

SEPTEMBER BRIEFING MEMORANDUM

Re: UC Merced 2020 Project: A campus for 10,000 students
Follow-up from July Board of Regents Meeting

Date: September 8, 2015

In July 2015, the Committee on Grounds and Buildings and the Committee on Finance considered a Discussion Item that provided an overview of a proposed method for delivering significant amounts of academic, residential and student-support facilities by 2020 and maintaining major building systems under a long-term contract with a private-sector developer. This model is known as an Availability Payment Design-Build-Finance-Operate-Maintain contract (DBFOM).

Questions not previously addressed raised during the discussion related to:

- The risks of putting all of the project's "eggs in a single basket" by concentrating delivery of the facilities through a single procurement
- Clarification of the financial risk profile between the University and the Developer and the asserted cost savings during the life of the project
- The risks of not requiring 100% performance bonding
- The criteria and requisite expertise of the decision makers during the proposed bidding process; and
- The implications to the campus if needed facilities were delivered more slowly.

The purpose of this memorandum is to address these new questions raised at the July Regents meeting. This memorandum is meant as a companion document to the July 21 Briefing Memorandum circulated for the July Regents meeting. The July 21 Briefing Memorandum provides a basis for the position that a single procurement is the most cost-effective and timely manner of reaching the Fall 2020 target and that the proposed method has been structured to mitigate financial exposures to the campus and the system both during construction and during operations. Moreover, the ongoing and future contributions of the nation's leading experts on this delivery method in support of a competitive procurement requiring committed price proposals provide a basis that the proposed method should result in a faster implementation and with cost certainty.

At the September Regents meeting, a presentation will be provided that focuses on the benefits and risks of the approach and the steps being taken through the Project Agreement to mitigate identified risks. In November 2015, the Regents will be asked to consider approval of the request for proposals, including the instructions to proposers and the commercial terms of the Project Agreement.

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1. COMPARISON OF MULTIPLE, SIMULTANEOUS CONTRACTS TO PARTNERSHIP WITH A SINGLE ENTITY

The driving force for the 2020 Project is to develop and operate sufficient, high-quality facilities at UC Merced to accommodate 10,000 students by Fall 2020 in the most cost-effective and low-risk manner possible. Satisfaction of this target will enable the campus to reach stability and enable the system to satisfy its commitments under the Master Plan.

In the July Briefing Memorandum¹, three delivery options for the development of the 2020 Project were explored. The third option -- an availability payment DBFOM contract -- was discussed under two different development strategies:

- Strategy I. A single-phase procurement with an optional termination; and
- Strategy II. A single-phase procurement with a pre-development agreement.

Under both of these options, the Regents would contract with one developer. Strategy I was presented as the alternative that would achieve timely delivery of the facilities at a lower and more certain cost.

During the July meeting of the Board of Regents, the Board requested further analysis on a possible third strategy:

- Strategy III. A single-phase procurement with an optional termination, under which more than one developer would enter into separate, simultaneous contracts for different portions of the 2020 Project.

In this section, we explore the benefits and risks of Strategy III as compared with Strategy I. We utilize the same factors as those presented in the July Briefing Memorandum to analyze these potential strategies. Within a discussion of the ability to share performance and financial risk, we specifically focus on interface risk and litigation risk of these strategies.

Following the Regents' meeting, analysis was requested on a fourth proposal.

- Strategy IV. This variant of Strategy I would include a single procurement with multiple series – akin to a master lease format. The goal would be to enable the campus in the short term to maintain off-ramps for a portion of the project, while requiring work on all other elements. This would provide flexibility to the campus to adapt to change in facilities needs (e.g., large-scale renovations).

An analysis of Strategy IV is included as well.

¹ Briefing Memorandum Regarding UC Merced 2020 Project. July 21, 2015. Pages 5, 11-16.

A. Single-Phase Procurement with Multiple Contracts

Consideration of a strategy that utilizes multiple contracts is understood to be motivated by a goal to achieve diversification of risk in the case of non-performance. There are two primary ways to diversify the contractual risk:

- **Divide the project footprint (Strategy II).** The campus would contract with one developer for all of the First Delivery Facilities on approximately half of the 2020 Project footprint. The same or a different developer would then be used to develop all of the Second Delivery Facilities on the other half of the 2020 Project footprint.

This strategy was explored in the July Briefing Memorandum as a single-phase procurement with a pre-development agreement. This strategy would provide the Regents with an option to utilize the same developer for the Second Delivery Facilities and/or to re-bid the second component of the project.

- **Divide the project by use-type (Strategy III).** The campus would contract with more than one developer to design, build, finance, operate and maintain facilities of different use types. For example, one developer could be required to develop all of the buildings with primarily academic uses. Another developer could be required to develop all of the buildings with primarily student housing and/or other auxiliary use types.

Benefits of Strategy III. Strategy III would reduce the nominal size of each contract into smaller component parts. It was suggested that if one developer contests an issue during project implementation, the work under the other developer would continue to proceed, and the University's focus is then on resolving issues pertaining to a subset of the project.

In addition, the ability to select specialty firms to provide different use types would be retained by the University. Under Strategies I and II, the developer would be required to retain specialty firms to provide for the different use types in the project program.

It is important to note that under any DBFOM strategy, it is much less likely that the construction subcontractor of the developer would stop work to contest an issue. In a typical construction contract, the University would be making regular progress payments, so a contractor contesting an issue would have been paid current by the University up until the claim event; by contrast under the DBFOM contract, the construction progress will be funded in part through the developer's debt and equity, which does not receive full repayment until facilities are completed and then available. Accordingly, lenders and investors will generally require their contractor to keep working toward timely completion even if there is a claim outstanding, given there is always a risk the claim will not settle in their favor. In addition, the Project Agreement specifically requires that work continue while disputes are resolved pursuant to the contract's dispute-resolution mechanism.

Considerations for Strategy III. Considerations about how the use types will be delivered under the 2020 Project are very important to the overall success of the project because the campus must expand capacity among every use type to grow enrollment. As such, the functionality of the new portion of the campus will be holistic as students avail themselves of classrooms, student services, and housing while faculty rely on office space, research labs, and classrooms. Failure to deliver in a timely fashion *on any one subset* of facilities has significant implications for the utility of the other facilities.

The successful expansion of the UC Merced campus will require successful and on-time delivery of all the use types in the project program. For example, if the campus successfully develops academic facilities, but does not successfully develop new student housing, it will not be able to expand the size of its undergraduate freshman class. Similarly, if it develops student housing but not academic facilities, the campus will not be able to hire the faculty necessary to teach an expanded number of students.

The utilization of multiple contract counterparties would require all contracts to be successfully completed on-time to achieve successful delivery. Each developer would need to execute on the same project footprint. This would require careful management of the interface between contractors – a risk referred to below as “interface risk.”

B. Comparison of Strategy I (Single Contract) to Strategy III (Multiple Contracts by Use Type)

(i) Delivery of the Necessary Facilities by 2020

One of the overriding goals of the 2020 Project is to accomplish the development of all the 2020 Program elements by Fall 2020. To meet this schedule, it is currently assumed that the project will be completed in overlapping stages.

As the master plan design is underway, so must also be the design of the First Delivery Facilities. First Delivery Facilities represent roughly half of the Project and consist of the most critically needed academic, classroom and residential facilities needed to maintain UC Merced’s enrollment and faculty hiring trajectory. During construction, the infrastructure and landscape expansion must be closely coordinated with the delivery of building phases and as the first-phase buildings are being constructed the Second Delivery Facilities will need to be in design. Second Delivery Facilities include additional academic and residential facilities combined with basic recreation and student-life needs. This development must be accomplished in a manner that does not significantly impact campus operations and the student experience.

Accomplishing these overlapping demands and meeting the schedule is only possible using a single team with the interdisciplinary skills, resources and project-management authority to choreograph the complex logistics required by the development. Strategy I accomplishes this goal by enabling the campus to interact with a single team and avoid potential schedule disruptions due to scheduling the interactions between multiple development teams.

Strategy III complicates schedule management in several ways:

- Master Plan: The master plan would need to be completed with all use types in mind before construction work commences.
- Infrastructure Coordination: The expansion of infrastructure will be required over the full 2020 Project footprint, regardless of the use type of the facilities built atop the underground infrastructure. The placement and utilization of the infrastructure is dependent upon the master plan. The responsibility for construction of the infrastructure would therefore need to be aligned with the master plan. Separating the development of the infrastructure from the master plan and/or the buildings to be constructed could elongate the schedule.
- Program Integration: The campus is seeking to maximize the utilization and effective use of space which might require bringing multiple use types together in the same facility. The need for the campus to manage the coordination and interface between multiple contractors to maximize space utilization would take time. This also creates schedule risk.
- Job Site Risk: The risks associated with multiple teams trying to construct separate development components at the same time on aggressive schedules would exponentially increase the risk associated with coordination errors, logistics disputes, disruption of campus operations and blame shifting.
- Contract Administration: The University would need to manage the ongoing performance requirements of each contract separately, on the same underlying infrastructure.

(ii) *Reduction of Design and Construction Costs through Economies of Scale*

In addition to schedule management, there are many opportunities under Strategy I for savings and efficiencies that can be derived through economies of scale. These opportunities include:

- **Logistics.** In addition to the installation of new infrastructure, the 2020 Project schedule will require overlapping development of building types. As described above, the construction of these building types will occur in a compact development area with limited roadway access on a fully occupied and functioning campus. Although the campus recently completed a development program one-fourth of the size of the 2020 Project, the logistics of managing simultaneous contracts for the development of the infrastructure and buildings would be challenging for the campus to manage from both a staffing and operational perspective.

Under Strategy III, the campus would be required to manage multiple developers who would be required to build all the components at the same time. The financial and schedule impacts of managing the interface between contractors

would ultimately fall to the campus. Having one developer responsible for the coordination of design-build subcontractors puts the financial and schedule responsibility on this team to effectively coordinate all of the site logistics as a master developer. This is a clear benefit of Strategy I over Strategy III.

- Another benefit will be to coordinate the activities of a unified workforce in a way that best optimizes required skills to achieve the greatest efficiencies. This will help manage the scheduling and cost of labor. It will also be easier to enforce accountability to logistical requirements with a single provider who is clearly responsible for ensuring all activities go as planned, rather than in a multiple-provider model where one developer could blame the other developer's activities for impacting their work and logistics management.
- **Infrastructure Development.** At present, the campus only has ingress and egress onto the current operating campus from the northwest corner of the project site via a two-lane road, displayed in the image below. The development of additional infrastructure on the 2020 Project site will require the construction of an extension to Bellevue Road, starting at the southwest corner of the 2020 Project site. As a result, the developer responsible for the installation of this component of the infrastructure would effectively control access into the Project during construction.

Utilization of more than one developer during construction of the infrastructure would require the University to manage a construction program that is four times larger than anything attempted on the campus, which would require the University to take schedule and cost risks associated with the coordination of the construction site.



- **Bulk Purchasing.** A single developer will likely be able to negotiate significant discounts on many of the project materials by aggregating purchases, whereas multiple providers will not be afforded this opportunity. Potential purchasing savings are expected to be reflected in the procurement process.

(iii) Innovation in Design and Construction

One important goal of the 2020 Project is to enable the UC Merced campus to become a mixed-use development that integrates students, faculty, and staff into a sustainable living and learning environment. To achieve this goal, the campus must be designed in holistic manner that considers the location and interrelationships of all development components to collectively achieve the project's goals and programmatic requirements. Having one interdisciplinary team working together to design and build the entire 2020 Project helps facilitate the achievement of this and other project goals.

Rather than trying to incrementally achieve overall campus objectives on the basis of use type, having an interdisciplinary team holistically design the campus affords opportunities to create an innovative living and learning environment throughout the campus in a manner that achieves these mixed-use objectives and optimal space utilization. The competitive process requires the design teams to deliver a pre-determined amount of assignable square feet within each use type, which will foster competition around the development of efficient buildings and help maximize space utilization.

Developing and advancing design simultaneously with two different design teams on an interwoven set of facilities would complicate the effort to maximize space utilization. With multiple projects and developers, the campus would essentially forgo the benefit of having a single developer holistically designing the overall expansion, potentially resulting in inconsistencies in everything from design intent to space utilization to landscape to aesthetics, across smaller projects. Under this approach the campus may have to interject itself into design decisions to a greater degree, thereby shifting some risk back to the campus for design defects and delays.

(iv) Achievement of Good Performance of Buildings Throughout Their Lifecycle

As discussed in the July Briefing Memorandum, an availability-payment DBFOM contract builds upon the concept of a single-phase Design-Build approach in order to achieve the campus objective to implement a lifecycle financial model and risk profile for its facilities that preserves the value of university ownership of the facilities. The DBFOM approach creates private-sector competition for a contract that links the cost of the long-term maintenance and operation of the facilities to their initial design and construction. Effectively, it builds a capital-maintenance program into the contract(s).

The implementation of multiple availability-payment DBFOM contracts complicates the campus' ability to achieve this objective due to the risk of interface between two long-term contracts. Under Strategy III, two development entities would be required to ensure the adequate performance of building systems that rest atop the same infrastructure footprint. The inability of one developer to achieve the contractual requirements could cause disputes. The university would bear this interface risk, which could reduce its ability to effectively transfer the risk of capital maintenance.

In addition, multiple developers responsible for the maintenance and effective performance of the buildings would be required to achieve these results while operating from a primary central plant managed by the University. This also causes a risk of integrating how each developer would draw upon services being provided from a centrally managed central plant. This integration risk could undermine some of the performance guarantees structured into the contract.

(v) Advancement of the University's Sustainability Agenda

The project site is located on an undeveloped greenfield site two miles to the north and east of the City of Merced. As part of UC Merced's LRDP goal to achieve zero net energy, zero net emissions and zero waste, the campus has a unique opportunity to procure a completely integrated portfolio of facilities that are designed to minimize resources. Utilization of one team to master plan a district-level approach and develop the infrastructure for the 2020 Project provides the best opportunity to integrate environmental sustainability into the overall campus environment. As an example, the energy efficiency provided by the existing district-based central plant for the Phase 1 campus is one of the primary reasons the campus has been able to expand beyond its design capacity. Similar to the ability to achieve construction-cost economies of scale, the design, construction and implementation of sustainable systems also benefits from scale.

Assuming that the master planning and infrastructure development counterparties would be able to effectively predict the types of sustainable systems to be installed in the buildings, the campus would have to be prescriptive about the systems to be used by each developer, thereby shifting some risk back to the campus for design defects and delays.

(vi) Ability to Share Performance and Financial Risk Over the Lifecycle of the Facilities

The execution of a single contract with a developer under Strategy I enables the University to carefully structure the risk allocations between the University and the developer.

Under Strategy III, structuring risk allocations between multiple counterparties would become more challenging due to the multiplicity and interconnectedness of partners. As a result, breaking up the 2020 Project into several availability-payment DBFOM contracts will likely result in increased performance and financial risk to the University as compared with a single project. In an availability payment context on a functionally integrated campus where deductions are assigned due to unavailability, disputes as simple

as whether a room is too hot or cold (e.g. Is it the fault of the first team's infrastructure designer or the second team's building contractor?) provide an opportunity for increased blame shifting requiring intraparty dispute resolution.

Significantly, under Strategy I, there is one developer whose entire private financing is at risk for overruns, meeting handback condition requirements, liquidated damages/deductions applied by the University, as well as in the event of a termination for an uncured developer default. Under Strategy I, this is true regardless of whether such risk is manifest across the entire contract or from a problem with a small subset of the facilities. But under Strategy III, a loss or default on a subset of facilities managed by one developer would not place the financing of the other developers at risk. Given that most foreseeable loss events for which the developer is responsible would arise from one building and/or a subset of the overall program, this means that Strategy III effectively would cap the University's ability to recover at the amount of the overall financing outstanding divided by the number of developers under simultaneous contract – materially reducing the security implicit in the deal structure in most given loss scenarios.

(vii) Total Cost of Ownership

The factors discussed above describe the differences between Strategy I and Strategy III. Several of these factors impact the total cost of ownership. These factors include the ability to ensure delivery of the 2020 Project on time and the ability to reduce cost through economies of scale. These factors suggest that Strategy III would result in higher design, construction and operational costs. In addition, Strategy III introduces interface risks associated with multiple contractors on the same construction site, which could impact the design and the ability to enforce performance requirements over the life of the contract. The impact of higher design and construction costs also increases the interest cost associated with the project. The July Briefing Memorandum shows that the campus estimates the annual cash-flow requirement for Strategy I to be \$105 million per year. Strategy II was estimated to be \$113 million per year. Strategy III is estimated to be \$117 million per year.

(viii) Term of Contractual Relationship(s)

In order to hold the developer accountable for the performance of the buildings over their lifecycle, the term of the contract needs to extend through at least one capital-maintenance cycle. Therefore, there is no difference between Scenario I and Scenario III. For each of the strategies discussed, the University would need to structure the availability payment DBFOM for up to 39 years. The distinction is that with Scenario III, the University would have to manage an administrative process to manage a long-term relationship with multiple concessionaires and, as discussed above, the ability to absorb the risk of a given loss event would be reduced pro rata for each developer.

C. Comparison of Alternative Multiple Contract Strategies

Based upon the factors used to analyze the 2020 Project delivery options, the introduction of interface risk within the availability-payment option would increase the cost and risk

to the university. It would sacrifice the goal of timely delivery and reduce the university’s ability to hold the contractor accountable for facilities performance and capital maintenance over the life of the facilities.

	Term of Contract	Total Cost of Ownership	Performance and Financial Risk Sharing over life of facilities	Sustainability	Quality influence based on O&M incentives	Opportunity for Innovation in Design and Construction	Economy of Scale	Time to Delivery
Strategy I								
Strategy III								

Achieves 2020 Project Goals	Suboptimal, but better than Design-Build	Less Optimum/ Does not achieve 2020 Project Goals

D. Single Procurement with Multiple Series (Strategy IV)

Another possible approach to reduce the overall size of the Project Agreement (in terms of scope and dollar value) would be to enter into more than one contract with a single developer, with delivery required on the same schedule, as opposed to in sequence. Presumably each contract would cover a subset of the buildings, but would include a variety of program types in order to achieve the mixed-use living/learning space that is a key objective of the Project. These contracts together would make up the overall obligation contemplated in the proposed 2020 Project approach.

This multiple-contract approach may be sub-optimal from the standpoint of the overall transaction structure and risk allocation.

If the implementation of Strategy IV is that each contract the single developer holds with the University is truly independent (not subject to University cross-default or offset by the University), then the developer’s risk exposure (and that of its lenders) is effectively firewalled. If the University found itself in a position where the developer is in default under one of the contracts, it may well be preferable to have the option to remove the developer from either the entire job or a portion of the job.

Under the multiple-contract approach, the University would not be able to terminate the contracts that are not in default, and would be bound to a potentially deficient and financially strapped developer for the rest of the project.

It would have no protection against the first default having a cascading effect on the other contracts – for the developer’s lenders still may deem a default under any of the contracts to be a default for the entire financing. And, in any event, the ability to proceed with the

remaining contracts assumes that the lenders will continue to allow draws on the unaffected construction loans when one of the contracts is in default.

In addition, there are scenarios under which the developer would actually be in a better position, and the University in a worse position, under a multiple-contract scenario. For example, in a default situation, if there are four contracts and the developer fails to perform on one, the ability to wipe out only 25 percent of the developer's financing may mean that there could be a loss from which the developer could walk away while 75 percent of the debt remains outstanding. This situation could increase the financial risk to the University similar to what would occur under Strategy III.

On the other hand, if the University retains the rights to trigger default and to offset for performance on one contract across all contracts, then lenders and investors would need to make careful analysis that there was not an increased or hair-trigger default risk that ensued from having multiple, smaller contracts securing the financing. Any default on one of the contracts would likely trigger default under all the loan documents. It is difficult to assess what the advantages of this approach are in default scenarios and what the University would ultimately gain compared to contracting under a single contract.

Under Strategy IV, because the University would have the right to terminate one or more of the multiple contracts (whether for default, extended relief event or University convenience), the developer may indirectly be forced to break up its flow-down contracts to align with the primary obligations under the contract. This could result in a loss of "volume pricing" or other premia given the added complexity. It could also likely require multiple subcontractor proposals and surety bonds, one for each contract. All of these factors could have a cost impact. In addition, the developer and its subcontractors may need to hold separate reserves and contingency for each of its contracts with the University to protect against the possibility that the University terminated one but not another. This would potentially result in higher combined costs.

With the single contract as envisioned for the 2020 Project, the University has the option of determining whether it wants to proceed with the unaffected portions of the Project while a dispute on a portion of the Project is resolved, or to terminate the contract outright and take over the remainder of the job. The Project Agreement specifically requires that work continue while disputes are resolved pursuant to the contract's dispute-resolution mechanism and as discussed previously, lenders will generally require likewise.

Partial Termination vs. Full Termination Analysis

Under Strategy IV, the campus considered the attributes of an uncured developer default with respect to the operations of a subset of facilities that would lead to partial termination of the developer rather than full termination². Taken together, it does not

² In such an instance, there would be termination of the Developer's responsibility for the subset of facilities, including those which were triggering the default, but the Developer would remain in place for other buildings.

appear to be in the best interest of the University to provide for a partial default that arises from a subset of buildings.

The campus believes that any uncured default gives rise to the right to terminate the contract in full for default. Ensuring that the full financing is at risk ensures that lenders and investors are incentivized to mitigate any default rather than finding it favorable to walk away from a troubled portion of the Project.

This is due to the fact that a partial termination likely also entails protecting the pro rata portion of the developer's financing from exposure to any losses. In the event of termination for developer default, the University pays a settlement sum equal to a reduced portion of the developer's entire outstanding financing that is further offset by any damages and losses the University will incur (including rectification costs).

It is possible that the damages and losses associated with a failure of even one building would exceed the pro rata amount of developer financing at risk which is associated with that building or even a cluster of facilities. However, in the highly extenuated circumstance that termination for default did occur, the University retains the right to assume key subcontracts (such as the lead O&M firm) to the extent it needs to in order to assure the smooth continuation of operations despite the termination.

In addition, the decision to terminate for developer default (which is financially favorable to the University) is solely in the University's discretion – and it can wait to do so until it has an operations plan in place or even a replacement contractor. These rights ensure that the University is not dis-incentivized from exercising its termination rights when there is an uncured developer default.

Should there be an acute safety issue with a given facility or facilities, the University retains the right to step in to mitigate the issue (at the developer's cost) and then step back out – all without terminating the Project Agreement.

Lastly, if during the ordinary course of contract term, there is a need to make a modification to the developer's scope with respect to a given facility or facilities, the Project Agreement outlines a change-order process which can be followed and by which corresponding payment adjustments are made.

2. FINANCING: WHO IS REALLY AT RISK

One of the key elements of this Project has been to clearly delineate who is really at risk - between the University and the developer - at various stages during the construction and operations of the project. The 2020 Project approach is designed to minimize the University's financial exposure at the most vulnerable points during the construction process, protect the system's ability to meet its other financial obligations and to incentivize high-quality performance.

The Base Case Financial Plan

The base case plan of finance for the Project has been modeled as a "hybrid" version of an availability-payment DBFOM contract. As envisioned in the base case, the University would borrow approximately 50-75% of the total project construction cost using a combination of its own General Revenue and Limited Project Revenue Bonds. The developer would provide funding for the remainder, through a combination of equity and private debt.

The developer's financing will be repaid over time through availability payments. The University's requirement to make availability payments will be an unsecured contractual obligation of the Regents under the Project Agreement.

The total design and construction cost estimate under the DBFOM approach has been assumed to be just under \$1 billion in 2014 dollars. With construction escalation, the estimate approaches \$1.1 billion in year-of-expenditure dollars.

Milestone Payments

The General Revenue Bonds (GRBs) and Limited Project Revenue Bonds (LPRBs) used to fund the three milestone payments will be issued in the same manner and have the same priority as all other Regents debt issuances.

The milestone payments allow the University to use its own low-cost financing for a portion of the project **and** retain the long-term performance guarantees provided under the availability-payment DBFOM structure.

The milestone payments will only be made to the developer if specific conditions are satisfied and will not pay for the entire capital cost of the Project.

A summary of the funding for the \$600 million in expected milestone payments, which is also referred to as “Regents-Issued Debt,” follows:

Milestone Payment 1 (Mid-2017)

- \$50 million
- Funded from existing Century Bond proceeds (non-State eligible)
- Payable upon the completion of \$100 million in construction work

Milestone Payment 2 (Mid-2018)

- \$250 million
- Funded with new GRBs³ (state-eligible) and/or LPRBs (non-state eligible)
- Payable upon completion of all First Delivery Facilities (approximately 50% of overall 2020 Project program)

Final Acceptance Payment (Mid-2020)

- \$300 million
- Funded with new GRBs³ (state-eligible) and LPRBs (non-state eligible)
- Payable upon completion of entire 2020 Project

Milestone Payment 2 and the Final Acceptance Payment will only be paid once UC Merced is able to start occupying 50% and 100% of the 2020 Project facilities, respectively⁴. Therefore, the developer must fully deliver complete packages of facilities to receive the funds.

In the event of a contractor-caused delay or other problem precluding timely completion, these milestone payments will not be made unless and until all of the required facilities are completed in full, and if the delay is not remedied in a timely manner, the developer can be terminated for cause⁵.

In addition to its own equity and debt (“Developer Financing”), the developer will use the two milestone payments paid during the construction period (Milestone Payment 1 and Milestone Payment 2) to fund construction of remaining project elements. The developer is expected to use the Final Acceptance Payment (which will not be received until all construction is complete) to repay a short-term construction loan.

Following repayment of the short-term construction loan, the developer will continue to have long-term Developer Financing outstanding (debt and equity). The developer will also be at risk at all times for the portion of the project which it finances by pledging the anticipated long-term availability-payment revenue to secure its own developer long-term

³ The Developer will be required to provide documentation of state-eligible costs incurred as would be required for any traditional UC project using state-funded GRBs.

⁴ Milestone Payment 1 has been assumed to be contributed earlier in the construction process because the debt has already been issued and UC Merced is already carrying the related interest cost. If desired, the Century Bond proceeds currently used for Milestone Payment 1 could be contributed to Milestone Payment 2 instead, eliminating the first payment and tying 100% of the Regents debt-funded payments to facility completion milestones.

⁵ In the event of any termination prior to completion of construction, the amount of any milestone payments made to date will be deducted from any compensation payable to the Developer by UC Merced.

debt. This approach and risk allocation differs substantially from design-bid-build and design-build approaches, whereby the Regents make progress payments to the contractor in monthly increments as work is completed. In this typical structure, the Regents finance progress payments through its commercial paper program, and long-term finance either following substantial completion or advantageous capital markets dynamics.

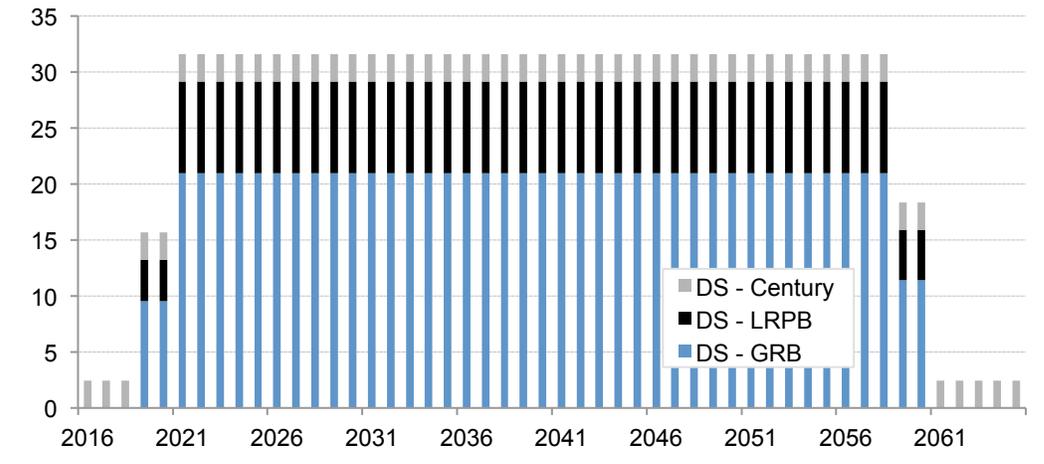
Structure of Regents-Issued Debt

The \$550 million in new GRBs and LPRBs for the 2020 Project have been modeled with level debt service over a not-to-exceed forty-year period (depending on market conditions).

The model assumes a \$400 million contribution from GRBs. The GRB interest rate is assumed to be 4.25%,⁶ for an annual debt-service payment of \$21 million. The model also assumes \$150 million of milestone payments would be funded from LPRBs. The LPRB interest rate is assumed to be 4.50%⁷ for an annual debt-service payment of \$8 million to be funded with revenues from the new auxiliary facilities. The existing \$50 million in Century Bond proceeds have been assumed to pay interest at their 4.875% rate for a total payment of just under \$3 million/year.

A summary debt-service profile is shown below. Debt service increases after the issuance of the debt for Milestone Payment 2 and then again after the debt issuance for the Final Acceptance Payment two years later; a parallel decrease occurs at the end of the period as the debt is fully repaid forty years after issuance⁸.

Estimated Debt Service (DS) Profile (\$ millions)



⁶ The forty-year level debt service GRB structure has an average life of 25 years. The 4.25% interest rate assumption is based on MMD (3.10%) + 20 bps + 95 bps forward premium/cushion for future rate changes.

⁷ The forty-year level debt service LPRB structure has an average life of 25 years. The 4.50% interest rate assumption is based on MMD (3.10%) + 45 bps + 95 bps forward premium/cushion for future rate changes.

⁸ If desired, UC could use its commercial paper program to fund all or a portion of Milestone Payment 2 and defer the long-term 40-year issuance to completion of the full project at the same time as the issuance for the Final Acceptance Payment. This approach would reduce debt service in 2019 and 2020.

The requirement to make availability payments is an unsecured contractual obligation of the Regents under the Project Agreement

The requirement to make availability payments is an unsecured contractual obligation of the Regents under the Project Agreement. The availability payments will be divided into two distinct components. The component of the availability payment that will fund the repayment of the developer's effective design and construction retention is called "Availability Payments-Capital." The component of the availability payment that will fund the payment of the long-term operations and maintenance component of the contract is called "Availability Payments -Operations and Maintenance."

Availability Payments – Capital, which are akin to debt-service payments for capital projects, will be made from UC Merced capital-eligible sources, including auxiliary revenues, unrestricted core funds, indirect cost recoveries, certain gifts and investment revenue and, for the portion of the AP – Capital associated with state-eligible projects, state general funds⁹.

Availability Payments – Operations and Maintenance, which are akin to payments from the campus operating budget, will be made from any unused capital-eligible sources as well as core funds.

The availability payment provides cost certainty for the campus through 2055

Availability payments will not commence until substantial completion of all 2020 Project facilities¹⁰. During the procurement process, proposers will submit their prices in the form of "Maximum Aps," defined as the amount due in current-year dollars for a 100% available project meeting all performance requirements. The RFP will establish an "upset limit," which represents a maximum payment above which price proposals may be non-responsive¹¹.

The upset limit will be derived from the DBFOM Annual Cash Flow requirement of \$105 million (FY 2021) previously modeled. This figure includes \$8 million in annual capital payments related to approximately \$90 million in costs which are expected to be cash-funded, leaving a total annual cost of \$97 million.

The \$97 million includes approximately \$32 million/year of Regents debt service related to Milestone Payments 1 and 2 and the Final Acceptance Payment.

⁹ The Developer will be required to provide documentation of state-eligible costs incurred as would be required for any traditional UC project using state funds.

¹⁰ In the event of specific defined occurrences, including force majeure, UC Merced-caused delays, change orders and limited other events, the Regents may be obligated to make certain payments in advance of full project completion to compensate for additional Developer costs and/or provide the Developer with additional time to complete the project. The construction security package, including the liquidated damages regime, would still be in place, as would the ability to terminate the Developer for extended completion delay (beyond that caused by the relief event) or any other uncured default. The Regents also always would have the ability to terminate for its convenience and extended force majeure.

¹¹ Price will be a factor in the selection so it is likely that the winning proposal does not require the maximum APs set forth here.

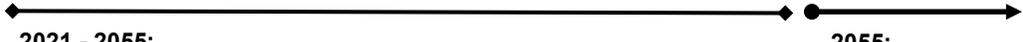
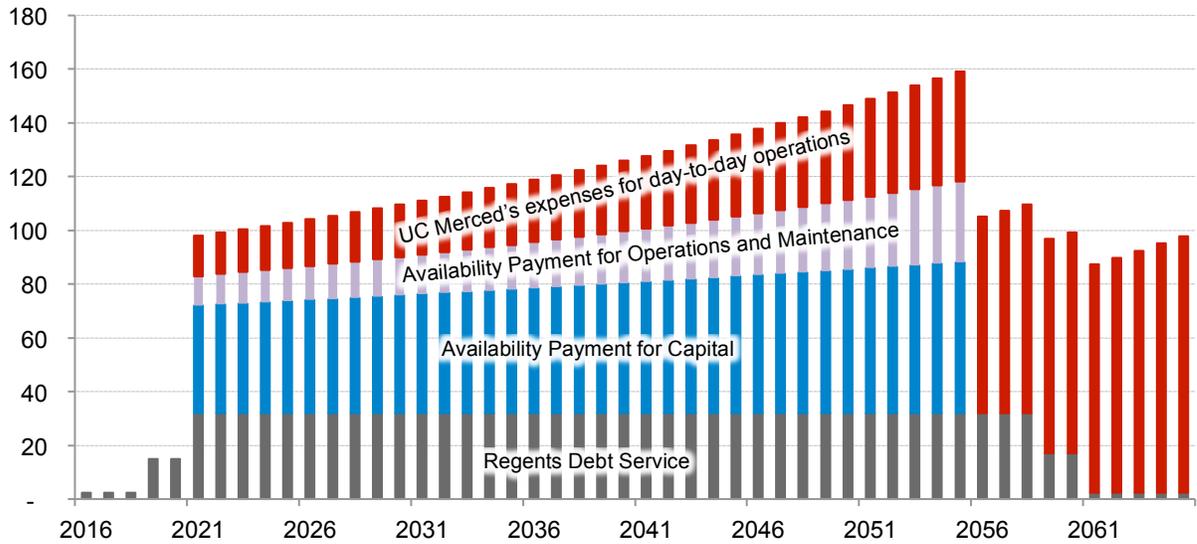
This figure also includes an AP – Capital payment of approximately \$40 million in FY 2021 (increasing at 1% / annum) and an AP – O&M of \$11 million (increasing with CPI assumed to be 3% / annum). This \$51 million in costs will constitute the upset limit provided to proposers.

In addition to the AP paid to the developer, UC Merced will also incur \$15 million (FY 2021) in costs for day-to-day operations and maintenance responsibilities that will be retained by the campus. AP payments to the developer will stop in 2055, and at that time, UC Merced will directly assume responsibility for the operations and maintenance scope previously allocated to the developer.

Because the contract price will be expressed as the maximum APs that can be earned in each year, UC Merced will be able to budget accordingly and then, in the event of imperfect performance, would be able to reduce payments during that particular period.

Estimated Availability Payments for Capital and for Operations and Maintenance (\$ millions)

Increases illustrated predetermined adjustments for inflation



2021 - 2055:

- Campus expends \$15 million/yr. for day-to-day operations
- Campus pays Developer \$11 million/yr. for operations and maintenance
- Campus pays Developer \$40 million/yr. for capital
- Campus pays Regents debt service \$32 million/yr. for capital

Figures are adjusted for inflation

2055:
Contract Ends

Campus assumes all Operations & Maintenance costs

3. IMPLICATIONS AND ANALYSIS OF NOT REQUIRING 100% PERFORMANCE AND PAYMENT BONDING

Similar to all capital projects undertaken by the University, the 2020 Project incorporates two distinct bonds to protect the University. The first are “Performance Bonds” and the second are “Payment Bonds.” Performance Bonds cover the failure of the developer to perform in accordance with the contract attached to the bond. Payment Bonds are intended to cover the failure of prime contractors to pay lower-tier subcontractors or suppliers.

Performance bonds can also be triggered in the event of a construction defect if the contractor subsequently fails to rectify the defect due to bankruptcy or default.

Nearly all University projects have required the amount of the performance and payment bonds to be based on the total design and construction cost of the project. There have been some exceptions to this rule, whereby the University has conducted an analysis specific to the performance and payment risks attributable to the specific project. While the University typically requires bonds to cover the total design and construction cost of the project, it is not required to have 100 percent bonding in all instances.

Under an availability payment DBFOM structure, the University would not make monthly progress payments typical of a design-bid-build or design-build strategy. Instead, the University would only make milestone payments upon the substantial completion of defined deliverables under the contract. This reduces the University’s performance and payment risk to the developer and makes a requirement of 100 percent bonding unnecessary in this case.

Under the Project Agreement, the total amounts to be paid by the University during the design and construction of the project are less than 100% of the design and construction cost. The balance will be funded by the developer’s lenders and equity investors. As discussed below, the bond amount currently required in the Project Agreement is equivalent to nearly the entire amount of payments that will be made by the University prior to final acceptance of the project. From the University perspective, the balance of the project performance is effectively secured through de facto retainage – in the unlikely event of an uncured developer default during construction, the University would have most or all of its money still in hand. Meanwhile, in addition to the surety bond required by the University, the developer’s lenders and investors whose money is directly at risk for construction completion will require additional forms of security from their design-build subcontractor to ensure timely performance.

Performance Bonds: \$275 million performance bond designed to cover \$120 million maximum probable loss

In order to analyze the performance and payment risks specific to the 2020 Project, the campus analyzed cash-flow risk using a “Maximum Probable Loss” methodology. Under this methodology, the campus anticipates that it could protect itself from any potential loss based on an amount of performance and payment bonds less than the total design and construction value of the total, sequenced project.

The primary reason is that the facilities will be built in defined sequences and delivered over time. In other words, the campus believes that purchasing performance and payment bonds for the entire amount of the project would result in an over-insured position (notwithstanding the fact that the developer investors and lenders also bear the first loss risk ahead of the University).

To determine the amount of bonds necessary to protect the University over the life of the 2020 Project, the campus analyzed the greatest loss that might occur (“Maximum Probable Loss”)¹² for performance *or* payment to the project (an amount which would be borne first by the developer’s Design-Build subcontractor and its guarantor, and then by the developer’s equity investors, and then by its lenders before the University, if ever, would be exposed). This analysis assumes that the University procures an availability-payment DBFOM contract, which utilizes milestone payments that lag construction costs incurred by the developer¹³. In addition, the analysis assumes that all reasonable mitigation measures are followed, and assumes prudent management by the University. The assumed reasonable mitigation and prudent management measures include:

- Design documents are compliant with the contractual obligations set forth in the Project Agreement;
- Regular and frequent observation of construction work to ensure that work is in accordance with design; and
- Monitoring of payment to subcontractors, suppliers and vendors.

The analysis indicates that the Maximum Probable Loss that might occur during construction of the Project, under the availability-payment DBFOM methodology, would be approximately \$120 million. While the campus believes the analysis is based upon conservative assumptions about the potential losses that might be incurred to finish a project if the University needs to step in, it proposes to require a more conservative amount of \$275 million (an amount which is nearly equal to the total amount which the University will have paid the developer before final acceptance of the Second Delivery Facilities).

As shown in the graphic below in the cumulative distribution curve, *both the First and the Second Delivery* contribute to the Maximum Probable Loss until the completion of

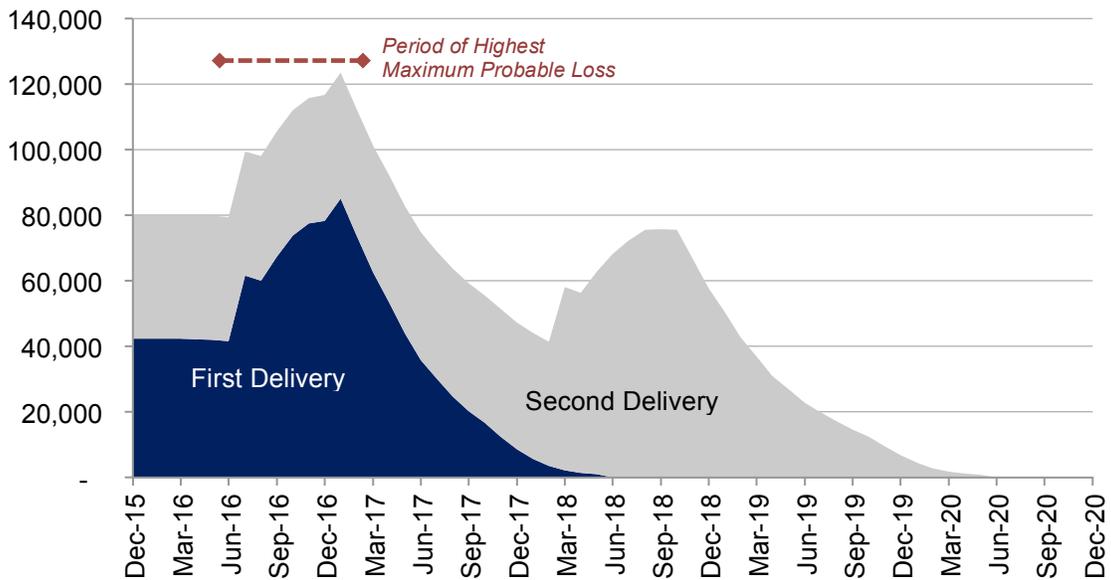
¹² See Appendix A for assumptions within Maximum Probable Loss

¹³ The use of milestone payments differs from a design-bid-build or design-build contract, whereby the university typically makes progress payments

the First Delivery. This is based on an assumption that the developer would begin construction on the Second Delivery Facilities prior to completion of the First Delivery Facilities (at which point only up to \$50 million would have been paid by the University to the developer).

The figures in the chart below were developed based on the analysis of the Maximum Probable Loss at any given point in time during the construction of the Project. Based on the assumptions, it represents a conservative approach to paying for work to finish a project if the University needs to step in at various points. However, the contracting teams may take a different approach to the sequencing of the work; therefore procurement of an additional amount of bonding capacity would help provide the university with sufficient protection.

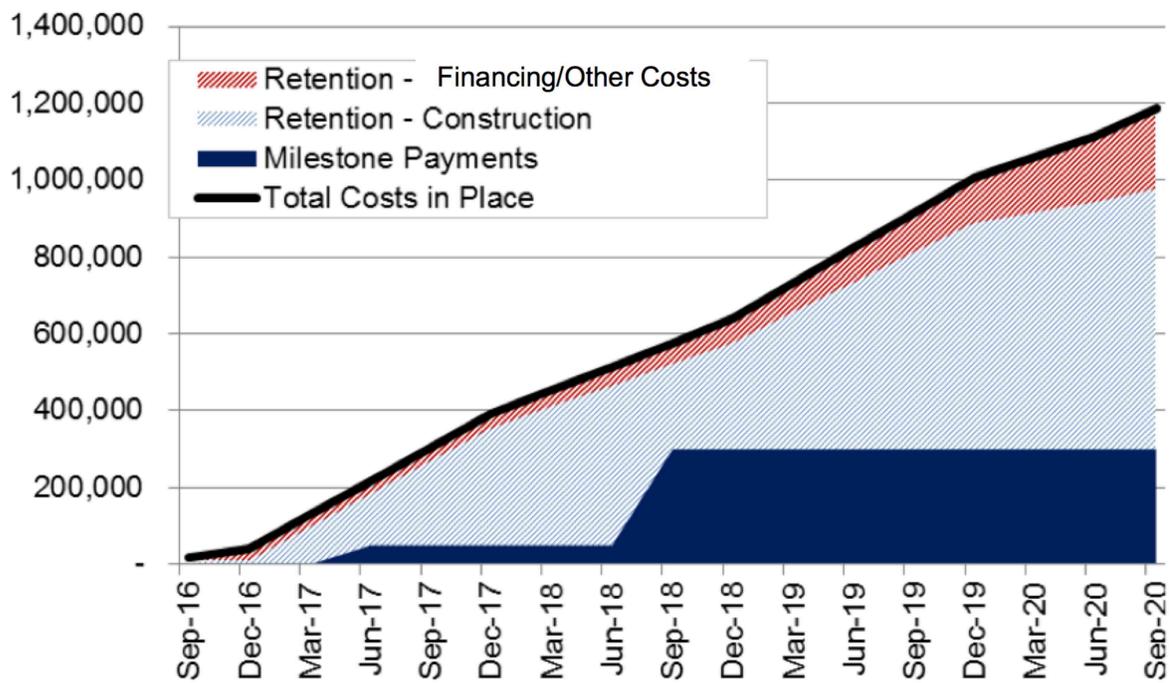
Cumulative Distribution Curve of Maximum Loss
Maximum Probable Loss occurs between Month 6 and Month 12



Effective Retention

As the chart below shows, the developer must retain significant liability under the availability-payment DBFOM model before the University makes payment for work in place. This effective retention provides a large implicit contingency against contractor default or failure to pay subcontractors or suppliers. The retention allows the University to offset losses before payment to the developer. In addition, note that the maximum probable loss would occur before the bulk of the milestone payments are made.

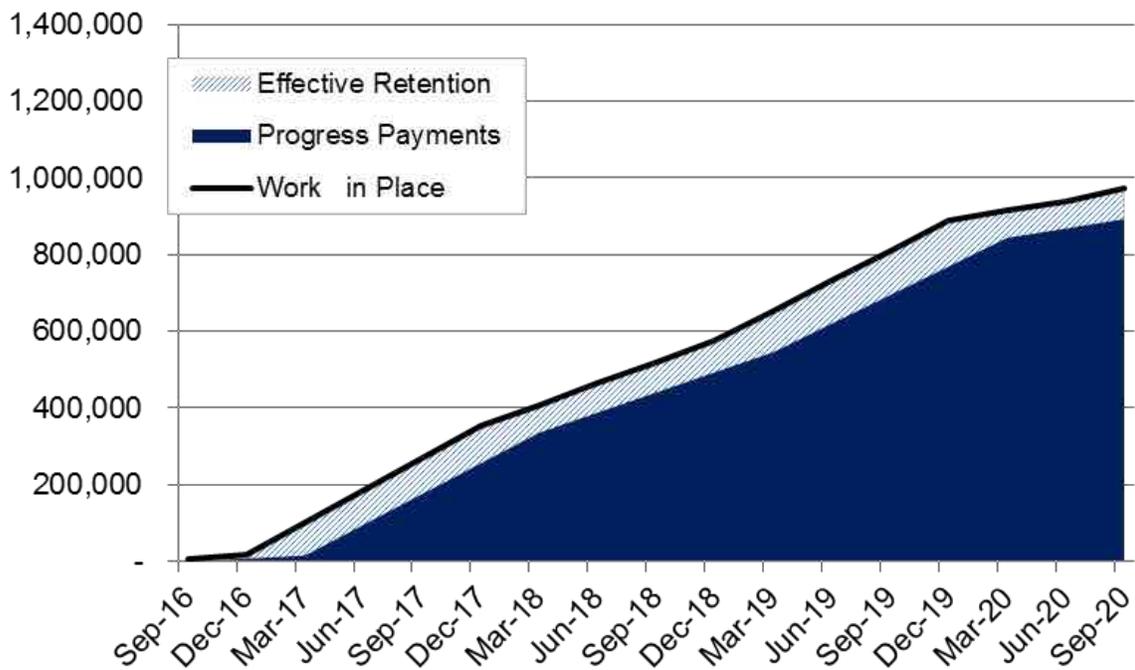
Effective Retention with Milestone Payments
Retention acts as implicit contingency against default



By contrast, in a Design-Bid-Build or Design-Build model, the University is not able to offset losses before payment to the contract. Ongoing progress payments, made prior to the completion of facilities under the contract, minimize the amount of effective retention by the contractor. Therefore, the University would be required to try to recover losses after payment in this model. For this reason, much greater amounts of performance bonds would be required. In this type of structure, the University requires payment and performance bonds in the amount of 100 percent of the design and construction value.

Effective Retention with Progress Payments

Would require University to try to recover losses after payment



Performance Bonds: Post-Construction Defect and Default

For the performance bond to be triggered in the event of a post-construction default there must be a defect attributable to the contractor's failure to perform the contract. This would require a construction defect. In addition, the contractor must then default, and be unable to remedy the defect. This is not common, but does occur on occasion.

Under this scenario, the University would have several other potential recourses in an availability-payment DBFOM. First, the University would look to the developer to remedy the defect, or face default for cause. The developer's lender would also have an interest in remedying the defect, since they risk the loss of outstanding debt balances. The likelihood of a total default where the performance bond is the only remaining remedy is therefore extremely low. It also is only likely if the cost of remedying the default is extremely high, since the developer and its lenders will have substantial losses if they fail to remedy (the entire financing would be at risk). This is therefore a low-probability, high-impact event, which can be very difficult to quantify.

While extreme failure could result in the total loss of all buildings, this is highly unlikely. It would require an irreparable defect that renders the entire facility un-usable. This has occurred in single buildings with extensive water intrusion leading to contamination by mold, but it is unlikely that all buildings across the development would experience such universal failure. The maximum credible loss is the total loss of a single building, or the total failure of a single component (such as windows) across all building types. This means that the maximum credible loss is in the range of 25% of the construction value, or roughly \$250 million. This is well within both the proposed performance bond and the effective retention at the completion of construction (after final acceptance, over 40% of the project capital cost will remain unrecouped by the developer, pending its future receipt of availability payments).

Payment Bonds

In a typical availability-payment DBFOM contract, the owner does not constantly monitor the payment of sub-contractors. This is a developer responsibility, and unless the developer is defaulting under its obligations to the owner, the owner relies on the payment bond, certifications and other mechanisms in the contract to protect against non-payment of sub-contractors.

The University has multiple layers of protection against non-payment by the developer of its sub-contractors:

- (1) The payment bond, which is sized to protect against maximum exposure at a given point in time;
- (2) The obligation of the developer to bond around and discharge any stop payment notices filed by a sub-contractor;
- (3) The obligation to indemnify and defend the University against losses and claims asserted, incurred by or awarded to a third party if caused by any such stop payment notices or by its breach or alleged breach of its obligations more generally, and
- (4) The requirement to certify that it has paid its sub-contractors prior to receiving any payment (i.e., any Milestone Payment, Final Acceptance Payment or Availability Payment).

In the availability-payment DBFOM structure, “Key Contracts,” subject to the Project Agreement, must also include a provision whereby the Key Contractor must acknowledge it has no right or claim to any lien or encumbrance on the Project. Finally, it should be noted that it is not possible to lien public property, so mechanics’ liens on the University’s property are not a risk on this project.

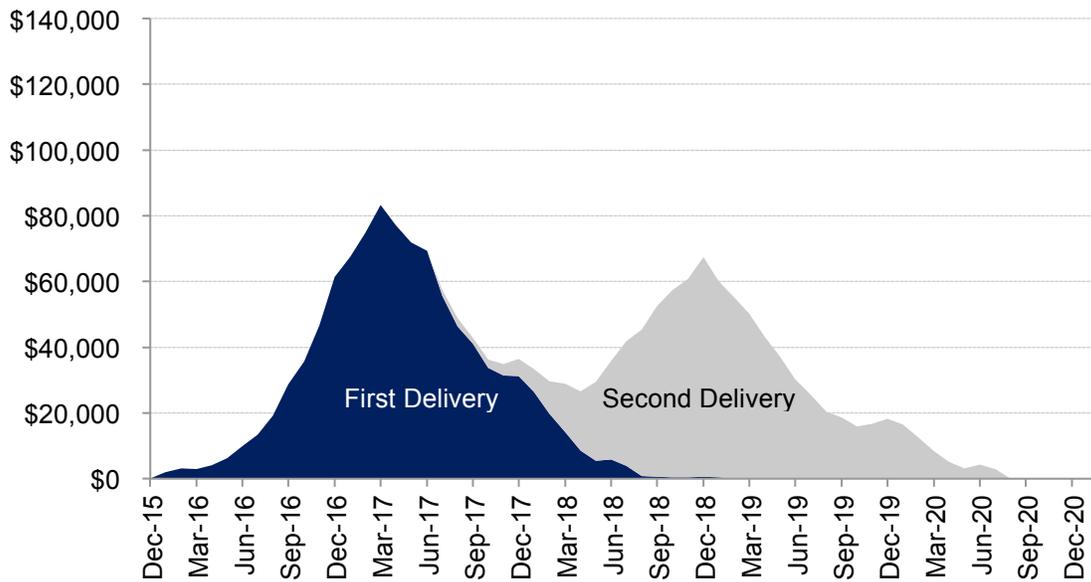
In addition, the lenders will likely have their own mechanisms under the finance documents to prevent non-payment of sub-contractors from rising to a material level (e.g., a requirement that developer submit stop-payment notice releases with each monthly draw on the construction loan). A default under a material sub-contract would likely be an event of default under the financing document as well.

Payment Bonds: \$275 million Payment Bond designed to cover \$85 million Maximum Probable Loss

Payment bonds are intended to cover the failure of prime contractors to pay lower-tier subcontractors or suppliers. The risk is mitigated by retention and by monitoring payments by the prime contractor.¹⁴ In the analysis conducted for the 2020 Project, peak monthly work-in-place cost approaches \$50 million. Due to the lag time in payment from the prime contractor to subcontractors, it is likely that failure to pay would not become evident until the month succeeding the failure. The Maximum Probable Loss scenario, therefore, assumes that the default in payment could reach two months of payment, resulting in a potential default of up to \$100 million.

Payment bonds are generally issued in conjunction with performance bonds. Given a Payment Bond Maximum Probable Loss of approximately \$85 million and the developer/design-builder’s bonding capacity as demonstrated in the responses to the RFQ, the University concluded that the payment bond be issued for the same amount as the performance bond, \$275 million.

Maximum Probable Loss for Payment Bonds



¹⁴ Within an availability payment DBFOM contract, there is added mitigation provided by the milestone payment structure as compared with a design-bid-build or design-build contract, whereby progress payments are made throughout the term of the contract. In the availability payment DBFOM model, payment by the prime contractor to subcontractors and suppliers is not dependent on payment from the owner. The payment bond Maximum Probable Loss occurs at roughly the same time as the Maximum Probable Loss for Performance. The milestone payment structure creates an effective retention significantly greater than the conventional 10% provided by progress payments, particularly during the later portions of the project. Provided the owner monitors payments to the subcontractors and suppliers, the exposure should be relatively limited.

Bonding Capacity vs. Pricing

The draft Project Agreement currently states that the Developer is required to obtain \$275 million Performance and Payment Bonds as a condition precedent to first Notice to Proceed (NTP).

Requiring performance and payment bonds at 100 percent of the contract value is likely to present practical concerns. The short-listed teams have commented that the \$275 million bond requirement is excessive in relation to the risk, and have asked that the amount be reduced.

Pricing is likely not the primary concern, given that the price of the bond is typically based on the contract value regardless of the size of the bond. The issue for the teams is the impact of the bonding requirement on the contractors' bonding capacity. Even very large contractors, like those on the short-listed teams, will be affected by a large bonding requirement, in terms of their ability to obtain bonds for other projects. The teams are concerned about tying up bonding capacity on a single job. This affects their overall business, and their ability to diversify risk through a portfolio of diverse projects at different stages of completion and of different sizes. A large bond size also may require the involvement of more than one surety provider depending on with which surety provider the contractor(s) typically works.

In addition, because project finance lenders typically do not value surety bonds as a primary tool to ensure timely performance or provide liquidity, it is likely that lenders will require contractors to post a standby letter of credit and to provide a significant parent-company guarantee in addition to any surety bonds.

Accordingly a requirement to bond to 100 percent may cause commercial issues for contractors and would represent a material change to the procurement. The RFQ specified the \$275 million bonding capacity and informed the teams' decision to participate: a change at this point could impact the procurement.

The campus has reviewed the bond requirements on other availability-payment transactions in the U.S. The values generally range from zero to 50 percent of the contract value. Examples include the Presidio Parkway transaction (\$1.1 billion), which required 15 percent performance and payment bonds. The Long Beach Courthouse project (\$340M) relied on a \$10 million letter of credit. Similar performance bonds also are not typically required in global P3 precedents. In some of transactions reviewed, the payment bond is substantially less than the performance bond. In other transactions the security for the developer and its lenders, who bear the first risks of losses, is entirely comprised of letters of credit and guarantees by the contractor or its parent corporation in lieu of bonds, and there is no additional security for the public owner given that it only pays to the extent the project is meeting completion and then service requirements.

Going forward, the 2020 Project team will work to evaluate the cost of 100% coverage so that it can be incorporated into the cost model in order to determine the project impact – if any.

4. CRITERIA FOR SELECTION AND RELEVANT EXPERTISE FOR EVALUATING THE PROPOSALS

From aesthetics to finance to infrastructure, the proposed evaluation process for 2020 Project submissions has been structured to elicit comprehensive and topic-specific input from experts in multiple, discrete subject-matter areas as well as relevant campus stakeholders.

Proposed Timeline through 2016

The campus goal is to release the Final RFP in November 2015 and receive proposals in March 2016. This would be followed by a rigorous scoring and selection process informed by expert advisors. After evaluation of the proposals, a preferred proposer would be selected in May 2016. This would be followed by execution of the Project Agreement in June 2016.

Scorers, Evaluators and Advisors have demonstrated expertise

Development of the RFP to this point has been a collaborative, 18-month effort among leading legal, financial and technical consultants with on-the-ground input from campus leadership, administrative leadership and the campus community. *A key attribute of the evaluation process is that this same team that developed the highly detailed RFP will be integrated into the advice and decision process.*

The legal elements have been coordinated in consultation with Nossaman LLP, campus counsel and UCOP counsel. Nossaman LLP has led most of North America's most high-profile public-private partnerships and UC counsel has more than a decade of expertise tied to the regulatory, intergovernmental and environmental issues related to the UC Merced campus specifically.

The financial elements have been guided by a team from multiple offices of Ernst & Young's Infrastructure Advisory team. This team has been responsible for enabling the campus to evaluate multiple financial models for the 2020 Project based on their history in this field. Notably, their depth of experience includes Florida's I-595 Express Lanes and Port of Miami P3 project, similarly structured high-profile initiatives that were each procured and successfully opened using the same consultant firms and individuals as those currently advising the University and a combined value of \$2.5 billion, as well as numerous other PPPs for public facilities. The campus and University counterpart includes UCOP's financial and procurement leadership.

The detailed technical elements in the RFP related to infrastructure, phasing, operations, contracting, design, aesthetics, and delivery have been founded on real-estate strategy from Jones Lang LaSalle, programming expertise from SCB Architects and infrastructure analysis from AECOM – all leaders in their fields. At every step, campus counterparts in Design and Construction, Facilities Management and Administration have ensured that the final product correctly reflects the real-world needs of the campus.

The principals that worked with the campus in developing the program will support the campus during evaluation and provide analyses as required (with the campus ultimately retaining all scoring and decision-making responsibility). Following proposal selection, the campus anticipates maintaining relationships with key legal and procurement advisors in order to ensure the Project is implemented as envisioned.

Who will be evaluating the Proposals

The Proposals will be evaluated by three topic-specific **evaluation committees** comprised of campus academic and administrative and UCOP management. The evaluation committees will score the proposals with supporting expert advice from three **topic-specific expert panels** drawn from both internal stakeholders and external consultants.

The **Project Selection Committee** is comprised of the Chancellor and the UC Chief Financial Officer.



Proposals will be scored based on Technical and Financial Criteria

Proposals will be evaluated and scored according to *Technical Criteria* and *Financial Criteria*.

Evaluation of Proposals will be based on information submitted in the Proposals and will involve both pass/fail evaluation factors and an evaluation of technical and financial criteria. Proposals must achieve a rating of “pass” on each “pass/fail” evaluation factor listed in the RFP and their price must be below the upset limit. Technical and Financial Criteria will be equally weighted with 500 points each.

Technical Qualitative Criteria (500 points)

- Academic Facilities
- Student Life Facilities
- Living and Learning, Community Design and Aesthetics
- Community and Workforce Engagement
- Delivery
- Operations and Maintenance and
- Sustainability and Triple Net Zero Sustainability Goals

Financial Criteria (500 points)

- For scoring/point allocation, all price proposals are normalized on a net present value basis (or equivalent) to determine a “Normalized Price”.
- Price scores will be calibrated so every 5% Normalized Price premium over the low bid will be equivalent to a 150-point improvement in technical score (e.g. from Good to Very Good+). Note the number of points between Fair and Good is expected to be greater than 150, allowing for a greater price premium in the lower technical range to appropriately incentivize bidders to pursue solutions featuring technical quality as well as cost effectiveness.

Technical qualitative scores will be converted from adjectival (Excellent, Very Good, Good, Fair, Poor) scores to numerical equivalents (using numerical equivalents that the University has allocated to the adjectival scores prior receipt of Proposals). The numerical/point scores will be averaged and totaled for each proposal. The total technical points for each proposal will be added with the total financial point score for each proposal. The proposal receiving the highest number of points will be recommended for award.

The Project Selection Committee (Chancellor Leland and EVP-CFO Nathan Brostrom) will make final selection of the apparent successful Proposal.

University retains right to not award a Proposal

The University intends to award based on the responsible Proposer offering an acceptable Proposal that is the deemed most advantageous to the University taking into consideration the evaluation criteria and procedures set forth in the RFP. However, the University retains the right to award or not award an agreement as a result of the RFP.¹⁵

¹⁵ There will be a minimum technical qualitative threshold and a maximum financial threshold (Maximum Availability Payment (MAP) upset limit) for a proposal to be considered responsive. The RFP is issued pursuant to California Public Contracts Code Section 10503.

Summary of Evaluation Process: Designed to ensure fairness and transparency

<p><i>Procurement Process</i></p>	<ul style="list-style-type: none"> • Maximum point values, criteria weightings and evaluation methodology are pre-determined and published in the final RFP document • Sub-criteria weightings are set by the campus Controller and delivered to Procurement Officer in sealed envelope • The Procurement Officer is responsible for opening and logging the submissions • Procurement Officer distributes Proposals to Project Selection Committee, Evaluation Committees and Expert Panels
<p><i>Proposal Review and Evaluation Process</i></p>	<ul style="list-style-type: none"> • Expert Panels review Proposals and develop consensus comments <ul style="list-style-type: none"> ○ Administrative and Legal Expert Panel reviews Proposals for responsiveness ○ Technical Expert Panel reviews Proposals against applicable RFP pass/fail and qualitative evaluation criteria and develops consensus comments ○ Financial Expert Panel reviews Proposals against applicable RFP pass/fail criteria and reviews financial proposal data • Each Expert Panel meets with corresponding Evaluation Committee to present consensus comments/proposal analysis and answer questions
<p><i>Scoring Process</i></p>	<ul style="list-style-type: none"> • The Technical Evaluation Committee individually reviews and scores Proposals and delivers to Procurement Officer. • The Financial Evaluation Committee will assess each financial pass/fail criteria and calculate Normalized Prices. • Tabulated scores are delivered to Project Selection Committee (PSC) • PSC meets with Procurement Officer and Evaluation Committee members <ul style="list-style-type: none"> ○ The Evaluation Committee’s final scores will be determined by applying predetermined weighting formulae to the numerical scores and by applying the price scoring formula to the Normalized Prices. ○ PSC will be provided with analyses, consensus comments, pass/fail assessments and scores received and may ask questions of Evaluation Committee members ○ PSC will determine apparent successful Proposer at that meeting or at a subsequent meeting

5. IMPACT TO CAMPUS OF USING DESIGN-BID-BUILD FOR PROJECT DELIVERY

If the Regents chose to sequence the project under the Design-Bid-Build methodology, it would delay project implementation and increase costs. This is likely to result in reductions to the project scope and decreased ability to reach the campus goal of 10,000 students by 2020.

Under any sequential procurement methodology, the need to develop infrastructure based on a selected master plan before procurement of buildings will elongate the delivery time for the facilities. In the July 2015 Briefing Memorandum, the campus modeled a sequential project delivery under the Design-Bid-Build methodology, and estimated that the fastest possible time to deliver the 2020 Project's infrastructure, and all of the First Delivery Facilities and Second Delivery Facilities, to be a minimum of eight years (2024). As a result, the annual costs were estimated to be \$6 million higher per year due to construction inflation and the separation of the projects through several separately managed phases.

Based on an 8-year Design-Bid-Build delivery of project, this would result in flatter profiles for enrollment, faculty hiring and state support; consistent with the expected gradual phasing in of facilities over 8 years. The impact of this reduced profile would diminish UC Merced's mission of providing access to low-income, first-generation students in the near, and possibly, long term.

There are two critical impacts to campus enrollment and reserves under a sequential Design-Bid-Build delivery scenario compared to a DBFOM model:

- a) Under a Design-Bid-Build scenario, UC Merced would be able to accommodate approximately 1,900 fewer students in FY2021 (year starting Fall 2020), and
- b) Under a Design-Bid-Build scenario, the campus would accumulate \$78 million less in campus reserves by the end of FY 2021 and \$183 million less by the end of FY2030.

APPENDIX A:

CALCULATING MAXIMUM PROBABLE LOSS

To calculate the Maximum Probable Loss for purposes of procurement of performance bonds, the University made the following four assumptions:

- (i) ***The University or developer would identify the failure in a reasonable timeframe*** such that there is no overpayment and no material amount of deficient or non-conforming work in place.
- (ii) ***The cost to recover from the failure will carry a premium cost*** due to the need to bring in a new contractor to take over the work. The premium includes:
 - a. Direct costs related to procurement/re-bidding and transition, and the indirect impact within the market, where any subsequent bidder is likely to bid the work at a higher margin. The premium cost varies from 10% early in the project to 30% after about the one-third point of the contract.
 - b. Cost to correct any defective work
 - c. Inflation on the outstanding balance of the work.
- (iii) ***The work is procured in two sequences***, with First Delivery Facilities to be delivered in 2018, and Second Delivery Facilities to be delivered in 2020.
- (iv) ***The performance bond, in accordance with market practice, does not cover the cost of lost time***, liquidated damages due to missed schedule deadlines, acceleration to recover any schedule loss, or legal costs related to termination of the developer agreement. (Although note that the developer and its lenders are still at risk for such costs, which if outstanding would be deductible from any termination compensation otherwise due to the developer in the event of termination for its uncured default.)

The initial calculation of the Maximum Probable Loss does not include any subrogation or recovery of amounts covered by the bond from the defaulting contractor. In practice,, the University will be able to deduct these costs from amounts due to the contractor in termination, reducing the amount of the bond needed to cover the Maximum Probable Loss (if any) that would otherwise be borne by the University.