

Fiscal Year 2022-23 Capital Construction Request

Western Colorado University
Hurst Hall Lab Renovation (Capital Renewal)

PROGRAM PLAN STATUS

2023-020

Approved Program Plan

N/A

Date Approved:

PRIORITY NUMBERS

<u>Prioritized By</u>	<u>Priority</u>	
WCU	1 of 2	
CCHE	14 of 34	
OSPB	15 of 27	Recommended for funding.

PRIOR APPROPRIATIONS AND REQUEST INFORMATION

<u>Fund Source</u>	<u>Prior Approp.</u>	<u>FY 2022-23</u>	<u>FY 2023-24</u>	<u>Future Requests</u>	<u>Total Costs</u>
CCF	\$0	\$3,831,677	\$0	\$0	\$3,831,677
CF	\$0	\$163,815	\$0	\$0	\$163,815
Total	\$0	\$3,995,492	\$0	\$0	\$3,995,492

ITEMIZED COST INFORMATION

<u>Cost Item</u>	<u>Prior Approp.</u>	<u>FY 2022-23</u>	<u>FY 2023-24</u>	<u>Future Requests</u>	<u>Total Cost</u>
Land Acquisition	\$0	\$0	\$0	\$0	\$0
Professional Services	\$0	\$478,327	\$0	\$0	\$478,327
Construction	\$0	\$2,265,579	\$0	\$0	\$2,265,579
Equipment	\$0	\$831,125	\$0	\$0	\$831,125
Miscellaneous	\$0	\$62,959	\$0	\$0	\$62,959
Contingency	\$0	\$357,502	\$0	\$0	\$357,502
Total	\$0	\$3,995,492	\$0	\$0	\$3,995,492

PROJECT STATUS

This is a new, never-before-requested project.

Fiscal Year 2022-23 Capital Construction Request

Western Colorado University
Hurst Hall Lab Renovation (Capital Renewal)

PROJECT DESCRIPTION / SCOPE OF WORK

Western Colorado University (WCU) is requesting a combination of state funds and cash funds spending authority to renovate 13,434 ASF in the 54,478-ASF Hurst Hall to provide additional teaching and laboratory space for the Natural and Environmental Sciences Department, and specifically the Physics, Chemistry, and Life Sciences programs. About 10,500 ASF of the space to be renovated was recently vacated by the Math and Computer Science programs, which have moved to a new facility. The project addresses deferred maintenance and a shortage of laboratory space.

The renovated space will feature state-of-the-art laboratories and research centers, including teaching labs for the Physics and Chemistry programs; flexible group and individual study spaces for team activities and collaborative learning; and upgraded mechanical systems. The project upgrades fume hoods and the air handling system in the organic chemistry lab to address capacity and safety issues associated with ventilation of hazardous chemical emissions, the electrical system to address capacity and obsolescence issues, and lighting.

Cost assumption. Project costs were determined during the program planning process, which was conducted by a contractor, with input from an additional contractor. The plan accounts for inflation. The project complies with the Art in Public Places and High Performance Certification Program requirements.

PROJECT JUSTIFICATION

The university says the project will address mechanical system deficiencies stemming from years of deferred maintenance, a shortage of science lab and teaching space that meets modern educational standards, and a safety issue in the organic chemistry lab.

The existing organic chemistry lab is ventilated by two chemical fume hoods and downdraft tables. The mechanical system does not provide adequate exhaust for the dangerous chemicals used in the lab, and the hoods and tables are further unable to contain or exhaust chemical fumes or spills. The downdraft tables are supposed to act as additional fume hoods, but the university says these are inadequate substitutes. Loss of one of the two exhaust fans results in lab shutdown, and adding more fume hoods requires additional mechanical capacity. Faculty have also expressed concerns about the organic chemistry lab due to tight aisle spacing, lack of visual supervision because of the lab's configuration, and student use of chemicals outside of the fume hoods.

Additional mechanical deficiencies include an electrical system that is at capacity and requires additional panelboards, and an antiquated, insufficient lighting system. HVAC condensing units are no longer working, so the building is without mechanical cooling. As a result, several rooms become hot due to class size and computer heat gain.

A recent space utilization study of Hurst Hall found that its lab spaces are used nearly twice as much as Department of Higher Education guidelines, with similar usage rates in its classroom spaces. WCU says the lack of space in the building has limited the ability of science programs to deliver content to students, a situation that is compounded by disruptions to repair mechanical systems to keep the building functional. The university further says that the project's upgrades will help to alleviate the lab space shortage and attract top talent as student enrollment increases.

PROGRAM INFORMATION

Hurst Hall was constructed in 1962, and an addition to the building in 2000 more than doubled its size. The building hosts the Natural and Environmental Sciences Department, which includes programs in biology, chemistry, physics, geology, anthropology, biomedicine, zoology, microbiology, and ecology. The university notes that the building supports innovative partnerships such as the WCU/CU Boulder Engineering degree, which allows WCU students to attain a University of Colorado Engineering degree at a lower cost while remaining in Gunnison.

Fiscal Year 2022-23 Capital Construction Request

Western Colorado University
Hurst Hall Lab Renovation (Capital Renewal)

PROJECT SCHEDULE

	Start Date	Completion Date
Design	May 2022	January 2023
Construction	April 2023	October 2023
Equipment	November 2023	January 2024
Occupancy	January 2024	January 2024

SOURCE OF CASH FUNDS

The source of cash funds for the project is university reserves.

OPERATING BUDGET

The university anticipates the project will have a positive impact on its operating budget by reducing mechanical repair work orders in Hurst Hall, while not having a significant impact on energy consumption.

STAFF QUESTIONS AND ISSUES

All responses to staff questions have been incorporated into the project write-up.

Fiscal Year 2022-23 Capital Construction Request

Western Colorado University
Leslie J. Savage Library (Capital Renewal)

PROGRAM PLAN STATUS

2023-019

Approved Program Plan

Yes

Date Approved:

June 1, 2014

PRIORITY NUMBERS

Prioritized By	Priority	
WCU	2 of 2	
CCHE	20 of 34	
OSPB	19 of 27	Recommended for funding.

PRIOR APPROPRIATIONS AND REQUEST INFORMATION

Fund Source	Prior Approp.	FY 2022-23	FY 2023-24	Future Requests	Total Costs
CCF	\$0	\$2,940,516	\$0	\$0	\$2,940,516
CF	\$0	\$125,715	\$0	\$0	\$125,715
Total	\$0	\$3,066,231	\$0	\$0	\$3,066,231

ITEMIZED COST INFORMATION

Cost Item	Prior Approp.	FY 2022-23	FY 2023-24	Future Requests	Total Cost
Land Acquisition	\$0	\$0	\$0	\$0	\$0
Professional Services	\$0	\$327,938	\$0	\$0	\$327,938
Construction	\$0	\$2,459,545	\$0	\$0	\$2,459,545
Equipment	\$0	\$0	\$0	\$0	\$0
Miscellaneous	\$0	\$0	\$0	\$0	\$0
Contingency	\$0	\$278,748	\$0	\$0	\$278,748
Total	\$0	\$3,066,231	\$0	\$0	\$3,066,231

PROJECT STATUS

This is a new, never-before-requested project. For FY 2015-16 through FY 2020-21, the university submitted requests for state funds and cash funds spending authority for a library renovation project with a greater scope that included elements of the current request. Those earlier requests were not funded. Portions of the earlier, larger request have been funded through grants and the controlled maintenance process.

Fiscal Year 2022-23 Capital Construction Request

Western Colorado University
Leslie J. Savage Library (Capital Renewal)

PROJECT DESCRIPTION / SCOPE OF WORK

Western Colorado University (WCU) is requesting a combination of state funds and cash funds spending authority for a capital renewal project to revitalize the windows, mechanical controls, and boilers in the Savage Library. The university says all three systems pose a threat of failure, and replacement parts are difficult to acquire due to system obsolescence.

The project replaces low-insulation, single-pane windows with contemporary units featuring double-glazed, insulated-glass-unit windows that are thermally efficient and structurally resilient. WCU explains that such units stand up against Gunnison's rapidly cycling temperature extremes. Antiquated HVAC controls that rely on pressurized pneumatic tubes will be replaced with contemporary direct digital controls that better integrate into the campus building automation system, resulting in improved monitoring and reduced need for emergency repairs. The library's scattered lighting control system will be centralized for better access, efficiency, and safety. Inefficient, cast-iron boilers will be replaced with high-efficiency models.

Cost assumption. Professional services costs were calculated as a percentage of total construction costs and checked against expenditures for similar projects. Window- and boiler-replacement costs are based on recent WCU projects, and the controls replacement costs were provided by a controls contractor with experience on the campus. The project accounts for inflation at a rate of 4.2 percent. The project is exempt from the Art in Public Places and High Performance Certification programs.

PROJECT JUSTIFICATION

WCU says the project addresses urgent deferred maintenance needs in the Savage Library that will allow the facility to remain open, and will also reduce maintenance and energy costs going forward. The university will address previously planned programmatic changes to the library in a future capital request. The current Facility Condition Index (FCI) rating for the library is 38.7. FCI measures the relative condition of a facility, and the Office of the State Architect's target FCI score for state buildings is 85.

The current single-pane windows are energy inefficient and degrading rapidly, and replacement parts for them are hard to source, according to the university. Certain rooms in the library are drafty to the point of disuse during cold-weather events, requiring additional energy to normalize the temperature to occupancy conditions. Replacing the windows will make the university eligible for rebates from its natural gas supplier.

The building's HVAC controls are easily punctured, prone to failure, and no longer supported by the manufacturer. The lighting control systems are dispersed, and lighting the building requires staff to access five separate closets and mechanical rooms, which takes about 30 minutes. Many lights do not have switches. Using breaker panels as switches creates a hazard, since accessing them puts staff in electrical rooms that contain high-voltage transformers. The current boilers are steadily decreasing in efficiency, require frequent maintenance, and are out of warranty. WCU says boiler failure will result in temporary facility closure until an external boiler can be brought on site.

PROGRAM INFORMATION

The main portion of the Leslie J. Savage Library was designed in 1939 by Temple Hoyne Buell, and is the only designated historic building in Gunnison. An addition was constructed in 1963. Savage houses the Writing Center, Academic Peer Counseling, Makers Space Lab, and the Women's Center. The library serves as a hub for meetings, mentoring, and study groups, and services numerous academic programs in in-demand fields, as ranked by the Bureau of Labor Statistics. The university says the library is central to not only the university but to the community as well, since it hosts numerous public programming events each year. The Gunnison Rotary Club operates out of the library.

Fiscal Year 2022-23 Capital Construction Request

Western Colorado University
Leslie J. Savage Library (Capital Renewal)

PROJECT SCHEDULE

	Start Date	Completion Date
Design	May 2022	October 2022
Construction	November 2022	August 2023
Equipment	August 2023	August 2023
Occupancy	August 2023	August 2023

SOURCE OF CASH FUNDS

The source of cash funds for the project is university reserves.

OPERATING BUDGET

The university estimates that it will save \$30,000 annually due to the energy efficiency of the new windows and boilers. It expects the new HVAC controls to further augment these savings, potentially cutting the library's energy costs by 36 percent to 49 percent, according to U.S. Department of Energy guidelines.

STAFF QUESTIONS AND ISSUES

Responses to all staff questions have been incorporated into the write-up.