PROPERTY AND FACILITIES COMMITTEE 2 SEPTEMBER 27-28, 2023

Contact: John Nash

ANNUAL FACILITIES REPORT

Action Requested:

Approve the Five-Year Capital Plans, including the Capital Request for FY 2025.

Approve the Institutional Roads Program.

Receive the Facilities Governance Report.

Table of Contents

			Board Action
Part 1	Five-Year Capital Plans		Approval Requested
		Page	
	1. Five-Year Capital Plan for State Funds	3	-
	2. Five-Year Capital Plan for UIHC	16	-
	3. Five-Year Capital Plans for Other Funds		
	for UI, ISU and UNI	17	-
	University of Iowa	18	-
	Iowa State University	19	<u>.</u>
	 University of Northern Iowa 	21	
			Board Action
Part 2	Institutional Roads Program		Approval Requested
		Page	·· ·
	1. Five-Year Institutional Roads Program	23	
	2. Overview of the Institutional Roads Program	24	
	3. CY 2024 only	25	
	4. Institutional Road Project Descriptions	26	•
			Board Action
Part 3	Facilities Governance Report (historical data)		Beceive the Report
Fait 5	racinities obvernance Report (nistorical data)	Page	Receive the Report
	1 Ouick Facts	31	
	2 Size Age and Replacement Cost of Facilities	32	-
	3 State-Funded Square Footage Comparison:		
	Regents vs Other State Agencies	36	
	4. All Funds Spent	37	-
	5. Space Utilization	38	-
	6. Interinstitutional Collaboration on Facilities	42	-
	7. Fire and Environmental Safety	44	-
	8 Ruilding Ponowal	50	-

Part 1 of 3

FIVE-YEAR CAPITAL PLANS

Executive Summary: There are three Five-Year Capital Plans. They include the: Five-Year Capital Plan for State Funds, including Capital Request for FY 2025 Five-Year Capital Plan for UIHC and the Five-Year Capital Plan for Other Funds for UI, ISU and UNI.

1. Five-Year Capital Plan for State Funds, including Capital Request for FY 2025

	University Funds, State Private									
	Projects Requesting State Funds	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Request	Gifts	Total	
UI, ISU, UNI	New Building Renewal Commitment	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$150,000	\$-	\$150,000	
UI, ISU, UNI	Tuition Replacement Appropriation	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$150,000	\$-	\$150,000	
UNI	Industrial Technology Center Modernization	\$ 3,850	1 -	-	-	-	\$ 3,850	\$ 4,276	\$ 8,126	
IA LL	lowa Lakeside Lab - Housing Facility	\$ 1,500	7,412	-	-	-	\$ 8,912	\$-	\$ 8,912	
Total = \$65,350 \$67,412 \$60,000 \$60,000 \$60,000 \$312,762 \$ 4,276 \$317,038										
¹ The 2023 General Assembly authorized the Board to "expend such amount as the Board determines for purposes of steam tunnel repairs," which totaled \$3.85 million.										

a. New Building Renewal Commitment and Tuition Replacement Board Office

To address building renewal needs in General Education Fund (GEF) facilities, the Board requests an amendment to Iowa Code 262A to allow the BOR to bond for academic buildings without specific authorization from the General Assembly and Governor. In addition and as described in more detail below, the following requests include \$30 million capital commitment be set aside annually in the Rebuild Iowa Infrastructure Fund (RIIF) budget for the Board to use for GEF building renewal projects, and an additional \$30 million annually to meet existing annual debt service obligations on academic building revenue bonds replacement obligations (tuition replacement appropriation) allowing the Board to apply any remaining funds to building renewal projects.

<u>New Building Renewal Commitment</u> - Over the last 18 years, the Regent institutions have received an average of \$32 million per year in capital appropriations for GEF facilities. Over the same period, Regent institutions supplemented those appropriations by funding 34% of those GEF capital projects. The requested annual \$30 million would be matched at 50% in aggregate by the universities. Funds would be used to pay for GEF building renewal projects directly or for debt service of bonds issued to fund improvements.

New Building Renewal Commitment from State

State Funding	University Match	Total				
\$30,000,000	\$15,000,000	\$45,000,000				

Specifically, these building renewal funds would be allocated by the Board primarily towards building renewal projects in GEF facilities. Fire and environmental safety, campus security,

regulatory compliance, energy conservation, modernization and building replacement projects in GEF facilities would be included.



Most recently, Regent universities completed over \$27 million in GEF building renewal projects in FY 2023, up 22% from last year's \$22 million.



Over the last five years, Regent universities spent an average of over \$32 million per year to minimize the current \$1.4 billion GEF building renewal backlog.

Advantages to Funding Building Renewal:

- Avoid inadequate HVAC systems, which could lead to health and safety risks
- Avoid entire system failures, leading to building shutdowns, class disruptions
- · Avoid emergency breakdown repairs, which often come at a higher cost
- Avoid reduced equipment efficiency, which often leads to higher energy costs
- · Avoid inadequate regulatory compliance, which could lead to fines and affect reputations

Building Renewal: Outstanding General Education Fund Buildings Fall 2023 (\$ in thousands)											
UI ISU UNI Total											
Individual											
Buildings 1	\$227,398	\$685,417	\$185,282	\$1,098,098							
Utilities	-	34,930	5,609	40,539							
Subtotal	\$227,398	\$720,347	\$190,891	\$1,138,637							
Included within Buildings 1	Five Year \$214,531	Capital Plan \$31,342	(FY 2025 - F \$40,000	Y 2029) \$285,873							
Utilities	-	3,500	-	3,500							
Grand Total	\$214,531	\$ 34,842	\$40,000	\$ 289,373							
Buildings 1	\$441,929	\$716,759	\$225,282	\$1,383,971							
Utilities	-	38,430	5,609	44,039							
Total	\$441,929	\$755,189	\$230,891	\$1,428,010							
¹ Includes site work	t.										

Completed vs Outstanding



For additional building renewal information, see page 50.

<u>Tuition Replacement Appropriation</u> - The 1969 General Assembly passed legislation (Iowa Code 262A) permitting the issuance of Academic Building Revenue bonds to fund capital projects at the Regent universities. The bonding program has enabled the Regents to finance critical academic construction needs at Iowa's public universities through the public sale of long-term bonds. The issuance of these bonds currently requires approval of the General Assembly and the Governor. Tuition replacement appropriations represent an ongoing commitment of the state to meet the debt service cost of Academic Building Revenue bonds. The Board requests an amendment to the Code to eliminate the legislative approval allowing the Board to issue bonds

for academic facility improvements like other Board-issued bonds. Tuition revenue is pledged to pay the principal and interest on the bonds, and the tuition replacement appropriation replaces that tuition revenue.

In recent years, the tuition replacement appropriation has ranged from \$32.45 million in FY 2017 to \$27.9 million in FY 2024. In addition to the new building renewal appropriation with the matching funds outlined on the previous page, this request includes an annual \$30 million commitment in tuition replacement funding for existing debt service on previously issued bonds and would allow the Regents to utilize the difference either directly or as additional debt service on Academic Building Revenue Bonds for GEF building renewal projects.

b. UNI Industrial Technology Center Modernization University of Northern Iowa



Of the \$40.5 million in funds appropriated to this project from FY 2021 to FY 2023, the 2023 General Assembly authorized the Board of Regents to *"expend such amount (from the UNI Industrial Technology Center Modernization project) as the Board determines for purposes of steam tunnel repairs at the University of Northern Iowa"* (SF 577). That amount of funds was \$3.85 million.

In December 2022, UNI required emergency repairs to their Steam Distribution System. UNI staff, through their due diligence with preventive maintenance, identified the steam issue quickly, avoiding an on-campus catastrophe. Specifically, design problems were found with steam pipe and associated pipe support brackets across a mile and a half of steam tunnel. To resolve the issue, steam pipe and associated support brackets were replaced at a cost of \$3.85 million.

The University of Northern Iowa requests \$3.85 million in FY 2025 for this project to recover the cost of the emergency steam repairs, which were redirected from this project.

	Proposed Appropriations ¹	Gifts & Donations	Total	Status	
FY 2021	\$1,000,000	-	\$1,000,000	Funded	
FY 2022	\$13,000,000	-	\$13,000,000	Funded	
FY 2023	\$26,500,000	\$2,138,000	\$28,638,000	Funded	
FY 2024	-	\$2,138,000	\$2,138,000	Funded	
TOTAL	\$40,500,000	\$4,276,000	\$44,776,000		-

¹ \$3.85 million was redirected to UNI's emergency steam repairs.





Through this project, the UNI Department of Technology proposes to renovate and expand the Industrial Technology Center to meet the needs of UNI students and Iowa industry. It would help prepare graduates to enter the workforce and to teach STEM disciplines.

The project also aligns with the Iowa Department of Education's initiative Career and Technical Education program by preparing the teachers who would prepare secondary school students and to educate the workforce in industrial and construction fields.



Construction progress, August 2023

Built in 1974, the existing building is programmatically obsolete and undersized for the program demands. The project would expand the building by 48,000 gross square feet and renovate over 52,000 gross square feet.

This project would eliminate \$10 million in building renewal costs.

c. Iowa Lakeside Lab – Housing Facility Iowa Lakeside Laboratory



The Iowa Lakeside Lab requests \$8.9 million to demolish two existing motel buildings used for student housing and build a new 75-bed, 40-unit, 21,200 gross square foot residence hall on Lakeside's 147-acre residential campus located eight miles southwest of Spirit Lake, Iowa west of scenic West Okoboji Lake.

The 75-bed residence hall would cover the maximum 65 bed demand in the summer and have built-in capacity for future enrollment growth. Demolition of the two motel buildings would eliminate \$500,000 in building renewal costs.





Proposed New Iowa Lakeside Lab - Housing Facility (up to 75 beds), east end, looking west

Proposed Project Budget										
	Proposed	Gifts &								
	Appropriations	Other Funds	Total							
FY 2025	\$ 1,500,000	-	\$ 1,500,000							
FY 2026	7,412,000	-	7,412,000							
FY 2027	-	-	-							
FY 2028	-	-	-							
FY 2029	-	-	-							
Total	\$ 8,912,000	\$0	\$ 8,912,000							

Project Schedule								
Planning	10.0 months							
Bidding	1.5 months							
Construction	12.0 months							
Occupancy	0.5 months							
Total	24.0 months							

Annual Operating Expenses

Operations and Maintenance	\$ 26,000
Utilities	19,000
Other (Grounds, Mail, Environmental Health	
& Safety, Department of Public Safety	12,000
Annual Capital Renewal	50,000
—	

Annual Operating Expenses: Source of Funds Student housing contracts, internship rentals, existing operating funds



Proposed New Iowa Lakeside Lab – Housing Facility (up to 75 beds), West end, looking east

In early 2022, Iowa Lakeside Lab subsequently hired CMBA Architects of Spencer to conduct a comprehensive housing study of existing housing and provide options for housing improvements.



East common area-second floor, looking east



Recreation Room-second floor, looking south

With the completion of this project, Iowa Lakeside Lab anticipates serving 300+ additional post-secondary students annually.

Construction of new housing is a critical step as Iowa Lakeside Lab seeks to expand the number of students, faculty and interns that can be housed at Iowa Lakeside Lab and participating in yearround education, research, and outreach programs. This is essential in maximizing the value of Iowa Lakeside Lab to Regent universities and northwest Iowa.



Typical housing unit



Typical housing unit floor plans, 1 or 2 bed flexibility

Iowa Lakeside Lab students currently live in 10 heatless cabins or two former motel buildings, built in the 1950s. Without heat, the 10 cabins can only be used in the summer and provide 25 beds. The motel buildings have 40 beds and are used year-round. Together, all 65 beds are filled during the summer during maximum bed demand. During the fall, winter or spring, the capacity falls to 22 beds.

Not only are the 10 heatless cabins only used in the summer, but they also share a centralized restroom and shower facility. In the early 2000's, the two motel buildings were purchased from a resort in Spencer, Iowa for \$55,000 and moved to Iowa Lakeside Lab's campus.





Existing Iowa Lakeside Lab housing: 25 cabin beds (10 cabins) for summer use only due to the lack of heating

Existing Iowa Lakeside Lab housing: 40 motel beds, for year-round use (two buildings)

While the motel buildings have electric heat and bathrooms, they are extremely energy inefficient with minimal wall/floor/ceiling insulation, have doors that open directly to the outdoors, and are served by energy-consuming window air conditioning units.

In addition, the motel (40 beds) and the cabins (25 beds) are lacking fire detection and fire suppression per a State of Iowa Fire Marshal inspection, storm shelters, secure entries, ADA compliant enhancements and ADA accessible parking.

Concurrent Lakeside Capital Projects

The Iowa Lakeside Lab – Housing Facility project would be integral to Lakeside's larger, comprehensive effort to modernize and winterize the campus. Concurrent Lakeside campus development projects include renovation of the Limnology Lab Building and replacement of King Lab. Together, both projects total \$6.5 million and are funded by philanthropic fundraising campaigns and foundation grant writing. Neither project requires state appropriations.

Capital improvement projects at Iowa Lakeside Laboratory are managed by the University of Iowa's Design and Construction Division.

About Iowa Lakeside Lab

The Iowa Lakeside Lab and Regent Resource Center (Lakeside) is a 147-acre residential campus located eight miles southwest of Spirit Lake, Iowa on scenic West Okoboji Lake. It is owned by the state of Iowa and operated through the Board of Regents.

The mission of Lakeside is to provide facilities and programing as a field station and community resource to support scientific education, research, and outreach programs of Regent universities. Lakeside supports several of the Board of Regents strategic efforts, including Objective 1.1 of the 2022-2027 strategic plan relating to student success.

Lakeside offers university courses focused on experiential learning models along with research opportunities for undergraduate and graduate students. A thriving internship program builds career skills for students in STEM fields as well as education, public health and communication, among other disciplines. Lakeside also includes formal K-12 STEM education in partnership with northwest lowa schools and inquiry-based summer camps.

Outreach efforts bring Regent scholarship to the public through presentations, workshops, and other community engagement events. Lakeside's water quality monitoring program provides valuable data to the Iowa Great Lakes community for the long-term protection and enhancement of the Okoboji lakes. Lakeside also engages with the humanities by hosting artists and writers for residencies, open studio events and collaborations with faculty and students.

Enrollment

Enrollment of Lakeside classes is capped at 12 per class to allow for the intensive, fast-paced and experiential education model.

Faculty work closely with students to not only teach them the course content, but often mentor students in research, career skill development and community engagement at the same time. Students remark on the accessibility of the faculty, which increases student success and achievement in the courses. As a Regents Resource Center, Lakeside works across university boundaries to support students in unique ways. Courses that are impractical or impossible to offer at one university can be offered for credit simultaneously to all Regent students, maximizing efficiency.

	Calendar Year	2018	2020	2022	2024	2026
Decidente	Undergraduates	75	70	95	175	250
Residents	Research Interns	12	25	35	50	80
	Total	87	95	130	225	330
Non-residents	K-12 Students	1,800	2,000	1,700	2,500	6,000

Growth in both enrollment for courses and internships is limited primarily by the lack of housing. Affordable housing (short or long term) in the lowa Great Lakes for students simply does not exist.

The addition of year-round housing as proposed through this project would leverage the existing Lakeside assets to maximize benefits to students, faculty and the community. Anticipated growth is detailed in the graph below.

While K-12 students do not reside at Lakeside, adding internship housing for education interns to assist with K-12 programming would allow significant growth in this area.

Lakeside has begun to explore models of short-term education programming for children in grades 7-12 that could be expanded if housing were available during the January term or May term (both Okoboji and Spirit Lake schools currently offer J or M terms). These J-term or M-term classes can be particularly useful in demonstrating STEM career opportunities and starting students on these educational pathways.

2. Five-Year Capital Plan for UIHC



UIHC's Five-Year Capital Plan for Other Funds would be \$969 million, up 23% from last year's \$786 million, due to a new Inpatient Bed Tower project.

Of course, this plan includes multiple projects that enhance UIHC infrastructure, renovate laboratories to accommodate modern technology, convert inpatient rooms to single-bed rooms and meet accreditation requirements.

FIVE-YEAR CAPITAL PLAN for UIHC

FY 2025 - FY 2029*

(\$	in	thousands)	
-----	----	------------	--

														Source
		Y 2025	F	Y 2026	F	Y 2027	F	Y 2028	F	Y 2029		Total		of Funds*
Fire and Environmental Safety														
Facility Wide Improvements to Meet Accreditation/Regulatory Reqs.	\$	200	\$	200	\$	200	\$	200	\$	200	\$	1,000		9
Fire Protection Systems Replacement (multiple projects)		200		200		200		200		200		1,000		9
Subtotal =	\$	400	\$	400	\$	400	\$	400	\$	400	\$	2,000		
NEW CONSTRUCTION														
Master Plan Infrastructure Enabling Work**	\$	17,840	\$	17,840	\$	17,840	\$	17,840	\$	14,840	\$	86,200	**	9,11
Inpatient Bed Tower**		5,000		153,000		167,000		163,000		161,000		649,000	**	9,11,4
Subtotal =		\$22,840	\$	170,840		\$184,840	5	\$180,840	\$	175,840	\$	735,200	**	
RENOVATION														
UIHC Electrical Power Enhancements (multiple projects)	\$	-	\$	-	\$	3,525	\$	3,080	\$	6,300	\$	12,905		9
UIHC Facilities Enhancement Program (multiple projects)		2,000		2,000		2,000		2,000		-		8,000		9
JPP L7 New Labor & Delivery Expansion **		16,000		20,000		5,000		-		-		60,000	**	9, 11
SFCH L7 Neonatal Intensive Care Unit Expansion **		15,000		5,500	-			-		-		41,000	**	9, 11
Installation of Diagnostic & Therapeutic Imaging Equipment														
Per Siemens Agreement		12,080		11,256		9,651		3,740		8,333		45,060		9, 11
SFCH L8 Inpatient Bed Expansion **		12,000		15,000		2,000	-		-			39,000	**	9, 11
JPP L6 Labor & Delivery Modifications	-			5,000		15,000		6,000	-			26,000		9, 11
Subtotal =	: \$	57,080	\$	58,756	\$	37,176	\$	14,820	\$	14,633	\$:	231,965		
Total =	: \$	80,320	\$	229,996	\$	222,416	\$	196,060	\$	190,873	\$	969,165	**	
**Expense outside of report time frame		· · ·						-				-		

* Source of Funds:

1	(not used: report State Funds in Table 1)	5	Dept'l Renewal and Replacement	9	University Hospitals Building Usage Funds
2	Building Renewal Funds	6	Aux. Enterprise Revenue Bonds	10	Center for Disabilities & Development
3	Treasurer's Temporary Investments (TTI) Income	7	lowa DOT (Road Use Tax Funds)		Building Usage Funds
4	Gifts and Grants	8	Student Health Fees	11	UIHC Bonds

*All projects identified in UIHC's Five-Year Capital Plan are contingent upon the availability of self-generated UI Hospitals and Clinics funding, UIHC bond revenue and/or gifts, approval through UIHC's annual capital budget process, finalizing specific renovation projects and approval of each project by the Board of Regents, State of Iowa. In addition, the "cutting edge" responsibility of the UIHC constantly brings about some revisions in planning. While this list includes most projects now envisioned for the **FY 2025-2029** period, the dynamics of clinical service-educational demands, corollary societal forces, accreditation, and regulatory requirements may mandate other projects over time. In accord with long-standing practice, any such changes which arise will be fully documented for consideration and approval by the Board of Regents, State of Iowa.

The UIHC Five-Year Capital Plan includes only those projects that are anticipated to be <u>initiated</u> during FY 2025-2029. It does not include projects with previously approved budgets that will have expenditures during the FY 2024-2028 period.

3. Five-Year Capital Plans for <u>Other Funds</u> for UI, ISU and UNI

The Five-Year Capital Plan for Other Funds for \$812 million for all three universities is down 19% from last year's \$1 billion.

Other Funds include all funds, except GEF building funds. Specifically, Other Funds include operating budget building repair funds, income from Treasurer's Temporary Investments (TTI), auxiliary service or enterprise bond funds (athletics, residence systems, parking, utilities and student unions), donor gifts, federal grants, departmental renewal and replacement funds.

While campus road repair projects are primarily funded by the lowa Department of Transportation's "State Parks and Institutional Roads Program" funds, replenished annually by the Iowa Road Use Tax Fund (RUTF), Other Funds do occasionally supplement them.

Five-Year Capital Plans for Other Funds

Does not include state or UIHC funds (\$ in thousands)

	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total	
UI	\$76,443	\$56,929	\$129,815	\$68,025	\$53,845	\$385,057	
ISU	69,844	77,322	61,568	50,274	56,904	315,912	
UNI	29,818	35,318	20,368	9,778	16,518	111,800	
Total	\$176,105	\$169,569	\$211,751	\$128,077	\$127,267	\$812,769 *	*
* down 1	9% from last yea	r's \$1 billion					



The UI's Five-Year Capital Plan for Other Funds would be \$385 million, down 42% from last year's \$659 million mostly due to the removal of the new \$212 million Medical Education Building.

FIVE-YEAR CAPITAL PLAN for OTHER FUNDS

(\$ in Thousands)

		F	Y 2025	F	Ý 2026	F	Y 2027	F	Y 2028	F	Y 2029	Fi	ve Year Total	Source of Funds*
NEW CONSTRUCTION		-		-		-		-		-				
Athletic Facilities - Replacement Facilities for Various Sports Pr	ograms	\$	7,000	\$	-	\$	9,000	\$	10,000	\$	-	\$	26,000	4, 6
Tippie College of Business Facility	-						35,000		26,350		21,000		82,350	4
Sul	btotal =	\$	7,000	\$	-	\$	44,000	\$	36,350	\$	21,000	\$	108,350	
RENOVATIONS														
Athletic Facilities - Renewal & Improvements		\$	500	\$	500	\$	500	\$	500	\$	500	\$	2,500	4, 6
Calvin Hall - Renovate			1,800		8,000		1,400		-		-		11,200	2, 3
Carver Hawkeye Area - Facility Improvements			-		10,000		1,000		-		-		11,000	4, 6
College of Medicine Facilities - Renewal & Improvements			9,500		9,500		9,500		8,500		8,500		45,500	3, 4, 5
Gilmore Hall - Modernization			-		-		1,000		5,800		-		6,800	2, 3, 5
Housing Facilities - Renewal & Improvements			13,398		5,023		7,750		4,750		-		30,921	6
Iowa Memorial Union - Modernization, Phase II			-		-		14,000		-		-		14,000	4, 6, 8
Lindquist Center - Building Modifications, Phase I			-		1,000		1,500		-		-		2,500	4, 5
Main Library - Renewal, Phase I					11,000		11,000		-		-		22,000	2, 3, 4, 5
Telecommunications - Renewal & Improvements			3,100		3,100		3,100		3,100		3,100		15,500	5
University Capitol Center - 2nd Floor Renovation			2,000		2,000		-		-		-		4,000	3, 5
Van Allen Hall - Modernization			-		-		-		3,500		18,000		21,500	2, 4, 5
Westlawn - Raze Facility			-		-		1,500		-		-		1,500	2
Sul	btotal =	\$	30,298	\$	50,123	\$	52,250	\$	26,150	\$	30,100	\$	188,921	
PARKING / INSTITUTIONAL ROADS														
Lot 33/40 Reconstruction and New Ramp		\$	35,000	\$	-	\$	-	\$	-	\$	-	\$	35,000	5, 6
Lot 13 Reconstruction			-		1,676		-		-		-		1,676	5, 6
IMU Ramp Replacement			-		-		29,870		-		-		29,870	5
Institutional Roads Program			1,670		245		245		2,800		245	•	5,205	7
Parking System - Renewal & Improvements			2,475		4,885		3,450		2,725		2,500		16,035	5, 6
Sul	btotal =	\$	39,145	\$	6,806	\$	33,565	\$	5,525	\$	2,745	\$	87,786	
UI	Total =	\$	76,443	\$	56,929	\$	129,815	\$	68,025	\$	53,845	\$	385,057	

* Source of Funds:

1 (not used: report State Funds in Table 1)

2 General Fund Building Renewal

3 Income from Treasurer's Temporary Investments

4 Gifts and Grants

5 Departmental Renewal and Replacement Funds

6 Auxiliary Service or Enterprise Revenue Bonds

7 Iowa DOT (Road Use Tax Funds)

8 Student Health Fee

9 University Hospital Building Usage Fund

10 Center for Disabilities and Development Building Usage Fund

11 University Hospital Revenue Bonds

12 Federal Appropriations

IOWA STATE UNIVERSITY

ISU's Five-Year Capital Plan for Other Funds would be \$316 million, up 39% from last year's \$228 million due to the addition of multiple smaller projects.

FIVE-YEAR CAPITAL PLAN for OTHER FUNDS

(\$ in Thousands)

Laura Otata Universita						Five Year	Source of
	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Iotal	Funas
Cooling Tower Condenser Water Pipe Replacement	\$ 2.000	\$ 1.500	-	-	-	\$ 3.500	6
Utility system repairs and overhauls under \$1 mil	1,500	2,000	3,500	3,500	3,500	14,000	6
Subtotal =	\$ 3,500	\$ 3,500	\$ 3,500	\$ 3,500	\$ 3,500	\$ 17,500	
			¢ 4.000	¢ 4.000		¢ 0.000	4
Southwart Field Carendary Lighting	-	-	ֆ 4,000	\$ 4,000	-	\$ 8,000	4
	-	-	-	1,000	-	1,000	6
	\$ -	\$ -	\$ 4,000	\$ 5,000	Ъ -	\$ 9,000	
RENOVATIONS							
Gilman Renovation						•	
Private funds	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000	\$ 8,000	\$ 40,000	4
University funds	-	6,000	8,000	6,000	2,300	22,300	5
Black Engineering - Repurpose former IMSE space for Mech. Eng	2,500	2,500	-	-	-	5,000	4
Swine Teaching and Research Facility	-	4,000	3,000	3,000	-	10,000	4
Town Engineering - Expansion	5,000	10,000	10,000	-	-	25,000	4
Veterinary Medicine - Repurpose space formerly used by VDL	100	100	1,500	1,300	-	3,000	5
Memorial Union Parking Ramp Capital Improvements	-	-	-	-	25,000	25,000	5
Cardio Equipment Replacement	-	300	-	-	-	300	6
Resurface 2nd Floor Lied Jogging Track and Old State Gym Tracl	-	-	-	350	-	350	6
Lied Rec - Expansion & Remodel	15,000	5,000	-	-	-	20,000	6
Hilton Renovation/Deferred Maintenance	-	-	-	-	-	-	
Private funds	4,000	-	-	-	-	4,000	4
Auxiliary funds	13,000	13,000	-	-	-	26,000	6
Knapp Storms Update	1,000	-	-	-	-	1,000	6
Seasons Life Cycle Refresh	-	2,000	-	-	-	2,000	6
Conversations Life Cycle Refresh	-	-	1,000	-	-	1,000	6
Design Café Renovation	-	-	500	-	-	500	6
Courtvard Café Renovation	-	-	300	-	-	300	6
MU Market Renovation	-	350	-	-	-	350	6
Eastside Market Renovation	-	250		-		250	6
Westside Market Renovation	_	250	_	_	_	250	6
	-	200	-	-	-	200	0

Subtotal = \$48,600 \$51,750 \$32,300 \$18,650 \$35,300 \$186,600

(continued next page)

IOWA STATE UNIVERSITY

FIVE-YEAR CAPITAL PLAN for OTHER FUNDS (continued)

(\$ in Thousands)

GENERAL FUND FACILITY REPAIR, SAFETY, ACCESSIBI	LITY										
MacKay - Replace Roof Sections A,B,C,D,E,G,H,I		5 1,6	646							1,646	2
Howe - Replace Roof Section M		1,5	595							1,595	2
Kildee - Replace East Side Office AHUs, Phase 3		1,2	256							1,256	2
Beardshear - Replace Roof Sections A, B, E, F, G, H, I				1,660						1,660	2
Kildee - Replace East Side Office AHU, Phase 4				1,267						1,267	2
Molecular Biology - Modernization of Elevators ELC1, ELC2, ELC3				1,561						1,561	2
Kildee - Replace Roof Sections G,H,I,J					1,976					1,976	2
Printing - Replace Roof Section A					1,071					1,071	2
Chemical Storage - Replace AHUs 8 and 9					1,268					1,268	2
Simon Estes Music - Replace Roof Sections A through L						1,449				1,449	2
Parks Library - Replace AHU 3 & 4						1,400				1,400	2
Carver - Replace Upper Level Windows						1,239				1,239	2
Howe - Replace Roof Sections A-K								1,825		1,825	2
Simon Estes Music - Replace AHUs 1,3,4								1,210		1,210	2
Stephens - Elevator ELC1, ELC2, ELC3 Modernization								1,661		1,661	2
Repair, safety and accessibility projects under \$ 1 Mil		2,7	799	2,324	2,694	1,978		2,509		12,304	2
Subtot	al = :	5 7,2	296	\$ 6,812	\$ 7,009	\$ 6,066	\$	7,205	\$	34,388	
TELECOMMUNICATIONS											
		\$ 2,3	352	\$ 7,164	\$ 6,163	\$ 7,212	\$	103	\$	22,994	6
Subtot	al = :	\$ 2,3	352	\$ 7,164	\$ 6,163	\$ 7,212	\$	103	\$	22,994	
PARKING / INSTITUTIONAL ROADS											
Institutional Roads Program	:	5 9	996	\$ 996	\$ 996	\$ 996	\$	996	\$	4,980	7
Annual Parking Lot Pavement Preservation		2,6	500	2,600	2,600	2,600		2,600		13,000	6
Subtot	al = :	5 3,5	596	\$ 3,596	\$ 3,596	\$ 3,596	\$	3,596	\$	17,980	
RESIDENCE SYSTEM											
Deferred Maintenance (Residence Halls only)		5 3	395	\$ 395	\$ 395	\$ 395	\$	395	s	1,975	6
Frederiksen Court-Life Cycle Improvements		1.2	200	-	300	300		300		2,100	6
Frederiksen Court-Fire Alarm, Roof, Window Replacements		-		1.200	900	900		900		3,900	6
Friley Residence Hall-Bathroom Renovations-Remaining Phase	ses	2.7	780	2,780	3,280	4,530		5,480	-	18,850	6
Various Life Cycle Paint & Corridor Flooring		1	25	125	125	125		125	•	625	6
Subtot			00	4 500	E 000	0.050	-	7 000		07 450	

ISU Total = \$69,844 \$77,322 \$61,568 \$50,274 \$56,904 \$315,912

Source of Funds:

1 (not used: report State Funds in Table 1)

2 General Fund Building Renewal

3 Income from Treasurer's Temporary Investments

5 Departmental Renewal and Replacement Funds 6 Auxiliary Service or Enterprise Revenue Bonds

7 Iowa DOT (Road Use Tax Funds)

4 Gifts and Grants



UNI's Five-Year Capital Plan for Other Funds would be \$124 million, up 9% from last year's \$114 million.

FIVE-YEAR CA	PITA	AL PLAN	to		R I	FUNDS	5								
	Pre	evious	na	5)									Fi	ve Year	Source of
	Yea	ars	F	Y 2025	F١	Y 2026	F	Y 2027	F	Y 2028	F	Y 2029		Total	Funds*
Power Plant Replace CFU Main Tie Transformer	\$ ¢	-	\$ ¢	-	\$ ¢	500	\$ ¢	1 000	\$ ¢	-	\$ ¢	-	\$ ¢	1,000	6
Steam and Condensate Line Replacement AEB to CEEE	э \$	-	φ \$		φ \$	-	9 \$	750	φ \$	750	φ \$	-	φ \$	2,000	6
Subtotal =	\$	-	\$	-	\$	500	\$	2,250	\$	1,750	\$	-	\$	4,500	
	\$	-	\$	-	\$		\$	-	\$	-	\$	-	\$	-	
Subtotal =	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	
RENOVATIONS															
Outdoor Track Replacement	\$	-	\$	1,400	\$	-	\$	-	\$	-	\$	-	\$	1,400	4
Gilchrist Roof Replacement	\$	-	\$	1 200	\$	-	s	-	\$	-	\$	-	\$	1 200	2
Campanile Renovation and Landscape	s	1 200	\$	1 000	\$	-	\$	-	\$	-	\$	-	\$	2 200	4
	¢	10.850	¢	20,000	¢	10 000	¢		¢		¢		¢	40.850	-
	ې ب	10,650	ې م	20,000	ф Ф	0,000	ې ب	-	ф ф	-	• •	-	\$ \$	40,850	4
	Þ	-	ې ۹	4,000	Þ	6,000	Þ	-	Þ	-	Þ	-	Þ	10,000	4
	\$	-	\$	1,000	\$	1,000	\$	-	\$	-	\$	-	\$	2,000	2
Commons Renovation	\$	-	\$	-	\$	10,000	\$	10,000	\$	-	\$	-	\$	20,000	4
Rod Library Roof Replacement	\$	-	\$	-	\$	2,500	\$	-	\$	-	\$	-	\$	2,500	2
Wellness Recreation Center Climbing Wall Replacement & New Bouldering Wall	\$	-	\$	-	\$	1,150	\$	-	\$	1,210	\$	-	\$	2,360	2, 4, 5, 6
Gallagher Bluedorn Performing Arts Center Seating Replacement	\$	750	\$	-	\$	-	\$	800	\$	-	\$	-	\$	1,550	4
Wellness Recreation Center Roof Replacement Phase 2	\$	-	\$	-	\$	-	\$	1.400	\$	-	\$	-	\$	1.400	2
Maucker Union Roof Replacement	\$	-	\$	-	\$	-	\$	3.500	\$	-	\$	-	\$	3,500	6
Gallagher Bluedorn Performing Arts Center Roof Replacement	s		\$	-	\$	-	\$		\$	3 000	\$	_	\$	3,000	2
Schindler Education Center Roof Replacement	ç	_	¢	_	¢	_	¢	_	¢	1 400	¢	_	¢	1 400	2
Communication Arts Contor Roof Poplacoment	¢		¢		¢		¢		¢	1,400	¢	1 000	¢	1,400	2
Mal and Center Reaf Benjacement	÷	-	φ ¢	-	÷	-	÷	-	φ ¢	-	φ ¢	2,400	φ ¢	2,400	2
	÷.	-	¢ ¢	-	¢ ¢	-	÷ ¢	-	¢ ¢	-	÷	3,100	¢ ¢	3,100	4
Subtotal =	ې : \$	- 12,800	ې \$	27,500	ب \$:	32,150	ې \$	17,200	ې \$	7,110	ب \$	5,600	ب \$	102,360	2
PARKING / INSTITUTIONAL ROADS															
Institutional Roads	\$	-	\$	468	\$	468	\$	468	\$	468	\$	468	\$	2,340	7
Parking Lot Rehabilitation	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	10
Subtotal =	\$	-	\$	468	\$	468	\$	468	\$	468	\$	468	\$	2,340	
RESIDENCE SYSTEM															
Residence System - ResNet Upgrades	\$	500	\$	600	\$	-	\$	-	\$	-	\$	-	\$	1,100	6
Residence Hall Roof Replacement and Envelope Sealing and Caulking	¢		¢	750	¢	750	¢		¢		¢		•	1 500	c
Mauakar Lipian East Sanrias Lingrada	ę	-	ų e	1 000	φ e	1 000	÷	-	φ ¢	-	φ ¢	-	,	2,000	6
	Ψ e	-	ې د	100	φ e	450	φ e	-	φ ¢	450	φ e	-	r 🦉	2,000	e
Residence Hall Finish Opgrade	ð Ö	-	\$ \$	100	ф Ф	450	¢ ¢	450	ф Ф	450	ф Ф	450	,	1,900	0
Residence Hall Renovation Subtotal =	\$ \$	-	\$	- 1,850	\$	- 2,200	\$	- 450	\$	- 450	\$	10,000	\$	15,400	6
UNI Total =	: \$	12,800	\$	29,818	\$:	35,318	\$	20,368	\$	9,778	\$	16,518	\$	124,600	

* Source of Funds Key:

1 (not used: report State Funds in Table 1)

2 General Fund Building Renewal

3 Income from Treasurer's Temporary Investments

4 Gifts and Grants

5 Departmental Renewal and Replacement Funds

6 Auxiliary Service or Enterprise Revenue Bonds

7 Iowa DOT (Road Use Tax Funds)

- 8 Student Health Fee
- 9 Multimodal Transportation Center Maintenance funds

10 Parking Operations

End of Capital Plans

(Page intentionally left blank)

Funded through the:

Part 2 of 3

INSTITUTIONAL ROADS PROGRAM

Executive Summary: This year's \$12,550,000 Institutional Roads Program, funded through the lowa Department of Transportation's "State Parks and Institutional Roads Program," is up 6% from last year's \$11,800,000. Per the Board's *Policy Manual* §2.3, Board approval is required to use these lowa DOT funds.

1. Five-Year Institutional Roads Program

	Project Summary				c	Cale	endar Yea	ar					
	· · · j· · · · · · · · · · · · · · · ·		CY 2024		CY 2025		CY 2026		CY 2027	(CY 2028		Total
UI Reconstruction	Finkbine Drive (asphalt portion)	\$	800,000		-		-		-		-	\$	800,000
and Improvements	South Grand Ave (Med Labs)		600,000		-		-		-		-		600,000
	Hawkins Drive - Finkbine to Elliott Drive		-		-		-		2,330,000		-		2,330,000
	Reconstruction and Improvements Subtotal	\$	1,400,000	\$	-	\$	-	\$	2,330,000	\$	-	\$	3,730,000
	-												
Repair	Pavement Management	\$	45,000	\$	45,000	\$	45,000	\$	45,000	\$	45,000	\$	225,000
	Annual Special Maintenance		225,000		200,000		200,000		200,000		200,000		1,025,000
	Repair Subtotal	\$	270,000	\$	245,000	\$	245,000	\$	245,000	\$	245,000	\$	1,250,000
	University of Iowa Total	\$	1,670,000	\$	245,000	\$	245,000	\$	2,575,000	\$	245,000	\$	4,980,000
								-					
ISU Reconstruction	Scholl Road - Ontario to north of railroad tracks	\$	68,000				-		-		-	\$	68,000
	13th Street - Stange Road east to ISU property limit		-		282,000		336,000		446,000		472,000		1,536,000
	Reconstruction Subtotal	\$	68,000	\$	282,000	\$	336,000	\$	446,000	\$	472,000	\$	1,604,000
	Courth 40th Charact (and of lock Trian Charling) that					-							
Improvomente	south foth Street (east of Jack Trice Stadium) - traffic		200,000		200,000								400.000
improvements	Signal		200,000		200,000				-		-		400,000
	replacement		170 000		170 000		260 000				-		600 000
	Improvements Subtotal	\$	370,000	\$	370,000	S	260,000	\$	-	\$	-	\$	1 000 000
		Ψ	010,000	Ý	010,000	Ţ	200,000	Ŷ		Ψ		Ŷ	1,000,000
Repair	Pavement Management	\$	15,000	\$	15,000	\$	15,000	\$	15,000	\$	15,000	\$	75,000
	Annual Special Maintenance		85,000		85,000		85,000		85,000		85,000		425,000
	Pavement Preservation		458,000		244,000		300,000		450,000		424,000		1,876,000
	Repair Subtotal	\$	558,000	\$	344,000	\$	400,000	\$	550,000	\$	524,000	\$	2,376,000
	lowa State University Total	\$	996,000	\$	996,000	\$	996,000	\$	996,000	\$	996,000	\$	4,980,000
	1												
UNI	Janninga Drive (Janninga Court Anastmenta ta 500' apat)		170.000									•	170.000
Reconstruction	Delasta Street (Obia Street to Badalan Drive)	\$	473,000		-		-		-		-	\$	473,000
	West 21st Street (Onlo Street to Redeker Drive)		-		473,000		-		-		-		473,000
	West 22nd Street (Hudson Road to 200' west)		-		-	-	200,000		-		-		213 000
	Campus Street (South of Univ. Ave. to Jennings Dr.)		-	-	-	-	213,000		473.000		230.000		703.000
	Towers Drive								473,000		243,000		243 000
	Reconstruction Subtotal	\$	473 000	\$	473 000	S	473 000	\$	473 000	\$	473,000	\$	2 365 000
		Ψ	410,000	Ψ	410,000	Ψ	410,000	Ŷ	410,000	Ψ	410,000	Ψ	2,000,000
Repair	Pavement Maintenance	\$	25,000	\$	25,000	\$	25,000	\$	25,000	\$	25,000	\$	125,000
	Repair Subtotal	\$	25,000	\$	25.000	S	25.000	\$	25.000	\$	25,000	\$	125,000
	University of Northern Iowa Total	\$	498,000	\$	498,000	\$	498,000	\$	498,000	\$	498,000	\$	2,490,000
			,		,		,		,		,		, ,
IA LL Repair	pavement repairs, crack sealing	\$	20,000	\$	20,000	\$	20,000	\$	20,000	\$	20,000	\$	100,000
	Iowa Lakeside Laboratory Total	\$	20,000	\$	20,000	\$	20,000	\$	20,000	\$	20,000	\$	100,000
			,		,		,		,		,		,

2. Overview of Five-Year Institutional Roads Program

The Iowa DOT's "State Parks and Institutional Roads Program" is funded by the Road Use Tax Fund (RUTF), which is state-shared revenue created in 1949 by the Iowa Legislature and enshrined into the Iowa Constitution to assist state, county and city governments with the construction, repair and maintenance of Iowa's road infrastructure. The Legislature also sets the fuel tax rate, which contributes to the RUTF.

Per *lowa Code* §307.24, the DOT's "State Parks and Institutional Roads Program" provides 65/100 of one percent of the Iowa Road Use Tax Fund (RUTF) for the construction, reconstruction, improvement and maintenance of roads and streets located on all state land, including the Regents. The Regents' annual allocation is 30 percent of this amount.



Each year, the Iowa DOT provides the Board Office with their annual allocations for the next five years. While these Iowa DOT funds are efficiently allocated and much appreciated, we acknowledge that state funds are scarce, and that this level of funding is not sufficient to address all Regent road improvement needs.

The five-year DOT allocation breakdown:

40% University of Iowa = \$ 4,980,000 40% Iowa State University = 4,980,000 20% University of Northern Iowa = 2,490,000 Total = \$12,450,000

> lowa Lakeside Lab = 100,000 Total = \$12,550,000

The Regents' most urgent roadway needs fall into three categories:

- reconstruction
- improvements
- repairs

Funded through the:

3. Proposed road projects for CY 2024 only

The Institutional Roads Program for calendar year 2024 would be \$3.2 million, up 33% from last year's \$2.4 million.

			ADUI
UI		CY 2024	Total
See next pages. Finkbine Dr	ive (asphalt portion)	\$ 800,000	
South Gran	d Ave (Med Labs)	600,000	
Pavement	/lanagement (ongoing)	45,000	
Annual Spe	cial Maintenance (ongoing)	225,000	\$1,670,000
ISU			
See next pages. Scholl Road	l – Ontario to just north of railroad		
tracks		\$ 68,000	
South 16th	Street (east of Jack Trice Stadium)		
- traffic sign	al	200,000	
University E	Boulevard & 6th Street - traffic		
signal repla	cement	170,000	
Pavement	/lanagement (ongoing)	15,000	
Annual Spe	cial Maintenance (ongoing)	85,000	
Pavement F	Preservation (ongoing)	458,000	\$ 996,000
UNI			
See next pages. Jennings D	rive (Jennings Court Apartments to		
500 feet ea	st)	\$ 473,000	
Pavement I	Aaintenance (ongoing)	25,000	\$ 498,000
lowa			
Lakeside Lab		<u> </u>	-
Pavement P	Repairs, crack sealing (ongoing)	\$ 20,000	\$ 20,000

Proposed road projects for CY 2024 = \$3,184,000

Upon approval of this "Five-Year Institutional Roads Program," each project would be subject to the Board's capital project approval process, consistent with the Board's *Policy Manual* §2.3.

4. Institutional Road Program Project Descriptions for CY 2024

- Finkbine Goff Course
 Finkbine Drive

 Finkbine Drive Reconstruction
- a. University of Iowa: Finkbine Commuter Drive at South Access

b. University of Iowa: South Grand Avenue Reconstruction







University of Iowa: Institutional Roads

University of Iowa, 32 total miles





b. Iowa State University: Institutional Roads projects for CY 2024 - CY 2028

Iowa State University, 45 total miles

North



c. University of Northern Iowa: Institutional Roads projects planned for CY 2024 - CY 2028

University of Northern Iowa, 10 total miles

North

(Page intentionally left blank)

Part 3 of 3

FACILITIES GOVERNANCE REPORT

Executive Summary: The annual Facilities Governance Report for FY 2023, required by the Board's *Policy Manual* §2.3, is intended to provide the Board with a broad overview of the size, age, value and general condition of Regent facilities.

Combined with intellectual, financial and human resources, facilities are a primary asset of higher education. Quality facilities help ensure excellent academic programs and the ability to attract and retain students, faculty and staff.

1. Quick Facts

Size, Age and Replacement Cost of Facilities

Acres, total	= 5,164 acres*
Paved roads	= 88 miles*
Number of buildings	= 922*
Building average age, GEF facilities only	= 45 years
Building average age, all facilities	= 41 years
 Square footage, GEF facilities only 	= 19 million gsf
Square footage, all facilities	= 41 million gsf
 Replacement cost, GEF facilities only 	= \$11.4 billion
 Replacement cost, all facilities 	= \$23.7 billion

All Funds Spent: projects over \$250,000

•	FY 2023, up 26% from last year	= \$ 309 million
•	Average, last 5 years	= 288 million
	increase from 5-year average	= \$ 21 million

Fire Safety: General Education Fund facilities only

•	FY 2023, completed, up 23%	= \$1.5 million
•	Average completed, last 5 years	= 1.9 million
	decrease from 5-year average	= (\$ 0.4 million)
•	FY 2024, planned, down 24%	= \$ 2.3 million
•	Outstanding Fire Safety, down 42%	= \$ 8.8 million

Building Renewal: General Education Fund facilities only

n
n
n)
n
า

* Excludes ISU Agricultural Research Farm's 9,982 acres, 403 buildings and roads.

2. Size, Age and Replacement Cost of Facilities

a. Regent acres:

- 4,650 acres = on-campus, down 0.3% from last year
- 513 acres = off-campus, unchanged from last year *
- 5,163 acres = total or 8.07 square miles
- * Does not include ISU's 9,999 Agricultural Research Farm acres, up 0.2% from last year's 9,982 acres.

b. Regent square footage: GEF facilities, UIHC, athletics, residence halls, parking, utilities and all other facilities



Regent Square Footage by University and Use

Gross Square Feet	UI	ISU	UNI	Total
Academic, Research, &				·
Administration (GEF)	9,077,855	7,447,458	2,593,358	19,118,671
				19,118,671
UIHC	5,076,955			5,076,955
All Other	7,202,542	7,547,812	2,127,607	16,877,961
				21,954,916
Total	21,357,352	14,995,270	4,720,965	41,073,587

c. Replacement Cost of Facilities

All Regent facilities have 41.1 million gross square feet (gsf) with a replacement cost of \$23.7 billion. Of those 41.1 million gsf, General Education Fund (GEF) facilities occupy 19.1 million (46%) with a replacement cost of \$11.4 billion.

Replacement costs play a key role in setting a facility's building renewal budget. The Board's *Policy Manual* §2.3 requires that universities annually budget 1.5% of a new facility's replacement cost to fund its future routine maintenance and building renewal costs. <u>This 1.5% is</u> not intended to fund the current \$1.4 billion backlog in building renewal.

Replacement costs are based on the following set of \$/gsf values used by all Regent universities.

	Replacement
Regent Facility Type	Cost per GSF
academic classroom and offices	\$447
administrative offices	\$375
animal facility	\$466
athletics, recreation or general use	\$430
day care	\$323
hospital	\$993
laboratory	\$533
laboratory service	\$331
library	\$415
medical clinic	\$476
museum	\$465
parking garage	\$75
performing arts	\$613
residence or house	\$285
shop or storage	\$318
student union	\$386

These replacement costs were derived through teamwork between the Regent universities and the use of construction cost data from the following construction industry cost experts.

- R.S. Means construction data, a subsidiary of Gordian
- U.S. Department of Defense
- APPA (Association of Physical Plant Administrators)
- College Planning & Management magazine
- Regent capital projects

Final replacement costs were a combination of averages across these five sources and inhouse interpolations by Regent universities, attaining replacement costs that best fit the Regents' wide variety of building types.

d. Age and Quality: Gordian, a nationally known strategic planning and advisory firm specializing in higher education facilities, has consulted with all three universities at various times, and tracks over 400 campuses in 44 states and four provinces in Canada. They report there have been two major waves of construction over the last 65 years, which stress all higher education abilities to care for their facilities and contribute to 58% of Regent building renewal.



Regent Construction: mid 1800's to present

Gordian: 2022 State of Facilities in Higher Education

Most U.S. campus buildings were constructed before 1975. The Regents' average facility age is 41 years, just like last year. In any facility, age and the quality of the original construction are the two biggest contributors to building renewal and fire safety deficiencies.

>First Wave of Construction: 30% of Regent Facilities

The "First Wave" of construction in the 1960s and 1970s represents 30 percent (see previous graph) of Regent GEF facilities and 40 percent of all campus construction in the United States. It was generated by the G.I. Bill of 1944 and the Baby Boomer Generation (persons born between 1946 and 1964). This construction wave is characterized by buildings that were built quickly, but poorly and now represents the Regents' single largest source of building renewal. Now 42 to 61 years old, most of these facilities and/or their buildings must be repaired, renovated or replaced to maintain competitive programs on Regent campuses.

This wave represents our "catch up" need in building renewal.

> Second Wave of Construction: 27% of Regent Facilities

The "Second Wave" of construction from 1995 to 2015 represents 27 percent (see previous graph) of Regent GEF facilities and 30 percent of all campus construction in the United States. It was generated by the increasing enrollment of millennials (persons born between 1981 and 1996), who had new higher education expectations, including a higher demand for newer technologies and more collaboration. This wave produced buildings that met those needs, were much more energy efficient and were much more "high tech." However, these buildings require much more routine and major maintenance to keep their more sophisticated systems operating at optimal levels.

This wave represents our "keep up" need in building renewal.

In summary, the Regent's "catch up" needs (30 percent-First Wave) and "keep up" needs (27 percent-Second Wave) make up 58 percent of all outstanding building renewal in Regent facilities.

3. State-Funded Square Footage Comparison: Regents vs Seven Other State Agencies

The following graph compares the amount of state-funded (appropriations and/or Academic Revenue Bonds (ABRs)) square footage of eight state of Iowa agencies. It does not include the Iowa Department of Education, whose facilities have not been funded by appropriations or ABRs through FY 2023.

When adding the Regents' auxiliary facilities on top of the Regents' GEF square footage, the Board of Regents owns, operates and maintains 64 percent of all square footage at these eight state agencies. Auxiliary facilities include the University of Iowa Hospitals and Clinics, utilities, athletic facilities, residence halls, recreation facilities, parking, student unions and Iowa State University Agricultural Experiment Station.



State-Funded Vertical Infrastructure

percentage of square feet*

* 2019, does not include the Department of Education

Please note in the above chart that the Regents' have 50% more state-funded vertical infrastructure facilities than the Iowa Department of Administrative Services (DAS).

4. All Funds Spent

"All Funds" include state appropriations, building renewal (repair) funds, institutional road funds (DOT), gifts and grants; Treasurer's Temporary Investments (TTI) income, proceeds of academic building (ABRs), dormitory, athletics, telecommunications and other revenue bonds, University of Iowa Hospitals and Clinics (UIHC) building usage funds and revenue bonds.

In FY 2023, universities spent \$309 million, which is a 26% increase from last year's \$245 million. The 5-year average is \$288 million.

In the first four of the last 10 years, the Regents' number of projects and funds spent increased together until FY 2016. For the next five years until FY 2021, universities focused on lowering building renewal costs by doing more, but smaller projects.



5. Space Utilization

	Space Utilization	Unive	rsity Class	rooms UNI	I	-aboratorie	s UNI
s	# of Rooms	278	206	123	169	336	110
Roon	Average Room Periods Used per Week	26.15	21.4	17.8	14.27	12.5	11.0
s	# of Seats	14,113	14,544	6,030	4,952	9,188	3,598
Seat	Utilization of Seats when Room is Occupied	58.2%	59.8%	59.8%	52.7%	64.5%	61.0%

General Strategies for Optimal Use of Facilities

- a. Each university should adopt general principles, consistent with the Board's and each university's strategic plan, regarding space assignment and scheduling of classes, and should so inform the campus community. Each university should also ensure that its policies and procedures regarding space are consistent with these principles.
- b. The universities should use their appropriate campus committees to stimulate discussions on improving the utilization of campus space and facilities and to provide recommendations to the university administration.
- c. Space planning should continue to be a university responsibility and be part of comprehensive long-range campus planning, which includes an analysis of the quality, quantity and location of the space.
- d. Requests for new space should continue to be documented and justified on a functional need basis with a demonstration that the identified program need cannot be met more economically through more efficient use of existing space or renovation, consistent with the Board policy.
- e. Each university should review its existing utilization data when planning for new or renovated space. To the greatest extent possible, objective measures should be used to determine space needs. These objective measures could include benchmarking data or objective models, supplemented by further analyses and specialized studies.
- f. Each university should consider the development of policies regarding office space for parttime employees, including adjunct faculty, graduate students and emeritus faculty.
- g. Each university should keep and utilize project guidelines for the size of offices as each new construction or renovation project is conducted.
- h. Each university should submit with its request to lease space, an explanation of how campus spaces were first examined and what spaces were found unsuitable.
- i. Classrooms, class laboratories and other facilities should be designed and scheduled for optimal utilization given program needs and student expectations.

- j. The universities should strive to design efficient facilities, providing for as much usable (net) square footage as reasonably possible within the gross square footage and program goals.
- k. Universities should be as thorough and innovative as possible in their allocation and reallocation of space within their existing physical plants.
- I. For those facilities thought to be obsolete, the universities should, of course, assess the building's physical condition, but also its contribution to the university's mission, heritage and potential for reuse. Based upon this assessment, each university should determine whether it is prudent to retain such facilities or raze and recycle them.

University of Iowa

Optimal Utilization of Space

The review, analysis, assignment, and management of UI campus space plays a significant role in the success of university programs. Effective and efficient utilization of this limited resource relies on a collaborative partnership between campus programs and the Campus Planning and Development Office. The team approach supplemented by formal space planning policies and procedures help align programmatic needs with space assignments in support of institutional objectives.

Campus Master Plan

To balance and align current space needs with long-range goals, decisions about space are reviewed and coordinated with the Campus Master Plan. The Master Plan is driven by each unit's current operating needs as well as the unit's strategic aspirations. Campus Planning and Development and the Office of the Provost recently revised the approach to Master Planning to strengthen the alignment of the University's programmatic needs with the physical assets that are required to support them. The new approach provides opportunities to address program needs in an adaptable, efficient, and cost-effective manner. Space needs are then addressed through the ongoing University Space Plan which considers the University goal to improve facility use, quality of buildings, site and infrastructure.

Institutional Space Planning

The University has refined the structure and processes to facilitate a more strategic and optimized approach to the utilization and assignment of campus space. Campus Planning and Development is collaborating with the Provost Office, Dean's Council, and other campus programs to manage the University's ongoing Space Plan.

Reassignment

Campus Planning and Development works directly with the Office of the Provost, Office of the Vice President for Research, departmental executive officers, college deans, and others regarding space allocations and assignments. The University Space Committee reviews all major space reassignments to assure each is justifiable and aligns with the Campus Master Plan and University Strategic Plan.

Programming

Campus Planning and Development is responsible for coordinating programming efforts in support of major capital projects. This work includes evaluation of space uses, benchmarking of space standards, both within the university and with peer universities, and coordination of project-specific programming. Staff may work with outside professional consultants when

necessary. A new two-step approach is being used to improve the programming process for capital projects. Step 1: the Feasibility Study is being beta tested on several projects during the Pre-"Permission to Proceed" phase. Step 2: the full Program Plan, to include long-term investment, ownership and operating impacts, follows feasibility once a plan is approved by campus leadership. The programming efforts set detailed expectations for the design process.

➢ Space Information

The University of Iowa's Space Information Management System (SIMS) provides the central master record of campus space, including the University Hospitals and Clinics. This data supports the Facilities and Administrative cost survey that is used to negotiate the University's federal indirect cost recovery rate. An increase of just one percent in this rate can mean millions of dollars in additional external funding. It is also used to calculate operating costs and building replacement values for insurance coverage. SIMS embeds data into floor plans, with a goal of increasing efficiency. Building Information Modeling (BIM) data would be incorporated into the drawings, and SIMS would integrate with the computerized maintenance management system to improve maintenance cost calculations and provide ready access to accurate information on building systems.

Iowa State University

Optimal Utilization of Space

lowa State University has policies and procedures to provide for the optimal utilization of existing campus facilities. Facilities Planning and Management (FPM) Planning Services supports university administration in the effective and efficient use of space. FPM Planning Services uses information about facilities utilization to provide analysis and advice on program space needs.

Space Allocation

Space is a limited resource. FPM Planning services provides recommendations for the effective and efficient use of university facilities and supports the Senior Vice President and Provost and the Senior Vice President for Operations and Finance in the allocation of space to colleges, departments, and other units.

Space Conversion

Advance notice and review of facility conversions or renovations is part of space management. The conversion of space from one function to another requires review by FPM Planning Services. Similarly, contracted space or commitments to new staff, which requires additional space beyond that already assigned, is also reviewed by FPM Planning Services.

Resource Management Model

The Resource Management Model assigns income and expenses to major organizational units of the university. One of the elements of the model is units pay the operating costs of space used.

The President, advised by the Capital Project Advisory Committee, is the final authority on use of existing space and development of new space.

University of Northern Iowa

Information provided is based on the university's database as of June 1, 2023. In 2015, the university retained a space management consultant, Ayers Saint Gross (ASG) of Washington, D.C., to update the space inventory and verify utilization rates, number of rooms, number of stations and square footage calculations. ASG was subsequently retained to update the report in 2020. UNI has also initiated numerous space utilization studies including the South Campus, West Campus, ITTC/Bartlett, Commons, West Gym and McCollum Science Hall.

Additionally, the University of Northern Iowa has created the Office of Planning and Space Management to provide ongoing facilities space planning, space allocation, and facility data information to ensure that university resources are planned, maintained, and managed in a way that contributes to its mission and desired student outcomes.

Recently the Facilities Management Department has implemented a new space management system (FAMIS 360). This allows the Office of Planning and Space Management to easily update changes to how space is used on campus and provide timely reports and visual maps of campus space usage.

The University of Northern Iowa has established Principles and Procedures for Space Assignment. These state that building space on campus is university space and is to be utilized for the maximum benefit of the institution. Space is to be utilized so that it maximizes resources consistent with the University Strategic Plan.

The assignment of instructional space rests with the Registrar's Office. While the Registrar may assign priority use of classrooms and labs to individual units, the space remains university space, and the Registrar retains the authority to schedule the space when not otherwise in use.

Assignment of academic space is the purview of the provost and non-instructional space is made by the division vice president to whom the space is assigned. Principles for non-instructional space state that landscape open office concepts would be utilized as much as possible for administrative functions and for adjunct faculty, graduate students, and emeritus faculty space. Assignment of emeritus and adjunct faculty office space is on a space available university-wide basis. The standard faculty office is 120 square feet.

The Facilities Planning Advisory Committee, composed of members representing each university division, the Academic Affairs Council, the Council of Department Heads, the Faculty Senate, and the Northern Iowa Student Government consider capital project priorities and the assignment of space and forward recommendations for consideration by the President's Senior Leadership Team.

The Facilities Management Department (FM) works with campus stakeholders on capital projects to maximize outcomes. For example, FM has coordinated with the Registrar's Office on all major capital projects to determine appropriate classroom and lab needs. Attention is given during planning to maximize usable space in facilities for a high net to gross square foot ratio. Energy use and sustainability are also key planning elements in the facilities planning process.

6. Interinstitutional Collaboration on Facilities

a. Electronic Bidding:

Since January 2018, all Regent capital projects utilize an online bidding system called *Bid Express*[®]. This system saves the Regents \$100,000 per year over paper bids through less administrative time, no copying, no mailings, no paper, and zero bidding errors or bid disputes. The Regents bid 200 projects per year.

• Depending on the number of times contractors bid on Regent projects, they also save money through quicker bid adjustments, fewer in-person bid openings and fewer bidding mistakes.

b. <u>Electronic Signatures:</u>

Since September 2018, all Regent capital projects utilize the electronic signature software *DocuSign*[®]. It saves the Regents over \$34,000 per year over wet signatures through less administrative time, no copying, no mailings, no paper, no missed signatures and no waiting for documents in the mail.

In FY 2023, the Regents had 395 facility *DocuSigns*[®] or 1.6 per workday.

c. Electronic Meetings:

In 2018, Regent capital project staff started using *Zoom*[®] to replace three of their four quarterly, in-person interinstitutional meetings. Since COVID-19 in early 2020, all meetings are done through *Zoom*[®], saving the Regents over \$15,000 per year through a substantial reduction in transportation time, transportation costs and meeting expenses.

d. Indefinite Services (IS) Agreements (Five Years) for Design Professionals:

In June 2023, the Board approved the use of 15 groups of "Indefinite Services Agreements" with terms up to 5 years on projects with budgets up to \$5 million. They allow the universities to quickly acquire the services of architects, engineers and other design professionals.

- Those 15 groups include categories such as General Architecture, Structural Engineering, Civil Engineering, Lab Design, Building MEPT (mechanical, electrical, plumbing and telecommunications), Building Envelope Commissioning and MEPT Commissioning.
- Three of the 15 groups are specifically for University of Iowa Hospitals and Clinics to fit a hospital's unique building type and infrastructure.
- Regent administrative costs have been reduced by eliminating four to eight weeks of traditional advertising, submittal processing, interviews and administrative time. The Design Professional on-boarding process has been drastically sped up using the IS Agreements.

e. Capital Project Management

- In July 2021, ISU and UNI finished the replacement of outdated internal contract management software: *FAMIS[®]*, *Centric[®]* and *EasyNetPay[®]*. *FAMIS[®]* and *Centric[®]* have been used by both universities for the last 20 years. Both universities are now in their second year of using *FAMIS360[®]*. Additionally, ISU uses *Lucernex[®]*, while UNI has adopted *eBuilder[®]*.
- UI continues to provide capital project oversight at Iowa Lakeside Laboratory.
- Utility staff from all universities collaborate on a regular basis to identify common utility issues, share best practices, and consult on current and near-term challenges.

- Through the Iowa Chapter of APPA (Association of Physical Plant Administrators), staff from the three universities collaborated with other Iowa higher education institutions to provide online facilities management professional development opportunities and an in-person conference in April 2023.
- Building maintenance, grounds and custodial staff continue to meet annually to share planning strategies, information and best practices.
- On-going monitoring of state licensure requirements for staff, including electricians, plumbers, HVAC technicians, fire alarm system installers and elevator mechanics to assure applicability and compliance for all Regent universities.
- All universities share the *FleetCommander*[®] fleet management system providing motor pool reservations along with vehicle maintenance and fuel usage management.
- The Board's *Policy Manual* §2.3 "Property and Facilities" continues to be updated to remain current with the *Iowa Code*, reflect evolving design and construction practices and simplify administrative processes.

f. Environmental Testing and Hazardous Waste Disposal:

All universities continue to share service contracts for environmental testing, hazardous and universal waste disposal, electronic waste recycling and boiler water treatment.

g. <u>Renewable Fuel: Miscanthus:</u>

UI and ISU continue the development of Miscanthus; a fast-growing dedicated energy crop grown by local farmers and used as a biofuel replacement of coal at UI's Power Plant.

- Miscanthus grass was selected as a source of alternative energy for the University of Iowa in partnership with Iowa State University's Agronomy Department and AgGrow Tech, a private firm who is a leader in Miscanthus technology and production.
- One acre of Miscanthus grass displaces 8,000 pounds (4 tons) of coal. Since 2013, UI has planted over 1,200 acres, displacing 9.6 million pounds (4,800 tons) of coal.

h. Routine Maintenance, Cleaning Supplies and other:

All universities collaborate on a routine maintenance repair and operations contract (MRO) with W.W. Grainger, who provides a wide variety of equipment and routine maintenance supplies.

All universities also work in partnership to purchase facility cleaning chemicals through a contract with Supply Works.

The universities continue to collaborate in writing vehicle specifications, coordinating vehicle purchases and purchasing vehicle fuel with DAS and IDOT.

All universities collaborate to purchase electrical supplies through Crescent Electric, air filters through Tri-Dim and office furniture through multiple suppliers.

7. Fire and Environmental Safety

Fire and environmental safety standards are established by the *State of Iowa Building Code*, which is part of the *Iowa Code*. The State Fire Marshal's Office, a division of the Iowa Department of Public Safety, and the Iowa Occupational and Safety Act (IOSHA), a division of Iowa Workforce Development, implement those standards by teaming with Regent facility personnel and local fire departments. Fire and environmental safety deficiencies are identified during scheduled site visits with one or more of these agencies.

a. Fire Safety: Potentially life-threatening deficiencies are promptly addressed and corrected, or the facilities are closed, until they can be made safe. Lesser risks are prioritized using multiple factors, including hazard assessments and regulatory requirements. Corrective work is undertaken as funds are available, or as part of a renovation project.

	Fire Safety Inspections binannual
	University of Iowa ¹ = 2022 UIHC ² = 2022 Iowa State University ³ = 2023 University of Northern Iowa ⁴ = 2021
The authority having	lowa Lakeside Labs ⁵ = 2023
jurisdiction over Regent facilities is the State of Iowa	¹ State Fire Marshal's Office (SFMO), City of Iowa City and the UI conduct inspections at the UI biannually.
Fire Marshal. Fire safety inspections at Regent facilities are conducted biannually by the	² SFMO, City of Iowa City and the UI conduct inspections at UIHC biannually. Also, the Joint Commission conducts unannounced surveys of UIHC's life safety systems every three years.
State of lowa's Fire Marshal's Office directly or indirectly	³ In 2017, the SFMO authorized ISU's Environmental, Health & Safety (EH&S) to conduct fire safety inspections at ISU biannually.
with assistance from city fire departments, local building	⁴ SFMO and UNI conduct fire safety inspections at UNI biannually.
officials and Regent universities.	⁵ UI Fire Safety Coordinator Bruce McAvoy and ILL conduct fire safety inspections at ILL biannually.

Each institution systematically maintains and prioritizes a list of fire safety issues and updates it as issues are resolved or discovered. Additions to the list often occur when the use of a space changes; when, for example, an office changes to a wet lab.

Should the State Fire Marshal's Office issue a fire safety citation, those can be classified as:

- User: housekeeping or procedural items such as use of a doorstop to prop open a door,
- Maintenance: items requiring no design and minimal expense, such as door repairs, or
- <u>Other deficiencies</u>: items for which the correction requires an outlay of funds beyond facility management maintenance funds; these items are documented and prioritized.

b. Environmental Safety: Environmental compliance at the universities is overseen by IOSHA, Environmental Health and Safety (EH&S), Facilities Management personnel and the Office of Risk Management.

Many environmental safety issues come directly from facilities. Issues include asbestos, lead, Underground Storage Tanks, Spill Prevention, Control, & Countermeasure (SPCC) Plans, Storm Water Pollution Prevention Plans (SWPPP), Polychlorinated Biphenyls [(PCBs) banned in 1978 and found in fluorescent light ballasts, floor mastic and caulking in 1950-1970 buildings], mercury, the Clean Air Act and radioactive sites. Environmental safety deficiencies are identified by campus personnel and regulatory entities and corrected by the universities as required.

Asbestos abatement continues to be one of the most common and costly environmental safety issues. For example, Iowa State University spent \$138,995 in FY 2023, down 13% from last year's \$160,686. ISU plans to spend another \$525,000 on GEF asbestos abatement in FY 2024. The cost to remove all asbestos containing materials from ISU's General Education Fund facilities is estimated to be \$5,800,000.

c. Fire Safety Projects: Completed

Regent universities completed \$1.6 million in FY 2023 in GEF fire safety projects, which is down 23% from last year's \$1.3 million. The five-year average is \$1.9 million.



Looking forward to FY 2024, over \$2.5 million in fire safety projects are planned.



Fire Safety and Building Renewal

Comparison

Comparing 10-year to five-year averages, completed Fire Safety projects have decreased 5%, while completed Building Renewal projects have increased 1%.



d. Fire Safety Projects: Outstanding

Outstanding fire safety projects include items identified by the State Fire Marshal's Office, Iowa City Fire Department, Environmental Health & Safety and institutional departments authorized by the State Fire Marshal's Office to conduct fire inspections. It excludes work in buildings to be demolished, and buildings with waivers from the State Fire Marshal's Office.

Fire Saf G	ety Project General Fun Fall 2 (\$ in thou	ts: Outstan d Buildings 023 _{Isands)}	ding ¹	
	UI ²	ISU	UNI	Total
Fire Safety Projects	\$1,981	\$2,400	\$4,232	\$8,613
¹ Items identified by State F officials; excludes pending ² Does not include UIHC.	ire Marshal's demolitions	s Office, city and special	officials and State Fire M	l university arshal waivers.

This \$8.6 million in outstanding fire safety projects is a 43 percent decrease from last year's \$15.2 million.

e. Comments from the Universities on Fire Safety and Environmental Safety Projects

University of Iowa

Department of Public Safety (UIDPS) and Facilities Management's Fire and Life Safety Department (FM FLS) work together to ensure compliance with fire safety codes in General Education Fund and other campus facilities. Design and Construction teams include them for plans and designs of new buildings, as well as renovation projects, so they can be reviewed for code compliance and checked for outstanding fire safety deficiencies. When fire safety deficiencies need to be incorporated into a project, they are formally communicated to the project's design manager, and design professional in the planning stages of projects. These individuals routinely consult with UIDPS and FM FLS to resolve challenges to fire safety deficiencies.

Under the UI fire safety program, buildings are continually inspected and evaluated.

- Bi-annual basis by inspectors from the State Fire Marshal's Office (SFMO) with assistance from the UI Fire Safety Coordinator. In addition to bi-annual inspections, construction and pre-occupancy inspections are being conducted by the State Fire Marshal's Office and State Building Code Bureau with the assistance of the UI Fire Safety Coordinator. These inspections evaluate newly constructed or renovated buildings prior to occupancy and have mitigated the possibility of finding major deficiencies during future inspections.
- Iowa City Fire Department (ICFD) conducts annual inspections of each campus building focusing on the prevention of fire incidents and becoming familiar with UI buildings for emergency response purposes. The ICFD inspection reports are categorized, and corrections are made in 30 days after issuance to the user group or Facilities Management.

• FM FLS conducts monthly inspections of the buildings they service, as well as Semi-Annual and Annual Fire Alarm inspections, and annual fire protection inspections.

The University continues to provide maintenance and periodic replacement of building fire safety systems, including fire detection, sprinkler, and suppression systems, along with portable fire extinguishers. During recent years, Facilities Management's Fire Safety Inspectors have identified minor fire code deficiencies during their normal monthly tours checking fire equipment in GEF buildings. They bring the issues to the attention of the user group or make the necessary work orders upon completion of the building's inspection. These deficiencies are then corrected quickly.

On a regular basis, corrections report(s) from the latest state fire inspection, and updates from previous reports are submitted to the State Fire Marshal's Office for approval. These plans are a continuation of the annual agreement between the University and the State Fire Marshal's Office, which identifies each deficiency from the inspection reports with corrections and timetables noted.

Iowa State University

Starting in 2017, Iowa State University's Environmental Health & Safety (EH&S) was authorized by the State Fire Marshal's Office to conduct ISU's fire inspections.

• Process Used to Incorporate Fire Safety Deficiencies into Renovation Projects

EH&S works to ensure compliance with fire safety codes. All plans and designs for new buildings and renovation projects are reviewed for code compliance and checked for outstanding fire safety deficiencies. Fire safety deficiencies needing to be incorporated into a project are communicated to the project designers and engineers. Project designers and engineers routinely consult with EH&S to resolve challenging fire safety deficiencies early in the planning stages.

• Fire Safety Deficiencies

During FY23, \$104,030 was expended for health and life safety projects for General Education Fund facilities. In FY24, approximately \$1,200,000 will be spent on General Education Fund facilities. The estimate to correct remaining fire safety deficiencies identified by the State Fire Marshal in General Education Fund facilities is \$2,400,000. This estimate includes the cost of adding sprinkler systems to five buildings to address fire corridor deficiencies cited in the inspection. Funding for correcting fire safety deficiencies comes from overhead use facilities and capital renewal funds.

• Asbestos

Asbestos removal is required when remodeling and renovation projects disturb asbestoscontaining material (ACM). Scheduling asbestos removal when buildings are being renovated has proven to be cost-effective and time-efficient because the asbestos work is planned to coincide with other major disruptions in a building. During FY23, \$138,995 was spent on asbestos removal from General Education Fund facilities. In FY24, it is estimated that \$525,000 would be spent on asbestos abatement for General Education Fund facilities. The cost to remove all ACM from General Education Fund facilities is estimated to be \$5,800,000.

Asbestos not associated with renovation projects is managed under an operations and maintenance program. ACMs removals are reported to Facilities Planning and Management, where funds are identified. These repairs are required while asbestos is managed in place until major renovation projects can allow for the complete removal of the ACM.

• Underground Storage Tanks

Transportation Services operates and maintains two regulated underground storage tanks, the last remaining on university property. These double-wall fiberglass-reinforced plastic fuel tanks were installed in July 1988; the underground piping and distribution systems were completely replaced in August 2010. State and Federal regulations require operator training, leak detection sensors, spill prevention equipment, monthly checks, annual certification, and biennial third-party inspections of the fuel storage and distribution systems. Because of these preventive measures, the university has operated these tanks incident-free for many years. No additional installations of underground tanks on university property are under consideration.

• Polychlorinated Biphenyls (PCBs)

All large pieces of equipment containing PCBs have been removed from campus.

The last known PCB-containing transformer was removed in June 2014 at a cost of \$4,440. Small sources, such as light ballasts and capacitors, continue to be collected for proper disposal as they are removed from service. ISU continues to segregate non-PCB ballasts from PCB-containing ballasts, significantly reducing disposal costs. Any oil-filled equipment scheduled for decommissioning is tested for PCBs prior to removal.

University of Northern Iowa

• Process Used to Ensure Fire Safety Deficiencies are Included in Renovation Projects

During the design phase of renovation projects, Facilities Management's project management team collaborates with licensed architects and engineers, the Office of Risk Management and Environmental Health & Safety (EHS), and the State Fire Marshal's office to address fire safety and other code items within the project. EHS staff receive a project update report bi-weekly and participate in bi-weekly project update meetings. This is to ensure that fire safety deficiencies are addressed.

• Environmental Safety

The University of Northern Iowa identifies and addresses environmental safety deficiencies through its Office of Risk Management and Environmental Health & Safety (EHS). EHS conducts regular inspections of the university's facilities and works with external entities inspecting campus for deficiencies like the Iowa Department of Health and Human Services.

EHS also provides training to university employees on how to safely identify environmental safety deficiencies and works to promote a safety culture that encourages members of the campus community to report any suspected safety deficiency observed on campus.

• Asbestos

The university has in place an Asbestos Management Plan that addresses any operation, including maintenance activities, involving the potential or actual disturbance of asbestos containing materials. This plan complies with all state and federal regulations, including those promulgated by Iowa OSHA, OSHA and the EPA.

• Underground Storage Tanks

No underground storage tanks exist on the UNI campus.

• Polychlorinated Biphenyls (PCBs)

No pieces of large equipment containing PCBs exist on the UNI campus.

8. Building Renewal (Deferred Maintenance)

Building renewal in higher education is not just a Regent issue, but a large national problem. Regardless, minimizing and eliminating building renewal is a high priority for Regent universities and the Board Office. Definition of Building Renewal: "The repair or replacement of all, or part of an existing capital asset, which was not repaired or replaced at the appropriate time, because of lack of funds."

Data collection

To determine building renewal, Regent universities break down each facility by its building components and assess those individually, according to the following categories.

A. Substructure	A10 – Foundations
	A20 – Basement Construction
B. Building Envelope	B10 – Superstructure
	B20 – Exterior Enclosure
	B30 – Roofing
C. Interiors	C10 – Interior Construction
	C20 – Stairs
	C30 – Interior Finishes
D. Services	D10 – Conveying
	D20 – Plumbing
	D30 – HVAC
	D40 – Fire Protection
	D50 – Electrical
E. Equipment & Furnishings	E10 – Equipment
	E20 – Furnishings
F. Special Construction & Selective Building Demolition	F10 – Special Construction
Sciective Building Bernolition	F20 – Selective Building Demolition
G. Sitework	G10 – Site Preparation
	G20 – Site Improvements
	G30 – Site Mechanical Utilities
	G40 – Site Electrical Utilities
	G50 – Other Site Construction

UNIFORMAT Classification of Building Components¹

¹ UNIFORMAT is a trademark of the Construction Specifications Institute.

Examples of data collected would include construction inflation rate, cost to replace an element and square footage. For example, the building renewal cost on a roof would be:

12.7% construction inflation x \$10/square foot x 10,000 square feet = \$112,700.

a. Building Renewal: Completed

However, Regent universities have spent an average of \$32 million per year over the last five years to minimize the \$1.4 billion backlog. To minimize this, the Board Office would request \$30 million per year for five years in the 2024 General Assembly Session.

Specifically, Regent universities completed over \$27 million in GEF building renewal projects in FY 2023, which is up 28% from last year's \$21 million.

Building Renewal Budget Development: For new facilities per the Board's *Policy Manual* §2.3 and industry standards, universities should budget 1.5% of a new facility's replacement cost annually to fund its future routine maintenance and building renewal costs.

This 1.5% is intended only for the new facility, and not for the Regents' existing \$1.4 billion building renewal backlog.





b. Building Renewal: Outstanding

	(\$	Fall 2023 in thousands)		
	UI	ISU	UNI	Total
Individual				
Buildings 1	\$227,398	\$685,417	\$185,282	\$1,098,098
Utilities	-	34,930	5,609	40,539
Subtotal	\$227,398	\$720,347	\$190,891	\$1,138,63
Included within	n Five Year (Canital Plan (FY 2025 - F	Y 2029)
Included within Buildings ¹ Utilities	n Five Year (\$214,531 -	Capital Plan (\$31,342 3,500	FY 2025 - F \$40,000	Y 2029) \$285,873 3,500
Included within Buildings ¹ Utilities Subtotal	n Five Year (\$214,531 - \$214,531	Capital Plan (\$31,342 3,500 \$ 34,842	FY 2025 - F \$40,000 - \$40,000	Y 2029) \$285,87 3,500 \$ 289,37
Included within Buildings ¹ Utilities Subtotal Grand Total	n Five Year (\$214,531 - \$214,531	Capital Plan (\$31,342 3,500 \$ 34,842	FY 2025 - F \$40,000 ¹ - \$40,000	Y 2029) \$285,87: 3,500 \$ 289,37:
Included withi Buildings ¹ Utilities Subtotal Grand Total Buildings ¹	n Five Year (\$214,531 - \$214,531 \$214,531 \$441,929	Capital Plan (\$31,342 3,500 \$ 34,842 \$716,759	FY 2025 - F \$40,000' - \$40,000 \$225,282	Y 2029) \$285,873 3,500 \$ 289,373 \$1,383,97
Included withi Buildings 1 Utilities Subtotal Grand Total Buildings 1 Utilities	n Five Year \$214,531 \$214,531 \$214,531 \$441,929	Capital Plan (\$31,342 3,500 \$ 34,842 \$716,759 38,430	FY 2025 - F \$40,000' \$40,000 \$225,282 5,609	Y 2029) \$285,873 3,500 \$ 289,373 \$1,383,97 44,033

This \$1.43 billion in building renewal is a 13.5% increase over last year's \$1.26 billion. This 13.5% increase aligns with last year's COVID-19-induced construction inflation rate of 12.7%.



Building renewal costs kick in once a building component has outlived its useful life and is in its warranty period. For example, as the warranty expires in year 51 of a 50-year roof warranty, replacing the roof shifts from the contractor to the owner, requiring the owner to pay 100% of the

roof replacement. The building renewal cost of the roof is then determined utilizing industry standards, such as RS Means cost per square foot information, consultation with Gordian, and comparisons to similar Regent projects.

Since 1940, RS Means has been a primary construction cost resource used by contractors, architects, engineers and owners. Gordian is a higher education consultant employed by the Regent universities at various times, who specializes in facilities operations, costs and capital investment.

Building renewal costs are broken down into nine different building systems, including building envelope, roof, window, HVAC, electrical, plumbing, interior, elevators and site. Replacement cost of the building, the warranty of a specific building component and the condition of those components according to university maintenance staff are also considered.

c. Facility Condition Index

The most widely accepted and standardized facility management benchmark used to compare one facility to another is the "Facility Condition Index" (FCI).

The FCI is simply the ratio of a facility's building renewal cost (\$1.43 billion) to its replacement value (\$11.45 billion (square footage x current replacement cost per square foot). Replacement costs increase annually per construction inflation, which was 12.7%. Due to COVID-19-induced construction inflation, 12.7% is three times higher than our normal construction inflation rate of 4.5%, established over the 17 years before COVID-19.

Per Engineering News Record/Vanguard Resources: Facility Condition Index | The Latest News and Trends in Your Industry (vanguardresources.com) "Good" Condition: 0% - 5%, University of Virginia = 5.0% "Fair" Condition: 5% - 10%, U.S. Department of Interior = 5.5% "Poor" Condition: 10% - 20%, Regents = 12.5% "Critical" Condition: 20%+, Kansas State = 20.3%

FCI examples

- University of Virginia had \$152 million in building renewal in 2020 and a \$2.997 billion replacement value for an FCI of 5.1%
- U.S. Department of the Interior had \$16.4 billion in building renewal in 2019 with a replacement value of \$300 billion for an FCI of 5.5%
- Regent GEF facilities had a \$1.43 billion in building renewal in 2023 and a \$11.45 billion replacement value for an FCI of 12.5%
- Kansas State University's portfolio (7 institutions) had \$87 million in building renewal in 2016 and a \$428 million replacement value for an FCI of 20.3%

d. Building Renewal: Institutional Comments University of Iowa

General Education Fund Facilities

The condition of existing facilities, their functionality and their suitability to support student success, research and discovery inform the use of various facilities stewardship strategies. These strategies include ongoing maintenance and operational care of existing facilities, reduction of building renewal, and reinvestment in the renewal of long-term physical assets. In instances where facilities have become obsolescent and have substantial building renewal, the University considers decommissioning or removal.

The University of Iowa also uses a *total cost of* ownership evaluative framework philosophy when

UI Facilities Management uses four basic facilities stewardship strategies to manage the condition of existing GEF facilities:

- Ongoing maintenance and operational care of existing facilities,
- Reinvestment in the renewal of long-term physical assets,
- Reduction of the backlog of deferred maintenance, and
- Decommission obsolescent facilities, those with substantial building renewal issues.

weighing the various alternatives that may include renovation, improvement, or demolition of existing facilities. The *total cost of ownership* framework includes all stewardship costs, including the initial project cost and on-going care, utilities and energy costs over the useful life of a facility. When renewal would not result in useful space configurations, program success, or would prolong the inefficient use of existing land, the UI may consider removing a building. In situations where building removal is considered, historical value and heritage are carefully weighed.



Beginning in 2004, the UI has contracted with third parties for periodic facilities condition assessments. The summary data for GEF buildings in this report is now data provided through our work with Sightlines now named Gordian. Our initial Facility Condition Assessment with Sightlines occurred in 2018 and the UI is engaging with them for a new assessment to be done in 2023. We anticipate data changes in this assessment. The changes would be a result of inflation, facility changes and improved data collection.

From FY09 through FY15, the UI maintained the condition of its facilities at a consistent equilibrium, with rate of renewal in balance with the rate of deterioration. This changed in FY16, when the annual funding for these efforts was cut in half. As evidenced in the graph above, expenditures were buoyed by commitments made prior to FY16, but show a drop in FY17. Investments initiated after FY16 were closer to \$15 million annually, and funding has continued to decline with each passing year. In addition, we see a further reinvestment gap in FY22 due to decreased funding and funds targeted to new facilities, i.e., the new Stanley Museum of Art. We anticipate this gap shrinking as the UI begins to renovate facilities as a part of Capital Plan.

With the current level of funding, the UI no longer is positioned to "keep up" with the rate of building deterioration nor to "catch up" to the demands for program-related modernization. The gap between the available funding and need is significant, and not quickly resolvable.

We are applying our matrix to align funding stewardship and determine priorities that would be based on several factors, including asset criticality, urgency, student success and operational impact. The University of Iowa is tracking the performance of its mission critical buildings that currently face the highest risk of failure. The UI Campus Development Team is reviewing those buildings to determine how best to ensure these facilities can continue to support the success of the programs within them. The University of Iowa has developed an institutional specific project scoring matrix to be used in conjunction with data from the facility condition assessment for objective scoring, prioritization, and alignment with institutional priorities.

University of Iowa Hospitals and Clinics

As a self-supporting auxiliary enterprise, the University of Iowa Hospitals and Clinics funds its own building renewal repairs.

Iowa State University

General Education Fund Facilities

As funding for maintenance and repair of General Education Fund facilities remains limited, the condition of campus facilities continues to decline, as reflected in the steady growth of the backlog of building renewal. The much higher rate of construction inflation experienced in FY 2022 and FY 2023 also significantly increased the cost to correct this building renewal.



Major projects completed in FY 2023 include water damage repairs and elevator modernization in the Enrollment Services Building, repairs to heating and cooling systems in Gilman Hall, repairs to the domestic hot water system in the Food Science Building, replacing portions of the roof of Lagomarcino Hall, repairs to the heating and cooling system of Parks Library, replacement of a portion of the roof of C.Y. Stephens Auditorium, and continuing repairs to the domestic water lines of the Veterinary Medicine building.

The university has a Maintenance and Improvement Committee, which includes stakeholders from academic affairs, research, student affairs, and operations and finance. They meet regularly to prioritize building renewal needs and allocate the available resources. Requirements are prioritized by the impact on teaching, research or outreach, situations that significantly compromise safety, and the risk to the ability of the university to continue to provide services. This process assures the university addresses the most critical needs within the limited available resources.

• ISU Utility Building Renewal

The Utility Enterprise tracks and budgets building renewal for the central campus cogeneration plant, satellite heating and cooling plants, and underground distribution systems.

The annual Utility Enterprise budget includes \$4.25 million for routine and preventative maintenance and \$3.5 million for major repairs and overhauls. Major repair funds are first allocated to perform scheduled overhauls of turbines, boilers, chillers, and associated auxiliary equipment as required by the university's insurance carrier and to ensure reliable utility production. The overhaul schedule was developed to minimize year to year budget fluctuation, with annual overhauls costs typically totaling between \$500,000 and \$800,000. Remaining utility repair funds are allocated based on building renewal plans (prioritized by safety and reliability), other required or emergent repairs, and quarterly revenue projections.

This approach has been successful in maintaining the critical, campus serving utility systems in good operating condition. The utility building renewal backlog is approximately \$38.4 million, relative to a replacement value over \$624 million.

University of Northern Iowa

General Education Fund Facilities

The university continues to update its building renewal information through building and system assessments. Information is obtained from users of the buildings, along with the maintenance personnel for the respective areas. When planning renovations, Facilities Management design and construction staff review the building renewal deficiencies and address those as part of the project.

The university has a backlog of \$230,890,964 in building renewal, which is an increase of \$18,668,007 from the previous year. An increase in annual budgeted funds would be required to sustain an adequate maintenance schedule for campus buildings.

The university is striving to maintain its facilities on a building repairs budget of \$1,500,000. This is 0.10% of our \$1,512,711,079 estimated replacement value. The Board of Regents Policy Manual states that universities should plan for an annual investment of approximately 1.5% of replacement value. According to national standards, 1% is the minimum commitment to prevent future facilities deterioration. Operations and maintenance personnel focus their resources based on a priority system that addresses safety issues, educational support, and repair of facilities equipment to lengthen the assets life.

The university has identified approximately \$26,592,438 in building renewal projects in General Education Fund facilities and utilities planned for or continued in FY 2024. Building renewal projects completed in FY 2023 totaled \$8,760,110. Future projects would continue to be selected from the top 25 Building renewal list and from the Major Maintenance Project found in the 5 Year Capital Plan.

e. Building Renewal Trends and Recommendations

Regent universities continue to take a pro-active stance on building renewal, creatively developing strategies to minimize their "keep up" and "catch up" costs. In doing so, they set priorities based on several factors, including building condition, building utilization, operational demands and program growth. From there, the universities track the performance of its mission critical buildings that currently face the highest risk of failure to determine the best course of action.

The sheer aging of facilities and budget challenges over the years have led to an increase in building renewal issues, fire safety projects, environmental safety deficiencies and have hindered our institution's abilities to "catch up" and "keep up" with building renewal.

Maintenance cycles and preventative maintenance activities have been delayed or eliminated, placing buildings and occupants more at risk for unanticipated outages. In general, delays in the maintenance of roofs, exterior building envelopes, windows, mechanical and electrical systems can cause further damage, increasing building renewal cost exponentially.

Building Renewal Trends¹

There are three key conditions affecting higher education facilities and, specifically, building renewal.

- <u>A growing backlog of building renewal</u>: Facility funds are spread thinner as the Regents continue to "catch up" and "keep up" with building renewal.
- <u>Compounding Waves of Building Renewal Needs</u>: From 2030-2045, the two previously mentioned waves of construction, 1961-1980 and 1995-2015, are projected to produce multiple overlapping building renewal projects.
- <u>Fewer Students and Less Revenue</u>: It is well known that that US birthrates have been declining in the wake of the Great Recession of 2007-2009, raising the prospect of fewer young people moving through any educational system. In addition, state and institutional funds are scarce, particularly in the wake of COVID-19, starting in March 2020.

Building Renewal Recommendations²

In addition to harnessing all possible financial resources to minimize the GEF building renewal backlog, Gordian provides these recommendations.

- Invest facility funds to maximize the use of existing space and minimize safety issues.
- Maximize the impact of each investment. Continue to connect building renewal investment with student success, mission and priorities.
- Continue to make tough decisions about facilities that do not further the institution's mission or provide a competitive edge. Plan where <u>not</u> to spend facility funds.
 - ¹ Gordian: 2020 State of Facilities in Higher Education

² Gordian: 2017 State of Facilities in Higher Education

End of Facilities Governance Report