



U N I V E R S I T Y
o f A L A S K A

Many Traditions One Alaska

Proposed FY15 Capital Budget and 10-Year Capital Improvement Plan

Reference #3

Board of Regents
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University of Alaska
Proposed FY15 Capital Budget Request and
10-Year Capital Improvement Plan
Introduction

Presented within are the proposed FY15 Capital Budget Request and the 10-Year Capital Improvement Plan. The goal of the Board of Regents' University of Alaska FY15-FY24 Capital Improvement Plan (CIP) is to guide decision making that ensures the necessary facilities, equipment, and infrastructure are in place to support the academic and research direction of the university system as prescribed in the UA Academic Master Plan, and supports UA in the system wide "Shaping Alaska's Future" project. The extended capital forecast also permits consideration of the associated future annual operating costs that may be incurred.

The capital budget presents the top priority projects for FY15, and then an educated guess at the short-, mid-, and long-term capital investment possibilities beyond that. The priority projects for FY15 call for a state investment of approximately \$319.3 million. Requests include Deferred Maintenance (DM), funding to complete the UA Engineering Buildings, and funding for the UAF Heat and Power Plant Major Upgrade project. A significant amount of General Fund money is being spent on research directly related to the Alaskan economy that we believe can be accomplished much more effectively within the UA system. We propose transitioning much of Alaska's research work over to UA starting in FY15. The Proposed FY15 Capital Budget Request is summarized below, with full descriptions beginning on page 5.

- UA's FY15 Deferred Maintenance request of \$37.5 million has been, unquestionably, one of the single most important investments the state has made in UA, and this will be the fifth, and last, year of the Governor's 5-year plan to reduce the State's DM backlog. Another 5-year commitment would sustain the significant slowdown in DM growth the past years have created. The University is focusing on minimizing the DM and R&R on buildings 15 years and newer by establishing the University Building Fund (UBF).
- Renewal and Repurposing (R&R), an annual sustainment funding of \$50 million is approximately 2.5% of the UA's facilities adjusted value. Fully funding annual R&R is universally acknowledged as the single most effective way to prevent adding to the maintenance and R&R backlog. The University has proposed legislation for a UBF that will be modeled after the State's Alaska Public Building Fund. It unanimously passed the Senate in last session and is pending in the House for action in January 2014.
- New Starts/Continuation funding is requested to complete the UA Engineering Buildings already well under construction at UAA and UAF. Work must also begin soon on the cogeneration heat and power plant major upgrade at UAF. These have pushed new construction requests that have already received some planning approval into the out years of the 10-year capital improvement plan. The 10-year capital improvement plan is included on page 4.
- Planning and Design requests are not included in the FY15 budget request due to the projected fiscal climate and existing capital construction. Projects to be considered in the

mid-term of the 10-year capital improvement plan will be assessed first based on a Mission Area Analysis (MAA) and a Statement of Need (SON) process. Additional planning and new construction needs for the long-term will be assessed in time based on support of academic and strategic goals.

- Research for Alaska includes funding to support specific research efforts Alaska wants and needs in order to address critical state requirements in the areas of earthquake prediction and monitoring, Arctic oil spill response, and greatly enhanced digital cartography aimed at rare earth minerals.

University of Alaska
Proposed FY15 Capital Budget Request
(in thousands of \$)

	State Approp.	Receipt Auth.	Total
Deferred Maintenance (DM) /	37,500.0		37,500.0
Renewal & Repurposing (R&R)			
<i>UAA Main Campus</i>	9,171.0		9,171.0
<i>UAA Community Campuses</i>	1,926.0		1,926.0
<i>UAF Main Campus</i>	22,021.0		22,021.0
<i>UAF Community Campuses</i>	1,020.0		1,020.0
<i>UAS Main and Community Campuses</i>	2,749.0		2,749.0
<i>SW Statewide</i>	613.0		613.0
Annual Renewal & Repurposing Sustainment Initiative			
New Starts/Continuation			
<i>UA Engineering Building Completion (UAA and UAF)</i>	78,900.0		78,900.0
<i>UAF Heat & Power Plant Major Upgrade Project</i>	195,000.0	50,000.0	245,000.0
Research for Alaska			
<i>UAF Adapting the EarthScope Seismic Array for Earthquake Assessment</i>	5,000.0	2,500.0	7,500.0
<i>UAF Arctic Oil Spill Response Research Center</i>	1,000.0	2,000.0	3,000.0
<i>UAF Digital Aerial Mapping of Alaskan Resources, including Rare Earth Metals</i>	1,900.0		1,900.0
University Receipt Authority for Capital Projects		30,000.0	30,000.0
Total FY15 Proposed Capital Budget	319,300.0	84,500.0	403,800.0

University of Alaska Proposed 10-Year Capital Improvement Plan (in thousands of \$)

				FY15			State Appropriations		
				State Approp.	Receipt Auth.	Total	Short-Term FY16-FY17	Mid-Term FY18-FY19	Long-Term FY20-FY24
Deferred Maintenance (DM) / Renewal & Repurposing (R&R)									
Facilities Deferred Maintenance/Renewal & Repurposing				37,500.0		37,500.0	75,000.0	75,000.0	37,500.0
Modernize Classrooms							10,000.0	10,000.0	25,000.0
Additional DM Backlog Reduction							100,000.0	100,000.0	
Annual Renewal & Repurposing Sustainment Initiative¹							100,000.0	100,000.0	250,000.0
New Starts/Continuation²								176,000.0	440,000.0
Academic Facilities									
UA	Engineering Building Completion (UAA and UAF) ³			78,900.0		78,900.0			
UAA	Health Sciences Phase II Building and Parking Structure ⁽⁴⁾⁽⁵⁾								121,000.0
UAA	Kodiak Career & Technical Education Center ⁽⁴⁾⁽⁵⁾							24,300.0	
Research Facilities									
UAF	Alaska Center for Energy and Power Office Infill (\$7M in University Receipts) ⁵						5,500.0		
Student Life (Housing), Support, and Other Facilities									
UAS	Student Commons ⁵						1,000.0	12,000.0	
UAF	Housing Receipt Authority (\$65M in University Receipts)								
UAF	Kuskokwim Campus Consortium Learning Center ⁽⁴⁾⁽⁵⁾							7,200.0	
UAF	UFD Emergency Services and Management Facility ⁴								13,000.0
Infrastructure									
UAF	UAF Heat & Power Plant Major Upgrade Project			195,000.0	50,000.0	245,000.0			
UAA	Master Plan Circulation Improvements							6,000.0	
Research for Alaska									
UAF	Adapting the EarthScope Seismic Array for Earthquake Assessment			5,000.0	2,500.0	7,500.0			
UAF	Arctic Oil Spill Response Research Center			1,000.0	2,000.0	3,000.0			
UAF	Digital Aerial Mapping of Alaskan Resources, including Rare Earth Metals			1,900.0		1,900.0			
University Receipt Authority for Capital Projects						30,000.0	30,000.0		
				319,300.0	84,500.0	403,800.0	291,500.0	510,500.0	886,500.0

¹ Annual Requirement for R&R may also be considered as part of the building fund through the operating budget

² Additional planning and new start projects for the out-years will be developed to support academic and strategic goals based on a Mission Area Analysis (MAA)/ Statement of Need (SON)

³ Includes new construction, known renovations to accommodate programmatic change and associated infrastructure costs

⁴ The first year of this capital request is for planning and design

⁵ Pending approval of MAA and SON

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

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

FY15 (GF: \$37,500.0, Total: \$37,500.0)

FY16-FY20 (GF: \$187,500.0, Total: \$187,500.0)

This request is the fifth year of the Governor's \$100 million per year commitment to the reduction of the State's deferred maintenance. This portion has been assigned to UA in the past based on the square footage of the State's facilities, excluding roads.

Annual Renewal & Repurposing Sustainment Initiative

Renewal and Repurposing (R&R) Requirement and annual sustainment funding of \$50 million is approximately 2.5% of the UA's facilities adjusted value, and fully funding annual R&R is universally acknowledged as the way to prevent adding to the maintenance and R&R backlog. The University has also proposed legislation for a University Building Fund (UBF) that will model the State's Alaska Public Building Fund. Legislation would include a fiscal note to establish base state appropriation funding for the UBF, which unanimously passed the Senate in last session and is pending in the House for action in January 2014.

UA New Starts/Continuation

UAA Engineering Building Completion

FY15 (GF: \$45,600.0, Total: \$45,600.0)

UAA engineering is experiencing dramatic growth in its enrollments with a near doubling of the entire program in the past five years now at over 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 undersized for UAA's program growth to meet industry demand. The new Engineering & Industry Building will enhance engineering teaching, learning and research, fostering faculty-industry collaboration and inspiring student success. Revitalizing the existing engineering facility and constructing the new space will help answer Alaska's call for cutting-edge graduates who are ready to energize the state's growing engineering community.

This project includes the construction of a new Engineering & Industry laboratory/classroom building (approximately 75,000 GSF); the renovation and repurposing of the existing three-story School of Engineering building (40,000 GSF) which together will meet the total current demand for engineering classrooms, laboratories, and faculty offices; and a new multistory structured parking facility with approximately 500 spaces required by the Municipality of Anchorage to accommodate the parking demand, as well as replace the existing parking displaced by the new building.

The Total Project Cost for this project is \$123,200.0. The funding received to date (\$77,600.0), has allowed the University to design the new building and the parking garage, and begin the construction of the new building. The additional funding requested for FY15 will be necessary to provide the equipment and furnishings required to operate the new building, design and construct the renovations of the existing building, and construct the parking garage.

UAF Engineering Building Completion

FY15 (GF: \$33,300.0, Total: \$33,300.0)

As part of the UA Statewide Engineering Expansion Initiative, the University of Alaska Fairbanks (UAF) has seen a 100% increase in student enrollment and graduation of baccalaureate trained engineers, and has started construction on the UAF Engineering Facility at the Fairbanks campus. The new facility will allow UAF to graduate more engineering students, enhances the student experience for multiple disciplines campus-wide and creates a modern and interactive learning environment. The facility also allows for better integration of UAF's engineering research and graduate programs, and addresses critical classroom needs.

The proposed facility of 119,100 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 UAF campus core. The new facility blends 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 engineering building and programs and the nearby Bunnell Building which houses business programs. The facility plan will provide approximately 30,000 gsf of renovation to portions of Duckering to provide a functional connection with the new building and to allow efficient use of space to better serve the needs of the engineering program. The remaining \$33M in funding is required to complete the building. If received by May 2014, the project should be complete by January 2016.

UAF Heat & Power Plant Major Upgrade Project

FY15 (GF: \$195,000.0, NGF: \$50,000.0, Total: \$245,000.0)

The UAF heat and power plant provides electricity and steam heat to more than 3.1 million square feet of public facilities on the Fairbanks campus. The plant's main coal boilers were put into service in 1964. These boilers have reached the end of their useful life and need to be replaced prior to experiencing a catastrophic failure. A key requirement of any plant upgrade is that it provides both heat and power to campus.

A 2006 Utilities Development Plan identified replacing and expanding the current coal-fired combined plant and boilers as the preferred option for providing current and future energy (electricity and building heat) to the UAF campus. New efficient coal boilers represent the lowest life cycle cost of the options explored. The campus energy needs have also grown to the point where purchasing power from Golden Valley Electric Association and use of oil has significantly increased UAF's energy costs. A new efficient plant will decrease annual operating costs. This new plant will produce cleaner air for the community than the current facility and is the cornerstone of a strong and diverse energy portfolio for the next 50 years. Because fuel costs are lower with the new boilers and plant upgrade, UAF can afford to finance up to \$50 million of the project and make payments with the money saved in fuel costs. Without a major upgrade, both the educational and workforce development opportunities that support the state's economic health are at risk.

Research for Alaska

UAF Adapting the EarthScope Seismic Array for Earthquake Assessment

FY15 (GF: \$5,000.0, NGF: \$2,500.0, Total: \$7,500.0)

The National Science Foundation (NSF) has funded a monumental project to blanket the United States with a transportable grid to record the minute vibrations of the Earth. NSF is now looking to move the

FY15 Capital Budget Request Project Descriptions

grid to Alaska in 200+ locations across the state. NSF is making an estimated \$40M investment in the Alaska Transportable Seismic Array as part of this EarthScope project. EarthScope will include with the seismic stations the required communications and technology infrastructure not currently available in many remote locations in the state. Each station has a residency time of about two years, after which the station is planned to be moved to the eastern edge of the array. This \$40M federal investment is not conditional on additional state funding however, it creates an opportunity to leverage this investment from NSF to ensure this one-time opportunity benefits Alaska directly and beyond the scheduled two year project term.

Alaska has a one-time opportunity to transform a temporary investment into a sustained earthquake monitoring and production network. By filling in significant monitoring gaps in the current very limited seismic network, Alaskans will be provided data necessary to better understand the earthquake risks to our communities and information and enhance our capacity to warn and respond.

The first of these funds will allow UAF to buy out the infrastructure, in place, and diversify the types of environmental measurements. A large portion of the investment by NSF will pay for installation of the infrastructure to support the stations. With the seismic stations installed, they can be augmented with additional tools to measure Alaska's environment at a fraction of the cost to install from scratch. With the infrastructure in place, it becomes possible to communicate this information across the State in a timely manner. This investment will, for the first time, provide sustained comprehensive earthquake monitoring across Alaska.

UAF Arctic Oil Spill Response Research Center

FY15 (GF: \$1,000.0, NGF: \$2,000.0, Total: \$3,000.0)

One of the areas of highest interest and potential for new development in oil production is in the Alaskan Arctic offshore where it is estimated there are more than 23 billion barrels of technically recoverable oil exist. Exploration and development of these resources are dependent on public trust in the capacity to prevent, respond to and mitigate the effects of an offshore arctic oil spill. The danger of oil spills – whether from exploration, production, ship traffic, or land-based activities – can best be mitigated by thoroughly informed decisions based on integrated, multi-dimensional knowledge of the operations and the total environment, including the people. In terms of risk mitigation, prevention is always the first priority.

This funding will support research and educational programs developed at UAF through an Arctic Center for Oil Spill Research and Education (A-CORE). Funds will build the infrastructure required to partner effectively with State and Federal agencies, industry, and other academic institutions. A-CORE will provide the structural framework for developing and sustaining the type of transformational science and technology, education, and knowledge transfer collaborations necessary to address the complex challenges associated with exploration, development, and transport in the future.

UAF Digital Aerial Mapping of Alaskan Resources, including Rare Earth Metals

FY15 (GF: \$1,900.0, Total: \$1,900.0)

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

FY15 Capital Budget Request Project Descriptions

potential development of Alaska's resources. Increased capability to monitor and document land surface conditions and characteristics will improve our ability to detect and respond to the changing environment, assess resources, and plan new development. Such monitoring is particularly needed in regions of rapid change, such as in areas changed by wildfires, along coast lines, near glaciers and in zones of rapidly degrading permafrost. In addition to using traditional remote sensing technology the university will use part of this funding to advance the use of new technologies including hyperspectral imaging which will dramatically enhance the ability to locate new mineral deposits, clarify vegetation types and improve the ability to track oil spills in ice covered waters.

University Receipt Authority

University Receipt Authority for Capital Projects

FY15 (NGF: \$30,000.0, Total: \$30,000.0)

This request is an estimation of potential university receipt authority needed for FY15-FY16 projects at the main and community campuses. Prior university receipt authority has been used for projects such as the UAA Anchorage Campus Security Cameras for \$830.5, UAF Fine Arts Recital Hall Renovation for \$225.0 and UAS Dormitory Heating Systems for \$400.0.

10-Year Capital Improvement Plan Projects (FY16-FY24)

UAA Health Sciences Phase II Building and Parking Structure

FY20-FY24 (GF: \$12,000.0, Total: \$12,000.0) - *Planning*

FY20-FY24 (GF: \$109,000.0, Total: \$109,000.0)

UAA is uniquely situated, surrounded by two of the largest hospital complexes in Alaska. As the U-Med District grows, partnerships with neighboring institutions continue to emerge. For the past decade, the University has been in discussion with neighboring institutions about partnering for joint-use health care training facilities. In addition, the demand for health care professionals throughout the state has resulted in a call for increased course and program offerings that UAA is unable to meet because of a lack of facilities. In FY09, the Alaska State Legislature appropriated \$46M for the construction of the Health Sciences Building. This funding provided for construction of a 65,000 gsf. building to be located on the land parcel UAA received in the 2005 land trade with Providence Hospital. During programming for this building and for the Health Sciences programs, it was determined that this facility would become Phase I and would only be able to house the Nursing and WWAMI programs with some functions remaining in existing space on the West Campus. It was determined that approximately 99,500 additional gsf of space would be needed in Phase II to accommodate the additional programmatic needs of the Allied Health programs and other health science programs, as well as classroom and administrative space. The UAA Health Sciences Subdistrict Plan consists of nine acres of prime road-front real estate on Providence Drive and is contiguous with the main campus. The plan was approved by the BOR in February 2009 as an amendment to the 2004 UAA Master Plan, and has since been retitled as the Health Zone and incorporated in the 2013 Campus Master Plan. It calls for several high profile buildings to be located on this site that will require a high volume of parking. In accordance with the UAA Campus Master Plan, all future parking should be consolidated in parking structures to reduce the impact on developable land, provide better traffic control on the campus and reduce the negative visual impact of surface parking. This project was identified in the FY15 – FY20 timeframe of the 2013 UAA Campus Master Plan. It is in keeping with the UAA 2017 Strategic Plan priorities to strengthen the UAA community and to Expand and Enhance the Public Square.

UAA Kodiak Career & Technical Education Center

FY18-FY19 (GF: \$2,300.0, Total: \$2,300.0) - *Planning*

FY18-FY19 (GF: \$22,000.0, Total: \$22,000.0)

The Vocational Technology Center (VOTECH) Building on the Kodiak campus was constructed in 1973 and as its outdated name implies, was designed and built for a different era. The facility no longer meets the Career Vocational and Technical (CTE) needs of industry and business partners for the types of classes and workforce training needs currently in demand in the Kodiak community, including the largest US Coast Guard base and island's seven rural villages. Attempting to meet the expanded and steadily increasing needs over the last seven years, the College has been only partially successful by conducting courses at the local high school. Unfortunately, courses may only be offered after the traditional high school day, thereby severely limiting the number of programs and courses offered. Local school district prioritization limits availability and access to facilities to one or occasionally two weekday evenings only, with no ability to use facilities during traditional workday hours, on weekends, during school vacations, closures and summer months. Having more hours of access to facilities in which to offer courses would allow the college to increase opportunities for students.

In order to meet the growing program and space needs for the construction, welding, occupational safety, fitness, marine maintenance and repair, alternative energy, diesel, small engine and mechanical trades and address the issues associated with the current building, an expansion of the existing facility should be constructed to house these programs. In the past two years alone, new grant funded equipment has been obtained by the college totaling more than \$280,000. This equipment would be more secure, better maintained and less likely to be misused or damaged if access were limited to college students in a college location. It has become a challenge to ensure correct use and effective stewardship of these valuable resources. Kodiak students are forced to pay much more for course materials fees due to the inability of the College to buy materials in bulk due to storage limitations. The campus is therefore in need of a secure warehouse and maintenance shop space to support the equipment used to maintain campus facilities and store equipment when not in use. Having this equipment has reduced the reliance on independent contractors, thereby reducing maintenance expenses, e.g. snow removal, grounds maintenance, etc.

UAF Alaska Center for Energy and Power Office Infill

FY16-FY17 (GF: \$5,500.0, NGF: \$7,000.0, Total: \$12,500.0)

In April 2008, UAF launched the Alaska Center for Energy and Power (ACEP), a new research unit to investigate energy options for the state. ACEP builds upon years of energy research organized under the Arctic Energy Technology Development Laboratory. ACEP is part of the Institute of Northern Engineering, the research branch of the College of Engineering and Mines. Although its administrative home is UAF, ACEP integrates energy research across University of Alaska campuses and the state. ACEP's mission is to meet state, industry and federal demand for applied energy research to lower energy costs throughout Alaska, and to develop economic opportunities for the state, its residents and industries.

For ACEP to help meet the demand for applied energy research in Alaska, it is crucial that the program have designated space to conduct research, testing and demonstration. ACEP must also have space where public and private entities can interact with the university. With its present distribution across campus, there is no central location that brings the university and the community together around energy solutions. In addition, the lack of appropriate space also makes it challenging to hire and retain the type of world-class researchers needed to meet ACEP's long-term program goals.

FY15 Capital Budget Request Project Descriptions

UAS Student Commons

FY17 (GF: \$1,000.0, Total: \$1,000.0) - *Planning*

FY18 (GF: \$12,000.0, Total: \$12,000.0)

The UAS Student Commons will promote student retention and completion at UAS by providing a venue for student-focused services, a central gathering space for the UAS community, and a place that enhances opportunities for UAS to host community lectures, forums, and cultural performances. The UAS Campus Master Plan and recent student surveys focusing on retention and degree completion underscore the importance of having an engaging campus core in Juneau that helps attract and retain students. The Student Commons will complement the new 120-bed Freshman Housing now under construction nearby, creating a focal point for activity which includes the Egan Library and Classroom Wing, with a new cafeteria, and adjacent student services. UAS continues to see growth in fulltime students, and this new facility will create a prominent and attractive gathering place for student learning and engagement for both fulltime and commuter students.

The Commons will include a student resource center and support services, student government offices, spaces for student clubs and other activities, a new cafeteria, small areas for studying and tutoring, along with amenities like a coffee house and late-night food services. It will also have public spaces for hosting forums, lectures, art displays, and cultural performances—all designed for expanded community engagement involving faculty, staff, students, and community members.

UAF Housing Receipt Authority

FY18-FY19 (NGF: \$65,000.0 Total: \$65,000.0)

As part of the Student Life: Transforming the UAF Experience project, UAF proposes to provide new student housing units. The housing will be the first phase in a plan to increase the quality and quantity of housing stock.

UAF Kuskokwim Campus Consortium Learning Center

FY18 (GF: \$700.0, Total: \$700.0) - *Planning*

FY19 (GF: \$6,500.0, Total: \$6,500.0)

The Kuskokwim Campus Consortium Learning Center will provide access to information, resources, and services to all members of the Bethel community. The new learning center will allow access to the entire collection along with improved seating and study areas for students and area residents.

UAF University Fire Department (UFD) Emergency Services and Management Facility Replacement

FY20-FY24 (GF: \$700.0, Total: \$700.0) - *Planning*

FY20-FY24 (GF: \$12,300.0, Total: \$12,300.0)

The UAF Fire Department urgently needs a new facility to meet current and future demand for educated, experienced firefighters and emergency medical responders. The Whitaker building on the UAF campus has served these functions well but lacks sufficient space to meet realized and anticipated growth in enrollments, and has significant mechanical and structural problems.

UAA Master Plan Circulation Improvements

FY16-FY17 (GF: \$6,000.0, Total: \$6,000.0)

One of the primary results of the 2013 Campus Master Planning Study was identifying the need for improved vehicular, bicycle, and pedestrian access, egress, and circulation within the UAA Main Campus. Several UAA, MOA, and DOT projects either in planning or under construction will impact traffic patterns at UAA and within the UMED District. It will be to UAA's benefit to construct road improvements in conjunction with these projects in order to improve traffic flow within UAA and the UMED District, and to secure MOA approval for the projects.

The scope of this project includes the following major road improvements to improve traffic flow on the UAA Campus and within the UMED District:

Realign Mallard Lane within the existing right-of-way, upgrade the road to MOA 2-lane road standards, and provide appropriate traffic controls at the intersection with UAA Drive.

Construct a 2-lane, paved connection from Residential Drive in the student housing area to a proposed roundabout to be constructed by the city at the intersection of Elmore Road and Tudor Centre Drive. This project will also include reconstruction of the parking area south of the Templewood Student Housing Apartments, and a road connection from East & West Halls to Wellness Drive near 40th Ave.

Construct Pedestrian Trail Improvements to extend and connect Pedestrian Trails enhancing pedestrian and bicycle circulation throughout the UAA Main Campus.

Each of these road and trail improvements will be constructed to MOA standards and will include all appropriate curbs, gutters, sidewalks, landscaping, traffic markings, signs, and other controls as necessary.

University of Alaska
FY15 Priority Deferred Maintenance (DM) and Renewal and Repurposing (R&R) Projects State
Appropriations (in thousands of \$)

Project Name	DM	R&R	Total
UAA Main Campus			
Campus Building Envelope & Roof Systems Renewal	2,000.0		2,000.0
Campus Building Interior & Systems Renewal	500.0	500.0	1,000.0
Campus Exterior Infrastructure and Signage Renewal	200.0	50.0	250.0
EM1 and EM2 Mechanical	1,250.0		1,250.0
WFSC Near Term Renewal & Repurposing	2,500.0	2,500.0	5,000.0
Consortium Library Old Core Mechanical Upgrades	2,500.0		2,500.0
UAA Main Campus Total	8,950.0	3,050.0	12,000.0
UAA Community Campuses			
KPC Campus Renewal	250.0	250.0	500.0
Kodiak College Campus Renewal	215.6	200.0	415.6
PWSCC Campus Renewal	150.0	150.0	300.0
Mat-Su Campus Renewal	300.0	300.0	600.0
KPC Kachemak Bay Campus Renewal	60.0	60.0	120.0
KPC Kenai River Campus Career Tech Collateral Buildings Backfill	100.0	100.0	200.0
Mat-Su Parking/Road/Circulation Renewal	92.4	100.0	192.4
KPC Kachemak Bay Campus Gas Conversion		70.0	70.0
PWSCC Parking and Security Upgrades	35.0	20.0	55.0
KPC Kenai River Campus Academic Center/Classroom Renewal	25.0	25.0	50.0
UAA Community Campus Total	1,228.0	1,275.0	2,503.0
UAA DM and R&R Total	10,178.0	4,325.0	14,503.0
UAF Main Campus			
Cogen Heating Plant Required Upgrades to Maintain Service and Code Corrections (Ph3)	1,000.0		1,000.0
Critical Electrical Distribution		3,500.0	3,500.0
Fairbanks Campus Main Waste Line Repairs	2,000.0		2,000.0
Fairbanks Main Campus Wide Roof Replacement	1,000.0		1,000.0
West Ridge Facilities Deferred Maintenance and Revitalization	4,000.0	3,000.0	7,000.0
ADA Compliance Campus Wide: Elevators, Ramps, Restrooms	750.0	250.0	1,000.0
Elevator/Alarms Scheduled Upgrading and Replacement	100.0	400.0	500.0
Lower Campus Backfill Renovations per 2010 Masterplan	400.0		400.0
Patty Center Revitalization	1,000.0		1,000.0
Campus Infrastructure	500.0	500.0	1,000.0
Tilly Commons Demolition	2,000.0		2,000.0
Student Services Renewal - Wood Center Student Union	2,000.0		2,000.0
UAF Main Campus Total	14,750.0	7,650.0	22,400.0
UAF Community Campuses			
Kuskokwim Campus Facility Critical Deferred and Voc-Tech Renewal -- Phase 2	725.0	245.0	970.0
UAF Community Campus Total	725.0	245.0	970.0
UAF DM and R&R Total	15,475.0	7,895.0	23,370.0

University of Alaska
FY15 Priority Deferred Maintenance (DM) and Renewal and Repurposing (R&R) Projects State
Appropriations (in thousands of \$)

Project Name	DM	R&R	Total
UAS Main Campus			
Technology Education Center Renewal Phase 2	1,500.0	1,470.0	2,970.0
Juneau Campus Site Lighting Replacement	800.0		800.0
Juneau Campus Pavement Replacement	500.0		500.0
UAS Main Campus Total	2,800.0	1,470.0	4,270.0
UAS Community Campuses			
Sitka Campus Site Improvements		500.0	500.0
UAS Community Campus Total		500.0	500.0
UAS DM and R&R Total	2,800.0	1,970.0	4,770.0
Statewide			
Butrovich East Parking Lot	1,500.0		1,500.0
Butrovich Building Repairs	600.0		600.0
Statewide Total	2,100.0		2,100.0
DM and R&R Total	30,553.0	14,190.0	44,743.0
Additional DM and R&R			
UAA Main Campus	162,046.6	125,914.1	287,960.6
UAA Community Campus	16,489.9	13,875.9	30,365.7
UAF Main Campus	518,110.8	272,880.4	790,991.2
UAF Community Campus	13,925.6	16,748.8	30,674.4
UAS Main and Community Campuses	6,566.7	1,827.2	8,393.9
Statewide	9,900.0		9,900.0
UA System Additional DM and R&R Total	727,039.5	431,246.3	1,158,285.8
UA DM and R&R Grand Total	757,592.5	445,436.3	1,203,028.8

UAA Main Campus

- **Campus Building Envelope & Roof Systems Renewal**

FY15 (GF: \$2,000.0, Total: \$2,000.0)

FY16-FY20 (GF: \$10,000.0, Total: \$10,000.0)

This project will address campus-wide deferred maintenance and renewal and renovation requirements for building envelope and roof systems. It will include roof repair and replacement, doors, windows, vapor barriers, siding, weatherization, insulation; and other building envelope issues.

- **Campus Building Interior & Systems Renewal**

FY15 (GF: \$1,000.0, Total: \$1,000.0)

FY16-FY20 (GF: \$5,000.0, Total: \$5,000.0)

Many of the original buildings on the UAA Campus were constructed in the early- to mid-1970s and the building systems are beginning to fail and are no longer adequate for the current demands and require replacement or upgrading. The Mechanical, Electrical and HVAC systems in particular fall into this category, however replacement parts for many of these systems are no longer available. The systems are very expensive to operate due to their low efficiencies. Replacement of these systems would allow for increased energy efficiencies and better environmental control throughout the building. This project will replace failing piping, inadequate electrical systems, inefficient lighting, boilers, fans, deficient VAV boxes and upgrade the building automation system controls.

- **Campus Exterior Infrastructure and Signage Renewal**

FY15 (GF: \$250.0, Total: \$250.0)

FY16-FY20 (GF: \$1,250.0, Total: \$1,250.0)

The UAA campus is over 30 years old and many of the roads, trails, sidewalks, parking areas, curbs and gutters are part of the original construction or have been impacted by construction, repair and renovation projects over the years. This results in uneven surfaces, lack of adequate sidewalks and other deficiencies that pose a safety hazard or are increasingly susceptible to additional damage. Increased enrollment and subsequent staffing increases dictate a need to upgrade and repair these surfaces in order to maintain a safe and effective environment for students, staff and the public, as well as a need to provide adequate exterior wayfinding signage.

- **EM1 and EM2 Mechanical**

FY15 (GF: \$1,250.0, Total: \$1,250.0)

FY16-FY20 (GF: \$2,248.8, Total: \$2,248.8)

The Energy Modules (EM1, EM2) were constructed in 1977 and provide heating and cooling services for a number of campus facilities. The Energy Module boilers, pumps and piping systems are over 30 years old and has been failing due to age, corrosion and fatigue. Many of these failures have occurred during the winter months when additional stresses are placed on the systems due to increased heating demands and environmental impacts. These failures further impact other systems, thus driving up the associated costs. Emergency repairs are very expensive and have a severe impact on students, faculty and staff working in the buildings served by these modules.

FY15 Priority Deferred Maintenance (DM) and Renewal & Repurposing (R&R) Project Descriptions

- **WFSC Near Term Renewal & Repurposing**

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

In FY09, the State Legislature appropriated \$15M for design and site development for a new Sports Arena on the UAA Campus, and fully funded the project in FY13 and FY14. This facility will allow for the majority of intercollegiate sports programs and related offices and operations to be housed in a separate facility. The 2013 Campus Master Plan calls for the eventual replacement of the WFSC with a new facility supporting Student Support Services and an expanded Student Union. However, in the near term, space will become available within the Wells Fargo Sports Complex for student sports, student activities, academics, and recreational offerings.

- **Consortium Library Old Core Mechanical Upgrades**

FY15 (GF: \$2,500.0, Total: \$2,500.0)

FY16-FY20 (GF: \$7,658.2, Total: \$7,658.2)

The original HVAC systems consist, for the most part, of equipment over 29 years old located within the four central building cores. The boilers, main supply/exhaust fan units, heating/cooling coils, galv. piping and humidification systems have all reached the end of their useful life. Major component parts are no longer available for these units. Control systems are no longer able to properly regulate air flow resulting in irregular temperatures and conditions within the building. The 2004 Library addition contains newer HVAC systems with different control and delivery systems that have resulted in incompatibilities between the two systems and has affected the efficiencies of both systems.

UAA Community Campuses

- **KPC Campus Renewal**

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

FY16-FY20 (GF: \$2,500.0, Total: \$2,500.0)

The Kenai River Campus includes four buildings built between 1971 and 1983. Each building is of different quality having been constructed using different construction methods and materials, and energy efficiencies. With the exception of some painting and the Ward Building renewal in 2005, the exteriors of these buildings have not been upgraded since they were built. A number of roofs are at or have exceeded their life cycle at the Kenai River Campus. Some roofs contain asbestos products which will require some abatement prior to replacement. The campus is spending too much money on utility costs due to the inefficiencies of the old buildings. With rapidly increasing utility costs, the energy savings realized by this renewal would be significant. Some of the original methods of construction included single pane windows, door glass, and aluminum store fronts that do not block the cold and increase utility costs and extreme campus-user discomfort during the extreme winters. Many of the entrances are not covered and allow the buildup of ice and snow at the critical slip/trip points at the building entrances. In addition to gaining additional instruction space and significantly increased energy efficiencies, this project will create a positive first impression for visitors and prospective students.

The McLane (KP101) and Brockel (KP103) additions were all constructed between 1972 and 1976 and the original air handling units are in place. The air handling equipment and associated duct work in these buildings cannot supply the quantities of air required by current mechanical standards. The University needs to replace the heat plant and air handling equipment for these facilities prior to a catastrophic failure results in and emergency replacement.

- **Kodiak College Campus Renewal**

FY15 (GF: \$415.6, Total: \$415.6)

FY16-FY20 (GF: \$2,078.0, Total: \$2,078.0)

The buildings on the Kodiak Campus were constructed in the early to mid-1970's. The exteriors are painted wood siding that are being impacted by the exposure to the extreme climate conditions of Kodiak. The original windows suffer from worn seals that cause air infiltration. The mechanical and electrical systems are in need of renewal to meet the increased student demand and increased use of new technology. Improvements to layout and design will increase space efficiency and allow for replacement of worn and outdated fixed equipment. In FY09 and FY10, some funding was provided for the replacement of siding on two of the buildings and for some minor upgrades. In FY11, FY12, and FY13 additional funding was allocated and used to continue the most urgent repairs to the buildings. In FY14, additional funding was requested to cover the FY12 Energy Audit recommendations.

- **PWSCC Campus Renewal**

FY15 (GF: \$300.0, Total: \$300.0)

FY16-FY20 (GF: \$1,500.0, Total: \$1,500.0)

The Growden-Harrison building was originally built shortly after the 1964 earthquake as a Elementary school and was added onto in a piecemeal fashion in the following years. This has resulted in aging mechanical, electrical, HVAC systems that are currently undersized for the facility and have included the use of asbestos containing materials. The piecemeal additions have resulted in draining and weathering problems that adversely impact the building envelope.

- **Mat-Su Campus Renewal**

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

FY16-FY20 (GF: \$3,000.0, Total: \$3,000.0)

This project will address campus-wide deferred maintenance issues and renewal and renovation requirements for the Mat-Su Campus.

The buildings on the Mat-Su campus are 15-30 years old and their roofs need to be replaced. With several of MSC's buildings reaching 25 - 30 years of age, it is prudent to plan for the replacement of building components during the next few years. Boilers systems in this region are an essential component. The boilers not already updated this summer range in age from 1979 to 1994. The boiler upgrades (with the oldest first) would allow for greater cost savings through energy efficiency as 80% efficiency boilers would be replaced with 95% efficiency boilers.

The original doors and hardware are still in use across the campus with some units being over 40 years old and heavily used. As these units wear, energy leaks are created within the buildings which increases the cost of operation and wear on other systems, resulting in an unbalanced environment within the buildings. Additionally, the failure of the hardware increases safety and security risks for the University that can result in substantial liability. Technology advancements increase the energy efficiency and security of these units, which will reduce expenses for the University.

- **KPC Kachemak Bay Campus Renewal**

FY15 (GF: \$120.0, Total: \$120.0)

FY16-FY20 (GF: \$600.0, Total: \$600.0)

A significant portion of the Kachemak Bay Campus Building (KB-101, 7,200 sqft.) was originally built in 1988 as a post office. The roof and mechanical/electrical systems are original and were not updated as part of the campus addition in 2006.

- **KPC Kenai River Campus Career Tech Collateral Buildings Backfill**

FY15 (GF: \$200.0, Total: \$200.0)

FY16-FY20 (GF: \$731.1, Total: \$731.1)

The construction of the KPC Career and Technical Education Center will result in the relocation of programs and equipment to new space and will require the renovation and back filling of the space vacated in the Goodrich and Ward building.

The affected areas of the Goodrich (KP102 built 1974) and Ward (KP105 built 1982) buildings have not been renewed since original construction.

- **Mat-Su Parking/Road/Circulation Renewal**

FY15 (GF: \$192.4, Total: \$192.4)

FY16-FY20 (GF: \$651.0, Total: \$651.0)

The Mat-Su campus is over 30 years old and many of the roads, trails, sidewalks, parking areas, curbs and gutters are part of the original construction or have been impacted by construction, repair and renovation projects over the years. This results in uneven surfaces, lack of adequate sidewalks and other deficiencies that pose a safety hazard or are increasingly susceptible to additional damage. Unpaved surfaces cause dirt and mud to be tracked into the building damaging the carpets and floor coverings. Increased enrollment and subsequent staffing increases dictate a need to upgrade and repair these surfaces in order to maintain a safe and effective environment for students, staff and the public.

- **KPC Kachemak Bay Campus Gas Conversion**

FY15 (GF: \$70.0, Total: \$70.0)

FY16-FY20 (GF: \$930.0, Total: \$930.0)

When the original Pioneer Building and the Bayview Building were originally constructed, natural gas was not yet available in Homer, Alaska. Natural gas is anticipated to be available to Homer customers in Fall 2013 and will provide a significantly more efficient and less expensive source of heating fuel for the Kachemak Bay Campus. Although the newer Bayview Building boilers can be converted to burn natural gas by replacing the boiler burners, the older Pioneer building will require additional modification to the boiler systems.

- **PWSCC Parking and Security Upgrades**

FY15 (GF: \$55.0, Total: \$55.0)

FY16-FY20 (GF: \$270.0, Total: \$270.0)

This project will address safety issues such as vehicle circulation, parking lot lighting, building lighting and security cameras. This project will renew landscaping around the parking area and the buildings. This work is driven by a need for an increased security presence on campus and reconfiguration of the area based on the Whitney Museum addition which was completed in spring 2008.

- **KPC Kenai River Campus Academic Center/Classroom Renewal**

FY15 (GF: \$50.0, Total: \$50.0)

FY16-FY20 (GF: \$250.0, Total: \$250.0)

The Brockel Building (KP103) was originally built in 1976 and added onto in 1982.

This project would allow for the renewal and reconfiguration of the Brockel Building, which is greatly needed after 33 years of hard use.

UAF Main Campus

- **Cogen Heating Plant Required Upgrades to Maintain Service and Code Corrections (Ph3)**

FY15 (GF: \$1,000.0, Total: \$1,000.0)

FY16-FY20 (GF: \$36,770.0, Total: \$36,770.0)

In 1963, the UA Board of Regents agreed that the utilities on main campus should be consolidated into a new combined heat and power plant that offered redundancy, reliability, and effective use of current technology. In the past 50 years the plant has undergone expansions to keep up with the growing campus physical plant. Unfortunately, there has been limited renewal of the major components of the utility systems. Critical overhaul of the current plant will allow UAF to meet the current utilities demands. There are many utility components that have exceeded their useful life and the probability of a major failure increases every year that renewal is not done. The overall project consists of many smaller projects that address the critical areas of the various utility systems that need revitalization. All of these projects were identified and scoped in the 2006 Utilities Development Plan. The highest priority is being put on critical equipment that would still be used when the Cogen Heating and Power Plant Boiler and Turbine Replacement project is constructed. For the past several years UAF has been completing such maintenance projects. The remaining highest priority projects are in the FY15 request and the remainder of the projects are in the FY16+ requests. They are listed in the approximate order of priority.

Continuous Emissions Monitoring for Boiler No. 4: Existing air permit includes 10% capacity constraint for Boiler #4 that would be lifted with installation of continuous monitoring.

Utilidor Ventilation: Installation of fire rated door assemblies at the plant/utilidor access points and certain locations at campus buildings has eliminated natural ventilation in large portions of the utilidor system, causing a large amount of condensation on exposed steel and significant corrosion. This measure would install ventilation shafts in sealed areas of the utilidor system.

Replace fire water pumping station: The existing domestic and fire pumping station located in the boiler plant basement dates back to at least the early 1970's. A new electric pump station, perhaps located in the water treatment plant with more sophisticated control, would be installed.

Replace boiler tubes for Boilers 1&2: Existing units have been in service in excess of 40 years. Perform thorough NDE inspection of tubes. Replace as indicated. Rehabilitate existing mechanical components such as fans, coal elevator, stoker grates, ash removal, etc. Replace obsolete control system: This is an aging plant control system (1980's vintage). This system runs the bulk of the steam generation facility. Parts and technical support are becoming difficult to obtain because the vendor is phasing out that product line.

Reconstruct Feedwater pumping station: This measure would remove the abandoned 1960's vintage feedwater pumping station and replace it with new technology, efficient, multistage pumps.

Improve Domestic water taste (membrane filtration): This measure would install point-of-use membrane filtration units in key locations to reduce consumer concern about taste.

Pave Atkinson parking lot for dust control (air permit issue): Vehicle access around the plant by ash hauling trucks, fuel delivery and plant operations creates dust which is a violation of the current air permit. There is potential for UAF to be cited by ADEC for this.

- **Critical Electrical Distribution**

FY15 (GF: \$3,500.0, Total: \$3,500.0)

FY16-FY20 (GF: \$4,822.0, Total: \$4,822.0)

The existing electrical distribution system at UAF is nearly 50 years old. With the completion of several new facilities, the antiquated equipment could be stretched beyond its capabilities and begin to fail. To ensure campus power is not shutdown, major upgrades must be made to replace the ancient switchboard and cabling to bring the campus distribution back into code compliance. This is a multi-phase project and \$32.9M has already been appropriated in past years (2005-2014). Additional funding is necessary to complete the upgrade.

- **Fairbanks Campus Main Waste Line Repairs**

FY15 (GF: \$2,000.0, Total: \$2,000.0)

FY16-FY20 (GF: \$10,000.0, Total: \$10,000.0)

Much of the sanitary and storm sewer main piping on campus is original wood stave or clay piping dating back nearly 60 years. These mains, though not at full capacity, have far exceeded their useable life and are failing. Campus growth and an ever-changing regulatory environment require the modification and upgrade of the waste water handling infrastructure. The project will replace several thousand feet of waste line main piping with new modern materials with a life that exceeds 60 years.

- **Fairbanks Main Campus Wide Roof Replacement**

FY15 (GF: \$1,000.0, Total: \$1,000.0)

FY16-FY20 (GF: \$5,000.0, Total: \$5,000.0)

UAF has many large campus structures that still have original roof systems. As buildings on campus age and do not receive adequate R&R funding, roofing system repairs only offer a band-aid solution to a long-term problem. Funding is required for a multi-year project to replace roofs that have surpassed their useable life and are at risk of complete failure.

- **West Ridge Facilities Deferred Maintenance and Revitalization**

FY15 (GF: \$7,000.0, Total: \$7,000.0)

FY16-FY20 (GF: \$29,450.0, Total: \$29,450.0)

The majority of the facilities located on UAF's West Ridge were built in the late 1960s and early 1970s. Irvings 1 and 2, Elvey, O'Neill, and Arctic Health Research Building serve multiple research and academic units on the Fairbanks Campus. The facilities house major academic programs for fisheries, biology, wildlife, physics, chemistry, agriculture and natural resource management. Elvey, home to the UAF Geophysical Institute, is a major center for many state emergency preparedness programs including the Alaska Earthquake information Center and the Alaska Volcano Observatory. The Arctic Health Building is home to several research programs that directly affect the health and welfare of thousands of Alaskans including the Center for Alaska Native Health Research and the School of Natural Resources and Agricultural Sciences. The Irving 1 facility is the home of the Institute of Arctic Biology and the Department of Biology and Wildlife. Hundreds of undergraduate, graduate, and master degree students learn, research, and teach in the building every day. The research intensive Irving 2 facility serves the Institute of Marine Sciences and School of Fisheries.

These facilities, which represent nearly 500,000 gross square feet of space, are the key component to UAF's competitive edge in research relating to the people and places of the Arctic regions. Research performed in the building represents over 50% of the total research revenue for the campus. Academic programs represented on West Ridge also affect over 1500 undergraduates and graduates seeking a degree in a program offered on West Ridge.

- **ADA Compliance Campus Wide: Elevators, Ramps, Restrooms**

FY15 (GF: \$1,000.0, Total: \$1,000.0)

FY16-FY20 (GF: \$6,750.0, Total: \$6,750.0)

The Campus Wide ADA Guidelines Compliance project is an on-going effort to bring the UAF Fairbanks campus and associated community and research campuses into compliance with ADA guidelines. This project includes accessibility improvements such as renovations to restrooms, improvements to accessibility routes both inside and outside buildings, replacing drinking fountains, upgrading elevators and modifying stairwell handrails.

- **Elevator/Alarms Scheduled Upgrading and Replacement**

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

FY16-FY20 (GF: \$2,500.0, Total: \$2,500.0)

UAF Facilities Services manages the operation and maintenance for a fleet of more than 50 elevators and lifts with an average age of over 25 years. With the help of an FY01 audit, 28 elevators were identified as needing modernization upgrades. This request represents the latest installment of multi-year modernization plan and will address ADA, code, and deferred maintenance improvements in the campus elevator systems. Also included in this scope of work is routine and deferred maintenance on the many fire alarm systems in UAF facilities.

- **Lower Campus Backfill Renovations per 2010 Masterplan**

FY15 (GF: \$400.0, Total: \$400.0)

FY16-FY20 (GF: \$800.0, Total: \$800.0)

Many classrooms on the Fairbanks campus do not meet the needs of today's students. This project will update and renovate classrooms to make them more conducive learning environments including soundproofing, renovating vacant and underutilized spaces, and renovating spaces vacated by moves to new West Ridge facilities.

- **Patty Center Revitalization**

FY15 (GF: \$1,000.0, Total: \$1,000.0)

FY16-FY20 (GF: \$26,000.0, Total: \$26,000.0)

Constructed in 1963 to replace an existing 40-year old gym, the Patty Center now houses sports and recreational space for five NCAA Division II, and two NCAA Division I sports. This includes both men's and women's teams that are a vital part of the UAF Campus Life Master Plan. The construction project will correct an abundant list of code citations and extend the life of the 50-year-old facility. The facility must be upgraded to meet basic competition standards.

- **Campus Infrastructure**

FY15 (GF: \$1,000.0, Total: \$1,000.0)

FY16-FY20 (GF: \$5,000.0, Total: \$5,000.0)

The UAF Fairbanks campus is serviced by infrastructure that was constructed up to 60 years ago when the student population and vehicle traffic were only a fraction of what they are today.

In addition to necessary communications infrastructure improvements, UAF Fairbanks Campus roads and building access are in major need of renewal and renovation. Unlike the state, UAF does not receive federal maintenance funding per mile of road. UAF also does not receive funding for projects that address air quality issues such as bus pullouts and bike paths.

Typical projects include multiple sidewalk, curb, gutter and ramp improvements, completion of the northern link of Tanana Loop and the roundabout on Tanana Drive, and communication infrastructure upgrades. The project will also create safe and attractive pedestrian walkways close to the roadway for non-motorized users. Existing roads will be resurfaced and sidewalks will be replaced to maintain ADA compliance.

FY15 Priority Deferred Maintenance (DM) and Renewal & Repurposing (R&R) Project Descriptions

- **Tilly Commons Demolition**

FY15 (GF: \$2,000.0, Total: \$2,000.0)

Lola Tilly Commons, the current location of the campus meal plan dining facility, is in need of a substantial renovation. An analysis of the projected maintenance and renewal necessary to a safe, sound, and sanitary facility shows that the funding necessary exceeds the value of the facility. With the completion of the Wood Center Dining Addition in August 2014 the central dining activity will relocate from Tilly Commons to Wood Center. UAF has evaluated many options for the reuse of Tilly Commons but the high deferred maintenance costs make it more efficient to demolish the building.

- **Student Services Renewal - Wood Center Student Union**

FY15 (GF: \$2,000.0, Total: \$2,000.0)

FY16-FY20 (GF: \$1,300.0, Total: \$1,300.0)

The Wood Center has the advantages of a central campus location, the draw of food service, and very high levels of pedestrian traffic. Despite these advantages, Wood Center does not function as a “campus center” that attracts students in the evenings or on weekends or whenever they have spare time during the day. While there are areas within the building that are “destinations” for students, including the Pub and the bowling alley, the building as a whole is not a draw for students, even those who live on campus. Renewal work in the Wood Center will include renovation of existing spaces to allocate room for the consolidation of programs serving UAF students.

UAF Community Campuses

- **Kuskokwim Campus Facility Critical Deferred and Voc-Tech Renewal -- Phase 2**

FY15 (GF: \$970.0, Total: \$970.0)

FY16-FY20 (GF: \$7,000.0, Total: \$7,000.0)

Current maintenance and repair funding levels are not sufficient to meet the critical maintenance needs at the rural campuses. Funding will allow for continued major renovations and code upgrades to over 50,000 square feet of space. Work generally includes new architectural finishes on the inside and outside, new electrical distribution, corrected plumbing systems, and installation of code compliant ventilations systems.

UAS Main Campus

- **Technology Education Center Renewal Phase 2**

FY15 (GF: \$2,970.0, Total: \$2,970.0)

The Technology Education Center is the principal career education teaching facility at UAS Juneau. This project would be the second phase of a significant renewal and repurposing of this 35 year old facility.

- **Juneau Campus Site Lighting Replacement**

FY15 (GF: \$800.0, Total: \$800.0)

The bulk of existing exterior area illumination are supported by wooden poles that are over thirty years old and rotting. This project will replace exterior building, parking lot, street and path lighting to achieve better lighting and use less electrical energy.

- **Juneau Campus Pavement Replacement**

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

This project will reconstruct existing vehicular and pedestrian paved surfaces that are failing throughout the Juneau campus.

UAS Community Campuses

- **Sitka Campus Site Improvements**

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

A feature of the UAS 2012 masterplan is a recommendation to improve the Sitka campus entry, parking and site features. Vehicular circulation is ambiguous through the vast concrete areas between the entry from Seward Avenue and the lined parking lot. Throughout the undefined areas there are conflicts between vehicles and pedestrians.

The UAS 2012 Masterplan recommends: “Improve/ enhance quality of green space and pedestrian circulation adjacent to Sitka Campus building to connect to proposed trail systems, clarify circulation, and provide opportunities for cultural and art displays.”

This project would respond to the strategy of community engagement as the city and borough of Sitka has identified the Japonski Loop Trail as part of their 2003 Trail Plan, circling the island with a portion bordering the campus.

Statewide

- **Butrovich East Parking Lot**

FY15 (GF: \$1,500.0, Total: \$1,500.0)

The Butrovich Building was constructed in 1988 on the south facing slope of the West Ridge. To provide parking for the employees and visitors of the building, parking lots were constructed on the north and east side of the building. The parking lots have deteriorated over the years due to poor sub-soils and surface water infiltration that have allowed excessive frost heaving and uneven settling; and damage to curbs and surfaces from heavy equipment used for snow removal and movement from the unstable soils and vehicular traffic. The north parking lot is situated between Yukon Drive and the Butrovich Building and was replaced along with the sidewalks in front of the building during the summer of 2013. The east parking lot was located to the east of the building and is support by a retaining wall that extends approximately 400 feet east from the southeast corner of the Butrovich building. This retaining wall was experiencing excessive movement and was feared to be facing imminent failure. Based on studies conducted between the spring of 2011 and fall 2012, it was determined that the substandard soils upslope of the retaining wall were allowing excessive water to infiltrate the soil and freeze, causing movement to the wall and damaging the parking surface. During the summer of 2013, the retaining wall was replaced with the substandard soil removed and replaced with frost resistant soils.

- **Butrovich Building Repairs**

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

FY16-FY20 (GF: \$3,000.0, Total: \$4,900.0)

The Butrovich building was constructed in 1988 and is at a point where many of its building components are reaching their life cycle end. Over the next five to ten years many of the main mechanical systems will come due for replacement or refurbishing.

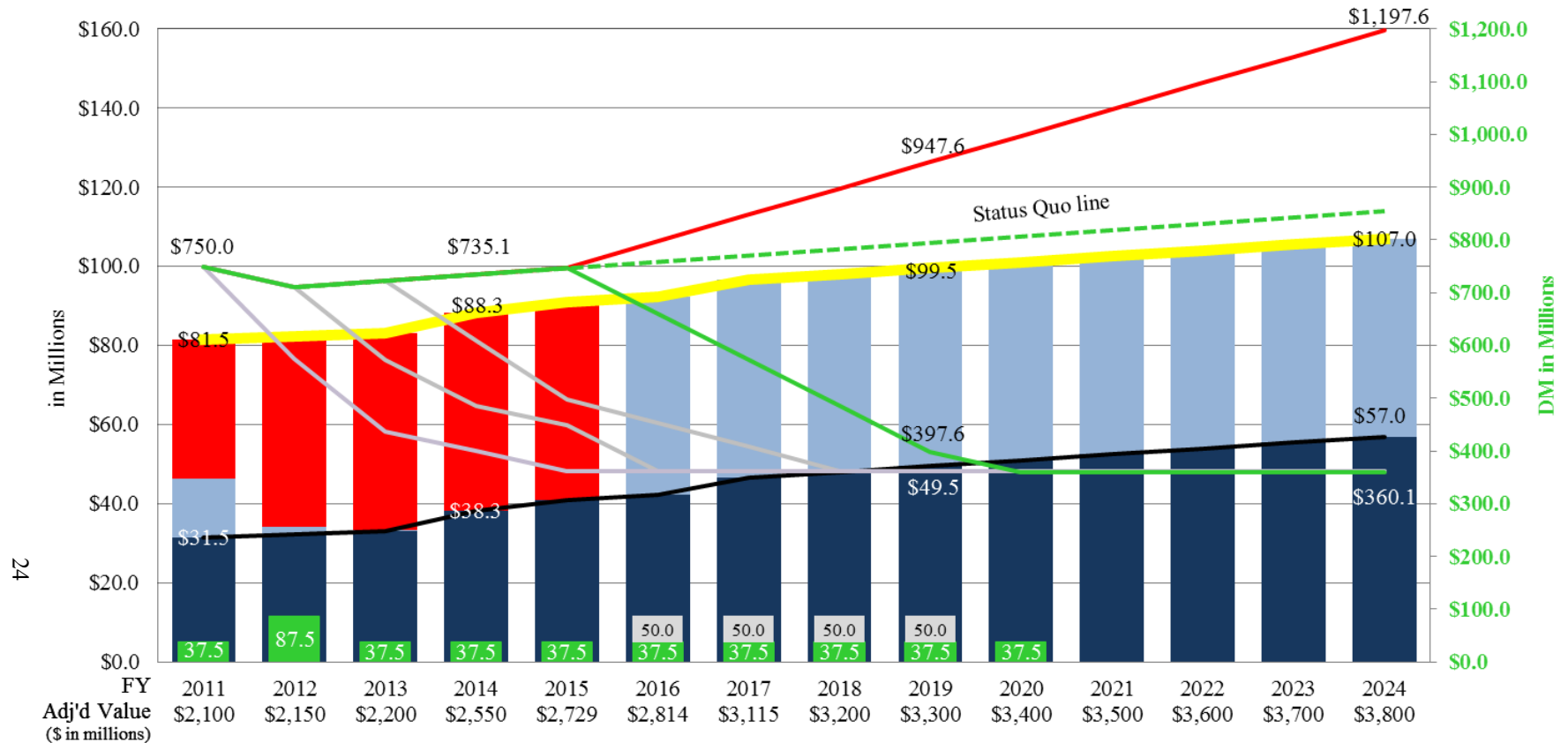
University of Alaska
FY15 Deferred Maintenance (DM) and Renewal & Repurposing (R&R)
Distribution Methodology
(Based on Age, Size, and Value of Facilities)

	Location	#of Bldgs	Average Age (years)	Weighted Avg. Age (years)	Gross Area (sq. feet)	Adjusted Value (thousands)	Dist. % *	DM Model of \$37.5M
Anchorage Campus	<i>Anc.</i>	63	27.0	26.1	2,325,499	844,068.2	24.5%	9,171.0
UAA Community Campus		25	28.8	33.0	326,505	141,335.3	5.1%	1,926.0
<i>Kenai Peninsula College</i>	<i>Soldotna</i>	6	31.7	33.0	89,432	35,863.9	1.3%	
<i>Kachemak Bay</i>	<i>Homer</i>	2	20.0	27.3	25,067	11,121.3	0.3%	
<i>Kodiak College</i>	<i>Kodiak</i>	5	36.8	37.5	44,981	19,681.1	0.8%	
<i>Matanuska-Susitna College</i>	<i>Palmer</i>	6	25.3	28.2	105,316	49,401.3	1.6%	
<i>Prince Wm. Sound CC</i>	<i>Valdez</i>	6	33.2	40.1	61,709	25,267.8	1.1%	
	UAA Total	88	25.5	26.9	2,652,004	985,403.5	29.6%	11,097.0
Fairbanks & CTC	<i>Fbks.</i>	249	36.8	40.2	3,252,326	1,355,185.2	58.7%	22,021.0
UAF Community Campuses		29	30.2	30.6	128,614	79,379.6	2.7%	1,020.0
<i>Bristol Bay Campus</i>	<i>Dillingham</i>	2	26.5	27.4	18,023	9,054.7	0.3%	
<i>Chukchi Campus</i>	<i>Kotzebue</i>	1	37.0	37.0	8,948	7,015.1	0.3%	
<i>Interior-Aleutians Campus</i>	<i>Multiple</i>	5	25.2	32.2	29,111	18,477.6	0.6%	
<i>Kuskokwim Campus</i>	<i>Bethel</i>	7	29.3	28.0	51,774	34,357.6	1.1%	
<i>Northwest Campus</i>	<i>Nome</i>	14	32.9	34.8	20,758	10,474.6	0.4%	
	UAF Total	278	34.3	39.8	3,380,940	1,434,564.8	61.4%	23,041.0
Southeast Campus	<i>Juneau</i>	35	33.6	26.6	444,048	154,808.6		
UAS Community Campus		5	54.1	57.5	115,908	43,079.6		
<i>Ketchikan Campus</i>	<i>Ketchikan</i>	4	37.3	38.3	47,850	24,133.7		
<i>Sitka Campus</i>	<i>Sitka</i>	1	71.0	71.0	68,058	18,945.9		
	UAS Total	40	28.8	33.0	559,956	197,888.2	7.3%	2,749.0
Statewide	<i>Various</i>	8	41.6	26.5	112,461	59,154.3	1.6%	613.0
	SW Total	8	41.6	26.5	112,461	59,154.3	1.6%	613.0
	UA Total	414	32.1	33.9	6,705,361	2,677,010.7	100.0%	37,500.0

Facility data from 2012 Facilities Inventory

*This distribution is based on the individual building age and adjusted value by campus

FY15 Sustainment Funding Plan for UA Facilities



Annual Sustainment Funding

- M&R Annual Expenditures (Operating Budget)
- M&R Annual Maintenance (Target is 1.5% of Adjusted Value)
- R&R Annual Capital Expenditures (Target is \$50.0M a year)
- M&R/R&R Annual Investment Target
- Annual Investment Target Shortfall (adds to DM backlog)

Deferred Maintenance Reduction

- Deferred Maintenance Reduction Expenditures (\$37.5M for 10 years)
- Additional DM funds necessary to reach sustainment level by FY20
- Deferred Maintenance Backlog with adequate M&R/R&R funding (Reduce to approximately \$360M by FY20)
- Deferred Maintenance Backlog as reported in FY12-FY14
- Deferred Maintenance Backlog without adequate R&R funding (Increases to over \$850M by FY24)
- Deferred Maintenance Backlog with no additional funding beyond the Gov's 5 year plan (ending FY15)

FY15 Sustainment Funding Plan for UA Facilities

This plan sets forth the funding strategy and requirements for preserving and achieving full utilization of the buildings, assets and infrastructure for the University system. The objectives are to reduce the University’s deferred maintenance (DM) to approximately \$360 million by FY20 and achieve a sustainable level of funding for annual maintenance and capital reinvestment by FY20. The assumptions used in developing the plan are below.

- Adequate funds for two streams of investment are achieved by FY20: annual routine & preventative maintenance and repair, and major repair and recapitalization (building system renewal and repurposing). Making this needed investment annually is the only way to eliminate the continued increase of deferred maintenance. Status Quo (dashed green line) represents effect of not adequately making this investment.
- Annual Maintenance & Repair (M&R) operating expenditures will continue to meet or exceed the annual target of 1.5% of adjusted facility value (black line and dark blue column).
- Annual requirement for Renewal & Repurposing (R&R) will be targeted at \$50 million per year from FY11 forward, approximately at 2.5% of facilities adjusted value.
- Non-State sources have averaged over \$9 million from FY06-FY11, and are a portion of the light blue column. Sources include: Federal Title III, and University bonding. Non-state revenue sources will continue to help support R&R activities.
- ☞ State support for R&R will increase to supplement the non-state sources and provide the projected need: \$50 million per year (light blue column).
- State support for reducing deferred maintenance by \$37.5 million a year through FY20 (green column). A Facility Condition Index (FCI) was determined in FY12, and is be used to demonstrate the effects of spending to reduce the DM backlog.
- In order to reach the deferred maintenance goal, any unfunded annual R&R requirement has been added to FY16 through FY19 (grey columns).
- Deferred maintenance in FY11 (\$750 million) is based on each university’s categorization of DM and R&R projects for FY11. A \$360 million level of DM is approximately 12% of UA’s facilities adjusted value, approximately \$3 billion.
- Reducing deferred maintenance to \$360 million by FY20 will minimize the expenditures for emergency response maintenance, which is more expensive than performing the preventative maintenance, routine maintenance, and capital reinvestment on a planned basis (green line).
- Facilities adjusted value in FY11 is based on escalation of original construction cost over time as recorded in the fall 2010 Facility Inventory publication. Replacement value is approximately 50% higher.
- FY11 General Obligation Bond projects and other projects increase the facility adjusted value by \$350 million in FY14. There are also increases in 2015 through 2016 because of the UAA Alaska Airlines Center, UA engineering buildings, and UAS housing.
- The solid red line indicates what would happen to the deferred maintenance backlog if there was no additional funding beyond the Governor’s 5 year plan.

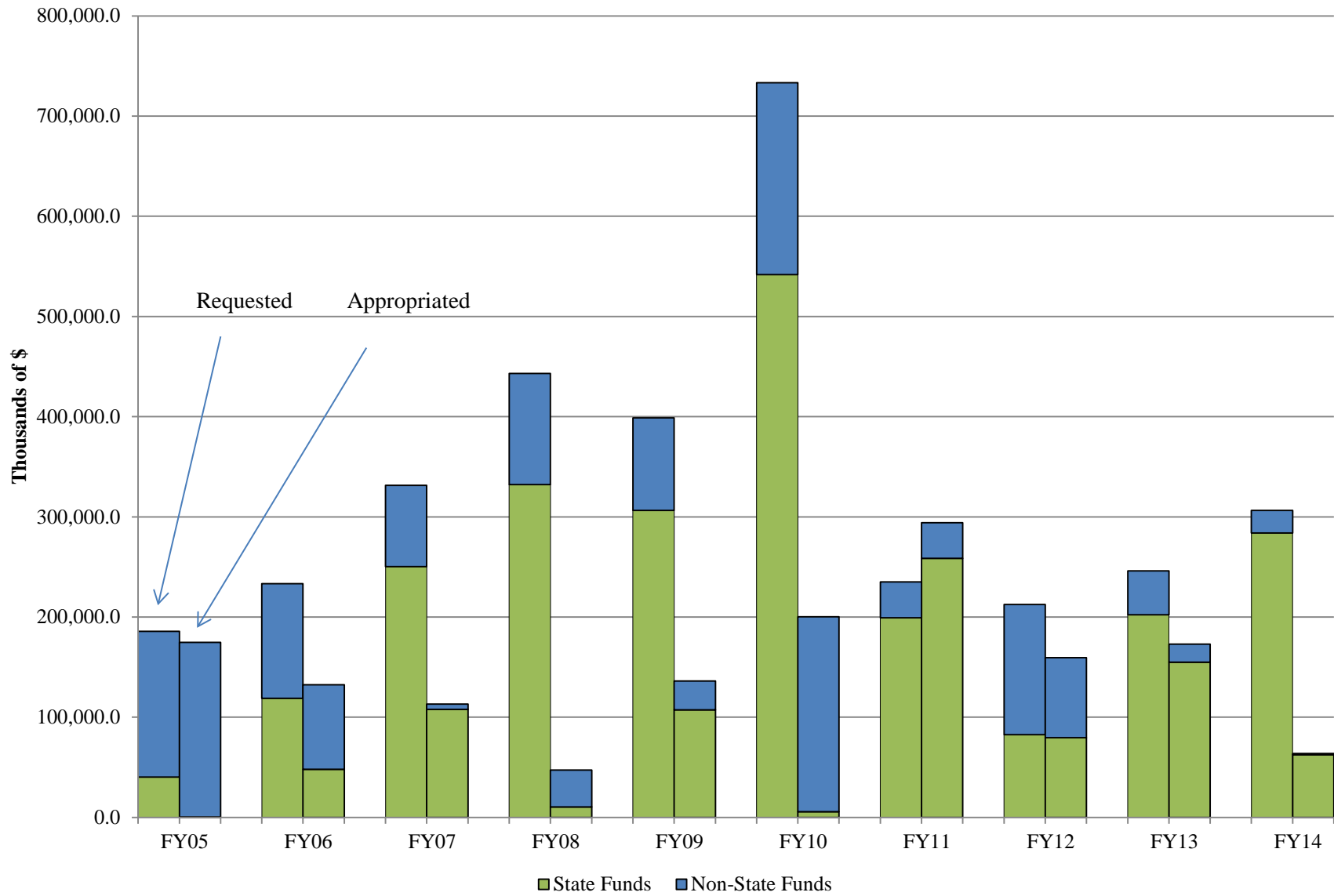
University of Alaska
Capital Budget Request vs. State Appropriation
FY05-FY14
(in thousands of \$)

Request	Renewal and Repurposing	Add/Expand	New Facilities	Equipment	Other¹	Total
FY05	10,055.0		26,550.0	3,111.3	550.0	40,266.3
FY06	40,753.5	2,600.0	70,536.0	4,403.4	550.0	118,842.9
FY07	87,520.0	9,650.0	135,983.0	16,721.9	550.0	250,424.9
FY08	131,016.0	6,395.0	186,500.0	7,874.7	550.0	332,335.7
FY09	114,000.0	2,000.0	163,870.0	26,000.0	550.0	306,420.0
FY10	204,130.0		194,495.0	90,000.0	53,150.0	541,775.0
FY11	100,000.0		99,375.0			199,375.0
FY12	70,433.0				12,092.5	82,525.5
FY13	187,500.0				14,700.0	202,200.0
FY14	162,500.0		108,900.0		12,500.0	283,900.0
Total	1,107,907.5	20,645.0	986,209.0	148,111.3	95,192.5	2,358,065.3
10 yr. Avg	110,790.8	2,064.5	98,620.9	14,811.1	9,519.3	235,806.5

Approp.	Renewal and Repurposing	Add/Expand	New Facilities	Equipment	Other¹	Total
FY05					450.0	450.0
FY06	8,100.0	1,950.0	35,700.0	1,750.0	550.0	48,050.0
FY07	48,725.0		58,500.0		715.0	107,940.0
FY08	8,475.0		1,250.0		640.0	10,365.0
FY09	45,822.6		61,300.0		125.0	107,247.6
FY10	3,200.0		2,500.0			5,700.0
FY11	43,539.3		214,000.0	400.0	610.7	258,550.0
FY12	39,500.0	2,000.0	35,800.0		2,204.0	79,504.0
FY13	37,950.0	50.0	108,900.0		7,990.0	154,890.0
FY14	30,000.0		30,000.0		2,588.7	62,588.7
Total	265,311.9	4,000.0	547,950.0	2,150.0	15,873.4	835,285.3
10 yr. Avg	26,531.2	400.0	54,795.0	215.0	1,587.3	83,528.5

¹ Includes research, small business development center and other capital funding requests or appropriations

**University of Alaska
Capital Request and Appropriation Summary
FY05-FY14**



University of Alaska
State Appropriation Summary by Category
FY05-FY14
(in thousands of \$)

Campus	Location	Renewal and Repurposing		Additions / Expansions		New Facilities		Equipment		Other ¹		Total	
Anchorage Campus	Anchorage	58,319.6	22.0%			310,100.0	56.6%	490.0	22.8%	4,100.0	25.8%	373,009.7	44.7%
Kenai Peninsula College	Soldotna	7,156.6				35,300.0		27.5		50.0		42,534.1	
	Kachemak Bay Homer	685.8		800.0		2,750.0				165.0		4,400.8	
Kodiak College	Kodiak	2,076.8	8.1%		20.0%	350.0	11.9%		3.9%		1.4%	2,426.8	10.5%
Matanuska-Susitna College	Palmer	4,318.2				23,850.0		55.3				28,223.5	
Prince Wm. Sound Com. College	Valdez	7,220.9				3,050.0						10,270.9	
UAA		79,778.0	30.1%	800.0	20.0%	375,400.0	68.5%	572.8	26.6%	4,315.0	27.2%	460,865.8	55.2%
Fairbanks Campus	Fairbanks	125,733.8				158,550.0		670.1		10,625.0		295,578.9	
Fairbanks Campus	Juneau		47.5%			10,000.0	30.8%		31.2%		66.9%	10,000.0	36.6%
Fairbanks Campus	Palmer	300.0										300.0	
Fairbanks Campus	Seward												
Bristol Bay Campus	Dillingham	153.0		1,200.0						50.0		1,403.0	
Chukchi Campus	Kotzebue	38.6								50.0		88.6	
Interior-Aleutians Campus	Tok												
Interior-Aleutians Campus	Fort Yukon	7.3	4.5%		30.0%						2.1%	7.3	1.6%
Interior-Aleutians Campus	Fairbanks	47.7								50.0		97.7	
Kuskokwim Campus	Bethel	7,251.5								50.0		7,301.5	
Northwest Campus	Nome	4,496.8								50.0		4,546.8	
Fairbanks Campus (CES)	Kenai									90.0		90.0	
UAF Comm. & Tech. College	Fairbanks	16,745.3	6.3%							50.0	0.3%	16,795.3	2.0%
UAF		154,774.0	58.3%	1,200.0	30.0%	168,550.0	30.8%	670.1	31.2%	11,015.0	69.4%	336,209.0	40.3%
Juneau Campus	Juneau	22,621.9	8.5%	2,000.0	50.0%	4,000.0	0.7%	741.1	34.5%			29,363.0	3.5%
Ketchikan Campus	Ketchikan	1,849.8	1.1%							30.4	0.4%	1,880.2	0.4%
Sitka Campus	Sitka	1,110.2								30.4		1,140.6	
UAS		25,581.9	9.6%	2,000.0	50.0%	4,000.0	0.7%	741.1	34.5%	60.7	0.4%	32,383.7	3.9%
Statewide	Fairbanks	3,178.0	2.0%					166.0	7.7%	482.7	3.0%	3,826.7	0.7%
Systemwide	Systemwide	2,000.0										2,000.0	
SW		5,178.0	2.0%					166.0	7.7%	482.7	3.0%	5,826.7	0.7%
UA Grand Total		265,311.9	100.0%	4,000.0	100.0%	547,950.0	100.0%	2,150.0	100.0%	15,873.4	100.0%	835,285.3	100.0%
		31.8%		0.5%		65.6%		0.3%		1.9%		100.0%	

¹ Includes research, small business development center and other capital appropriations

State Appropriation Summary by Category FY05 -FY14

New Facilities and Major Expansions

UAA

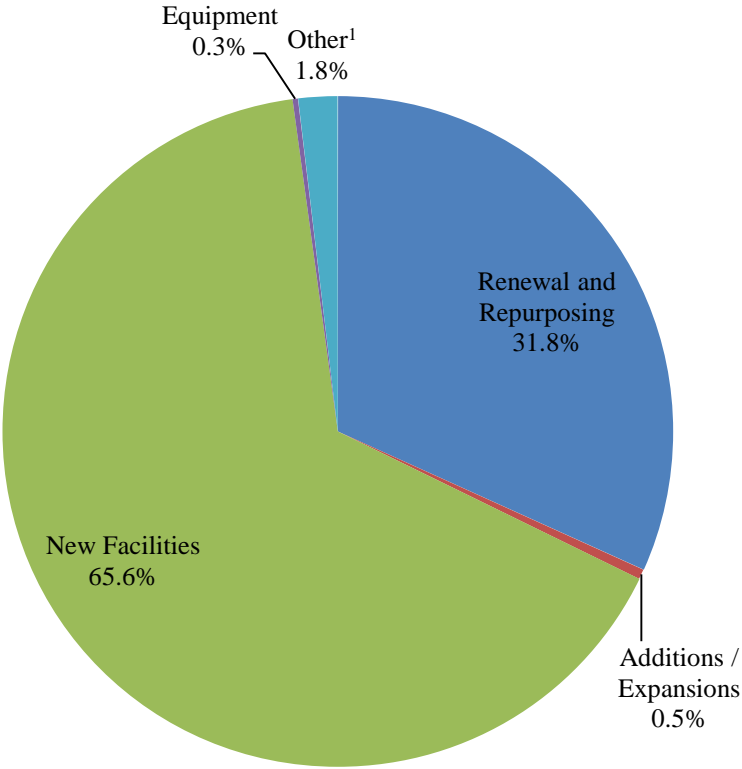
- AK Cultural Center & PWSCC Training Center (FY07)
- Integrated Science Facility (FY06, FY07)
- Center for Innovative Learning - ANSEP (FY06)
- Kodiak College Vocational Technology (FY06)
- Matanuska-Susitna Campus Addition (FY06)
- Student Housing (FY06)
- Kachemak Bay Campus New Facility (FY08, Reapprop FY10, FY11)
- Health Sciences Building (FY09)
- Engineering Facility Planning, Design and Construction (FY11, FY13, FY14)
- Kenai Peninsula College Campus Student Housing (FY11, FY12)
- Kenai Peninsula College Campus Career & Technical Education Center (FY11)
- Matanuska-Susitna Campus Valley Center for Art & Learning (FY11)
- Community Sports Arena (FY09, FY11, FY12)

UAF

- Lena Point Fisheries Phase I & II (FY06)
- Museum of the North (FY07)
- Engineering & Technology Project Design, Development and Construction (FY11, FY13, FY14)
- Life Sciences Classroom and Laboratory Facility (FY11)

UAS

- Banfield Hall Dormitory Addition (FY12, FY13)



¹ Includes research, small business development center and other capital appropriations