

WASHINGTON STATE UNIVERSITY

Aggregated Intermediate Preservation Projects Sloan Hall HVAC Restoration (Academic Building Air Quality and Safety)

2009 – 11 Request:	\$3,510,000	Project Type:	Preservation (Rennovation)
COP Ranking:		Project Phase:	Design/Constr
Institution Priority:	#6	Gross Square Ft:	105,604

This preservation project will renovate the existing deteriorating heating, ventilating, and air conditioning systems (HVAC) in Sloan Hall which was built in 1962. The project was included in the 2007-09 capital request as an aggregated intermediate preservation project because its cost is in the “less than \$5 million but greater than \$2 million” range.

The Sloan Hall project was combined with several similar renewal projects to improve air quality in older academic buildings. The building provides space for the College of Engineering and Architecture including the departments of Civil and Environmental Engineering, School of Electrical Engineering and Computer Science, School of Mechanical and Materials Engineering, and it includes thirteen general university classrooms.

The HVAC system is original equipment. It has had additional loading added and deteriorated over time to the point where many subsystems are not functioning to design levels. This is causing negative pressure issues, lack of or insufficient ventilation (an air quality hazard), and inoperable controls. The renovation encompasses retrofitting the ventilation system with variable air volume dual fan systems; fan replacements with fan walls; Variable Frequency Drive (VFD) installation; controls replacement; cleaning and balancing the entire HVAC systems; and potential A/C improvements.

Renovating the HVAC systems in Sloan Hall will help reduce the deferred maintenance backlog and will greatly improve air quality and safety of this densely populated building. Postponing the project will result in the continual deterioration of the systems that could ultimately result in the shut down of classrooms, offices, labs and research in this 105,000 square foot building.

