



UNIVERSITY
of ALASKA

Many Traditions One Alaska

Proposed
FY2019 Capital Budget and
10-Year Capital Improvement Plan

Board of Regents
November 9-10, 2017
Fairbanks, Alaska

Prepared by: University of Alaska
Statewide Office of Planning and Budget
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University of Alaska
Proposed FY2019 Capital Budget Request and
10-Year Capital Improvement Plan
Introduction

Presented within are the proposed FY2019 Capital Budget Request and the 10-Year Capital Improvement Plan. The goal of the Board of Regents' University of Alaska FY2019-FY2028 Capital Improvement Plan (CIP) is to guide decision making that ensures the necessary facilities, equipment, and infrastructure are in place to support the academic direction of the university system, support a continuous improvement philosophy, and permit consideration of the associated future annual operating costs that may be incurred.

The capital budget presents the top priority projects for FY2019 and the short-, mid-, and long-term capital investment goals consistent with the Campus Master Plans. A state investment of \$50 million for Deferred Maintenance (DM)/ Renewal and Repurposing (R&R) is proposed for FY2019. Priority new construction projects that have already received some approval are included in the 10-year capital improvement plan for consideration in future capital budget requests.

University of Alaska
Proposed FY2019 Capital Budget Summary
(in thousands of \$)

	Unrestricted General Funds (UGF)	Designated, Federal and Other Funds	Total Funds
<hr/>			
Facilities Deferred Maintenance (DM) / Renewal & Repurposing (R&R)	50,000.0		50,000.0
<i>UAA Main Campus</i>	<i>12,825.0</i>		<i>12,825.0</i>
<i>UAA Community Campuses</i>	<i>2,968.0</i>		<i>2,968.0</i>
<i>UAF Main Campus</i>	<i>28,107.0</i>		<i>28,107.0</i>
<i>UAF Community Campuses</i>	<i>2,058.0</i>		<i>2,058.0</i>
<i>UAS Main & Community Campuses</i>	<i>2,551.0</i>		<i>2,551.0</i>
<i>SW Statewide</i>	<i>1,491.0</i>		<i>1,491.0</i>
FY2019 Capital Budget Total	50,000.0	0.0	50,000.0
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University of Alaska Proposed 10-Year Capital Improvement Plan (in thousands)

	FY2019		State Appropriations			
	Unrestricted General Fund (UGF)	Designated, Federal, and Other Funds	Total Funds	Short-Term FY20-FY21	Mid-Term FY22-FY23	Long-Term FY24-FY28
Deferred Maintenance (DM)/Renewal & Replacement (R&R)						
Facilities Deferred Maintenance/Renewal & Repurposing	50,000.0		50,000.0	100,000.0	100,000.0	250,000.0
Major Maintenance & Renewal Projects						
<i>UAA Campuses</i>						
Social Sciences Building Renewal				7,130.6	19,869.4	
Fine Arts Building Renewal						35,000.0
Professional Studies Building Renewal						14,605.6
<i>UAF Campuses</i>						
Moore-Bartlett Infrastructure				10,000.0	10,000.0	
Engineering Program Modernization: Duckering				7,000.0		
West Ridge Research Facilities: Elvey Annex (Phase 1) & Exterior (Phase 2)					13,000.0	80,000.0
Arctic Health Facility Upgrade						64,000.0
Fine Arts Program: Salisbury Theater/Multi-Use Instructional Space						25,000.0
Patty Center NCAA Compliance: Men & Women Locker Room Upgrades				2,300.0		
<i>UAS Campuses</i>						
Auke Bay Marine Station (ABMS) / Physical Science Building - Remodel / Replace (\$10.4M Non-state)						
New Construction						
<i>Academic Facilities</i>						
<i>UAA Main Campus</i>						
Health Sciences Phase II Building And Parking Structure				141,500.0		
Cuddy Hall Expansion & Renewal				2,200.0	21,000.0	
Alaska Native Art and Culture Building (\$3.6M Non-state)						
Aviation Complex Expansion						47,500.0
<i>UAA Community Campus</i>						
PWSC Vocational Technology Center					8,000.0	
KPC Kachemak Bay Campus Technical Career Center						7,200.0
<i>UAF Main Campus</i>						
CTC/Fairbanks Campus Fire and Emergency Services Training and Education Facility				38,400.0		
Troth Yeddha /Indigenous Studies Center: Park & Building (Add'l \$25.0M Non-state)					5,000.0	10,000.0

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

	FY2019		State Appropriations			
	Unrestricted General Fund (UGF)	Designated, Federal, and Other Funds	Total Funds	Short-Term FY20-FY21	Mid-Term FY22-FY23	Long-Term FY24-FY28
<i>UAF Community Campus</i>						
Community & Technical College (CTC) Aviation/Hangar Addition						13,000.0
Kuskokwim Campus Consortium Learning Center						7,200.0
<i>UAS Main Campus</i>						
Egan Library/Cyril George Indigenous Knowledge Center (\$2.25M Non-state)						
Welding Lab Replacement				1,800.0		
Lakeside Access Improvements - Phase 1 - Lakeside Classroom (\$2.15M Non-state)						
Center for Mine Training Portal						1,500.0
<u>Research Facilities</u>						
<i>UAF Main Campus</i>						
Toolik Research Field Station: Classroom (\$3.0M Non-state)						
Science, Teaching & Research Building (West Ridge Research Building #2)						100,000.0
<u>Student Life (Housing), Support, and Other Facilities</u>						
<i>UAA Main Campus</i>						
Student Support Services and Student Union Building					79,000.0	93,000.0
Administration, Alumni Relations and Visitor Center						33,000.0
Community Arena and Recreational Facility						70,000.0
<i>UAA Community Campus</i>						
Mat-Su Student Housing						12,000.0
<i>UAF Main Campus</i>						
Student Recreation Center Expansion					500.0	11,500.0
Campus (Undergraduate & Graduate) Housing Project					6,500.0	65,000.0
Athletics & Recreation: Patty Center Complex Connector						20,000.0
<i>UAS Main Campus</i>						
Student Union (Add'l \$10.0M Non-state)				10,000.0		
Facility Services Building Replacement - Juneau				500.0	8,500.0	
Egan Library - Enhancements					1,600.0	
Banfield Hall Conversion (Add'l \$1.25M Non-state)				500.0	500.0	250.0
Auke Lake Student Study Spaces					500.0	500.0

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

	FY2019		State Appropriations			
	Unrestricted General Fund (UGF)	Designated, Federal, and Other Funds	Total Funds	Short-Term FY20-FY21	Mid-Term FY22-FY23	Long-Term FY24-FY28
Lakeside Access Improvements Phase 2 - Floating Trail and Dock (\$2.1M Non-state)						
Auke Lake Cultural Center						26,000.0
Auke Lake Field House						11,000.0
Infrastructure						
<i>UAA Main Campus</i>						
Master Plan Circulation Improvements				5,500.0		
<i>UAA Community Campus</i>						
MAPTS Kenai Ground Water Contamination Mitigation				2,020.0	20.0	50.0
Kodiak Entrance Road Realignment and Exterior Lighting				6,000.0		
Mat-Su Roads, Circulation, & Parking Improvements					2,000.0	
<i>UAF Main Campus</i>						
Coal Ash Disposal Site (CHP)				1,000.0		
Core Campus Parking Garage (Add'l \$4.0M Non-state)						4,350.0
<i>UAS Main Campus</i>						
Juneau Campus Pavement Replacement					500.0	700.0
Land, Property, and Facilities Acquisitions						
<i>UAA Main Campus</i>						
Adjacent Land and Property Acquisitions (\$2.0M Non-state)						
<i>UAA Community Campus</i>						
Kodiak CTC Skills Warehouse Acquisition (\$2.4M Non-state)						
KPC Kachemak Bay Campus Property Acquisition (\$1.8M Non-state)						
Kenai River Campus Property Acquisition (\$2.2M Non-state)						
<i>UAF Main Campus</i>						
Early Childhood Education and Childcare Center (\$850k Non-state)						
<i>UAS Main Campus</i>						
Natural Science Research Facility - Sale Preparation (\$0.5M Non-state)						
Research for Alaska						
<i>UAF Main Campus</i>						
Sustaining USArray Capabilities in Alaska (Add'l \$12.5M Non-state)				5,000.0		
Alaska Operating Environment Data Center (Add'l \$350k Non-state)				750.0		
Revitalizing Alaska Native Languages (RANL) (Add'l \$250k Non-state)				250.0		

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

	FY2019		State Appropriations			
	Unrestricted General Fund (UGF)	Designated, Federal, and Other Funds	Total Funds	Short-Term FY20-FY21	Mid-Term FY22-FY23	Long-Term FY24-FY28
Academic Equipment						
<i>UAA Main Campus</i>						
College of Engineering Materials Testing Lab Upgrades				350.0		
Consortium Library - Library Materials for UA				800.0	300.0	
<i>UAF Main Campus</i>						
e-Learning Recording Capabilities, ADA Accessibility & Instructional Classroom Technology					2,000.0	
<i>UAS Main Campus</i>						
Smart Classrooms Juneau Campus					100.0	
Total	50,000.0		50,000.0	343,000.6	278,889.4	1,002,355.6

University of Alaska
FY2019 Priority Deferred Maintenance (DM) and Renewal and Repurposing (R&R) Projects
State Appropriations (in thousands of \$)

Project Name	DM & R&R
UAA Main Campus	
Campus Building Envelope & Roof System Renewal	1,000.0
Campus Building Interior & Systems Renewal	1,000.0
Campus Exterior Infrastructure and Signage Renewal	900.0
EM1 & EM2 Mechanical	525.0
Consortium Library Old Core Mechanical Upgrades	4,900.0
Campus Access/Security Modernization Phase 1	2,000.0
Campus Space Reallocation/Consolidation Phase 1 (DSS/ISER)	2,500.0
UAA Main Campus Project Total	12,825.0
UAA Community Campuses	
Kenai Peninsula College Campus Renewal	934.3
Kodiak College Campus Renewal	279.8
Prince William Sound College Campus Renewal	55.1
Matanuska-Susitna College Campus Renewal	1,076.6
Kenai Peninsula - Kachemak Bay Campus Renewal	72.2
Prince William Sound College Multipurpose Training Room Reconfiguration	150.0
Kenai Peninsula - Kachemak Bay Library/Computer Classroom Renovation	150.0
Kodiak College Infrastructure Standby Generator	250.0
UAA Community Campuses Subtotal	2,968.0
UAA DM and R&R Total	15,793.0
UAF Main Campus	
Building Envelope & Roof Systems Renewal	5,355.0
Fairbanks Campus Building Interior & Systems Renewal	13,090.0
Campus Infrastructure and Signage Renewal	6,852.0
Regulatory Compliance - ADA, Title IX & Transgender	2,810.0
UAF Main Campus Subtotal	28,107.0
UAF Community Campus	
Rural & Community Campus Renewal	2,058.0
UAF Community Campus Subtotal	2,058.0
UAF DM and R&R Total	30,165.0
UAS Main & Community Campuses	
Auke Lake Pedestrian Guardrail Replacement	300.0
Replace Fire Alarm Panel	75.0
Demolish Soboleff Annex and Landscape	75.0
Technical Education Center Overpass Power Wash and DOT Maintenance List	50.0
Sitka Campus Hangar Replace/Repair Atrium Skylight	100.0
Technical Education Center Boiler Replacement	500.0
Sitka Campus Hangar Back-up Generator and UPS	500.0

University of Alaska
FY2019 Priority Deferred Maintenance (DM) and Renewal and Repurposing (R&R) Projects
State Appropriations (in thousands of \$)

Project Name	DM & R&R
UAS Main & Community Campuses (continued)	
Egan Library Replace Penthouse Siding	175.0
Housing Fuel Tank Replacements	240.0
Sitka Campus Hangar Doors Replacement	50.0
Novatney Roof Replacement	285.0
Facilities Replace Fuel Shed & Tanks	201.0
UAS Campuses Total	2,551.0
Statewide	
Butrovich Lighting Upgrades	810.0
Butrovich Building Repairs	606.0
University House Repairs	75.0
Statewide DM and R&R Total	1,491.0
UA FY2019 DM and R&R Total	
	50,000.0
Additional DM and R&R	
UAA Main Campus	268,392.9
UAA Community Campuses	19,086.0
UAF Main Campus	687,951.3
UAF Community Campuses	27,487.1
UAS Main & Community Campuses	6,077.8
Statewide	2,261.5
Additional DM and R&R Total	1,011,256.6
UA DM and R&R Total	1,061,256.6

FY19 Priority Deferred Maintenance (DM) and Renewal & Repurposing (R&R) Project Descriptions

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

(GF: \$50,000.0, NGF: \$0.0, Total: \$50,000.0)

The University of Alaska (UA) is responsible for maintaining facilities and infrastructure across the state. UA continues to be good stewards of these valuable assets, while exploring ways to reduce its facilities footprint and long-term operating costs. UA has over 400 facilities, with an average age of 33 years, an inflation-adjusted value of \$3.8 billion, and a deferred maintenance/renewal & repurposing (DM/R&R) backlog in excess of \$1 billion. UA requests \$50 million in FY2019 for deferred maintenance/renewal & repurposing funding.

UAA Main Campus

UAA Campus Building Envelope & Roof Systems Renewal

(GF: \$1,000.0, NGF: \$0.0, Total: \$1,000.0)

This project addresses campus-wide deferred maintenance and renewal and replacement requirements for building envelope and roof systems. It includes roof repair and replacement, and repair or systematic replacement of exterior doors, windows, vapor barriers, siding, weatherization, insulation, and correction of other building envelope issues necessary to maintain the integrity of the building shell. This allocation also addresses immediate code compliance or life safety issues identified with building envelope or roof projects.

UAA Campus Building Interior & Systems Renewal

(GF: \$1,000.0, NGF: \$0.0, Total: \$1,000.0)

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. Many systems 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. Replacement parts for many of these systems are no longer available. The older systems are very expensive to operate due to their low efficiencies. Replacement of these systems will improve energy efficiencies and provide better environmental control throughout the building. This project will replace associated failing piping, boilers, fans, deficient VAV boxes and upgrade the building automation system controls. Increased use of newer technology requires replacement of inadequate electrical systems and inefficient lighting. This project also repairs or replaces interior doors, wall partitions, ceilings as needed and addresses immediate code compliance or life safety issues identified with building interiors or support systems.

UAA Campus Exterior Infrastructure and Signage Renewal

(GF: \$900.0, NGF: \$0.0, Total: \$900.0)

The UAA campus is almost 50 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 posing a safety hazard or are increasingly susceptible to additional damage. This funding addresses the need to upgrade and repair these surfaces in order to maintain a safe and effective environment as students, staff and the public move around campus. Subsurface infrastructure such as storm drain, sewer, water, natural gas and electrical lines also require repair and replacement due to corrosion and decay. Updates to exterior wayfinding signage are required due to weather exposure and campus churn and reorganization.

FY19 Priority Deferred Maintenance (DM) and Renewal & Repurposing (R&R) Project Descriptions

UAA EM1 & EM2 Mechanical

(GF: \$525.0, NGF: \$0.0, Total: \$525.0)

The energy modules (EM1, EM2) were constructed in 1977 and provide stand-alone heating and cooling services for a number of campus facilities. The energy module boilers, pumps and piping systems are over 30 years old and have been failing due to age, corrosion and fatigue. Many of these failures have occurred during the critical winter months when additional stresses are placed on the systems due to increased heating demands and environmental impacts. These failures affect service and further impact other systems driving up associated costs. Emergency repairs are very expensive, time consuming, and have a severe impact on students, faculty and staff working in the buildings served by the modules. The total cost to complete this project is \$5.8 million. Deferred maintenance funding of \$1.5 million to date, along with FY19 funding of \$525 thousand is about half of the funding needed to complete this project.

UAA Consortium Library Old Core Mechanical Upgrades

(GF: \$4,900.0, NGF: \$0.0, Total: \$4,900.0)

The original HVAC systems consist, for the most part, of equipment over 45 years old located within the four central building cores. The boilers, main supply/exhaust fan units, heating/cooling coils, galvanized piping and humidification systems have all reached the end of their useful life. Major component parts are no longer available for repairs on these units. Control systems are no longer able to properly regulate airflow resulting in irregular temperatures and conditions within the building. The 2004 library addition contains newer HVAC systems with different control and delivery systems and technology that have resulted in incompatibilities between the two systems and have affected the efficiencies of both systems. Total cost to complete this project is estimated at \$16.2 million. Deferred maintenance funding of \$4.9 million in FY18, along with this request of \$4.9 million in FY19 will bring the campus to about half of the total funds and work needed for full completion.

UAA Campus Access/Security Modernization Phase 1

(GF: \$2,000.0, NGF: \$0.0, Total: \$2,000.0)

Concerns raised by faculty and staff based on the rise of “active shooter” incidents nationwide, prompted a review of the ability to secure buildings, classrooms, and other facilities - manually or automatically - in the event of any incident requiring persons to shelter-in-place. Initial review of the level of effort involved to upgrade all room entrances with appropriate locking mechanisms and automation revealed that this will be a multi-year, multimillion dollar effort. The facilities have a wide mix of access control procedures, lock mechanisms, and automation controls that do not integrate well or at all. This project is developed to fully assess the level of effort needed, design an action plan, and implement the first increments of access control security related measures for the highest priority campus facilities and/or spaces. Future phases and estimated costs will be identified based on the outcome of this initial phase.

UAA Campus Space Reallocation/Consolidation Phase 1 (Disability Support Services/Institute of Social and Economic Research)

(GF: \$2,500.0, NGF: \$0.0, Total: \$2,500.0)

As the State’s budget challenges have unfolded, the University has undertaken programmatic and administrative reviews to reduce costs. One obvious way to save costs is to reduce the physical footprint of campus facilities from which we operate. Reducing occupied square footage trims the maintenance, repair, custodial and utility costs, as well as eliminating deferred maintenance backlog. In the event of emptying a

FY19 Priority Deferred Maintenance (DM) and Renewal & Repurposing (R&R) Project Descriptions

full facility, we are relieved of lease obligations for rented space or future life cycle cost for owned assets. Internally, UAA has initiated a space assessment to determine where reallocation, consolidation, and compaction could occur. Some vacant space currently exists, but can only truly be recaptured for use by restacking organizations into contiguous spaces and reassigning off-campus departments to the recovered defragmented spaces. This project will plan and move the first increment of organizations internally to Main Campus, providing space to absorb other entities and functions currently residing in leased spaces and off-campus. Work includes not only the physical movement of occupant or organizational contents between spaces, but planning and managing the restacking process, posting new signage and wayfinding for relocated entities, refreshing building interiors as needed, and ancillary costs related to systematic relocation. Relocating Disability Support Services to a larger space to meet regulatory mandates and associated dislocations is one initial critical need. Consolidating space within the College of Business and Public Policy and returning the Institute of Social and Economic Research to Main Campus will free 8,500 SQ FT of space off-campus for other needs or disposal.

UAA Community Campuses

Kenai Peninsula College Campus Renewal

(GF: \$934.3, NGF: \$0.0, Total: \$934.3)

This project will address campus-wide deferred maintenance issues and renewal and replacement requirements for building envelope and roof systems, building interiors and systems, exterior infrastructure and signage, and code compliance and life safety issues.

Kodiak College Campus Renewal

(GF: \$279.8, NGF: \$0.0, Total: \$279.8)

The buildings on the Kodiak Campus were constructed in the early to mid-1970's. 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. Roofing repairs are required, specifically for the campus center. Parking lot lighting repair and upgrades are required until the Kodiak Road Realignment and Exterior Lighting project is completed. Improvements to layout and design will increase space efficiency and allow for replacement of worn and outdated fixed equipment. This project will address campus-wide deferred maintenance issues and renewal and replacement requirements for building envelope and roof systems, building interiors and systems, exterior infrastructure and signage, and code compliance and life safety issues.

Prince William Sound College Campus Renewal

(GF: \$55.1, NGF: \$0.0, Total: \$55.1)

The Growden-Harrison building was originally build shortly after the 1964 earthquake as an elementary school and was added onto in a piecemeal fashion in the following years. Recent re-siding of this building has helped improve the performance of the building envelope, however, aging mechanical, electrical, HVAC systems are currently undersized for the facility and have included the use of asbestos containing materials. The entire parking lot requires regrading and repaving due to the severe freeze-thaw cycle in Valdez and subsurface drainage issues. This project will address campus-wide deferred maintenance issues and renewal and replacement requirements for other building envelope and roof system issues, building interiors and systems, exterior infrastructure and signage, and code compliance and life safety issues.

Matanuska-Susitna College Campus Renewal

(GF: \$1,076.6, NGF: \$0.0, Total: \$1,076.6)

This project will address campus-wide deferred maintenance issues and renewal and replacement requirements for building envelope and roof system issues, building interiors and systems, exterior infrastructure and signage, and code compliance and life safety issues.

Kenai Peninsula College - Kachemak Bay Campus Renewal

(GF: \$72.2, NGF: \$0.0, Total: \$72.2)

A significant portion of the Pioneer Hall campus building (KB101, 7,200 SQFT.) was originally built in 1988 as a post office. The roof and mechanical/electrical systems are original and require replacement. This project will address campus-wide deferred maintenance issues and renewal and replacement requirements for other building envelope and roof system issues, building interiors and systems, exterior infrastructure and signage, and code compliance and life safety issues.

Prince William Sound College Multipurpose Training Room Reconfiguration

(GF: \$150.0, NGF: \$0.0, Total: \$150.0)

Funding will provide a large flexible training space for lecture, conference, or hands-on training. The Prince William Sound College GE Instruction and Vocational Technology / Workforce Development Training programs continue to expand and explore instruction and vocational training opportunities in areas such as the rural health care fields, industry, and other work force development needs in line with the UA and State of Alaska workforce development objectives. The current facility does not have any space that can accommodate groups of 20 or more people. This additional space would be used year-round for instruction, training, student success support and campus events. This is a phased project with a total cost of \$900k.

Kenai Peninsula College - Kachemak Bay Campus Library/Computer Classroom Renovation

(GF: \$150.0, NGF: \$0.0, Total: \$150.0)

This project will reconfigure and renovate approximately 1,850 sf of classroom and study space within Pioneer Hall on the Kenai Peninsula College - Kachemak Bay campus. Scope of work includes converting the existing library to a classroom and reapportioning and converting a smaller classroom and computer lab to a larger library and appropriate-sized multifunction computer classroom lab. This is a phased project with a total project cost of \$600k.

Kodiak College Infrastructure Standby Generator

(GF: \$250.0, NGF: \$0.0, Total: \$250.0)

Kodiak College reports loss of power 5-6 times a year, sometimes for several hours. These outages are a safety and security concern for staff and students; additionally, it can cause permanent damage to the building infrastructure. Additionally, the city emergency management office asks that the college be prepared to provide distribution services for emergency supplies, act as temporary medical clinic, or support other recovery site functions other than a public shelter. This would require backup power to support facilities in the event the power supply fails. Preliminary planning and design was developed in August 2006, but will need to be revalidated before proceeding with full design and installation. This project replaces a 250kw standby power generator and above-ground storage tank with automatic transfer switch and distribution to campus critical power requirements. Work also includes installing a generator shelter, concrete pads, security fencing,

FY19 Priority Deferred Maintenance (DM) and Renewal & Repurposing (R&R) Project Descriptions

lighting, driveway access, and other features necessary to integrate and operate the standby power generation system with campus facilities. This is a phased project with total project cost of \$500k.

UAF Main Campus

UAF Building Envelope & Roof Systems Renewal

(GF: \$5,355.0, NGF: \$0.0, Total: \$5,355.0)

Projects within this category will address deferred maintenance, renewal and renovation requirements for buildings' envelopes and roof systems. They include roof repairs and replacements, doors, windows, vapor barriers, painting, siding, weatherization, insulation, foundations, and other building envelope issues.

The building envelope elements for the selected buildings are in the worst condition needing re-roofing, windows replacements, and storefront upgrades. The roofing projects are an ongoing replacement of roofs that have reached the end of their useful and protective life. The buildings' windows and storefronts are mostly original to the building with older building technology and poor insulation values or have deteriorated from constant high volume use.

A systematic buildings envelope replacement and improvement is needed to prevent leaks, failures, and disruptive damage to other building assets and occupants. This allows uninterrupted buildings' programmatic functions from emergency repairs, lowers maintenance cost from costly short-term repairs, increase energy-efficiency with up-to-date insulation, improve thermal and moisture protection with contemporary tighter construction. The improved buildings' exterior envelopes also have better performance and an added aesthetic value to the campus.

This request includes roof replacements at two of the Cutler Apartment Complex buildings, installation of card swipes on exterior doors, storefront replacements in the core of campus and window replacements on older buildings.

UAF Fairbanks Campus Building Interior & Systems Renewal

(GF: \$13,090.0, NGF: \$0.0, Total: \$13,090.0)

The interior systems projects address the buildings' mechanical, electrical and HVAC systems. These projects will replace failing piping, inadequate electrical systems, inefficient lighting, damaged finishes, fans, deficient VAV boxes and upgrade the buildings automation system controls. This category also includes efforts to remove asbestos containing material (ACM) in particular building areas.

Many of the buildings in the UAF system were constructed in the 1960s and 1970s and the building interiors and systems are in very poor shape and beginning to fail; they are no longer adequate for the current demands and require replacement or upgrading. Replacement parts for many of these systems are no longer available. Many of the systems are expensive to operate due to their low efficiencies. Replacement of these systems will allow for increased energy efficiencies, more attractive interiors, and better environmental control throughout UAF's facilities.

Besides improving buildings' functionality, more comfortable working environment and creating the right aesthetic impressions for current and future students and the public, the improvements will reduce maintenance costs. The projects lower operational costs by upgrading or replacing old building technology systems with current up-to-date technology where there is greater payback.

FY19 Priority Deferred Maintenance (DM) and Renewal & Repurposing (R&R) Project Descriptions

This request includes upgrading interior locks on classrooms and offices to improve safety, annual restroom renovations, elevator renewals, and HVAC upgrades of older equipment.

UAF Campus Infrastructure and Signage Renewal

(GF: \$6,852.0, NGF: \$0.0, Total: \$6,852.0)

The exterior infrastructure projects address the campus roadways, trails, parking, sidewalks, plazas, outdoor lighting, and utility systems. This also includes wayfinding improvements.

The severe Fairbanks climate takes a toll on the many roads, trails, sidewalks, parking areas, curbs and gutters across our campus creating uneven surfaces. Lack of adequate sidewalks and other deficiencies pose a safety hazard or are increasingly susceptible to additional damage. The exterior lighting in the selected buildings is original to the building and needs to be replaced with more energy efficiency LED lights.

Repairing and upgrading the exterior infrastructure surfaces are required in order to maintain a safe, accessible, and effective environment for students, staff and the public. Adequate exterior wayfinding signage is critical to creating a safe and accessible campus. Improved lighting is needed to increase safety, security, and lower energy consumption by using energy efficient LED's. The utilities projects that include sewer and storm drainage projects are continued efforts to upgrade old and damaged pipes or deteriorated wood stave pipes with modern insulated pipes. The new lines will prevent unanticipated failures.

This request includes upgrading exterior lighting of parking lots and walkways to energy efficient LED technology, storm drainage issues between the Eielson and Gruening building, a study to improve the chilled water system in the campus core, and upgrading single walled fuel tanks to double walled.

UAF Regulatory Compliance - ADA, Title IX, & Transgender

(GF: \$2,810.0, NGF: \$0.0, Total: \$2,810.0)

Complying with regulations including building and life safety codes, the Americans with Disabilities Act and Title IX, and accommodating transgender students, staff and faculty is a top priority at UAF. Remaining in compliance requires an on-going effort to modify and upgrade exterior hardscapes, elevators, building passageways, toilet and locker rooms, signage and security infrastructure.

The UAF Facilities Services maintenance staff tracks all maintenance requests from the campus community. Certain repair requests such as exit doors and broken hardware repairs in this category receive disproportionate number of repair requests. Other project needs are to create ADA and gender-inclusive restrooms in buildings where there are none.

This category has requests that typically require quick response for life safety and general regulatory compliance. Timely and proactive response provides improved life-fire-safety, security, code compliance, and reduces maintenance cost. Besides the projects' regulatory requirements, these projects benefit the diverse campus communities.

This request includes renovations to come of the athletic team locker rooms for NCAA/GNAC compliance, a code correction study for both egress path exiting within the Duckering building, and Patty Center shower room renovations to increase privacy and security of facility users.

FY19 Priority Deferred Maintenance (DM) and Renewal & Repurposing (R&R) Project Descriptions

UAF Community Campus

Rural & Community Campus Renewal

(GF: \$2,058.0, NGF: \$0.0, Total: \$2,058.0)

The UAF Rural projects include aggregated general scopes for all categories of building envelopes, exterior infrastructure, and interior systems with a top priority for renewal and regulatory compliance requirements projects. These projects include College of Rural and Community Development (CRCDD) facilities at Bristol Bay Campus, Chukchi Campus, Kuskokwim Campus, Northwest Campus, Interior Alaska Campus, and Brooks Building.

The distant locations of the CRCDD campuses requires UAF to prioritize regulatory compliance, distance education, energy efficiency and conservation projects. Energy costs in rural Alaska are much higher than in urban areas like Anchorage and Fairbanks.

Systematic building improvement, energy efficiency, increase in higher-grade and durable construction material will reduce operational and maintenance costs. This also reduces the frequency of building system failures that are costly because of emergency shipping for both labor and material.

The largest project at the rural campuses is to replace the failing HVAC system within the Maggie Lind Building of the Kuskokwim Campus building. Other projects to be completed include upgrades to fire alarm systems, replacement of inefficient light fixtures, and code upgrades to fuel oil tanks.

UAS Main & Community Campuses

UAS Auke Lake Pedestrian Guardrail Replacement

(GF: \$300.0, NGF: \$0.0, Total: \$300.0)

Existing pedestrian guardrails are made from wood, are expensive to paint, have a large flat top that is always covered in bird droppings, and the openings do not meet current building codes. This project will construct a new railing made of more durable materials which will lower maintenance costs.

UAS Replace Fire Alarm Panel

(GF: \$75.0, NGF: \$0.0, Total: \$75.0)

Existing fire alarm panel in the Technical Education Center is no longer supported by the manufacturer and is showing signs of failure. This project will replace the fire alarm panel and supporting devices.

UAS Demolish Soboleff Annex and Landscape

(GF: \$75.0, NGF: \$0.0, Total: \$75.0)

The Soboleff Annex building is a double wide trailer intended for temporary use. The UAS Master Plan recommends removing this building and replacing with an open area. The building has exceeded its useful life, requiring more maintenance than it's worth and does not fit the character of campus. This project will remove the structure and replace it with a hard scape and landscape area for use by UAS staff and students.

UAS Technical Education Center Overpass Power Wash and DOT Maintenance List

(GF: \$50.0, NGF: \$0.0, Total: \$50.0)

UAS owns and operates the pedestrian highway overpass between the Juneau Douglas High school and the UAS Technical Education Center. Department of Transportation and Public Facilities bridge department inspects the overpass and provides a list of maintenance that UAS needs to have completed. This project will complete these required maintenance tasks.

Sitka Campus Hangar Replace/Repair Atrium Skylight

(GF: \$100.0, NGF: \$0.0, Total: \$100.0)

The skylight in the Sitka Campus building has been leaking for several years. Facility maintenance has re-caulked the window several times with limited success. This project will replace the skylight with a modern skylight design that does not rely on caulking for moisture protection.

UAS Technical Education Center Boiler Replacement

(GF: \$500.0, NGF: \$0.0, Total: \$500.0)

The existing boilers date from the 1983 construction of the Technical Education Center and have reached the end of their service lives. Replace the two boilers with oil-fired boilers, reconfigure piping to primary-secondary with new primary pumps and lead-lag variable speed secondary pumps. Includes direct digital control changes and new graphics. Investigate feasibility of using an air source heat pump or water source heat pump to reduce energy costs.

Sitka Campus Hangar Back-up Generator and UPS

(GF: \$500.0, NGF: \$0.0, Total: \$500.0)

Sitka does not currently have a backup generator for power failure. The campus houses important research material in deep freeze freezers. A prolonged power failure could cause irreplaceable damage to research materials. This project would install a backup generator that is capable of supporting these freezers, basic mechanical systems, emergency lighting and critical IT and communication services so the campus can provide basic services during a utility power failure.

UAS Egan Library Replace Penthouse Siding

(GF: \$175.0, NGF: \$0.0, Total: \$175.0)

The siding on the Egan Library is made from a western cedar that has been painted. The siding on the mechanical room penthouse has started to deteriorate exposing the underlying building moisture membrane. This project will replace all the siding on the penthouse.

UAS Housing Fuel Tank Replacements

(GF: \$240.0, NGF: \$0.0, Total: \$240.0)

Existing underground fuel tanks at the UAS housing facility are more than 20 years old, and have reached the end of their useful life. The financial and environmental consequences of a leaky underground fuel tank are substantial. This project will look at the feasibility of heating the housing units with air source heat pumps instead of oil. If air source heat pumps will not work for this facility, the existing single fuel tanks will be replaced with double walled fuel tanks with leak detection monitoring.

Sitka Campus Hangar Doors Replacement

(GF: \$50.0, NGF: \$0.0, Total: \$50.0)

Exterior doors in the Sitka Campus building are more than 20 years old, are worn out and no longer operate smoothly or provide a clean seal. This project will replace all the exterior doors with new metal doors, frames, hardware and electronic locking systems.

UAS Novatney Roof Replacement

(GF: \$285.0, NGF: \$0.0, Total: \$285.0)

The existing roof on the UAS Novatney building is more than 25 years old, exceeding its warranty date. This project will replace the roofing system.

UAS Facilities Replace Fuel Shed & Tanks

(GF: \$201.0, NGF: \$0.0, Total: \$201.0)

The UAS facility fuel shed and tanks are more than 20 years old and have exceeded their useful life. This project will replace the fuel shed and fuel tanks.

Statewide

Statewide Butrovich Lighting Upgrades

(GF: \$810.0, NGF: \$0.0, Total: \$810.0)

In 2010 a lighting study was conducted for the Butrovich Building to evaluate the efficiency and condition of the existing fixtures and controls. Based on the findings of this survey, there were 7 recommendations made to increase the energy efficiency of the building and reduce the operating costs for maintaining the building's lighting systems. During the summer of 2014, a "Daylight Harvesting" project was completed on the north side of the building to correct issues with an earlier system that had been installed but failed to work properly, which addressed part of one of the recommendations from the report. That project has proven to be successful and is working as designed. This project will complete the rest of the recommendations from the 2010 Study.

Statewide Butrovich Building Repairs

(GF: \$606.0, NGF: \$0.0, Total: \$606.0)

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.

Statewide University House Repairs

(GF: \$75.0, NGF: \$0.0, Total: \$75.0)

The University house is over 20 years old and has reached a point where systems and components will need to be repaired or replaced as they are at the end of their useful life. The building envelope needs to be maintained to ensure that the structure remains sound. Replacement of the roof should be completed within the next 3-7 years and exterior surfaces need to be inspected, repaired or replaced and refinished.

FY19-FY28 Capital Budget Request Project Descriptions

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

FY19 (GF: \$50,000.0, NGF: \$0.0, Total: \$50,000.0)

FY20-FY28 (GF: \$450,000.0, NGF: \$0.0, Total: \$450,000.0)

The University of Alaska (UA) is responsible for maintaining facilities and infrastructure across the state. UA continues to be good stewards of these valuable assets, while exploring ways to reduce its facilities footprint and long-term operating costs. UA has over 400 facilities, with an average age of 33 years, an inflation-adjusted value of \$3.8 billion, and a deferred maintenance/renewal & repurposing (DM/R&R) backlog in excess of \$1 billion. UA requests \$50 million in FY2019 for deferred maintenance/renewal & repurposing funding.

Major Maintenance and Renewal Projects

UAA Social Sciences Building Renewal

FY20-FY21 (GF: \$7,130.6, NGF: \$0.0, Total: \$7,130.6)

FY22-FY23 (GF: \$19,869.4, NGF: \$0.0, Total: \$19,869.4)

The Social Sciences Building (SSB) was built in 1974 and used extensively for office, classroom and lab space, as well as the central information systems control center (IT Services). It was originally built with a relocatable wall system that is no longer functional. The backup generator has failed and cannot be replaced because of current code requirements; now relying on portable generator for backup. Deferred Maintenance backlog on this building is nearly \$18M with \$2M projected in the next few years. This building will require extensive renovations to meet current operational, energy efficiency, code, and safety requirements. Architectural, structural, mechanical, electrical and networking systems are all in need of extensive repairs, upgrades or replacement. This project will include lighting upgrades, ceiling grid replacement, carpet replacement, office upgrades, classroom reconfiguration, interior painting, and replacement of select classroom and office furniture. The 40-year old roof would also be replaced. IT back-up systems, cooling systems, and layout will be assessed and upgraded or replaced as necessary.

UAA Fine Arts Building Renewal

FY24-FY28 (GF: \$35,000, NGF: \$0.0, Total: \$35,000)

UAA's Fine Arts Building was built in 1986. The building is heavily used by the University and the Anchorage community. Over the years the finishes have become outdated and worn, and the building systems have begun to fail. The major mechanical systems of the Fine Arts Building are no longer providing adequate ventilation, heating and cooling of the classroom labs, shops, studios and offices. Critical needs are to provide a properly controlled storage environment for educational materials, furnishings, musical instruments and equipment. This project will completely renovate the existing 139,520 GSF Fine Arts Building to provide offices, classrooms, instructional labs and modernized restrooms. The project scope involves the refurbishment/ replacement of the mechanical systems (HVAC). The electrical systems will be upgraded throughout the building to ensure code compliance, improve lighting in all areas, upgrade fire systems and increase available power to meet the needs of the users. Interior finishes including restroom plumbing and fixtures, carpets and floor coverings, and the elevators will be renewed or upgraded. The building envelope will be renewed to increase thermal efficiency and correct weatherization issues. This project has been deferred long enough that the two projects must be combined due to the criticality of replacing aging building systems and the complexity of upgrading or replacing independent systems reliant on each other.

FY19-FY28 Capital Budget Request Project Descriptions

UAA Professional Studies Building Renewal

FY24-FY28 (GF: \$14,605.6, NGF: \$0.0, Total: \$14,605.6)

In 1973, the Professional Studies Building (PSB) was built adjacent to the five buildings constructed as the foundation of West Campus in 1970. The PSB was expanded shortly thereafter in 1975 with a classroom/studio wing to the west and the construction of the Wendy Williamson Auditorium to the east. This project renovates the entire 87,351 GSF facility. The primary purpose of the renovation is to remove the deferred maintenance backlog, improve energy efficiencies, and mitigate code related compliance issues. An outcome of the renovation, will be improved space utilization through review of current program uses and corresponding space consolidations as well as creation of flexible use classrooms. Renewal includes the replacement and updating exterior envelope, elevators, mechanical, electrical, plumbing, HVAC, fire protection/suppression, telecommunications, architectural finishes, and building automation systems.

UAF Moore-Bartlett Infrastructure

FY20-FY21 (GF: \$10,000.0, NGF: \$0.0, Total: \$10,000.0)

FY22-FY23 (GF: \$10,000.0, NGF: \$0.0, Total: \$10,000.0)

The plumbing infrastructure in the Moore and Bartlett dormitories is near the end of its life. The copper piping has corroded to the point of failure in some areas. This project will replace the plumbing and reconfigure the restrooms to comply with modern dorm restroom expectations.

UAF Engineering Program Modernization: Duckering

FY20-FY21 (GF: \$7,000.0, NGF: \$0.0, Total: \$7,000.0)

This project will renovate and modernize teaching lab space in the Duckering building once the new engineering facility is complete. The engineering program has grown to the point that both the new building and a modernized "old" building are required to support the program.

UAF West Ridge Research Facilities: Elvey Annex (Phase 1) & Exterior (Phase 2)

FY22-FY23 (GF: \$13,000.0, NGF: \$0.0, Total: \$13,000.0)

FY24-FY28 (GF: \$80,000.0, NGF: \$0.0, Total: \$80,000.0)

Phase 1 includes code corrections, a new roof, ventilation, electrical and seismic upgrades of the Elvey Annex. Phase 2 is a major renovation of the Elvey tower to abate the asbestos, bring the seismic resistance up to code, upgrade the electrical and mechanical systems and re-skin the building to significantly decrease the energy use. Functional obsolescence will be addressed with efficient office and lab layouts.

UAF Arctic Health Facility Upgrade

FY24-FY28 (GF: \$64,000.0, NGF: \$0.0, Total: \$64,000.0)

Major facility upgrade to the Arctic Building including code corrections, renovation of functionally obsolete space and equipment, and building mechanical and electrical systems.

UAF Fine Arts Program: Salisbury Theater/Multi-Use Instructional Space

FY24-FY28 (GF: \$25,000.0, NGF: \$0.0, Total: \$25,000.0)

The project is a major renovation of the Salisbury Theater. It will address major code deficiencies, create new, smaller learning spaces appropriate for today's teaching methods and replace worn out mechanical and electrical equipment. The resulting variety of smaller learning and convening spaces will serve all of UAF and not just the Theater Department and College of Liberal Arts (CLA). The remodel will create a nominal 200 to

FY19-FY28 Capital Budget Request Project Descriptions

approximation of the human one-to-one experience and is essential in UAF degree programs utilizing collaborative teaching across campuses. With the increase in collaborative teaching the demand for video conferencing enabled learning spaces has eclipsed the existing capacity. Creating additional video conference enabled classrooms will ease the tension for access to these high-demand learning spaces.

UAS Smart Classrooms Juneau Campus

FY22-FY23 (GF: \$100.0, NGF: \$0.0, Total: \$100.0)

Smart / Flex classrooms give professors more options for engaging with students in the classroom and on-line.

**University of Alaska
FY2019 Deferred Maintenance (DM) and Renewal & Repurposing (R&R)**

**Distribution Methodology
(Based on Age and Value of Facilities)**

Location	Bldgs	Age (years)	Avg. Age (years)	Weighted Avg. Age (years)	Gross Area (sq. feet)	Adjusted Value (thousands)	Index (Age and Value)	Adjusted Value	Dist. % * DM Model
Anchorage Campus									
<i>Anc.</i>	69	25.7	18.7	3,204,421	1,182,062.7	22.5	25.7%	12,825.0	
UAA Community Campuses									
<i>Kenai Peninsula College</i>	8	26.8	22.7	158,446	76,904.1				
<i>Kachemak Bay</i>	3	17.0	29.7	25,897	12,580.0				
<i>Kodiak College</i>	5	39.8	40.5	45,049	23,120.9				
<i>Matanuska-Susitna College</i>	8	23.9	23.0	152,781	78,169.7				
<i>Prince Wm. Sound College</i>	6	7.5	10.3	67,327	33,141.5				
UAA Total	99	24.9	19.2	3,653,921	1,405,978.9	27.7	31.6%	15,793.0	
Fairbanks Campus									
<i>Fbks.</i>	246	36.9	34.9	3,245,648	1,561,089.3	48.7	55.4%	28,107.0	
UAF Community Campuses (CRCD)									
<i>Bristol Bay Campus</i>	3	15.0	23.2	20,217	14,050.0				
<i>Chukchi Campus</i>	1	40.0	40.0	10,362	9,273.5				
<i>Community & Technical College</i>	4	38.5	26.2	226,053	41,154.7				
<i>Interior Alaska Campus</i>	5	28.2	35.2	29,111	21,915.6				
<i>Kuskokwim Campus</i>	7	32.3	31.0	51,774	43,296.6				
<i>Northwest Campus</i>	14	35.9	37.8	20,758	18,310.9				
<i>Rural College</i>	1	13.0	13.0	22,908	14,821.0				
UAF Total	281	36.3	34.1	3,626,831	1,723,911.6	53.0	60.3%	30,165.0	
Southeast Campus									
<i>Juneau</i>	32	25.5	20.0	449,877	188,780.1	4.0			
UAS Community Campuses									
<i>Ketchikan Campus</i>	4	15.8	14.1	47,850	25,946.2				
<i>Sitka Campus</i>	1	4.0	4.0	68,058	23,525.5				
UAS Total	37	23.9	17.6	565,785	238,251.9	4.5	5.1%	2,551.0	
Statewide									
<i>Various</i>	9	37.7	35.6	220,050	82,974.8	2.6	3.0%	1,491.0	
SW Total	9	37.7	35.6	220,050	82,974.8	2.6	3.0%	1,491.0	
UA Total	426	32.6	26.2	8,066,587	3,451,117.2	87.8	100.0%	50,000.0	

Facility data from 2016 Facilities Inventory

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

University of Alaska
 Capital Budget Request vs. State Appropriation
 FY2009-FY2018
 (in thousands of \$)

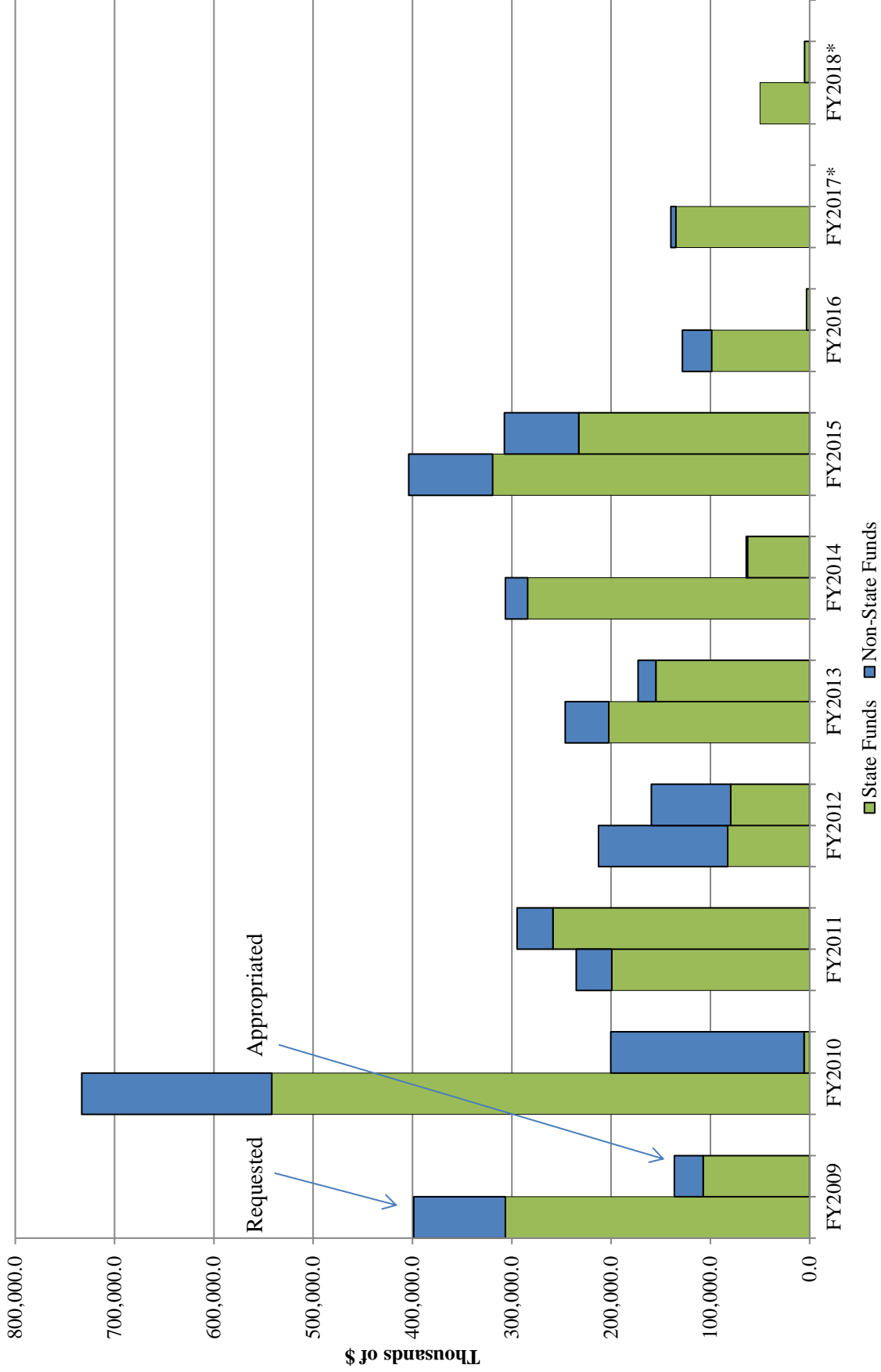
Request	Renewal and Repurposing	Add/Expand	New Facilities	Equipment	Other¹	Total
FY2009	114,000.0	2,000.0	163,870.0	26,000.0	550.0	306,420.0
FY2010	204,130.0		194,495.0	90,000.0	53,150.0	541,775.0
FY2011	100,000.0		99,375.0			199,375.0
FY2012	70,433.0				12,092.5	82,525.5
FY2013	187,500.0				14,700.0	202,200.0
FY2014	162,500.0		108,900.0		12,500.0	283,900.0
FY2015	37,500.0		273,900.0		7,900.0	319,300.0
FY2016	50,000.0		35,550.0		13,000.0	98,550.0
FY2017	100,000.0		34,800.0			134,800.0
FY2018	50,000.0					50,000.0
Total	1,076,063.0	2,000.0	910,890.0	116,000.0	113,892.5	2,218,845.5
10 yr. Avg.	107,606.3	200.0	91,089.0	11,600.0	11,389.3	221,884.6

Approp.	Renewal and Repurposing²	Add/Expand	New Facilities	Equipment	Other¹	Total
FY2009	45,822.6		61,300.0		125.0	107,247.6
FY2010	3,200.0		2,500.0			5,700.0
FY2011	43,694.7		213,896.7	400.0	558.5	258,550.0
FY2012	39,500.0	2,000.0	35,800.0		2,204.0	79,504.0
FY2013	37,950.0		108,900.0		8,040.0	154,890.0
FY2014	30,000.0		30,000.0		2,588.7	62,588.7
FY2015	19,273.0		212,600.0	120.0	450.0	232,443.0
FY2016	3,000.0					3,000.0
FY2017						
FY2018	5,000.0					5,000.0
Total	227,440.3	2,000.0	664,996.7	520.0	13,966.2	908,923.3
10 yr. Avg.	22,744.0	200.0	66,499.7	52.0	1,396.6	90,892.3

¹ Includes research and other capital funding requests or appropriations

² Funds reallocated from the state appropriated portion of the operating budget for: Strategic Investments (SI): FY17 - \$10.0 million; FY18 - \$5.0 million, and non-state; Natural Resource Funds (NRF): FY17 - \$269.3 thousand; FY18 - \$300.4 thousand.

**University of Alaska
Capital Request and Appropriation Summary
FY2009-FY2018**



*Funds reallocated from the state appropriated portion of the operating budget for: Strategic Investments (SI): FY17 - \$10.0 million; FY18 - \$5.0 million, and non-state; Natural Resource Funds (NRF): FY17 - \$269.3 thousand; FY18 - \$300.4 thousand.