Office of the President

TO MEMBERS OF THE FINANCE AND CAPITAL STRATEGIES COMMITTEE:

DISCUSSION ITEM

For Meeting of September 13, 2017

EMERSON HALL HOUSING REPLACEMENT PROJECT, DAVIS CAMPUS

EXECUTIVE SUMMARY

The Davis campus's proposed Emerson Hall Replacement project would replace the aging 118,000-gross-square-foot (gsf) Emerson Hall with a new 180,000-gsf residence hall comprised of approximately 350 rooms that would house 700 to 800 freshmen students and associated support spaces. Upon opening, the replacement building would configure 20 percent of the rooms for triples, but all rooms would be sized for tripling so additional rooms could be converted in the future to increase capacity and, with tripling being a lower cost option, help affordability. The new residence hall would allow the campus to offer the same high level of academic support, counseling, student activities, and other amenities at Emerson that are available at its other first-time freshmen residential facilities.

Emerson Hall is located in the Cuarto neighborhood. Over the past decade, the Davis campus has planned and implemented redevelopment projects in the Cuarto residential neighborhood including investments in a series of dining and housing projects that have improved and densified the neighborhood. The existing Emerson Hall accommodates up to 500 beds in 250 rooms that cannot currently be tripled due to the room size. It was constructed in 1967 by a private developer and was acquired by the campus in 1986. The structure has many building system and program deficiencies and is at the end of its useful life. Building system deficiencies include insufficient HVAC, plumbing, lighting, telecommunications, and high speed internet access. Upgrades to the fire suppression system and abatement of hazardous materials are needed. Program deficiencies include lack of space for advising, academic support, study, and student life activities critical to first-year student success. Existing Emerson Hall would be demolished to make room for the replacement building.

The Emerson Hall Replacement project would complete the redevelopment of the Cuarto neighborhood, increase site density, and leverage previous investments in dining capacity and other central facilities shared between Thoreau Hall, Emerson Hall, and the Webster Hall Replacement project, currently under construction.

FINANCE AND CAPITAL STRATEGIES -2-COMMITTEE Sepember 13, 2017

BACKGROUND

UC Davis Housing Overview

The UC Davis Student Housing and Dining Services program (Program) provides a safe and comfortable environment that fosters community interaction and educational development. The Program serves undergraduate and graduate students including students with children and those who are married or have domestic partners. In 2016-17, the campus housed approximately 5,500 students in traditional residence halls and approximately 4,300 students in apartment beds. The campus also master-leased apartment complexes to house 550 first-year transfer students.

The Program currently guarantees one year on-campus housing to all incoming freshman and transfer students. The campus's historical take rate with this guarantee is 95 percent of first-year freshmen and 30 percent of transfer students. When residence hall housing is offered to returning students, three percent of these students choose to live on campus in a residence hall instead of in an apartment. The design and programming in new modern residence hall construction is conducive to living on campus a second year and the campus projects that approximately five percent of returning students will want to be housed in the redeveloped Cuarto neighborhood.

As illustrated in Attachment 1, housing on the Davis campus is organized in several neighborhoods. Traditional residence halls are located in the Tercero, Segundo, and Cuarto neighborhoods and primarily serve freshman and sophomores. Since 2001, the campus has invested approximately \$300 million in the construction of new residence halls and increased the residence hall bed count by more than 60 percent.

On-campus apartment-style housing, located in the Cuarto, Solano, Segundo, and West Village neighborhoods, provides housing to upper division undergraduate and graduate students. Future development plans at West Village include additional apartment-style student housing. A second phase of undergraduate apartments in the West Village neighborhood was described in the UC Davis housing update to the Finance and Capital Strategies Committee in November 2016 (*Update on Student Housing and Plans for the Continued Development of the West Village Neighborhood, Davis Campus*). Plans include an additional approximately 2,775 apartment beds to be developed via a public-private partnership (P3) delivery model with housing opening in fall 2020.

The Cuarto Neighborhood

The Cuarto neighborhood primarily serves first-year students and housed approximately 950 students in fall 2016. The neighborhood has a dining facility and three student residence halls (Webster, Emerson, and Thoreau Halls) and is organized around Oxford Circle on University-owned property within the City of Davis. Surrounding properties are characterized by predominately two-story, small multi-family apartment complexes and single-family homes. The Cuarto neighborhood also houses some single graduate students. Located approximately a

FINANCE AND CAPITAL STRATEGIES -3-COMMITTEE Sepember 13, 2017

quarter of a mile from this cluster of residence halls, the neighborhood includes the 8th and Wake apartment community (formerly Castilian Hall).

In 2004, the campus engaged in a neighborhood planning effort for the Cuarto residential area. This effort focused on improving the dining facility to create additional capacity, and creating new residence hall and apartment spaces to better serve students. Renovation of the Cuarto Dining Commons was completed in fall 2010. Redevelopment of the former Castilian Hall, now 8th and Wake, was completed in fall 2015 and provided P3-delivered apartment-style housing for graduate students. In 2016, Interim Chancellor Hexter approved the \$49.9 million Webster Hall Replacement project via the Delegated Process for Capital Improvement Projects. With completion anticipated in fall 2019, the Webster Hall Replacement provides 180 rooms with a designed capacity of 400 beds that can be configured in a combination of double and triples. Webster is planned to have 20 percent of the rooms tripled. However, all rooms are being sized for tripling so additional rooms could be converted to increase capacity, provide swing space for the Emerson Hall Replacement project, and maintain affordability. The redeveloped Webster Hall provides neighborhood programmatic support space, including a computer center, area office, area service desk, and area mail room, to serve students housed in the three student residence halls.

The plan to redevelop Emerson Hall was one of the projects listed in the November 2016 Finance and Capital Strategies meeting discussion item as part of the UC Davis update on student housing. The Cuarto neighborhood plan calls for Emerson Hall to be demolished in 2019 when the Webster Hall replacement is complete.

PROJECT DRIVERS

Need for Building Renewal and Program Deficiencies

Emerson Hall is a three-story, wood-frame building that currently houses approximately 500 students in suite-style configurations where two or three double occupancy bedrooms share a living room and either one or two full bathrooms. Emerson Hall and its building systems are at the end of their useful lives. Deficient and/or outdated building systems include: mechanical, plumbing, lighting, cabling, and telecommunications, and internet access. In addition, upgrades to the fire suppression system and abatement of hazardous materials are needed. Aging building systems require constant maintenance and could fail.

Emerson Hall's design also results in programmatic deficiencies as it lacks office and meeting space for academic support. The current units are all configured as suites, minimizing social interaction among residents and compromising the student experience. In addition, the rooms as configured could not support tripling to respond to surges in demand.

Need for Additional Housing

Student Housing and Dining Services has committed to guaranteeing housing to incoming

FINANCE AND CAPITAL STRATEGIES -4-COMMITTEE Sepember 13, 2017

first-year students in residence halls. The campus's longstanding goal is to house freshmen in residence hall complexes with programs and services that are geared toward supporting academic success and individual development as students transition to university life. Despite recent expansions in the Tercero neighborhood and a project under way to increase the number of residence hall beds in the Cuarto neighborhood via the Webster Hall redevelopment, additional residence hall beds are necessary to keep pace with anticipated demand over the next decade.

Student Housing and Dining Services' strategy to provide modern housing and meet demand involves building new residence halls, configuring new facilities with 20 percent triple occupancy in order to provide a more affordable option, replacing aging facilities and renovating existing facilities. Table 1 illustrates the supply of current and projected campus residence hall housing by year.

FINANCE AND CAPITAL STRATEGIES -5-**COMMITTEE** Sepember 13, 2017

Table 1: On-Campus Residence Hall Supply and Demand Projections									
	FY 16/17	FY 17/18	FY 18/19	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25
SUPPLY									
Residence Hall Beds ¹	5,500	5,700	5,700	5,600 ²	5,600	5,600	6,300	6,300	6,300
PROJECTED DEMA	ND ³								
Enrollment Projections for First-Year Freshmen	5,800	5,700	5,800	5,550	5,525	5,775	6,000	6,200	6,325
Projected First-Year Freshmen Demand (95% of enrollment)	5,510	5,415	5,510	5,275	5,250	5,485	5,700	5,890	6,010
Projected Second- Year Demand (5%)	260	275	270	275	265	265	275	285	295
Residence Hall Capacity Excess (Shortfall)	(270)	10	(80)	50	85	(150)	325	125	(5)
Approved Residence Hall Projects		Tercero 4 opens; Webster closes		Webster opens					
Emerson Hall				Emerson closes			Emerson opens		

n · 1 11 11 0 1 D 1 D

Alternatives Considered

Though a significant investment to replace the Emerson Hall beds has long been part of the Cuarto neighborhood options and the overall Davis campus housing forecast, the campus reevaluated available options in terms of the existing building conditions, current construction market conditions, and demand. Options analyzed included: extending the life of the building with minimal investments to prolong the date by which the facility must ultimately be decommissioned; renovating the existing building; demolishing and replacing the existing building at a higher density; and delivering a new building with a public-private partnership. Attachment 3 provides a summary of the findings of this analysis.

Having analyzed the various development options, the campus proposes to demolish Emerson

Baseline housing capacity which includes converting 20 percent of the rooms in new residence hall to triples.

² Loss of 100 beds is the net result of the existing Emerson Hall being shut down in 2019, which is partially offset by the gain in beds from the redeveloped Webster Hall, which will be opened in that same year. This net loss of 100 beds can be accommodated, if needed, through the built in additional tripling capacity beds in the new Webster Hall and through the additional capacity in the Tercero neighborhood.

³ The UC Davis Long Range Development Plan charts overall potential enrollment growth for the campus; however enrollments are projections only and actual enrollment levels are unknown.

FINANCE AND CAPITAL STRATEGIES -6-COMMITTEE Sepember 13, 2017

Hall and replace it with a new, higher-density facility with the campus developing the project. This approach allows the campus to maximize the bed count given budget, site, dining, and neighborhood contextual constraints, and provide appropriate program space to serve the students while maintaining continuity of program with other first-year residence halls.

Project revenue streams and financial feasibility, residential life programs, and delivery and operating efficiencies support the campus proposal to deliver this project rather than partner with a private developer. As noted earlier, the campus is currently pursuing apartment-style housing projects using public-private partnerships. UC Davis has the financial capacity to make an initial capital outlay to support the project and has modeled debt service to cover the portion of the project that would be financed in its housing plan.

Campus delivery and operation of the Emerson Hall redevelopment also allows the campus to maintain full responsibility for the residential program experience, student services, and programs to support the successful transition of freshman and transfer students into university life. The campus has significant expertise delivering student life programs, which include advising, tutoring, counseling, recreation, and other support services. These programs allow the campus to create connections among the various housing communities within the neighborhood and across the larger campus. It is important that the campus provide a consistent and high-quality first-year residential experience among all campus neighborhoods. On the operational side, campus delivery and operation of Emerson Hall would bring significant operational synergies with Webster Hall, Thoreau Hall, and Cuarto Dining Commons, all of which are operated by UC Davis Student Housing and Dining Services.

Project Description

The proposed approximately 180,000-gross-square-foot (gsf) project would include about 700 to 800 residence hall beds, Cuarto neighborhood program space, and shared community support space (e.g. community kitchen, large lounge, and Resident Assistant work room/meeting space). An academic advising center with professional staff serving the students would also be included in the project. This model is in line with the other residential neighborhoods. The project would be served by the existing recently renovated Cuarto dining hall and will leverage the full capacity of the dining hall.

Emerson Hall's residential space would be constructed to align with the configuration and amenities provided in recent residence hall developments on the Davis campus. Design of the new Webster Hall will be used as the basis of design for the Emerson Replacement project, incorporating elements that appeal to both first- and second-year students. These design elements include increased bathroom privacy, small community gathering spaces, and flexible space for the educational programs. Bedrooms will be sized as double rooms with the ability to configure as triples, with minimal impact to the residents. The redeveloped Emerson project would also include informal interaction space, lounge and study areas, a community kitchen, laundry facilities, and other support space.

The campus has preliminarily investigated a number of density and massing options based on

FINANCE AND CAPITAL STRATEGIES -7-COMMITTEE Sepember 13, 2017

construction type, cost per square foot, and number of beds delivered. To optimize the redevelopment opportunity, the campus's goal is to pursue the maximum site density while taking into consideration the cost of construction, cost per bed, cost per square foot, social implications, daylighting, views, and the neighborhood scale. With these goals in mind, the campus rejected the high- and low-rise options and has opted for mid-rise construction of four to five stories. This height fits the neighborhood context – the Webster Hall Replacement project currently being constructed is four stories high. The final decision on the number of stories will be made in the preliminary plans phase as part of the design-build process that accommodates a building program that supports 700 to 800 beds on this site.

Delivery Model

The proposed project is intended to be constructed using the design-build delivery method, which has been successfully employed by UC Davis on a number of recent housing projects. In this process, the University contracts with a single party for both design and construction. The campus prepares a comprehensive bid package outlining detailed project requirements, performance specifications, desired design character, and maximum acceptance cost. This package is competitively bid to prequalified contractor/architect teams who submit schematic design proposals. The contract is awarded to the team that provides the best value for the budget. The design-build process is highly efficient and allows the contractor's technical expertise and creativity to be incorporated into the design process from the beginning. In addition, this method permits project schedules to be fast-tracked because procurement, fabrication, and construction of utilities can begin while construction documents are still under way. The design-build process has proven to be very successful in controlling costs, managing schedule, and maximizing value for housing projects, and the campus now delivers virtually all residence hall housing projects using this method.

Project Schedule and Future Actions

The campus intends to request Regental approval of preliminary plans funding in November 2017. Approval of budget, external financing, design, and California Environmental Quality Act compliance would be sought at the January 2018 meeting. At that time, the campus will request approval of the project's conceptual design and site planning parameters in order to include approved design parameters in the bid documents prior to initiating the design-build competition. Upon the completion of the Webster Hall Replacement project, it is anticipated that construction of the Emerson Hall Replacement project would start in 2019, with the goal of delivering the complete project for occupancy in fall 2022.

itey to meronymis	
GSF	Gross-Square-Foot
LRDP	Long Range Development Plan
P3	Public-Private Partnership
Program	UC Davis Student Housing and Dining Services program

Key to Acronyms

FINANCE AND CAPITAL STRATEGIES -8-COMMITTEE Sepember 13, 2017

ATTACHMENTS

Attachment 1: Campus Housing Neighborhoods Attachment 2: Emerson Hall Redevelopment Site Attachment 3: Alternatives Considered

ATTACHMENT 1



Cuarto Neighborhood Current student housing projects Future faculty and staff housing

ATTACHMENT 2

z⊕

EMERSON HALL REDEVELOPMENT SITE Emerson Hall Replacement R. UC Davis Cuarto Housing Area

ALTERNATIVES CONSIDERED

Information regarding the alternatives considered for the Emerson Hall Replacement project is provided below.

Alternative 1: Extend life of building with minimal investment

Approximately \$3 million would be required to complete basic improvements necessary to extend the use of Emerson Hall, as currently configured, through the 2023-24 academic year. If the campus were to continue to minimally invest in Emerson Hall, the cost of operations would continue to increase as the mechanical systems have already outlived their useful life. The risk of a catastrophic system failure increases every year. Emerson would have to be decommissioned in 2024, resulting in a loss of 500 beds to the campus inventory, and the campus would be in jeopardy of not being able to meet its housing guarantee for first-time freshmen, forcing freshmen into the general Davis market.

Alternative 2: Renovate Emerson Hall

Renovating Emerson Hall would improve some programmatic and life-safety deficiencies, but would also decrease the on-campus supply of first-year freshmen housing. The resulting renovation would result in a net loss of at least 50 beds to accommodate the needed programmatic space such as a student advising center, study rooms, and recreational rooms. A renovation to update the facility and provide adequate programmatic space would require an investment of approximately \$60 million and extend the life of the building by approximately 20 years. A new housing project would need to be considered to accommodate the loss in beds from Emerson being retired in 2039.

The campus anticipates an increase in first-year residence hall bed demand of over 800 beds in the next ten years. The President's Housing Initiative encourages campuses to continue to increase the number of beds offered on campus. Renovating Emerson to provide programmatic space equivalent to other first-year housing on campus would reduce the number of beds available on campus and limit the campus's ability to accommodate future demand or meet the goals of the systemwide Housing Initiative.

Alternative 3: Demolish and Develop a New Residence Hall

Increasing density in the Cuarto neighborhood is part of the campus's strategy to continue to provide adequate housing to maintain the first-year housing guarantee. Given the campus's need to continually increase its housing capacity, every new residential project must consider the maximum practical density to be built. The considerations must include the cost of construction, the cost per bed, the cost per square foot, social implications, daylighting, views, and the neighborhood scale. Several density options were considered under the option to demolish and rebuild, ranging from wood-framed construction in the three- to five-story range to type I construction high-rise at ten plus stories. Preliminary analysis indicates that the option that best

maximizes the University's investment lies in the middle of that range, allowing for densification and economies of scale while maximizing the existing investment in the dining facility and keeping the cost per bed and the cost per square foot as low as possible to keep the rental rates as affordable as possible for students. To balance the cost and scale of the new buildings, preserve views, and enhance daylighting, a hybrid approach of building heights and construction types could be used. These options will be further tested during preliminary planning.

This analysis considered the challenges to building higher within the neighborhood context. The city's height limit in the surrounding neighborhood is nine stories, and while the University is not obligated to follow such restrictions, increased density of that magnitude would affect the neighborhood.

Alternative 4: Demolish and Rebuild Using a P3 Development Implementation Strategy

Housing projects are developed either through the use of internal campus management and resources, which is how all new construction of first-year student residence halls have been delivered to date on the Davis campus, or through a ground lease of the property to a third party, who would deliver the project and act as the students' landlord. Under the right circumstances, P3s have the potential to offer savings in time and reduce expenditure of capital reserves. Consideration of P3s by UC is based primarily on potential advantages in risk allocation and in management efficiencies offered by experienced developers who specialize in building types commonly developed by the private sector. The campus has determined that Emerson Hall is not a suitable candidate for a P3 because:

Revenue Streams and Financial Feasibility:

- While a P3 could minimize the campus' initial capital outlay, the loss in long-term net operating income is substantially greater than the ground rent that could be generated from the project. Housing reserves built up from the project would then be reinvested in future student housing and dining projects.
- The resulting revenue stream will be used to fund other aspects of the housing and dining program such as program enrichment and reserves for building upgrades or future projects. A percentage of this revenue stream will also be spent on campus programs and infrastructure.
- A P3 provides little advantage to the campus in regards to "risk" allocation. "Risk" of vacancy and subsequent default is considered very low, due to the limited amounts of on-campus housing at UC Davis and adequate housing reserves.

Residential Life:

• A significant element of the project is the residential program experience, student services, and programs to support the successful transition of freshman and transfer students into University life. The campus has significant expertise delivering student life programs that include advising, tutoring, counseling, recreation, and other support services. The campus has a successful first-year experience program in the residence halls. Delivering the same level of service with a P3 provider is more difficult to manage and coordinate and would require additional resources to ensure consistency.

Delivery and Operating Efficiencies:

- Campus staff has significant experience in developing student housing. In the past ten years the campus has delivered approximately 2,400 residence hall beds and has partnered with private developers to deliver approximately 2,100 apartment-style beds for students.
- Emerson Hall will have operating synergies with Webster Hall, Thoreau Hall, and Cuarto Dining Commons, all of which are operated by UC Davis Student Housing and Dining Services.