California State University Los Angeles
Space Needs Assessment: Teaching, Learning, and Research Spaces
Executive Summary

Overview

Rickes Associates (RA) was tasked with providing analysis and identifying overall space needs for several interrelated areas at California State University Los Angeles (Cal State LA). These include:

- **Faculty Offices**: All spaces coded as Faculty Office-Professional or Faculty/Admin – Professional in the most recent University space inventory data.
- **Research Laboratories**: All spaces currently designated as Research Laboratories in the University’s space inventory data, and associated support spaces.
- **Instructional Spaces**: Teaching laboratories and specialized instructional spaces, as well as general-purpose classrooms that were formally scheduled in Fall 2016.

Together, these areas total approximately 560,000 assignable square feet (ASF) on the Cal State LA campus, representing just over half of all assignable space in inventory data provided. For more information regarding distribution of space, refer to the **Strategic Drivers** section of the report.

RA’s approach to determining space needs draws on key quantitative (enrollment, personnel, space inventory) and qualitative inputs (stakeholder interviews) to provide a foundation upon which detailed analysis of the three main space categories in this study can built. Process and findings from these analysis are found in the **Instructional Space Utilization Analysis** and **Faculty Office and Research Space Needs Analysis** sections of the report. This process culminates in the development of overall space needs projections by major space category, detailed in the **Space Needs Projections and Opportunity Space Identification** section of the report.

This study is informed and supplemented by the detailed assessment of teaching and research laboratory spaces prepared by Jacobs Consultancy, Inc. Focusing on current conditions in instructional and research laboratory spaces and associated support spaces on the Cal State LA campus, findings from the analysis are explored in the **Instructional and Research Lab Conditions Assessment** section of the report.

Key findings and recommendations are summarized for each area of focus in the following sections.

**Faculty Office Space**

- Compared to an existing total of nearly 105,000 ASF of office space across the University’s Colleges, approximately 111,000 ASF is currently needed, inclusive of full- and part-time faculty office space. This increases to roughly 116,000 ASF by 2028 in line with planned faculty growth (see Figure 5-4, p. 38).
- Applying a typical planning ratio of conference space to faculty offices, a calculated need of 25 conference rooms totaling roughly 11,000 ASF was identified, versus the existing total of 22 rooms occupying roughly the same amount of space at present, distributed across the University’s Colleges (see Figure 5-6, p. 40).
- There is an abiding need for part-time faculty space at the University. This issue has become more acute as full-time faculty numbers have increased in recent years, and is compounded by the design of some campus buildings, which called for two full-time faculty members sharing an office. Ideally, each building should have a dedicated part-time faculty suite, including shared workstations that can be signed out when needed, as well as access to secure storage and private meeting space.
- Accommodations for FERP and emeriti faculty vary across campus and seem driven more by space availability within each College than any overarching strategy. Given the paucity of full-time faculty space on campus, FERP faculty teaching less than half-time and emeriti faculty could be provided...
space in the Library’s part-time faculty suite in order to yield office space within the Colleges. Exceptions could be made for those faculty members still engaged in research or responsible for other administrative duties.

**Research Space**

- The space inventory identifies just over 93,000 ASF of research space and over 17,800 ASF of research support space at Cal State LA. Just over 55,000 ASF is in the College of Natural and Social Sciences, followed by the College of Engineering, Computer Science, and Technology, with approximately 28,000 ASF (see Figure 5-8, p. 42).
- Up to 10,000 ASF of additional research space is needed at present, based upon current research funding, and broadly applicable multipliers for research space based on discipline. The major need is for additional research space for faculty in the College of Health and Human Services. Conversely, the College of Engineering, Computer Science, and Technology has a calculated surplus – although this may be mitigated by the nature of the research. (See Figure 5-9, p. 43).
- It is understood that research takes place in other settings aside from formally designated research space within the context of a university campus. It is also understood that some research endeavors do not require any dedicated space. The development of a detailed catalog of spaces tied to research activity at Cal State LA, linking information such as personnel, grant funding, and grant timeframes, etc., would delineate the overall “footprint” of research at the University with greater precision.
- Current “sunset” provisions for vacated research space on the Cal State LA campus should be clarified in order to govern allocation of research space more actively.
- The delta between the amount of dedicated research space available and needed will only grow as more research activity is encouraged at the University. This goal gains import in light of the arrival of a new generation of faculty, many of whom are more likely to be research-oriented. The lack of contemporary research on campus may limit Cal State LA’s ability to attract and retain faculty.

**Instructional Space**

- The demand for teaching laboratories and specialized instructional spaces varies by discipline. There was a calculated need for just two additional labs -- Chemistry and Physics -- above and beyond the existing complement of labs, even allowing for a 10% growth in enrollment. In contrast, there are calculated “surplus” instructional labs in several disciplines (see Figures 4-4 through 4-9, p. 21-24).
- Ideally, many disciplines require more square footage to align with contemporary lab design. Furthermore, it appears that room capacities have been adjusted upwards in some instances, likely as a way of responding to enrollment growth. The course data indicated some instances where the number of students exceeded the number of available stations in a given room. The extent that this limits functionality within the spaces where it has occurred should be investigated further.
- There is a calculated current need for 164 appropriately-sized classrooms (139,000 ASF), in contrast to the 200 that now exist in 154,000 ASF of space. With a hypothetical 10% growth in enrollment, this need rises to 173 classrooms in roughly 156,000 ASF of space. This indicates that some inappropriately sized and/or underutilized classrooms could be taken offline, while more desirable classrooms need to be added (see Figure 4-14, p. 29).
- The calculated need for self-instructional space differs greatly from the space inventory; it is likely that a number of existing spaces were not reflected in the inventory. In addition, general-purpose computer classrooms may be able to accommodate some of the calculated need for this function when not formally scheduled for course use (see Section 4.6, p. 34).

**Space Projections and Opportunity Space Identification**

The following table summarizes current and projected need for space in the categories of space evaluated within the purview of this analysis.
### Figure 1: Overall Space Projections, by Space Type

<table>
<thead>
<tr>
<th>Space Type</th>
<th>Current ASF (per SFDB)</th>
<th>Calculated Current Need ASF</th>
<th>Projected Need (10% growth) ASF</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty Office Spaces</td>
<td>104,949</td>
<td>134,889</td>
<td>139,719</td>
<td>5% growth in faculty assumed.</td>
</tr>
<tr>
<td>Research Laboratories</td>
<td>92,263</td>
<td>81,269 – 118,615</td>
<td>81,269 – 118,615</td>
<td>Need based on annualized grant awards held constant.</td>
</tr>
<tr>
<td>Research Laboratory Service</td>
<td>17,821</td>
<td>24,381 – 35,585</td>
<td>24,381 – 35,585</td>
<td></td>
</tr>
<tr>
<td>General-Purpose Instructional Spaces (Lecture and Seminar)</td>
<td>154,183</td>
<td>139,470 – 167,090</td>
<td>155,940 – 184,600</td>
<td>Range of need reflects 18 ASF/seat to 22 ASF/seat. Physical Sciences offline for next 2-3 years (17 classrooms).</td>
</tr>
<tr>
<td>Lecture–Computer Labs</td>
<td>19,213</td>
<td>25,200</td>
<td>27,200</td>
<td>Subset of general-purpose instructional spaces; evaluated separately given computer classroom configuration.</td>
</tr>
<tr>
<td>Teaching Laboratories and Specialized Instructional Spaces</td>
<td>173,173</td>
<td>115,360</td>
<td>122,080</td>
<td>Current ASF includes 39,000 ASF of unscheduled teaching lab space added to inventory in November 2017.</td>
</tr>
<tr>
<td>Teaching Laboratory Service and Specialized Instructional Support</td>
<td>25,206</td>
<td>34,608</td>
<td>36,192</td>
<td></td>
</tr>
<tr>
<td>Self-Instructional Computer Laboratories</td>
<td>1,289</td>
<td>28,800</td>
<td>28,800</td>
<td>Unclear if all labs reported in current space inventory. Consider need together with need for Lecture-Computer Lab spaces.</td>
</tr>
<tr>
<td>Totals</td>
<td>561,938</td>
<td>559,758 – 635,928</td>
<td>591,714 – 668,924</td>
<td></td>
</tr>
</tbody>
</table>

Source for Current ASF: AA Space Usage 11-22-17.xlsx 11/22/17

- Compared to existing space totals, overall calculated current space need totals remain flat or increase by roughly 20%, or some 100,000 ASF, in total, as enrollments increase. All space types show a potential current need for additional space with the exception of Teaching Laboratories.

### Opportunity Space Identification

- Nearly 20,000 ASF of low-use general-purpose classroom spaces and over 40,000 ASF of low-use teaching laboratories were identified that could be investigated further to determine if they could be selectively repurposed for other uses. In addition, nearly 39,000 ASF of non-scheduled teaching laboratory space that was added to the space inventory data provided as this analysis progressed may provide other opportunities for selective intensification and/or repurposing of space (see Figure 7-3, p. 63).
- Accompanying the identification of opportunity spaces and building upon the quantitative and qualitative analyses in this study, a number of higher-order reorganizations of space on campus are suggested, as well as potential policy changes that would help Cal State LA defragment and/or collocate related functions and clarify the space allocation process (see Section 7.6, p. 65).

### Conclusion

Grounded in an analysis of strategic data inputs -- including enrollment, personnel, course data, and space inventory data -- the report is intended to provide Cal State LA with targeted recommendations to help optimize the use of its physical resources. This was accomplished through the quantification of space needs vis-à-vis existing space, the identification of low and underutilized spaces that could be potentially repurposed to partially address unmet needs, and the suggestion of several policy changes, which can be accomplished without capital resources. The ultimate goal is to ensure that Cal State LA maintains forward momentum in terms of ensuring that it has the right amount of space available, in the right place, and at the right time.