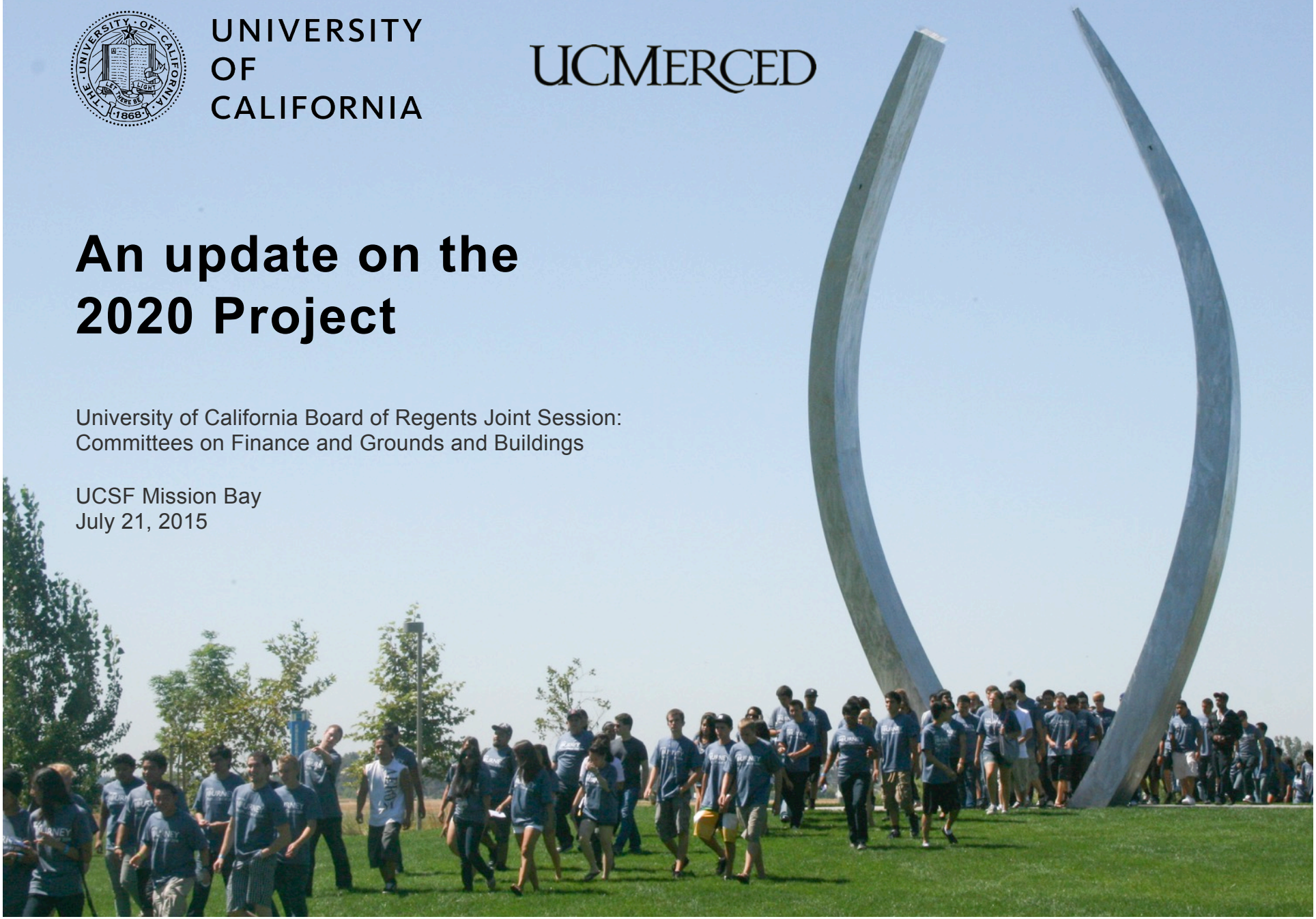
UNIVERSITY OF CALIFORNIA

UCMERCED

An update on the 2020 Project

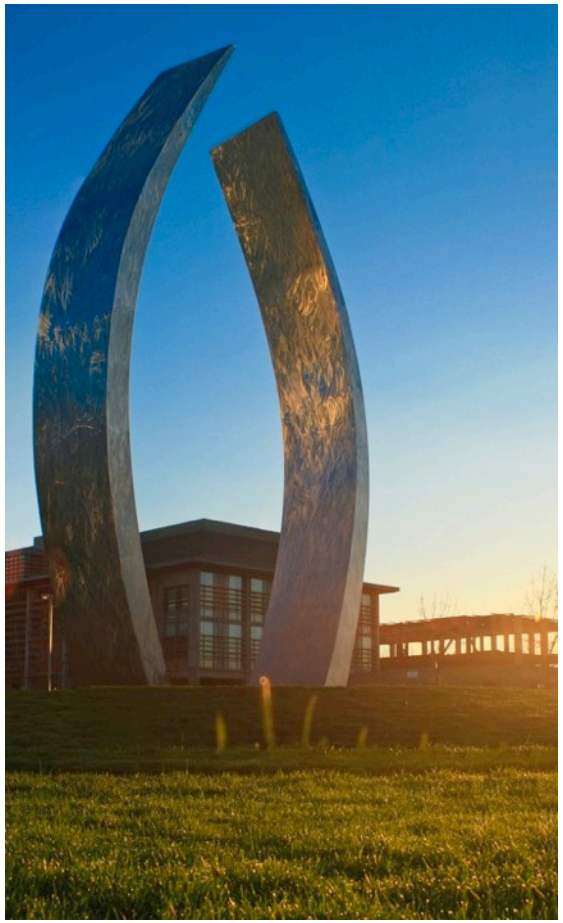
University of California Board of Regents Joint Session:
Committees on Finance and Grounds and Buildings

UCSF Mission Bay
July 21, 2015



WHY WE ARE HERE

To provide an in-depth briefing on UC Merced's 2020 Project, answer questions and to seek continued input from the Regents on key components

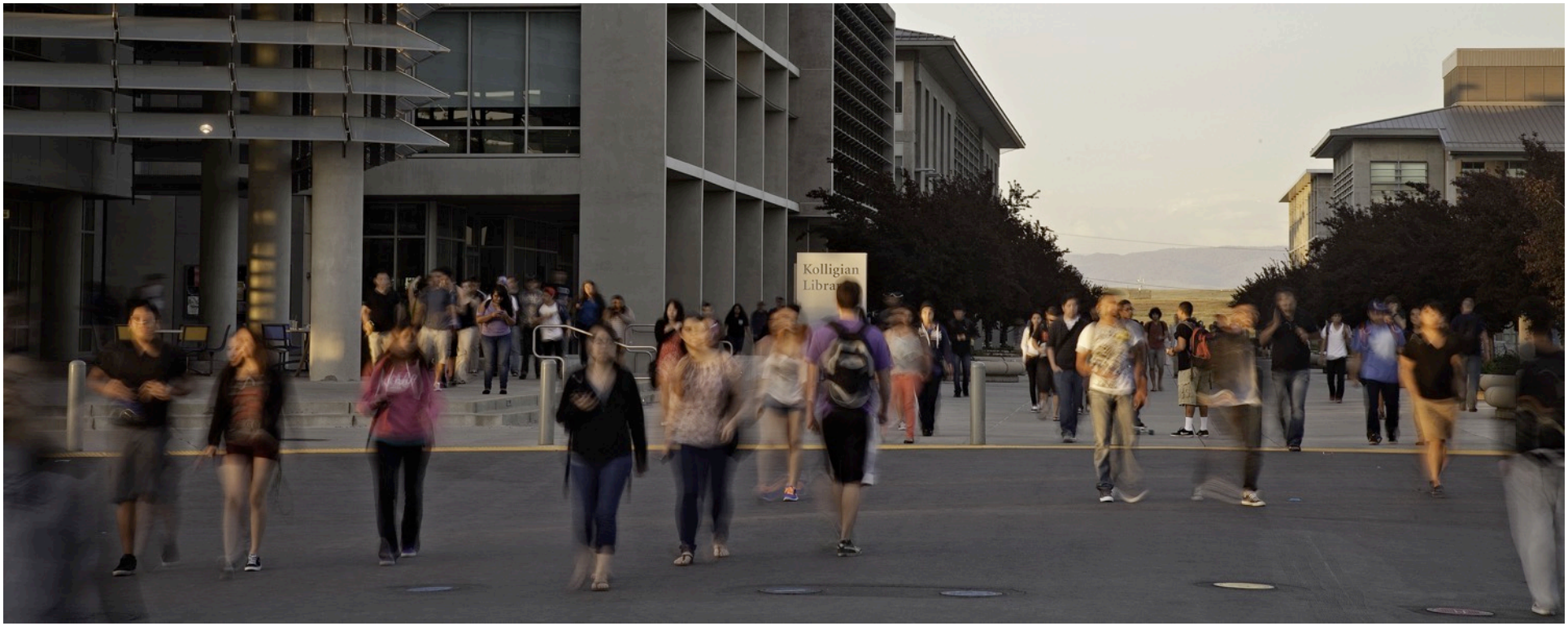


Key discussion topics include:

1. The Need to Build UC Merced and Objectives of the 2020 Project
2. Comparison of Delivery Options
3. 2020 Project Financial Considerations: A Hybrid Approach
4. Project Agreement and Risk
5. 2020 Project Labor Considerations: A Hybrid Approach
6. Summary and Next Steps: Future Regents' Decision Points

No formal action or decision is being requested from the Board today

1. THE NEED TO BUILD UC MERCED AND OBJECTIVES OF THE 2020 PROJECT



UC Merced is an intimate campus with a unique mission

A venue for social mobility reflecting the diversity of California's next generation

Global and national research distinction in unique, targeted areas

A catalyst for economic diversification in the Central Valley

The objective of the 2020 Project is to double the size of Campus facilities by 2020 in the most cost-effective manner possible

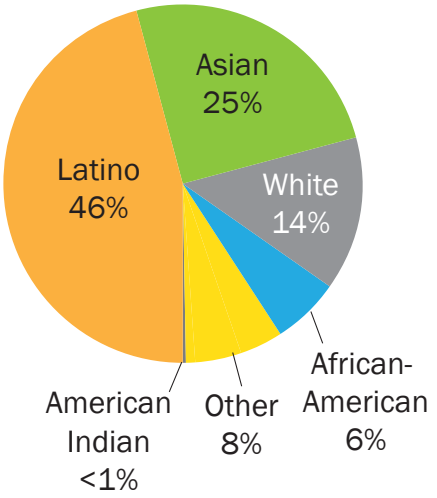
UC Merced has become critical to the University's goal to increase resident enrollment and is providing a unique educational and research opportunity to under-represented, first-generation students.

99.5% of UC Merced undergraduates are Californians

64.8% are first-generation students

62.5% are Pell Grant recipients

UC Merced Undergraduate Diversity, Fall 2014



Data Source: http://irds.ucmerced.edu/docs/Undergraduates/Geographic%20Origin.pdf; http://irds.ucmerced.edu/docs/Undergraduates/undergrad%20enrollment%20first%20gen%20status.pdf; http://irds.ucmerced.edu/docs/Undergraduates/Pell%20Recipients.pdf

THE NEED TO BUILD UC MERCED AND OBJECTIVES OF THE 2020 PROJECT

Several key goals provide the basis for an analysis of the 2020 Project delivery strategy

- Deliver approximately 445,000 ASF by Fall 2018 ("First Delivery Facilities")
- Deliver an additional 498,000 ASF by Fall 2020 ("Second Delivery Facilities")

- Provide a flexible and adaptable joint-use physical environment
- Develop advising and support facilities to facilitate student success
- Provide an inspiring, mixed-use and dynamic living and learning environment

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- Maximize short- and long-term economic impacts within the San Joaquin Valley
- Develop environmentally sustainable facilities
- Create financial stability with a lifecycle pro-forma financial model
- Ensure campus can maintain what it builds

2. COMPARISON OF DELIVERY OPTIONS

COMPARISON OF DELIVERY OPTIONS

1. Design-Bid-Build

Campus contracts separately with architects, designers and contractors in multiple phases. **The Campus pays for 100% of the design and construction costs upfront**. Campus annually budgets for all operations and maintenance and takes full responsibility for building performance.

Design-Bid-Build	
	Multiple Phases
Phasing Approach	1. Infrastructure 2. First Delivery Facilities 3. Second Delivery Facilities
Substantial Completion	2024
Estimated "Annual DBFOM Cash Flow Requirement"* After Substantial Completion	$119 million
Termination	Campus retains the discretion to proceed with each phase

* Together, the annual cost of the amortization of design and construction, the cost of financing and the estimated cost of ongoing operations and maintenance of the facilities represents the "Annual DBFOM Cash Flow Requirement" of the Project.

2. Design-Build (DB)

Campus contracts with design-builder(s). **The Campus pays for 100% of the design and construction costs upfront.** Campus annually budgets for all operations and maintenance and takes full responsibility for building performance.

Design-Build (DB)		
	Variant 1 **Single-Phase DB Procurement**	**Variant 2** **Two-Phase DB Procurement**
Phasing Approach	First Delivery Facilities and Second Delivery Facilities are sequenced, with an integrated delivery of infrastructure	First Delivery Facilities and the associated infrastructure are procured and delivered. Following substantial completion, a second procurement is conducted for Second Delivery Facilities and the associated infrastructure
Substantial Completion	2020	2022
Estimated Annual DBFOM Cash Flow Requirement After Substantial Completion	$105 million	$113 million
Optional Termination	Contingent breakage that could also result in delay, with related costs	No additional costs or breakage that would result in delay

COMPARISON OF DELIVERY OPTIONS

3. Availability Payment Design-Build-Finance-Operate-Maintain (DBFOM)

Campus contracts with one development team. The development team contracts with a design-builder. **The Campus would make "milestone" payments for 50-75% of the design and construction costs after completion of construction.** The Campus would make "availability payments," subject to the availability of the facilities as specified in the Project Agreement.

Availability Payment DBFOM Contract		
	Single-Phase Procurement with Optional Termination (2020 Project Approach)	**Single-Phase Procurement with Pre-Development Agreement**
Phasing Approach	First Delivery Facilities and Second Delivery Facilities are sequenced, with an integrated delivery of infrastructure	First Delivery Facilities and the associated infrastructure are procured and delivered. At the same time, a pre-development agreement is entered into for development of the Second Delivery Facilities and the associated infrastructure
Substantial Completion	2020	2022
Annual DBFOM Cash Flow Requirement After Substantial Completion	<= $105 million	<= $113 million
Optional Termination	University retains a right of optional termination at any time. Exercising this option would require a premium to be paid at the time of termination. Contingent breakage that could result in delay, with related costs	University retains a right of optional termination at any time. Exercising this option would require a premium to be paid at the time of termination. No additional costs or breakage that would result in delay

COMPARISON OF DELIVERY OPTIONS

Comparison of delivery methods for the 2020 Project suggest DBFOM long-term performance guarantee builds on Design-Build's advantages

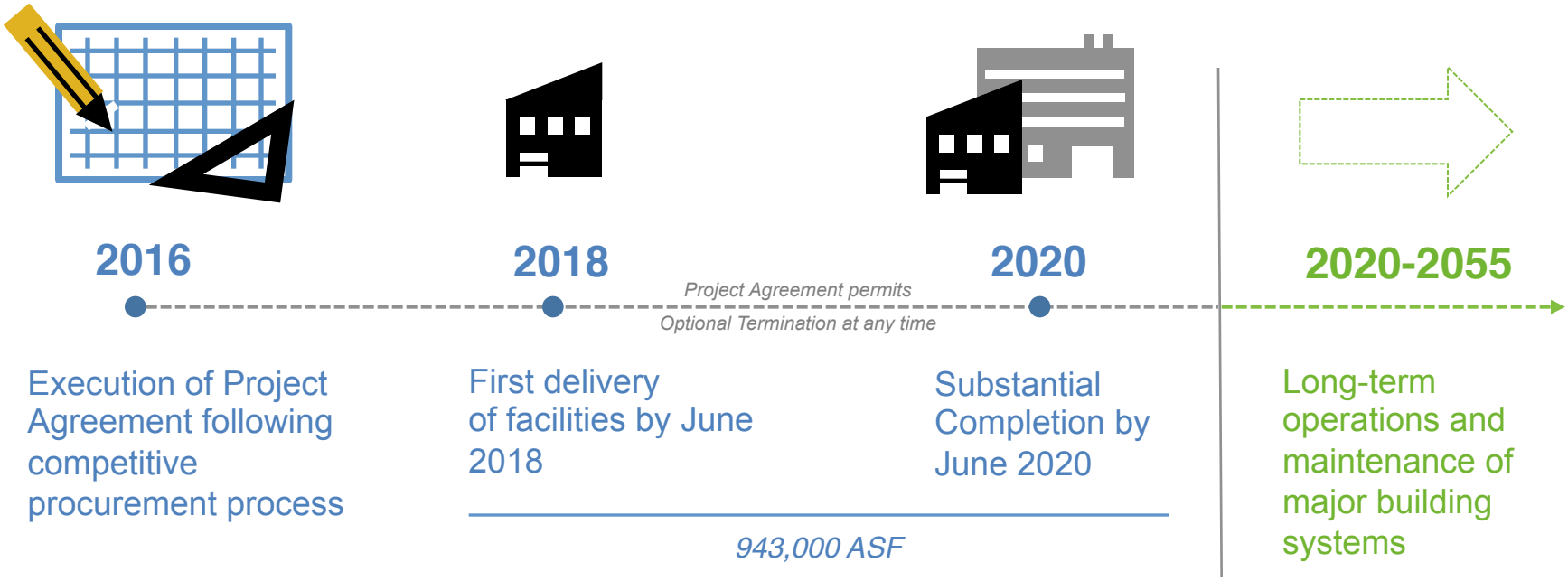
	Term of Contract	Total Cost of Ownership	Performance and Financial Risk Sharing over life of facilities	Sustainability	Quality influence based on O&M incentives	Opportunity for Innovation in Design and Construction	Economy of Scale	Time to Delivery
Design-Bid-Build Contract(s)	●	○	○	◑	○	◑	○	○
Design-Build Contract(s)	●	◑	○	●	○	●	●	●
Availability Payment DBFOM Contract	○	●	●	●	●	●	●	●

Legend

Achieves 2020 Project Goals	Neutral	Less Optimum/ Does not achieve 2020 Project Goals
●	◑	○

A single procurement for the 2020 Project achieves goals and preserves the Campus' ability to "Opt-out"

2020 Project Agreement: Sequencing



BENEFITS

- Time to deliver facilities and economies of scale reduce design and construction cost
- Campus maintains right to terminate contract at any time.
- The cost of the option to terminate is only incurred if Campus exercises the option.
- Both Developer and Lenders have financial incentive to cure subpar maintenance of major building systems.
- Developer default also can terminate the contract and the Campus has the right to step-in.

DISADVANTAGES

- Term of contract
- The process of calculating and paying breakage costs in case of termination

Throughout the term of contract, Campus has right to terminate for failure to perform and retains right to terminate at any time

1 Termination for Default

If Design-Build Contractor does not perform pursuant to its contract, both the Developer and the Lenders have their investment at risk. This is a strong incentive to step in to cure before Campus exercises its rights.

- Right to terminate and recover all associated costs and damages
- Lenders not fully repaid
- Campus keeps all construction-in-progress/buildings

2 Optional Termination

Campus can terminate at any time, for any reason, even if the Developer is performing

(a) Primary Benefit is Flexibility

- Campus maintains right to terminate contract at any time
- The cost of this option is incurred only if Campus exercises the option

(b) Impact

Campus would have to pay:

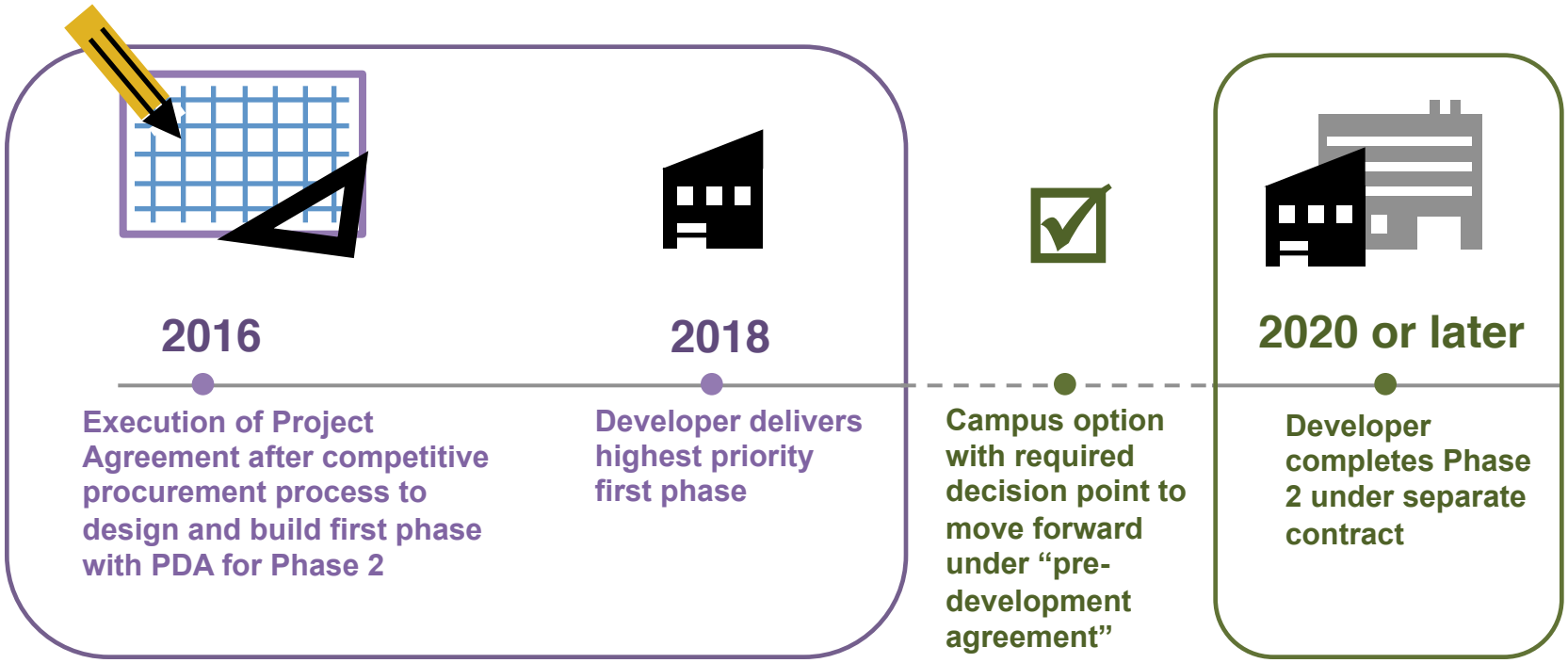
1. Amount needed for equity investors and Lenders to be made whole
2. minus any insurance proceeds

(c) Result

The Campus would be in the same financial position equivalent to undertaking a two-phase design-build approach.

Alternative Approach: Option to Opt-In to a Second Phase

Single procurement that incorporates an option to "Opt-In" to Phase 2 through a pre-development agreement ("PDA")



BENEFITS

- Enables the Campus to ensure adequate performance under the Project Agreement before entering into contractual obligations with respect to Phase 2
- Eliminates the need to calculate and pay breakage costs at the time the Campus opts not to exercise the option of Phase 2

DISADVANTAGES

- Campus pays for an option it may not exercise
- Higher design and construction cost
- Potential time delays
- Integration risks

Proposed Approach builds on University experience and proven best practices from around the world

Delivery strategy has been successfully implemented in Canada, Europe and the U.S.

- The 2020 Project Agreement is based on DBFOM projects *(e.g. I-4 Managed Lanes, [Florida]; Partnerships for School Building Program [England]; Presidio Parkway [California])*
- Complex, large-scale projects of this type were used as reference points *(e.g. Long Beach Courthouse [California]; New Karolinska Solna Hospital [Sweden]; Emily Carr University of Art and Design, [Canada])*
- The campus has customized it to UC Merced based on lessons learned and best practices within the system *(e.g. UCI East Campus, UCSF Neuroscience)*

Based on lessons learned, the campus can achieve:

- Rapid Delivery
- Quality, Mixed-Use and Adaptable Facilities
- Environmental Sustainability
- Long-Term Financial Stability
- Shared Risk in Operations and Maintenance

Advisors

Legal
Nossaman LLP

Finance
Ernst and Young

Technical
AECOM
Jones, Lang, LaSalle
SCB Architecture

3. 2020 PROJECT FINANCIAL CONSIDERATIONS: A HYBRID APPROACH

2020 PROJECT FINANCIAL CONSIDERATIONS: A HYBRID APPROACH

Any scenario for expanding UC Merced will require a significant investment from the University of California

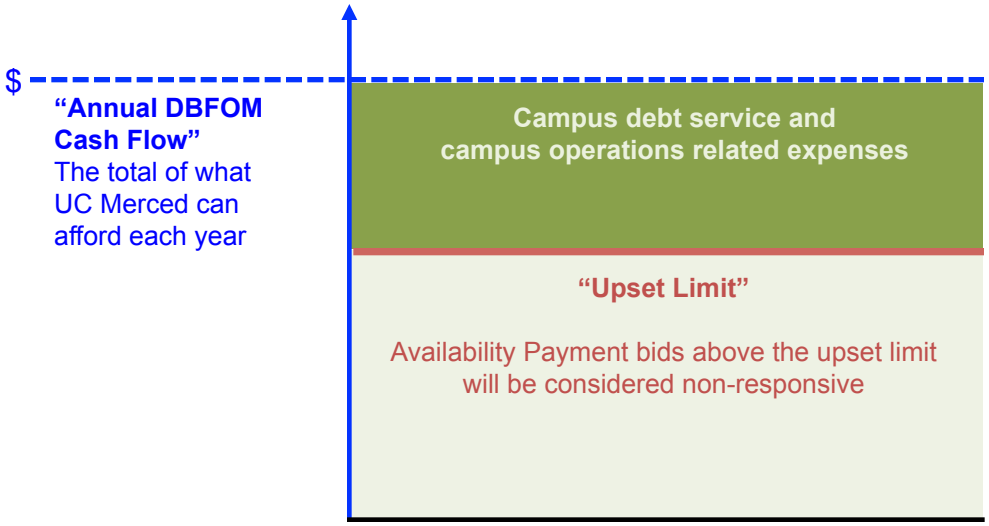
- The 2020 Project represents a major financial commitment to fulfilling the mission established for UC Merced
- The transaction structure is designed to help manage the campus' lifecycle performance and financial risk at the lowest possible cost (*i.e.*, through a competitive procurement process)

2020 PROJECT FINANCIAL CONSIDERATIONS: A HYBRID APPROACH

The Upset Limit is the tool that enables UC Merced to capture value through the procurement process

The process is structured to ensure that the cash flow requirement after completion is equal to or less than the threshold cost ("Annual DBFOM Cash Flow") for the project

Cash Flow and the Upset Limit



How the Upset Limit was developed

- **The campus estimated the annual DBFOM cash flow** that would be required for a design-build project based on a long-range, lifecycle financial model
- Using an **upset limit ensures the delivery approach is both affordable** and economically equivalent or better than the design-build approach.
- Winning bidder's **availability payment will be contractually binding**
- Relying on the upset limit **will ensure the approach is in the best interest** of the University

2020 PROJECT FINANCIAL CONSIDERATIONS: A HYBRID APPROACH

Milestone and Availability Payments enable the Campus to utilize low-cost financing and enforce Developer performance

Milestone Payments (MP)

Three payments during construction tied to specific construction milestones

- Requires a direct issuance of debt by the Regents
- Takes advantage of the Regents' access to lower cost of capital

Availability Payments (AP)

Paid monthly during occupancy, subject to facilities' availability and subject to good operation and maintenance performance

- Enforces adherence to lifecycle performance standards throughout the term of the Project Agreement
- Entails marginally higher cost of private financing
- AP would pay for 25-50% of capital costs

Annual DBFOM cashflow requirement incorporates milestone and availability payments

2020 PROJECT FINANCIAL CONSIDERATIONS: A HYBRID APPROACH

Milestone Payments are made at the end of construction and funded with low-cost financing

Proposed Base Case Scenario

Milestone Payment	Construction Milestone	Financial Instrument
June 2017 $50 million	Payment tied to a specific technical milestone and conditioned upon a minimum expenditure of $100 million	Century Bond
June 2018 $250 million	Payment due upon completion of high-priority First Delivery facilities	General Revenue Bonds and/or Limited Project Revenue Bonds
September 2020 $300 million	Payment due upon final acceptance of all facilities	General Revenue Bonds and/or Limited Project Revenue Bonds

2020 PROJECT FINANCIAL CONSIDERATIONS: A HYBRID APPROACH

A hybrid financing approach balances our cost of capital with the goal of sharing performance risk

Proposed Base Case Approach scenario is structured to balance the cost of capital with risk transfer

	100% University Financing	Proposed Base Case Approach	100% Private Financing
% University Financing	100%	50% to 75%	0%
% Private Financing	0%	25% to 50%	100%
Weighted Cost of Capital	**'X' %**	**'X' *plus* 0.75% to 1.25%**	**'X' *plus* 1.5% to 2%**
	100% University Financing scenario is applicable to a traditional Design-Bid-Build or Design-Build model.	Proposed Base Case hybrid model balances cost of capital with risk. Reduces long-term cost. University Financing in Proposed Base Case Scenario represents 50%-75% of design and construction costs.	Entirely financing project with private funds would be subject to performance risk.

2020 PROJECT FINANCIAL CONSIDERATIONS: A HYBRID APPROACH

Financial projections indicate financial sustainability over the life-cycle of the Project

UC Merced has prepared a budget projection that incorporates the Campus' long-range enrollment plan, resources plan and 2020 Project payment requirements.

Annual Campus Pro Forma FY 2021-2030 ($M)	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Revenues	$466	$485	$507	$525	$547	$563	$581	$599	$619	$638
Expenses	($350)	($373)	($397)	($409)	($423)	($436)	($450)	($463)	($477)	($492)
Net Cash Flow before Project costs	**$116**	**$113**	**$111**	**$116**	**$124**	**$127**	**$131**	**$137**	**$141**	**$146**
Campus Payment (for 2020 Project)	($97)	($106)	($107)	($108)	($110)	($111)	($112)	($114)	($115)	($117)
Other Project Commitments	($1)	($1)	($1)	($1)	($1)	($1)	($1)	($1)	($1)	($1)
Change in Campus Reserves	**$18**	**$6**	**$3**	**$7**	**$14**	**$15**	**$18**	**$22**	**$25**	**$29**
Reserves (Closing Balance)	$304	$311	$314	$321	$335	$350	$368	$390	$416	$444
Months of Operating Reserves	11	10	10	10	10	10	10	10	10	11

Breakdown of Campus Payment ($M)	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Availability Payment – Capital	($47)	($47)	($48)	($48)	($49)	($49)	($50)	($50)	($51)	($51)
Availability Payment – O&M	($26)	($27)	($28)	($28)	($29)	($30)	($31)	($32)	($33)	($34)
Milestone Debt Service	($24)	($32)	($32)	($32)	($32)	($32)	($32)	($32)	($32)	($32)

Assumes 55% capital assumption for milestone payments.

2020 PROJECT FINANCIAL CONSIDERATIONS: A HYBRID APPROACH

How will we know that we are capturing value in the bids submitted by the proposers?

Responsive proposals are required to include:

Financial Plan

- Evidence of equity and debt commitments
- Summary Cost Table
- Summary Pro Forma Tables
- Closing Work Plan
- Term Sheets
- Financial Strategy

Financial Model

- Preliminary Financial Model
- Assumptions within the Financial Model
- Preliminary Financial Model Audit
- Sensitivity Analysis

Availability Payment Details

- Firm Maximum Availability Payment bid (at or below the “Upset Limit”)

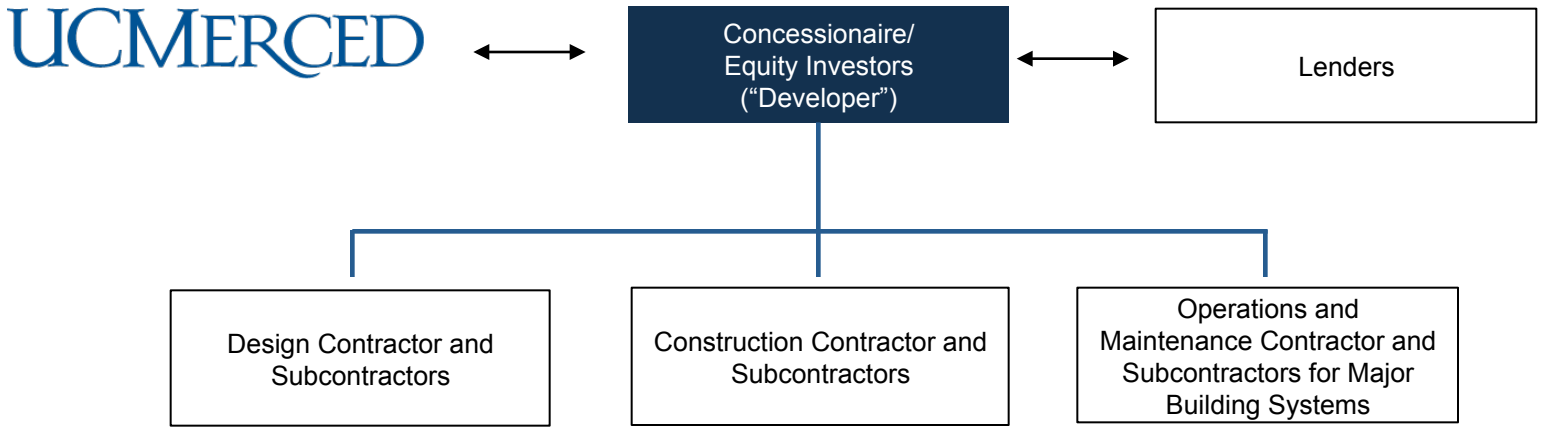
Verification of Team’s Financial Health

- Credit Ratings
- Financial Statements
- Financial Capacity
- Off-balance sheet liabilities
- Letters of Support

4. PROJECT AGREEMENT AND RISK

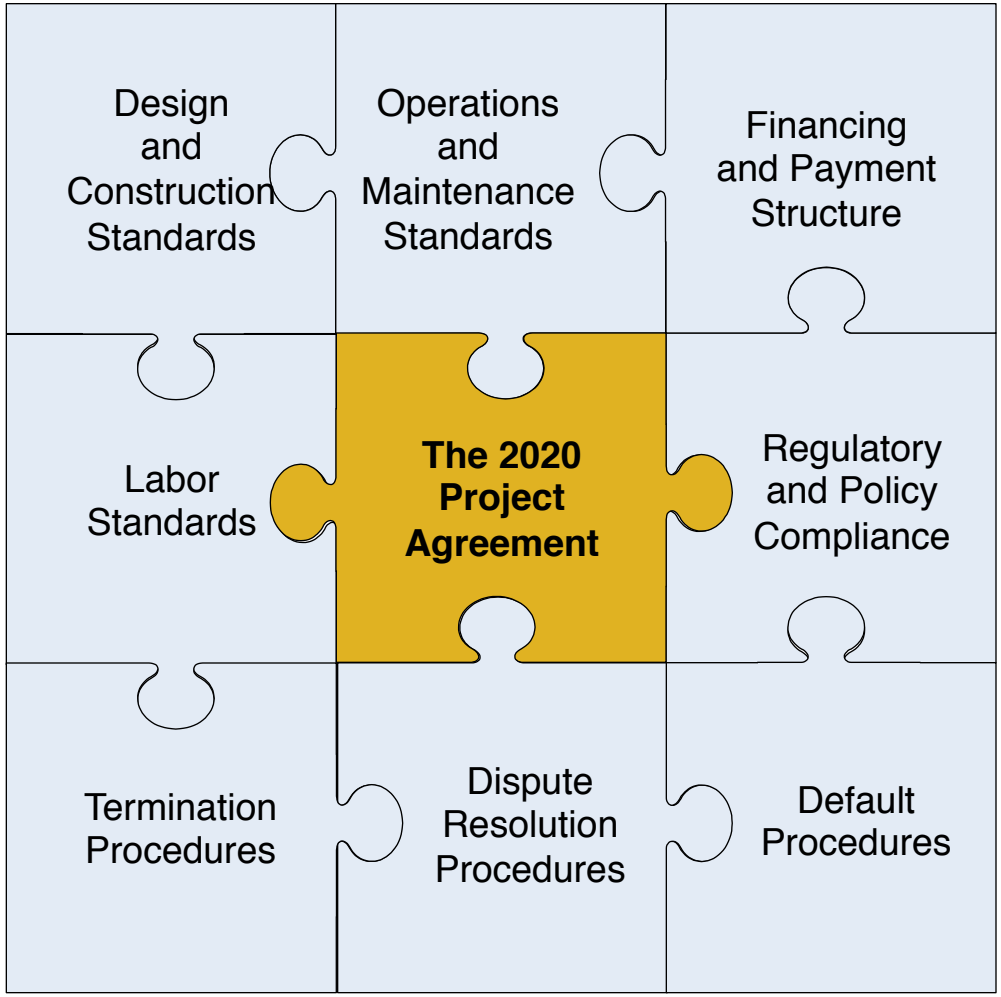
PROJECT AGREEMENT AND RISK

The Campus will enter into the Project Agreement with a "concessionaire" comprised of the equity members of the team (the "Developer")



PROJECT AGREEMENT AND RISK

The Project Agreement contains the key commercial terms and technical specifications



- Adapted from agreements used in similar, successful transactions
- Customized to meet the campus' needs

Key Terms

- Developer's obligation to design, build, finance, operate and maintain major building systems for a term of 39 years
- Financial Requirements
- Delivery dates for all facilities
- Detailed campus review of design and construction to ensure compliance with the contract terms
- Penalties for performance failure and a "non-compliance" points scheme that lead to progressive remedies up to and including default and termination
- Handback conditions and reserves
- Limitations on Developer's ability to assign the Agreement, and
- Direct agreement with the Lenders setting forth their rights and obligations

PROJECT AGREEMENT AND RISK

Risks related to its core mission are retained by the Campus, while Project risk is allocated between the Campus and Developer

Campus risk related to core mission

- Enrollment levels
- State appropriation support
- Auxiliary revenue
- Pell Grant support
- Delivery of academic program
- Reputational risk

Retained risk under Project Agreement

- Changes to the contract specifications during design and construction or operation
- Changes in law (for example, code requirements)
- Force majeure events
- Unknown environmental conditions

Developer Risk

- Quality of construction
- Building systems and performance failure
- Long-term maintenance and renewal
- Technological changes
- Known environmental conditions

PROJECT AGREEMENT AND RISK

“Step-in” rights and dispute resolution provide several layers of contractual protection for the Campus

Developer and Lenders have their own incentives to step in to ensure performance

If the Design-Build Contractor defaults, Lenders and Developer have their investments at risk

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A dispute resolution process governs disputes between the parties to ensure work continues* and reduces the likelihood of litigation

Dispute resolution is built into sub-contracts, requires work to continue and provides for fast-track determination of time-sensitive issues

*Source: “**25.4 Continuance of Work During Dispute**: During the course of any Dispute Resolution Procedures, Developer shall continue performing the Work, including any Work that is the subject of the Dispute, as directed by the Owner in accordance with the Contract Documents.”

PROJECT AGREEMENT AND RISK

Sample Risk Events and Apportionment

Construction Delays before Substantial Completion

Developer bears the risk: Campus is under no obligation to pay until construction is complete; early warning measures and penalties help mitigate impact of delay on campus.

Owner changes during design and construction

Campus bears the risk: Extensive program planning and technical specifications intended to limit need for changes; standards relating to floor plan flexibility reduce likelihood of change orders due to program changes; Campus requirement for “single point of approval” at VC level for significant changes limits changes in the field.

Operations and Maintenance failure after delivery

Developer bears the risk: Availability payment reductions and non-compliance points create incentive to meet performance standards; Developer and Lenders have incentive to cure to avoid reduced payments; Campus has “step-in” right.

Revenue shortfall during operations period

Campus bears the risk: Campus is obligated to make payments even if a decline in enrollment or appropriations occurs.

Developer or contractor bankruptcy

Developer bears the risk: Campus (Regents) owns the buildings and land at all times (no lease); Sizable bonds ($275M) and retainage (55%) during construction; Developer and Lenders motivated to replace bankrupt party to protect their investment; Campus step-in rights in the event of default

5. 2020 PROJECT LABOR CONSIDERATIONS: A HYBRID APPROACH

2020 PROJECT LABOR CONSIDERATIONS

The 2020 Project uses a hybrid approach to operation and maintenance of major building systems

- The Campus will be responsible for day-to-day operations and maintenance of the entire campus, including 2020 Project facilities. *Includes custodial, grounds keeping and existing dining.*
    - Developer responsible for maintaining major building systems of buildings it designs and builds, *(e.g. Foundations, HVAC, plumbing, generators, pumps, roadways, pavement, irrigation). This will have no impact on current represented employees.*

Labor protections will be built into the Project Agreement

Prevailing Wage and Labor Compliance Program

Contracts require payment of prevailing wage

Skilled Workforce

Full compliance with skilled workforce provisions of Section 22164 of the Calif. Public Contract Code, as amended by SB 785

Small Business Goals

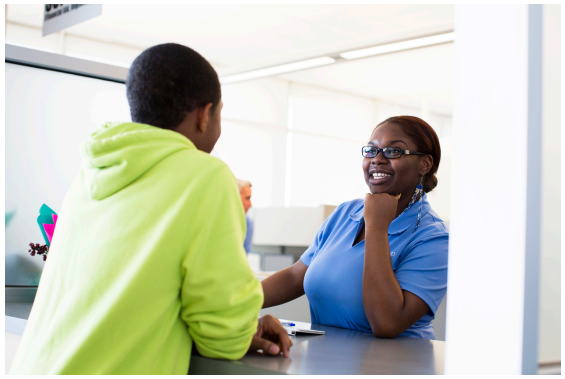
Contract incorporates specific goals to advance small business participation in the Project

2020 PROJECT LABOR CONSIDERATIONS

Immediate and long-term labor and economic benefits

During construction

- 12,600 California jobs over the life of the project
- $2.4 billion of potential direct and indirect economic impact



After construction, 400 additional jobs will be created by the campus.

Services <u>not</u> provided by the developer:

- Janitorial and Custodial
- Landscaping
- Security
- Parking Services
- Shipping and Receiving
- IT/Audio Visual Support
- Laboratory Fit-out and Safety

6. SUMMARY AND NEXT STEPS: FUTURE REGENTS' DECISION POINTS

Our process envisions several decision points by the Regents

Red font = Regents' action **Green font = President's action** **Blue font = Procurement process step**

July 2015 Regents' Meeting	Information Item: Detailed Briefing
September 2015 Regents' Meeting	Information Item: Commercial Terms Budget for State Capital Improvements ("AB94 submittal")
November 2015 Regents' Meeting	Approval of RFP, including Project Agreement (constitutes "budget" approval including minimum programmatic scope and maximum upset limit) Best Interest Determination Delegation to the President to execute the Project Agreement Acceptance of the Physical Design Framework Acceptance of Capital Financial Plan – [pertinent only if inclusion of other projects is needed to facilitate the 2020 Project] Release RFP (after Regents' approval)
March 2016	Receive Proposals
May 2016 Regents' Meeting	Approval of External Financing Select Preferred Proposer Design commences pursuant to separate design contract (authority level TBD)
June 2016	**President Executes Project Agreement**
July 2016	Approval of Design (based on Master Plan plus representative buildings)

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