UAF challenges

- State and federal budgets
- Low tuition increase
- Aging heat and power plant
- Deferred maintenance
- Partially-funded facilities
- New higher education models

ALASKA

UAF opportunities

- Research
- Instruction
- Service
- Facilities transformation
- Online strengths
- Our brand

ALASKA

Executive Summary

Higher education institutions in the U.S. are facing increased scrutiny from the multiple constituencies they serve including federal and state policy makers, parents, students and the general public. Learning outcomes and college affordability are among the many issues being carefully reviewed. Attention to college affordability in particular has resulted in an uncertain budget environment for higher education institutions as pressure builds to moderate tuition increases, while also reducing reliance on state and federal funds. This reality has resulted in somewhat of a dilemma for administrators in higher education as utilities, health care, deferred maintenance and facility needs, and other administrative costs continue to increase. The message from Juneau and Washington D.C. is the same: "moderate your primary self-generating revenue (tuition) and anticipate less from state and federal coffers."

UAF is not exempt from the conditions that make up this operating environment. Understanding this fiscal climate, UAF must effectively manage its resources and demonstrate excellent stewardship of state and federal (external) as well as internal funds. Examples of this prudent fiscal management include, but are not limited to:

- 1) Streamlining existing processes in an effort to hold down costs,
- 2) Finding ways to generate additional revenue from non-general fund resources,
- 3) Pursuing new models for resource management including public-private partnerships (P3) to address housing, dining, and other student facility and service functions, and
- 4) Strategically reinvest internal resources to high priority programs that align with UAF's strategic plan, accreditation core themes, and the UA Strategic Direction Initiatives (SDI).

UAF addressed each of these areas in FY12 through:

- 1) The Process Improvement initiatives led by the Administrative Services division.
- 2) Exploration of new funding mechanisms and models, such as use of Debt Service to address facility needs, as well as new initiatives to expand commercialization of research efforts and intellectual property,
- 3) Initial investments made in a large-scale giving campaign in preparation for UAF's Centennial Anniversary celebrations that will take place from 2015-2017,
- 4) Productive partnerships that will bring new opportunities to UAF such as the Public/Private Partnership (P3) Wood Center Dining addition (Phase 1) schematic design approved by the Board of Regents for Student Life Revitalization, Sustainable Village partnerships with the Cold Climate Housing Research Center and UAF student designers/innovators for sustainable student housing, and new partnerships with the State for Unmanned Aerial Vehicle (UAV) research endeavors,
- 5) Incorporation of the UAF accreditation core themes into UAF's internal strategic reinvestment process to better ensure alignment of plans and missions, and
- 6) Regular ongoing academic planning and program review led by the Office of the Provost.

University of Alaska Fairbanks

The Governor's strategy over the past few fiscal years, which continues in FY14, has been to "hold-the-line" on budget requests from state agencies including the University. UAF ended the fiscal year with stability and will continue efforts to align public service, conduct outreach, increase development and pursue engagement efforts.

Total revenue increased in FY12 over FY11, primarily as a result of one-time funds from the American Reinvestment and Recovery Act (ARRA). UAF received approximately \$68 million in ARRA stimulus funds

in FY12 and \$33.5 million in FY11. In total, since 2010, UAF has received almost \$108 million in ARRA funds, with 85% of those funds supporting the School of Fisheries and Ocean Sciences with the construction of the arctic research vessel Sikuliaq. The 261-foot Arctic research vessel was christened and launched on October 13, 2012 and is expected to arrive in its homeport of Seward, Alaska by January 2014.

As ARRA stimulus funds are one-time federal funds, this source will likely not be an available source of funds in the future. For that reason, ARRA funds are excluded in many of the charts and graphs throughout the 2012 Fall Financial Review that aim to compare revenue trends across years.

Deferred Maintenance and Facility Needs

Several initiatives continued as a work-in-progress during FY12 including the construction of the new 100,000 square foot Life Sciences Building which is estimated to be completed by summer 2013 and the Utilities West Ridge Steam Capacity Expansion Project which will provide additional steam distribution capacity to the West Ridge.

UAF relies on tuition and indirect cost recovery from grants and contracts, primarily federal, to cover portions of its annual fixed increases. In recent years, UAF has had to rely on debt service and revenue bonds to fund deferred maintenance needs and facility upgrades. Use of debt service puts additional pressure on UAF resources, as historically investments of this nature were funded through direct State support. This approach is a fundamental shift in facility improvement and investment in order to manage required maintenance and infrastructural needs. The lack of comparable growth in revenue streams within the control of UAF makes managing these additional pressures difficult.

Projects addressed via this models include but are not limited to funding for Life Sciences (\$20.6 million of the \$108.6 million total project cost) and Deferred Maintenance (\$22.5 million), critical electrical maintenance, Cogeneration Heating Plant maintenance, Voice Over IP telecommunication upgrades, the West Ridge Research Revitalization project, campus wide energy solutions and roof replacement in critical areas. An additional \$23.25M for Deferred Maintenance is anticipated in FY13, however it should be noted that the total Deferred Maintenance backlog exceeds this request.

Revenue bond refinancing will also be used in the Spring of 2013 for additional deferred maintenance projects that contribute to an enriched student experience and life on campus. The UAF Public/Private Partnership (P3) for the Dining/Housing facility upgrades issued bonds to fund the student dining facility revitalization. The bond proceeds for the project were \$26.0M. UAF annual lease payments will be \$1.45M.

New construction items include the Engineering Building completion (partially funded in FY13) and receipt authority for the Sustainable Village Phase II. UAF will prepare for the Energy Technology Facility, a University Fire Department/CTC Fire Station Replacement and Training Center, the Kuskokwim Campus Consortium Learning Center, and the Public/Private Partnership Housing (and Dining) Fairbanks Student Life renovation in the FY15-FY16 request.

Federal Climate

The federal government continues to craft a plan to address financial pressures driven by national deficit levels. A reduction in expenditures is expected, which may impact agency funds that are a key component of the UAF fiscal makeup. While there is general support to invest in higher education at a federal level, UAF understands the expectation that the institution must maintain a strategic and relevant research agenda in order to remain competitive in this environment. Federal funding for higher education is expected to be more targeted and UAF will prepare for this shift as applicable.

Policy makers, both federal and state, face budget deficits. Institutions of higher education are under tremendous pressure from elected officials to reduce reliance on federal and state funds. Meanwhile, the cost of providing higher education continues to go up. The President of the United States, in his 2012 State of the Union address, had this to say about federal funding of higher education:

"...let me put colleges and universities on notice: if you can't stop tuition from going up, the funding you get from taxpayers will go down."

Absent action by the U.S. congress, there is a likelihood there will be some level of Federal Sequestration. This is likely to impact Federal agency funding for FY13 and beyond. However, the full impact of any sequestration cannot be reasonably determined at this time.

State Climate and Budget Requests

State support for higher education across the U.S. has been greatly impacted by the recession. According to the College Board Advocacy and Policy Center *Analysis Brief* - "Trends in Higher Education Series" published in July 2012, state support for the entire U.S. public higher education system has declined by an average of -3.8% since 2006-07. The state of Alaska has been more resilient to this economic impact and has been strategic about maintaining its reserves. The publication notes, since 2006-07, Alaska state appropriations have increased by 24.2%.

Alaska's primary source of general fund revenue is the natural resource wealth attributed to oil production on the North Slope. However, oil production is declining. In 2001, Trans Alaska Pipeline System (TAPS) oil throughput averaged just below 1 million barrels per day. In 2011, TAPS throughput averaged 603 thousand barrels per day. This trend is expected to continue in the near future.

Of equal importance, is the state's reliance on high oil prices to support current state spending levels. The breakeven price of oil to support current spending is roughly \$100/barrel. In FY10, the state budget required \$64/barrel to support state expenditures. The increase in the breakeven price of oil for the state budget to balance may be cause for concern without additional diversity in state revenues. If expenditure levels continue to rapidly increase, the break-even price may exceed the market price, leading Alaska into budget deficits.

State general fund support increased by 2.2% between FY11-12 and another 3.8% between FY12-13. Overall, earned revenue went up. UAF is poised for growth in a few identified strategic areas in FY13 and beyond.

UAF was funded via the State of Alaska in the following program areas in FY13 (\$ State Funds/\$ Receipt Authority, units in thousands unless noted otherwise):

- Honors Program: \$100K
- Advising Students for Performance Success: \$600K/\$273K
- Support for Increased Engineering Retention & Graduation: \$400K/\$400K
- Vet Med Program: \$200K/\$200K
- Early Childhood Program Support: \$144K
- Indigenous Students PhD & Alaska Native Knowledge Network: \$250K/\$46.6
- Resilience and Climate Adaptations Program (RAP) in Graduate Studies: \$300K/\$472.6K
- Sikuliaq On-Shore Support (receipt authority only): \$547.2
- FFA and 4-H: \$250K/\$750K
- Alaska Air National Guard Scholarship Program: \$80K

UAF was funded via the State of Alaska in the following capital and facility areas in FY13:

- UAF Engineering Facility (partial funding): \$46.3M
- Ocean Acidification Research: \$2.7M
- Unmanned Aerial Vehicle R&D: \$5M
- Georgeson Botanical Garden: \$100K
- Kuskokwim Campus R&R: \$450K

UA's FY14 budget request approved by the UA Board of Regents and submitted to the Governor includes the following programmatic requests for UAF:

- Mandatory Comprehensive Student Advising (CRCD): \$302.4/\$14.0
- UAF STEM Capacity in General Chemistry: \$200.0/\$53.0
- E-Learning (Instructional Design and Equipment): \$250.0/\$100.0
- Alaska Young Fisherman's Summit: \$43.9/\$5.0)
- Alaska Seafood Processors Leadership Institute (ASPLI): \$56.5/\$75.0
- UAF Nursing Program at Bristol Bay: \$55.0/\$55.0
- Alaska Veterinary Medicine 2+2 Program w/Colorado State: \$200.0/\$243.0
- UAF/UAA Joint Doctoral Program in Psychology: \$300.0
- Mineral Research and Development Initiative: \$100.0/\$90.0
- Workforce Development in Construction Trades and Tribal Management: \$140.0/\$90.0
- Response to Statewide Business Pressure for Accountants (Controllership): \$195.0/\$30.0
- Sustaining the UA Press: \$200.0
- Intellectual Property for Business Development: \$200.0/\$50.0
- Ship Time for Alaska Specific Research (Sikuliaq): \$500.0
- High Performance Computing: \$100.0/\$100.0

UA's FY14 Capital Budget request includes the following UAF-specific items:

- Annual requirement for maintenance (Est. 62% of \$37,500.0): \$23.131.0
- Cogeneration Heating Plant Replacement Design: \$22,000.0
- Engineering Building Completion: \$48,300.0/\$10,000.0
- Cold Climate Housing Research Center Sustainable Village Phase II: \$0.0/\$1,300.0

UAF FY14 Capital Research to Sustain Alaska's Economy:

- Partnership to Develop Statewide Energy Solutions: \$5,500.0/\$3,000.0 (phased)
- Improving Arctic Oil Spill Response through Dedicated Science and Technology Center: \$1,500.0/\$2,000.0
- Enhance Base Maps for Alaska: \$1,900.0
- Research Alaska's Chinook Salmon Production & Decline: \$3,100.0/\$6,200.0

Strategic Reinvestment

The challenging federal and state fiscal climates will make management of UAF's internal resources all the more important. UAF regularly reallocates internal resources to support priority areas. For FY13, UAF invested in the office of Undergraduate Research and Scholarly Activity, the Honors Program, the Center for Alaska Native Health Research, a UAF branding and marketing campaign, International student recruitment strategies, and research initiatives, among other investments. Factors that contribute to funding are the

requests' alignment with the UAF mission, strategic plan, and accreditation core themes. Additionally, funded efforts typically have alignment with performance outcomes such as increasing the number of UAF graduates, graduating students in high demand job areas that meet the needs of the Alaskan economy (Engineering, Fisheries, Mining, Teacher Education, Health/Biomedical, Workforce Development, and Research), contributions to competitive research, and other student attainment and achievement areas.

The UAF Office of Management and Budget (OMB) was also established in 2012. OMB focuses on budget analysis and planning, process improvement and efficiencies, and financial projections and forecasting. OMB will also play a significant supporting role in future strategic budgeting and reallocation processes at UAF.

FY13 Investment and FY14 Outlook: Planning for the Future (units in thousands)

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 will be used in budget and planning discussions with the State for FY14 requests.

UAF Accreditation Core Themes	UAF Strategic Plan	UA Strategic Direction Initiatives
Educate: Undergraduate and graduate	Educate students to be informed,	Student achievement and attainment
students and lifelong learners	responsible, active citizens by	
_	incorporating real-world experiences	Research and development to help build
Research: To create and disseminate	and applications into the undergraduate	and sustain Alaska's economic growth
new knowledge, insight, technology,	curriculum.	and productive partnerships
artistic and scholarly works		
	Promote UAF as Alaska's premier	Productive partnerships with schools,
Prepare: Alaska's career, technical and	research enterprise in partnership with	public entities and private industry
professional workforce	state agencies, industry, and civic	
	organizations.	Accountability to the people of Alaska
Connect: Alaska Native, rural, and		
urban communicates by sharing	Enhance UAF's competitive advantage	
knowledge and ways of knowing	by attracting and keeping the best and	
m	brightest students and faculty.	
Engage: Alaskans through outreach for	Francis de la disease una cuerca de terresta d	
continuing education and community	Expand graduate programs in targeted areas of identified need and existing	
and economic development	strengths.	
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	Improve assistance to students in	
	making transitions across all phases of	
	the education continuum.	
	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.	
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Student Achievement and Attainment

A common theme in UAF's student achievement package is to remove barriers for student success. In FY13, the State of Alaska put \$600.0 toward UAF "Advising Students for Performance Success" and \$400.0 toward "Support for Increased Engineering Retention and Graduation" initiatives. Data has shown the six-year graduation rate for students with comprehensive advising support is nearly 19% higher than those without. Expanding the TRiO program last year with this funding (from 160 students to nearly 400) contributed to improvements in student retention and degree completion. In FY14, UAF requests to expand advising support

UAF Office of Management & Budget (OMB)

Page 6 of 51

to include community campuses, specifically Bristol Bay, Kuskokwim Campus, and CTC, and will target non-completing degree seeking students. UAF STEM capacity in General Chemistry is also a bottleneck, as 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.

Additional investments in E-Learning are expected to increase both enrollment and degree completion. The ability to increase course offerings via online instruction will leverage technology in an effort to increase urban and rural student capacity.

Productive Partnerships with Alaska's Public and Private Industries

There are several key areas UAF will focus on in the FY14 budget request related to productive partnerships: Fisheries, Health/Biomedical, Mining, and Workforce Development. The University of Alaska Fisheries, Seafood and Maritime Initiative 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. Related to these efforts, UAF is exploring opportunities to partner with the Alaska Department of Fish and Game for fisheries research and development efforts.

Specific to Health/Biomedical, UAF received \$200.0 in FY13 for Veterinary Medicine, which was half of the requirement for full program expansion. In FY14, UAF will request the remaining \$200.0 investment to build this joint "2+2" accredited program with the College of Veterinary Medicine and Biomedical Sciences at Colorado State University. Additionally, UAF plans to expand the Nursing program at Bristol Bay in an effort to reduce the wait list for nursing students and increase clinical lab space. This will ensure a high quality learning environment and fill the increasing statewide demand for nurses in rural Alaska. Similarly, UAF and UAA will partner to expand 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.

Other investments in Mining and Workforce Development also serve to grow effective partnerships and meet Alaska's high demand job needs. The Mineral Resources Research Laboratory will offer vocational training relevant to the field and will expand the ability for UA to capitalize on private sector research for mining exploration developments. Additionally, the Interior Aleutians Campus is developing an alternative energy emphasis that includes Construction Trades Technology training and education in alternative energy technology. A focus on energy efficient building practices will also contribute to rural communities. Finally, the School of Management intends to grow its Accounting program by five courses, with an emphasis in chief accountants and controllers to meet Alaska's job demands for skilled accountants in small and medium sized organizations.

Fostering Knowledge of Alaska Issues, Culture and History

UA Press is the only book publisher operating in Alaska that focuses on scholarly and educational books and e-books. UA Press publishes an average of 20 books per year on topics ranging from politics, history, Alaska Native languages and cultures, to science and natural history. Sales exceed 30,000 books annually; however, UAF will request support for this strategic operation as current book revenues are not sufficient to maintain existing publication levels.

Research and Development to Help Sustain Alaska's Economic Growth

In FY13, UAF put forward requests for "Commercialization of University Intellectual Property for Business Development" and "High Performance Computing for Alaskan Research", with little success. These initiatives remain a priority in FY14, and have been reevaluated and improved to leverage partnerships across

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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. This request may be packaged with a similar request from UAA, and remains a common goal for the UA System. Additionally, High Performance Computing (HPC) investments enable a wide variety of stakeholders to more easily engage in computational modeling, have access to large data sets, and allow for data visualization, education and outreach opportunities. UAF must sustain modern technology services via HPC in order to remain competitive and receive research awards.

In FY13, UAF included university generated funding for on-shore staff support for the Sikuliaq research ship, which becomes operational in 2013 for testing, and moves to scientific operations in 2013-2014. UAF's FY14 budget includes a state-funding 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.

Capital Research Priorities

In FY13, UAF garnered legislative support for research initiatives that contribute to Alaska's economy. UAF received \$2,700.0/\$750.0 for studying the "Impacts of Ocean Acidification" and \$5,000.0 was added by the Legislature for research and development of "Unmanned Aerial Vehicle Systems". In FY14, UAF takes a similar approach and plans to put forward four capital research projects of importance to the State.

UAF has significant capabilities to assist the State and Alaska communities in making informed decisions about in-state energy development. Funding for a UAF hosted integrated in-state energy policy center will allow UAF the ability to objectively and critically analyze energy alternatives. UAF will leverage the energy technology testing and development success of the Alaska Center for Energy and Power (ACEP) to advance research in target areas of energy analysis and fossil fuel research. Assessments for natural gas development, proposed coal-to-liquids and gas-to-liquids projects, hydropower, carbon sequestration and other strategies can be conducted to inform Alaska's leaders and help ensure Alaska's resources are developed in a prudent and economically beneficial manner. 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.

Management of Alaska's salmon populations is of great importance to Alaska's subsistence, personal use, commercial and recreational fisheries in Alaska. Specifically, Alaska's Chinook salmon populations particularly in the Yukon-Kuskokwim river drainages are on the decline. To date, there is limited reliable data because Chinook salmon populations vary and are impacted by several factors. As a result, biologists and stakeholders seek to better understand the factors affecting the Chinook salmon returns to Alaskan waters. Improved data is needed in order to find solutions for the Alaskan industries and communities dependent on this food source.

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 will submit 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 FY13, UAF received \$46,300.0 for the first phase of the Engineering Facility, \$450.0 for Kuskokwim Campus Renewal and Renovation (R&R), and \$100.0 for survivability research in the Georgeson Botanical Gardens.

In FY14, the major priorities are deferred maintenance, planning for the Cogen Heating Plant replacement, and the next phase of the Engineering Facility. 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. As the UAF campus is approaching its centennial anniversary (2015-2017), the aging facility needs are generally the highest in the UA System.

New priorities include planning for the Cogen Heating Plant replacement. This significant project is expected to cost in upwards of \$175,000.0, and will be a part of the FY15-FY17 UAF Capital Budget Request as design and planning is completed.

New construction items include the Engineering Building completion and receipt authority for the Sustainable Village Phase II. As UAA also has an engineering building in progress, the engineering completion request is a joint request for UAF and UAA totaling over \$108,900.0 for the UA System.

UAF will additionally prepare for the Energy Technology Facility, a University Fire Department/CTC Fire Station Replacement and Training Center, the Kuskokwim Campus Consortium Learning Center, and a Public/Private Partnership Housing (and Dining) Fairbanks Student Life renovation in the FY15-FY16 request.