

Merced 2020

A lifecycle-based approach for developing
and maintaining social infrastructure



PRESENTATION ABSTRACT November 2016

University of California, Merced
5200 N. Lake Road
Merced, CA 95354

merced2020.ucmerced.edu

We welcome your comments

University of California, Merced
5200 N. Lake Road
Merced CA 95343

merced2020.ucmerced.edu

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Foreword

The University of California, Merced is a public research university which has a goal of developing additional physical facilities by Fall 2020 in order to address existing needs, accommodate enrollment growth to 10,000 students and capture the benefits of evaluating the total cost of ownership of its capital assets.

This document provides an overview of the University of California's 2020 Project, a first of its kind variant within the public-private partnership sector.

- It details the University's goals in pursuing the project, the decision-making process and overall objectives.
- And it details the key commercial terms and obligations of the respective parties.

The 2020 Project is one piece of a larger strategy to achieve academic distinction and ensure access to the University of California, Merced for eligible Californians. This document represents a high level introduction to the project based on detailed documents and analysis.

The Project Agreement and other documents are available online at merced2020.ucmerced.edu.

Rendering of 2020 Project Facilities



Why UC Merced?

The University of California, Merced is a research university located in the heart of the San Joaquin Valley, an agriculturally-rich area stretching from Stockton to Bakersfield.

As of 2016, 4.1 million people and more than 100 ethnic groups live in the San Joaquin Valley. As a region, however, the San Joaquin Valley's population has the lowest level of college attainment in California, the highest levels of young people under age 18 living in poverty, and among the highest unemployment in the United States.

By 2055, state demographers project the region's population will increase to 7 million people, a 68 percent increase that is twice as fast as California's growth rate – making it one of the state's fastest growing regions.

To prepare for and influence the character of this growth, in 1998, the Regents of the University of California selected an undeveloped 2,000 acre site in Merced County for its tenth campus in order to expand access to the University of California for qualified California students, increase college-going rates in the historically under-served San Joaquin Valley, and stimulate economic growth and diversification in a region struggling with chronic unemployment and poverty.

Groundbreaking on the initial 104-acre portion of the campus occurred in 2002 and the campus opened for classes in 2005 with 875 students.

UC Merced Today

As of Fall 2015, the campus had grown to over 6,800 students, 1,400 staff, and 212 ladder rank faculty on a footprint of 1.2 million gross square feet.

With respect to UC Merced's student population, 99 percent are Californian, 46 percent are Latino, more than 60 percent are the first in their families to attend a four-year university, and 60 percent come from low-income families. Approximately 55 percent of students are majoring in science, technology, engineering, and math (STEM) disciplines.

While increasing the campus' enrollment is critical to the University of California's system wide ability to continue to provide access to eligible students, the campus is faced with a growing gap between strong student demand and the campus' limited physical capacity to provide the facilities necessary to support that demand. Without a significant financial investment in its future development, the net impact of limiting growth at Merced would be to deny access to the UC system from qualified students across California.

As a result, UC Merced established a goal of creating facilities that will accommodate 10,000 students by 2020. At that size, the campus would be able to attain self-sufficiency and function effectively as a world-class, but highly focused, research university.

Also underlying that goal was an acceptance of the realization that if the Merced campus were to grow, it had to do so in a manner that suits the unique needs of the campus and that it could not expect to grow in the ways its sister UC campuses did in previous decades.

The Merced 2020 Project

“The Merced 2020 Project” is a construction project that will expand the existing UC Merced campus through the addition of approximately 1 million square feet of academic, administrative, research, recreational, student residence, and student services buildings, as well as infrastructure, outdoor recreation facilities and open space, landscaping, roadways, and parking.

At project inception, the preliminary cost of developing these facilities was estimated at over \$1 billion. However, without the availability of traditional state funding that enabled other UC campuses to grow, UC Merced began investigating the potential of alternative financial frameworks and delivery models.

Multiple delivery models were evaluated for their quantitative and qualitative ability to meet the project’s objectives and after analysis, the campus selected a model known as an “Availability Payment Concession”.

Under this model, the University and a private development consortium would partner to finance and deliver new facilities by Fall 2020, and then maintain them under a contractual agreement ending in 2055. This will enable the campus to cost-effectively build, operate, and maintain critically needed facilities. Among the delivery method’s key unique advantages is the ability to transfer risk during construction, to deliver facilities efficiently and to capture the benefits of a long-term and affordable lifecycle approach to facilities maintenance.

The Development Partner

The delivery strategy was structured to incorporate international best practices and to expand the notion of what a master-planned development could include. Its unique features combines the proven method of design-build delivery of facilities with long-term operations and maintenance obligations that create the incentive to deliver high-quality facilities designed with lifecycle operating and maintenance costs in mind. The delivery model is noteworthy for its ability to deliver facilities as fast as Design-Build with the added benefit of providing budgetary certainty over multiple decades, and minimize the financial burden typically created by deferred maintenance.

The winning bidder for UC Merced 2020 Project, Plenary Properties Merced, produced a compact, environmentally sensitive design that will meet the University’s needs. The bid was awarded in June 2016 and executed in August 2016. Groundbreaking occurred in October 2016.

The Project

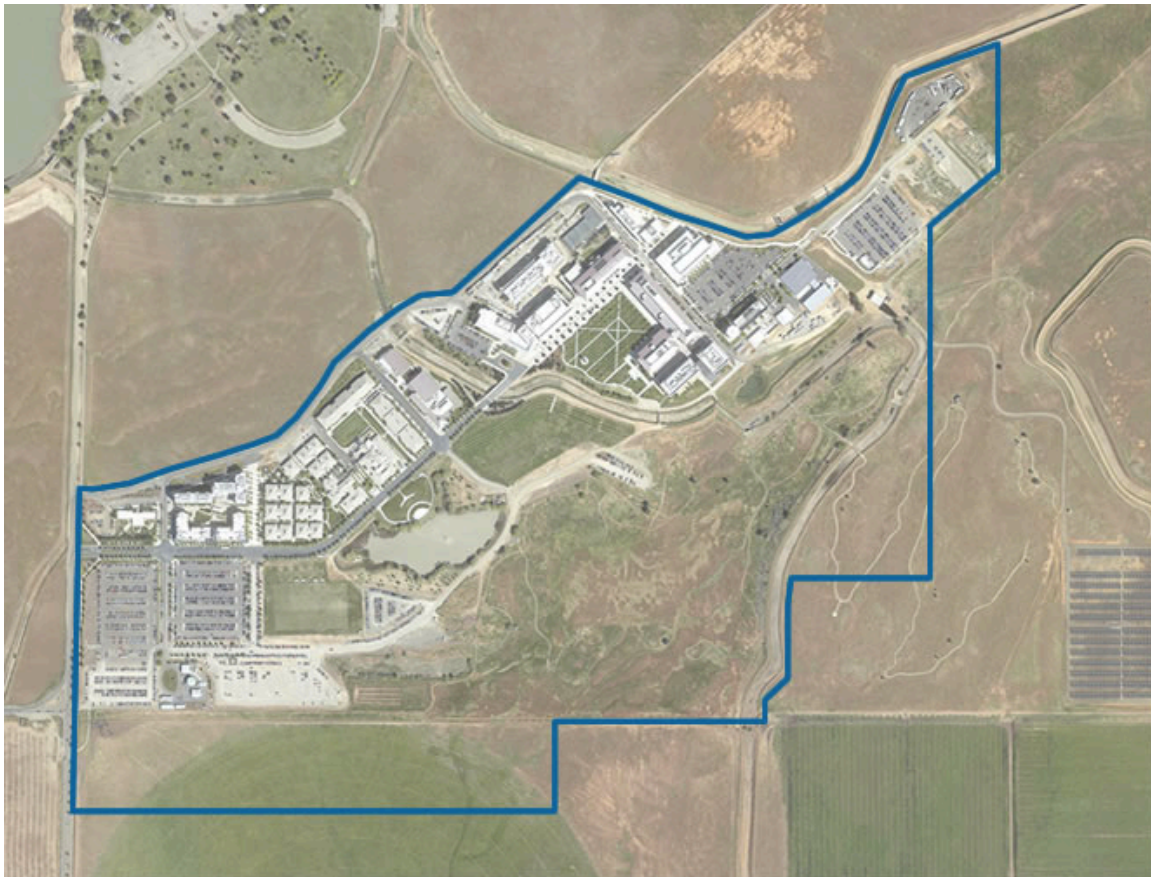
Due to its size, UC Merced’s instructional model is that of a small, intimate research university. To outline the specific facilities envisioned for the 2020 Project, UC Merced first engaged a broad set of academic, administrative, and student stakeholders to inform space-planning needs and the programmatic character for the site. These intensive focus groups developed information and specific criteria for various space types, schools, campus programs, student services, and campus-wide initiatives.

The ultimate 2020 Project program is a reflection of this process and is focused on creating mixed-use academic and student-focused space on campus. The goal of the program is to extend the current campus to support new approaches to multi-disciplinary learning and research, consistent with UC Merced's academic plan, which provides the intellectual foundation for the next decade of UC Merced's growth.

The size of 2020 Project program development process was eventually identified as 918,900 assignable square feet program and comprised of two broad categories: (1) space to address critical existing needs and (2) space needed to accommodate growth to 10,000 students. Within the program, the two largest types of space were Academic Space and Student Housing, followed by Student Life/Athletics and Campus Operations.

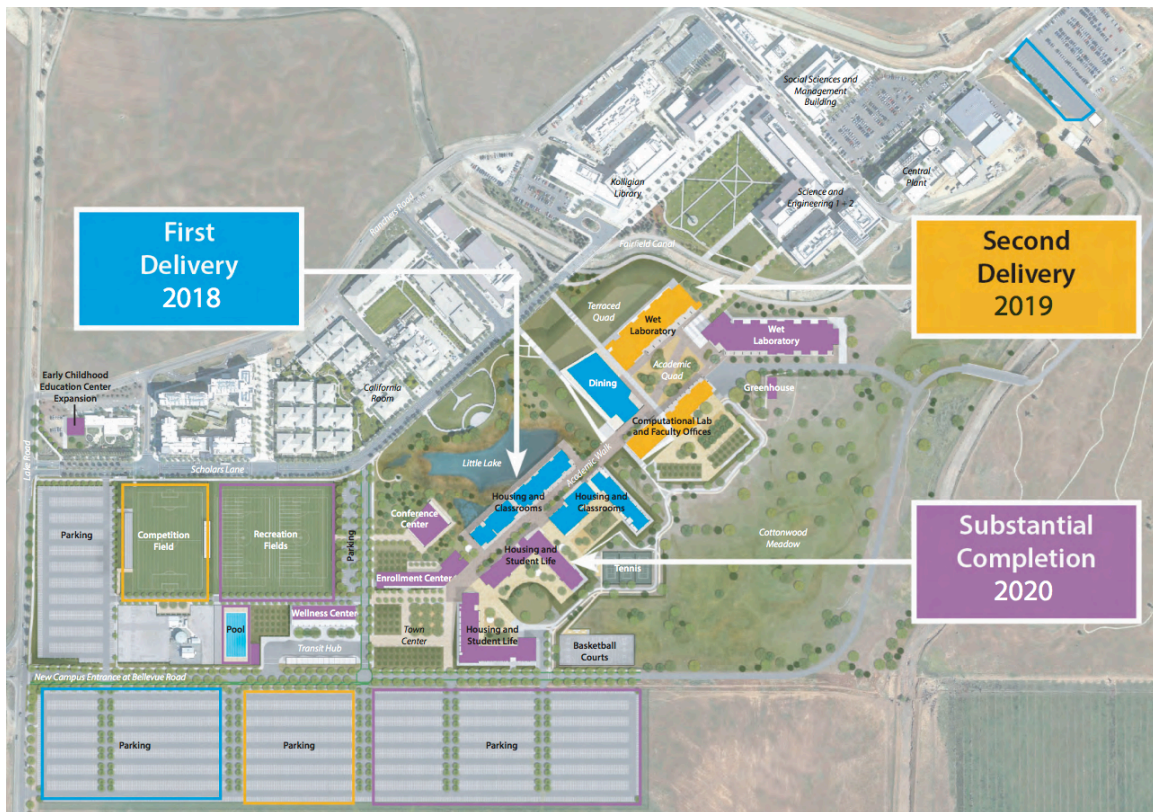
2020 Project Site, Pre-Development

The Project Site area is currently occupied by three parking lots, an informal recreation field and undeveloped grazing land located in Merced County. As shown below, the project boundaries extend south and directly adjacent to the existing Merced campus. Two unlined, gravity-fed agricultural irrigation canals operated by the Merced Irrigation District, pursuant to an easement, border and transect the Project Site.



The 2020 Project will be delivered in three phases

By 2020, the 2020 Project will have added 1.2 million GSF of new space for teaching and research, housing, dining, student life, and athletics to accommodate 10,000 students. The first set of facilities will be complete by Fall 2018; the second set of facilities by Fall 2019; and the balance by Fall 2020



Project Objectives and Options

UC Merced had a number of objectives for the 2020 Project. In order to address existing deficiencies and provide the capacity for increased enrollment, the campus sought a solution that would:

- Use an aggressive construction schedule that results in substantial completion by 2020 of 918,900 assignable square feet of new academic space for teaching and research, housing, dining, student life, athletics, campus operations, and associated infrastructure necessary to accommodate 10,000 students; by requiring delivery of assignable square feet, rather than gross square feet, the campus hopes to further incentivize efficiencies and space economies within the built program
- Provide mixed-use facilities that allow for interdisciplinary scholarly activities and result in a unique, dynamic, and inspiring environment for students, faculty, and staff
- Create built-in flexibility and adaptability to accommodate future needs
- Implement a project plan that expands space capacity appropriately across all Building and facility categories necessary for enrollment growth
- Result in a cost-effective development that takes advantage of existing investments in campus infrastructure and provides best overall value for the lifecycle of the facilities
- Support UC Merced's sustainability goals of achieving "Triple Net Zero" status (zero net energy, zero landfill waste, and zero net greenhouse gas emissions)
- Incorporate private-sector innovation and expertise in design, construction and management, and access to portions of the financing to facilitate the transfer of risk
- Shift certain risks related to design, construction, operations, and maintenance to a private-sector partner; and
- Facilitate greater capacity to focus on core teaching, research, and public service missions

The University of California and Public-Private Partnerships

The University of California has employed a variety of Public-Private Partnerships (PPP or P3) in asset areas ranging from medical office buildings and research facilities to student apartments and hotels.

For some institutions and governmental entities, a primary motivation for utilizing a P3 is access to capital. The University of California, however, has robust financing capability. As such, the University's focus, when considering P3s, has been on other beneficial aspects, including risk allocation and the management efficiencies intrinsic to experienced private development teams. At every stage of the process, the campus and the system office collaborated on the project.

Delivery Option Assessment

Three delivery options were considered for the 2020 Project Program. The campus analyzed timely delivery of the 2020 Project and the ability to transfer risk under the following frameworks:

- **Design-Bid-Build:** UC procures construction of project facilities under separate contracts. UC uses public financing to fund design and construction and bears related risks. UC owns the land and facilities and bears risk for operations and maintenance over lifecycle of the facilities.
- **Design-Build:** UC procures design and construction of project facilities under one or two contracts encompassing both design and construction elements. UC uses public financing to fund design and construction and bears related risks. UC owns the land and facilities bears risk for operations and maintenance over lifecycle of the facilities.
- **"Availability Payment Concession" DBFOM:** UC procures design, construction, operations and maintenance of project facilities under single contract. UC makes payments to cover a portion of design and construction costs upon achievement of key milestones. Developer finances the remainder of design and construction of project facilities against availability payments to be made by UC upon completion of construction over the operating period. Developer bears risk for 35 years of the operation and maintenance of the facilities, which will also be funded with availability payments from UC subject to deduction for substandard performance. UC maintains ownership of the land and facilities: the developer is a concessionaire operating the facilities for the University.

To analyze the three models, the campus compared its own expected outcomes using its traditional Design-Bid-Build and Design-Build strategies to the Availability Payment Concession approach for its ability to accommodate:

- Certainty of cost and schedule for delivery by Fall 2020
- An optimal balance of construction, operations and maintenance expenditures over the lifecycle of facilities
- Optimal risk transfer

To compare the delivery methods, the expected annualized cost of the Design-Build delivery option was set as the benchmark to define value. To the extent the Availability Payment structure delivers the project at a lower annualized cost, value is created through the alternative delivery method. The Availability Payment procurement process uses that threshold to ensure that financial bids result in lifecycle costs lower than the Design-Build approach.

Note that the Availability Payment Concession DBFOM approach includes long-term operations and maintenance risk transfer and warranty-like protection for asset performance, which is not a feature of the Design-Build option and represents a source of value to the campus. However, for purposes of the campus' analysis, these benefits/risks were conservatively assumed to be zero in the annualized cost comparison described above.

For each delivery option, the starting point of the analysis was an initial Budget Cost Model, which assumed UC Merced procured using the Design-Bid-Build strategy employed for the majority of the existing campus facilities to date.

The initial budget cost model was then adjusted to reflect the different base construction, operations and maintenance costs for each procurement strategy. The model uses an annualized cash flow requirement to compare costs across cases. This approach does not rely on a discount rate assumption and also helps confirm the annual project outlays' affordability, which is a key consideration for the campus.

When these factors were considered, the three delivery options resulted in an estimated annual cash flow requirement of:

- Design-Bid-Build (DBB): \$119 million/yr.
- Design-Build (DB): \$105 to 113 million/yr.
- Availability Payment Concession DBFOM: \$105 million/yr.

Project Scope

The UC Merced campus currently consists of 1.4 million GSF of physical facilities built over the past fourteen years. However, in its current configuration, the campus faces space deficiencies that impact its current and long-term ability to provide a quality education and expand enrollment.

The space deficiencies have resulted in teaching laboratories and large academic classrooms are over-utilized and lack availability for high-demand and prerequisite courses. This has affected course availability and, consequently, some students' ability to schedule curriculum in order to graduate within four years. In addition, housing is oversubscribed, and infrastructure systems operate above their designed capacity.

To remedy these deficiencies and continue to meet enrollment demand, UC Merced required space in two broad categories:

- (1) Space to address critical existing needs
- (2) Space needed to accommodate growth to 10,000 students.



Procurement Process

The University applied a rigorous scoring and selection process informed by expert advisors to identify a private sector partner.

The procurement process was a two-phase process that formally began in 2014. In the first phase, a Request for Qualifications was released to the market in order to prequalify prospective development teams. Six teams responded to the request and a shortlist of three prequalified teams was identified to respond to a Request for Proposals in the second phase.

As structured in the RFP, the Developer would be responsible for the design, construction, operation and maintenance of the Project as well as financing the portion of capital costs not funded by progress payments from the University. The Developer would receive progress payments tied to achievement of key construction milestones and availability payments for (i) the capital component they funded and (ii) the costs associated with the Developer's maintenance, operation, and renewal obligations.

All financial bids were subject to a not-to-exceed maximum availability payment to ensure (i) the bids meet campus affordability thresholds and (ii) the DBFOM cost does not exceed the estimated cost of a traditional Design-Build procurement to the University.

The Board of Regents approved release of the RFP at their November 2015 meeting.

In January 2016, the University released a Request for Proposals (RFP) to the three prequalified development teams.

In April 2016, the University received proposals, all of which were above the predetermined budgetary limit or "upset limit" that the University had established.

After receiving the bids, the campus strategically consolidated some space elements to gain efficiencies, eliminate duplicated space, and made program adjustments.

On June 7, 2016, the University issued a revised RFP pursuant to a Best and Final Offer process ("BAFO").

Key Dates in the Procurement Process

Request for Qualifications Phase

RFQs Issued	September 2014
RFQ Responses submitted	October 2014
Shortlist announced	January 2015

Request for Proposals Phase

RFP Issued	January 2016
RFP Responses submitted	Spring 2016

Completion/Best and Final Offer Phase

Apparent Successful Proposer Announced	June 2016
Contractual Close	August 2016
Financial Close	August 2016

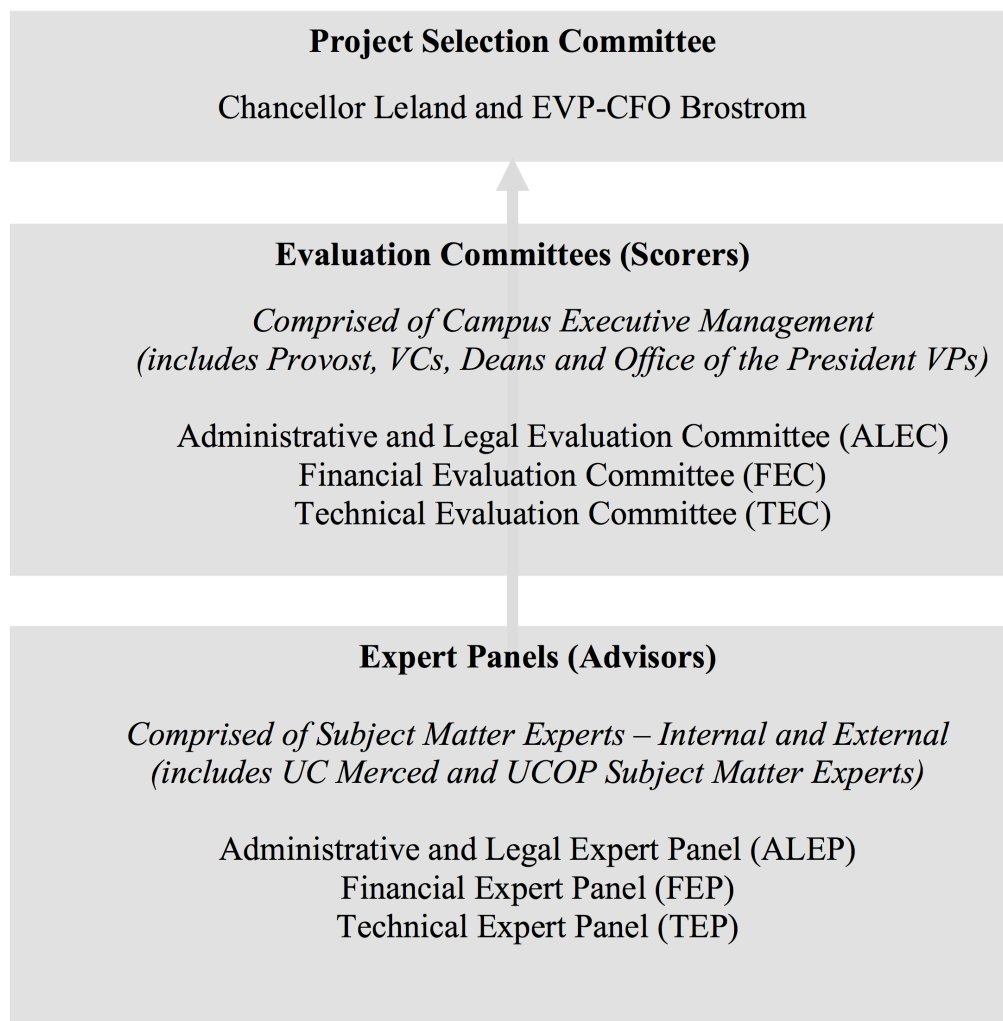
Procurement Governance and Evaluation

The proposals were evaluated by three topic-specific evaluation committees comprised of campus academic and administrative personnel and UC Office of the President management.

The evaluation committees scored the proposals with supporting expert advice from topic-specific expert panels drawn from both internal stakeholders and external consultants.

The Project Selection Committee was composed of the UC Merced Chancellor and the Executive Vice President – Chief Financial Officer. This Committee made its final selection of the apparent successful proposal based on the feedback from the topic-specific evaluation committees.

Throughout the process, the University retained the right to award or not award an agreement as provided for under the RFP.



Procurement Guiding Principles

As a public process, the University has an obligation to ensure the ethical nature of its bidding processes.

This obligation was heightened during this particular procurement due to the amount of investment required to submit bids and the time sensitive nature of the project. As such, the procurement was led by a professional team of procurement officials who managed the process with the following goals and following principles:

- To demonstrate consistency
- To promote efficiency
- To ensure fairness
- To protect the interests of the University, proposers and the public, and
- To identify the proposing team that would provide the best overall solution to the University.

Procurement Outcome

Plenary Properties Merced was selected as the apparent preferred proposer in June 2016 based on a bid that came in below the University's affordability range.

The submittal from Plenary Properties Merced retained the overarching goals of utilizing the Availability Payment Concession DBFOM delivery method and allowed for:

- Time to delivery within four years
- Cost-effective pricing of lifecycle design, construction, and facilities management (\$49.7 million/yr Availability Payment was below \$51 million/yr model)
- Increased long term budgetary certainty for maintenance and operations
- Transfer of construction related risks from the campus to the Developer

Project Milestones

Plenary Properties Merced proposal met the delivery milestones the University required to move forward with the teaching, research and public service mission.

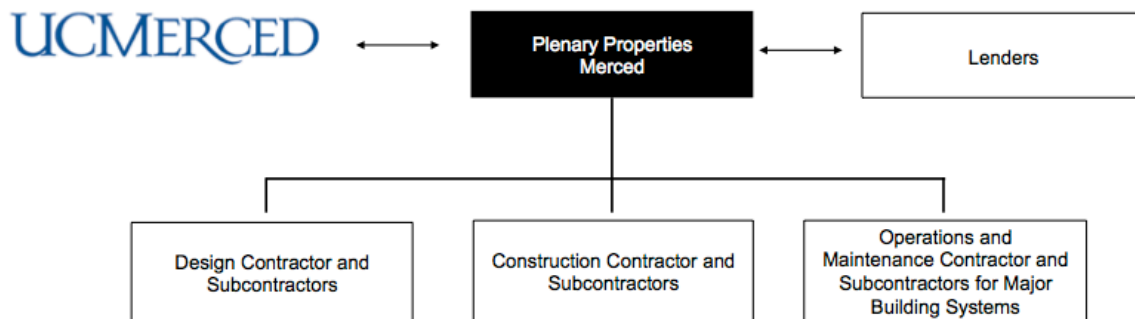
Project Milestone	Date
First Delivery of Facilities 161,000 ASF	Fall 2018
Second Delivery of Facilities 150,800 ASF	Fall 2019
Substantial Completion 478,000 ASF	Fall 2020

The Project Agreement

The key document in the procurement is a multi-volume “Project Agreement.” It sets forth the rights and obligations of both the Developer and the University. Campus, institutional and advisory experts, and stakeholders spent almost two years developing the document.

In August 2016, the President of the University of California, on behalf of the Regents, executed the Project Agreement and related documents to design, build, partially finance, maintain and operate the 2020 Project facilities. The sole counterparty to the University is Plenary Properties Merced. The Project Agreement is available online at merced2020.ucmerced.edu.

Contractual Relationship



Plenary Properties Merced Consortium

Lead Developer, Equity Member, and Financial Arranger: Plenary Group (Canada) Ltd

Lead Contractor: Webcor Construction LP

Lead Operations and Management Firm: Johnson Controls Inc

Campus Planner: Skidmore Owings & Merrill Inc.

Research Laboratory Architect: Skidmore Owings & Merrill Inc.

Academic Classroom Architect: WRNS Studio

Student Life Facility Architect: HOK

Student Housing Architect: Page Southerland Page

Student Housing Architect: Mahlum Architects

Infrastructure and Engineering: Arup North America

Commercial Terms

The Project Agreement includes commercial and risk-allocation provisions covering:

- The Developer's obligation to design, build, finance, operate, and maintain major building systems
- Requirements for "First Delivery" (in 2018) and "Second Delivery" (in 2019) of certain facilities critical to facilitate campus enrollment growth prior to 2020
- Penalties for late delivery or poor performance
- Good-faith thresholds to employ local businesses from the San Joaquin Valley
- Maintenance and renewal requirements of the facilities for 35 years
- Labor, prevailing-wage requirements and safety standards
- Governmental, regulatory, sustainability and building official approval requirements
- Limitations on the ability of the Developer to assign or transfer its obligations
- Procedures for force majeure events (e.g. earthquakes, natural disasters)
- A form of direct agreement with the Lenders
- University's oversight and approval rights, including step-in rights in the event of default
- Duration and allocation of responsibility for various elements of Project operations

Under the Project Agreement, Plenary is responsible for developing the conceptual design included in its bid to final design, in accordance with the design requirements, technical specifications and performance standards contained in the Project Agreement.

Plenary is required to provide design submittals for the campus' review and approval during the contract administration phase. The Project Agreement also sets handback standards for the condition of the buildings on their return to the University at the end of the Agreement.

As detailed above, the financial structure includes milestone payments from the University to the Developer during construction. However, in contrast to progress payments used in typical scenarios, the gap between the amount of work in place and the milestone payments actually paid by the University to the Developer (far greater than any standard construction retention) provides a large contingency against contractor default or failure to pay subcontractors or suppliers. The result of this effective retention is that it allows the University to offset losses before payment to the contractor, as opposed to trying to recover losses after payment.

In order to protect the University in the event of nonperformance during construction, the campus has required 100% performance and payment bonds. The performance bonds cover the failure of the Developer to perform pursuant to the contract. The payment bonds are intended to cover the failure of prime contractors to pay subcontractors.

Risk Transfer

A key characteristic of the Availability Payment DBFOM procurement is the transfer of risk that can be achieved compared to more traditional University of California delivery models or lease structure employed in other public-sector contexts.

No Availability Payments until delivery

The transaction structure ensures that the University does not make availability payments for the new facilities until they have been certified as substantially complete and operational. Therefore, in a range of delay or distress scenarios during the construction period, the University is in an inherently stronger position under the Availability Payment Concession DBFOM structure than in a traditional scenario.

Guaranteed Price

In addition, during the operations period, the University's pre-determined availability payments (which cover the Developer's operations and maintenance costs and amortize the Developer's capital investment) are made over time and are subject to potential payment adjustments in the event of poor performance, essentially providing an all-in guaranteed price and a long-term asset performance and state of good repair warranty akin to retainage.

The Availability Payment approach puts the University in the situation where it is a purchaser of services (availability of facilities and performance of operational services) rather than the manager of capital maintenance and staff. At the same time, the University remains the owner of the facility at all times and the Developer is a service provider (not a lessee or lessor).

Structural incentives for good performance

By their nature availability payments are dependent on long-term performance, otherwise disinterested and unrelated parties (responsible for construction, financing, and operations) are incentivized to work together to manage and mitigate risk, avoid integration problems, minimize lifecycle costs and ensure high performance.

In particular, the equity providers to Plenary Properties Merced will seek to coordinate across all of the Developer team members in order to safeguard their investment. In addition, The Developer, on behalf of its lenders and investors, will seek security from, and will manage, their Design-Build and Operations and Maintenance sub-contractors to ensure their own returns.

Risk Assignments

The selected delivery method shifts certain services that are not part of UC Merced's core educational mission to a third party while risks related to the University core mission are retained.

Developer Risks	Risks retained by the University
<ul style="list-style-type: none"> • <u>Master Planning:</u> Development of functional master plan for the Project site • <u>Design and Construction of Facilities:</u> Production of a detailed design for the site and facilities • <u>Design and Construction of Associated Infrastructure:</u> Design and construction of some or all infrastructure required for the facilities, including energy, water, transportation and other supporting infrastructure • <u>Financing a portion of the design and construction of the facilities and associated infrastructure and</u> • <u>Operation and Maintenance:</u> Provision of lifecycle maintenance services for major building systems 	<ul style="list-style-type: none"> • <u>Enrollment levels:</u> Variations in actual enrollment levels may cause funding, revenues and costs to vary from projections (e.g. state funding, tuition levels, faculty costs, etc.) • <u>Auxiliaries' revenue:</u> Income-generating facilities from which the University retains revenue to help cover its operations and capital expenses may not perform as projected (e.g. student housing , dining, parking, etc.) • <u>Owner scope change:</u> The University may determine its needs are different after construction has already commenced (while some flexibility may be embedded and structured in the project agreement, other changes would require additional compensation to the Developer) • <u>State appropriation support:</u> The University, through the UC system, relies on annual State of California appropriation support to fund operations and capital expenses. A reduction in appropriation levels will strain the University budget and impair its ability to cover operations and capital expenses • <u>Federal Pell Grant support:</u> The University relies on federal Pell Grant support to fund operations. Given the high proportion of eligible students, any scaling back of the program will strain the University budget and impair its ability to cover operating expenses • <u>Technical obsolescence:</u> Facilities may become obsolete over time and require major lifecycle renovation or even replacement • <u>Force majeure events:</u> Certain non-insurable (or not insurable at commercially available rates) extreme events including for example terrorism may expose the University to additional costs and/or delay Relief events – Less severe events such as an external utility failure may also expose the University to additional costs and/or delay • <u>University-caused delays:</u> Failure by the University or a related UC party to deliver design approval, funding, etc. as scheduled may result in additional cost or delay • <u>Reputational risk</u>

FINANCING AND AFFORDABILITY

The project budget for design and construction is \$1.3 billion.

Of that amount: (i) \$600 million is anticipated to be from University external financing, with \$400 million of that financing supported by State General Funds subject to California Assembly Bill 94 (ii) \$590.35 million is anticipated from Developer funding, of which \$127.3 million will be supported by State General Funds as allowed under California Senate Bill 81 and (iii) \$148.13 million is anticipated from campus funds.

The University will use a combination of its own General Revenue and Limited Project Revenue Bonds to fund its external financing. The Developer is providing funding for the remainder of construction costs plus any financing and other transaction costs through a combination of equity and private debt.

UC Merced generates revenues from tuition, fees, and research grants as well as housing, dining and parking facilities and is responsible for covering expenses related to instruction, research, student services and the auxiliary amenities as well as the cost of developing and maintaining its facilities. The campus also receives ongoing State support in the form of educational, capital and financing appropriations to help cover costs related to instruction, financial aid, capital projects and other items core to the mission of the campus.

Based on the campus' financial models, the 2020 Project and associated annual operating costs fit within the campus' expected affordability envelope. As the 2020 Project goes into construction and begins to come online, costs related to the availability payments and the debt service related are assumed to be paid from available UC Merced sources of funding, including State appropriation support.

SUMMARY

The value created by the Availability Payment Concession approach is based on the premise that the developer will have a more efficient method of completing the project and ensuring building performance over time than the campus would expect to accomplish itself under more traditional delivery methods.

This premise will be tested through a competitive procurement process, whereby development teams must compete across all lifecycle costs, to win a contract that requires the winning team to provide long-term performance guarantees at the bid cost.

The scope and strategy for the 2020 Project have received extensive modeling and evaluation. Based on that analysis, the DBFOM approach was viewed as the optimal solution to fulfill the 2020 Project program goals, because:

- The approach allowed the University to be less prescriptive, thereby allowing greater innovation across design, construction, and facilities maintenance, enabling the proposers to drive lifecycle costs lower, notwithstanding higher cost of capital.
- The approach provides a long-term guarantee of building performance throughout their lifecycle that includes incentives for cost-effective preventative maintenance.
- Transfer of significant non-core risks from the campus to the developer during both construction and operations.
- A competitive procurement process for all lifecycle cost components enabled the University to capture value.
- The approach provided an advantage in time to delivery.
- Relative to a Design-Bid-Build approach, the approach achieved efficient and cost-effective pricing of design and construction, due to acceleration in the time to delivery and economies of scale.
- The strategy achieves budgetary stability with respect to maintenance and operation for 35 years.

Appendix 1: Glossary

Term	Meaning
Annual DBFOM Cash flow	The total of what UC Merced can afford each year including debt service, campus expenses, operations and maintenance and capital costs.
Apparent Successful Proposer	The development team identified prior to ultimate selection by the Board of Regents
Area Data Sheets	Detailed performance specifications for particular space types
ASF	Assignable Square Feet. Measurement tools used during the procurement to drive efficiencies.
Availability Payment Concession	A public-private partnership variant
Best and Final Offer Phase	Submission phase reserved by the University during the RFP process
Contractual Close	The date on which the Board of Regents and Plenary Properties Merced entered into the Project Agreement
Contractual Term	Length of the Project Agreement. For the Merced 2020 Project, this means 39 years.
Developer	Plenary Properties Merced, LLP
Industry Review Period	Period prior to release of the final RFP where shortlisted team may comment on draft RFP
First Delivery	Initial facilities required for Delivery under the Project Agreement
First Generation Student	Enrolled student from family where neither parent holds a four-year university or college degree
FF&E	Furniture, Fittings and Equipment
GSF	Gross Square Feet
LRDP	Long Range Development Plan. This is the University of California equivalent of a Land Use Master Plan.
Minimum Scope	Minimum square footage of facilities required by the RFP or 918,000 ASF
O+M	Operations and Maintenance
P3	Public Private Partnership
Program	Facilities required for development by Fall 2020. In this case, 918,000 ASF.
Project	UC Merced 2020 Project
Project Agreement	The Project Agreement entered into between the University of California Board of Regents and Plenary Properties Merced
Regents	University of California Board of Regents
RFP	Request for Proposals
RFQ	Request for Qualifications
Short listed teams	The three development teams who were prequalified to respond to the Request for Proposals
Upset Limit	Maximum threshold for Availability Payment not to exceed \$51 million per year

Appendix 2: Useful references

Project documentation, including the Project Agreement, is available at:
<http://merced2020.ucmerced.edu>

University of California Office of the Chief Financial Officer
<http://ucop.edu/finance-office/>

University of California, Merced website
<http://ucmerced.edu>

Appendix 3: Key Contact Details

Division of Planning and Budget

University of California, Merced
5200 N. Lake Road
Merced CA 95343

Web: <http://opb.ucmerced.edu>

(209) 228-4430

2020 Project

University of California, Merced
5200 N. Lake Road
Merced CA 95343

Web: <http://merced2020.ucmerced.edu>

Email: construction2020@ucmerced.edu

Appendix 4: Evaluation Criteria

UC Merced evaluated each proposal against detailed evaluation criteria in three broad categories:

- **Pass/Fail Factors**
 - Administrative
 - Technical
 - Financial
 - **Technical Criteria (500 pts)**
 - Qualitative
 - Adjectival scoring/numerical equivalents
 - Categories
 - Academic Facilities – 75 pts
 - Student Life Facilities – 75 pts
 - Living and Learning Community Design - 75 pts
 - Community and Workforce Engagement – 50 pts
 - Delivery – 50 pts
 - Maintenance and Operations – 100 pts
 - Sustainability – 75 pts
 - **Financial Criteria (500 pts)**
 - Normalized
 - On a net present value based on proposed Availability payments
 - Formulaic
 - Scores calibrated to allow up to 5% price premium for higher technical score.
 - $$\text{Fin. ScoreA} = 500 \text{ pts} - (150) \times (\text{PriceA} - \text{Pricelow}) / (5\% * \text{Pricelow})$$
- Where:
 - Fin. ScoreA cannot be negative
 - PriceA = Normalized Price bid by Proposer “A”
 - Pricelow = Lowest Normalized Price bid (included in a responsive, passing Proposal)

Appendix 5: Score Tabulation and Selection

The following process was followed in order to tabulate proposals:

1. Technical Scores were submitted, numerical equivalents were applied, and scores were averaged.
2. Normalized financial pricing was submitted and combined with Technical scores.
3. The Proposal receiving highest aggregate score recommended for award to the Project Selection Committee
4. The Project Selection Committee makes final decision