

# Budget Proposal Narrative

## 2023 Strategic Budgeting Process

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Please carefully review the [Call for Proposals](#) with particular attention to the evaluation criteria before beginning this application. Criteria should be addressed throughout the proposal narrative.

### Section 1: Proposal Title and Department Contact

Proposal Title: Laboratory Safety Infrastructure Enhancements

Division: Business and Financial Affairs

College/Unit: Risk, Ethics, Safety and Resilience

Department Contact: Darin Rasmussen; Grant Whitman

### Section 2: Proposal Summary and Problem Statement

*Check the most relevant box (one selection only).*

Priority Program and Service Areas:

- Graduate Programs
- Inclusive Student Success

Identified Structural or Legacy Funding Needs (to be used sparingly and in conjunction with Division VP)

- Core Infrastructure, Safety, and Regulatory Compliance
- Remaining funding needs from partially funded prior request  
*If checked, please identify original funding request amount and actual funding received in narrative section*
- Other [Click here to enter text](#)

Statement of Purpose (One Page or Less):

What are the challenges or opportunities being addressed? How will the new investment(s) in this proposal address this challenge or opportunity? What are the expected outcomes if this proposal is funded?

To fulfil the University's mission of serving the people of Washington State, we have a duty to protect ourselves, our colleagues and students, and the environment. By protecting these assets, we maximize our ability to serve the public and promote student success. Additionally, we must address our aging facilities, implement industry best practices, and bring our laboratory facilities into compliance with federal and state regulations.

Over the past couple of years, laboratory safety surveys have been conducted in a sampled number of laboratories on Western's campus. These surveys have identified a number of built environmental needs that are consistent throughout campus laboratories and summarized in the table below.

Summary of Proposed New Investments:

Summarize the new investments included in this proposal (total monetary amount, number of FTE and type of positions, and other expenses). Explain the need for any goods and services or professional contracts.

**Total cost of labor and materials to purchase, install, and calibrate 22 alarms in existing fume hoods- \$60,248**

<b>Improvement/ Upgrade</b>	<b>Rationale</b>	<b>Total cost of labor and materials including 8.8% sales tax and 10% contingency.</b>
Purchase and installation of 27 Class ABC 10 lb. fire extinguishers	Many laboratory spaces utilize combustibles in their operations. There is a significant risk of fire and combustion placing our students, faculty, and staff at risk.	\$8,070
Purchase, installation, and calibration of 22 low airflow alarms in existing fume hoods	Many hoods were originally installed without low airflow alarms. Alarms are an important piece of safety equipment to prevent exposures to hazardous materials.	\$60,248
Purchase and installation of three fiberglass HEMCO Wall Canopy Hoods to enhance ventilation of chemical operations	Chemistry operates a glass washing machine and two solvent stills. Chemical fumes/vapors are released during these operations. Local exhaust is warranted to reduce exposures and odors.	\$28,807
Purchase and installation of three flammable material storage combination refrigerator/freezers and 14 flammable cabinets	Hazardous material storage cabinets and flammable storage refrigerators are specialized storage equipment providing increased fire prevention and protection. Many current cabinets and refrigerators are not fire code compliant, presenting increased fire risk, and requiring groups to maintain smaller chemical quantities. Compliant cabinets and refrigerators are needed to protect building occupants and first responders.	\$57,628
Purchase and installation of seismic safety straps	We sit in a moderate-high hazard seismic zone (US Geological Survey). Chemical storage shelving should have lips to stop chemicals	\$59,353

(250 qty.) and shelving ((15 qty.)	from rolling off in the event of an earthquake. Top-heavy equipment should be secured to prevent tipping. Retrofits are needed where these controls are not in place.	
Installation of Vacuum pump cabinet retrofits (10 qty.)	Vacuum pumps are used for evaporating volatile chemicals. Used improperly, vapors can become entrained in the pump, fill the cabinet, and ignite as was recently reported. Vacuum pumps should be exhausted to the fume hood plenum, requiring modifications.	\$16,500
<b>Total</b>		<b>\$230,608</b>

***It is anticipated that there will be an ongoing cost of approximately \$1,200 beginning in FY25 for fire extinguisher maintenance to include testing and servicing of the new fire extinguishers.***

Impact of New Investment on ADEI and Sustainability:

Please provide data or an analysis to support this request and illustrate the anticipated impact of this investment, including in advancing accessibility, diversity, equity, inclusion, and sustainability.

Increased physical safety in the form of equipment that aligns with industry standards and universal best practices benefits all users. Some specific improvements directly address ADEI. The retrofitting of fume hoods to add alarms will provide a layer of notification to a greater population of students, faculty, and staff; notifying them when a fume hood is in alarm. With regard to Sustainability, improved air quality in laboratory spaces will both help those with respiratory limitations and will be more sustainable in the long term. The addition of fire cabinets will allow for larger quantities of chemicals to be safely stored. Larger quantities are more sustainable to store than small quantities.

### Section 3: Performance Outcomes and Risk Mitigation

Expected Outcomes and Evaluation of Success:

Please explain how the success of the proposal will be measured, if funded. What metrics might indicate that the intended impact was achieved? How can the expected outcomes be directly tied to the investment being proposed?

Specifically, provide the targets and explain which method(s) will be used to track progress (refer to the Provost’s [Overall Metrics to track progress toward University’s Strategic Plan](#)), estimated return on investment (such as enrollment increases or efficiencies), divisional KPI’s, recruitment and retention especially specifics for historically marginalized populations.

Performance outcomes are difficult to quantify because the successful outcome is to “not have an incident”. However, the university does monitor via the Vector system for serious incidents in laboratories. Success will be measured by continued monitoring these trends. Additional means of measure and monitoring improved laboratory safety will include the in-house laboratory safety surveys

conducted by EHS as well as improved outcomes in inspections conducted by federal and state agencies.

**Impact on Recruitment, Retention, and Satisfaction of Diverse Faculty, Staff, and Administrators:**  
For proposals that include personnel resources, explain how the proposal improves recruitment, retention, and satisfaction of diverse faculty, staff, and administrators.

A visibly safer workplace enhances the ability to recruit faculty and staff including diverse faculty and staff. The addition of this equipment will also professionalize and modernize the laboratory spaces to align with industry standards and universal best practices.

**Risk to Desired Outcomes:**

What might occur to prevent the desired outcomes even if funding is obtained? How will these risks be mitigated? Beyond new funding, what other criteria or external factors need to occur in order for this proposal to be successful (e.g., economic or demographic factors, etc.).

There may be some challenges in obtaining the desired equipment. It is likely that some of the equipment will be needed to retrofit existing facilities such as the fume hoods, and it may not be readily obtainable. Additionally, FDO may not have the staffing and/or the bandwidth to make the modifications and installations.

**Anticipated Consequences if Proposal is Not Funded:**

What are the anticipated consequences of not funding this proposal?

Continued risk to the physical safety of our students, faculty, and staff who work in and around laboratory spaces. Additionally, continued risk of damage to property ranging from small damage in the laboratory up to and including catastrophic damage to university facilities from fire, smoke, and other perils. in the form of due to the identified exposures. The University also faces reputational risk arising from adverse findings from outside agency inspection reports including sanctions and fines. Finally, there is the risk of failing to adequately prepare students to graduate and work in laboratories that adhere to industry standards and universal best practices.

## Section 4: Process and Development

**Describe Collaborations and Stakeholder Engagement:**

What stakeholders were involved, and in what role/capacity? Which groups were engaged and at what stages? How were concerns addressed? What process have you followed to identify unintended consequences that may result from this proposal? Is the issue being addressed a broader issue across the university?

Stakeholders include:

- Lab and Chemical Safety Committee
- Chemistry, Biology, and Environmental Department safety coordinators
- Environmental Health and Safety
- Risk management (ERM)

Concerns have been identified through:

- (1) Laboratory safety surveys which include one-on-one interview with those faculty members responsible for the spaces
- (2) Reviews of significant incidents with respective chairs and deans as appropriate.

Explain how this proposal will leverage resources or commitments from other sources:

Identify any current resources in place, any new commitments, or potential funding partnerships with external entities that have been identified. If exploration is currently underway, note any conversations with university development officers, funding agencies, the Vice Provost for Research, etc.

No additional sources have been identified.

Has your department previously submitted this proposal?

If so, briefly outline any significant changes and indicate the feedback received during that budget process.

This proposal has not been previously submitted.

Describe any funding alternatives that have been explored.

Note both alternative approaches in addressing the problem, as well as alternatives to new funding (repurposing existing divisional funding or one-time fund use). If these alternatives are not being pursued, explain why.

The laboratories are in state-owned buildings which must be maintained to contemporary standards. Deferred maintenance to address institutional crumbling infrastructure has been identified as an enterprise risk. Some effort was made to explore available grant funding; however, no grants have been identified to address ongoing infrastructure improvements.

## Section 5: Fulfillment of WWU's Strategic Plan's Core Themes and Goals

Please explain how your proposal and the anticipated outcomes will advance the Core Themes and Goals of [WWU's 2018-2025 Strategic Plan](#) and the strategic priorities set for this budget cycle. How does this allocation or withdrawal of funding advance or hinder access to Western, academic excellence, and/or inclusive achievement?

### Core Themes

Advancing Inclusive Success

[Click here to enter text](#)

Increasing Washington Impact

The university is invested in graduating increased numbers of STEM graduates. These graduates will need to have experience in working in facilities that utilize industry standards and universal best practices. It will be an expectation of prospective employers that our students are familiar with these and adhere to them.

### Enhancing Academic Excellence

A workplace that provides physical safety and the appearance of safety creates an environment that encourages the pursuit of academic excellence.

### Goals

Western will provide a transformational education grounded in the liberal arts and sciences and based on innovative scholarship, research, and creative activity.

These upgrades will enhance an environment that encourages scholarship, research, and creative activity.

Western will advance a deeper understanding of and engagement with place.

[Click here to enter text](#)

Western will foster a caring and supportive environment where all members are respected and treated fairly.

Physical safety is an important piece of a supportive and caring environment. Feeling comfortable about your physical safety allows you to focus on the university mission and your passion in course of study.

Western will pursue justice and equity in its policies, practices, and impacts.

[Click here to enter text](#)

## Section 6: Space Planning, Capital, and Maintenance Considerations

### Major Equipment of Software Needs

If the proposal includes new major equipment or software (>\$25K), please indicate its anticipated useful life, and associated operating costs such as service contracts or annual licenses.

The useful life of this equipment where it is well-maintained is 25-30 years. There are no anticipated ongoing licenses or contracts.

### Space or Infrastructure Upgrades

Do you believe new space, space modifications, or infrastructure upgrades will be required? If so, please provide the following as best you can.

*Please note that Capital Planning and Development will review and evaluate the request after the proposal is submitted to determine options.*

*Scope:*

There will likely be space modifications, electrical work as needed. Because this is a wide-ranging initiative that covers multiple spaces across the university it is difficult to estimate the total scope and expense.

*Square Footage:*

Click here to enter text

*Cost for capital component:*

TBD

Changes to the Use of Existing Space

If existing space is being repurposed, explain how the proposed activities will be accommodated within existing space. For how long? Who will need to approve the proposed new use of this space?

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Incorporation of Physical Accessibility and Cultural Inclusion

For proposals that include capital development or IT infrastructure, please explain how physical accessibility and cultural inclusion (beyond statutory requirements) will be resourced as foundational elements of project development.

Click here to enter text

**Proposal Title: Laboratory Safety Infrastructure Enhancements**

**Divison: Business and Financial Affairs**

**Department: Risk, Ethics, Safety & Resilience**

**Department Contact: Darin Rasmussen**

	Description	Fiscal Year 2024					Fiscal Year 2025				
		FTE	Salary	Benefits	One-Time Costs	Total	FTE	Salary	Benefits	One-Time Costs	Total
<b>Salary and Benefits</b>											
Faculty Positions		-	\$0	\$0	\$0	\$0	-	-	-	\$0	-
Professional/Exempt Positions		-	\$0	\$0	\$0	\$0	-	-	-	\$0	-
Classified Positions		-	\$0	\$0	\$0	\$0	-	-	-	\$0	-
Student Salaries (Graduate Assistants, Hourly Student, etc)		-	\$0	\$0	\$0	\$0	-	-	-	\$0	-
<b>Total Salaries and Benefits</b>		-	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	-	-	-	<b>\$0</b>	-

	Description	Price per		Recurring	One-Time	Total	Price per		Recurring	One-Time	Total
		Units	Unit	Costs	Costs		Units	Unit	Costs	Costs	
<b>Non-Personnel Expenses</b>											
Supplies and Materials	Material for laboratory safety upgrades				\$84,829	\$84,829					\$0
Professional Service Contracts						\$0					\$0
Other Goods and Services, Memberships, etc.						\$0					\$0
Travel						\$0					\$0
Other						\$0			\$1,200		\$1,200
Capital Facility Expenses (New Space or Space Modifications)	Installation, testing, etc (see Addl Analysis)				\$145,779	\$145,779					\$0
<b>Total Non-Personnel Expenses</b>				<b>\$0</b>	<b>\$230,608</b>	<b>\$230,608</b>			<b>\$1,200</b>	<b>\$0</b>	<b>\$1,200</b>

	Description	Include?	Recurring	One-Time	Total	Recurring	One-Time	Total
			Costs	Costs		Costs	Costs	
<b>University Indirect Costs</b>								
Libraries** (Estimated at \$10k per faculty member)	\$10,000 per new faculty member	NO	\$0	\$0	\$0	\$0	\$0	\$0
Academic Support Services/Student Support Services	3% of Recurring Direct Costs	YES	\$0	\$0	\$0	\$36	\$0	\$36
Institutional Support	2% of Recurring Direct Costs	YES	\$0	\$0	\$0	\$24	\$0	\$24
Plant Operation and Maintenance	3% of Recurring Direct Costs	YES	\$0	\$0	\$0	\$36	\$0	\$36
Graduate TA Waiver	<a href="#">Input amounts for new TA Positions</a>	NO	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Indirect Costs</b>			<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$96</b>	<b>\$0</b>	<b>\$96</b>

	FTE	Head Count	Recurring Costs	One-Time Costs	Fiscal Year Total	FTE	Head Count	Recurring Costs	One-Time Costs	Fiscal Year Total
<b>Total Proposal, All Direct and Indirect Costs</b>	<b>0.00</b>	<b>0.00</b>	<b>\$0</b>	<b>\$230,608</b>	<b>\$230,608</b>	<b>0.00</b>	<b>0.00</b>	<b>\$1,296</b>	<b>\$0</b>	<b>\$1,296</b>