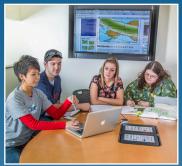


# FYT 6 Operating Budget Request Summary and Narrative August 2014













### **UAF FY16 Operating Request:**

# Fixed Costs & Program Enhancement to Assist in Shaping Alaska's Future August 2014

UAF FY16 FIXED COST INCREASES		State	1	Receipt		
CHI I II THE COST II CREMBES	App	Appropriation		Authority		Total
Personal Services Fixed Costs Increases	\$	3,000.0	\$	3,000.0	\$	6,000.0
Fairbanks & Community Campus Adjustment (Est.)		3,000.0		3,000.0		6,000.0
Title IX Compliance - Prevent/Respond to Campus Sexual Harassment	\$	230.0	\$	-	\$	230.0
Non-Personal Services Fixed Costs Increases	\$	2,570.0	\$	2,070.0	\$	4,640.0
General Fixed Cost Increases (Est.)		460.0		1,350.0		1,810.0
Rural 4-H Program Natural Resource Fund (NRF) Replacement (pending NRF decisions - up to \$400.0 max amt.)		400.0		-		400.0
UA System Office Risk Assessment: FY15 Increase & FY16 Proposed (30% increase from		240.0		-		240.0
Electronic Journal Subscriptions for Rasmuson Library		250.0		-		250.0
Facilities Maintenance and Repair (Est.)		1,220.0		720.0		1,940.0
Utility Cost Increases (Est.)	\$	1,600.0	\$	600.0	\$	2,200.0
New Facility Debt, Lease, Operating & Maintenance (O&M) Costs	\$	245.0	\$	750.0	\$	995.0
Bristol Bay Applied Science Center		65.0		-		65.0
Process Technology Program Lease (\$155K) Facility Operations/Shuttle Service (\$25K) (Partial Replacement Funds)		180.0		-		180.0
ASF-Richardson, Seward Ship Office & CTC Hangar O&M		-		750.0		750.0
Estimated Fixed Cost Increases Total	\$	7,645.0	\$	6,420.0	\$	14,065.0
Fixed Cost Request as a % of FY15 Operating Budget (excl. OTO funds)		4.4%	4.4% 3.7%			8.2%

UAF PRIORITY PROGRAM ENHANCEMENT - Shaping Alaska's Future Themes		State Appropriation	Receipt Authority	Total	
Student Achievement & Attainment	FTE	\$ 868.0	\$ 501.0	\$ 1,30	69.0
Complete the Launch of the Collaborative 2+2 Veterinary Medicine Program	3.0	200.0	241.0	44	41.0
Maintain Nursing Program at Bristol Bay	0.5	60.0	30.0	ç	90.0
Comprehensive Rural Student Advising (Ongoing)	3.0	278.0	-	27	78.0
Expand the Behavioral Health Workforce by Building the Undergraduate & Clinical PhD Psychology Program	2.0	200.0	100.0	30	0.00
Build in-State Leadership for Tourism Management	2.0	130.0	130.0	26	60.0
Productive Partnerships with Alaska's Public Entities & Private Industries		\$ 1,719.0	\$ 1,760.0	\$ 3,47	79.0
Establish Core Infrastructure for Continued Unmanned Aircraft Systems Operations	4.0	570.0	1,000.0	1,57	70.0
Deliver Chemical Engineering Degree to Support Alaska LNG & Refining Industries	4.5	400.0	450.0	85	50.0
Research & Development to Support Alaska Mining Development	2.0	150.0	150.0	30	0.00
Strengthen Alaska's Participation in Arctic Policy	1.5	200.0	-	20	0.00
Expand Rural Construction Trades Program	0.5	54.0	25.0	7	79.0
Develop Film Industry Workforce	2.5	232.0	-	23	32.0
Improve Alaska Seafood Processing & Training in Kodiak	1.0	113.0	135.0	24	48.0
Research & Development to Sustain Alaska's Economic Growth		\$ 890.0	\$ 2,618.0	\$ 3,50	08.0
Improve Understanding of Ocean Acidification	2.0	227.0	65.0	29	92.0
Ship Days to Compete for Marine Ecosystem Program & Other Competitive Grants	0.0	500.0	2,500.0	3,00	0.00
Develop Economically Viable Crops with Alaska's Farmers	1.0	163.0	53.0	21	16.0
Priority Program Enhancem	ent Total	\$ 3,477.0	\$ 4,879.0	\$ 8,35	56.0
Program Request as a % of FY15 Operating Budget (excl. OTO funds)		2.0%	2.8%	4	4.8%



### **UAF FY16 Operating Budget Request Narratives**

#### FIXED COST INCREASES

### Personal Services Adjustment (Estimate): Fairbanks & Community Campuses

(GF \$3,000.0, NGF \$3,000.0, Total \$6,000.0)

This request covers 50 percent of the projected FY16 compensation increases for Fairbanks and the UAF community campuses. This estimate will continue to be refined.

### Title IX Compliance - Prevent/Respond to Campus Sexual Harassment (GF \$230.0)

This request will support two Title IX positions required to meet federally recommended levels and compliance standards and provide funds to support travel to rural campuses.

#### Non-Personal Services Fixed Costs Increases

(GF \$2,570.0, NGF \$2,070.0, Total \$4,640.0)

- General Fixed Cost Increases (Estimate)
   (GF \$460.0, NGF \$1,350.0, Total \$1,810.0)
   Based on non-personnel services expenditures excluding utilities and facilities maintenance & repair. Increase is at the latest Anchorage consumer price index adjustment of 1.5 percent. Examples of increases in this area include the UAF custodial services contract increase (\$98.0K FY15 and \$100K FY16).
- Rural 4-H Program Natural Resource Fund (NRF) Replacement (GF \$400.0)
  - In FY10, University of Alaska (UA) Natural Resources Funds (NRF) were provided as match to a general fund request. The NRF were eliminated for FY14, but programming continued to be available for one year as the Cooperative Extension Service was forward-funded one year. The NRF funding has been provided for FY15, but a decision for FY16 is pending. In FY16, without ongoing reinstatement of the NRF or without general fund replacement funds, UAF will have to eliminate three faculty positions located in Bethel, Kenai and Anchorage who provide outreach programs that promote community development and positive youth development and a fourth faculty position located in Fairbanks who works in conjunction with the Alaska Center for Energy and Power (ACEP) as a liaison with communities, to inform ACEP of energy-related problems and local resources, and to transmit information from ACEP to communities.
- UA System Office Risk Assessment: FY15 Rate Increase & FY16 Proposed (GF \$240.0)

The figure represents the announced adjustment based on FY15 increases and FY16 proposed increases from the UA System Office Risk Assessment funding distribution and cost estimates for risk and safety services. The proposed FY16 rate increase is 30% higher than the FY12 rate (an average annual increase of 7.5%). Based on the



FY15 UA System Office analysis, in addition to the more regular annual increase estimates, this is partially due to an increase in property insurance premiums and new construction/improvements. This also covers Statewide Risk Management staffing costs.

• Electronic Journal Subscriptions for Rasmuson Library (GF \$250.0)

Desktop and remote access to the most current information resources and scientific knowledge is vital for our students, faculty, staff and researchers for exploration of subject matter and teaching in the classroom and the field. These resources directly impact accreditation, instruction, research, and ability to seek grant funding. The Rasmuson Library is responsible for the delivery of resources to the Kuskokwim, Nome and Kotzebue campuses and all e-learners. When possible, journal subscriptions are shared with UAA and UAS campuses to be cost-efficient. Without additional funding, reductions in popular and high-use subscriptions will be necessary.

• Facilities Maintenance & Repair (Estimate) (GF \$1,220.0, NGF \$720.0, Total \$1,940.0) UAF's annual maintenance and repair is calculated at a minimum 1.5 percent of current building value. Each year the annual operating budget dedicated to facilities maintenance, often referred to as M&R, is increased to keep pace with the ever-increasing building maintenance need. This request covers that requirement and will be refined by the Statewide Budget Office.

#### **Utility Cost Increases (Estimate)**

(GF \$1,600.0, NGF \$600.0, Total \$2,200.0)

This request covers the projected FY16 utility and fuel cost increases. This estimate will continue to be refined.

New Facility Debt, Lease, Operating & Maintenance (O&M) Costs (GF \$245.0, NGF \$750.0, Total \$995.0)

Bristol Bay Applied Science Center

(05.0/5.0)

(GF \$65.0)

This increment provides the funding necessary to meet the ongoing operating costs associated with the acquisition of the Bristol Bay Applied Science Center (former NAPA building) which houses the campus nursing and applied science programs.

 Process Technology Program Lease & Facility Operations/Shuttle Service

(GF \$180.0)

Technical and Vocational Education Program (TVEP) funding has been used to cover the lease costs associated with the Process Technology program facility and expansion, operations and shuttle service. TVEP funding is incrementally declining and there is a need to expand the program footprint. This space is needed to meet



essential instructional and program needs for the Process Technology, Instrumentation, and Safety/Health/Environmental Awareness programs.

 Alaska Satellite Facility (ASF) - Richardson, Seward Ship Office & CTC Hangar Non-General Fund O&M Requirement (NGF \$750.0)

Receipt authority needed to support activity at each of the ASF-Richardson, Seward Ship Office and CTC Hangar facilities. This increment covers working capital costs and O&M.

#### PRIORITY PROGRAM ENHANCEMENT & GROWTH

#### Student Achievement & Attainment

### Complete the Launch of the Collaborative 2+2 Veterinary Medicine Program

(GF \$200.0, NGF \$241.0, Total \$441.0)

Throughout the state, there is demand for veterinarians who understand the unique needs of Alaska's pets and farm and work animals. In addition, Alaska's young people are eager to pursue a career in veterinary medicine but face challenges because veterinary programs in the Lower 48 usually have a strong preference for in-state students. To address that need, UAF formed a partnership with Colorado State University (CSU) that will allow students to complete their undergraduate veterinary education plus the first two years of their professional program at UAF. Students will complete their final two years at the veterinary teaching hospital at CSU. The Legislature provided some initial funding to hire program administrators to design the program in FY14. This request is for the remaining funding needed for faculty to teach courses scheduled to begin in fall of 2015. This program will address both Alaskan workforce needs and a specialized education that will appeal to many of Alaska's students.

### Maintain Nursing Program at Bristol Bay

(GF \$60.0, NGF \$30.0, total \$90.0)

The Bristol Bay Campus Nursing Program is a very popular degree program and there is presently a waiting list for admission. Significant investment is being made for additional clinical lab space to help insure quality instruction and a quality learning environment. Producing more nursing graduates will help meet employer needs and fill the increasing statewide demand for nurses, specifically nurses for rural Alaska. This increment will support a portion of existing nursing faculty that is current supported by diminishing grant funding.

### Comprehensive Rural Student Advising (Ongoing) (GF \$278.0)

This request for ongoing funds will replace the one-time funding provided by the Alaska Legislature in FY15. UAF rural campuses deliver place-based courses that allow students to receive training in or near their home community. "Gatekeeper" courses such as Developmental Mathematics and Developmental Science can be offered in a



format that allows remedial students to complete their developmental work more quickly and move into a degree program. This project supports two student advisors to be housed at the Bristol Bay and Kuskokwim Campus. A Research Specialist will also be supported to perform degree audits, so that student advisors can contact non-completing, degree-seeking students to encourage them to complete their degree. The Research Specialist will be located in Fairbanks, in the Office of the Vice Chancellor for Rural Community & Native Education, in order to best serve all rural campuses across the state.

### Expand the Behavioral Health Workforce by Building the Undergraduate & Clinical PhD Psychology Program

(GF \$200.0, NGF \$100.0, Total \$300.0)

This request supports undergraduate programs in psychology; graduates from these programs often find work in community health and social services programs in Alaska. This request also supports the UAF clinical training component of the UAA-UAF Joint Ph.D. program in Community-Clinical Psychology; high-quality clinical training is needed for the Ph.D. program to retain accreditation (American Psychological Association) and for graduates to become licensed for clinical practice. The Ph.D. program emphasizes training for individuals to work with rural and indigenous populations and communities; clinical psychologists are in short supply in Alaska, particularly outside urban areas.

### Build in-State Leadership for Tourism Management

(GF \$130.0, NGF \$130.0, Total \$260.0)

Tourism continues to grow in Alaska; although much of the industry is managed from outside of Alaska, there are opportunities for growth of an Alaskan based industry as well. The School of Management (SOM) in partnership with the School of Natural Resources and Extension (SNRE), the Community and Technical College (CTC), and the Department of Recreation, Adventure and Wellness (DRAW) is proposing to create an interdisciplinary program in tourism management. This program would be modelled after the Bachelor of Emergency Management Program (BEM) which went from a new program to 120 majors (and still growing) in just six years. It is UAF's belief that a tourism management program has similar or even greater growth potential and could see 200 students or more within five years, with the potential to be one of the largest undergraduate programs at UAF. The program would allow students to complete 21-33 credits from UAF or any regionally accredited institution in recreation, outdoor leadership, hospitality and lodging, ecotourism, and/or similar subject areas, along with general education requirements. Students would then either continue at or transfer to UAF to complete their degree by taking additional management, natural resources, recreation, and externship/internship courses in the last two years of the program.

Students graduating with a Tourism Management degree would find many positions in a broad variety of fields in Alaska and elsewhere. This program will be organized for inclass instruction and will also be fully available online, enhancing its ability to attract students from outside the Fairbanks area and Alaska. As this program will draw from the support and expertise that already exists at UAF, it will only require two faculty, funding for course design and two adjunct instructors to get it up and running.



#### Productive Partnerships with Alaska's Public Entities & Private Industries

### Establish Core Infrastructure for Continued Unmanned Aircraft Systems Operations

(GF \$570.0, NGF \$1,000.0, Total \$1,500.0)

This increment would support both the Alaska Center for Unmanned Aircraft Systems (ACUASI) and a workforce training position at the Community and Technical College (CTC). ACUASI provides science, research, and test and evaluation services and support to the unmanned aircraft system (UAS) user and manufacturer community with the operational infrastructure built in large part with seed funding from the previous one-time capital investment from the State of Alaska Legislature. It is anticipated that ACUASI will be able to seek user reimbursement for many of the costs associated with system development/integration, data product development and test flight services it provides. However, management and outreach is generally not fully funded by project sponsors, and is a necessary requirement for successful operation, continuation, and growth of the UAS program. The funding requested will provide the necessary management and business development to ensure the continued success of the UAS program. The bulk of the funding in this increment would go toward providing partial base support for ACUASI's high-profile operations and four employees. This increment is a complimentary proposal to an additional one-time capital request for key projects, submitted separately. Funds from this increment would also be used to fund an additional faculty member in CTC's Aviation and Maintenance Technology Program to develop and deliver a new occupational endorsement qualifying individuals to serve as UAS technicians. It is anticipated that the UAS industry will grow rapidly in Alaska, with one likely hub in Fairbanks, and this new program will meet workforce demand.

### Deliver Chemical Engineering Degree to Support Alaska LNG & Refining Industries

(GF \$400.0, NGF \$450.0, Total \$850.0)

This increment is one part of a planned partnership to build a Baccalaureate degree in Chemical Engineering (ChE) in Alaska. A three-part funding approach is envisioned for this program, including: state support, chemical engineering industry funds and tuition revenue. Alaska's strong dependence upon chemical processes is integral to the petroleum and petroleum products industries, energy conversion processes, and minerals processing needs to be supported by chemical engineers with fundamental appreciation for, and experience with, living in Alaska. Currently all chemical engineers working in, or on projects for, Alaska are held by those who are either educated outside of Alaska or hold degrees in allied but not directly specialized chemical engineering disciplines. A Bachelor of Science (BS) Chemical Engineering program will create a highly trained workforce to meet existing and future needs in Alaska.

UAF already offers many of the courses necessary for an accredited ChE program. To develop and offer the remaining six necessary courses, and to have sufficient teaching faculty to meet anticipated enrollment growth if this new degree option is offered in-



state, state funding will support three full-time, tenure-track, chemical engineering faculty, three half-time research faculty (each with some instructional responsibility as well as student research leadership), quarter-time assignments for existing faculty to the ChE program, and part time administrative and minimal professional development support. These faculty will provide instruction, advising, and will liaise with employers of the graduates. As UAF is a nationally well-regarded research institution, these faculty will likely also secure funding for research projects relevant to industry needs and providing experiential learning opportunities for students.

### Research & Development to Support Alaska Mining Development (GF \$150.0, NGF \$150.0, Total \$300.0)

The mining industry is taking off in Alaska, but many deposits are not yet economic to develop. Minerals typically occur in rural areas. When a deposit is not developed due to technical or environmental problem, it is a lost opportunity for economic development. The problems the industry currently faces and will face in the longer term are well known. UAF has an important opportunity, where a small sustained investment in problem-solving will reap big rewards. The program will start by focusing initially on rare earth deposits, as that will help the industry toward substantial growth in Alaska, though over time work will expand to base metals (copper, zinc, etc.) and precious metals (gold).

The three major challenges the mining industry in Alaska faces are:

Low grade recovery - Fort Knox mine has trace amounts of gold, at grades of 0.5 parts per million. This is true of many mineral resources. If ore can be recovered at lower grades economically, projects like in Livengood, Alaska, become more viable, while mines like Fort Knox can remain open longer. In the short run, the national interest is focused on rare earths, which normally occur in low grades, such as the Bokan Mountain deposit in southeast Alaska.

Water use minimization - Water is a valuable resource in the state, and in somewhat short supply in the most northern latitudes. Even where water is plentiful there is public concern about mining industry water use harming salmon spawning or migration. Therefore, like in other places around the world, minimizing use of water is highly desirable.

Remediation - Remediation starts at the point of mining. The goal is to look at the whole chain and not just at the very end. The remediation and low grade recovery efforts need to be in tandem, so that the developed recovery techniques will result in the lowest environmental impact, making remediation easier.

Funding is requested for two research fellows, whose research in these areas will be guided by engineering faculty and the Director of the Mineral Industry Research Laboratory. The research and academic products will educate the public on the technical possibilities and challenges, allowing them to make educated decisions on resource development topics. The program is also likely to yield intellectual property, which can provide income for the university.



### Strengthen Alaska's Participation in Arctic Policy (GF \$200.0)

Building upon decades of investment in, and demonstration of excellence and leadership in Arctic research and scholarship, UAF, America's Arctic University, will establish the Center for Arctic Policy Studies (CAPS). The Arctic and Alaska are drawing more regional, national, and international attention and investment. As the Arctic becomes more important geopolitically, Alaska must strategically, purposefully, and quickly build upon existing expertise and leverage infrastructure to focus on the pressing and important issues facing Alaskans and the citizens of the North. CAPS will be closely affiliated with the University of the Arctic Institute for Arctic Policy - a circumpolar initiative lead by UAF and Dartmouth College.

The Alaska Arctic Policy Commission (AAPC), created to investigate and address the rapid physical, social, economic and cultural changes occurring throughout the state and the Arctic, identified critical issues in need of further research, action and implementation. CAPS will draw upon expertise at UAF, the University of Alaska, state agencies, as well as national and international experts to inform, influence, and assist in making actionable those recommendations found in the AAPS 2014 report. These areas include: Governance and Indigenous Perspective, Science and Research, Planning and Infrastructure, Oil, Gas, and Mineral Resources, Security and Defense, Marine Transportation, Search and Rescue/Oil Pollution, Energy and Power, Fisheries and Wildlife.

Further, CAPS would serve as Alaska's, and the nation's, central policy center on current and emerging Arctic issues. By doing so, CAPS will serve as a resource for the state of Alaska, state legislators, and industry on relevant and timely issues. Additionally, CAPS will provide critical outreach and communication functions to ensure Alaskans are appropriately aware of, and engaged in issues that will impact them far into the future.

### **Expand Rural Construction Trades Program**

(GF \$54.0, NGF \$25.0, Total \$79.0)

The UAF Interior-Aleutians Campus is requesting support for 50 percent of an Academic Program Head in Construction Trades Technology (CTT). This position will provide oversight of the CTT program as it continues to develop into a cross-regional training program with statewide delivery. This is also a teaching faculty position. 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. Enrollment has averaged 40 students per year, currently limited by the availability of appropriate rural construction projects for the hands-on training component and funds to hire and support faculty in remote locations. The Construction Trades program's students are mainly Alaska Native men, so this position would improve educational access and equity for students in rural communities.



### **Develop Film Industry Workforce**

(GF \$232.0)

The UAF Film program in the College of Liberal Arts is the only University of Alaska Film degree and its enrollment is growing rapidly. CLA continues to develop tech-prep opportunities for Alaskan High School students, and have partnered with Prince William Sound to articulate it's AA to UAF's BA. Film is committed to working with K-12 schools, bridging programs with UAF. This includes production of educational videos for the North Slope Borough School District and the Math in a Cultural Context program, as well as educational videos for the International Polar Year. The Alaska Legislature initiated growth of the Alaska Film industry with tax incentives. The Film program is dedicated to helping sustain this growth with a qualified workforce. In order to fully meet the demands of the film industry, and for more Alaskans to be employed, this increment will help to increase the number of trained individuals present in the state.

UAF students have successfully been placed on film and television crews with Universal Pictures, National Geographic, Discovery Channel, Animal Planet, Nova, CNN, Sundance Film Institute, Lock and Monkey, Treehead Films, Native American Public Telecommunications, and Original Productions, representing hundreds of hours of programming featuring Alaska in the national spotlight. Film students work in documentary, educational, corporate, commercial and narrative film projects during their time as students, often in conjunction with professional film production crews. Through a multiplicity of digital technologies, students develop skills, industry contacts and hands-on experience that routinely lead to paid positions in the film industry. Dedicated funding of this program will enable students to consistently reach their goals with experienced faculty, internship opportunities and on-the-job training programs while providing UAF staff and student support positions, and technologically relevant equipment.

### Improve Alaska Seafood Processing & Training in Kodiak

(GF \$113.0, NGF \$135.0, Total \$248.0)

The seafood industry in Alaska employs 40,000 individuals, produces 60 percent of the nation's seafood and is valued at over two billion dollars per year. It is Alaska's largest private employer within the state. The seafood processing industry in Alaska, in partnership with other maritime sectors, recently completed the *Alaska Maritime Workforce Development Plan*, supported by the state's Alaska Workforce Investment Board in May and by the Board of Regents in June. The University of Alaska facilitated development of the Plan through its cross-campus initiative called the Fisheries, Seafood and Maritime Initiative (FSMI). The Initiative supports the growing critical need of these industries for educated and trained Alaskans to support life-long careers in the state's largest private source of employment. The initiative is compatible with UA's Shaping Alaska's Future both by creating productive partnerships with Alaska's public and private industries and building and sustaining Alaska's economic growth and communities.

This proposal funds a seafood specialist faculty member who will deliver two intensive, hands-on training programs at the Kodiak Seafood and Marine Science Center, an existing UAF facility. Kodiak is the third most valuable seafood port in the nation, is home to 13 resident seafood companies operating 11 months each year and employs



over 3,600 residents. In the Maritime Workforce Development Plan, the seafood processing industry identified nine key priority occupations in the Plan as hard to fill and needing skilled employees. The two programs envisioned in this proposal targets three of the priority occupations identified in the Plan by the seafood processing industry as a high need for skilled employees: Seafood Plant Manager, Seafood Production Manager and Seafood Quality Control and Assurance Manager and Technician.

#### Alaska Seafood Processing Leadership Institute

The Alaska Seafood Processing Leadership Institute (ASPLI) provides technical training, leadership training and understanding of Alaska seafood in the global marketplace for the next generation of seafood managers. ASPLI has been presented four times since 2006, each time with different funding. ASPLI has been open to all Alaska seafood processors and has served over 20 seafood companies in 18 communities in Alaska. Course fees and sponsors help support the class. The bulk of the ASPLI training takes place at the UAF Kodiak Seafood and Marine Science Center, where the seafood pilot plant, classroom and labs enable the participants to work on seafood safety, quality and processing issues. The community of Kodiak provides a logical site for seafood processors from around the state to come together to support capacity building and leadership training for this important state industry.

#### Seafood Processing Quality Control Training Program

The Seafood Processing Quality Control (SPQC) training program is a series of technical trainings that lead to competencies related to food safety and the regulatory process needed by the seafood plant to operate in a safe and legal manner. The series is composed of ten basic technical courses. Courses will provide industry certifications in Hazard Analysis & Critical Control Points (HACCP) and Sanitation. The completion of the full suite of classes will lead to a SPQC Workforce Credential that will be valuable to an individual applying for a QC position in a plant as well as requesting advancement in a current place of employment. The SPQC is planned for hybrid delivery to meet the broad geographic needs of the industry and condensed timeline of the seafood industry. Online training modules will be developed for a subset of the classes and onsite classes will be offered at the Kodiak Seafood and Marine Science Center as well as other hub locations.

#### Research & Development to Sustain Alaska's Economic Growth

#### Improve Understanding of Ocean Acidification

(GF \$227.0, NGF \$65.0, Total \$292.0)

This is an ongoing extension of the ocean acidification capital research funding received in FY13 for assessing the impact on Alaska's fisheries. Climate change and ocean acidification are especially acute in Alaska's waters and have the potential to affect the State's marine resources. UAF lacks an Alaska based faculty member with expertise in this critical field of research who is committed to education. UAF's oceanography department is the sole State entity conducting research and disseminating knowledge through its academic program and public service. This request seeks funding for a tenure-track faculty that would add expertise to situate UAF as a



recognized leader in ocean acidification research and education with the potential to attract bright students and researchers. This position will contribute to the existing academic programs and research in oceanography, marine biology, and fisheries.

### Ship Days to Compete for Marine Ecosystem Programs & Other Competitive Grants

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

Construction of the federal research vessel Sikuliaq has been completed and the ship is currently involved in a series of trials before science operations begin in winter 2014. The Sikuliaq will allow researchers to collect sediment samples directly from the seafloor, host remotely operated vehicles, permit flexible use of science equipment, and conduct surveys throughout the water column and sea bottom. Although the Sikuliaq is capable of operating in Arctic waters, researchers from around the country may apply to use the ship in projects in other parts of the world as well. Given changing ocean conditions in the Arctic, and the possible impacts on Alaska, it is important that some of the ship time is dedicated to Alaskan/Arctic research. This request commits ship time for Alaska-specific research and outreach opportunities.

### Develop Economically Viable Crops with Alaska's Farmers (GF \$163.0, NGF \$53.0, Total \$216.0)

Peonies and rhodiola, a high-value medicinal plant, show great promise and income potential. The value per acre of cut flower peonies is estimated to be \$50,000 to \$100,000, while rhodiola has the potential to net a farmer \$25,000 to \$40,000 per acre. This request supports funding for a scientist who will work to develop and share information on specialty crops with farmers in Alaska with a focus on research and teaching. The scientist will develop an in-depth research program on specialty crops for Alaska and will teach courses in the Natural Resources Management degree at UAF.



## Appendix: UAF FY16 Budget Request by Strategic Investments for Alaska

UAF Strategic Investment Priorities to Benefit Alaska		State Appropriation		Receipt n Authority			Total
Strengthening Alaska's Position in Setting the Arctic Agenda	FTE	\$ \$	15,197.0	\$	12,565.0	\$	27,762.0
Operating	FIE	\$	1,497.0	\$	3,565.0	\$	5,062.0
Strengthen Alaska's Participation in Arctic Policy	1.5	Ψ	200.0	Ψ	3,505.0	Ψ	200.0
Establish Core Infrastructure for Continued Unmanned Aircraft Systems Operations	4.0		570.0		1,000.0		1,570.0
Compete for Marine Ecosystem Program & Other Competitive Grants with Sikuliaq	0.0		500.0		2,500.0		3,000.0
Improve Understanding of Ocean Acidification	2.0		227.0		65.0		292.0
Capital	2.0	\$	13,700.0	\$	9,000.0	\$	22,700.0
Supporting the U.S. Arctic Council Chairmanship: 2015-2017 & Beyond - 2 year		Ψ	1,200.0	Ψ	3,000.0	Ψ	4,200.0
Unmanned Aircraft Systems in the Arctic - 5 year			10,000.0		5,000.0		15,000.0
Revitalizing Alaska Native Languages - 5 year			2,500.0		1,000.0		3,500.0
		\$	41,988.0	\$	26,918.0	\$	68,906.0
Promoting Economic Diversity in Alaska  Operating		\$	1.188.0	\$	918.0	\$	2,106.0
	1.5	Ф	400.0	Ф	450.0	Þ	850.0
Deliver Chemical Engineering Degree to Support Alaska LNG & Refining Industries	4.5						
Research & Development to Support Alaska Mining Development	2.0		150.0		150.0		300.0
Improve Alaska Seafood Processing & Training in Kodiak	1.0		113.0		135.0		248.0
Build in-State Leadership for Tourism Management	2.0		130.0		130.0		260.0
Develop Film Industry Workforce	2.5		232.0		-		232.0
Develop Economically Viable Crops with Alaska's Farmers	1.0		163.0		53.0		216.0
Capital		\$	40,800.0	\$	26,000.0	\$	66,800.0
Engineering Facility Completion			31,300.0		5,000.0		36,300.0
Energy & Remote Power Partnerships for Alaska's Future - 3 year			3,000.0		11,000.0		14,000.0
Alaska Center for Energy and Power Office Buildout			-		6,500.0		6,500.0
Integrated Fossil Fuels Program - 3 year			1,500.0		1,500.0		3,000.0
Oil Spill Research Center of the Arctic (ORCA) - 5 year			5,000.0		2,000.0		7,000.0
Supporting Alaska's Students & Sustaining Communities		\$	57,342.0	\$	74,396.0	\$	131,738.0
Operating		\$	792.0	\$	396.0	\$	1,188.0
Provide Comprehensive Rural Student Advising (Ongoing)	3.0	Ψ	278.0	Ψ	570.0	Ψ	278.0
Maintain Nursing Program at Bristol Bay	0.5		60.0		30.0		90.0
Expand Rural Construction Trades Program	0.5		54.0		25.0		79.0
	3.0		200.0		241.0		441.0
Complete the Launch of the Collaborative 2+2 Veterinary Medicine Program	3.0		200.0		241.0		441.0
Expand the Behavioral Health Workforce by Building the Undergraduate & Clinical PhD	2.0		200.0		100.0		300.0
Psychology Program		Φ	56.550.0	Ф	<b>540000</b>	Φ	120 550 0
Capital		\$	56,550.0	\$	74,000.0	\$	130,550.0
Closing Alaska's Earthquake Safety Gap - 2 year			10,000.0		8,000.0		18,000.0
Public/Private Partnership (P3) Campus Housing Project			6,500.0		65,000.0		71,500.0
Fire Hall Replacement & CTC Emergency Services Training Center			1,500.0		-		1,500.0
Core Campus Parking Garage			350.0		-		350.0
Kuskokwim Campus Consortium Learning Center			700.0		-		700.0
Expanding the Early Childhood Program (Bunnell House)			850.0		-		850.0
Northwest Campus Realignment			150.0		-		150.0
Classroom Instructional & e-Learning Technology - 2 year			2,000.0		-		2,000.0
Advanced Analytical Instrumentation for Resources R&D and Education - 2 year			1,000.0		1,000.0		2,000.0
Technology Tools & Systems Integration in Support of Business Process Improvement - 2 year			1,000.0		-		1,000.0
UAF Proportion of \$50M UA Request for R&R, Code & ADA			32,500.0		-		32,500.0
Strategic Investment Priori	tiesTotal	\$	114,527.0	\$	113,879.0	\$	228,406.0
			G		D		
UAF FY16 FIXED COSTS - Shaping Alaska's Future Themes			State		Receipt		m
			ropriation		Authority	Φ.	Total
Student Achievement	ı	\$	650.0	\$	-	\$	650.0
Rural 4-H Program Natural Resource Fund (NRF) Replacement (pending NRF decisions - up to			400.0		-		400.0
\$400.0 max amt.)							
Electronic Journal Subscriptions for Rasmuson Library			250.0		-		250.0
Accountability to the People of Alaska		\$	6,995.0	\$	6,420.0	\$	13,415.0
Fairbanks & Community Campus Adjustment (Est.)			3,000.0		3,000.0		6,000.0
Title IX Compliance - Prevent/Respond to Campus Sexual Harrassment			230.0		-		230.0
General Fixed Cost Increases (Est.)			460.0		1,350.0		1,810.0
UA System Office Risk Assessment: FY15 Increase & FY16 Proposed			240.0		-		240.0
Facilities Maintenance and Repair (Est.)			1,220.0		720.0		1,940.0
Utility Cost Increases (Est.)			1,600.0		600.0		2,200.0
Bristol Bay Applied Science Center			65.0		-		65.0
Process Technology Program Lease (\$155K) Facility Operations/Shuttle Service (\$25K)							
(Partial Replacement Funds)			180.0		-		180.0
ASF-Richardson, Seward Ship Office & CTC Hangar O&M					750.0		750.0
Estimated Fixed Cost Increase	ene Totol	•	7,645.0	\$	6,420.0	\$	14,065.0
Estimateu Fixed Cost increa	ses total	Φ	7,045.0	Φ	0,420.0	Φ	14,005.0