DAVIS PROJECT SUMMARIES 2017-18 to 2018-19

Capital Projects Under \$10M (E&G)

- Major capital projects budgeted at a cost of less than \$10,000,000.
- Includes renovations, new construction, equipment installation, infrastructure, and other types of projects. Projects address near term needs and many are in support of new faculty and research initiatives.
- Specific projects anticipated to advance in 2017-18 include Physics Building Renovations, the Hamidian Lab, and renovations and improvements in Chemistry.

Additional projects are under study to prioritize those with the highest value for advancing the campus mission:

Neuroscience RenovationsBiological Sciences RenovationsSeismic CorrectionsSocial Sciences RenovationsWelcome CenterSchool of Education RenovationsChemistry RenovationsSchool of Law Renovations

Engineering Renovations School of Veterinary Medicine Renovations

HARCS Renovations CAES Renovations

Vacant Building Demolitions

Central Cage Wash Facility

- 5,400ASF/8,000GSF
- Though accreditation has been maintained, the Association for Assessment and Accreditation of Laboratory Care (AAALAC) has noted
 concerns with campus cage wash facilities.
- Animal cage sanitation is critical to the mission of maintaining healthy animals. Currently, approximately 15,000 animal cages are
 serviced by multiple decentralized cage wash facilities across the Davis campus. This facility will allow for the centralization of cage
 wash services and the closure of aged, inefficient Med Sci D cage wash and decrease operations at the K2 cage wash.
- Constructs a central cage wash facility to allow for full equipment and space utilization to meet AAALAC compliance and optimize the use of campus utilities.
- New, efficient equipment reduces water and energy use and improves operational efficiency and safety.

Chemistry Addition and Phase 1 Renovation Vision

- Multi-project vision to complete seismic improvements, renovate Chemistry complex, and construct an addition to the Chemistry building.
 - Temporary space: approximately 20,000 square feet
 - Chemistry Phase 1 Renovation: approximately 6,000 square feet new research labs.
 - o Chemistry Addition: approximately 20,000 square feet new space.
- Addition provides laboratory, research space, and faculty offices; renovation modernizes labs and addition provides office space.
- Continues the renewal of the aging Chemistry Complex, including updates that increase the functionality of the space for current laboratory configuration and the modern research environment.
- Delivers phased series of improvements that allows for continued operation of Chemistry functions and provides for temporary space to accommodate ongoing research, instruction, and other operations as necessary.
- Includes electrical and mechanical modernization; corrects building code compliance deficiencies; improves energy efficiency and upgrades finishes.
- Renovates selected laboratories, and replaces primary air handling equipment and controls.
- Completes seismic improvements in Chemistry and Chemistry Annex to bring the entire Chemistry Complex into compliance with seismic codes.
- Structured to minimize the impact of construction activity on operations and research programs within the building.

Computational and Data Sciences

- 30,500ASF/46,950GSFNew facility to be located in the Engineering Sciences District
- Serves College of Engineering; consolidates the Department of Computer Sciences, which is currently located in Kemper Hall and the Academic Surge Building.
- Includes research and administrative office space.
- High priority development initiative for the College of Engineering; addresses space constraints that have forced the disparate location of related programs and supports growth.

Critical Infrastructure Improvements

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- Addresses the highest priority campus need for infrastructure renewal and/or expansion to support growth.
- Not all projects will be moved forward within this budget.
- High priorities for 2017-18: addressing the campus' aging steam infrastructure, boilers, and heat generation at the main Central Plant and the CNPRC Central Plant.

- Campus is conducting assessments to prioritize projects with the highest value for advancing the campus mission and address the most critical infrastructure needs.
- Campus infrastructure priorities may evolve over the ten-year implementation period of this plan, and the Campus will continue to re-evaluate priority needs. It is anticipated that this list will grow over time.
- Current potential infrastructure renewal projects include, but are not limited to, the following:
 Smart Lighting Initiative (future phases)
 Utility Water Well Replacement

CNPRC Plant Improvements & Building Energy Conservation Road and Path Improvements
Utility Water Well Pipe Improvements

Boiler #1 and #2 Replacement
CNPRC Boiler + Chiller Replacement

Electrical Improvements

Steam System Renewal Hutchison and 113 on ramp/ off ramp Improvements

Campus Wastewater Treatment Plant Improvement Hot Water Distribution

Storm Water Improvements Phase 1 (Detention) Chilled Water System Improvements Tank Addition

Improvements

IT Infrastructure Phase 1 & 2

Dom. Water System Improvements
Central Plant Boiler Replacement

Deferred Maintenance

• Addresses high priority deferred maintenance across the campus that improve quality of campus space, promote stewardship of existing facilities, and reinvest to repair and modernize assets.

Sanitary Sewer Lift Station and Pump Improvements Natural Gas System

Ongoing program receiving annual infusions of funds via Century Bond proceeds; \$15,000,000 annually 2017-18 through 2019-20.

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Engineering Student Design Center

Domestic Water Wells Replacement

- 15,400 ASF/23,700 GSF; Renovate approximately 12,000 GSF / New construction (addition): approximately 12,000 GSF
- Renovates and expands Bainer Hall to provide instructional and fabrication lab and support space for the College of Engineering.
- The Engineering Fabrication Lab in Bainer Hall, which supports a number of required and elective courses, is currently undersized and
 oversubscribed based on demand. This space also supports nationally recognized competition teams, senior capstone projects, and
 other student learning enhancement.
- A new Engineering Student Startup Center will engage engineering and business students in an integrated and collaborative product design and business development process.
- Specialized classroom space will accommodate Computer-aided Design (CAD) and Computer-aided Manufacturing (CAM).

Freeborn Hall Renewal

- 38,240 ASF/58,288 GSF; Renovate existing and approximately 1,200 GSF addition
- Freeborn Hall was closed in 2014 due to programmatic and structural deficiencies.
- Project addresses seismic deficiencies of the 50 plus year-old Freeborn Hall which has a "very poor" rating. Also implements general systems improvements in the aging facilities and renews the space to support programs that address current campus needs.
- Campus assessing program and need for facility that includes a multi-use auditorium space for festival style events and can accommodate seated dining as well as need for additional space for student services functions. Potentially constructs addition to existing facility to accommodate additional conference space needs.
- Captures required renovations related to life safety, accessibility, and the partial replacement of the failing building systems (accessibility upgrades, finish repair, HVAC work, fire sprinkler installation, fire alarm replacement, electrical and lighting improvements, replacement of exterior canopy, etc.).

Hunt Hall Second Floor Renovation

- Renovate 18,227 ASF/27,608 GSF
- Renovates the second floor of Hunt Hall to accommodate the relocation of departments to best serve emerging space needs and provide adequate adjacencies for departments.
- Converts outdated lab space into offices with minimal reconfiguration.
- Upgrades systems to modernize Hunt Hall.
- Accommodates future growth based on hiring priorities.
- Provides modern & efficient space layouts; updates lighting and finishes.
- Addresses life safety and building systems as necessary (including fire sprinklers, elevator upgrades, accessibility, HVAC, etc.).
- Provides for office, workstation, computer lab and other support space; removes/replaces lab specific building systems with new
 office type systems.
- Modifies the existing interior space configuration to provide more flexible office configurations with formal and informal meeting space, and will provide additional capacity and support collaboration.

Intercollegiate Athletics Initiatives Under \$10M

- TBD ASF/TBD GSF
- Captures the major gift-driven initiative targets established by Intercollegiate Athletics.
- Addresses the objectives of donor-development programs.
- Includes renovation, renewal and/or construction of: Student Athlete Academic Center, Schaal Aquatics Center seating and offices, strength and conditioning facility, and Aquatics Dive Tower, covered baseball/softball batting cages, grass practice field, multi-use turf

- field, softball improvements and/or relocation, soccer field relocation/expansion, Toomey Field renovation, soccer field lighting, baseball field lighting, and tennis complex improvements (court seating and locker room).
- Funding to be raised via a gift campaign. Gift-funded projects will advance when funding is available.

Laboratory for Energy-related Health Research (LEHR) Remediation

- NA ASF/NA GSF
- Component of ongoing efforts to mitigate environmental impacts from the Old Campus Landfills and associated waste units on the south campus
- In 1994, the United State Environmental Protection Agency (EPA) placed 25 acres on the south campus on the National Priorities List as a Superfund Site. The University is bound under Federal Administrative Order on Consent to clean-up the Site in accordance with the requirements of state and federal laws and regulations.
- Completes EPA-selected "Alternative #6" for addressing solid waste and groundwater remediation. Project timeline aligns with anticipated EPA report.

Orchard Park Redevelopment

- 520,000 ASF/ 580,000GSF
- · Redevelops the Orchard Park apartment community, which currently has 200 vacant one- and two-bedroom units.
- Demolishes the existing structures and constructs new apartments for family/graduate housing. Affordability of housing for graduate students is a primary project driver. Constructs higher density housing on the site.
- Project anticipated to be delivered via a public-private partnership.
- Project will replace the existing number of units in Orchard Park for student families. The project will explore options to densify
 development on the site to provide additional housing for students and university affiliates. Targeting 200 2-bedroom family units
 and 1,200 additional beds for graduate students.

Physical Sciences & Engineering Library Seismic and QMAP Renovation

- Seismic improvements in whole facility: 24,322 ASF/ 32,012 GSF
- Renovation: 6,500 ASF
- Physics department is experiencing dramatic growth, including the newly established Center for Quantum Mathematics and Physics (QMAP) program.
- Project renovates space in the Physical Sciences and Engineering (PSE) Library to accommodate the new faculty and associated researcher and graduate student support staff for this program.
- Delivers open, shared, and private office spaces as well as conference and collaboration space and general office support functions, including copy, storage, and break areas.
- In accordance with the UC Seismic Safety Policy, the campus has continued to study seismic risk associated with campus buildings.
 Based on these findings, structural upgrades will be completed on the seismically-deficient PSE Library in conjunctions with the renovations.

Research Animal Facility

- 29,900 ASF/34,800 GSF
- The geographical distribution, operational decentralization, age, and physical condition of UC Davis vivaria facilities are barriers to improving the efficiency and quality of vivaria services on the Davis campus.
- Project constructs a state of the art vivaria facility with co-located procedure rooms.

Teaching and Learning Complex

- 41,000 ASF/60,000 GSF
- Classroom capacity is a limiting factor to student access to courses necessary to support timely progress toward graduation and current classrooms are overprescribed. Campus plans to renovate existing classrooms will reduce the total number of classroom seats in existing rooms on campus.
- Redevelops a site along Hutchison Drive currently occupied by Surge IV, a collection of single-story modular structures installed in 1972.
- Modern, efficient classroom space with approximately 2,000 seats.
- Classroom configurations and related amenities, such as study space, would incorporate design elements to accommodate emerging pedagogy.

Tercero Dining Commons 2

- 26,500 ASF/30,000 GSF
- Project develops new approximately 500-seat dining facility.
- Located adjacent to Tercero housing district.
- Part of the Student Housing Strategic Plan; allows Student Housing to provide additional on campus dining and facilitate utilization of triples within the Tercero area along with supporting future growth.
- Also serves as a dining resource for members of the campus community that work in the neighborhood.
- Provides multiple food platforms, grab-n-go options, and other convenience options.

Third & A Mixed Use

- 86,400ASF/144,000 GSF
- Delivers mixed-use project with housing and offices along the A Street corridor on the eastern edge of campus.
- Project responds to campus needs for additional student housing to continue to make progress toward LRDP goals to house additional students on campus. Also explores potential opportunities to provide housing for non-student university affiliates.
- Project responds to the need for additional office space to support faculty growth and the associated growth in support staff. Campus estimates upwards of 70,000 ASF necessary to support growth over the next 5 years.
- Project delivery models and size to be determined.

Seismic Corrections

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- Addresses seismic corrections for select campus buildings.
- Will include the next group of highest priority buildings based on types of occupancy and critical functional needs.
- Anticipated identification of specific structures pending outcome of current structural and risk analysis under current methodologies.

Solano Park Redevelopment

- TBD ASF/TBD GSF
- Redevelops the Solano Park site.
- Site currently occupied by student family apartment; closure and subsequent redevelopment would follow the completion of the Orchard Park Redevelopment project, which would provide replacement housing for this segment.
- Solano Park is more than 50 years old and reaching the end of its useful life.

Student Affairs - Recreation, MU, Unitrans: Projects Under \$10M

- · Addresses Student Affairs, Recreation, Memorial Union, and Unitrans major capital improvement needs
- Includes deferred maintenance projects, cost-cutting upgrades, energy-efficiency upgrades, and health, life, and safety upgrades.
- Focuses on renewal and expansion projects.
- Projects include, but are not limited to, the following: MU passenger terminal project, MU loading dock, Dairy Road recreation field, and Russell IM field lighting.
- May also utilize grant or university fee reserves where appropriate and available.

Student Housing Projects Under \$10M

- Comprises several bundled projects for Student Housing and Dining to accomplish deferred maintenance and building upgrades and corrections.
- Focuses on structural deficiencies.
- Projects include, but are not limited to the following: Building Entry electronic lock system, Tercero IV lounge furniture, Tercero IV room furniture, Cuarto Dining Commons fall protection, Regan Carpet, High-rise window replacement, Tercero II carpet, Tercero Dining Commons roof, Segundo Dining Commons flooring, Segundo north exterior paint, High-rise carpet, High-rise window replacement, Webster furniture, Tercero Dining Commons II furniture, Segundo Dining Commons epoxy flooring, Tercero I exterior paint, Cuarto Dining Commons flooring, Segundo North Carpet, Emerson furniture, Tercero Dining Commons epoxy floor.

Veterinary Medical Center

- Approximately 400,000 total GSF new or renovated
- The existing Vet Med Teaching Hospital (VMTH) is the oldest Veterinary Medicine Teaching Hospital in the country; the existing facility is more than 40 years old and faces obsolescence.
- Phased series of projects deliver the vision for the Veterinary Medical Center by construction a replacement Veterinary Medical Center and renewing the existing facility.
- Provides new equine performance and clinical facilities, livestock medical facilities, small animal care facilities, large animal support facilities, a visioning center, renewal of the existing community practice (CCAH), and renovation of the existing Vet Med Teaching Hospital to be repurposed for related uses. Includes necessary utility improvements in the projects to complete the vision.
- Central campus to fund \$25M infrastructure improvements in support of development efforts and improvements in the Health Sciences District.
- Projects will be phased and approved based on availability of gift funds.

West Village Faculty/Staff For-Sale Homes

- 200.000 GSF
- Construction of approximately 81 Faculty/Staff single-family detached for-sale homes.
- Covers approximately 45 acres of West Village.
- Utilizes a large portion of existing finished residential lots and infrastructure that was installed by a third-party developer under an existing ground lease.
- Ground lease termination was recently approved by UC Regents. Upon termination, the development rights are returned to the University.
- Project fulfills longstanding goal (2003 LRDP) to provide much needed housing opportunities to qualified faculty and staff members in a constrained local housing market.

West Village Transfer Student Housing

- T533,000ASF/625,000GSF/
- Rental student housing to be located in West Village.
- Covers approximately five acres of West Village.
- Project was originally slated for Faculty/Staff Housing under a ground lease with a third party developer.
- Ground lease was terminated by the UC Regents in December 2015. Upon termination, the development rights were returned to the University.
- Provides a target of at 1,875 beds of apartment-style housing; encouraging developer to increase density to provide significantly more units.
- Anticipated project delivery via public-private partnership.