

## Capital Project Stage Gate II: Cascade Hall

### BACKGROUND

The Cascade Hall Renovation project is included in the Ten-Year Capital Forecast. On April 4, 2019, the Finance & Administrative Committee advanced the project to the design development phase, which the university has now completed. The following information is provided for the committee and Board’s consideration of advancing this project to the construction phase, pursuant to the [Approval of Capital Projects policy](#).

### PROJECT DESCRIPTION, SCOPE AND PROGRAM

Cascade Hall is a 38,765 square foot, two-story building constructed in the 1960s. The eastern side of the building was repurposed for classrooms and academic support in 2014. The current project focuses on the western side (14,607 square foot) of the building that is currently vacant. The lower floor of the renovated space will provide a new home for the Navy ROTC program, following removal from the program’s current location at a Quonset building slated for demolition as part of the Washington Way Improvements project. The upper west-side floor of Cascade Hall will provide space for the Department of Public Safety, already located on the east side of the upper floor, to accommodate staff and program growth. The project’s scope includes full replacement of all building systems, seismic strengthening, and renovated space to accommodate the new tenants.

### ESTIMATED TOTAL PROJECT BUDGET, FUNDING AND TIMELINE

The Cascade Hall renovation cost is \$6.5M and will be funded by OSU revenue bonds (\$3M) and state bond funded capital improvements and renewal funds (\$3.5M) from the 2017-19 allocation.

The project is expected to be completed in the summer of 2020.

### IDENTIFICATION OF RISKS AND PROPOSED CONTINGENCY

The following risks have been identified for the project. In consideration of these risk, the contingencies for design, construction, and owner are 2%, 3%, and 7%, respectively. The design contingency has been lowered since stage gate 1 as the project design is now well established with cost estimates confirmed by a sub-contractor specialist.

<b>Risks</b>	<b>Consequences</b>	<b>Mitigation Strategy</b>
<i>Undiscovered conditions</i>	Renovations carry an inherent risk of the actual construction or conditions being different from archived documents or even explorative inspection and testing, especially in older buildings. Conditions beyond what is expected would present a risk to final cost, schedule and/or the quality and scope of the project.	This risk is mitigated by construction contingency.

<i>Labor and materials availability</i>	Availability of resources presents risk to cost, schedule, and possible scope.	This risk is mitigated by construction contingency.
<i>Higher than expected construction market escalation</i>	This risk is based more on national/regional economics than labor availability (above), but risks are similar.	This risk is mitigated by escalation and contingencies.
<i>Project delay</i>	Funding, permitting, logistics, contractual, or any reason for substantial delays in construction present not only schedule vulnerability, but also subject the project to further escalation in materials and labor costs. Stretching the construction period would likely increase the cost for the contractor to manage the project and pay for general logistics (general conditions).	This risk is mitigated by having a team in place early that considers critical activities, appropriate timelines, and measures to avoid and accommodate delays.

### TOTAL COST OF OWNERSHIP

Total cost of ownership is a summary of estimated financial obligations for an asset, including initial design and construction expenses, operations and maintenance, debt service and renewal costs. It is a more useful way of considering the total impacts of E&G projects than the standard project pro forma the university uses for self-support projects, which have a revenue component.

The estimated total cost of ownership over a 25-year life cycle for Cascade Hall is summarized in the following table, which includes total project cost, debt service, operations and maintenance (O&M), and capital renewal funding based on depreciation.

<b>Education and General Fund – Forecasted Total Cost of Ownership Cascade Hall</b>	
<b>ITEM</b>	<b>COST</b>
<b>Total project cost</b>	<b>\$6,500,000</b>
Total debt service (10 years – 3.50%)	\$3,581,473
Operations and maintenance (25 years, \$164,329 - escalated 3% annually)	\$5,657,259
Capital renewal (25 years – escalated 3%) <sup>1</sup>	\$9,479,409
<b>Total cost of ownership</b>	<b>\$25,218,141</b>

<sup>1</sup>Capital renewal is calculated based on each building's estimated lifespan and associated depreciation, with a 3% annual escalation

### RECOMMENDATION

Staff recommend that the Finance & Administration Committee recommend to the Board approval of a total capital project budget of \$6.5M for the Cascade Hall Renovation project and advancing of the project to construction phase.

*October 17-18, 2019 Board of Trustees Meetings*