

Office of the President

TO MEMBERS OF THE FINANCE AND CAPITAL STRATEGIES COMMITTEE:

ACTION ITEM

For Meeting of November 14, 2018

APPROVAL OF BUDGET AND SCOPE, APPROVAL OF EXTERNAL FINANCING AND EXTERNAL FINANCING SUPPORTED BY STATE GENERAL FUNDS, AND APPROVAL OF DESIGN FOLLOWING ACTION PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT, TEACHING AND LEARNING COMPLEX, DAVIS CAMPUS

EXECUTIVE SUMMARY

The Davis campus proposes to construct the Teaching and Learning Complex to provide a new facility on the central campus for general assignment classrooms and faculty and staff office space to support recent and projected enrollment growth. The project would redevelop a site along Hutchison Drive currently occupied by Surge IV, a collection of single-story modular structures installed in 1972. The proposed project would deliver an approximately 100,000-gross-square-foot (65,200-assignable-square-foot), four-story facility to include approximately 2,000 instructional seats, space for student study and collaboration, an innovative Laboratory of Teaching, a Laboratory of Learning, and administrative and faculty office space.

Classroom capacity is currently a factor limiting student access to courses necessary to support their timely progress toward graduation. Current classrooms are oversubscribed and plans to upgrade existing classrooms to meet accessibility requirements will result in a reduction of the number of seats available. For these reasons, along with University plans to increase enrollment, additional classroom space is a priority. The proposed project would deliver the number of seats to satisfy estimated demand through 2030. Classroom configurations and related amenities would incorporate many design elements to accommodate emerging pedagogy. The room and furniture designs, in conjunction with audiovisual technology, would be flexible to support interactive learning.

The proposed project is part of the 2018-19 Budget for State Capital Improvements. The project would be funded by external financing supported by State appropriations and external financing supported by general revenues of the Davis campus. The University received notification on April 10, 2018 from the Department of Finance that the Legislature endorsed using State resources to partially fund the construction for this project as a component of UC's 2018-19 capital outlay.

The campus presented an overview of the Teaching and Learning Complex project in a discussion item to the Finance and Capital Strategies Committee at the Regents' September 2017 meeting. The Regents last reviewed the project and approved funding for preliminary plans at their November 2017 meeting. During the planning phase, the project scope was refined and expanded to include a floor of faculty and staff office space.

The Regents are being asked to: (1) approve the project budget of \$86,337,000 to be funded from external financing supported by State appropriations (\$50 million) and external financing to be supported by general revenues of the Davis campus (\$36,337,000); (2) approve the project scope; (3) approve external financing to be supported by general revenues of the Davis campus in the amount of \$36,337,000; (4) approve external financing supported by State appropriations in the amount of \$50 million; (5) adopt the California Environmental Quality Act Findings; and (6) approve the project design.

RECOMMENDATION

The President of the University recommends that the Finance and Capital Strategies Committee recommend to the Regents that:

- A. The 2018-19 Budget for Capital Improvements and the Capital Improvement Program be amended as follows:
 - From: Davis: Teaching and Learning Complex – preliminary plans – \$3.4 million to be funded from campus funds.
 - To: Davis: Teaching and Learning Complex – preliminary plans, working drawings, construction, and equipment – \$86,337,000 to be funded from external financing supported by State appropriations under the process described in Sections 92493 through 92496 of the California Education Code (\$50 million) and external financing supported by general revenues of the Davis campus (\$36,337,000).
- B. The scope of the Teaching and Learning Complex project shall provide approximately 65,200 assignable square feet (100,000 gross square feet) in a four-story structure. The facility includes approximately 2,000 general assignment classroom seats totaling approximately 41,500 assignable square feet (asf), as well as approximately 5,600 asf for student study and collaboration, approximately 12,700 asf of office space, and approximately 5,400 asf for building support space. The scope also includes plazas, bicycle parking, and the demolition of the Surge IV structures currently on the site.
- C. The President be authorized to obtain external financing not to exceed \$36,337,000 plus additional related financing costs. The President shall require that:

- (1) Interest only, based on the amount drawn, shall be paid on the outstanding balance during the construction period.
 - (2) As long as debt is outstanding, general revenues of the Davis campus shall be maintained in amounts sufficient to pay the debt service and to meet the related requirements of the authorized financing.
 - (3) The general credit of the Regents shall not be pledged.
- D. The President be authorized to obtain external financing not to exceed \$50 million plus related interest expense and additional related financing costs. The President shall require that:
- (1) Interest only, based on the amount drawn, shall be paid on the outstanding balance during the construction period.
 - (2) The primary source of repayment shall be from State General Fund appropriations, pursuant to the Education Code Section 92493 et seq. Should State General Fund appropriation funds not be available, the President shall have the authority to use any legally available funds to make debt service payments.
 - (3) The general credit of the Regents shall not be pledged.
- E. Following review and consideration of the environmental consequences of the proposed Teaching and Learning Complex project, as required by the California Environmental Quality Act (CEQA), and including any written information addressing this item received by the Office of the Secretary and Chief of Staff to the Regents no less than 24 hours in advance of the beginning of the Regents meeting, testimony or written materials presented to the Regents during the scheduled public comment period, and the item presentation, the Regents:
- (1) Adopt the CEQA Findings in support of the project.
 - (2) Approve the design of the Teaching and Learning Complex project, Davis campus.

BACKGROUND

The Davis campus has grown rapidly over the last decade and expansion of facilities to serve additional students has not kept pace. As a result, the campus now faces a critical shortage of classrooms, study, and collaboration spaces. Over the last seven years, total student enrollment has grown by 24 percent (more than 7,200 students); however, investment in renovation and expansion of classrooms has not matched the need resulting from this growth. The campus has completed minor classroom conversions and renovations, which have added less than 100 seats in two classrooms. Classrooms are deficient in technology and flexibility to support modern learning and are severely oversubscribed, with classes being held late into the evening; in addition there is

no downtime to properly maintain existing classrooms. Faster than anticipated growth in student enrollment and limited classroom capacity has affected student access to courses and their timely progress toward graduation.

The campus has several projects underway to address this shortage of classroom space. The California Hall project, a 600-seat lecture hall, anticipated for completion in early 2019, will address the need for a large lecture hall. Two separate renovation projects in Cruess and Walker Halls will deliver approximately 465 additional seats in new classrooms in 2019 and 2020. The campus has also identified limited opportunities to provide temporary instruction within existing facilities including Jackson Hall at the Mondavi Center, the Welcome Center, and Gallagher Hall. However, these facilities were designed for performance, event, and other specialized uses outside of regular instruction. They have limited availability, acoustic and configuration challenges, and can provide space on a temporary basis but do not adequately address the need for classrooms to support modern pedagogy. The need to take 555 seats at Haring Hall out of use because of seismic and life safety concerns further compounds classroom capacity concerns.

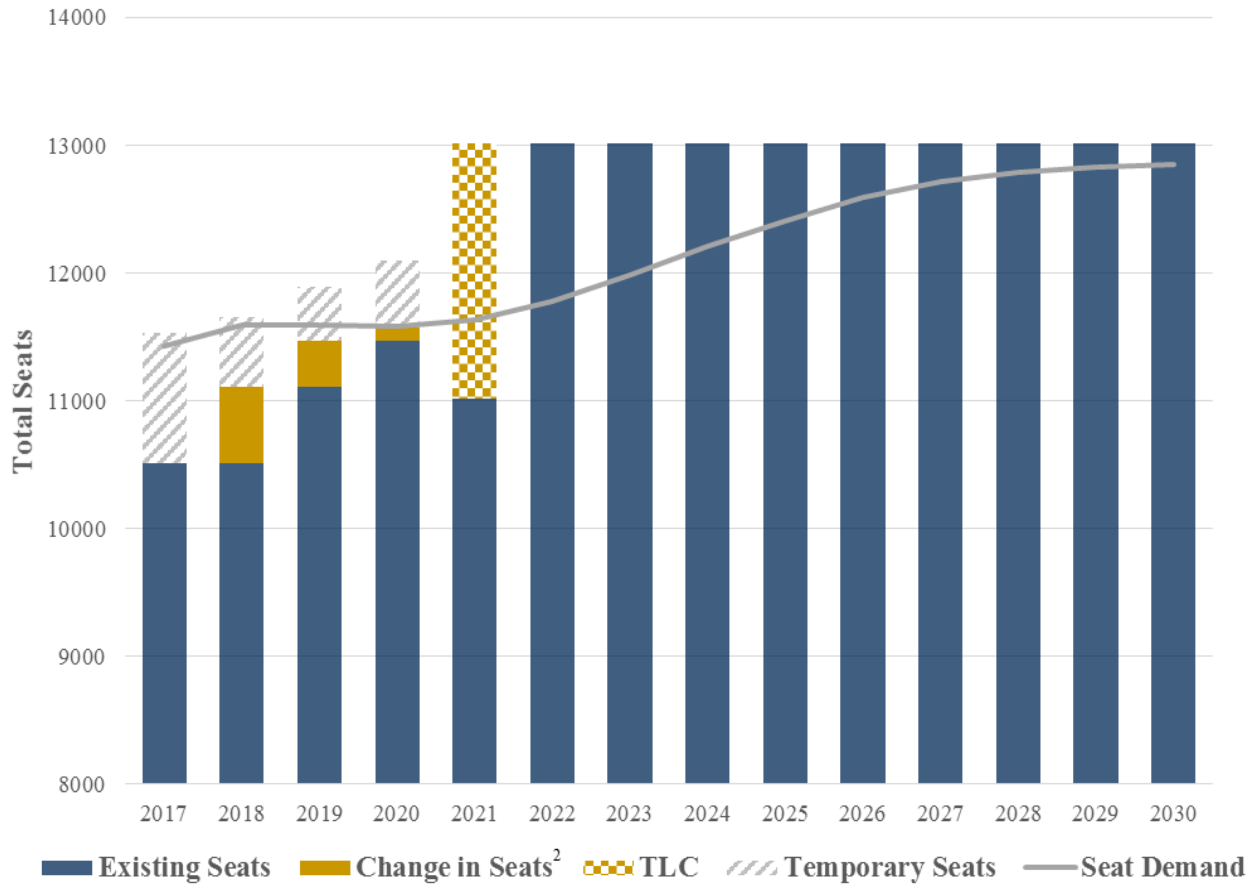
PROJECT DRIVERS

Need for General Assignment Classrooms

Nearly all general assignment classrooms at Davis are near or exceed 100 percent utilization, and as demonstrated in Figure 1 below, additional classroom seats are necessary for the campus to keep pace with the instructional demands associated with current and anticipated enrollment. The graph illustrates the campus's plan to provide instructional space in the coming years. There will continue to be a shortage of classroom seats over the next three years, which the campus will bridge using interim strategies such as utilizing event space for instruction. In addition to the classrooms already in the campus development pipeline for delivery by 2019, approximately 2,000 seats are needed to accommodate anticipated undergraduate enrollment growth of approximately 3,600 students through 2030.

In addition to analyzing utilization statistics for existing classrooms at UC Davis, the planning process for the proposed Teaching and Learning Complex included significant campus outreach to students and faculty designed to learn more about the types of space and features that would best serve the campus community. Based on feedback received from these workshops and surveys, the project includes – in addition to classroom spaces – informal study spaces to serve both group and individual study.

Figure 1
Classroom Seat Growth and Enrollment Seat Demand¹



¹ Campus classroom seat standard: 0.4 seats/student; growth based on undergraduate enrollment projections as a portion of the population estimated in the 2018 Long Range Development Plan

² Change in Seats:

2018: California Hall (600);

2019: Walker Hall (367);

2020: Cruess Hall (100);

2021: Teaching and Learning Complex (2,000); Haring Hall offline (-555)

Need for Office Space

The Teaching and Learning Complex was originally conceptualized as a three-story classroom building. However, in addition to classroom shortages, the campus is currently experiencing a shortage of office space, including a shortage of available office space for faculty, which impedes faculty hiring. This need is felt across colleges, and available options to provide offices for new faculty hires are few. The campus is deficient in administrative space to accommodate growth in existing administrative teams and new initiatives; in addition, the campus needs flexibility in administrative space to accommodate temporary relocations associated with future seismic retrofits, deferred maintenance work, and renovations.

PROJECT DESCRIPTION

The Teaching and Learning Complex would include construction of a new classroom building providing approximately 2,000 seats in various sizes and configurations of flexible and traditional classrooms that support modern pedagogy, including the integration of adjustable environments, visual teaching and learning, and adaptive teaching. Current pedagogy requires flexibility in design, technology, and furniture. The building would be designed to support various teaching and learning methodologies and is intentionally alterable to incorporate changing pedagogies and technologies over time. The Teaching and Learning Complex would provide a range of possible seat configurations including adjustable and interactive seating; thus depending on the seating arrangement, the number of seats could vary but would not exceed the maximum number of seats supported by the California Building Code for each classroom type.

Classrooms would include larger, fixed-seat auditoriums supporting between 120 and 425 seats as well as a variety of smaller classrooms with flexible furniture arrangements (see Table 1). Adjustable seating allows students to work collaboratively while still having access to technology resources. Flexibility has been built into the classroom plans to allow the rooms to be adapted in the future as needs change. The project would support the traditional lecture format and allow students to transition into small breakout discussions and group work. The small classrooms and the computer classrooms would be the same size and could be interchanged in the future as needed. The tiered large classrooms would be constructed such that the tiers could be removed in the future if newer teaching pedagogies require a modified layout with a flat floor.

In support of the project’s integration of classroom design to support emerging instructional pedagogy, the project would also include the Laboratory of Teaching, a space for faculty members to try different teaching pedagogies with various technology and furniture set-ups as well as to support equipment training.

**Table 1
Classroom Program Summary**

Classroom Type	Seating Style	Quantity	Seats Per Classroom	Total Seats
Auditorium	Fixed	1	425	425
XL Classroom	Fixed	2	184	368
Large Classroom	Fixed	1	124	124
Large Classroom	Flexible	2	120-173	240-346
Medium Classroom	Flexible	5	72-93	360-465
Small Classroom	Flexible	5	52-63	260-315
Computer Classroom	Flexible	5	30-63	150-315
Laboratory of Teaching	Flexible	1	32-64	32-64
Laboratory of Learning	Flexible	1	28-60	28-60
Total		23		1,987-2,482

In response to feedback from faculty and students, the project would include dedicated spaces to provide for independent and group study needs. Study areas would be furnished in flexible arrangements to accommodate a variety of group sizes and would include both desk-height tables

and chairs as well as some soft furnishings. Post-lecture discussion areas would be located directly outside classrooms and would include white boards and flexible seating to support continued discussion between students and instructors. A total of approximately 5,600 asf would be dedicated to these uses (Table 2).

Table 2

Study and Gathering Spaces	
Type	ASF
Group Study	1,800
Post-lecture Discussion	1,700
Individual Study	1,200
Storage of Laboratory of Learning	300
Computer Support	300
Storage	300
Total	5,600

The fourth floor of the Teaching and Learning Complex would provide approximately 12,700 assignable square feet of open office space, and at full capacity could accommodate approximately 90 faculty and staff.

The project's exterior spaces will complement the building's program and will include bicycle parking and landscape plazas that will provide spaces for interaction, with shading and drought tolerant plants. Exterior design and furnishings will support utilization of exterior spaces for study. See Design section below for more information.

Delivery Method

The proposed project is intended to be constructed using the design-build delivery method. A design-build delivery has been successfully employed by UC Davis on a number of recent projects such as Tercero Housing Phase 4 and the Jan Shrem and Maria Manetti Shrem Museum of Art, where both projects were delivered on time and on budget. In this process, the University contracts with a single party for both design and construction. The design-build process is efficient and allows the contractor's technical expertise and creativity to be incorporated into the design process.

Project Schedule

The project is planned to open for instruction in spring quarter of 2022.

Financial Feasibility

The total project budget of \$86,337,000 would be funded with external financing supported by State appropriations under the provisions of Section 92493 through 92496 of the California Education Code (\$50 million) and external financing supported by general revenues of the Davis

campus (\$36,337,000). The estimated debt service for the \$50 million in external financing supported by State appropriations, at a planning rate of six percent, is \$3.63 million per year, including principal and interest, over a 30-year term. This debt service is paid using annual State appropriations and does not factor into campus debt calculations. The estimated debt service for the \$36,337,000 of external financing, at a planning rate of six percent, is \$2.64 million per year, including principal and interest, over a 30-year term. Over a ten-year period, the campus is projected to have a modified cash flow margin of 2.28 percent, and debt service to operations of 4.01 percent, which meet the requirements of the University's Debt Policy.

DESIGN

Approval of the design is being requested based on conceptual design and site-planning parameters included in the submittal prepared by the highest scoring team from the design-build competition. The design parameters are consistent with the Physical Design Framework (PhDF) and the proposed use of the project is consistent with the academic land-use designation in the 2018 Long Range Development Plan (refer to Attachment 6 – Design Graphics).

The Teaching and Learning Complex would be a crossroads of teaching and learning on the UC Davis campus. The goal is to create memorable and functional spaces for learning that build a strong connection between student and instructor. Classrooms would be designed to make use of natural light and provide flexible space, while balancing flexibility with the need to maximize classroom area.

Site

The project site is centrally located on the core campus on Hutchison Drive near the two-story Silo food service complex and is adjacent to several academic buildings and the bus terminal (refer to Attachments 5A and 5B). The project site is approximately 3.5 acres. The facility would complement the student-serving neighborhood, with ready access to public transportation, food service, and the Student Community Center. In addition, adjacent academic facilities include classrooms and teaching laboratories, thus the project would support core campus adjacencies for classroom turnover.

The project requires the demolition of the existing Surge IV facility, which is a group of one-story modular structures, totaling 30,765 gross square feet (gsf) and installed in 1972. Surge IV is deteriorating and an inefficient use of a core campus site. The majority of this facility was vacated when the School of Veterinary Medicine Dean's office relocated to the Veterinary Medicine and Student Services facility. The remaining small academic or support units in the Surge IV structures are scheduled for relocation prior to demolition in mid-2019. Developing this site for instructional use would remove non-student serving functions and a dilapidated facility and densify development in the core of the campus.

In addition to delivering the Teaching and Learning Complex building, the project would include significant outdoor spaces designed to facilitate safe and efficient movement during class exchanges, provide much-needed bicycle parking, and allow for study and informal meeting

opportunities for students and faculty. These spaces would create an extension of the architecture at the north and south sides of the building and would feature seating with a combination of natural shading and overhead canopies for protection from the elements.

Physical Design Framework

The project would align with the core principles of the PhDF; to create supportive, connected, and sustainable places. The Teaching and Learning Complex (1) would be located to be responsive to the context of the core campus and adjacent structures located on Hutchison Drive, (2) would include design elements that promote interaction among users in support of the campus's collaborative spirit, and (3) would be flexible to meet the needs of today's and future programs; together these would meet the mission to create supportive places. To further the mission to create connected places, the design of the building would reinforce the campus architectural vocabulary through the use of common building and site elements. The proposed project would be designed to provide clear connections to the circulation systems and make public spaces accessible, visible, and active. To advance the PhDF's principle to create sustainable places, the location and massing of the building would include the design elements described under the Sustainability section below.

Building Design

The building massing would be composed of a classroom wing with offices on the fourth floor in an east-west orientation and a lecture hall wing which would hug the eastern edge of the site. The structure is anticipated to be structural steel with durable finishes. The front door to the four-story building would be located on the north side of the site. The main entry would be marked by a front porch punctuated with large areas of floor to ceiling windows extending around to the eastern side of the building, which would house the largest instructional spaces. A central corridor would divide the building into the main wing of small and medium-sized classrooms and offices and the smaller wing that would house the auditorium and extra-large classroom. Multiple sets of stairs would facilitate movement through the building during busy class changes.

The hard and soft scape surrounding the building would promote accessibility, interactivity, and sustainability. The central circulation corridor would terminate in a south plaza. This area would provide bicycle parking and design elements that aim to take advantage of the entire site to create outdoor environments for learning that complement the instruction that occurs in the building. A canopy would provide a covered area in support of collaboration and interaction while providing protection from inclement weather or direct sun exposure. Site development and plantings would provide opportunities for low-impact storm water treatment, the demonstration of green building practices in the landscape, and planting that supports pollinator habitat and connects the site to the nearby agricultural community.

Materials

The materials used for the project would be consistent with the color and material palette described in the PhDF. The primary façade materials would include concrete, stone, tile, brick, or

cement siding that are light to middle earth tones. Secondary façade materials would include flat or profiled metal panels, aluminum windows and curtain walls, and glazing. These elements would be incorporated into the design to maintain a cohesive campus environment.

Sustainability

The project would register as Leadership in Energy and Environmental Design (LEED)TM for New Construction Version 4 and includes sustainable measures to achieve a minimum of LEED Silver certification as required by the UC's Sustainable Practices Policy (Policy). The project would strive for Gold certification.

In consideration of the Policy and the University's Carbon Neutrality Initiative, the Teaching and Learning Complex would be designed as an all-electric facility. Design of the building would take into account solar exposure, light, wind direction, and surrounding microclimates. Sustainable measures would be put into practice for this project to reduce energy use and work towards carbon neutrality including east-west building orientation for better control of solar heat gain; planned use of campus chilled and heating hot water (upon future conversion of steam to hot water in the district); efficient mechanical systems with radiant heating/cooling and displacement ventilation; high-performance building envelope; large-scale ceiling fans; incorporation of daylighting while maintaining a limited window-to-wall ratio; and LED lighting with occupancy and daylighting controls.

The project will also comply with the Policy's energy efficiency design requirements. Early energy modeling shows the facility would outperform the Policy's targets for Energy Use Intensity (EUI) and carbon emissions.

Water efficiency measures include efficient outdoor irrigation with separate building metering as well as high efficiency/low flow indoor fixtures to meet this goal.

CEQA COMPLIANCE

The Regents certified the UC Davis 2018 Long Range Development Plan (LRDP) Environmental Impact Report (EIR) (State Clearinghouse No. 2017012008) prepared in accordance with Section 15168 of the CEQA Guidelines in July 2018 (Attachment 7). The 2018 LRDP EIR analyzed the full implementation of uses and physical development proposed in the 2018 LRDP and identified measures to mitigate the significant adverse program-level and cumulative impacts associated with that growth. As described in the Initial Study Environmental Checklist (Attachment 8), the Teaching and Learning Complex is consistent with the land uses identified in the 2018 LRDP and is entirely within the scope of activities and development analyzed in the 2018 LRDP EIR. All applicable mitigation measures in the 2018 LRDP EIR are incorporated into the proposed project.

Since the certification of the 2018 LRDP EIR, circumstances under which the project will be undertaken have not changed; there is no substantial new information which would affect the significance of the previously evaluated environmental impacts; the environmental effects have

not become more severe than previously analyzed; and no new mitigation measures have become available. Therefore, none of the circumstances that would trigger additional evaluation under CEQA Guideline Section 15162 have occurred or are present; and no further environmental analysis pursuant to CEQA is required. CEQA Findings for the Teaching and Learning Complex are provided in Attachment 9.

KEY TO ACRONYMS

ASF	Assignable Square Feet
CEQA	California Environmental Quality Act
EIR	Environmental Impact Report
EUI	Energy Use Intensity
GSF	Gross Square Feet
LEED	Leadership in Energy and Environmental Design
PhDF	Physical Design Framework
Policy	Sustainable Practices Policy

ATTACHMENTS

Attachment 1:	Project Sources and Uses
Attachment 2:	Comparable Project Information
Attachment 3:	Summary of Financial Feasibility
Attachment 4:	Alternatives Considered
Attachment 5A:	Project Location Map
Attachment 5B:	Project Site Map
Attachment 6:	Project Design Graphics
Attachment 7:	2018 LRDP: http://campustomorrow.ucdavis.edu/app_pages/view/301 LRDP EIR: http://campustomorrow.ucdavis.edu/app_pages/view/433
Attachment 8:	Initial Study Environmental Checklist
Attachment 9:	CEQA Findings

**PROJECT SOURCES AND USES
TEACHING AND LEARNING COMPLEX
(CCCI 6815)**

PROJECT SOURCES		
Source	Total	Percent of Total
External financing supported by State General Funds	\$50,000,000	58%
External financing supported by general revenues of the Davis campus	\$36,337,000	42%
Total Sources	\$86,337,000	100%
PROJECT USES		
Use	Total	Percent of Total
Site Clearance ¹	\$2,400,000	2.9%
Building	59,000,000	72.5%
Exterior Utilities	2,500,000	3.1%
Site Development	3,100,000	3.8%
A/E Fees ²	3,100,000	3.8%
Campus Administration ³	3,800,000	4.7%
Surveys, Tests, Plans	860,000	1.1%
Special Items ⁴	1,847,000	2.3%
Interest During Construction	1,380,000	1.7%
Contingency	3,400,000	4.2%
Subtotal	\$81,387,000	100%
Group 2/3 Equipment	\$4,950,000	
Total Uses	\$86,337,000	

- (1) Site Clearance includes demolition and hazardous material removal of existing Surge IV structures.
(2) A/E Fees include the executive architect/engineer's basic services contract fee.
(3) Campus Administration includes project management and inspection.
(4) Special Items include: detailed project program and other pre-design study consultants, EIR services consultants, plan check fees, special design consultants, independent structural review, design build stipends, and commissioning fees.

PROJECT STATISTICS	
Gross Square Feet (GSF) (includes the canopy area at 50%)	100,000
Assignable Square Feet (ASF)	65,200
Efficiency Ratio ASF/GSF	65%
Project Cost/GSF	\$814
Building Cost/GSF	\$590

ATTACHMENT 2

COMPARABLE PROJECT INFORMATION

The cost figures for comparable projects shown in the following table demonstrates how the proposed budget for the Teaching and Learning Complex project at UC Davis compares to recent UC and university projects in California.

<i>Project</i>	<i>Location</i>	<i>GSF</i>	<i>Start of Construction</i>	<i>Building Construction Cost *</i>	<i>Building Construction Cost Adjusted to Subject Project **</i>	<i>Adjusted Building Construction Cost \$/GSF **</i>
1 UC Davis Teaching and Learning Complex	Davis	100,000	6/1/2019	\$59,000,000	\$59,000,000	\$ 590
2 UCI Classroom Office Building	Irvine	72,318	9/1/2016	\$47,064,000	\$53,802,000	\$744
3 UCLA Teaching and Learning Center for Health Sciences	Los Angeles	110,000	3/1/2014	\$73,175,000	\$86,511,000	\$786
4 UCM Classroom and Academic Office Building	Merced	77,021	2/1/2014	\$36,359,000	\$43,709,000	\$567
5 UC Davis Large Lecture Hall	Davis	17,325	7/18/2016	\$14,939,000	\$16,836,000	\$972
6 USC Jill and Frank Fertitta Hall	Los Angeles	102,000	10/1/2013	\$70,474,000	\$82,537,000	\$819
7 Stanford McMurtry Art and Art History	Palo Alto	100,166	6/1/2013	\$61,440,000	\$64,643,000	\$643

* Building cost at budget approval

** Adjusted for several factors including location and inflation to the start of construction of the proposed project; CCCI for projects with a future start date have been indexed by 6.7% per year

SUMMARY OF FINANCIAL FEASIBILITY

DAVIS CAMPUS	
Project Name	Teaching and Learning Complex
Project ID	953270
Total Estimated Project Cost	\$86,337,000
Anticipated Interest During Construction (included in total estimated project cost)	\$1,380,000
PROPOSED SOURCES OF FUNDING ¹	
External Financing supported by State General Funds	\$50,000,000
External Financing supported by general revenues of the Davis campus	\$36,337,000
Total	\$86,337,000

FINANCING ASSUMPTIONS	
External Financing Amount	\$36,337,000
Anticipated Repayment Source	General Revenues of the Davis campus
Anticipated Fund Source	•Unrestricted Short Term Investment Pool (STIP); •Total Return Investment Pool (TRIP)
Financial Feasibility Rate	6.0%
First Year of Principal (e.g. FY 20XX)	2022
Term (e.g. 30 years)	30 years
Final Maturity (e.g. FY 20XX)	2051
Estimated Average Annual Debt Service	\$2,640,000

Below are results of the financial feasibility analysis for the proposed project using the campus's Debt Affordability Model. The model includes projections of the campus's operations and planned financings.

Measure	CAMPUS FINANCING BENCHMARKS		
	10 Year Projections	Approval Threshold	Requirement
Modified Cash Flow Margin ¹	2.28% (min), FY 2020	≥ 0.0%	Must Meet
Debt Service to Operations ¹	4.01% (max), FY 2023	≤ 6.0%	Must Meet 1 of 2
Expendable Resources to Debt ¹	NA	≥ 1.00x	

¹ Modified Cash Flow Margin, Debt Service to Operations, and Expendable Resources to Debt are campus metrics.

ALTERNATIVES CONSIDERED

The campus evaluated a number of alternatives to identify a path toward meeting space needs for instruction. These included the following:

1. Pursuing non-capital solutions
2. Pursuing off-campus space
3. Developing a new on-campus facility
4. Renovating an existing campus facility

1. Pursuing non-capital solutions

The campus has already employed a number of strategies in order to maximize use of existing classrooms, including early morning and evening instruction and using non-general assignment space for instruction (e.g., performance venues and department-controlled seminar rooms). These strategies have helped manage near-term demand; however, the campus is not able to identify enough additional opportunities to provide adequate capacity to meet campus needs as enrollment increases.

2. Pursuing off-campus space

Typically, in evaluating options to meet additional space needs, the campus considers potential opportunities to deliver the space more quickly or cost-effectively by locating certain functions outside of the main UC Davis campus. Instructional space, however, is core to the campus mission and needs to be located close to other instructional facilities to allow for easy access for students living on campus, students living proximate to campus, and students relying on bicycles or public transportation. Any new instructional facilities need to be within ten minutes of existing facilities to ensure that students are able to travel between classes during the allocated class change time. For these reasons, it is essential that new classrooms be located on the core campus.

3. Developing a new on-campus facility

Additional classroom and office space could be effectively delivered in a new building. A new building provides the maximum flexibility for designing a space specifically to suit the needs of the intended uses. A new facility with classrooms must be located on the core UC Davis campus, close to other classroom buildings and transportation hubs. The site selected must also consider the desired size of the development to accommodate the desired program, and be of a right scale and density for the area of campus. There are “infill” type sites on the campus that could accommodate this development.

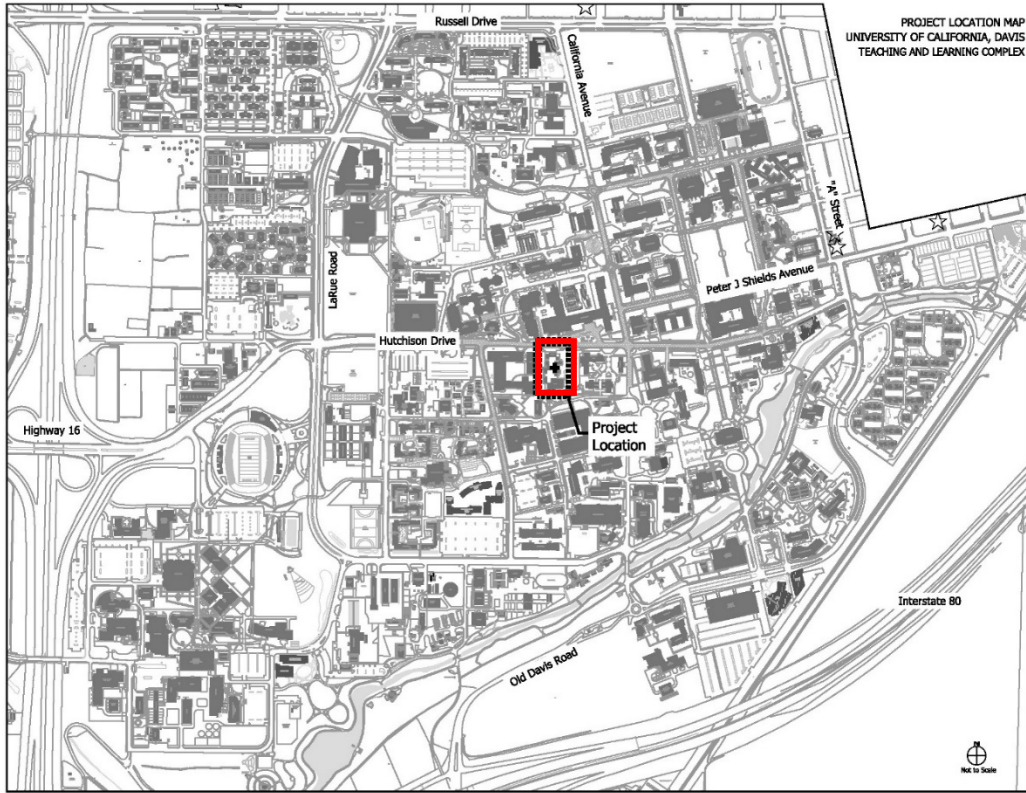
The proposed Surge IV site provides such an opportunity. The development of the Teaching and Learning Complex on this site would catalyze the demolition of modular structures that are deteriorating and are not an efficient use of the site. Constructing the proposed project on this site would revitalize a student-centric area on the core campus, located close to transportation. The proposed project delivers the anticipated number of seats to satisfy the demand through 2030 and would provide the design flexibility to accommodate varied sizes and instructional configurations of classrooms.

4. Renovate an existing campus facility

The campus has evaluated core campus buildings to assess their current utilization and the maximum occupancy they could support both with and without renovations, as well as to assess the condition of these buildings. Through this process, Haring Hall was identified as one of the opportunities to be renovated to accommodate campus growth needs for non-laboratory space, specifically faculty offices and classrooms. Although a feasibility study of Haring Hall determined that renovation work on the building would cost approximately 80 percent or less than the cost of demolition and construction of a facility of equal size and use, it was determined that Haring Hall did not provide the desired density on a site of its size. In addition, the configuration of the central wing, envisioned to hold classrooms, limited the design flexibility.

Other buildings that might accommodate this need have similar building system issues and deficiencies with comparable estimated costs to correct, but are not centrally located on campus. These buildings are currently occupied and would require multiple space moves to prepare the space to be renovated for the proposed uses. These buildings also would require future renewal, and many satisfy other programmatic and adjacency needs. For these reasons, the campus has concluded these buildings should be considered for renovations that maintain their primary functions as research laboratory and teaching spaces.

PROJECT LOCATION MAP



PROJECT SITE MAP

