

# University of Alaska

## PRIORITIZED CAPITAL PROJECTS THAT MAY NOT MEET ALL GENERAL OBLIGATION BOND CRITERIA

*(in thousands of \$)*

Given the critical nature of UA's deferred maintenance backlog and the on-going risk of building closures, the UA Board of Regents' FY2022 Capital Budget included a request for \$50 million. The following projects are UA's highest priority deferred maintenance, renewal and repurposing projects. Where portions of the projects are appropriate for general obligation bonding the amount has been identified.

Project descriptions can be found on UA Government Relations website:  
<https://www.alaska.edu/govrelations/state/budget.php>

Univ.	DM/R&R Project	Location	FY22 DM/R&R Budget Request	G.O. Bond Request
1 UAF	Fairbanks Campus Building Interior & Systems Renewal (Bartlett/Moore student housing)	Fairbanks	20,050.0	18,650.0
2 UAA	Campus Building Interior & Systems Renewal (Consortium Library)	Anchorage	6,450.0	2,959.0
3 UAS	Building Envelope & Roof Systems (Novatney)	Southeast	675.0	675.0
4 UAA	Campus Building Envelope & Roof Systems Renewal (Lucy Cuddy)	Anchorage	2,350.0	
5 UAF	Campus Infrastructure & Exterior Renewal (sanitary sewer lines)	Fairbanks	4,405.0	2,300.0
6 UAA	Campus Security & Safety	Anchorage	1,900.0	
7 UAF	Safety & Regulatory Compliance	Fairbanks	1,850.0	
8 UAS	Safety & Regulatory Compliance	Southeast	1,585.0	
9 UAA	Regulatory Compliance, Safety Improvements, & Code Upgrades	Anchorage	2,100.0	
10 UAA	Community Campus Regulatory Compliance, Safety Improvements, and Code Upgrades	Various	3,000.0	333.0
11 UAF	Rural and Community Campus Renewal	Various	2,200.0	835.0
12 UAF	Building Envelope & Roof Systems Renewal	Fairbanks	1,595.0	
13 UAS	Exterior Infrastructure	Juneau	665.0	105.0
14 UAS	Interior Systems	Southeast	175.0	
15 UAA	Campus Exterior Infrastructure & Signage Renewal	Anchorage	500.0	
16 UAF	Community & Technical College Renewal	Fairbanks	300.0	300.0
17 SW	Butrovich Lighting Efficiency Upgrades	Fairbanks	200.0	
<b>Total</b>			<b>50,000.0</b>	<b>26,157.0</b>

University of Alaska  
PRIORITIZED CAPITAL PROJECTS DESCRIPTIONS  
FY22 Priority Deferred Maintenance (DM) and Renewal & Repurposing (R&R) Project Descriptions

**UAF Fairbanks Campus Building Interior & Systems Renewal**

Location: Fairbanks

Request: \$20,050.0

Many of the buildings at UAF were constructed in the 1960s and 1970s. The original building interiors and systems are in very poor to failing condition, no longer adequate for current enrollment demands, and require replacement or upgrading. The systems, including finishes, plumbing, ventilation, heating, lighting, and electrical, are expensive to operate due to their low efficiencies and lack of replacement parts, and are no longer in compliance with current life safety codes. Failing systems are causing partial building closures across campus, increasing operating cost for temporary space or in some cases displacing students to off-campus housing. In some cases, these deteriorating systems have caused class and research cancellation and eroded UAF's ability to obtain new grants and initiatives.

Replacement of these systems will allow for increased energy efficiencies and better environmental control throughout UAF's facilities. Projects in this category lower operational cost by upgrading or replacing old building systems with current up-to-date technology where there is greater payback. The work will also renew aging, highly-used components including sanitation improvements, securing aging interior classrooms and labs and addressing building code/life safety issues. The work will reduce the backlog of deferred renewal and increase the useful life of these facilities. Besides improving building functionality, renewed finishes, doors, restrooms, and classrooms create a better impression for current and future students and the public. Modern, attractive facilities have a direct correlation to student enrollment and success.

The building interior and systems renewal projects address building finishes, plumbing, electrical and heating/ventilation systems to increase efficiency, reduce maintenance costs, and improve the living environment of highly used buildings. The projects also reduce building code deficiencies, a growing deferred renewal backlog, and address life safety items related to building interior finishes such as doors, hardware, flooring, and ceilings. Due to the age of UAF buildings, most projects have asbestos removal aspects and require upgrades to current codes and standards. The work performed within these projects preserves current facilities, extends the life of systems and reduces risk of failure that would impact program delivery.

- **Bartlett Hall and Moore Hall Plumbing Replacement:** Bartlett and Moore Hall are the largest dormitories, housing 650 UAF undergraduate and graduate students throughout the academic year. The sanitary sewer lines within the entire building are at risk of imminent total system failure, requiring UAF to close the halls with no notice should it fail. Over the last 4 years, plumbing supporting the restrooms has failed three to four times a year, leaving portions of the building without sanitation facilities. The pipe has degraded over the life of the 50-year old buildings, leaving large holes in branch and main lines. The damage has led to leaks of raw sewage into the occupied portions of the building. The project will also address major code citations, provide ADA compliant facilities, and reduce maintenance and custodial cost of the half-century old fixtures and finishes. Work will consist of demolition of the 8 floors of stacked restrooms back to structure, rebuilding the plumbing, electrical, and ventilation systems, and reconstructing compliant facilities on each floor. The project has been partially funded to begin the design and engineering phases with the goal of being ready for construction in FY22 thru FY23.
- **Bunnell Ground Level Refresh:** The 60-year old Bunnell Building is highly utilized for academic programs, classrooms, and UAF Office of Information Technology. The ground level corridor is well traveled and the finishes are showing their extended age. The project will perform a complete refresh of dated and worn finishes in the main corridor. It will also replace corridor doors, ceilings/lights, upgrade electric and information technology (IT) as needed. During the project, work will address two major code citations by renovating exit pathways of the two north stair towers to lead directly to outside and install fire doors at the elevator lobbies.

University of Alaska  
PRIORITIZED CAPITAL PROJECTS DESCRIPTIONS

FY22 Priority Deferred Maintenance (DM) and Renewal & Repurposing (R&R) Project Descriptions

- **Skarland Hall Elevator Modernization:** Installed in 1963 the highly used elevator has noticeable issues with the car travelling vertically (shaft appears to be listing to one side) and has several code deficiencies. The top of the hoist way at the penthouse entrance is built of combustible material. Modernization and upgrades will include a new elevator and associated appurtenances, new fire doors and renovation of the existing penthouse entrance for code compliance. The design was completed in 2020 and the project is bid ready for 2021.

**UAA Campus Building Interior & Systems Renewal**

Location: Anchorage

Request: \$6,450.0

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, are no longer adequate for the current demands, and require replacement or upgrading. The mechanical, electrical and Heating Ventilation and Air Conditioning (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 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 variable air volume (vav) boxes and upgrade the building automation system controls.

- **Consortium Library Old Core Mechanical Upgrades**  
The original HVAC systems consist, for the most part, of equipment over 46 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 these units. Heating system piping and coils are filled with sedimentation. 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.
- **Eugene Short Hall (ESH) Infrastructure Upgrades**  
This project will complete building code and infrastructure replacements. These upgrades include new boilers, required exits, elevator upgrades, and updates to dispatch related to NFPA requirements. Eugene Short Hall houses the university police department and is the central emergency response center for the UAA main campus. Additionally, ESH has 11 classrooms that support academic mission critical needs. These facilities are in a state of failure and these renovations are necessary to improve reliability for University Police Department (UPD) operations. If funded, this project would leverage a combination of capital investment and an Energy Service Company (ESCO) investment grade audit in order to maximize impact to reducing deferred maintenance liability and provide upgrades to optimize energy efficiencies and utility cost savings.
- **Professional Studies Building and Wendy Williamson Auditorium Infrastructure Upgrades**  
This project would leverage a recent re-commissioning report with potential support of an Energy Service Company (ESCO) in order to update building mechanical and electrical systems that are beyond their useful life and optimize the building systems that will remain.
- **Rasmuson Hall Infrastructure Upgrades**  
This project will complete building code and infrastructure improvements. The elevators are consistently failing reducing operation, resulting in class cancellations, and restricting access to students with mobility concerns. Additionally, a number of mechanical systems throughout the facility require replacement.

University of Alaska  
PRIORITIZED CAPITAL PROJECTS DESCRIPTIONS

FY22 Priority Deferred Maintenance (DM) and Renewal & Repurposing (R&R) Project Descriptions

- **Social Sciences Building (SSB) Infrastructure Upgrades**  
The Social Sciences Building 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. This building will require extensive renovations to meet current operational, energy efficiency, and code and safety requirements. If funded, this project would leverage a combination of capital investment and an Energy Service Company (ESCO) investment grade audit in order to maximize impact to reducing deferred maintenance liability and provide upgrades to optimize energy efficiencies and utility cost savings.

**UAS Building Envelope & Roof Systems**

Location: Southeast

Request: \$675.0

Building Envelope and Roof Systems provide our students, staff, faculty and building systems the protection from wind, rain, snow and cold. When a building envelope fails, everything inside the building is at risk of damage, decay and can make the building unsafe and unusable. Building envelopes last 30-50 years depending on the construction type and require periodic cleaning, repainting, and resealing. New roof systems last 40-60 years and besides periodic cleaning need little maintenance. Building renovations over the past 15 years have improved the building envelopes on the Juneau campus. However, Sitka and Ketchikan campus building envelopes are more than 40 years old, showing signs of compromise and need to be replaced.

UAS has approximately 21 individual projects under Building Envelope and Roof Systems. These projects consist of replacing roof systems, windows, skylights, painting buildings and replacing building siding. Two specific projects in this category include:

- **Novatney Roof Replacement:** The Novatney building roofing system has reached the end of its useful life and needs to be replaced. This project will replace the existing roof system with a new ethylene propylene diene monomer (EPDM) roof system with a 40-year life. If the roof is replaced before it substantially fails, the work can be completed without disrupting the programs in the building. UAS Admissions, Registrar, Financial Aid, Student Accounts, Vice Chancellor of Enrollment Management and Student Affairs are all housed in the Novatney Building. All of these UAS programs would be adversely impacted if the roof system fails and the building could experience substantial damage to the interior. Design for this project is complete and can be bid and constructed during this fiscal year. UAS has already received \$300,000 from the FY20 DM appropriation. \$300,000 is required to complete funding and bid the project.
- **Ketchikan (KTN) – Paul Deck Mansards Replacement:** The Paul Building has a Mansard type roof system that was constructed using a cement bonded siding material. This material has proven not to be able to withstand the frequent precipitation experienced in Ketchikan, Alaska, and is now falling apart. This project will replace the siding/roofing material with a Bermuda metal material that is more resistant to constant rain. This project can be designed, bid and constructed in the current fiscal year.

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

Location: Anchorage

Request: \$2,350.0

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.

University of Alaska  
PRIORITIZED CAPITAL PROJECTS DESCRIPTIONS

FY22 Priority Deferred Maintenance (DM) and Renewal & Repurposing (R&R) Project Descriptions

- **Lucy Cuddy (CUDY) Roof Replacement**  
This project will demolish the existing roof system, increase parapet cap height, upgrade structural components for seismic restraint, replace roof decking as required and install a new roofing system. The Cuddy building supports the culinary arts and hospitality programs, provides student services such as study space and dining, and acts as a community venue generating revenue for UAA.
  
- The following projects will demolish the existing roof systems, increase parapet cap height, upgrade structural components for seismic restraint, replace roof decking as required and install new roofing systems. Furthermore, these projects will look to replace and upgrade the windows to increase R-Values and promote energy efficiency. The following buildings are the highest priority for this work:
  - Arcade Bridge & Lounge Roof and Window Improvements
  - Seawolf Sports Complex (SSC) Roof Replacement
  - Gordon Hartlieb Hall (GHH) Roof Replacement
  - Student Union (SU) Roof Replacement
  - Consortium Library Old Core Roof Replacement
  - Wendy Williamson Auditorium (WWA) Roof Replacement
  - Aviation Technology Center (ATC) Roof Replacement

**UAF Campus Infrastructure & Exterior Renewal**

Location: Fairbanks

Request: \$4,405.0

Without robust and functioning infrastructure, program delivery is severely hampered and student health and welfare is adversely affected. Buildings and their occupants require basic infrastructure such as sanitary sewers, electrical power, drinking water, and connectivity via pedestrian pathways to be fully functional and serve the academic and research needs of campus. The severe Fairbanks climate and years of operation beyond the functional age of these systems have taken a toll on the campus support systems and now poses a significant hazard to the students, faculty, staff, and community. These projects will address infrastructures that are at risk of imminent failure and in urgent need of replacement in order to safely support the UAF campus.

The campus infrastructure request includes high priority sewer line replacements which are critical to maintaining healthy and sanitary student housing, classrooms, laboratories, and other campus facilities. The work will address major code deficiencies and reduce maintenance callouts for these existing aging systems. The request also includes critical district heat line repairs where piping has reached its useful life and recent damage is causing a reduction in system capacity. A final phase of electrical line replacement which improves reliability to several campus facilities is also included in this request. The improvements include repairs to pedestrian access paths by targeted replacement of failing walkways, ADA ramps, and stairs.

- **Fairbanks Campus Wide Sanitary and Storm Sewer Upgrades Hess to North Chandalar, Whittaker (Fire Station) and Wickersham:** The existing sanitary sewer line between Hess Village family housing and the main sewer line on the east side of campus has severely degraded and failed multiple times in the last 3 years. The existing system consists of a large lift station that requires substantial annual repairs and multiple different types of pipe, including wood stave. The project will install a new gravity sewer main from the large housing complex to an existing main line on the east side of campus. In addition, construction work will also disconnect storm drains from the sanitary sewer at the Whittaker Building and Wickersham Hall to address code citations, reduce utility cost, and meet the requirements of the local utility.
  
- **West Ridge District Chilled Water:** Five major research and teaching buildings and the University of Alaska Office of Information Technology Data Center (which serves all of UA's IT needs as well as State of Alaska emergency response functions) utilize approximately 15% of campus power for conditioning spaces and data equipment rooms. Further, the chiller system at the UA Data Center has reached the end of its useful life and parts

University of Alaska  
PRIORITIZED CAPITAL PROJECTS DESCRIPTIONS

FY22 Priority Deferred Maintenance (DM) and Renewal & Repurposing (R&R) Project Descriptions

are no longer available to repair the chiller units, leaving the data center vulnerable to failure. To eliminate this exorbitant quantity of electrical use, reduce campus operating cost significantly, and ensure the continuity of critical data center operations, the buildings must be connected to an existing district chiller water loop fed from an existing steam absorption chiller at the Murie Life Sciences Center. FY22 funding will extend the loop to the most critical needs at the Butrovich Building and future phases will expand to the remaining facilities.

**UAA Campus Security & Safety**

Location: Anchorage

Request: \$1,900.0

Concerns raised by faculty and staff based on the rise of active shooter incidents nationwide, prompted a review of the university's ability to secure buildings, classrooms, and other facilities manually or automatically in the event of any incident that would require persons on UAA campuses to shelter-in-place. Initial review of the level of effort involved to upgrade all room entrances with appropriate locking mechanisms and automation revealed a multi-year, multimillion-dollar effort. This project is developed to fully assess the level of effort, design a plan of execution, and implement security measures for the highest priority facilities and/or spaces. Follow-on phases will be developed and identified based on the planning and design efforts of this project.

**UAF Safety & Regulatory Compliance**

Location: Fairbanks

Request: \$1,850.0

Providing a safe and compliant campus for everyone is the top priority at UAF. UAF works hard to maintain a healthy campus, reduce risk to our building occupants, and ensure students have the safest experience possible, yet the aging campus is requiring larger upgrades to reduce risk and prevent injury. There are many facilities constructed prior to code adoption in the State of Alaska that do not meet current requirements for ventilation, egress, ADA/Title IX, and fire protection. Remaining in compliance requires an on-going effort to modify and upgrade every component of campus from exterior hardscapes, elevators, building passageways, and restrooms to fire alarms, locker rooms, signage and security infrastructure.

Safety and regulatory compliance projects provide updates to building features meant to protect the occupants and reduce risk to our students, staff, and faculty. Work includes updating ventilation to ensure sufficient fresh air is supplied to occupied rooms, replacing fire alarm systems, correcting emergency egress paths, and abating asbestos-containing material. Regulatory compliance also requires the University to replace aging fuel tanks at remote sites across the state.

- **Fairbanks Campus Doors, Hardware, and Security Renewal:** The Fairbanks Campus has over 9,000 doors secured with a keying system that is 20-years beyond its patented expiration date. The antiquated keying system severely compromises building security and leaves facilities vulnerable to break-ins, property theft, and vandalism. Nearly half of the campus doors have outdated and broken hardware, and oftentimes the door is also in need of replacement. Many of the exterior and emergency exit doors do not meet current fire codes or ADA regulations. Over a period of three years, UAF developed a multi-phased plan to complete a door hardware inventory, design and purchase a new keying system, establish a robust key issue policy, and begin replacing doors and door hardware. Electronic locks are installed on exterior doors to allow for fast lock-down of a building whether at the end of the normal business day or during a violent intruder event. The next phase of renewal will replace exterior doors and/or hardware at the Patty Center, Chapman Building, Lola Tilly Building, Elvey Building, and O'Neill Building. Interior work will focus on implementation of the keying system across all campus facilities as well as replacement of fire exit doors in Duckering, Gruening, and Bunnell.
- **Campus Wide Fire Alarm Replacement for End of Life:** Approximately 25 fire alarm panels on the Fairbanks Campus have reached their end of life and the manufacturer is no longer supporting them. Panel failures are causing buildings to be closed or post a fire watch. In the last year four panels failed and parts could not be

University of Alaska  
PRIORITIZED CAPITAL PROJECTS DESCRIPTIONS

FY22 Priority Deferred Maintenance (DM) and Renewal & Repurposing (R&R) Project Descriptions

located for several months. A comprehensive plan has been created to replace panels in small buildings, reserving those parts for older, larger buildings that have a higher cost to update. In FY20, funding completed replacement in Chapman, Brooks, Bunnell, Constitution, and West Ridge Research Building (WRRB). The next facilities to replace are Gruening, Duckering, Rasmuson, and Signers.

**UAS Safety and Regulatory Compliance**

Location: Southeast

Request: \$1,585.0

Safety of our students, staff, and faculty is of great importance to UAS and we strive to keep our facilities in compliance with current building codes, health mandates and safety standards. Regulatory agencies frequently update their requirements as investigations find safer ways to build buildings and as new technologies prove themselves to increase the health and safety of building occupants. Building owners are allowed to postpone implementing many of these regulatory changes until the next major building renovation. However, some of them are mandated to be implemented by a specified date. In addition, UAS is always looking for ways to improve campus safety regardless of regulatory mandates. Many of the fire alarm systems on campus are old and the manufacturer no longer makes replacement parts. Southeast Alaska communities are relatively safe compared to larger communities. However, theft from vehicles in parking lots, unauthorized access to campus and publicly aware community make for frequent requests for improving campus safety.

UAS has approximately 25 individual projects under Safety Improvements and Regulatory Compliance. This includes projects such as replacing fire alarm panels, installing electronic door locks, improving accessibility, adding snow coverings over exterior stairways and installing more security cameras. Four specific projects in this category include:

- Pedestrian Guardrail Replacement – Phase 2: Existing pedestrian guardrails along the outside second story walkways fronting Auke Lake 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 install new railing designed to meet current safety codes to improve the safety of UAS students, staff and faculty. They will be constructed of stainless steel requiring much lower maintenance costs. Phase 1 replaced about half of the existing railings in 2018. The design of Phase II is using the same design details and can be bid and constructed as soon as funding becomes available.
- Technical Education Center (TEC) Welding Lab Fire Alarm Replacement: The TEC welding lab fire alarm panel is no longer supported and if an alarm component fails there will be no way to repair the fire alarm system. UAS welding classes and program will be significantly impacted if the fire alarm fails before it is replaced. This project will replace the fire alarm system. This project can be bid and constructed in this fiscal year.
- Mourant Emergency Notification & Acoustic Improvements: The acoustics in the Mourant Cafeteria are very bad making it difficult to hear the person talking across the table, someone making announcements at an event, and the UAS emergency notification phone intercom messages. This project will install a sound system that is connected to UAS Cisco InformaCast system that can transmit emergency messages and will provide high quality speech reinforcement for presentations and group meetings. This project can be designed, bid and constructed in the current fiscal year.
- Ketchikan (KTN) – Paul Building ADA Entry: The main entrance to Paul is a ramp steeper than allowed by ADA Accessibility Guidelines (ADAAG). This project will regrade the entry area and install an ADA ramp with handrails. This project can be designed, bid and constructed in the current fiscal year.

University of Alaska  
PRIORITIZED CAPITAL PROJECTS DESCRIPTIONS

FY22 Priority Deferred Maintenance (DM) and Renewal & Repurposing (R&R) Project Descriptions

**UAA Regulatory Compliance, Safety Improvements, & Code Upgrades**

Location: Anchorage

Request: \$2,100.0

UAA requires significant and ongoing investment in existing buildings to maintain them for safe occupancy in compliance with regulation, code and safety improvements.

- **Arc Fault Requirements**  
This project addresses Occupational Safety and Health Administration (OSHA) National Fire Protection Association (NFPA) 70E requirements for standoff distances, electrical upgrades, safety placards and personal protective equipment requirements (PPE). Failure to meet Arc-Flash requirements places individuals operating an electrical panel at risk to severe injury or death. This project provides required Alaska Occupational Safety and Health (AKOSH) compliance and it remedies critical electrical safety concerns.
- **Expired Exit Sign Replacement**  
This project replaces and disposes of expired tritium exit signage across campus with Light Emitting Diode (LED) exit signage.
- **Accessibility Improvements**  
This project provides updates for Americans with Disabilities Act (ADA) accessibility including replacing door hardware, ADA compliant resolution, restroom upgrades for accessibility and ADA signage

**UAA Community Campus Regulatory Compliance, Safety Improvements, and Code Upgrades**

Location: Various

Request: \$3,000.0

UAA's community campuses require significant and ongoing investment in existing buildings to maintain them for safe occupancy in compliance with regulation, code and safety improvements.

- **Kodiak, Kenai Peninsula, Matanuska-Susitna, and Prince William Sound Campuses**  
This project will work to ensure the safe occupancy and compliance with regulation at each of UAA's community campuses, and will prioritize fire systems, electrical arc-flash, exit signage, and ADA compliance.

**UAF Rural and Community Campus Renewal**

Location: Various

Request: \$2,200.0

UAF's College of Rural and Community Development (CRCD) campus sites span Alaska with facilities in Fairbanks, Nome, Bethel, Dillingham, and Kotzebue. These sites provide valuable educational and cultural resources to their local and surrounding communities. Major renewal of the buildings has been a consistent effort over the last several years utilizing capital, operating, and grant funding. Despite these efforts, deferred renewal and code correction work is still required to maintain the critically important campuses.

The remote locations of the CRCD campuses requires UAF to prioritize regulatory compliance, distance education, energy efficiency and conservation projects. The priority projects for rural campuses are fire alarm upgrades and fuel tank compliance. Replacement of these systems supports building occupancy and program delivery continuity. Systematic, energy efficient building improvements that use higher-grade, durable construction materials reduce operational and maintenance costs. This also reduces the frequency of building system failures that are especially costly due to emergency shipping of both labor and material.

- **CRCD Fire Alarm Replacement for End of Life:** Approximately 10 fire alarm panels at the rural campus sites have reached their end of life and the manufacturer is no longer supporting them. Maintaining alarm systems in full



University of Alaska  
PRIORITIZED CAPITAL PROJECTS DESCRIPTIONS

FY22 Priority Deferred Maintenance (DM) and Renewal & Repurposing (R&R) Project Descriptions

operation is required for building occupancy and mission delivery. The next facilities to replace are Margaret Wood Building, Sackett Hall, and the Yup'ik Museum, Library, and Cultural Center.

- Kuskokwim Campus Vocational Education Center Electrical Code Compliance: Replace the main power distribution panel in the Voc-Tech Center to remove a major code violation for working clearance.
- CRCDCampus Wide Fuel Tank Compliance: Fix code deficiencies associated with the fuel tanks and piping for CRCDC facilities statewide.

**UAF Building Envelope & Roof Systems Renewal**

Location: Fairbanks

Request: \$1,595.0

The hallmark of a sustainable building is a solid foundation underfoot and a dry envelope overhead. Building envelope elements such as roofs, entry doors, windows, and exterior cladding for selected buildings at UAF are in poor to failing condition. Systematic building envelope replacement and improvement is needed to prevent leaks, failures, and other disruptive damage to building assets and occupants. Renewal projects help prevent programmatic function interruptions from emergency repairs, lower on-going maintenance cost, and increase energy-efficiency through improved thermal and moisture protection. The work preserves existing assets for the continuation of program and mission delivery.

Projects within this category include roof repairs and replacements, doors, windows, vapor barriers, exterior painting, siding, weatherization, insulation, foundations, and other building envelope issues. High performance building envelopes are critical to protect a building's interior finishes, structural integrity, and increase energy efficiency. The roofing projects are an ongoing replacement of roofs that have reached the end of their useful and protective life. Many windows and exterior entry storefronts are mostly original to the buildings on campus, with older construction technology and poor insulation values, or have deteriorated from constant high-volume use. Exterior door replacement work improves the ability to lock down buildings, enhancing safety and security of faculty, staff and students, improving ADA access and emergency egress.

- **Constitution Hall Exterior Windows:** Constitution Hall is a highly visible historic facility located in the core of the campus, serving student support functions such as the post office, bookstore, Alumni Relations, and the Department of Equity and Compliance. Many features of the building, including the single pane windows, are original to the 1955 facility. The windows have very low insulation value, leak cold air, and are laden with lead paint and asbestos. Replacement windows will mimic the current look to maintain the historic perspective but provide tremendous improvements in performance. The degraded windows directly impact the University's ability to continue to preserve this asset not only for the historical context but, more importantly, to continue mission delivery to the students. Being a hub of support for students, the facility directly influences recruitment and retention of students. Replacing the windows will immediately improve the quality of life inside the facility, reduce energy usage, and remove potential hazards of asbestos and lead within the occupied spaces of the facility.
- **Howard Cutler Apartment Roofing:** The Cutler Apartments are the largest and most popular apartment style housing offered on the Fairbanks Campus. Over multiple years, the roof systems have failed and relied on patches to continue to allow occupancy. Three phases have been completed since 2016 leaving three more blocks to complete. The project will remove the failed roofs and rotted substrate and rebuild the systems with additional insulation and vapor barrier and a roof that has a long warranty.

University of Alaska  
PRIORITIZED CAPITAL PROJECTS DESCRIPTIONS

FY22 Priority Deferred Maintenance (DM) and Renewal & Repurposing (R&R) Project Descriptions

**UAS Exterior Infrastructure**

Location: Juneau

Request: \$665.0

Exterior Infrastructure consists of all of UAS facilities that are located outside of a building including, road, parking lots, sidewalks, landscaping and distribution systems for water, wastewater, communication and power. There are several areas on campus where the exterior infrastructure is showing signs of its age, increasing risk of failure and reducing safety of the campus community.

UAS has approximately 36 individual projects under Exterior Infrastructure. These projects consist of repairing or replacing asphalt parking lots, concrete sidewalks, roads and street lighting. It also includes installing or repairing ADA access ways and covered stairways. Four specific projects in this category include:

- Ketchikan (KTN) – Ziegler Plaza Concrete Replacement: Concrete on the plaza installed in 2011 is deteriorating prematurely, spalling and yielding a rough, uneven surface. This creates slip and trip safety hazards to students, staff and faculty entering the building. This project will remove and replace the concrete walkways and can be bid and constructed in the current fiscal year.
- Housing Lodge Fuel Tank Replacement: The Housing Lodge fuel tank is 35 years old, supplies the Lodge's emergency generator and has reached the end of its expected life. Facilities Services recommends replacing this tank before it starts leaking and creating an environmental liability for the University. This project will replace the existing tank with a new double wall tank with interstitial monitoring system meeting current environmental codes. This project can be bid and constructed in the current fiscal year.
- Sitka (SIT) – Building Tech Lab Exit Canopy: Currently snow slides off the roof and falls in front of a building emergency exit. This presents a safety hazard to students, staff and faculty if maintenance crews are not able to remove the snow before they need to use the emergency exit. This project will construct a canopy over the exit door area that will shed the roof snow away from the exit door. This project can be bid and constructed in the current fiscal year.
- Campus Housing Drainage Improvements: There are several places around the housing apartments where drainage features are inadequate resulting in water flowing across sidewalks and freezing. Grounds crew spends a lot of time shoveling and sanding the sidewalks, but it is often not enough to prevent students from slipping on the ice. This project will install drainage pipes, ditches, French drains and other drainage features to keep the water off the sidewalks. This project can be designed, bid and constructed in the current fiscal year.

**UAS Interior Systems**

Location: Southeast

Request: \$175.0

Building Systems make the interiors of our facilities a pleasant and safe place to study, work and learn. Heating systems keep the buildings warm in the winter. Ventilation systems bring fresh outside air into the building and keep air circulating thru the building to prevent the growth of mold and mildew. Lighting, communication, water and wastewater systems keep the building occupants safe and productive. Many of UAS buildings are more than 40 years old. While some of the interior systems have been updated, there are still many interior systems that have exceeded their design life and need to be replaced with new and more efficient systems.

UAS has approximately 25 individual projects under Interior Systems. These projects consist of replacing heating systems, building automation systems, lighting systems, elevators and emergency generators. It also includes replacing carpeting or flooring. Two specific projects in this category include:

University of Alaska  
PRIORITIZED CAPITAL PROJECTS DESCRIPTIONS

FY22 Priority Deferred Maintenance (DM) and Renewal & Repurposing (R&R) Project Descriptions

- Sitka (SIT) – Replace Light Switches in Health Sciences: Lighting switches in the health sciences areas of the facility have mostly failed. UAS hired an electrical design consultant to come up with a repair. The consultant recommended the complete replacement of all the switches in the Health Science area. This project will complete the electrical design and replace all of the switches. This project can be designed, bid and constructed in the current fiscal year.
- Ketchikan (KTN) – Paul Elevator Replacement: The elevator in the Paul building is 47 years old; the manufacturer no longer makes replacement parts and it needs to be replaced. The elevator has been out of service for extended periods over the past few years. This creates a hardship on students, staff and faculty that have mobility challenges. This project will replace the existing elevator. This project can be designed, bid and encumbered in the current fiscal year and construction would take 18 months.

**UAA Campus Exterior Infrastructure & Signage Renewal**

Location: Anchorage

Request: \$500.0

The UAA campus is over 40 years old and many of the buried utilities, fire hydrants, waterlines, drainage infrastructure, 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. The buried piping is beyond its useful life which has resulted in increased failures primarily on west campus. This has resulted in water shutdowns, building closures, and sinkholes due to corrosion and piping failures. Additionally, the aged surfaces have resulted in uneven surfaces, lack of adequate sidewalks and other deficiencies that pose a safety hazard or are increasingly susceptible to additional damage. The safe, reliable and continued business function dictates the need to upgrade and repair the infrastructure and surfaces to maintain a safe and effective environment for students, staff and the public. Additionally, this project improves the campus user experience by improving upon the wayfinding signage.

- **Storm Sewer Improvements**  
This is a multiple phase project that has been underway for the last 4 summers. This is the final phase to replace degraded and failing storm drains on the west Anchorage campus. The camera scope study revealed immediate needs including partially collapsed lines, bottom corrosion failures and offsets that are leading to an increase in pipe failure and eventually roadway collapse. This area of campus has experienced 4 significant sinkholes in the past 6-7 years due to drain system failure, erosion and associated corrosion (typically of Corrugated Metal Pipe (CMP)). These have manifested as sink holes in turf near roadways, collapse of road surfaces, and failure of parking surfaces in the area of west campus. All of the situations expose our students, staff and campus visitors to a number of immediate dangers for both pedestrian and vehicular traffic. Current assessment in three test areas has revealed several failure points including drain line failure and collapse as well as offsets leading to increased erosion and drain line failure. A collapse of any of the lines under roadways and potentially in parking lots would cause a significant disruption to students and staff as well as presenting a significant hazard. The scope of work includes finalizing design, spot repair, slip lining and/or outright replacement of failed CMP with a more durable CPEP (Corrugated PolyEthylene Pipe) plastic drain line.
- **Water Supply Improvements**  
This project addresses west campus water supply and aging infrastructure while simultaneously improving system reliability by installing water supply isolation valves. Currently, the system requires shut off of several west campus buildings when the system experiences critical failure.

University of Alaska  
PRIORITIZED CAPITAL PROJECTS DESCRIPTIONS

FY22 Priority Deferred Maintenance (DM) and Renewal & Repurposing (R&R) Project Descriptions

**UAF Community and Technical College Renewal**

Location: Fairbanks

Request: \$300.0, NGF: \$0.0, Total: \$300.0)

UAF's Community and Technical College provides high-demand work-force development degrees and training programs across the Interior of Alaska. Programs within the college such as emergency services training and airframe and powerplant certification quickly prepare students for immediate placement in skilled trades. The college's facilities are mostly comprised of aged buildings given to the University and repurposed for these programs. Deferred maintenance was transferred with most of these assets and the facilities suffer from functional obsolescence.

- **University Park Restroom Renovation:** The restrooms at the Old University Park facility are of 1957 vintage, installed when the building was an elementary school. The restrooms are in poor condition and do not provide proper sanitation facilities for the users. The project will completely gut and renovate the restrooms to bring them up to current standards and code and make them fully operational. The upgrade will replace plumbing, water closets, sinks, old convection heating terminal units, tiles, and restroom accessories and create ADA accessible stalls.

**SWS Butrovich Lighting Efficiency Upgrades**

Location: Fairbanks

Request: \$200.0

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.

Lighting upgrades, including Lutron controls and re-ballast parabolic lighting fixtures, are needed in the whole building (Approximately 800 fixtures). Ballast are at their end of life. Artwork lighting fixtures need to be replaced with LEDs.