

Administrative Operations

BOARD APPROVED AUGUST 2, 2024

Cindy Ream Corporate Secretary

TO: Members of the Board of Trustees

FR: Jay Wasson, Vice President for Physical Facilities and Chief Public Safety Officer

DATE: July 23, 2024

RE: Approval of Ten-Year Capital Plan

Attachments:

- Purdue University 2025-2027 Capital Request Narrative
- 2025-2027 Capital Request Priority Project Summaries
- 2025-2035 Ten-Year Capital Project Plan Purdue University System-Wide Summary of Major Capital Projects

The enclosed capital planning documents summarize Purdue's 2025-2027 Capital Project Request and 2025-2035 Ten-Year Capital Plan. The final capital request will consist of a narrative and a prescribed set of tables and schedules issued jointly from the Indiana Commission for Higher Education (ICHE) and the State Budget Agency/Committee. These materials will be prepared and submitted to ICHE based on your approval of the capital plan and institutional priority rankings.

The evolution of the current draft of the Ten-Year Capital Plan is the result of a six-month capital planning process started in January with a request to the executives, vice presidents and chancellors to engage with the leadership of Physical Facilities to identify facility needs in the context of strategic initiatives, including Purdue Moves, Next Moves and various other campus planning activities currently underway. Physical Facilities, with support from administrative leaders, has evaluated the requests and conceptual funding plans for the various facility needs and have prepared the set of near-, mid-, and long-term facility project plans that will be submitted for your review on August 2, 2024.

Following approval from the Board of Trustees, this material will be submitted to ICHE and the State Budget Committee.

c: Chairman Mike Berghoff
President Mung Chiang
Treasurer Chris Ruhl
Provost Patrick Wolfe
Corporate Secretary Cindy Ream
General Counsel Steve Schultz



Purdue University 2025-2027 Capital Request Narrative

Introduction

The Ten-Year Capital Plan, in conjunction with the 2025-2027 Legislative Capital Request, outlines the strategy for Physical Facilities to maintain and renew Purdue University's physical infrastructure while prioritizing university initiatives, inclusive of Purdue Moves, Next Moves and a variety of other endeavors.

As in past years, it is important that the Ten-Year Capital Plan and the 2025-2027 Legislative Capital Request make progress on the following key themes:

- Renewal through renovation and replacement: Renovating and repurposing of existing space to allow our campuses to increase efficiency, sustainability and safety
- **Development through private, public and institutional partnerships:** Leveraging resources and aligning partners to create modern and efficient facilities that support emerging scientific methods and evolving instructional techniques, and providing improved opportunities for cross-disciplinary collaboration

Process

The framework to guide the growth, development and reinvestment in Purdue's physical infrastructure is rooted in each campus's master plan and guided by the university's strategic priorities. Purdue's capital project planning and the development of the 2025-2027 capital request involves:

- A biennial (once every two years) process to establish the Ten-Year Capital Plan
- An annual process to develop a repair and rehabilitation (R&R) and infrastructure plan

Purdue's capital project approval process, including new construction, facility renovations, leases and property acquisitions, are governed by State statute and the Bylaws of the university.

This year, Physical Facilities leadership consulted executives, vice presidents and chancellors to identify facility needs in the context of university strategic priorities. Physical Facilities, with support from administrative leaders, then evaluated the requests and funding plans for each identified need and organized them into a set of near-, mid- and long-term projects.

Balanced Capital Approach and Priority Projects

Throughout the evolution of the Ten-Year Capital Plan, Physical Facilities is mindful of the need to ensure financial viability and stewardship during challenging economic climates and to prioritize and contribute to student affordability and sustainability.

In order to achieve these goals, Purdue has adopted a balanced capital program approach for system-wide facility and infrastructure investments. This approach consists of the following core principles:

- Renovate existing facilities, where feasible
- Replace existing facilities with new, where appropriate
- Add new space only when needed

Our 2025-2027 Legislative Capital Request and Ten-Year Capital Plan are built on these fundamental core principles.



The following attachments consist of summaries of each of the prioritized projects (listed in order) that make up the 2025-2027 Legislative Capital Request:

- 1. Interdisciplinary Sciences Research Building, West Lafayette
- 2. Student Union and Library Renovation Phase 1/Porter Demolition, Purdue University Northwest

While not part of the 2025-2027 Legislative Capital Request, a supplementary summary on the following near-term project is included:

• Student Housing, Purdue Fort Wayne



2025-2027 Capital Request Priority Project Summary

Interdisciplinary Sciences Research Building, Near-term priority #1

Scope

- Construct a new 140,000 GSF building that will provide a new home for the Purdue University Institute for Cancer Research as well as other life science research on the West Lafayette campus.
 - o This will include 1,400 GSF of animal facilities (vivarium) space for gnotobiotic animals.
- The facility will provide energy and space efficient research laboratories as well as core and support facilities that will meet the needs for the innovative and leading-edge research being conducted.
- The facility will be collocated with other life science research and teaching facilities to enhance the connection to existing core facilities and foster a collaborative environment among the researchers.

Location

Purdue University West Lafayette

Project Cost

\$160M

- \$90M, estimated state funding
- \$70M, estimated other funding

Space Summary

	ASF	GSF
New Space to be Built	77,000	140,000
Space to be Terminated	0	0
Net Change in Campus Space	77,000	140,000
	<u>ASF</u>	
Space to be Renovated	0	
Space to be Repurposed	63,462*	
Space to be Released	0	

^{*}This is the Arthur G. Hansen Life Sciences Research Building (HANS) (106,441 GSF). Once the Interdisciplinary Science Research Building is completed, most programs in HANS will be relocated. This would create additional research space capacity for future growth and enable the potential renovation other existing research spaces. The cost and duration represented in the "Project Cost" and "Timeline" sections is inclusive of the Interdisciplinary Sciences Research Building only.

Timeline

Construction duration: 30-33 months
Construction initiation: Spring 2026
Construction completion: Fall 2028



Project Need

- Purdue University Institute for Cancer Research (PU-ICR) has held the NCI designation for over 45 years. The NCI designation is the highest federal rating a cancer center can achieve and is only awarded to the nation's top cancer centers in recognition of their innovative research and leading-edge treatments. There are seventy-one cancer centers in the United States, and PU-ICR is one of seven basic laboratory cancer centers and the only public institute as well as the only one in the Midwest. The current PU-ICR membership encompasses 118 faculty members, in 21 departments across 7 colleges/schools. As a part of the renewal submission, PU-ICR will need to demonstrate planning is in place for upgraded facilities.
- Purdue's life sciences research facilities vary in age and capabilities. Some spaces will require updates
 to remain effective. Loss or lack of modern research capabilities has and will continue to negatively
 impact faculty productivity, retention and recruitment. To increase grant dollars and to spur the growth of
 graduate students, post-docs and research scientists, high-quality research space is required. As much
 of the life science research space is being utilized, renovating existing space in the current life science
 research footprint would put further strain on the already strained capacity. The Interdisciplinary Life
 Sciences Facility will enable a series of renovation projects to enhance the entire portfolio of research
 space. The additional space will enable existing facilities and the entire portfolio of space to become
 more efficient.
- The Purdue Moves initiative saw \$521M in research funding with a substantial amount directed toward the life sciences. Purdue Next Moves plans to invest a further \$260M over five years, a portion of which will go to plant sciences and national security and technology initiatives. The success of the initiatives, and efforts by colleges and individual researchers, along with the growing demand to provide leased lab space to private sector partners has increased the demand for quality life science research space on campus. Failure to accurately plan for and provide effective research facilities will negatively impact Purdue's ranking as a top tier research institution.

State Biennial Request History

• Summary of this project's inclusion in previous state biennial requests:

Biennium	Project Name	State Funding Request	System Priority	Notes
2023-2025	Health and Life Sciences Interdisciplinary Research Building	\$OM	Near Term	Included as a project for innovative project delivery/public-private partnership
2021-2023	Life Sciences Interdisciplinary Research Building	\$OM	Medium Term	Included as a project for innovative project delivery/public-private partnership

Project Owner

Dr. Karen Plaut, Executive Vice President for Research

Dr. Eric L. Barker, Vice President for Health Affairs, dean, College of Pharmacy



2025-2027 Capital Request Priority Project Summary

Student Union and Library Renovation Phase 1/Porter Demolition, Near-term priority #2

Scope

- Phase 1 of 2 will include the renovation of approximately 29,000 SF within the Hammond Student Union Library Building (SULB).
 - o Renovated square footage will include labs, modern general academic classrooms and offices to replace the space that will be lost from the demolition of Porter Hall.
- The SULB ground floor renovation will include converting the existing campus bookstore into a state-of-the-art multimedia center for the College of Humanities, Education and Social Sciences (CHESS).
- The SULB second and third floors will be strategically reconfigured to construct the necessary office space and classrooms that will support modern teaching pedagogy.
- The project includes the installation of a new fire suppression system and upgrades to vertical circulation systems.
- Upon completion of the Porter Hall demolition, Founder's Plaza will be extended to encompass the space formerly occupied by Porter Hall.

Location

Purdue University Northwest, Hammond

Project Cost

\$23M

- \$19M, estimated state funding
- \$4M, estimated other funding

Space Summary

	ASF	GSF
New Space to be Built	0	0
Space to be Terminated	20,679	41,849
Net Change in Campus Space	-20,679	-41,849
	ASF	
Space to be Renovated	29,000	
Space to be Repurposed	0	
Space to be Released	0	

Timeline

Construction duration: 30 months
 Construction initiation: Summer 2026
 Construction completion: Fall 2028



Project Need

- This project is consistent with four of the five goals detailed in the 2023 Board of Trustees endorsed Purdue Northwest Facilities Renewal Plan:
 - Realign functional adequacy for student success.
 - Right-size the campus based on space needs and enrollment while providing flexibility for future growth.
 - o Densify and maintain strategic facilities that support innovation and regional growth.
 - Leverage outdoor environment for instruction, circulation and recreation to elevate student experience.
- The renovation of SULB to accommodate the multimedia center, the Department of Communications and Creative Arts and the general classrooms are necessary enabling projects to allow the demolition of Porter Hall. This project is documented in the 2023 PNW Renewal Plan as a near-term priority.
- The current multimedia center located in Porter Hall is antiquated and beyond its useful life. A new
 center located in the heart of campus will continue the theme of science on display that will be utilized
 for continued student success within this program and also as a recruitment tool for future PNW
 students.
- Porter Hall has \$3.2M in deferred maintenance and SULB has \$10.7M in deferred maintenance as
 documented in the 2022 Jones Lang LaSalle Facility Condition Assessment. The demolition of Porter Hall
 and strategic renovation of SULB will reduce PNW's deferred maintenance backlog by over \$5M and the
 annual operating expenses by over \$200,000/year.
- SULB is the largest facility at PNW without an existing (comprehensive) fire suppression system and has been documented as high risk by our current insurance provider.

State Biennial Request History

• Summary of this project's inclusion in previous state biennial requests:

Biennium	Project Name	State Funding Request	System Priority	Notes
2023-2025	Student Union & Library Renovation, Phase I	\$20M	Medium Term	
2023-2025	Porter Demolition	\$5M	Medium Term	

Project Owner

Dr. Kenneth (Chris) Holford, Chancellor, Purdue University Northwest



2025-2027 Capital Request Priority Project Summary

Student Housing, Near-term project

Scope

- Construct a new 110,000 GSF student housing building that includes approximately 375 beds arranged in pod and/or suite style units.
- The facility will support primarily first and second year students and will enhance the living-learning community model on campus.
- The building will include first floor kitchen, classroom and study spaces.

Location

Purdue University Fort Wayne

Project Cost

\$56M

- No estimated state funding
- \$56M, estimated other funding

Space Summary

	ASF	GSF
New Space to be Built	75,000	110,000
Space to be Terminated	0	0
Net Change in Campus Space	75,000	110,000
	<u>ASF</u>	
Space to be Renovated	0	
Space to be Repurposed	0	
Space to be Released	0	

Timeline

Construction duration: 24 months
Construction initiation: Fall 2026
Construction completion: Fall 2028



Project Need

- University recruitment methodologies have resulted in a sharp increase in enrolled students who reside
 outside the community or surrounding counties. This has resulted in existing student housing achieving
 100% occupancy.
- In addition to university-owned housing being at full capacity, the university has master leased an additional 400 beds in campus adjacent apartments. These leases will be consolidated for operational efficiency when the 5100 Saint Joe Road development comes online; however, demand is still projected to exceed capacity at that point.

State Biennial Request History

• Summary of this project's inclusion in previous state biennial requests:

Biennium	Project Name	State Funding Request	System Priority	Notes
2023-2025	Student Housing Phase IV	\$0	Near Term	Included as a project for innovative project delivery/public-private partnership
2021-2023	Student Housing Phase IV	\$0	Medium Term	Included as a project for innovative project delivery/public-private partnership

Project Owner

Ronald Elsenbaumer, Chancellor Kristina Surface, Vice Chancellor for Enrollment Management and the Student Experience

2025-2035 TEN-YEAR CAPITAL PROJECT PLAN PURDUE UNIVERSITY SYSTEM-WIDE SUMMARY OF MAJOR CAPITAL PROJECTS

NOTE: All financial values and temporal placements are preliminary and require further validation.

		Near Term 2025-27 Medium Term 2027- (\$, Millions) 29 (\$, Millions)			m 2029-35 Ilions)			
Proposed Projects	Near Term Priority Ranking	Est. State Funding	Est. Other Funding	Est. State Funding	Est. Other Funding	Est. State Funding	Est. Other Funding	Total Project Cost
MAJOR RENOVATIONS								
West Lafayette Campus								
Multiple Chiller Replacements I (WL)		-	-	-	35	-	-	35
Multiple Chiller Replacements II (WL)		-	-	-	-	-	85	
Hansen Hall (Chemical Sciences) Renovation (WL)		-	-	55	32	-	-	87
Hovde Hall Mechanical System Replacement (WL)		-	-	-	24	-	-	24
Schleman Hall Renovation (WL)		-	-	33	5	-	-	38
West Lafayette Campus Subtotal		-	-	88	96	-	85	269
Fort Wayne Campus								
Building Envelope and Infrastructure Renovation, Phase I		-	-	-	-	19	-	19
HVAC Control Systems Replacement and Upgrade		-	-	11	-	-	-	11
South Campus Renovations, Phase II		-	-	20	-	-	-	20
Fort Wayne Campus Subtotal		-	-	31	-	19	-	50
Northwest Campus								
Student Union & Library Renovation Phase 1 / Porter Demolition (H)	2	19	4	-	-	-	-	23
Cooling Tower & Chiller (W) and Chilled Water Line Replacement (H)		-	-	15	-	-	-	15
LSF Renovation (W)		-	-	6	-	-	-	6
Fitness Recreation Center Renovation (H)		-	-	7	3	-	-	10
Student Union & Library Renovation Phase 2		-	-	-	-	23		23
Gyte Renovation (H)		-	-	-	-	50		50
Northwest Campus Subtotal		19	4	28	3	73		127
Major Renovations Subtotal		19	4	147	99	92	85	446
NEW CONSTRUCTION								
West Lafayette Campus								
Interdisciplinary Sciences Research Building (WL)	(1)	90	70	_	_	-	_	160
Herrick Labs Building II (WL)		-	_	_	_	_	80	
Indiana Corn and Soybean Center Soil Handling Facility Addition (WL)		-	_	_	_	_	14	
Niswonger Renovation and Addition (WL)		-	_	45	10	_	_	55
Public Safety Building (WL)		-	_	_	73	_	_	73
Purdue In Indianapolis Building #2 (IN)		-	_	95	140	_	_	235
Student Housing Island Development (WL)		-	_	-	-	_	247	247
Thermal Energy Storage (WL)		-	_	_	64	_	_	64
West Lafayette Campus Subtotal		90	70	140	287	-	341	928
Fort Wayne Campus								00
Chiller Plant Expansion and Utility Infrastructure Replacement		-	_	20	_	-	_	20
Engineering, Technology and Computer Science Building Addition		-	-	76	-	-	-	76
Gates Athletic Center Addition		-	-	-	-	-	27	27
Parking Garage P1 Addition		-	-	-	42	-	-	42
Student Housing		-	56	-	-	-	-	56
Fort Wayne Campus Subtotal		-	56	96	42	-	27	221
Northwest Campus								
·		-	-	-	-	-	-	_
Northwest Campus Subtotal		-		-		-	-	
New Construction Subtotal		90	126	236	329	-	368	1,149
TOTAL PROOPING								
TOTAL PROGRAM			A					
TOTAL ESTIMATED FUNDING BY SOURCE		\$109M	\$130M	•	\$428M	\$92M	\$453M	
TOTAL ESTIMATED FUNDING BY TERM		\$23	89M	\$81	I1M	\$5 ₄	45M	\$1595M

		(\$, Millions)			Medium Term 2027- 29 (\$, Millions)		Long Term 2029-35 (\$, Millions)	
Projects Separated for Alternative Legislative Consideration	Near Term Priority Ranking	Est. State Funding	Est. Other Funding	Est. State Funding	Est. Other Funding	Est. State Funding	Est. Other Funding	Total Project Cost
NEW CONSTRUCTION & MAJOR RENOVATIONS								
		-	-	-		_	-	-
West Lafayette Campus Subtotal		-	-	-	-	-	-	_

Projects for Innovative Project Delivery	(\$, Millions)			Medium Term 2027- 29 (\$, Millions)		Long Term 2029-35 (\$, Millions)		
Public Private Partnerships	Near Term Priority Ranking	Est. State Funding	Est. Other Funding	Est. State Funding	Est. Other Funding	Est. State Funding	Est. Other Funding	Total Project Cost
NEW CONSTRUCTION (P3)								
West Lafayette Campus								
Birck Nanotechnology Center, Phase 2 (WL)		-	ı	-	51	-	-	51
West Lafayette Campus Subtotal		-	-	-	51	-	-	51