2020 PROJECT PROPOSAL CHECKLIST 2021-23 Biennium Four-year Higher Education Scoring Process

AINSTITUTION	CAMPUS LOCATION		
365 - Washington State University	Pullman, WA		
PROJECT TITLE	FPMT UNIQUE FACILITY ID # (OR NA)		
WSU Vancouver - Life Sciences Building	NA (new building)		
PROJECT CATEGORY	PROJECT SUBCATEGORY		
Growth	Major		
PROPOSAL IS			
New or Updated Proposal (for scoring)	Resubmitted Proposal (retain prior score)		
 New proposal Resubmittal to be scored (more than 2 biennia old or significantly changed) 	☑ Resubmittal from 2017-19 biennium□ Resubmittal from 2019-21 biennium		
CONTACT	PHONE NUMBER		
Kate Kamerrer	509-335-9314		

PROPOSAL CONTENT

- In Project Proposal Checklist: this form; one for each proposal
- □ Project Proposal Form: Specific to category/subcategory (10-page limit) **(NA)**
- Appendices: templates, forms, exhibits and supporting/supplemental documentation for scoring.

INSTITUTIONAL PRIORITY

Institutional Priority Form. Sent separately (not in this packet) to: <u>Darrell Jennings</u>.

Check the corresponding boxes below if the proposed project meets the minimum threshold or if the item listed is provided in the proposal submittal.

MINIMUM THRESHOLDS

- Project is not an exclusive enterprise function such as a bookstore, dormitory or contract food service.
- Project meets LEED Silver Standard requirements.
- ☑ Institution has a greenhouse gas emissions reduction policy in place in accordance with RCW 70.235.070 and vehicle emissions reduction policy in place per RCW 47.01.440 or RCW 43.160.020 as applicable.
- Design proposals: A complete predesign study was submitted to OFM by July 1, 2020.
- Growth proposals: Based on solid enrollment projections and is more cost-effectively providing enrollment access than alternatives such as university centers and distance learning.
- \Box Renovation proposals: Project should cost between 60 80% of current replacement value and extend the useful life of the facility by at least 25 years.
- □ Acquisition proposals: Land acquisition is not related to a current facility funding request.
- □ Infrastructure proposals: Project is not a facility repair project.
- □ Stand-alone, infrastructure and acquisition proposals: is a single project requesting funds for one biennium.

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REQUIRED APPENDICES

- ☑ Capital Project Report CBS 002
- \boxtimes Project cost estimate:
 - CBS 003 for projects between \$2 million and \$5 million
 - Excel C-100 for projects greater than \$5 million
- ☑ Degree Totals and Targets template to indicate the number of Bachelors, High Demand and Advanced degrees expected to be awarded in 2021. (Required for Overarching Criteria scoring criteria for Major Growth, Renovation, Replacement and Research proposals).
- Availability of Space/Campus Utilization template for the campus where the project is located. (Required for all categories/subcategories except Infrastructure and Acquisition proposals).
- Assignable Square Feet template to indicate program-related space allocation. (Required for Growth, Renovation and Replacement proposals, all categories/subcategories).

OPTIONAL APPENDICES

Attach supplemental and supporting project documentation, *limit to materials directly related to and needed for the evaluation criteria*, such as:

- Degree and enrollment growth projections
- □ Selected excerpts from institutional plans
- Data on instructional and/or research space utilization
- □ Additional documentation for selected cost comparables (acquisition)
- □ Selected materials on facility conditions
- □ Selected materials on code compliance
- □ Tables supporting calculation of program space allocations, weighted average facility age, etc.
- Evidence of consistency of proposed research projects with state, regional, or local economic development plans
- □ Evidence of availability of non-state matching funds
- □ Selected documentation of prior facility failures, high cost maintenance, and/or system unreliability for infrastructure projects
- Documentation of professional assessment of costs for land acquisition, land cleanup, and infrastructure projects
- □ Selected documentation of engineering studies, site survey and recommendations, or opinion letters for infrastructure and land cleanup projects
- Other: WSU Facility Development Plan

I certify that the above checked items indicate either that the proposed project meets the minimum thresholds or the corresponding items have been included in this submittal.

Name:	Kate Kamerrer	Title:	Exec Director, Finance, Business and Building Services
Signature:	Kati Kamorer	Date:	08/14/2020

Office of Financial Management

2021-23 Biennium

Version: 10 2021-23 WSU Capital Budget Request

Report Number: CBS002 Date Run: 8/6/2020 7:04PM

Project Number: 30000840

Project Title: WSU Vancouver - Life Sciences Building

Description

Starting Fiscal Year:	2018
Project Class:	Program
Agency Priority:	5

Project Summary

Washington State University requests \$52,600,000 in the 2021-23 capital budget for construction of an instructional and research facility that will provide cutting edge learning opportunities for students in STEM disciplines at the WSU Vancouver campus. Basic wet labs supporting chemistry, biology, and physics are at or over capacity. Expansion of lab space is critical to continue to serve the needs of undergraduate students in Southwest Washington who are pursuing STEM careers (for example, neuroscience, molecular biology, and nursing). The specialized nature of planned laboratory facilities and the broad range of students to be served by them preclude the use of off-campus space if it were available. Construction of new on-campus facilities is determined to be the best alternative for serving these programs and the growing student population at Vancouver.

Project Description

Identify the problem or opportunity addressed. Why is the request a priority? This narrative should identify unserved/underserved people or communities, operating budget savings, public safety improvements or other backup necessary to understand the need for the request. For preservation projects, it is helpful to include information about the current condition of the facility or system.

WSU Vancouver opened as a branch campus in 1989, serving upper division and graduate students. By legislative directive, lower division students were admitted for the first time in 2006. WSU Vancouver serves students from the catchment area of Clark, Skamania, Cowlitz, and Lewis counties, legislatively defined as underserved regions. Nearly half of students qualify for the highest levels of state and federal grants and without WSU Vancouver, they would not have access to baccalaureate and graduate higher education. Nearly 100 percent of students served by this project are place-bound students coming from underserved regions.

The addition of lower division students in 2006 greatly increased the demand on campus teaching laboratories. Scheduled lab sessions doubled from 17 sections to 35. Currently, almost 90 sections per term are offered through maximum utilization of teaching labs in the Classroom and Science and Engineering buildings. No new wet labs have been created since the addition of lower division classes; WSU Vancouver is over capacity for general science instructional labs and is challenged to accommodate new growth. Without additional general science labs, many undergraduate students will be unable to register for chemistry, biology, or other classes requiring wet labs, creating a choke point in fulfilling general degree requirements for all majors - especially those in the STEM and healthcare fields. Because the WSU Vancouver campus is out of space for new labs, this new building fills a critical need by providing teaching and research laboratories for multiple disciplines in STEM related fields.

In addition to general instructional lab space, this project includes dedicated research space, which is required to retain highly productive faculty. To remain competitive, the university must have modern laboratories with cutting edge equipment and space for graduate students and post-docs. The success of the university's research program directly impacts students, as a research element is typically required for graduate degrees. WSU Vancouver research labs employ both graduate and undergraduate students, contributing to their academic experience and their future success as professionals in Washington, as 92 percent of alumni remain in the area.

After converting the only viable space on campus to add a teaching lab in the fall of 2013, no other suitable space exists on campus to serve these program needs. The specialized nature of planned laboratory facilities and the broad range of students to be served by them preclude the use of off-campus space if it were available. Construction of new on-campus facilities is determined to be the best alternative for serving these programs and the growing student population at Vancouver.

What will the request produce or construct (i.e., predesign or design of a building, construction of additional space, etc.)? When will the project start and be completed? Identify whether the project can be phased, and if so, which phase is included in the request. Please provide detailed cost backup.

The state Legislature funded predesign during 2017-19 and design funding in the 2020 supplemental capital budget. The 2021-23 capital budget request is for the construction phase that will complete the project. That will bring all components of Vancouver's basic, translational, applied, and clinical health programs together in one location on campus, including Nursing, Neuroscience, Psychology, Molecular Biology, and Medical Education.

How would the request address the problem or opportunity identified in question 1? What would be the result of not taking action?

If action is not taken, existing labs will continue to be over-capacity, limiting access to required lab classes and significantly

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affecting time-to-degree for students at all levels and across all fields of study. Opportunities for a STEM-based education for these place-bound students will be lost. Additionally, graduate students, post-docs and faculty may continue to leave WSU to competing universities and research labs in search of modern laboratories with cutting edge equipment and space. This project would add critical space to accommodate existing campus growth and continued expansion of mission-critical teaching and research activities, supporting WSU's statewide goals and land-grant mission.

What alternatives were explored? Why was the recommended alternative chosen? Be prepared to provide detailed cost backup. If this project has an associated predesign, please summarize the alternatives the predesign considered. In addition to the No Action Alternative, three (3) Alternative designs were examined. Each is based on the same site and general building configuration, but with different mechanical systems. Because the mechanical system of any laboratory building is so extensive, comparing several system solutions with various life cycle cost advantages provides the university with valuable cost data with which to proceed. The Alternatives presented are:

- · 1 No Action Alternative (No new facility)
- · 2 100% Outside Air VAV (Ownership Option 1)
- · 3 Dedicated Outside Air with Chilled Beams/Chilled Sails (Ownership Option 2)
- · 4 Enhanced Heat Recovery/Heat Recovery Chiller (Ownership Option 3)

The financial analysis of options identified that Ownership Option 1 has the lowest first initial cost and Option 3 the lowest life cycle cost. The final decision on with option will be pursued will be determined during the design phase that is set to begin in the fall of 2020.

Which clientele would be impacted by the budget request? Where and how many units would be added, people or communities served, etc.

This building will enable the campus to award an additional 85 bachelor's degrees annually (70 in high demand fields) as well as an additional 20 advanced degrees in high demand fields. All undergraduate programs would benefit from additional science teaching lab space. Neuroscience, psychology, nursing, and science disciplines would benefit at the upper-division and graduate academic programs. The building would be interdisciplinary, including Colleges of Nursing, Medicine, Arts and Science, and Veterinary Medicine. It would add simulation labs, which are used in instructional programs for nursing and medical fields; currently programs go off-site for simulation requirements, which is a stopgap measure. The success of WSU Vancouver's research program directly impacts students, as a research element is typically required for graduate degrees. The university's research labs employ both graduate and undergraduate students, contributing to their academic experience and their future success as professionals.

The Life Sciences facility will support the increase of students enrolled in STEM and high demand fields by over 100 annually, which is nearly 10 percent of the state goal. This building will increase the number of students enrolled in online and hybrid courses as the entire nursing program is structured in this manner. WSU Vancouver will increase the number of graduates in STEM and high demand fields with this project by 105 degrees annually, which is 11 percent of the state goal. This project will increase the percentage of post-secondary students or students employed in Washington.

Does this project or program leverage non-state funding? If yes, how much by source? If the other funding source requires cost share, also include the minimum state (or other) share of project cost allowable and the supporting citation or documentation.

While efforts are being made to leverage other funds, non-state funds have not been identified.

Describe how this project supports the agency's strategic master plan or would improve agency performance. Reference feasibility studies, master plans, space programming and other analyses as appropriate.

WSU's Facility Development plan is focused on identifying and prioritizing capital projects which balance continued stewardship and renewal of existing facilities and infrastructure within a framework for responsible growth. The plan recognizes the urgent need to address a large and rapidly growing deferred maintenance backlog which has been identified as a significant risk to future operations at all of the WSU campuses as they age. Additionally, the goals of this plan are consistent with the Master Plans for each of the WSU campuses which together include emphasis on open spaces, pedestrian access, community connection and campus identity, and research and/or program excellence.

This project will provide space for both enrollment growth in existing programs, and the implementation of several new degree programs. The Campus Vision Statement reflects increasing the campus size to 5,000 students. This project timeline would provide the first new building on campus in 12 years, adding space to accommodate that campus growth and continued expansion of mission-critical teaching and research activities.

In general, there will be quality improvements to all STEM-related programs on campus with new wet lab space. As the campus

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was originally designed for only upper division students, it has been difficult to adapt existing facilities to accommodate lower division needs. The lack of wet lab space and the inability to enroll students in required science classes can affect time-to-degree for students and limit program growth.

The Life Sciences Building will permit enrollment growth and quality improvements in the following existing programs:

• Nursing: WSU Vancouver offers BS, MN, and DNP degrees and has an emerging need for simulation facilities, exam rooms, technology (AMS) enabled classrooms, and faculty offices. The nursing program has more applicants than can be admitted due to a lack of teaching space and a shortage of clinical sites.

• Biology: WSU Vancouver offers a B.S. in biology, which is one of the most popular among the 24 degree-granting programs found on campus. High student demand for the degree, coupled with the campus commitment to creating undergraduate research opportunities, has created a pressing need for more teaching lab and research space.

• Neuroscience: WSU Vancouver has an emerging research strength in neuroscience. The B.S. in Neuroscience is one of the fastest growing majors and there is a need for both research and teaching lab space to accommodate this growth. This degree also serves as a pre-med pathway to graduate students.

• College of Medicine: Collaborative and shared spaces with the College of Nursing will be located in this building to allow for programmatic synergies with undergraduate and graduate student academic and research programs.

In addition to current program offerings, the project will permit initiation of the following new programs:

• B.A. in Human Biology, a multidisciplinary degree that leverages faculty expertise in the biological, environmental, and social sciences.

· B.A. in Chemistry, which the Vancouver campus will not be able to offer without additional lab space.

This building project directly supports the Results Washington initiative, as WSU Vancouver will be unable to sustain growth in STEM and health-related fields without new wet lab and clinic space. There is increasing pressure on upper-division and graduate instructional labs that compete for the same general lab resources, impacting time-to-degree for these students. Upper division and graduate students requiring lab coursework in general science labs are a targeted growth goal for the state of Washington; limiting classes due to lack of suitable space directly conflicts with those goals.

Specifically, the WSU Vancouver Life Sciences facility will support the following Results Washington goals:

 \cdot 1.3.a The project will increase the percentage of eligible students signing up for College Bound through numerous faculty outreach projects and WSU Vancouver's strategic partnership with the Vancouver School District, as the iTech Prep magnet high school is co-located on campus.

• 1.3.e The project will increase the percentage of postsecondary graduates from community colleges that transfer to WSU Vancouver. The campus accepts many community college transfers into STEM and nursing majors, which this facility will support.

1.3.f The Life Sciences facility will increase the number of students enrolled in STEM and high demand fields by over 100 annually, which is nearly 10 percent of the state goal.

1.3.g This building will increase the number of students enrolled in online and hybrid courses as the entire nursing program is structured in this manner, contributing to nearly 10 percent of the state goal.

• 1.3.h WSU Vancouver will increase the number of graduates in STEM and high demand fields with this project by 105 degrees annually, which is 11 percent of the state goal.

· 1.3.i This project will increase the percentage of post-secondary students or students employed in Washington. The building will directly support 20 post-secondary degrees and 92 percent of WSU alumni remain in the Vancouver area.

Does this decision package include funding for any Information Technology related costs including hardware, software (to include cloud-based services), contracts or staff? If the answer is yes, you will be prompted to attach a complete IT addendum. (See Chapter 10 of the operating budget instructions for additional requirements.)

This request does not include funding for any Information Technology related costs.

If the project is linked to the Puget Sound Action Agenda, describe the impacts on the Action Agenda, including expenditure and FTE detail. See Chapter 12 Puget Sound Recovery) in the 2021-23 Operating Budget Instructions. This project is not linked to the Puget Sound Action Agenda.

How does this project contribute to statewide goals to reduce carbon pollution and/or improve energy efficiency? Please elaborate.

With the replacement of inefficient research space with new purpose built state of the art space this new facility will align WSU

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toward meeting our goal of reducing our carbon footprint. This project aligns with the guiding principles of the university's Facility Development Plan, including energy efficiency improvements, carbon reduction and water savings. Preliminary planning associated with the new Life Science Building acknowledges the requirements of House Bill 1257 (Washington State Clean Energy Standards) and House Bill 2311 (Greenhouse Gas Emissions) and strives to include energy improvements and carbon reduction throughout all project planning and execution.

Is there additional information you would like decision makers to know when evaluating this request?

This project must be initiated soon in order to meet academic certification requirements. The neuroscience program is housed in labs that were originally designed to support plant physiology research but now contain laboratory animals. These labs are at capacity and cannot accommodate expanding research programs and additional scientists. Minor capital remodels and facilities upgrades have been employed to retrofit facilities, which are marginally adequate. Compliance with federally mandated AAALAC standards (regulating animal holding) has been a struggle to maintain and growth of these vital research programs is not possible in the current facilities.

Additionally, WSU is accredited as an institution across all campuses through the Northwest Commission on Colleges and Universities. Not meeting accreditation standards on the Vancouver campus will affect the accreditation of WSU as a whole because degree requirements are expected to be equivalent statewide. Limited access to teaching wet-labs negatively impacts this academic imperative.

*Project was previously submitted and will retain score from 2017-19. Refer to project proposal checklist and supporting appendices for additional information.

Location

City: Vancouver

County: Clark

Legislative District: 017

Project Type

New Facilities/Additions (Major Projects)

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Growth Management impacts

The project will be part of campus development identified in the WSU - Clark County Development Agreement as framed by the Clark County Comprehensive Plan under the umbrella of the State Growth Management Act. WSU Vancouver's physical planning policies are coordinated with many agencies and government units. The Growth Management Act and its companion Traffic Demand Management legislation and the State Environmental Policy Act, however, are applicable to WSU's physical facilities and programs. Growth Management Act (GMA)-WSU will coordinate with Counties and Municipalities throughout the State to ensure compliance with GMA. WSU will avoid construction or activities which would permanently impair "critical" areas on its campuses as they are defined in the GMA. Transportation Demand Management-A companion piece of legislation sets forth a policy for Transportation Demand Management in which the State of Washington will provide leadership. The Director of the State of Washington Department of General Administration (DGA) is required to develop a commute trip reduction plan for state agencies which are Phase I major employers. WSU will conform to the plans developed by DGA. State Environmental Policy Act (SEPA)-WSU has adopted procedures set forth in the State Environmental Policy Act Handbook December 1988 and the State Environmental Policy Act Rules Chapter 197-11 Washington Administrative Code Effective April 4, 1984. Adherence to these procedures will be one of the principal means by which WSU coordinates its compliance with Growth Management requirements.

New Facility: Yes

How does this fit in master plan

WSU's Facility Development plan is focused on identifying and prioritizing capital projects which balance continued stewardship and renewal of existing facilities and infrastructure within a framework for responsible growth. The plan recognizes the urgent need to address a large and rapidly growing deferred maintenance backlog which has been identified as a significant risk to future operations at all of the WSU campuses as they age. Additionally, the goals of this plan are consistent with the Master Plans for each of the WSU campuses which together include emphasis on open spaces, pedestrian access, community connection and campus identity, and research and/or program excellence. This project will provide space for both enrollment growth in existing programs, and the implementation of several new degree programs. The Campus Vision Statement reflects increasing the campus size to 5,000 students. This project timeline would provide the first new building on campus in 12 years, adding space to accommodate that campus growth and continued expansion of mission-critical teaching and research activities. In general, there will be quality improvements to all STEM-related programs on campus with new wet lab space. As the campus was originally designed for only upper division students, it has been difficult to adapt existing facilities to accommodate lower division needs. The lack of wet lab space and the inability to enroll students in required science classes can affect time-to-degree for students and limit program growth. The Life Sciences Building will permit enrollment growth and quality improvements in the following existing programs: • Nursing: WSU Vancouver offers BS, MN, and DNP degrees and has an emerging need for simulation facilities, exam rooms, technology (AMS) enabled classrooms, and faculty offices. The nursing program has more applicants than can be admitted due to a lack of teaching space and a shortage of clinical sites. • Biology: WSU Vancouver offers a B.S. in biology, which is one of the most popular among the 24 degree-granting programs found on campus. High student demand for the degree, coupled with the campus commitment to creating undergraduate research opportunities, has created a pressing need for more teaching lab and research space. • Neuroscience: WSU Vancouver has an emerging research strength in neuroscience. The B.S. in Neuroscience is one of the fastest growing majors and there is a need for both research and teaching lab space to accommodate this growth. This degree also serves as a pre-med pathway to graduate students. • College of Medicine: Collaborative and shared spaces with the College of Nursing will be located in this building to allow for programmatic synergies with undergraduate and graduate student academic and research programs. In addition to current program offerings, the project will permit initiation of the following new programs: • B.A. in Human Biology, a multidisciplinary degree that leverages faculty expertise in the biological, environmental, and social sciences. • B.A. in Chemistry, which the Vancouver campus will not be able to offer without additional lab space. This building project directly supports the Results Washington initiative, as WSU Vancouver will be unable to sustain growth in STEM and health-related fields without new wet lab and clinic space. There is increasing pressure on upper-division and graduate instructional labs that compete for the same general lab resources, impacting time-to-degree for these students. Upper division and graduate students requiring lab coursework in general science labs are a targeted growth goal for the state of Washington; limiting classes due to lack of suitable space directly conflicts with those goals. Specifically, the WSU Vancouver Life Sciences facility will support the following Results Washington goals: • 1.3.a The project will increase the percentage of eligible students signing up for College Bound through numerous faculty outreach projects and WSU Vancouver's strategic partnership with the Vancouver School District, as the iTech Prep magnet high school is co-located on campus. • 1.3.e The project will increase the percentage of postsecondary graduates from community colleges that transfer to WSU Vancouver. The campus accepts many

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community college transfers into STEM and nursing majors, which this facility will support. • 1.3.f The Life Sciences facility will increase the number of students enrolled in STEM and high demand fields by over 100 annually, which is nearly 10 percent of the state goal. • 1.3.g This building will increase the number of students enrolled in online and hybrid courses as the entire nursing program is structured in this manner, contributing to nearly 10 percent of the state goal. • 1.3.h WSU Vancouver will increase the number of graduates in STEM and high demand fields with this project by 105 degrees annually, which is 11 percent of the state goal. • 1.3.i This project will increase the percentage of post-secondary students or students employed in Washington. The building will directly support 20 post-secondary degrees and 92 percent of WSU alumni remain in the Vancouver area. See: https://gis.wsu.edu/portal/apps/MapSeries/index.html?appid=9cc577c31d314e0fb75c0d519e82802f

Funding

			Expenditures		2021-23	Fiscal Period
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
057-1 062-1	State Bldg Constr-State WSU Building Account-State	56,600,000 500,000	500,000	4,000,000		52,600,000
	Total	57,100,000	500,000	4,000,000	0	52,600,000
		Fu	ture Fiscal Perio	ods		
		2023-25	2025-27	2027-29	2029-31	
057-1 062-1	State Bldg Constr-State WSU Building Account-State					
	Total	0	0	0	0	

Schedule and Statistics

	Start Date	End Date
Predesign	02/01/2018	06/01/2018
Design	4/1/2020	9/1/2021
Construction	7/1/2021	5/1/2023
	Total	
Gross Square Feet:	60,000	
Usable Square Feet:	36,607	
Efficiency:	61.0%	
Escalated MACC Cost per Sq. Ft.:	592	
Construction Type:	Science Labs (te	eaching)
Is this a remodel?	No	
A/E Fee Class:	В	
A/E Fee Percentage:	6.57%	

Cost Summary

Acquisition Costs Total	<u>Escalated Cost</u> 0	<u>% of Project</u> 0.0%	
Consultant Services			

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		Escalated Cost	<u>% of Project</u>
Consultant Services			
Pre-Schematic Design Services		650,000	1.1%
Construction Documents		1,524,992	2.7%
Extra Services		686,203	1.2%
Other Services		710,386	1.2%
Design Services Contingency		193,111	0.3%
Consultant Services Total		3,940,827	6.9%
aximum Allowable Construction Cost(MACC)	35,501,169		
Site work		1,517,957	2.7%
Related Project Costs		153,270	0.3%
Facility Construction		33,829,942	59.3%
GCCM Risk Contingency		4,487,352	7.9%
GCCM or Design Build Costs		2,455,474	4.3%
Construction Contingencies		2,090,074	3.7%
Non Taxable Items		0	0.0%
Sales Tax		3,740,861	6.6%
Construction Contracts Total		48,274,927	84.5%
Equipment			
Equipment		2,866,339	5.0%
Non Taxable Items		0	0.0%
Sales Tax		240,772	0.4%
Equipment Total		3,107,111	5.4%
Art Work Total		284,081	0.5%
Other Costs Total		284,060	0.5%
Project Management Total		1,209,209	2.1%
Grand Total Escalated Costs		57,100,215	
Rounded Grand Total Escalated Costs		57,100,000	

Operating Impacts

Total one time start up and ongoing operating costs

Acct Code	Account Title	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
FTE	Full Time Employee	5.8	5.9	5.9	5.9	5.9

OFM

365 - Washington State University Capital Project Request

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Operating Impacts

Acct Code	Account Title	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
001-1	General Fund-State	893,000	921,000	921,000	921,000	921,000
	Total	893,000	921,000	921,000	921,000	921,000

Narrative

Costs are based on calculated M&O rates by building type.

OFM

Capital Project Request

2021-23 Biennium

Parameter	Entered As	Interpreted As
Biennium	2021-23	2021-23
Agency	365	365
Version	10-A	10-A
Project Classification	*	All Project Classifications
Capital Project Number	30000840	30000840
Sort Order	Project Priority	Priority
Include Page Numbers	Y	Yes
For Word or Excel	Ν	Ν
User Group	Agency Budget	Agency Budget
User Id	*	All User Ids

STATE OF WASHINGTON AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated June 2020				
Agency	Washington State University			
Project Name	WSU Vancouver - Life Sciences Building			
OFM Project Number				

Contact Information			
Name	Jason Baerlocher		
Phone Number	509-335-9012		
Email	jason.baerlocher @wsu.edu		

Statistics				
Gross Square Feet	60,000	MACC per Square Foot	\$567	
Usable Square Feet	36,607	Escalated MACC per Square Foot	\$592	
Space Efficiency	61.0%	A/E Fee Class	В	
Construction Type	Science labs (teaching)	A/E Fee Percentage	6.57%	
Remodel	No	Projected Life of Asset (Years)	75	
	Additiona	al Project Details		
Alternative Public Works Project	Yes	Art Requirement Applies	Yes	
Inflation Rate	2.38%	Higher Ed Institution	Yes	
Sales Tax Rate %	8.40%	Location Used for Tax Rate	605	
Contingency Rate	5%			
Base Month	August-20	OFM UFI# (from FPMT, if available)	n/a (new bldg)	
Project Administered By	Agency			

Schedule			
Predesign Start	February-18	Predesign End	June-18
Design Start	April-20	Design End	September-21
Construction Start	July-21	Construction End	May-23
Construction Duration	22 Months		

Project Cost Estimate				
Total Project	\$54,854,429	Total Project Escalated	\$57,100,277	
		Rounded Escalated Total	\$57,100,000	

STATE OF WASHINGTON AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated June 2020			
Agency Washington State University			
Project Name			
OFM Project Number	30000840		

Cost Estimate Summary

Acquisition			
Acquisition Subtotal	\$0	Acquisition Subtotal Escalated	\$0

Consultant Services			
Predesign Services	\$650,000		
A/E Basic Design Services	\$1,633,879		
Extra Services	\$677,300		
Other Services	\$734,062		
Design Services Contingency	\$184,762		
Consultant Services Subtotal	\$3,880,003	Consultant Services Subtotal Escalated	\$3,941,002

Construction				
GC/CM Risk Contingency	\$4,298,229			
GC/CM or D/B Costs	\$2,351,986			
Construction Contingencies	\$2,001,986	Construction Contingencies Escalated	\$2,090,074	
Maximum Allowable Construction	\$34,039,729	Maximum Allowable Construction Cost	\$35,501,168	
Cost (MACC)	\$54,059,729	(MACC) Escalated	\$55,501,108	
Sales Tax	\$3,586,122	Sales Tax Escalated	\$3,740,862	
Construction Subtotal	\$46,278,053	Construction Subtotal Escalated	\$48,274,930	

Equipment			
Equipment	\$2,745,535		
Sales Tax	\$230,625		
Non-Taxable Items	\$0		
Equipment Subtotal	\$2,976,160	Equipment Subtotal Escalated	\$3,107,112

Artwork			
Artwork Subtotal	\$284,081	Artwork Subtotal Escalated	\$284,081

Agency Project Administration			
Agency Project Administration Subtotal	\$1,033,133		
DES Additional Services Subtotal	\$0		
Other Project Admin Costs	\$0		
Project Administration Subtotal	\$1,158,133	Project Administation Subtotal Escalated	\$1,209,091

Other Costs			
Other Costs Subtotal	\$278,000	Other Costs Subtotal Escalated	\$284,061

Project Cost Estimate				
Total Project	\$54,854,429	Total Project Escalated	\$57,100,277	
Rounded Escalated Total \$57,100,000				

	Acquisition Costs							
Item	Base Amount	Escalation Factor Escalated Cost		Notes				
Purchase/Lease								
Appraisal and Closing								
Right of Way								
Demolition								
Pre-Site Development								
Other								
Insert Row Here								
ACQUISITION TOTAL	\$0	NA	\$0					

Consultant Services							
Itom	Base Amount	Escalation	Escalated Cost	Notes			
Item	Base Amount	Factor	Escalated Cost	Notes			
1) Pre-Schematic Design Services							
Programming/Site Analysis							
Environmental Analysis							
Predesign Study	\$350,000						
Honorarium / BOD	\$300,000						
Insert Row Here							
Sub TOTAL	\$650,000	1.0000	\$650,000	Escalated to Design Start			
2) Construction Documents							
A/E Basic Design Services	\$1,633,879			69% of A/E Basic Services			
Other	<i>\\\\\\\\\\\\\</i>						
Insert Row Here							
Sub TOTAL	\$1,633,879	1.0089	\$1,648,421	Escalated to Mid-Design			
	<i></i> 033,073	1.0005	<i>¥1,040,421</i>	Esculated to wild Design			
3) Extra Services							
Civil Design (Above Basic Svcs)							
Geotechnical Investigation	\$85,000						
Commissioning	\$120,000						
Site Survey	\$25,000						
Testing	\$121,000						
LEED Services	\$115,000						
Voice/Data Consultant	\$36,300						
Value Engineering	1						
Constructability Review							
Environmental Mitigation (EIS)	\$25,000						
Landscape Consultant							
Audit	\$150,000						
Insert Row Here							
Sub TOTAL	\$677,300	1.0089	\$683,328	Escalated to Mid-Design			
4) Other Services							
Bid/Construction/Closeout	\$734,062			31% of A/E Basic Services			
HVAC Balancing							
Staffing							
Other							
Insert Row Here							
Sub TOTAL	\$734,062	1.0440	\$766,361	Escalated to Mid-Const.			
E) Design Services Contingency							
5) Design Services Contingency	6104 700						
Design Services Contingency	\$184,762						
Other							
Insert Row Here	6404 7C2		6400 CO2				
Sub TOTAL	\$184,762	1.0440	\$192,892	Escalated to Mid-Const.			
CONSULTANT SERVICES TOTAL	\$3,880,003		\$3,941,002				
Green cells must be filled in by user							

Construction Contracts							
Item	Base Amount	Escalation Factor	Escalated Cost	Notes			
1) Site Work							
G10 - Site Preparation	\$503,605						
G20 - Site Improvements	\$681,266						
G30 - Site Mechanical Utilities	\$200,700						
G40 - Site Electrical Utilities	\$100,000						
G60 - Other Site Construction							
Other							
Insert Row Here							
Sub TOTAL	\$1,485,571	1.0218	\$1,517,957				
2) Related Project Costs							
Offsite Improvements							
City Utilities Relocation							
Parking Mitigation							
Stormwater Retention/Detention	\$150,000						
Other							
Insert Row Here							
Sub TOTAL	\$150,000	1.0218	\$153,270				
3) Facility Construction							
A10 - Foundations	\$440,993						
A20 - Basement Construction	\$559,791						
B10 - Superstructure	\$3,424,143						
B20 - Exterior Closure	\$3,779,937						
B30 - Roofing	\$594,590						
C10 - Interior Construction	\$2,399,960						
C20 - Stairs	\$383,994						
C30 - Interior Finishes	\$1,673,972						
D10 - Conveying	\$419,993						
D20 - Plumbing Systems	\$3,599,940						
D30 - HVAC Systems	\$7,799,870						
D40 - Fire Protection Systems	\$329,995						
D50 - Electrical Systems	\$3,359,944						
F10 - Special Construction	\$416,822						
F20 - Selective Demolition	\$0						
General Conditions	\$2,640,000						
Lab Fixed Equipment	\$580,215						
Insert Row Here							
Sub TOTAL	\$32,404,158	1.0440	\$33,829,941				
4) Maximum Allowable Construction C							
MACC Sub TOTAL	\$34,039,729		\$35,501,168				

5) GCCM Risk Contingency				
GCCM Risk Contingency	\$4,298,229			
Other				
Insert Row Here				
Sub TOTAL	\$4,298,229	1.0440	\$4,487,352	
6) GCCM or Design Build Costs				
GCCM Fee	\$1,701,986			
Bid General Conditions				
GCCM Preconstruction Services	\$650,000			
Other				
Insert Row Here				
Sub TOTAL	\$2,351,986	1.0440	\$2,455,474	
7) Construction Contingency				
Allowance for Change Orders	\$1,701,986			
Extra Allowance for Change Orders	\$300,000			
Insert Row Here				
Sub TOTAL	\$2,001,986	1.0440	\$2,090,074	
8) Non-Taxable Items				
Other				
Insert Row Here				
Sub TOTAL	\$0	1.0440	\$0	
Sales Tax				
Sub TOTAL	\$3,586,122		\$3,740,862	
	\$3,586,122		\$3,740,862	

Equipment							
ltem	Base Amount	Escalatio Factor	Escalated Cost	Notes			
E10 - Equipment	\$1,353,835			-			
E20 - Furnishings	\$1,057,700						
F10 - Special Construction	\$334,000						
Other							
Insert Row Here			_				
Sub TOTAL	\$2,745,535	1.0440	\$2,866,339)			
-				-			
1) Non Taxable Items							
Other							
Insert Row Here							
Sub TOTAL	\$0	1.0440) \$0				
Sales Tax				_			
Sub TOTAL	\$230,625		\$240,773	8			
EQUIPMENT TOTAL	\$2,976,160		\$3,107,112	2			
Green cells must be filled in by user							

Artwork						
Item	Base Amount		Escalation Factor	Escalated Cost	Notes	
Project Artwork	\$0				0.5% of total project cost for new construction	
Higher Ed Artwork	\$284,081				0.5% of total project cost for new and renewal construction	
Other						
Insert Row Here						
ARTWORK TOTAL	\$284,081		NA	\$284,081		

	Project Management							
Item	Base Amount		Escalation Factor	Notes				
Agency Project Management	\$1,033,133							
Additional Services								
On-site Supervision	\$125,000							
Insert Row Here								
PROJECT MANAGEMENT TOTAL	\$1,158,133		1.0440	\$1,209,091				

Other Costs							
Item	Base Amount	ount Escalation Escalated Cost		Notes			
Mitigation Costs							
Hazardous Material							
Remediation/Removal							
Historic and Archeological Mitigation							
Facilities/Admin	\$278,000						
Insert Row Here							
OTHER COSTS TOTAL	\$278,000	1.0218	\$284,061				

C-100(2020) Additional Notes

Tab A. Acquisition

Insert Row Here

Tab B. Consultant Services

Insert Row Here

Tab C. Construction Contracts

Insert Row Here

Tab D. Equipment

Insert Row Here

Tab E. Artwork

Insert Row Here

Tab F. Project Management

Insert Row Here

Tab G. Other Costs

Insert Row Here

Degree Totals and Targets Template

Appendix A - Degree Totals

Required for Overarching Criteria for Major Growth, Renovation, Replacement and Research Proposals

Institution:	Washington State University					
Campus location:	Vancouver					
Project name:	Vancouver Life Sciences Building					
	Increase in bachelor's bachelor's degrees awarded degrees awarded demand fields					
2018-19 Statewide Public Four-Year Dashboard (a)	5,836	2,170	1,480			
Number of degrees targeted in 2021 (b)	5,703	2,064	1,521			
2018-19 totals/2021 target (a/b)	102.3%	105.1%	97.3%			
Score:	0.00	0.00	1.00			

Comments:

Dashboard data and degree projections are for WSU system (not just Vancouver campus). Individual campus degree targets are not currently available. 2018-19 Bachelor Degrees awarded for Vancouver totaled 910; high demand degrees totaled 393; and advanced degrees totaled 112.

Availab	ility of Space/O	Campus Utilization Template	
2	020 Four-year High	er Education Scoring Process except Infrastructure and Acquisition.	
Red	uired for all categories		
Project Name:	Vancouver Life Scier	nces Building	
Institution:	Washington State U	niversity	
Campus Location:	Vancouver		T
Identify the average number of hours per wee porposed porject's campus. Please fill in the g		seat and (b) classroom lab is expected to be utilized in Fal the campus where the project is located.	l 2018 on the
(a) General University Classroom Utilization		(b) General University Lab Utilization	
Fall 2019 Weekly Contact Hours	25,600	Fall 2019 Weekly Contact Hours	7,744
Multiply by % FTE Increase Budgeted	0.00%	Multiply by % FTE Increase Budgeted	0.00%
Expected Fall 2020 Contact Hours	25,600	Expected Fall 2020 Contact Hours	7,744
Expected Fall 2020 Classroom Seats	1,804	Expected Fall 2020 Class Lab Seats	588
Expected Hours per Week Utilization	14.2	Expected Hours per Week Utilization	13.2
HECB GUC Utilization Standard	22.0	HECB GUL Utilization Standard	16.0
Differrence in Utilization Standard	-35%	Differrence in Utilization Standard	-18%
institutional plans for achieving that level of u WSU's Facility Development plan is focused or of existing facilities and infrastructure within a towards reaching state targets for classroom a	tilization. n identifying and prio a framework for respo and laboratory utilizat	or the 16 hours per class lab HECB utilization standards, de ritizing capital projects which balance continued stewards onsible growth. While recent completed projects have aid tion, additional improvements are still required. This prop on standards. This guiding principle for all WSU projects w	hip and renewal ed progress osed project plan
achieving the state's target space utilization g			

Appendix C - Space Allocation

Program Related Space Allocation Template

Assignable Square Feet

Required for all Growth, Renovation and Replacement proposals.

Institution:

Washington State University

Campus location:

Project name:

Vancouver

Vancouver Life Sciences Building

Input the assignable square feet for the proposed project under the applicable space types below:

Type of Space	Points	Assignable Square Feet	Percentage of total	Score [Points x Percentage]
Instructional space (classroom, laboratories)	10	29,690	81.10	8.11
Research space	2		0.00	0.00
Office space	4	6,405	17.50	0.70
Library and study collaborative space	10		0.00	0.00
Other non-residential space	8		0.00	0.00
Support and physical plant space	6	512	1.40	0.08
Total		36,607	100.0	8.89

Appendix D - Facility Development Plan

WSU Facility Development Plan

WSU Facilities Services | Geographic Information System

Pullman 2021-2023

Johnson Hall Demolition \$8,000,000 (Design and Construction)

ARS Plant Biosciences Building \$105,000,000 (Federal Funding)

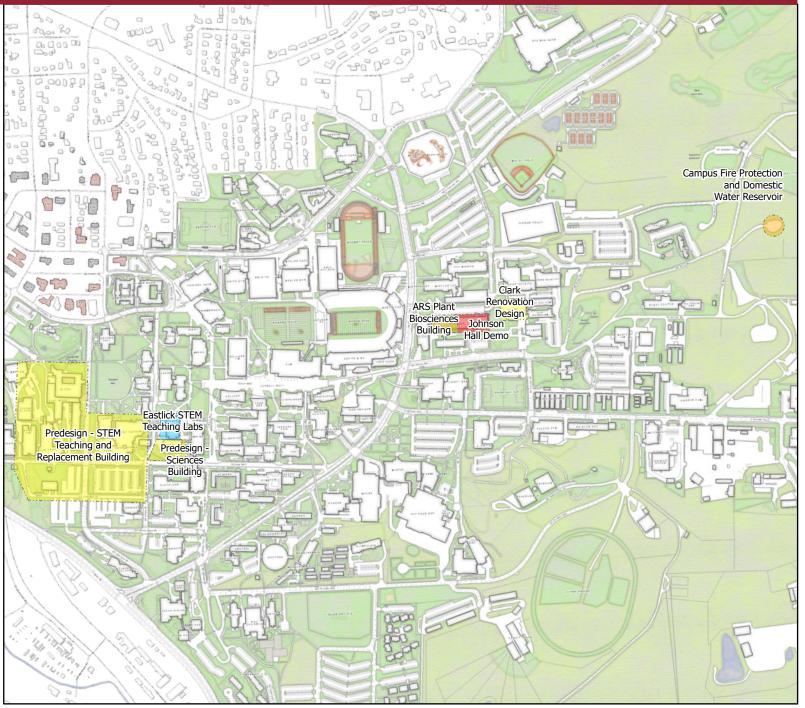
Campus Fire Protection and Domestic Water Reservoir \$8,000,000 (Design and Construction)

Pullman Sciences Building \$500,000 (Predesign)

STEM Teaching and Replacement Building – VCEA \$500,000 (Predesign)

STEM Teaching Labs \$4,900,000 (Design and Construction)

Clark Hall Research Lab Renovation \$4,900,000 (Design and Construction)



Appendix D - Facility Development Plan

WSU Facility Development Plan

WSU Facilities Services | Geographic Information System

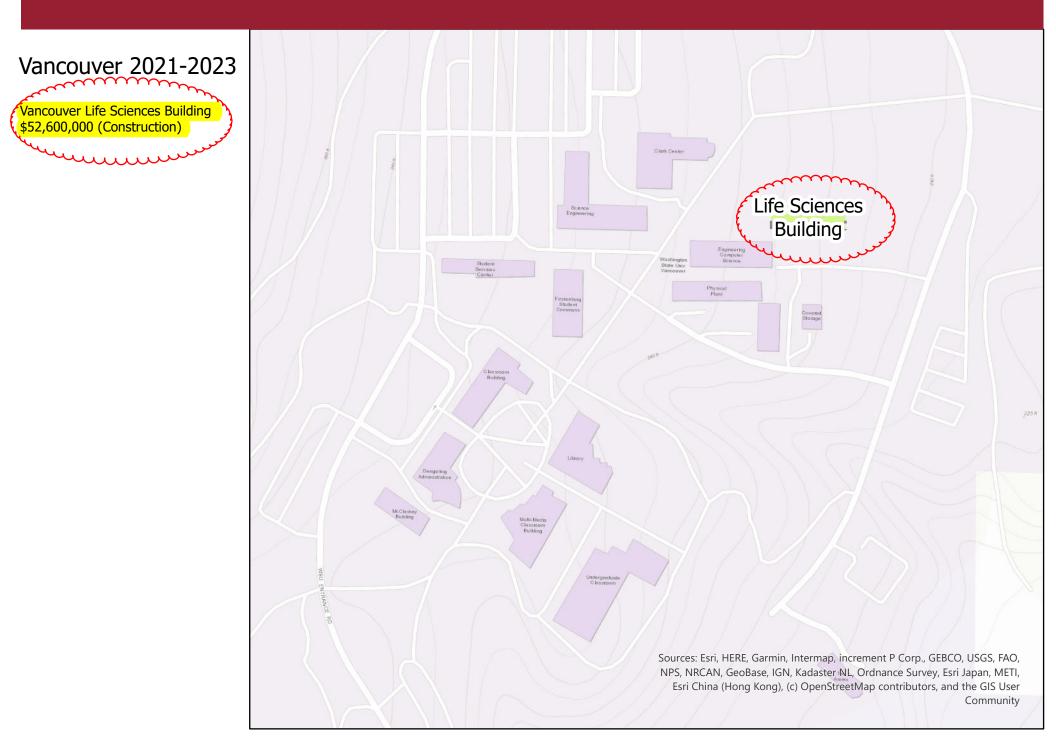
Spokane 2021-2023

Spokane Phase One Building Renovation \$15,000,000 (Design and Construction)



Appendix D - Facility Development Plan

WSU Facilities Services | Geographic Information System



Appendix D - Facility Development Plan

WSU Facilities Services | Geographic Information System

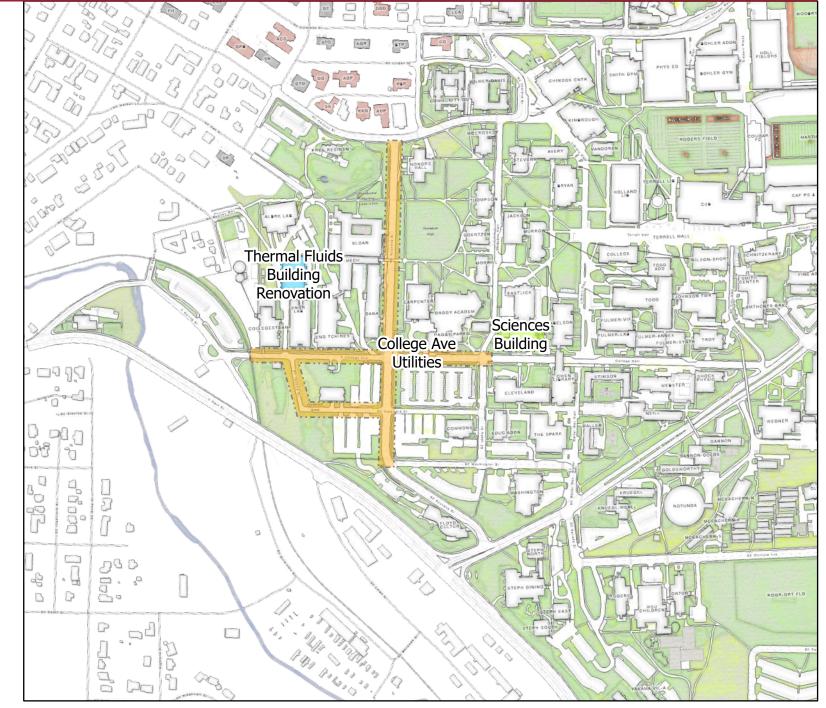
Pullman 2023-2025

Pullman Sciences Building \$53,000,000 (Design, Heald Hall Demolition and Construction)

College Avenue Utility Upgrades \$10,000,000 (Design and Construction)

Thermal Fluids Building Renovation \$10,000,000 (Design and Construction)

Building Systems (roofs, elevators, envelope, BAS, MEP) \$10,000,000 (Design and Construction) (Multiple locations - not shown on map)

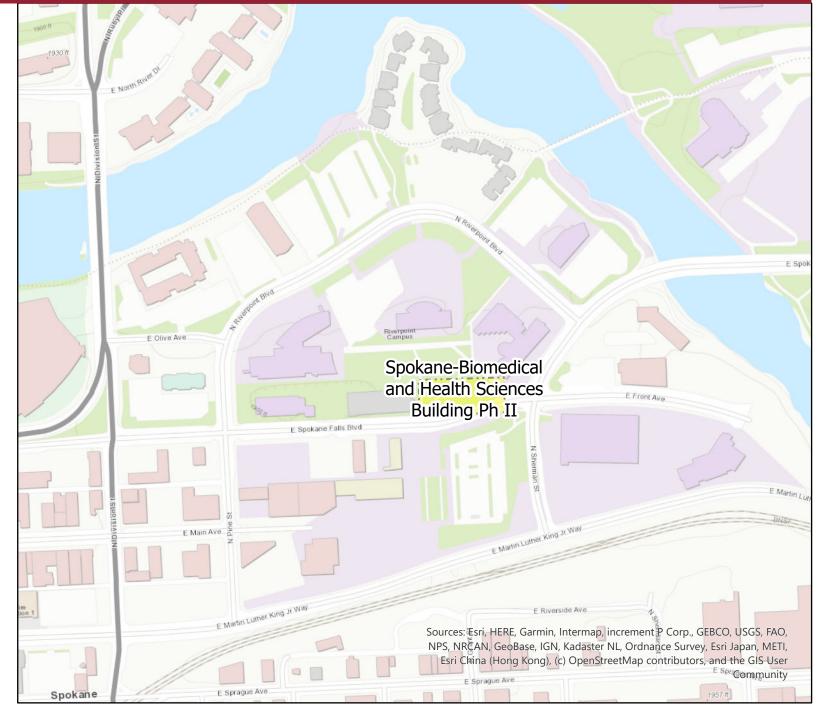


Appendix D - Facility Development Plan

WSU Facilities Services | Geographic Information System

Spokane 2023-2025

Spokane-Biomedical and Health Sciences Building Ph II \$5,000,000 (Design)



Appendix D - Facility Development Plan

WSU Facilities Services | Geographic Information System

Pullman 2025-2027

STEM Teaching and Replacement Building – VCEA \$8,000,000 (Design and Dana Hall Demolition)

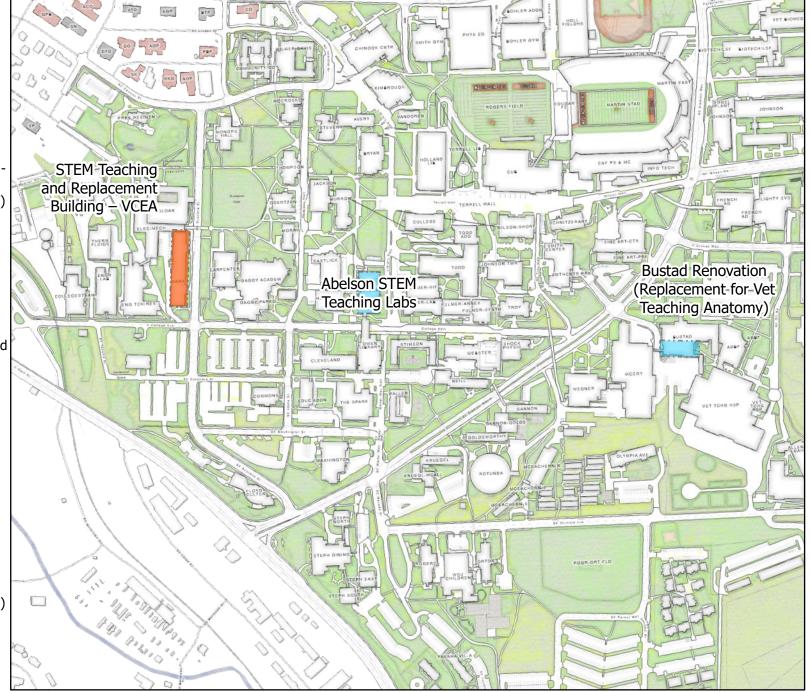
Washington State University Pullman -STEM Teaching Labs \$5,000,000 (Design and Construction)

Bustad Renovation (Replacement for Vet Teaching Anatomy) \$10,000,000 (Design and Construction)

Infrastructure (electrical, water, chilled water, steam, tunnels) \$10,000,000 (Design and Construction) (Multiple locations - not shown on map)

Learning Renovations \$10,000,000 (Design and Construction) (Multiple locations - not shown on map)

Information Technology Renovations \$5,000,000 (Design and Construction) (Multiple locations - not shown on map)

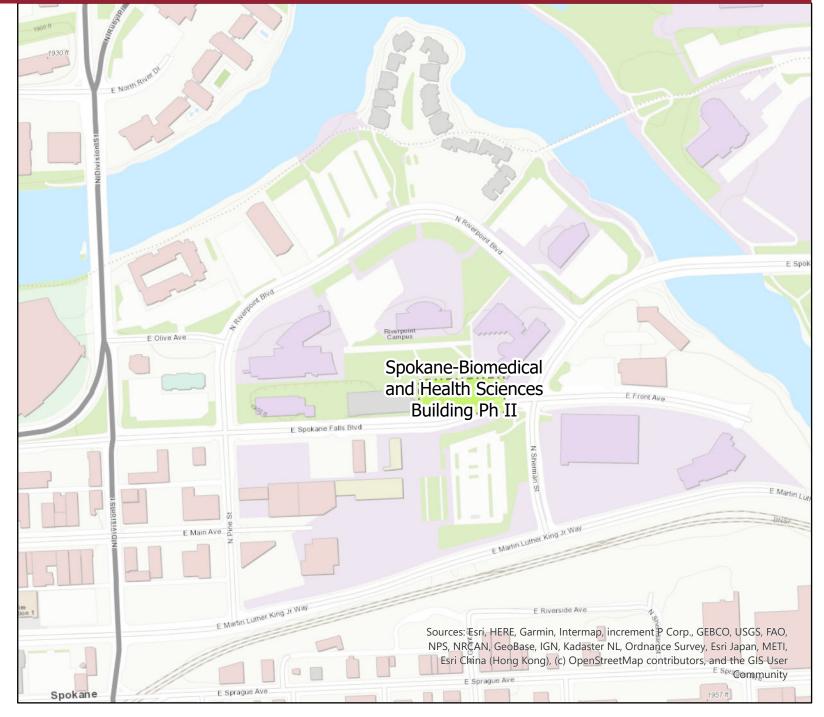


Appendix D - Facility Development Plan

WSU Facilities Services | Geographic Information System

Spokane 2025-2027

Spokane-Biomedical and Health Sciences Building Ph II \$35,000,000 (Construction Phase 1)



Appendix D - Facility Development Plan

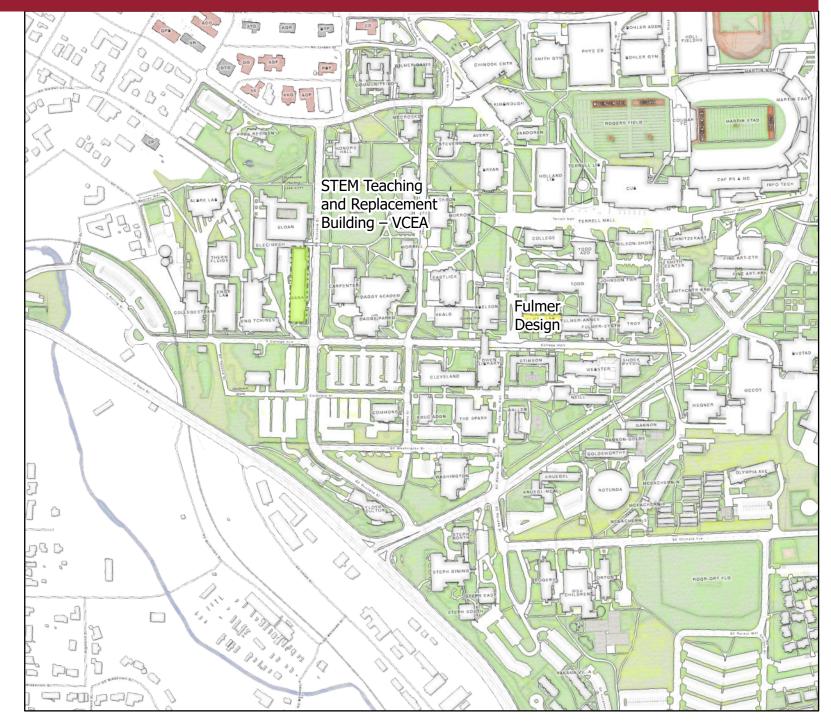
WSU Facilities Services | Geographic Information System

Pullman 2027-2029

STEM Teaching and Replacement Building – VCEA \$45,000,000 (Construction)

Fulmer Hall Renovation Phase 1 \$3,000,000 (Design)

Research Renovations \$10,000,000 (Design and Construction) (Multiple locations - not shown on map)

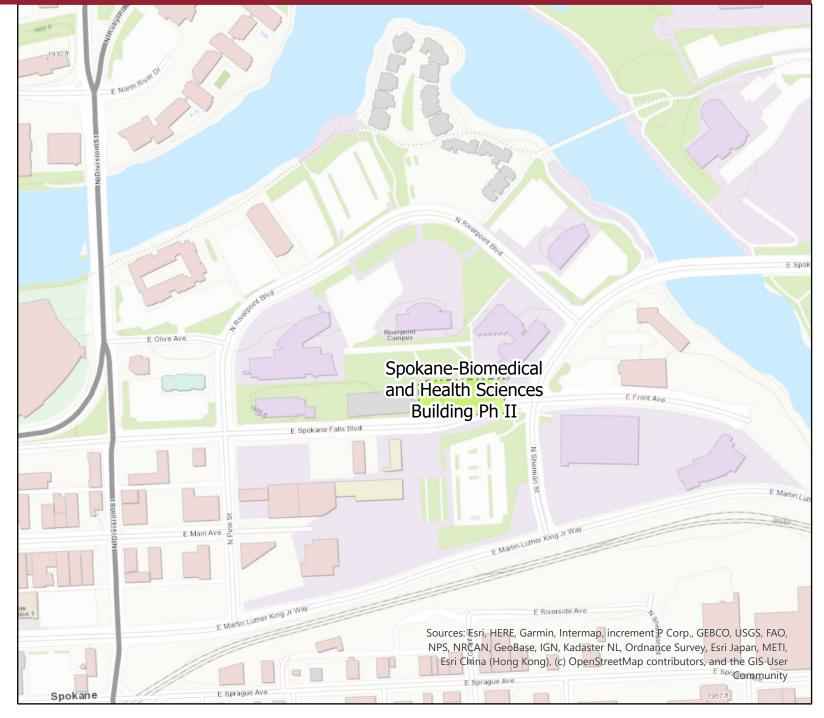


Appendix D - Facility Development Plan

WSU Facilities Services | Geographic Information System

Spokane 2027-2029

Spokane-Biomedical and Health Sciences Building Ph II \$35,000,000 (Construction Phase 2)



Appendix D - Facility Development Plan

WSU Facilities Services | Geographic Information System

Pullman 2029-2031

Fulmer Hall Renovation Phase 1 \$35,000,000 (Construction)

Engineering Renovation/Replacement Ph 2 – VCEA \$8,000,000 (Design and Demolition of Daggy Hall)

McCoy Hall Demolition \$8,000,000 (Design and Demolition of McCoy Hall)

Murrow Hall Renovation \$3,000,000 (Design)

Building Systems (roofs, elevators, envelope, BAS, MEP) \$10,000,000 (Design and Construction) (Multiple locations - not shown on map)

Infrastructure (electrical, water, chilled water, steam, tunnels) \$10,000,000 (Design and Construction) (Multiple locations - not shown on map)

Learning Renovations \$10,000,000 (Design and Construction) (Multiple locations - not shown on map)

Information Technology Renovations \$5,000,000 (Design and Construction) (Multiple locations - not shown on map)

