University of Oregon



Housing Transformation Phase 2 (Walten Hall Replacement)

December 2023

Ten Year Capital Plan

Prepared by Campus Planning and Facilities Management

Table of Contents

Project Escalation Tracking
Project Dashboard
Capital Plan Master Schedule

Academic Projects

Current Projects (BOT Approved)

- Huestis Hall Deferred Maintenance
- Knight Library Exterior Restoration
- Knight Campus Phase 2 (Research)
- Heritage Project: University Hall and Villard Hall Deferred Maintenance
- UO Portland Campus

Planned and Likely Projects

- Oregon Acoustic Research Lab
- Kalapuya Ilihi Building Repairs
- Friendly Hall Deferred Maintenance
- UO Portland Behavioral Health Building

Potential Future Projects

- Knight Campus Phase 3 (Academic)
- Condon Hall Deferred Maintenance
- Knight Library Renovation
- School of Journalism and Communication Expansion

Other Projects

Current Projects (BOT Approved)

- Utility Infrastructure Phase 1 (Chilled Water Tank)
- Athletics Indoor Practice Facility
- Housing Transformation Project Phase 3

Planned and Likely Projects

• Romania Site Development

Potential Future Projects

- Next Gen Housing Residence Hall
- Utility Infrastructure Phase 2

Studies

- Thermal Transition Study
- East Campus Master Plan
- Science Complex Study
- Mac Court Master Plan Study

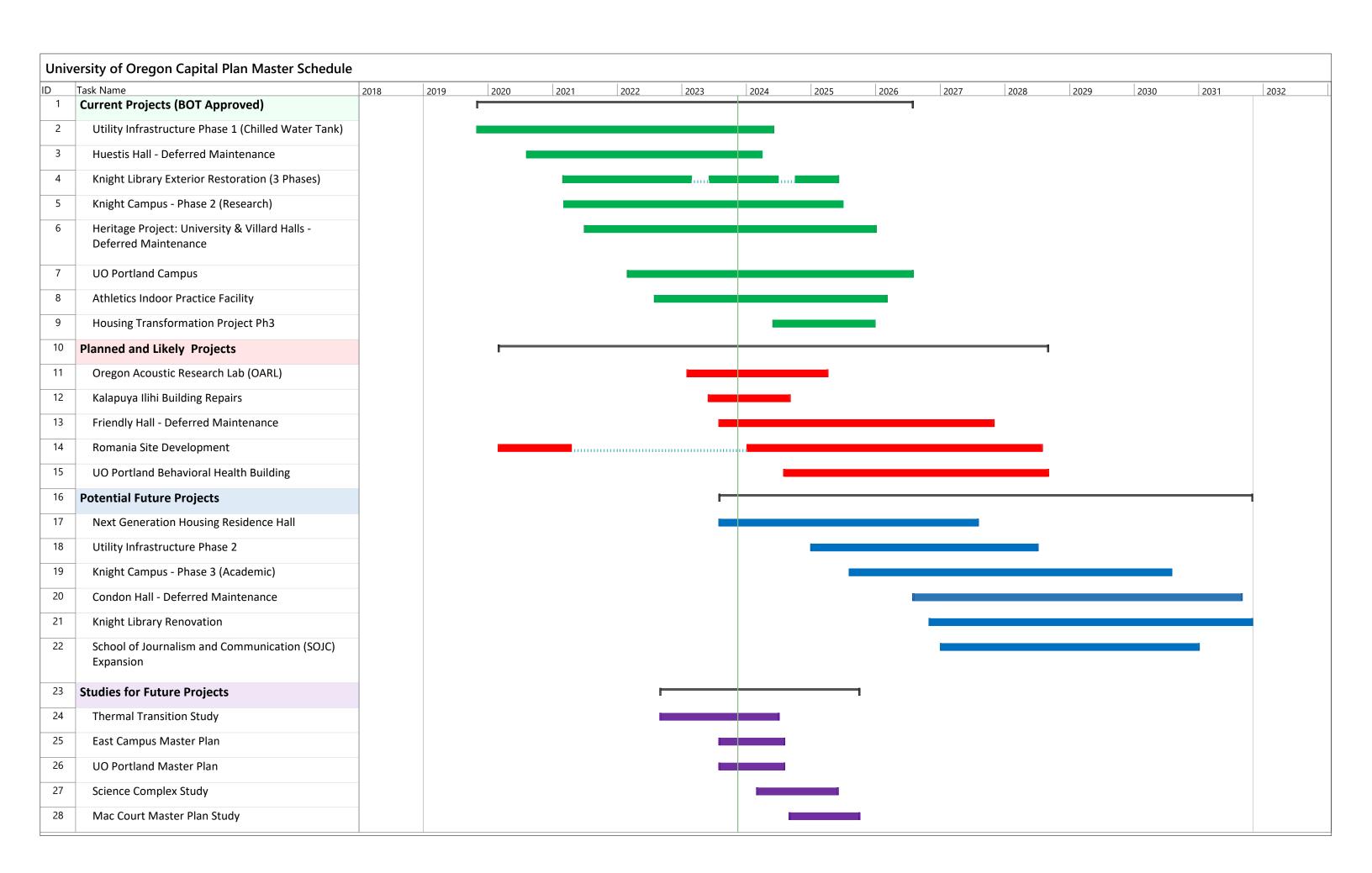
Large Project Cost Tracking

Years 2013 - 2023

																		2023	
Project	Final Budget	Project Area (S/F)	Bid Year	2013	2014	201	15	2016		2017	2	2018	2019	2020	2021	2022		ecasted alation	NOTES
ANNUAL REGIONAL CONSTRUCTION ESCALATIO	,	, , , ,			6.03%		_	4.500/		050/		50 0/	F 670/	2.200/	0.400/	0.26%			Escalation figures represent larger Portland market;
(Rates provided by Rider Levett Bucknall)	1.74%	6.02%	4.61		4.58%		5.05%	6	.50%	5.67%	2.30%	8.40%	9.36%	,	'.50%	Eugene market has been higher.			
ACADEMICS \$/SF Project Cost													ı	1					
STRAUB HALL Deferred Maintenance	\$21,519,000	43,361	2013	\$ 496	\$ 526	\$	550 \$	\$ 57	6 \$	610	\$	650	\$ 687	\$ 703	\$ 762	\$ 833	\$	896	Includes seismic upgrades
STRAUB & EARL Classroom Expansion	\$22,974,665	59,570	2014		\$ 386	\$	403	\$ 42	2 \$	447	\$	477	\$ 504	\$ 515	\$ 558	\$ 611	\$	656	Very constrained site conditions
PRICE SCIENCE COMMONS Addition and Renovation	\$19,733,490	44,300	2015			\$	445	\$ 46	6 \$	494	\$	526	\$ 556	\$ 569	\$ 617	\$ 674	\$	725	Underground and difficult access; deferred maintenance upgrades, unique plaza/roof
OREGON HALL RENOVATIONS Renovation	\$11,870,000	56,400	2017						\$	210	\$	224	\$ 237	\$ 242	\$ 263	\$ 287	7 \$	309	Significant surging of staff
CHAPMAN HALL Renovation	\$11,200,000	23,388	2017						\$	479	\$	510	\$ 539	\$ 551	\$ 598	\$ 654	\$	703	
TYKESON HALL New Building	\$42,548,000	64,000	2017						\$	665	\$	708	\$ 748	\$ 765	\$ 830	\$ 907	7 \$	975	Added basement mid-way through design
RESEARCH and SCIENCES ESSENCES																			
PACIFIC HALL B-2 FLOOR LABS Renovation/Deferred Maintenance South Wing	\$22,120,000	31,365	2016				!	\$ 70	5 \$	748	\$	797	\$ 842	\$ 861	\$ 933	\$ 1,021	\$	1,097	Significant deferred maintenance to MEP systems
KNIGHT CAMPUS PHASE 1 Building and Bridge	\$213,500,000	173,630	2018								\$	1,230	\$ 1,299	\$ 1,329	\$ 1,441	\$ 1,576	5 \$	1,694	Cost/sf excludes \$7.5M for property acquisition
KLAMATH 3RD FLOOR RENOVATION Renovation	\$22,900,000	25,000	2019								\$	916	\$ 968	\$ 990	\$ 1,073	\$ 1,174	4 \$	1,262	
ZEBRAFISH EXPANSION Addition and Partial Renovation	\$10,370,000	10,470	2020											\$ 990	\$ 1,074	\$ 1,174	4 \$	1,262	Received additional grant funding of \$500k for equipment
STUDENT SUPPORT																			
ERB MEMORIAL UNION Addition and Partial Renovation	\$98,762,185	209,943	2014		\$ 470	\$	492	\$ 51	5 \$	546	\$	581	\$ 614	\$ 628	\$ 681	\$ 745	\$	801	
OBF (OREGON BACH FESTIVAL) BERWICK HALL New Performing Arts Building	\$8,787,000	9,419	2015			\$	933	\$ 97	6 \$	1,035	\$	1,102	\$ 1,164	\$ 1,191	\$ 1,291	\$ 1,412	2 \$	1,518	Specialized rehearsal sound space
UNIVERSITY HEALTH and COUNSELING Addition (23,800SF) and Renovation (11,000SF)	\$20,100,000	39,700	2018								\$	506	\$ 535	\$ 547	\$ 593	\$ 649	\$	697	Addition costs at \$715/SF, Renovation at \$270/SF (2018 costs).
HOUSING			1									<u> </u>		<u> </u>	_				
CENTRAL KITCHEN/WOODSHOP New Building	\$8,890,240	21,592	2015			\$	412	\$ 43	1 \$	457	\$	486	\$ 514	\$ 526	\$ 570	\$ 623	\$	670	
KALAPUYA ILIHI HALL New Residence Hall	\$44,855,123	136,653	2016				!	\$ 32	8 \$	348	\$	371	\$ 392	\$ 401	\$ 434	\$ 475	\$	511	Complicated building form due to solar access to the Many Nations Longhouse
BEAN HALL EAST/WEST RENOVATION Addition and Renovation	\$48,000,000	174,540	2018						\$	275	\$	293	\$ 309	\$ 317	\$ 343	\$ 375	\$	403	
HOUSING TRANSFORMATION Ph1 Unthank Hall - New Building	\$87,500,000	208,000	2019										\$ 421	\$ 430	\$ 466	\$ 510	\$	548	BOT Approved \$101M, which included the design of Ph2. Project completed in August.
HOUSING TRANSFORMATION Ph2 Buildings B and C (Walton Hall Replacement buildings)	\$120,000,000	301,252	2022													\$ 398	\$	428	
ATHLETICS																			
JANE SANDERS STADIUM New Stadium	\$17,200,000	27,336	2015			\$	629	\$ 65	8 \$	698	\$	743	\$ 785	\$ 803	\$ 871	\$ 952	\$	1,024	Square foot numbers represent the building, not the field
OTHER																			
MILLRACE DRIVE - PARKING GARAGE (part of Knight Campus project)	\$22,400,000	118,980	2019								\$	188	\$ 199	\$ 204	\$ 221	\$ 241	\$	259	684 parking spaces
											•				•				

Summary of Projects > \$5 Million

	Project Name	Substantial Completion Date		Current Project Budget	Project Square Footage	Cost per Square Foot	Budget Comparison to BOT/Legislature Budget Status	Schedule performance	Meets Program Needs	Unanticipated Deferred Maintenance Issues	LEED Certification	Comments
	EMU Renovation & Addition	Jun 2016	\$ 95,000,000	\$ 98,762,185	209,943	\$ 470	•	•	•	•	Platinum	Added significant work at the Ballroom and other rooms on the third floor.
	Price Science Commons	Jun 2016	\$ 16,750,000	\$ 19,733,490	44,300	\$ 445	6	•	•	•	Gold	Added work associated with the Visualization Lab and Furniture. Significant amounts of deferred maintenance to major HVAC, Electrical and Structural systems impacted this project.
	Berwick Hall	Jul 2017	\$ 8,725,000	\$ 8,787,000	9,419	\$ 933	•	•	•	•	N/A	
	Kalapuya Ilihi Residence Hall	Jul 2017	\$ 45,000,000	\$ 44,855,123	136,653	\$ 328	3	•	•	•	Gold	
TORICAL	Chapman Hall	Jan 2018	\$ 10,700,000	\$ 11,200,000	23,388	\$ 479	•	•	•	•	Gold	
HISTOR	Pacific Hall (Phase I)	Feb 2018	\$ 16,900,000	\$ 22,120,000	31,365	\$ 709	•	•	•	•	N/A - Partial Reno	Scope increases as well as increased deferred maintenance surrounding MEP was discovered and resolved through Capital Improvement funds. This also created schedule impacts.
	Oregon Hall Renovations	Jan 2019	\$ 9,500,000	\$ 11,870,000	56,400	\$ 210	•	•	•	•	N/A - Partial Reno	Added Computing Center Help Desk to original project. Enrollment Management reorganizational adjustments which added scope.
	Tykeson Hall	Jun 2019	\$ 34,300,000	\$ 45,580,000	64,000	\$ 712	•	•	•	•	Gold	Additional scope was added on January 2017, which included basement and 4th floor build out. Since the scope addition, both schedule and budget were achieved as the project came to a close.
	Bean Hall Renovation and Addition	Aug 2019	\$ 44,000,000	\$ 48,000,000	174,540	\$ 275	•	•	•	•	Gold	Additional funds were for Administrative Addition added to the original renovation scope.
	University Health and Counseling	Aug 2020	\$ 18,800,000	\$ 20,100,000	39,700	\$ 506		•	•	•	N/A	With renovation work, additional deferred maintenance surrounding MEP was discovered and resolved (through Capital Improvement funds).
	Klamath Hall - 3rd Floor	Sep 2020	\$ 18,700,000	\$ 22,900,000	25,000	\$ 916	5	•	•	•	N/A - Partial Reno	Delayed start and significant unanticipated infrastructure / deferred maintenance issues. Budget adjusted with Presidential approval in December 2017. Since approval, project was completed on schedule and within the approved budget.
COMPLETED	Knight Campus Phase 1 (includes bridge)	Oct 2020	\$ 225,000,000	\$ 213,500,000	173,630	\$ 1,186	5	•	•	•	Gold	Total GSF Includes 2,719 SF for Bridge. Cost/sf excludes \$7.5M for land purchase. Delays from the original schedule due to COVID. Includes additional \$3.4M for purchase of Lot 4 from COE (site for phase 2 building)
ECENTLY	Millrace Drive Parking Structure (part of Knight Campus project)	Nov 2020	Included in Knight campus above	\$ 22,400,000	118,980	\$ 188		•	•	•	Gold	This is part of the overall Knight Campus project. Delays from the original schedule due to COVID. Includes additional \$7.5M for upper two floors of garage.
Ř	Autzen Sound and Video Board	Nov 2020	\$ 12,000,000	\$ 12,000,000	N/A	N/A	•	•	•	•	N/A	Experienced material and labor delays due to COVID.
	Housing Transformation Project Ph1 Unthank Hall	Jun 2021	\$ 89,500,000	\$ 87,500,000	209,500	\$ 418	•	•	•	•	Gold	\$101M was BOT approved. Balance of approval went to launching Phase 2 Design.
	Zebra Fish Expansion	Sep 2022	\$ 8,800,000	\$ 10,370,000	10,470	\$ 990	•	•	•	•	N/A	Complete
	Housing Transformation Project Ph 2	Aug 2023	\$ 120,000,000	\$ 120,000,000	302,000	\$ 397	•	•	•	•	Targeting Gold	Recently occupied
	Utility Infrastructure Phase 1 (CW Tank)	Jun 2023	\$ 8,500,000	\$ 11,800,000	N/A	N/A	•	•	•	•	N/A	BOT approved Increase to \$11.8M Dec 2022. Market conditions and procurement times impacting project.
	Huestis Hall Deferred Maintenance Project	Dec 2023	\$ 63,600,000	\$ 89,600,000	60,000	\$ 1,493	•	•	•	•	Targeting Gold	BOT approved increase to \$79.9M Dec 2021. Market escalation conditions impacted budget. Project in final stages of construction.
-GOING	Housing Transformation Project Ph 3	Jul 2024	\$ 10,000,000	\$ 9,900,000	155,000	\$ 64	I TBD	•	•	N/A	N/A	This phase is for Open Space Improvements, only; which includes th demolition of Hamilton Hall. This phase was originally scheduled for 2023, but is delayed a year due to the short-term need of Hamiliton Hall while Kalupua Ilihi undergoes repairs.
Š	Knight Library Exterior Restoration (Multiple Phases)	TBD	\$ 15,000,000	\$ 15,000,000	N/A	N/A		•	•	•	N/A	Ph1 of 3 complete. Ph2 construction scheduled for summer of 2024. Addressed through state Capital Improvement funds.
	Knight Campus Phase 2	Jul 2025	\$ 300,000,000	\$ 300,000,000	175,000	\$ 1,714	TBD	•	•	•	Targeting Gold	Current market escalation conditions and forecasts are showing significant risks to established budget.
	Heritage Project (University & Villard)	Jul 2025	\$ 87,820,000	\$ 87,820,000	68,059	\$ 1,290		•	•	•	Targeting Gold	Current market escalation conditions and forecasts are showing risk to established budget. GMP to be established in March 2024.
	UO Portland Campus	Sep 2024	\$ 58,000,000	\$ 65,100,000	392,000	\$ 153		•	•	•	N/A	In Construction. Deferred Maintenance items triggered early due to construction impacts.
	Oregon Acoustic Research Lab (Portland)	TBD	TBD	\$ 18,750,000	12,500		+	TBD	TBD	TBD	N/A	Federal grant. Port of Portland location.
NEW	Kalapuya Ilihi Residence Hall Repairs	Sep 2024	TBD	TBD	136,653 44,740	TBD	TBD TBD	TBD TBD	TBD	TBD TBD	N/A	Contractor currently estimating costs for repairs.
Z	Friendly Hall Deferred Maintenance OU Portland Behavioral Health Building	TBD TBD	TBD TBD	\$ 80,261,650 TBD	44,740 TBD	\$ 1,794 TBD	TBD TBD	TBD	TBD TBD	TBD	Targeting Gold Targeting Gold	Recently legislatively approved in 2023.
Key to co	<u>. </u>		•		•		<u>.</u>			1	0 0	•
	•	N/A	N/A	N/A			Budget within 3% of BOT / LEG or above 3% based upon program driven increases AND are under BOT approval levels	On Schedule	Program Maintained	All DM Issues Anticipated		
	•	N/A	N/A	N/A			Additional funds above 3% (Not for Program Enhancements) but not to BOT approval level		Minor loss of Program	Less than 5% Scope Increase due to unanticipated DM issues		
	•	N/A	N/A	N/A			Additional funding requiring BOT Approval	3 month or greater delay	Major loss of Program	More than 5% Scope Increase due to unanticipated DM issues		







Huestis Hall Deferred Maintenance

PROJECT DESCRIPTION

CURRENT PROJECT

PROJECT STATS

Huestis Hall was constructed in the early 1970s. The raw concrete façade and repetitive windows are features typical of the Brutalist architecture style popular during the time. The four-story building (including the basement) is part of the science complex and is connected to Streisinger Hall. The Lokey Laboratories expansion is beneath Huestis Hall.

Objectives

- Replace the original building mechanical, electrical, and plumbing systems and equipment to achieve modern building and research standards.
- Retrofit the seismic lateral-forceresisting system to achieve current life safety performance levels. This will be achieved by a seismic shaft on the west side of the building, which also includes a new freight elevator for lab equipment transport.
- Address the building envelope leaks that have plagued the facility.

- Reduce the energy, maintenance, and operational costs.
- Update all life/safety systems such as fire alarm notification and sprinkler systems.
- Renew the network infrastructure and pathways.
- Modernize the circulation corridors and shared public areas.
- Create flexible modular lab spaces by revising layouts and equipping them with casework systems designed to adapt to a changing environment.
- Increase the program square footage in the basement by relocating mechanical equipment from the basement to a new 6,745SF penthouse on the roof.

Project Status

In Construction



Project Type: Building Renovation

Space Type: Research and Laboratory

Classroom Teaching Labs

Square Footage: 57,501

Current Budget: \$89.6M

Funding Source(s):

Q Bonds: \$50.8M G Bonds: \$6.36M UO Match: \$6.36M UO Funds: \$12.4M State CIP: \$12.68M

UO System Development Funds: \$1M

Project Completion: February 2024



Knight Library Exterior Restoration

PROJECT DESCRIPTION

CURRENT PROJECT

PROJECT STATS

Ellis Fuller Lawrence's original plan called for an auditorium to be built in this site, as the termination of the south axis and most important building in his beaux-arts plan. The axis extended from the auditorium to Dad's Gates and beyond to the train station. However, the decision was made by President Hall to build a library in its place. The library was funded by the Public Works Administration ("PWA") and the Works Progress Administration ("WPA") program funds and is representative of the last surge of building before WWII.

The library has been referred to as Oregon's best example of integrated art and architecture. It is the most fully executed of Lawrence's buildings incorporating sculpture, painting and metalwork, much done by students, graduates and professors.

Objectives

Due to excessive exterior deterioration, this project will comprehensively restore the exterior envelope of one of UO campus largest buildings. This project will be done in three phases in line with three cycles of state biennial Capital Improvement funding. Restoration elements includes:

- Extensive brick tuck pointing
- Brick cleaning and sealing
- Careful wood trim and door restoration
- Decorative bronze cleaning

- Window detailing and thermal improvements
- Roof replacement which includes insulation upgrades
- Painting
- Historic fountain restoration

Project Status

The project will be implemented in 3 phases:

- Phase 1 (Y22): Design of all three phases of work. Restoration of the middle and south portions of the building. The north historic entry doors are also included. In Construction. Complete.
- Phase 2 (Y24): Restoration of the northern historic section of the building. Currently Bidding.
- Phase 3 (Y25): Restoration of the historic fountain, north landscape area, and surrounding concrete plaza and terraces.



Project Type: Exterior Restoration

Space Type:

Library and Materials Storage

Square Footage: N/A

Anticipated Budget: \$15M

Funding Source(s):

Capital Improvement Funds

- Phase 1: 2019-2021 \$4MPhase 2: 2021-2023 \$8M
- Phase 3: 2023-2025 \$3M

Expected Project Duration: 4-5 years



Knight Campus Building 2 Laboratory Building

PROJECT DESCRIPTION

CURRENT PROJECT

PROJECT STATS

The Phil and Penny Knight Campus for Accelerating Scientific Impact – Building 2 is the second phase of the initiative to expand the University of Oregon's strengths in bioengineering and applied scientific research and training, with a specific focus on facilitating innovation and accelerating the pace of societal benefit and impact of this research. The focus on bioengineering and applied science will change the profile of the University of Oregon in perpetuity.

This project has been to the Board of Trustees for initial funding requests, which were approved, addressing preliminary consulting contracts and preconstruction services necessary to move the project forward in design. The budget for the full project is being reviewed at the current December 2022 Board of Trustees Meeting.

Objectives

 Further bioengineering and applied science research activity with the goal of supporting at least another 15-20 individual research programs and shared research equipment and service facilities. Expand both core research facilities as well as flexible lab spaces that support bioengineering research endeavors.

Details

- Located just across the Millrace to the north of Building 1.
- Development of approximately 2 acres of property.
- 184,000 sf building, 4 stories above grade with a basement.
- Possible pedestrian bridge linking to Building 1.
- Extend university central utility infrastructure from the tunnel under the Riverwalk Axis to Building
 2.
- Potential Improvements to Public Ways including Riverfront Parkway and Millrace Drive.

Project Status

In Construction; finalizing GMP



Project Type: New Building

Space Type: Research and Laboratory

Classroom Teaching Labs

Square Footage: 184,000 GSF

Project Budget: \$300M

Funding Source(s):

Gift Funds

Project Completion: Late Fall 2025



Campus Heritage Project: University and VillardDeferred Maintenance

PROJECT DESCRIPTION

CURRENT PROJECT

PROJECT STATS

University and Villard Halls are the two oldest buildings at the University of Oregon. In 1876 University Hall was the first building constructed followed by Villard Hall in 1885. Both buildings are listed on the National Register for Historic Places and designated National Historic Landmarks.

University Hall encompasses multiple math classrooms supporting approximately 5,000 students annually. The building also contains faculty and staff offices. Villard Hall is currently the home of the Theater Arts Department and the Comparative Literature Program supporting approximately 5,000 students in a typical academic year.

Since legislative approval in 2021, UO increased both the scope and funding of the project in an effort to consolidate the Cinema Studies program (from various campus locations) into Villard Hall to build programmatic synergies with the Theater Arts program. BOT approved in 2023.

Objectives

- Replace all building systems (mechanical, electrical, plumbing, fire protection, computer network, access controls, and security). These new systems will meet energy performance requirements of the Oregon Model for Sustainable Development and LEED Gold certification.
- Improve building exterior envelope conditions, including historic preservation

treatments as well as energy efficiency improvements.

- Provide corrective life/safety and accessibility measures to the building.
- Upgrade the building structural systems to comply with current building code to ensure a structurally sound building in a seismic event.
- Provide corrective improvements to building utility systems (storm water, sanitary sewer, domestic water, fire protection water, and natural gas), and capitalize on the connection to the Central Power Station.
- Revitalize building spaces to meet current campus standards and improve the student experience. Improvements to the building interior environment will include finishes, layouts, lighting, and quality of space.
- Improve the south entrance to Villard Hall as it has become the primary entrance to the building. This in turn will improve accessibility for individuals entering and navigating the building.

Project Status

In Construction

Project Type: Renovation, Restoration and

Deferred Maintenance

Space Type: Classrooms, Offices, Cinema,

Theater, and Support Functions

Square Footage:

University Hall: 26,616 Villard Hall: 32,000 Robinson Theater: 19,153

Project Budget: \$87.82M

Funding Source(s):

Q Bonds: \$52.65M G Bonds: \$5.85M UO Match: \$5.85M UO Funds: \$18.47M State CIP: \$5.0M

Project Duration: 4 years



Portland Campus Renovations for Fall 2023 and Fall 2024 Occupancy

PROJECT DESCRIPTION

CURRENT PROJECT

PROJECT STATS

Purchase of the Portland Campus was finalized in June of 2022; made possible by a portion of the generous gift from Connie and Steve Ballmer to establish the Ballmer Institute for Children's Behavioral Health.

This Campus which sits on just over 19 acres, populated by approximately 20 buildings, contains just under 400,000 square feet of space.

The purpose of this project is to renovate buildings to enable occupancy of some of the campus by Fall Term 2023 and the remainder of the campus by Fall term 2024.

In addition to the Ballmer Institute, the programs currently in downtown Portland will be relocated to this campus by Fall 2024. This will set a path for a very optimistic future for the University of Oregon in Portland.

In the Spring of 2022, the Board of Trustees approved the purchase of the Campus. An initial budget authorization request for \$10M was brought to the Board of Trustees during the December 2022 meeting for preliminary work on the necessary capital projects to ready the buildings for occupancy. Approval for the full project was granted in September of 2023 with and authorized budget of \$58M. There is one major project not included in this proposed budget: the building which will house clinical research spaces for Ballmer and PSI clinical faculty. We are still evaluating

different options for housing these functions and anticipate bringing a proposal to the board on this matter at the December board meeting.

Objectives

- Establish the Ballmer Institute for Children's Behavioral Health with a presence on the Portland Campus for the start of Fall Term 2023.
- Establish a footprint for select academic and administrative units already located in Portland by the Fall Term 2023.
- Complete renovations necessary to relocate all Portland programs and house the full Ballmer Institute by Fall Term 2024.

Details

- Four to five major building renovations to be completed between Fall 2023 and Fall 2024.
- Infrastructure projects to support IT systems necessary to operate the campus.
- Site improvements to comply with City of Portland requirements and improve campus Universal Access.
- Maintenance renovations on exterior of numerous buildings to prevent additional damage or water infiltration.
- Numerous smaller renovations to upgrade buildings to UO standards for

- occupancy by students, faculty, and staff.
- Safety improvements to fire alarm, fire sprinkler, camera systems, access control, etc.
- Re-Branding the campus to express the pride the UO has in this new Portland location.

Project Status

Late stages of design on most buildings. Submitting for Permits. Nearing completion on phase 1 construction

Project Type: Multiple Building Renovation

Space Type: Existing Buildings

Square Footage: Existing Space

Project Budget: \$65.1M

Funding Source(s):

\$20M Gift Funds, \$10.7M State CIP Funds, \$28.6M Internal Bank Presidential Funds/Gift Funds, \$5.8M Bond Funds (to be repaid with Portland Housing proceeds)

Project Completion: Summer 2024



Oregon Acoustics Research Laboratory

PROJECT DESCRIPTION

PLANNED PROJECT

PROJECT STATS

The Oregon Acoustics Research Laboratory will be used to do acoustic testing of floor-ceiling construction assemblies, develop innovative mass timber assemblies, develop acoustical isolation technologies, and conduct human factors comfort and physiology research.

Objectives

- The proposed facility will attract industry engagement and codevelopment of intellectual property because of its high acoustical performance and high throughput testing capabilities.
- UO will be the only institution of higher education in North America with such a facility and it will support advancement of mass timber technologies, building acoustic material designs, and acoustics education and research programs.

Design and Construction Scope

Build-to-suit a 10,000 – 13,000 square foot acoustic facility in Portland to conduct research of mass timber and other construction assemblies, development of acoustical isolation technologies, building acoustics education, and industry contracted testing of floor-ceiling assemblies. The facility will split time between research, education, and industry contracted acoustical testing.

Project Status

In Design/Build Team selection process. Design to start January 2024

Project Type: New Building

Space Type: Design and research

Square Footage: 10,000-13,000

Current Projected Budget: \$18.75 M

Funding Source(s):

Federal grant, Matching State Grants

Project Completion: Spring 2027



Kalapuya Ilihi Residence Hall Repairs

PROJECT DESCRIPTION

PLANNED PROJECT

PROJECT STATS

Kalapuya Ilihi is named in honor of the Kalapuya, the indigenous people of the Willamette Valley. The building is adjacent to the Many Nations Longhouse and features art by Native American artists from the region.

Kalapuya Ilihi, constructed in 2017, features a maker-hacker space, study rooms, a large collaboration space, gender inclusive bathrooms, and a community kitchen. This building provides opportunities for students and faculty to come together and collaborate through community spaces and event facilities.

Kalapuya Ilihi supports the Native American and Indigenous Studies ARC (Academic Residential Community) which provides a strong residential academic support system for students' academic and social needs, as well as connections to community and cultural traditions.

Objectives

- Improve the building's ability to resist the forces imposed on it during a significant earthquake, while improving the efficiency of exiting the building during an earthquake event.
- Repair cracked finishes that have occurred due to damage related to structural movement of the building.
- Return the facility to normal use prior to the start of the Fall 2024 school term.

Design and Construction Scope

Make repairs and introduce additional structural elements within the lower floors of the building related to seismic strengthening of the building to better resist significant earthquakes and provide clear and efficient exiting from the building in the event of a significant earthquake.

Project Status

Project design is underway, with construction to be complete prior to the start of the Fall 2024 school term.

Project Type: Repairs

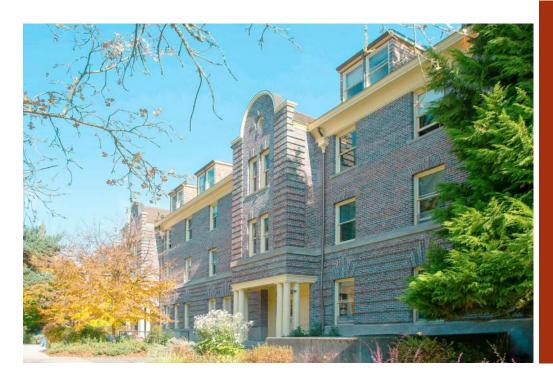
Space Type: Housing

Square Footage: 136,653

Current Projected Budget: TBD

Funding Source(s): TBD

Project Completion: Fall 2024



Friendly Hall Deferred Maintenance

PROJECT DESCRIPTION

PLANNED PROJECT

PROJECT STATS

Friendly Hall is the third major building built on campus in 1893 and is an unreinforced masonry building; the last primary campus building with a stone foundation. The building is of primary historic significance. Friendly Hall is a core building to Humanities and Social Sciences on campus, it houses Romance Languages, German, and East Asian Languages. The building also contains six general use classrooms.

Objectives

- Given the unreinforced stone foundation status, upgrade the building's foundation and structural systems to comply with current building code to ensure a structurally sound building in a seismic event.
- Replace all building systems (mechanical, electrical, plumbing, fire protection, computer network, access controls, and security). These new systems will meet energy performance requirements of the Oregon Model for Sustainable Development and LEED Gold certification.
- Provide corrective life/safety and accessibility measures to the building.
- Improve building exterior envelope conditions, including historic preservation treatments as well as energy efficiency improvements.
- Provide corrective improvements to building utility systems (storm water, sanitary sewer, domestic water, fire protection water, and natural gas), and capitalize on the connection to the Central Power Station.

- Expand current uses to accommodate other language and functions associated with Humanities and Social Sciences.
- Revitalize building spaces to meet current campus standards and improve the student experience. Improvements to the building interior environment will include finishes, lighting, and quality of space.

Project Status

Design to start early 2024



Historic Image

Project Type: Complete building and structural renovation.

Space Type:

Existing: Offices and Classrooms

Square Footage: 44,740

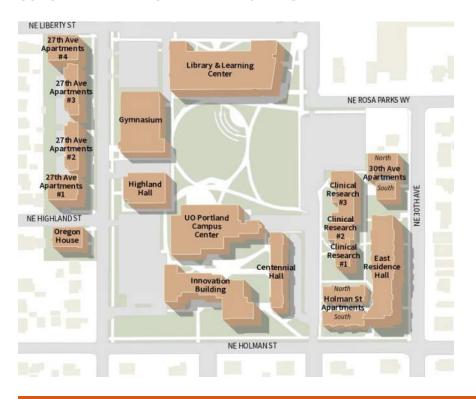
Project Budget: \$80.26M

Funding Source(s):

State Bonds:

Q Bonds: \$65.18M G Bonds: \$7.54M UO Match: \$7.54M

Expected Project Duration: 4 years



UO Portland Behavioral Health Building

PROJECT DESCRIPTION

PLANNED PROJECT

PROJECT STATS

The University of Oregon is currently underway on a Master Planning effort related to the UO Portland Campus, in preparation for the development of a new facility to house departments with the academic and research mission to support the behavioral health of children, adults, and families throughout the state of Oregon and beyond. The building is proposed to contain both the Ballmer Institute for Children's Behavioral Health and the Prevention Sciences Institute.

The facility will include office space, group meeting rooms, various types of research space, waiting rooms and other support space to activate these programs.

facility also offers This new an opportunity to further improve the academic environment on the UO Portland Campus through the improvement of pedestrian pathways, removal of structures that are not cost effective to renovate for current and future academic/research use and help establish a more engaged collegiate feel to the campus.

Objectives

- Develop state of the art academic and research space to support behavioral health programs located on the UO Portland Campus.
- Strengthen the academic fabric of the campus.
- Provide space for program growth related to both Behavioral Health and other programs located on the UO Portland Campus.
- Demolish old structures with exceptionally high deferred maintenance issues, code deficiencies, and programmatic inefficiencies resulting in exceedingly high renovations costs.

Design and Construction Scope

Design and construct new behavioral health facility by the summer of 2027.

Project Status

Master Planning and Project Development

Project Type: New Building / Building Demolition

Jemondon

Space Type: Academic and Research

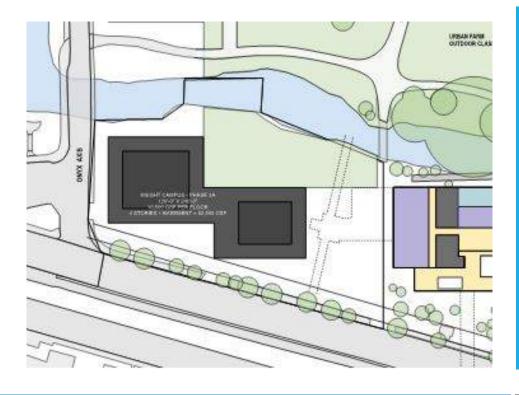
Building.

Square Footage: TBD

Approved Budget: TBD

Funding Source(s): TBD

Target Completion Date: Summer 2027



Knight Campus Phase 3 Academic Building

PROJECT DESCRIPTION

POTENTIAL PROJECT

PROJECT STATS

Knight Campus Phase 3 provides for an expansion of academic endeavors associated with the mission of the Knight Campus initiative. Located on the northern edge of the campus seven-minute walking circle, this site provides the best opportunity to integrate undergraduate and graduate education into the programs being developed within the Knight Campus.

Objectives

 Enhance the mission of the Knight Campus through the development of undergraduate and graduate academic programs.

Design and Construction Scope

- Complete the development of the Franklin Blvd site, with a third phase planned on Riverfront Research Parkway.
- Improve access across Franklin Blvd at Onyx Street.

Project Status

Project is in pre-planning

Project Type: New Construction

Space Type:

Academic classroom space, scientific and engineering teaching labs.

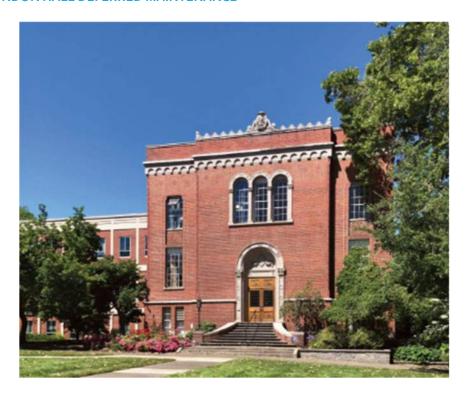
Net Square Footage: Approx. 50,000-

55,000

Anticipated Budget: TBD

Funding Source(s): Gift Funds

Expected Project Duration: 3-4 years



Condon Hall Deferred Maintenance

PROJECT DESCRIPTION

POTENTIAL PROJECT

PROJECT STATS

Condon Hall was constructed in 1925 making it the first building on the Memorial Quad. This important step marked the beginning of the implementation of the first Campus Master Plan. Both the master plan and Condon Hall were designed by prominent architect Ellis F. Lawrence, who established the School of Architecture and served as its first dean. Since its original construction, Condon Hall has undergone numerous renovations and additions, the largest of which roughly doubled the building footprint with a modern addition south of the historic wing in 1967.

Objectives

- Bring building up to current seismic standards.
- Replace all building systems (mechanical, electrical, plumbing, fire protection, computer network, access controls, and security). These new systems will meet energy performance requirements of the Oregon Model for Sustainable Development and LEED Gold certification.
- Provide corrective life/safety and accessibility measures to the building.
- Improve building exterior envelope conditions, including historic preservation treatments as well as energy efficiency improvements.
- Provide corrective improvements to building utility systems (storm water,

- sanitary sewer, domestic water, fire protection water, and natural gas), and capitalize on the connection to the Central Power Station.
- Expand current uses to accommodate other language and functions associated with Humanities and Social Sciences.
- Revitalize building spaces to meet current campus standards and improve the student experience. Improvements to the building interior environment will include finishes, lighting, and quality of space.

Project Status

Project is in pre-planning and waiting for funding.

Project Type: Building Renovation and

Systems Replacement

Space Type: Existing: Offices

Square Footage: 42,325

Anticipated Budget: TBD

Funding Source(s): TBD

Expected Project Duration: 3-4 years



Knight Library Renovation

PROJECT DESCRIPTION

POTENTIAL PROJECT

PROJECT STATS

The University of Oregon's historic Knight Library, along with the memorial quad it faces, is listed on the National Register of Historic Places. The Knight Library is one of the most iconic buildings on the UO's Eugene campus and serves every college, department, and center at the UO, as well as visiting scholars from around the world.

Instantly recognizable, this building was constructed in 1937 and has been renovated several times, with the most recent substantial renovation completed in 1994.

During 2023, the UO Libraries leadership team—in collaboration with the campus community—developed an extensive visioning plan to modernize spaces and functions, both physically and programmatically, of the library to fully serve the UO and surrounding communities.

The goals of a resulting renovation, in conjunction with replacing aging building systems and bringing the facility up to current building and safety codes, include:

Goals

• Nurturing Interdisciplinarity

The Knight Library offers a neutral academic space to nurture the "whole student," while bringing together students, faculty, and staff from every corner of campus in a cross-disciplinary forum to help researchers gain new perspectives and solve big problems. Its study spaces, labs, equipment, rotating exhibits, and consulting and educational services deliver the tools to accomplish that work.

• Seismic remediation

The historic library, its users and priceless collections will be protected from seismic disaster risks identified over the last 30–50 years.

Technology Integration

The Knight Library seeks to advance the Library's and the UO's missions into the middle of the 21st Century, marrying historic context and legacy with the future of research and innovation to create a ground-breaking model that serves the needs of tomorrow's library users.

A Museum-Quality Experience

Physical space enables browsing and serendipitous discoveries the way digital space can't. The new Knight Library capitalizes on its space with opportunities to discover everything from original Oregon Trail diaries to the records of Oregon's Rajneeshpuram commune, to the archives and records from Issac Newton, William Shakespeare, Phil Knight, Ken Kesey, and Ursula K. Leguin.

• Tell the UO Story

As one of the most publicly accessible entry points to the UO, the Knight Library sees tens of thousands of visitors every month. Every visit is an opportunity to highlight the UO's distinctive academic strengths, student and faculty accomplishments, and institutional history and legacy through fascinating archival collections and photos.

Project Status

Completed the visioning plan in 2023



Project Type: Interior Renovation

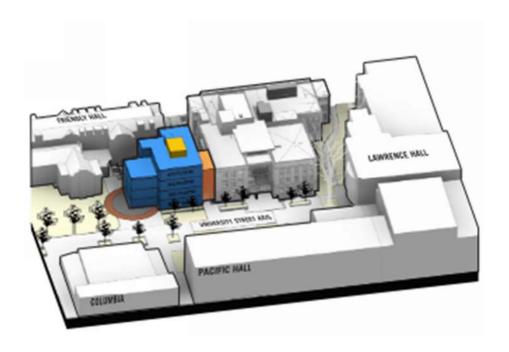
Space Type: Library, Office, Lounge

Square Footage: 398,815
Anticipated Budget: TBD

Funding Source(s):

TBD

Project Duration: 3-5 years



SOJC Expansion School of Journalism and Communication

PROJECT DESCRIPTION

POTENTIAL PROJECT

PROJECT STATS

Allen Hall, the primary home to the School of Journalism and Communication (SOJC) was originally constructed in 1953. In recent years, SOJC has been one of the fastest growing schools on campus. With this growth, the need for space has been an increasing issue. SOJC completed a study in 2021 to explore an addition to Allen Hall or construct a secondary building on campus in close proximity to Allen Hall in preparation for addressing increased growth.

Objectives

- Construct expansion space to resolve physical space demands.
- Consolidate faculty and staff in one location or in close proximity to existing facility.
- Provide flexible space to inspire innovation and collaboration.
- Bolster the SOJC brand and reputation on campus, within the local community, and nationally.
- Contribute to the future goals of the University for collaboration and partnerships with other departments.

Design and Construction Scope

This project will either construct an ~25,000sf addition to south end of Allen Hall or build a new ~50,000sf building in close proximity to Allen Hall that would serve both SOJC as well as other institutional needs.

Project Status

Completed study in 2021



Project Type: Building addition OR new building

Space Type: Mixed - public, office, research, career and other services

Square Footage: ~25,000sf Addition or

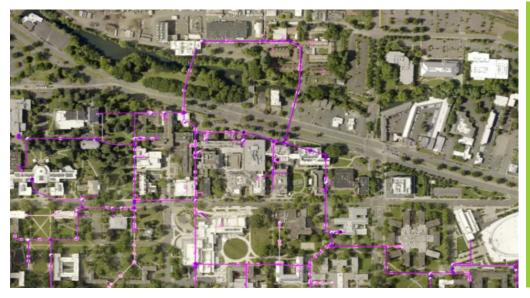
~50,000sf Building

Project Budget: TBD

Funding Source(s): TBD

Expected Project Duration: 3-4 years





Utility Infrastructure Upgrades Phase 1

PROJECT DESCRIPTION

LIBBENT PROJEC

PROJECT STATS

The utility system includes a campus chilled water plant with 12 miles of supply and return piping. System cooling capacity must be increased to meet demand generated from campus growth and to maintain existing resiliency. A major component of the Phase 1 upgrade is installing a chilled water thermal storage tank to increase capacity throughout campus. The BOT recently approved the Chilled Water Thermal Storage Tank project March, 2021.

As part of the Ph1 project portfolio, there are a series of smaller projects that will improve the overall campus utility infrastructure in terms of campus chilled water and electrical distribution. These smaller projects will be conducted between years 2020 through 2025.

Objectives (Chilled Water Storage Tank)

- Increase chilled water production capacity and flexibility.
- Maintain continuity of campus business operations requiring campus chilled water.
- Update the Chilled Water Plant controls to improve system efficiency and reduce costs.
- Increase free cooling capacity.
- Increase the capacity and efficiency of the campus chilled water distribution system to support increased cooling demand and campus growth.

Design and Construction Scope

- Design and construct a thermal energy storage tank (TES)
- Update Chilled Water Plant controls and production efficiency
- Install additional cooling towers and heat exchanger capacity

Project Status:

Thermal Storage Project - In Construction. The TES has been constructed. Ongoing work includes connection of the tank and cooling towers, operational controls upgrades and efficiency measures.

Other Small Projects Identified in Ph1 Electrical Upgrades and Improvements

- <u>Huestis</u> area electrical distribution switches and cables.
 <u>Budget</u>: up to \$3M
 <u>Status</u>: Substantial Completion
- Onyx area electrical distribution switches and cables
 Budget: up to \$3M

Status: Design

- Knight Library area electrical distribution switches and cables Budget: up to \$2M Status: Planning
- <u>Campus Electrical System Safety</u> <u>Improvements</u>
 Budget: up to \$2.5M
 Status: Design

Chilled Water Distribution Improvements

 Upgrade chilled water piping and building connections on campus to improve flow and align with chilled water plant improvements Budget: up to \$3.5M Status: Planning



Project Type: Utility Infrastructure

Space Type: N/A

Square Footage: N/A

Approved Budget: Thermal Storage: \$11.8M

Approved Funding Source(s): Thermal Storage:

System Development Funds: \$3.5M Utility Plan Reserve Funds \$8.3M

Expected Project Duration:

Thermal Storage: 20 months



Athletics Indoor Practice Facility

PROJECT DESCRIPTION

CURRENT PROJECT

PROJECT STATS

UO Athletics is planning a new indoor practice facility along Leo Harris Parkway. The project, slated for completion in 2025, will be funded entirely by private philanthropy and managed through the UO Foundation. The BOT recently approved leasing the property to the UO Foundation.

The project calls for a 140,000 square-foot new indoor practice facility, with 30,000sf of renovations. In addition, a new 65,000sf football locker room and associated support functions will be relocated next to the indoor facility. This new practice complex would benefit UO student athletes across multiple sports with increased access to indoor training facilities while providing one of the finest indoor football practice facilities in the country.

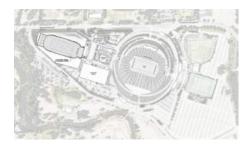
Objectives

- Provide much needed increased access to indoor facilities for UO student athletes across sports; currently availability of indoor facilities for Olympic sports is very limited
- Enable UO athletics to remain nationally competitive in recruiting and training with indoor facilities serving multiple sports
- Enhance safety, with additional width at sidelines and end lines

- Improve usability with areas for breakout sessions and increased clearance heights
- Provide energy efficient heating and cooling
- Help mitigate wildfire smoke so training can continue for multiple sports during poor air quality

Project Status

The project is in design



Project Type: New Construction

Space Type: Athletics training

Square Footage: 170,000 + 65,000

Anticipated Budget: N/A

Funding Source(s): Gift Funds

Expected Project Duration: 2.5 Years



Hamilton and Walton Residence Halls Transformation Project Ph3

PROJECT DESCRIPTION

CURRENT PROJECT

PROJECT STATS

Dynamic and attractive communities are needed now to help drive and support student recruitment and retention in a very competitive environment. Walton Hall and Hamilton Hall are in need of mechanical, electrical, plumbing, roofing, and other major systems replacement, as well as significant architectural improvements which require their demolition to build new, contemporary facilities.

Objectives

- Drive and support enrollment growth.
- Grow from 1,400 to 1,800 beds, including 400 upper-division student focused beds.
- Enhance Academic Residential Community offerings.
- Provide a variety of room types.
- Explore adding retail space to the ground floor.
- Add Prospective Student Recruitment and Visitors Center.
- New and enhanced dining options.

Design and Construction Scope

Design and construct new facilities in three phases between 2019 and 2024.

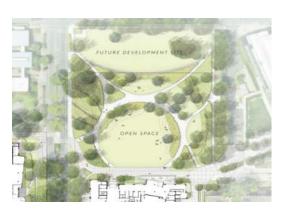
- Phase I: Building A (Unthank Hall)
- Phase II: Buildings B & C
- Phase III: Hamilton demolition and open space restoration.

Phase III Construction Scope

Complete the design and construct an open space replacement for the displaced Humpy Lumpy open space. Demolition of the existing Hamilton Hall will begin in the summer of 2023, with site restoration and buildout of the new open space to follow.

Project Status

Phase III is currently at the end of the design process. Construction of Phase III will begin in the summer of 2024 with the demolition of Hamilton Hall, and will finish in the fall of 2025.



Project Type: Open Space Improvements

Space Type: Housing, Dining, Academic Residential Community Space, Prospective Student Recruitment and Visitors Center

Square Footage: Phase III 154,595 GSF

Project Budget: \$9.9M

Funding Source(s): Revenue Bonds/Internal Bank; University Housing Carry Forward; Funding Raising/Sponsorships

Target Completion Date: Phase III: Fall 2025



Romania Site Development

PROJECT DESCRIPTION

PLANNED PROJECT

PROJECT STATS

The Romania site is located on the eastern edge of the university campus on the south side of Oregon Highway 126/Franklin Boulevard. The tract is approximately 4 acres which includes an existing 46,000 SF building. The use prior to university acquisition was as a car dealership and warehouse. The 1960 showroom, with its unique and concave roofline, is listed in the National Register of Historic Places.

Objectives

- Enter into a public-private partnership with a developer to design, finance, build, and operate a modern, university-centric entity/facility.
- Leverage the value of the real estate to provide housing opportunities for the university and the community. Student-oriented housing is not part of the mix.

Design and Construction Scope

A University-selected developer will design, finance, build, and operate a modern, revenue-producing enterprise on the site. The University will retain an appropriate level of control of each phase to protect and preserve campus culture and university needs. The university will also retain long-term ownership rights to the property.

Project Status

A Nonbinding Ground Lease Term Sheet was executed with Project^ in July 2023. Negotiations are underway to produce a ground lease agreement for a housing-centric approach.



Project Type: Public-Private

Partnership

Space Type: Mixed-use development with retail and residential uses. Adequate parking to support both uses is included.

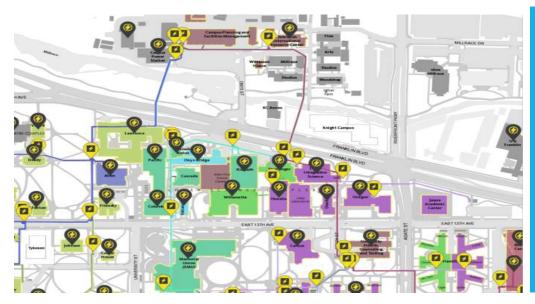
Square Footage: 180,338 (4.14 acre)

Anticipated Budget: N/A

Funding Source(s): Project^ (the developer

for the project)

Expected Project Duration: 3+/- Years



Utility Infrastructure Upgrades Phase 2

PROJECT DESCRIPTION

Current chilled water production is by electric based chillers, which supply chilled water for space and process cooling. Campus uses natural gas fired boilers to produce steam, which is distributed to campus buildings and is used for heating, hot water and process needs.

The University utility system consists of

electrical, steam, and chilled water

components of various ages and life

expectancies, which use an underground

tunnel system to distribute campus utilities.

As the utility infrastructure and equipment continues to age, investments will be needed to maintain operability of current systems in support of the business operations and resiliency of the campus.

A long term strategy is needed to continue utilizing existing forms of energy production and distribution or as an alternative, move to non-fossil fuel based production systems. The University is currently conducting a Thermal Systems Transition Study, which is required as part of the Climate Action Plan (CAP).

This Study will develop options for the use of non-fossil fuels on campus. System types, campus impacts, resiliency, timeline and cost will all be considered as part of the Study.

Objectives

- Establish redundant electrical supply feeders to campus buildings.
- Repair or replace the east utility tunnel running under Franklin Blvd.
- Replace tunnel sections that do not have sufficient space to

POTENTIAL PROJECT

accommodate additional piping or electrical cables.

- Steam piping phased replacement.
- Evaluate transitioning from steam to a water based distribution system, utilizing heat recovery chillers and electric hot water boilers.

Project Status

Dependent upon the completion of Phase 1

PROJECT STATS

Project Type: Utility

Space Type: N/A

Square Footage: N/A

Anticipated Budget: TBD

Funding Source(s): TBD

Project Duration: TBD



Next Generation Housing Residence Hall

PROJECT DESCRIPTION

POTENTIAL PROJECT

PROJECT STATS

The University of Oregon is committed to the continued modernization of its housing stock through a program of renovation and new construction. To meet the demand for oncampus housing from first year students as well as the need to provide housing for upper division students, graduate students and family housing, University Housing is beginning a multiyear renovation and new building campaign to be informed by the creation of a Next Generation Housing Development Plan (or Master Plan). The creation of the next generation residence hall will be the first step of implementing the plan.

Objectives

- Maximize student success by building new residential beds on Campus to house first year students as well as returning upper division undergraduate students.
- Increase student density in the east campus area in a thoughtful and deliberate way, exemplifying good stewardship of limited resources and compatibility with the surrounding neighborhoods.
- Enhance Academic Residential Community offerings.
- Provide a variety of room types.

Project Status In early master planning

Project Type: New Building

Space Type: Housing, Dining, Academic and Residential Community Space

Square Footage: TBD

Funding Source(s): TBD

Expected Project Duration: 3 years

Project Budget: TBD





Studies for Future Projects

STUDIES

Thermal Transition Study

(See attached One-Pager for details)

East Campus Master Plan

Enrollment growth is creating more demand for residence hall beds for incoming first year students. The eastern portion of campus has been planned to accommodate that future growth. The study will assess the quantity of beds desired and evaluate the feasibility of various locations for those structures. The master plan is under way.

Science Complex Study

This study will analyze the wet and dry lab needs of the university and suggest a sequence of projects that allows for the renovation of several buildings in the Science Complex. In addition to quantifying the deferred maintenance needs in the complex, the study will identify ways to optimize the programmatic organization of the buildings and increase the efficiency of those buildings.

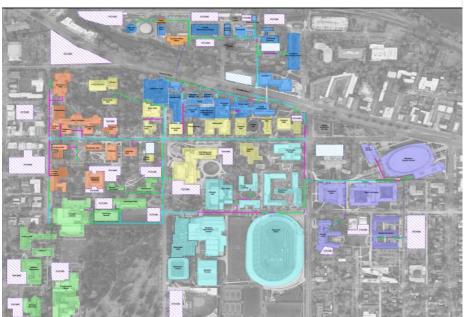
UO Portland Master Plan

The master plan will review building sites, building removal, and redevelopment; transportation and circulation analysis; concept utility planning; and other similar master plan activities. The result will be a master plan that demonstrates the full potential for building development while balancing the needs for high quality open spaces that support the mission of the university with the well-being of students, faculty, and staff.

Mac Court Master Plan Study

This study will examine the best institutional use for Mac Court. It is currently being used for intermittent surge space needs, as well as Athletics space in the basement. The study will also assess the existing physical environment of in terms of deferred maintenance, life-safety code improvements, seismic improvements, and accessibility enhancements. The study is anticipated to launch in 2024.





Thermal Systems Transition

PROJECT DESCRIPTION

converting building systems from steam to heating water. The heat pumps are very efficient and simultaneously produce hot water and chilled water to be distributed across campus. This option would be phased over 12+ years.

The Thermal Systems Transition Study analyses different approaches the University could adopt for reducing carbon emissions on campus from its district heating system. These range from electrifying steam production to replacing steam-based distribution with hot water.

As part of the study, the following options were developed to provide the largest reduction of emissions.

The first option is the addition of an 18 MW electrode steam boiler with capacity to meet nearly all of the campus heating load. This approach leaves the existing steam system intact, with the electrode boiler functioning as the primary source of steam for much of the year. Due to the electric demand of this boiler, significant modifications to the

university substation would be required.

The second option is the addition of a smaller 8 MW electrode steam boiler with capacity equivalent to one half of an existing natural gas boiler. This approach leaves the existing steam system intact. The size was selected to maximize capacity but avoid the expense of major modifications to the substation.

The third option is the conversion of campus to a hot water system which includes the addition of two heat pump chillers, chiller plant expansion, a 1.6M gallon hot water thermal storage tank, a new heating water distribution system throughout campus and

The final option uses similar strategies for converting campus to hot water, including new hot water distribution, and converting existing building systems from steam to heating water, except with ground source heat pump chillers which connect to a geoexchange field containing 1,400 boreholes approximately 600 feet deep. The ground is used to store energy and is alternately heated in summer and cooled in winter. This provides extra capacity when needed and further reduces carbon emissions. This option would follow a similar 12+ year phased implementation.

STUDY

The study will provide an economic analysis of the options and long-term transition recommendations to move away from natural gas as the primary fuel used in the district heating system.

PROJECT STATS



Objectives

- Enhance system heat production efficiency
- Identify emerging technologies for heat generation at the central plant
- Maintain system resilience and redundancy
- Develop multi-year phasing plan
- Leverage Inflation Reduction Act (IRA) funds

Status

Study report finalizing end of 2023.

Project Type: Infrastructure

Space Type: N/A

Square Footage: N/A

Anticipated Budget: TBD
Funding Source(s): TBD

Expected Project Duration: TBD