

## **Research Space Needs, including Risk Management Report**

### **BACKGROUND**

The Executive & Audit Committee annually reviews with university leadership top risks that may impact Oregon State University's ability to meet its mission and objectives. Each of the identified top risks are assigned to the various Board committees based on alignment with each committee's charter and workload. Through this process, the university identified Research Space Needs as a top risk for the university. The Finance & Administration Committee provides oversight of the university's action plan for mitigating this risk.

### **STATUS UPDATE**

Attachment 1 provides a summary of activities over the past year to address and mitigate this risk. One of the primary strategies for addressing this risk is the prioritized investment of state funds, Education & General Funds, and other sources to improve and expand research infrastructure. These priorities are captured in the Ten-Year Capital Forecast approved by the Board.

Development of the Ten-Year Capital Forecast is guided by the Infrastructure Working Group (IWG), which assists in prioritizing major capital and capital improvement projects. Facilities condition assessments and interviews with unit leaders across campus provide context during the IWG prioritization process, which helps inform IWG recommendations for the annual Ten-Year Capital Forecast update to executive leadership.

In alignment with the objectives of SP4.0, the IWG criteria prioritizes the improvement of existing research infrastructure such as the replacement of roofs, mechanical systems, and building controls. Research-intensive buildings, such as Cordley, Gilbert and Withycombe Halls, are also prioritized for renewal and major renovation.

In addition to these efforts, other actions underway to help manage and improve research space include the following:

- A comprehensive research space inventory is maintained and updated annually and links principal investigators to offices and laboratory spaces. The upcoming acquisition of new space management software will improve management and expand the use of current data with the ability to tie research activities to space. Reporting will improve our ability to analyze a variety of metrics.
- Designs for renovated and new buildings focus on greater flexibility and resilience, space optimization, energy efficiency, and lower total cost of ownership. Lab and office standards are followed with few exceptions.
- The acquisition of the Research Way Laboratory building, currently being prepared to support the upcoming Cordley renovation, provides surge space to reduce the impact on biological and chemical research programs during renovations. Longer term, it will be used as a research and innovation-focused bioscience hub that integrates industry, academic research, and start-ups.
- The Collaborative Innovation Complex (CIC) will emphasize research infrastructure that is difficult to construct as part of a renovation. Further, the space that the new CIC buildings will eventually free up around campus will enable OSU to renew the balance of our aged research buildings over the next decades and enable the retirement of Weniger

Hall. Finalization of the CIC programming will drive decisions for selection of three research building renovations within the Ten-Year Forecast. Candidate buildings include Pharmacy, Gleeson, Kidder, Wilkinson, Wiegand, Dryden and others.

- The build-out of ATAMI, the Advanced Technology and Manufacturing Institute, at HP building 11 is a recent example of a successful relationship between industry and university partners, where OSU provides facilities for microsystems fabrication, materials characterization, and new materials development.
- University Facilities, Infrastructure and Operations provides an annual review of building systems data to inform decision-making and prioritization of capital renewal projects.

### **NEXT STEPS**

Staff will continue to keep the committee up to date on these efforts.

**Oregon State University  
 Enterprise Risk Management  
 2020 Priorities  
 Research Space Needs**

<b>Risk Topic Oversight Summary</b>						
<b>Board Oversight Committee</b>	<b>Risk Topic</b>	<b>University Goal</b>	<b>Type(s) of Risks to be Prevented</b>	<b>Risk Owner(s)</b>	<b>Primary Risk Mitigation Strategy(ies)<sup>1</sup></b>	<b>Risk Mitigation Team</b>
Finance & Administration Committee	Research Space Needs	Demonstrated leadership in research supported by state-of-the-art research facilities that meet short- and long-term research enterprise needs.	Operational, Compliance, Financial, Reputational	Provost, VP for Research, VP for Finance and Administration	Accept, Reduce	Associate VP for University Facilities, Infrastructure and Operations; Associate VP for Research; Associate VP for Budget and Resource Planning; Infrastructure Working Group; Provost's Council of Deans; Capital Planning Review Group

<sup>1</sup> Definitions of mitigation strategies:

Avoid: Discontinue the activities that present unacceptable risk  
 Share/Insure: Transfer the risk through insurance programs or 3<sup>rd</sup> party

Reduce: Implement controls, practices, programs to lessen the risk  
 Accept: Proceed with the activity because the benefit outweighs the risk

<b>Mitigation Plan</b>	
<b>OBJECTIVE 1:</b> Provide an effective space-planning process that maximizes necessary resources, including long-term capital construction and renewal plans incorporating research needs	
<b>Actions to Satisfy Objective</b>	<b>Status Report</b>
<ul style="list-style-type: none"> <li>a. Complete university-wide research space and condition assessment.</li> <li>b. Institute the Infrastructure Working Group (IWG) made up of Provost’s Council of Deans members, University Housing and Dining Services (UHDS), and Athletics, and establish protocols to determine priority investments, capital improvements and renewal project recommendations.</li> <li>c. Link IWG activities to biennial and decadal capital requests.</li> <li>d. Leverage relationships with federal agencies and industry.</li> <li>e. Develop alternative models for space allocation (e.g., incentives for relinquishing dead space, fee-based allocation, etc.).</li> <li>f. Develop short- and long-term plans for space maximization including existing and newly proposed space and space made available when defunct structures are demolished.</li> </ul>	<ul style="list-style-type: none"> <li>a. The comprehensive space inventory is updated annually. OSU is in the final stages of selection for a new space management software program, which should be implemented in early FY21.</li> <li>b. The IWG reviewed and supported the prioritization of capital projects and plans. Over 90% of the \$15M FY2020 E&amp;G CIR funds supports the improvement of research infrastructure.</li> <li>c. The Ten-Year Capital Forecast is updated and reviewed by the IWG and recommended to executive leadership annually. The Board of Trustees approved the last update in January 2020.</li> <li>d. The university has been successful in leveraging federal and industry relationships in a number of areas and will continue to seek new opportunities.</li> <li>e. Responsible offices are analyzing operations and maintenance (O&amp;M) costs, researching cost estimating models for buildings, and assessing relationships to university budgets and allocation models. This will allow the university to evaluate ways to incent optimization of space in future fiscal years. New space management software will coordinate data tied to space, providing a more accurate picture of utilization and efficiency.</li> <li>f. The capital forecast eliminates an estimated \$620M in deferred maintenance and retires Weniger Hall, Snell Hall, the ROTC building, and the Facilities Service complex. The Phase 1 renovation of Cordley Hall, a major research building, has been approved for finalizing design and construction by the Board. The design has implemented laboratory allocation standards. Buildings are being designed and constructed for greater efficiency, greater flexibility and resilience, and space optimization. (Ongoing)</li> </ul>

<b>OBJECTIVE 2:</b> Establish effective processes and adequate funding for research equipment to support and sustain strategic, long term multidisciplinary research in priority-identified research facilities	
<b>Actions to Satisfy Objective</b>	<b>Status Report</b>
<ul style="list-style-type: none"> <li>a. Assess equipment needs for the most modern equipment that will keep OSU’s research facilities at the leading edge of research.</li> <li>b. Identify/create opportunities for funding to plan for the acquisition of the equipment.</li> <li>c. Work with the colleges to recruit transformative faculty who will ensure that we will utilize facilities toward completing research that advances the state-of-the-art in instrumentation and the scientific discovery that results from advanced instrumentation.</li> <li>d. Work with the colleges and OSU Foundation to develop an endowment that supports costs of operation (including staffing, maintenance, and equipment upgrades) as well as pilot research studies to initiate new investigations.</li> </ul>	<ul style="list-style-type: none"> <li>a. New objective added in May 2020</li> </ul>

Performance Metrics		
<b>METRIC 1:</b> Space Utilization		
Goal	Results	Comments
The goal for this metric is under development. The university will be establishing baseline cost/square foot (SF) for various research laboratory spaces across the OSU inventory.	Not available	Capital Planning/Space Management completed a study to review baseline metrics for research space and is developing new space standards for review and implementation.

<b>METRIC 2: Quality of Space Metric</b>		
<b>Goal</b>	<b>Results</b>	<b>Comments</b>
The goal for this metric is under development and will be based on an assessment of quality of research space across OSU inventory.	Not available	In order to assess the quality of space, Capital Planning/Space Management has solicited proposals for new space management software, which includes the capability to create assessment tools. The request for proposal process has been completed, a company has been selected and a contract is under negotiation.  Software implementation timeline: Integration Aug 2020 – Feb 2021 Develop Process Mar 2021 – Aug 2021 Training/Rollout: Aug 2021 – Feb 2022
<b>METRIC 3: User Space Satisfaction</b>		
<b>Goal</b>	<b>Results</b>	<b>Comments</b>
The goal for this metric is under development and will be based on an assessment of user satisfaction of research space in the OSU inventory.	Not available	Assess user satisfaction for Research space across OSU inventory. Survey tools and a variety of dashboard options will be implemented with the new software program in procurement process by Capital Planning/Space Management.
<b>METRIC 4: Research Equipment Needs</b>		
<b>Goal</b>	<b>Results</b>	<b>Comments</b>
This metric relates to the objective 2 of the mitigation plan for this risk. Objective 2 was recently added. The goal for this metric is under development and will be based on a survey of equipment needs.	Not available (New objective)	Survey the Associate Deans for Research will begin in FY2021; equipment costs across campus including operations and maintenance will be analyzed.