

University of Alaska

Empower Alaska

34th Legislative Session

Deferred Maintenance

Senate Finance Committee

March 18, 2025



Overview

- Introduction
- Context
- Priority Projects & Prioritization
 - UA Anchorage
 - UA Fairbanks
 - UA Southeast



Introduction

UA Facility Profile

- Serves academic, research, and community service mission
- Residential housing, general offices, classrooms, and complex laboratories
- 400 facilities, spanning 8.2 million square feet, replacement valve \$7 billion, avg age 37 years
- UA owns more than 40% of all State capital infrastructure
- Backlog of deferred maintenance and renewal projects nearly \$1.5 billion

Maintaining UA Facilities

- Facility deferred maintenance and renewal has been the UA Board of Regents' number one capital
 priority for over twenty years
- Aging facilities and a growing maintenance backlog make it difficult for UA to attract and retain students from an already shrinking applicant pool
- Over the last 3 years, UA has received an average of \$17.2 million in state funding per year
- A modest annual revenue stream of \$35 million per year would bring greater stability and predictability
- UA, in partnership with the State, needs to explore other strategies to address our most critical projects



UA Facility Profile

	# of Buildings	Avg Age (years)	Gross Area (Sq. feet)	Replacement Value (\$1,000)	•
UAA	98	31	3,236,860	2,302,320.6	428,366.9
UAF	257	39	4,097,567	4,097,887.8	992,150.7
UAS	33	28	493,122	369,394.0	27,399.0
SO	3	34	104,901	100,299.9	20,061.0
Investment	9	43	275,050	203,154.4	15,545.0
UA	400	37	8,207,501	7,073,056.6	1,483,522.5



DM Project Costs

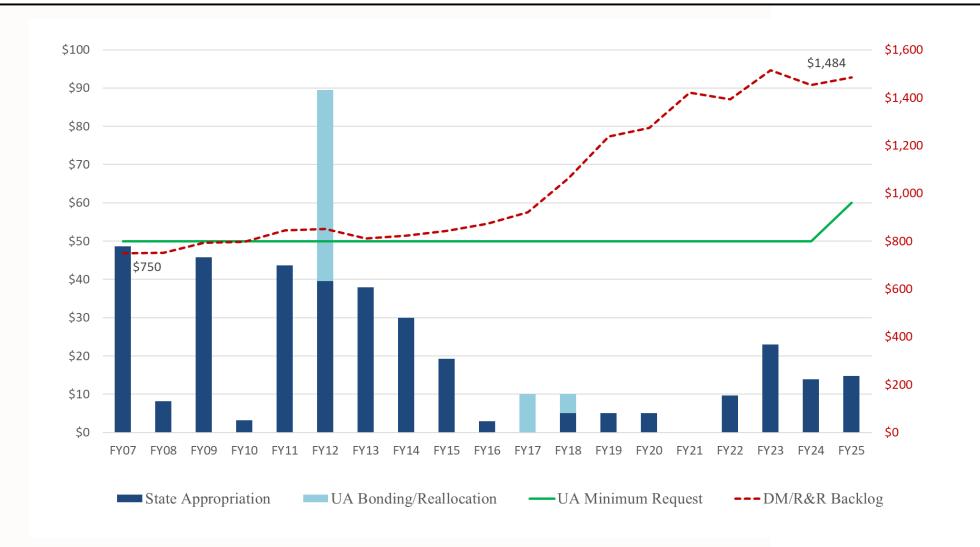
- Deferred Maintenance (DM) project costs are determined using several methods depending on <u>project size</u>, <u>complexity</u>, <u>expertise</u>, and <u>funding status</u>. Project cost estimates for most DM projects are performed using one or a combination of the following three methods:
 - Hire engineers, architects, and estimators (large or complex projects with eminent funding)
 - University staff with decades of experience in designing, estimating, and constructing projects (small or medium projects)
 - University staff produce estimates for projects by comparing them to actual previous project costs adjusted for inflation and/or cost data provided by external consultants (future projects)

Inadequate Funding

- Limited funds require reprioritization, leading to alterations in project scopes or requiring additional design resources to fit larger scopes into smaller budgets
- Insufficient and unpredictable funding leads to a lack of project workflow, resulting in delays in starting construction
- Inflation has significantly outpaced the capital budget, leading to delays as projects wait for additional funding to account for increased bid prices
- Local construction cost pressures such as labor market challenges and shipping cost increases



Capital Budget DM/R&R Funding History Unrestricted General Funds & Backlog (in millions of \$)







UNIVERSITY of ALASKA ANCHORAGE.



UAA DM Project Prioritization

- UAA's planning and engineering staff in conjunction with maintenance and operations staff, conducts full facility condition assessments every 5 to 7 years in consultation with Gordian Group (a parent company of RS Means) for all campus facilities.
- Gordian uses life cycle cost data and information from university staff to inform the deferred maintenance backlog and baselines the cost using RS Means estimating database to prepare a componentized project listing.
- Componentized project listing is submitted using prioritization categories defined as deferred maintenance backlog, timeline A (coming due in 1-3 years), timeline B (coming due in 4 to 7 years), and timeline C (coming due in 8 to 10 years).
- The project listing includes total estimated project costs and is organized by campus, building, system, and component.
- Annually, UAA works with Gordian Group to update the project listing by eliminating projects that have been executed, adding the projects associated with timeline A that are now deferred, and increasing the costs of all projects on the full prioritized list (including backlog, timeline A, B and C) based on RS Means construction inflation information.







UAA Residential Campus Building Envelope and System Renewal

- **FY26 Amount:** \$3,000,000 (TPC \$3,122,700)
- **Objective:** Investment in building envelopes and supporting infrastructure of critical residential facilities.

Key Points:

- Addressing deferred maintenance issues in Main Apartment Complex, Templewood Apartments, and three residential halls.
- Enhancing safety by addressing structural deficiencies and system failures.
- Improving energy efficiency and reducing operating costs.
- Enhancing resident experience with modern, well-maintained facilities.

Details:

- The targeted buildings, primarily constructed in the 1980s, have accumulated a deferred maintenance backlog of approximately \$90 million.
- Issues include wood rot, remediation of siding, ice damming on roofs, distressed roof truss systems, and plumbing system failures.
- Investments aim to enhance safety, improve energy efficiency, reduce operating costs, and enhance the resident experience

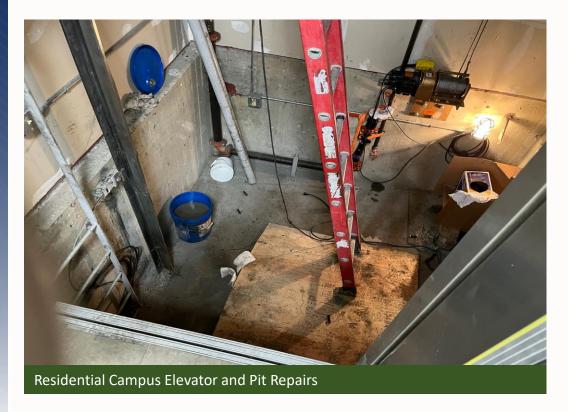




This is UA's 1st overall priority; see FY26 Redbook (pages 24 & 26)



UAA Residential Campus Building Envelope and System Renewal







UAA Campus Safety, Security, and Code Compliance

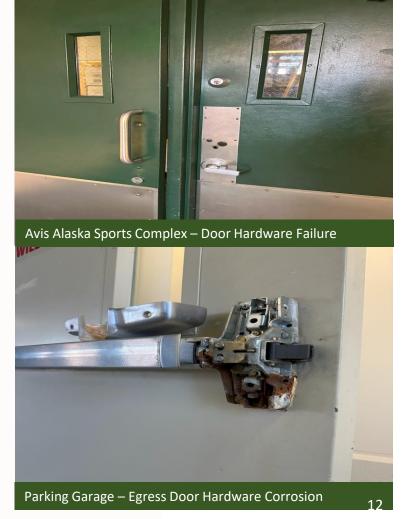
- FY26 Amount: \$500,000 (TPC \$1,914,600)
- **Objective:** Enhancing campus safety and ensuring compliance with the Clery Act.

Key Points:

- Expansion of access control systems to reduce unauthorized access.
- Improvement of key control management system for better security and accountability.
- Upgrading emergency communication platforms for effective emergency responses.
- Enhancing wayfinding to improve navigation and security.

Details:

- The Anchorage Campus faces unique challenges due to its proximity to various institutions, including medical facilities, a juvenile justice treatment center, a private university, federal government facilities, and K-12 educational institutions.
- The project focuses on expanding access control systems, improving key control management, upgrading emergency communication platforms, and enhancing wayfinding





UAA Social Sciences Building Energy Performance Upgrades

- **FY26 Amount:** \$4,000,000 (TPC \$9,447,100)
- Objective: Addressing aging infrastructure and enhancing energy efficiency.

Key Points:

- Modernizing lighting systems for better energy efficiency and user experience.
- Repairing hydronic heating system for a comfortable environment.
- Replacing pneumatic controls with direct digital controls for improved operational efficiency.

Details:

- The Social Sciences Building (SSB), constructed in the 1970s, has a backlog of \$26 million in necessary upgrades and repairs.
- The SSB houses the College of Arts (CAS) and UAA IT, including the main server room.
- Investments aim to enhance energy efficiency, improve user comfort, and ensure the reliability of essential services.

This is UA's 7th overall priority; see FY26 Redbook (pages 24 & 29)



Boiler Failure and Repair





UAA Kodiak College Campus Mechanical and Roof Membrane Renewal

- **FY26 Amount:** \$847,900 (TPC \$984,200)
- **Objective:** Addressing maintenance and upgrades for Kodiak College buildings.

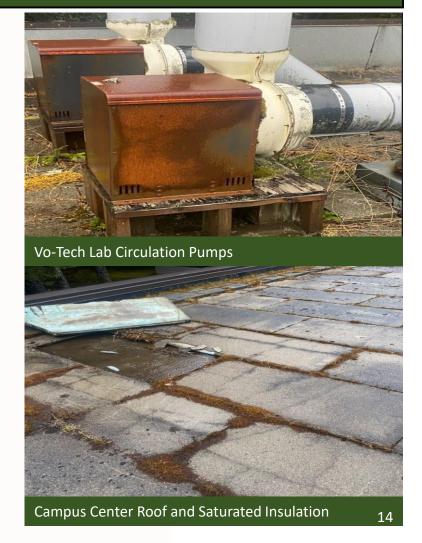
Key Points:

- Renewing outdated and inefficient building systems (electrical, plumbing, HVAC).
- Prioritizing roof renewal of the Adult Learning Center to ensure building integrity and safety.

Details:

- Kodiak College, built in the 1970s and 1980s, has a backlog of nearly \$1.7 million in maintenance and upgrades.
- The roof of the Adult Learning Center is a top priority due to leaks, structural weaknesses, and insulation issues.

This is UA's 9th overall priority; see FY26 Redbook (pages 24 & 31)









UAF Facility Condition Assessments & DM Planning

UAF has the largest and oldest facilities portfolio in the UA System

- 257 facilities across urban, rural, and off-road locations.
- Project prioritization focuses on high-use, high-impact, and critical needs.

Comprehensive Facility Assessments (Every 10 Years)

- Licensed engineers, architects, and estimators assess large portions of campus facilities.
- Focuses on buildings and systems that have exceeded their life cycles.

Ongoing Condition Assessments (Every 3-5 Years)

- UAF's maintenance, planning, and engineering teams review and update the deferred maintenance list.
- New maintenance needs are identified and incorporated.

Internal Assessments for Unreviewed Facilities

- Facilities not included in external surveys, such as the Fairbanks Experiment Farm, are assessed by UAF's internal team.
- Cost estimates are based on RS Means data and historical project costs.

Component-Based Project Planning

- Buildings are broken into major components, each with a defined scope of work.
- Work is prioritized based on system age, condition, and impact on operations.

Shifting from Component Repairs to Full Renewals

- Due to aging infrastructure, individual component replacements are transitioning to full building renewals.
- As projects are completed or buildings are retired, backlog items are removed, and new priorities are added.



Critical Roof and Envelope Renewal

FY26 Amount: \$12,000,000 (TPC \$13,480,500)

Objective: Replace failing roofs in key student support and research buildings to ensure safety and functionality.

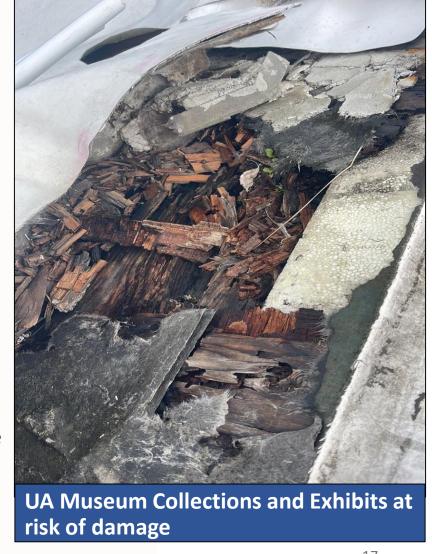
Impacts of not replacing roofs:

- Declining Student Experience: deteriorating spaces impact learning and campus life
- •Safety Risks: falling debris, seismic failures
- Building Closures: disrupts housing, research, childcare
- Energy Loss: higher heating costs, reduced efficiency

Projects Include:

- Cutler Housing: Replace roofs on three apartment blocks.
- •UA Museum of the North: Fix vapor barrier membrane failure.
- •University Park Building: Replace the south wing's roof, and upgrade seismic systems for childcare conversion.

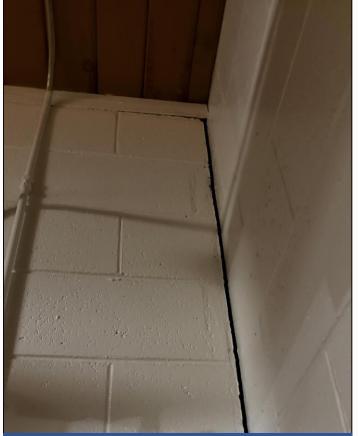
This is UA's 2nd overall priority, see FY26 Redbook (pages 24 & 26)







Rotted roofs cause continuous reactive maintenance and empty units at Cutler



Univ Park: Seismic connections addressed to meet State childcare standards



University Park Roof failures impact future Childcare Center services



Kuskokwim Campus Renewal: Maggie Lind/Voc-Ed Building

FY26 Amount: \$1,777,200 (TPC \$1,790,600)

Objective: Improve safety, efficiency, and compliance to support UAF's

largest regional campus.

Impacts of doing nothing:

- Building Closures: system failures could force shutdowns
- **Disruptions:** workforce programs and student services suffer
- •Increased Costs: system failures could force shutdowns
- Code Violations: buildings fail to meet compliance standards

Projects Include:

- Fire Alarm Systems: Replace outdated panels and detectors.
- **Electrical Systems:** Relocate and replace the main electrical distribution center for safety.
- **Restrooms:** Renovate with ADA-compliant features.

This is UA's 5th overall priority; see FY26 Redbook (pages 24 & 28)



Fire panel malfunction requiring fire watch or building closure



Electrical Panel exposed to aging pipe systems leads to failure and disruption to operations



UAF Student Health, Safety, and Success
Student Health Center Renewal, Duckering, Reichardt, and Salisbury
Teaching Lab Upgrades

FY26 Amount: \$10,490,000 (TPC \$21,769,600)

Objective: Critical facility upgrades to enhance safety, reduce risks, and improve learning spaces.

Impacts of lack of DM funding:

- Program Disruptions: insufficient facilities limit academic delivery
- Building Closures: critical failures could shut down spaces
- •Safety Risks: unfixed hazards increase injuries and liability
- **Higher Costs:** deferred maintenance leads to expensive emergency repairs
- •Limited Accessibility: restrooms, pathways, remain non-ADA compliant
- •Code Violations: non-compliant labs, theaters, and clinics This is UA's 8th overall priority; see FY26 Redbook (pages 24 & 29-31)

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Salisbury: Wood structural framing creates a fire hazard



Duckering: Under-ventilated labs limit class size, decreasing allowed enrollment



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UAF Student Health, Safety, and Success
Student Health Center Renewal, Duckering, Reichardt, and
Salisbury Teaching Lab Upgrades

Projects Include:

- **Duckering Lab:** Upgrade ventilation and dust removal for safer materials analysis.
- •Salisbury Teaching Theater: Fire safety upgrades, seismic bracing, and improved stage accessibility.
- •Student Health Clinic: Modernized exam rooms, ventilation, lighting, and ADA restroom.
- **Reichardt Lab:** Replace ventilation control valves for safer chemical handling.
- **Restrooms:** Upgrade Gruening & Bunnell facilities for compliance and plumbing fixes.
- Pedestrian Safety: Repair pathways, prioritizing high-traffic areas.

This is UA's 8th overall priority; see FY26 Redbook (pages 24 & 29-31)









UAS DM Project Prioritization

- UAS Facilities Services uses both in-house and Gordian Group to document, track and prioritize deferred maintenance projects.
- Each year UAS Facilities Services Director asks our Electrician, Plumber, HVAC, Carpenter, and Building Mechanic to rate each project on Urgency and Priority:

Urgency Rating	Priority Rating
1) Comes Due in 0-3 years	1) High Risk to Health, Safety, Facility Damage
2) Comes Due in 4-7 years	2) Potential Risk to Facility Damage
3) Comes Due in 8-10 years	3) Maintain Facility

 UAS Facilities Director and Operations and Maintenance Manager review these rankings and compile a final ranking of projects to be reviewed and approved by the UAS Chancellor and Vice Chancellor over Facilities Services.



University of Alaska Southeast

UAS Juneau Campus – Renewal of Utilities, Mechanical, Roofing and Safety Improvements

• **FY26 Amount:** \$3,250,000

• **Objective:** Address some of the DM/RR needs on the Juneau Campus.

Water Main Renovation (\$890K):

The 16-inch water main that supplies Juneau main campus is about 50 years old and has failed in two locations.





• ASHP Replacement (\$460K):

UAS have three LG Air Source Heat Pumps (ASHP) that frequently breakdown.

Replace Fuel Tanks at Housing (\$800K):

The Housing Apartment Unit fuel tanks are 35 years old.

This is UA's 3rd overall priority, see FY26 Redbook (pages 24 & 27)



University of Alaska Southeast

UAS Juneau Campus – Renewal of Utilities, Mechanical, Roofing and Safety Improvements

Replace Banfield Hall Roofing System (\$500k):
 The roof on the Banfield Hall is 27 years old and failing.





Replace **Walkway Lighting** (\$600K):

There is no dedicated pedestrian lighting on the walkway to the Rec Center and the lighting on the walkway between the Rec Center and Housing does not meet current illumination standards.



University of Alaska Southeast

UAS Ketchikan Campus – Renewal of Building Envelope and Mechanical System

- FY26 Amount: \$820,000 (TPC \$940,000)
- Objective: Address some of the DM/RR needs on the Ketchikan Campus.
 - Replace Mansards on the Paul Building Deck (\$400k):

The cement-bonded mansard siding is falling apart.

When constructing phase I of this project, we discovered that many of the structural steel trusses and beams were rusting.

This is UA's 6th overall priority; see FY26 Redbook (pages 24 & 28-29)









University of Alaska Southeast

UAS Ketchikan Campus – Renewal of Building Envelope and Mechanical System

Replace Air Handler in Ziegler Building (\$110K):
 The air handler unit in the Ziegler Building is over 20 years old, cannot have its belts realigned.

Install Backup Heating System in the Maritime Center (\$310K):
 The Maritime Center currently has no backup heating system.
 This work would install an electric boiler as a backup to the existing oil boiler.

This is UA's 6th overall priority; see FY26 Redbook (pages 24 & 28-29)





University of Alaska Southeast

UAS Sitka Campus – Window Replacement and Mechanical System Modernization

- **FY26 Amount:** \$820,000 (TPC \$1,410,000)
- Objective: Address some of the DM/RR needs on the Sitka Campus.
 - Replace HVAC Controls (\$400K):

The HVAC control systems throughout the hangar building are old pneumatic that gives the operator limited control of the system.

This is UA's 12th overall priority; see FY26 Redbook (pages 24 & 32)





• Replace Windows (\$310K):

The windows in the Sitka building have aluminum frames and do not provide adequate insulation.

• Renovate Security Cameras (\$110K):

Replace failed cameras and add several more cameras to cover blind spots including doorway and parking lot coverage.

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QUESTIONS?