatus bays and support space for fire and EMS living quarters. A Community & Technical College (CTC) EMS Training Center is also proposed. UAF requests planning funds for a parking garage to improve parking access for short-term needs and student use. Additionally, planning funds for a Consortium Learning Center in Kuskokwim to expand the library as part of the 2006 Master Plan will reduce overcrowding and improve public access to library resources.



With respect to land, property and facilities acquisition, UAF will request funds for the Bunnell House replacement and the Northwest Campus Realignment. The Bunnell House is the home of the Early Childhood Education program, which requires more functional space to meet accreditation requirements. The Northwest Campus realignment will improve use of leased land and campus-owned parcels in order to improve the instructional environment.

UAF will additionally prepare for the Public/Private Partnership (P3) Housing renovation in the FY15 request. As part of the “Student Life: Transforming the UAF Experience” project, UAF proposes new student housing units through the P3 arrangements.

Academic & Technology Equipment

Although UAF has had little success in this request category in past years, academic equipment and technology infrastructure are major components for effective student learning, research, outreach and safety. Requests include funding for audio and videoconferencing equipment for eLearning, advanced analytical research equipment and equipment for energy R&D that can be used for resource development, a certified test kitchen in Palmer for outreach activities, welding equipment for the UAF Interior-Aleutians Campus and CTC, infrastructure to digitize and preserve the Alaska and Polar Regions collections at the Rasmuson Library, and improved wireless connectivity infrastructure in Fairbanks for learning connectivity as well as student security and safety.

FUTURE CAPITAL ITEMS (FY16+)

- Public/Private Partnership (P3) Campus-wide Housing
- Alaska Center for Energy & Power (Office Infill)
- West Ridge Revitalization
- Troth Yeddha’ /Alaska Native Studies Building
- Stevens Papers Repository at Rasmuson Library