Opportunities and Challenges of Public-Private Partnership Projects

Agenda

CSU FACILITIES MANAGEMENT INSTITUTE
November 13, 2015 | 8:00 a.m. to 4:00 p.m.
Ballroom ABC | Long Beach Marriott
4700 Airport Plaza Drive | Long Beach, CA 90815

Opening remarks
8:00 a.m. to 8:15 a.m.
Presented by: Steven Lohr, Chief of Land Use Planning and Environmental Review, CSU Office of the Chancellor

Public-Private Partnership Projects – Goals, Types and Financial Considerations
Presented by: Gregory Gotthardt, Managing Director, Alvarez & Marsal Real Estate

Completed Projects – Goals, Deal Structures, Challenges and Key Issues
University of California, Davis West Village and Long Beach Courthouse
Presented by: Mary Hayakawa, Executive Director, Real Estate Services, University of California, Davis
Clifford Ham, Principal Architect, Capital Program Office, Judicial Council of California

Break
10:15 a.m. to 10:30 a.m.

Projects In-Process – Goals, Challenges and Early Lessons
University of Kansas and University of California, Merced
Presented by: Shannan Nelson, Assistant Vice Provost, Business Operations, University of Kansas
Kimberly Grunewald, Associate General Counsel, University of Kansas
Abigail Rider, Assistant Vice Chancellor, Real Estate Services, University of California, Merced
Andrew Boyd, Executive Director, Business and Financial Strategic Initiatives Center, University of California, Merced
Tom Lollini, Senior Associate Vice President and University Architect, Physical Planning and Development, San Francisco State University

Lunch
12:00 p.m. to 1:00 p.m.

Projects In-Process – Goals, Challenges and Early Lessons
Ohio State University Comprehensive Energy Public-Private Partnership
Presented by: Richard King, Public Finance Director, Barclays
Christoph Muelbert, Managing Director, Barclays

Realities of Public-Private Partnership Projects
Panel Discussion:
Debbie Adishian-Astone, Interim Vice President for Administration Services and Associate Vice President for Auxiliary Operations, California State University, Fresno
Andrea Gunn Eaton, Business and Finance Team Leader, Office of General Counsel, CSU Office of the Chancellor
Robert Eaton, Assistant Vice Chancellor, Financing, Treasury and Risk Management, CSU Office of the Chancellor
Timi Hallem, Partner, Manatt, Phelps & Phillips, LLP
Mary Hayakawa, Executive Director, Real Estate Services, University of California, Davis

Break
2:30 p.m. to 2:45 p.m.

Public-Private Partnerships at CSU
Audience Questions:
Debbie Adishian-Astone, Interim Vice President for Administration Services and Associate Vice President for Auxiliary Operations, California State University, Fresno
Vi San Juan, Assistant Vice Chancellor, Capital Planning, Design and Construction, CSU Office of the Chancellor
Robert Eaton, Assistant Vice Chancellor, Financing, Treasury and Risk Management, CSU Office of the Chancellor
Andrea Gunn Eaton, Business and Finance Team Leader, Office of General Counsel, CSU Office of the Chancellor

Closing Remarks/Adjourn
3:45 p.m. to 4:00 p.m.
Opportunities and Challenges of Public-Private Partnerships

November 13, 2015

Learning Outcomes

- Obtain a framework for understanding public-private partnership projects
- Become familiar with lessons learned associated with public-private partnership projects from the owner’s perspective
- Share experiences on public-private partnership projects within the CSU
- Become familiar with available resources within CSU
Public-Private Partnerships

“Generic term for the relationships formed between the private sector and public bodies, often with the aim of introducing private sector resources and/or expertise in order to help provide and deliver public sector assets and services.”

European Investment Bank, The EIB’s role in Public-Private Partnerships, July 2004

Public-Private Partnerships

- Traditional methods of financing campus projects (such as state support) have been largely unavailable or tapped out.
- Many colleges and universities are considering public-private partnerships as potential suitable development options.

NACUBO Magazine, January 2010
“The future ain’t what it used to be.” - Yogi Berra

“Yesterday’s home runs don’t win today’s games.” - Babe Ruth

“There are no secrets to success. It is the result of preparation, hard work and learning from failure.” - Colin Powell

Real Property Partnership Manual

Draft Real Property Partnership manual is available for review at:

https://csyou.calstate.edu/Divisions-Orgs/bus-fin/cpdc/luper/Pages/default.aspx
Information/Assistance

- For any questions, contact Dr. Steven Lohr at slohr@calstate.edu or (562) 951-4120
OVERVIEW OF PUBLIC-PRIVATE PARTNERSHIP PROJECTS – GOALS, TYPES AND FINANCIAL CONSIDERATIONS

AGENDA

I. P3s – What, Why and How?

II. P3 Best Practices
P3s – WHAT, WHY & HOW?

Public Private Partnerships (P3s) are a business relationship between a private-sector company and a government agency for the purpose of completing a project that will serve the public.

In higher education, P3s are typically used for:

**Asset Monetization** – Unlock value and monetize surplus or under-utilized assets;
- Generates funding for capital projects or “in-kind” services to the university
- Reduces expenses related to under-utilized assets

**Performance-Based Infrastructure** – Build or renovate, operate and maintain infrastructure and facilities;
- Requires funding obligation over a period of time for the university and/or end users;
- Cost/benefit to public determined by Value for Money (VfM) analysis, which is both quantitative and qualitative; and,
- VfM analysis should consider risk transfer, life-cycle costs, opportunities for innovation and alignment of interests.
P3s are seen as a way to capture value from existing assets and to provide needed facilities and services within budgetary constraints.

In what situations?

Unlock Value:
- P3s can return surplus or underutilized assets to productive use, promoting O&M savings and revenue generation;
- P3s can maximize the value of real estate holdings through renovation or development.

Provide or Renovate Facilities:
- P3s can mitigate operating and capital budget limitations and debt ceilings that often contribute to overuse and under-investment in real property assets;
- P3s can be an alternative form of capital project delivery and may achieve superior VfM compared to traditional methods of procuring capital assets;
- P3s can also be used when the university is unable to provide the needed facilities through traditional funding methods.

Provide Services:
- P3s may also achieve superior VfM in the provision of university services.
**P3: HOW? – VARIETY OF STRUCTURE OPTIONS**

- **Design-Build (DB)**: The government contracts with a private partner to design and build a facility in accordance with the requirements set by the government. After completing the facility, the government assumes responsibility for operations and maintenance.

- **Design-Build-Maintain (DBM)**: This model is similar to Design-Build except that the private sector also maintains the facility. The public sector retains responsibility for operations.

- **Design-Build-Operate (DBO)**: Under this model, the private sector designs and builds a facility. Once the facility is completed, the title for the new facility is transferred to the public sector, while the private sector operates the facility for a specified period.

- **Design-Build-Operate-Maintain (DBOM)**: Combines the responsibilities of design-build procurements with the operations and maintenance of a facility for a specified period by a private sector partner. At the end of that period, the operation is transferred back to the public sector.

- **Build-Own-Operate-Transfer (BOOT)**: The government grants a franchise to a private partner to finance, design, build and operate a facility for a specific period of time. Ownership of the facility is transferred back to the public sector at the end of that period.

- **Design-Build-Finance-Operate / Maintain (DBFOM)**: Under this model, the private sector designs, builds, finances, operates and/or maintains a new facility under a long-term lease. At the end of the lease term, the facility is transferred to the public sector.

**P3: HOW? – CONCESSION VS. AVAILABILITY PAYMENT MODEL**

- **Full Concession Model**: Private party will pay up front and/or over time for the rights to the asset.

- **Value Proposition**: We expect to receive $X million PV or per year once I build, finance and operate this asset, therefore...

- **Threshold Question**: Does the asset make money?

- **Yes**: The bid is set up to find the bidder who will pay the most.

- **Availability Payment Model**: Private party is paid each year to make the asset available.

- **Value Proposition**: We expect to pay out $X million PV or per year to build, finance and operate this asset, therefore...

- **Value Assessment**: Both approaches incorporate non-financial considerations in order to find the “Best Value”.

- **Both Approaches Have Equal Potential to**: Transfer risk (construction, financing, O&M), Reduce Costs, Increase the certainty of execution, Accelerate funding/project completion, Provide for other construction benefits.

Source: Goldman Sachs
P3 BEST PRACTICES

- Meetings with Cal Poly to identify needs, opportunities, objectives, constraints, etc.
- Discuss P3 initiatives & opportunities within the education environment with focus on retail, housing, hotel, athletic & entertainment uses
- Present P3 overview, including developer expectations, capital markets & transaction structures
- Co-develop work plan and goals
- Review challenges & opportunities
- Formulate preliminary strategy
- Co-develop Cal Poly’s P3 policy, process & guidelines
- Identify potential projects and immediate goals
- Identify areas for implementation
- Establish timeline & performance measures
- Rank & assess development potential of sites/projects using matrix (high-level analysis) considering opportunities & constraints
- Gather data on suitable project sites / potentially viable properties
- Gather relevant market data
- PBI: Begin design work
- Conduct feasibility analyses and valuations
- Create pro-forma development cash flows
- Develop options and strategies for prioritized properties, including SWOT analyses
- Develop initial understanding of CEQA issues/requirements
- Analyze options for capitalizing on various strategies/procurement methods
- Calculate impact on different constituencies
- Identify potential bidder/developer pool
- Present concept to stakeholders
- BOT concept approval
- Negotiate the structure that will maximize results
- CEQA requirements
- BOT approval
- Monitor/close transaction
- Formulate long-term monitoring process
- Provide necessary additional services as requested

1CEQA issues/requirements should be initially identified in the “Develop Options” process but the CEQA approval process will proceed with the selected developer up until final approval.
2Many procurements will use a two-step RFQ/RFP process where the selection of a short-list of qualified developers is selected prior to the issuance of the RFP.
Most successful P3 programs, regardless of the asset type, incorporate common principles, or best practices, which maximize the chances of success.

- **Recognition of the primacy of the institution’s mission(s)**, such as educating students, conducting research and delivering services to the community, obligates the institution and its advisors to examine the impact of a P3 on end-users.

- **P3 as a long-term solution**, as opposed to a “quick fix” to remedy a facilities need or budget shortfall. Institutions should consider the long-term implications of P3, with proper understanding that it may not best achieve certain goals.

- **Rigorous value for money (VfM) analysis**, which compares, on both a qualitative and a quantitative (financial) basis, the cost to provide identical facilities-related services via a P3 or traditional procurement over the lifecycle.

- **Proper allocation and transfer of risk**, in which the private sector assumes the risk for services which it can provide more efficiently than the institution (e.g. design/construction, operations & maintenance, lifecycle reinvestment) and the institution retains those functions for which it is best suited (e.g. administration, policy and oversight).

- **Transparency and competitiveness**, which ensure the best possible terms by precluding “inside deals” and inadequate due diligence of potential partners.

- **Performance-based project structure**, which requires the private partner to achieve agreed-upon output specifications and timelines in order to receive compensation.

**CHARACTERISTICS OF EFFECTIVE P3 ORGANIZATIONS**

- **Organizational commitment** – P3 champion(s) with the time and authority to make decisions and move the process forward.

- **Long-term planning**: Is the conceived P3 project a method of accomplishing a goal identified in a campus master plan?

- **Independent transaction advisors with strong real estate market, development and finance expertise** – critical for objective feasibility analysis, identifying value, proper scoping, qualifying/vetting bidders, and go/no-go decisions.

- **Realistic expectations** – regarding the benefits and costs of pursuing P3s.

- **Effective stakeholder management** – communicating P3 plans, strategies and progress at appropriate times in a clear and concise manner.

- **Managing community relations** – critical in no- or slow-growth communities to obtain community support.

- **Legal authorities and defined approval process** – avoiding transaction failures and/or rework late in the process.
Why West Village? Key Issues.

- Enrollment was growing; City of Davis was not
- Difficult to recruit faculty due to housing costs
- City pressure for more student housing on campus

- Limited campus funds to invest
- Limited campus debt capacity
- Affordability – prevailing wage issue
- Leveraging private sector expertise
- Zero Net Energy
Site Aerial with Campus

UC Davis
Central Campus

UC Davis West Village

Planning Principles

- Housing Affordability
- Environmental Responsiveness
- Quality of Place
West Village – the numbers

- 220 acres mixed-use neighborhood on campus west of HWY 113
- 130 acres under contract with West Village Community Partnership, LLC
- 1,980 student beds (completed)
- 343 single family homes for faculty/staff (not completed)
- 42,000 sq. ft. of commercial space (75% leased back to the university)
- University provided the off-site infrastructure (approx. $17 Million)
- Student Housing and Faculty/Staff Housing (approx. $300 Million)
Timeline

2001  Long Range Development Plan and EIR commenced
2003  LRDP & EIR approved by the Board of Regents
2004  RFQ issued –WVCP, LLC chosen
2006  Business Terms approved by the Board of Regents
2008  Ground Lease executed
2008  UC Davis Backbone infrastructure commenced
2010  UC Davis Backbone infrastructure completed
2011  First phase of Student Housing completed/Students move in
2012  Los Rios Community College Davis Center opens
2012  Second phase of Student Housing completed
2013  Third phase of Student Housing completed
2013  Notice of Determination from Department of Industrial Relations
2015  Settlement with Carpenters’ Union/Termination of Master Ground Lease

Building Design
UC Davis West Village
Student Amenities Center
UC Davis West Village

Environmentally Responsive Design
UC Davis West Village
Deal Structure

• Master Ground Lease to WVCP for 14 years
• Sub-Phase Leases for each student housing cluster for 65 years
• Faculty Housing Sub-Phase Lease – to be built in Sub-Phases of 50 homes (not executed)
• $550,000 annual ground rent from Student Housing
• WVCP has ongoing maintenance obligations for the Village Square
West Village Energy Initiative Program Goals

- Zero Net Energy from the Grid on an annual basis
- Deep Energy Conservation Measures
- Multiple integrated renewable resources at a community scale
- Smart Grid
- No higher cost to the developer
- No higher cost to the consumer

A Living Laboratory
Lessons Learned

- A Public Private Partnership is not a magic bullet
- This is a long-term relationship -- pick your partner carefully
- Make sure that you are clear on what you are trying to accomplish by entering into a P3
- Expectation management is key
- University has limited control over development
- There will likely be staff changes on both sides of the transaction and even administration changes during the term of the deal – this is going to impact the administration of the deal
- Understand difference in private sector development types/standards

Questions?
mghayakawa@ucdavis.edu
Governor George Deukmejian Courthouse

Project Overview

- Design, Build, Finance, Operate & Maintain
- 35 year Agreement
- Complete Services
- Payments Depend on Performance & Availability
- Strong Public Counterparties
  - Judicial Council of California
  - County of Los Angeles
Project Overview

- Courtrooms: 31
- Overall Bldg: 531,000 GSF
- Court Space: 416,000 GSF
- County/Commercial: 105,000 GSF
- Construction Cost: $339,000,000 (approx.)
- Design Build Start: January 2011
- Occupancy September 2013
Project Development

- RFQ, RFP, Proposal/Competition
- 11 Consortiums submitted Qualifications
- Five teams shortlisted for Interview, three selected for final D/B/F/M competition
- Six Month Competition w/ Multiple Proprietary mtgs.
- Design, Build, Finance, Operate, and Maintain Proposals Submitted December 2009
- Selection of Long Beach Judicial Partners June 2010
- Financial Close Occurred December 20, 2010
Long Beach Court - PBI
Project Contract Structure

JUDICIAL COUNCIL

Lenders

Senior Debt

Agreement & Payment

Interest in Land

Equity

Equity Provider

LBJP

Agreements

Johnson Controls
Operations
Maintenance

Clark/AECOM
Design/Construction

Interest in Land

Equity

Agreement & Payment

Long Beach Court – PBI Project Contract Structure
Risks Transferred

- Design and Construction Risks / Liability
- Entitlements and Utilities
- Completion Risk (Delay and Efficacy)
- Construction Cost Overruns
- Disputes Between Designer, Builder and Operator
- Landlord Risks & Rental Income Shortfalls

Risks Transferred

- Operation and Maintenance Risks
- O&M Cost Overruns
- Regulatory Compliance
- Capital Maintenance
- Technological Obsolescence
- Excess Energy Consumption
Risks Retained

- Owner’s Risk Under Any Delivery Method
- Changes In Law
- Uninsurable Force Majeure Events
- Pre-existing Site Environmental Conditions
- Such Uncontrollable = “Relief Events”
- Inflation (Service Fee 30% Index-Linked)
## Time Line Schedule

<table>
<thead>
<tr>
<th>Year</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
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<tbody>
<tr>
<td><strong>Long Beach-Actual Timeline</strong></td>
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<td>11/10/2010</td>
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<tr>
<td><strong>Typical Timeline</strong></td>
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<td>6/13/2008</td>
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<td>6/12/2009</td>
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<td>4/19/2011</td>
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<td>5/1/2014</td>
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</table>
# Service Payment Deductions

## Key Performance Indicators
- Calls Responded in 15 minutes
- % of Scheduled PMs Completed
- Asset Value maintained above threshold

## Availability Concept
- Facility Maintained in Required tolerances
- Linked Functional Units

## Deduction Example
- Prisoner Elevator is Down
- Elevator serves Holding Cells between Courtrooms
- 4 Floors are Affected
- Space Unavailable for 5 Hours
- Holding Cells & Linked spaces All Deemed Unavailable.

### Functional Unit Deductions

<table>
<thead>
<tr>
<th>Functional Unit</th>
<th># of Units / floor</th>
<th>Unit Deduction</th>
<th>Total Deduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Courtrooms</td>
<td>2</td>
<td>$384</td>
<td>$6,144</td>
</tr>
<tr>
<td>Holding Cells</td>
<td>7</td>
<td>$96</td>
<td>$5,376</td>
</tr>
<tr>
<td>Interview Rooms</td>
<td>2</td>
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<tr>
<td>Attorney/Client Room</td>
<td>4</td>
<td>$96</td>
<td>$3,072</td>
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<tr>
<td>Elevator Unavailability</td>
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<td>$5,000</td>
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<tr>
<td>Total</td>
<td></td>
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<td>$21,128</td>
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</tbody>
</table>

### Deduction Example Details
- Prisoner Elevator is Down.
- Elevator serves Holding Cells between Courtrooms.
- 4 Floors are Affected.
- Space Unavailable for 5 Hours.
- Holding Cells & Linked spaces All Deemed Unavailable.

<table>
<thead>
<tr>
<th>periods unavailable</th>
<th>2 (2 hr period)</th>
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<tbody>
<tr>
<td>floors affected</td>
<td>4 floors</td>
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</table>

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Private Sector Concerns

- State Credit Standing
- Service Fees Subject To Annual Appropriation
- “Essentiality”
- Special Purpose Building, Difficult To Reuse
- Cost to Propose Versus Stipend Amount
- Will Any Contract Ultimately Be Awarded?
What Made Us Successful

• Design Build tied to Building Performance
• Integrated Delivery – DBFOM
• RFP allowed Creativity – Outcome Focused
• Quality Management & Monitoring
• Discipline of 35 Yr Performance with Availability Penalties
What Made Us Flinch

- Perception of Free Money
- Possessory Interest Tax
- Total Life Cycle Costs
- Distrust of Return on Investment
Other Factors

• Public perception of project
• Sticker shock (total cost of ownership)

Next Time We Would:

• Add More Services
• Be Aggressive on Energy Requirements
• Consider Dedicated Funding Source
Governor George Deukmejian Courthouse

Long Beach, California  Judicial Council of California
Why P3?

- What do you need – what’s in & what’s out?
- How are you going to get there – Structure, Process & Approach
- How are you going to pay for it – Revenue Levers

Risk of Doing Nothing?

26.2

0.0
What’s In & What’s Out...

Project Goals / Project Scope

- Strategic Science Facilities
  - Integrated Science Building (ISB)
- Modernization of Infrastructure
  - New Power Plant
  - New Utility Distribution
  - Redundancy w/ N District Additional Parking
- Student Housing / Mixed Use
  - Diversify Housing Portfolio
  - New Suites
  - New Apartments
  - New Student Union
- Operations & Maintenance
  - O&M
  - Life-cycle
Public Private Partnership (P3) Model

- Design
- Finance
- Construction
- Maintain
- Operate

KU Model – Structure
## Tax Exempt Lease / Lease Back Model

<table>
<thead>
<tr>
<th>Project Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design and Construction (DB)</td>
<td>Developer / Architectural partners are responsible for design and construction. Potential of accelerated schedule. Construction cost and schedule risk are transferred to the private sector.</td>
</tr>
<tr>
<td>Finance (F)</td>
<td>The Non-profit provides the project financing and is typically funded by tax-exempt bonds. Will most likely impact university credit.</td>
</tr>
<tr>
<td>Operations &amp; Maintenance (OM) &amp; (R)</td>
<td>O&amp;M, along with Lifecycle (R) costs may be outsourced to a 3rd party to operate, maintain, and repair the facilities. Can be a Developer responsibility.</td>
</tr>
<tr>
<td>Lease Payments</td>
<td>KU enters into a long term agreement with the Non-profit (typically 30 – 40 years) and agrees to make lease payments in the amount of debt service and O&amp;M costs. KU maintains ownership of buildings.</td>
</tr>
</tbody>
</table>

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## Legal Structures / Oversight

- Enabling legislation
- Governing board
- Approval of contract terms
- Land ownership and lease authority
- Bonding/lending approval
- Internal oversight and processes
- External oversight and required approvals
- State liability?
Recapping the Process

Science & Campus Master Planning – 2012 to 2014

P3 – Working Groups: 2014 to Current
- Stakeholder / Legal
- Finance
- Programming / Site Planning
- Housing
- Parking & Infrastructure

Steering Committee / Executive Committee

KBOR / KS Legislature 2014 to Current

RFQ – 14 Proposals, Spring 2015
RFP – 3 Proposals, Summer 2015

How the P3 Partner Was Selected
- P3 RFP Approach

Value for Money (VfM) +/- $325MM

Scope Ladder – Base, Tier 1, Tier 2

1. Risk
2. Financing
3. Design
4. Construction
5. Operations & Maintenance (O&M)
P3 – Value for Money Analysis

Value for Money

- O&M Cost
- Retained Risk
- Financing Cost
- Construction Cost
- Design Cost
- Procurement Cost

PSC vs. PPP

RFP Selection

Base Scope (Minimum Scope)

Tier 1

Tier 2
Legal Process / Approach

Engagement Agreement

- Key terms listed in RFQ/RFP
- Exclusive negotiation period
- Develop financing and legal documents in tandem with design process.
- No exchange of funds; both parties accept risk of doing business
- Pre-construction costs?
Project Funding – Overview of the Identified ‘Revenue Levers’

The revenue levers and contributions outlined below have been identified as potential funding sources for the project.

<table>
<thead>
<tr>
<th>Source</th>
<th>Annual Amount</th>
</tr>
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<tbody>
<tr>
<td>Student tuition / fees</td>
<td>$</td>
</tr>
<tr>
<td>Central contribution</td>
<td>$</td>
</tr>
<tr>
<td>State contribution</td>
<td>TBD</td>
</tr>
<tr>
<td>Sponsorship / Endowment</td>
<td>TBD</td>
</tr>
<tr>
<td>Parking contribution from net income</td>
<td>$</td>
</tr>
<tr>
<td>Housing Income</td>
<td>$</td>
</tr>
<tr>
<td>Gap Funding (other)</td>
<td>TBD</td>
</tr>
</tbody>
</table>

Lessons learned

- Goals and objectives: Repeat, repeat, repeat
- Culture change
- Stick to your process
- Internal review process/decision matrix
- Financial structure
- Consultants with prior P3 experience
- Dedication of university staff member to project
- Communication – the 5 Ws
- “Victory has a thousand fathers, but defeat is an orphan.
- Champion v. Doer – You need both
Questions
Three overviews followed by discussion

- **How UC Merced decided to pursue a public-private partnership**
  - Tom Lollini

- **How a Design-Build-Finance-Operate-Maintain transaction works**
  - Abigail Rider

- **What you have to do differently in a Public-Private Partnership**
  - Andy Boyd
WHY UC MERCED DECIDED TO PURSUE A “P3”

In 1998, UC Merced was sited in the rapidly growing San Joaquin Valley

- The region had historically been underserved by the UC system
- 4 million people live in the region today and 7 million people are projected by 2055

Source: Demographic Research Unit, California Department of Finance. State and County Population Projections by County, by Race/Ethnicity and by Major Age Groups, 2010-2060.
Groundbreaking in 2002
First 300,000 ASF opened in 2005 for 875 students
Subsequent buildings built and financed individually
Master planned for 25,000 students on 815 acre site at buildout
Where UC Merced is today:
1.4 million gross square feet, 104 acres

- 6,685 students as of Fall 2015
- 65% first generation

UC Merced Undergraduate Diversity

- Latino 46%
- Asian 25%
- White 24%
- African-American 6%
- American Indian <5%
- Other 8%

Glass, concrete, stucco and steel
Inspired by simple forms derived from the region’s architecturally underappreciated buildings
UC Merced’s goal is to develop physical capacity for 10,000 students by 2020

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

Global and national research distinction in unique, targeted areas

A proven catalyst for economic diversification in the San Joaquin Valley

Context: UC Merced has measurable programmatic needs and limitations

Academic space is at capacity
- Classes end at 10:50pm
- Campus is slowing enrollment due to space utilization issues

Overburdened infrastructure
- Central Plant designed for 800,000 GSF
- Efficiencies enable it to accommodate 1.3 MGSF

High housing demand
- As built beds: 1,600
- Actual occupancy: 2,000 beds
- City of Merced General Plan does not envision rental capacity in near term
One challenge to growth is the fiscal environment

The traditional funding method has been almost completely eliminated

A young institution with basic limitations

- Very small donor base
- No large revenue stream sources
- No large reserves

Another challenge is ensuring lifecycle costs are predictable over the long term

UC Merced’s buildings are brand new, sustainable and state of the art....

... but UC Merced needs a long term strategy to avoid accumulating a backlog of deferred maintenance

Every building at UC Merced is LEED Gold or Platinum

Deferred Maintenance has historically been a challenge on UC campuses
Economies of Scale Challenges

High transaction costs for incremental small projects

High incremental infrastructure costs for individual projects

Funding for central or iconic spaces in competition with the need for buildings

The process of developing institutional support

2009 Long Range Development Plan
Award-winning plan and policies intentionally structured to support innovative project delivery

2010 Bay Area Council White Paper
Examined potential efficiencies from a Design-Build-Finance-Operate-Maintain delivery strategy

2012 KPMG Bellevue Gateway Screening Analysis
Examined potential efficiencies from a Design-Build-Finance-Operate-Maintain for non-state funded facilities
The process of developing institutional support

Advisory Panel provided recommendations in 2013 supporting a public-private approach

HOW A “DBFOM” TRANSACTION WORKS
DBFOM bundles all project elements into a single, coordinated delivery strategy

- Creates link between design and construction of facilities and long-term maintenance
- Holds the Developer accountable for performance over life of the asset
- Incorporates life-cycle financial plan within affordability constraints established by the University
- Addresses future obligations for capital maintenance
- Creates competition for all Project elements
- Manages certain risk elements to enable campus to focus on core teaching, research and public service missions

Finance, operations and maintenance risks are shared by University and Developer

Basic Principles of Availability Payment DBFOM

- University owns the land at all times
- UC pays if the Developer delivers on time and performs in accordance with contractual terms
- UC owns the buildings at all times
- Developer takes on risk of timely completion and high quality maintenance over the life of the contract
- University procures the project under the Public Contract Code
- Procurement strategy expands on approaches used to build projects across the system
- Includes strategies used in other public-private partnerships
- Applies best practices to UC Merced development
- Does not assign revenue
- Not a lease
How DBFOM at UC Merced will work

UC and a Developer jointly finance the design and construction of multiple facilities at UC Merced.

The Developer maintains major building systems for 35 years in exchange for predetermined payments.

At the end of the contract, the developer turns over maintenance of the well-maintained buildings to UC Merced.

Proposed Phasing of the 2020 Project

2016  
Campus selects a Developer
Developer prepares a comprehensive plan for the entire site.

2018  
First delivery of facilities
Developer delivers the first set of buildings by June 2018.

2019  
Second delivery of facilities
Developer delivers the first set of buildings by June 2019.

2020  
Substantial Completion
Developer delivers final set of buildings by June 2020.

2020-2055  
Long-term operations and maintenance of major building systems

Approximately 918,900 million ASF
The 2020 Project envisions that the Campus will enter into a Project Agreement with a “concessionaire” comprised of the equity members of the team (the “Developer”)

“The Project Agreement” is the performance based tool we are using to deliver the project

- 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
Traditional Procurement vs. 2020 Project
UC Merced is using a long-term, performance based framework for every element of the campus

Inputs in a Traditional Procurement
“Cooling to the building must be provided by Carrier Model XYZ heat pump with a cooling capacity of 220 tons.”

Outputs in a Public-Private Partnership Procurement
“The temperature of the occupied portions of the building shall not be lower than 68 degrees Fahrenheit and not higher than 72 degrees Fahrenheit, 97% of the time that the building is open to occupants.”

Lifecycle Questions we asked ourselves as we developed the Project Agreement

What is the role of a “100 year” building on a campus?

Can we afford buildings that last more then 40 years?

Do we want buildings that last more then 40 years?

Sterling Memorial Library, Yale University
Funded by Donor: 1918
Opened: 1931
Cost: $18 million

Boelter Hall, UCLA “Birthplace” of the Internet
State Funded: 1959
Opened: 1961
Cost: $9 million

Caruthers/Neilson Hall Dormitory
Louisiana Tech, 600 beds
Opened: 1966 at cost of $4.5 million
Demolished: 2013
Blended handback approach developed

- Avoids future capital maintenance nightmare
- Smoothes maintenance budget as campus takes on O&M

<table>
<thead>
<tr>
<th>“Fully Depreciated”</th>
<th>“University Condition”</th>
<th>“Age Appropriate”</th>
<th>“New Condition”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completely Operational but may need replacement</td>
<td>Some Deferred Maintenance</td>
<td>Major Systems renewed No Deferred Maintenance</td>
<td>40 Years of Remaining Useful Life</td>
</tr>
</tbody>
</table>

- Student Housing
- Student Activities
- Plan Replacement or Major Renovation
- Lab, Academic and Classroom Buildings
- Maintained in Solid Working Condition
- Major Iconic Buildings
- Ceremonial Spaces
- Performance Venues
- Stadiums
- Lab, Academic and Classroom Buildings
- Maintained in Solid Working Condition

How the payment mechanism works: Milestone and Availability Payments

- UC makes milestone payments when Developer meets construction targets
- UC makes availability payments subject to performance
- Developer’s reserve releases in final years
- Buildings turned over to UC in good condition at end of term

- University owns the buildings and land at all stages

<table>
<thead>
<tr>
<th>Year One</th>
<th>Duration of Project Agreement</th>
<th>Year 39</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signed Contract</td>
<td>University owns the buildings and land at all stages</td>
<td>Contract Ends</td>
</tr>
</tbody>
</table>

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Advantages:

Effective Retention higher with “Milestone Payments”

Procurement Process Timeline

Draft RFP

Final RFP

Teams Submit Proposals

Selection

Released Spring 2015 to prequalified teams with experience in

• Finance
• Master Planning
• Architecture
• Construction Management

Today

2016
Developing the Program and the details of the Agreement has been a time intensive process

The process has required a fundamental reconsideration

- Of how we think about what goes into our buildings
- And a quantification of lifecycle costs
Procuring an entire phase of a campus for its design and operations is different than a single building or complex

- Wide Variety of Facility Types
- Many Different Types of Users
- Different Service Level Requirements
- Need to interface with existing campus operations
- Challenge of developing policies and guidelines to ensure seamless integration of:
  - Circulation, open space and infrastructure networks
  - Architectural, engineering and landscape design character

Campus wide workshops with campus stakeholders helped develop priorities

- Keep it compact
- Provide amenities
- Promote mixed use opportunities
- Improve open space network
- Create “front door” to campus
- Explore opportunities with local governments
- Research requires reliable infrastructure
The refinement of the initial program was designed with three goals:

- **Flexible Spaces**: Space that can be employed for different uses concurrently.
- **Adaptable Spaces**: Space that can be easily and inexpensively converted to new, as yet unknown, future uses.
- **Mixed Uses**: Space that encourage scholars to live where they learn and learn where they live, 24 hours a day.

The starting point was determining the space needed for each use in 2020.

The campus has determined space needs for each use in 2020 using Assigned Square Feet (ASF) as the measurement metric.

Each developer team is being asked to propose innovative and cost effective ways to maximize our space utilization in light of our mission and goals.
The role of “Area Data Sheets” (ADS)

Area Data Sheets (ADS) contain the design and operations and maintenance performance requirements for that area type

The ADS specifies the performance level for critical areas of each area:

• Daylight
• Acoustics
• Lighting
• Temperature

... and many others

Looking ahead

The 2020 Project is just one phase and will have to integrate into the future campus
The 2020 Project uses a hybrid approach to maintenance of major building systems

- The Campus will be responsible for a portion of the maintenance of the entire campus, including 2020 Project facilities. Includes custodial, grounds keeping and existing dining.
  - This will result in a 50% increase in represented positions on the Merced campus
- Developer responsible for maintaining major building systems of buildings it designs and builds. This will have no impact on current represented employees.

Labor protections and Prevailing Wage built into the Project Agreement

- Contracts require payment of prevailing wage
- Full compliance with skilled workforce provisions of Section 22164 of the Calif. Public Contract Code, as amended by SB 785
- Contract incorporates specific goals to advance small business participation in the Project

Some services will be retained by the University

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

Services not provided by the developer:

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

• Make sure the organization has the institutional fortitude, belief and faith to see the process through
  – Not fit for the faint of heart
  – It should not be considered ‘free money’

• Allow enough duration in the project plan to develop an agreed-upon approval process

• Baselining: What to do and when to do it

• Clarify the overarching design principles and objectives early; then careful translation into performance requirements

• Economies of scale: this method is best suited to larger projects

http://2020project.ucmerced.edu
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The Ohio State University Comprehensive Energy Management Public Private Partnership

Outline of Discussion

I. Introduction
   I. Rationale for Public-Private Partnerships
   II. Ideal Partner Characteristics

II. The Ohio State University
   I. Background
   II. Current Status of the Ohio State University Process

III. University of Oklahoma
I. Introduction

Rationale for Public-Private Partnerships

| Economic       | • Upfront proceeds could be used to invest in the core academic mission  
|                | • Defray future capital expenditures  
|                | • Proceeds from partnership could be used to defease debt and free up balance sheet capacity to invest in other growth areas |

| Operational    | • Reliability – create well defined operating standards to ensure the University’s service needs are met, especially in critical areas such as infrastructure and research facilities  
|                | • Efficiency – leverage the concessionaire’s expertise and resources  
|                | • Accountability – ensure that redundancy, availability, and reliability standards are a contractual obligation |

| Sustainability | • Support sustainability through renewable projects, increased energy efficiency, and conservation  
|                | • Potential opportunity to leverage the concessionaire’s renewable power expertise to improve the University’s environmental footprint |
Ideal Partner Characteristics

- Ability to manage a complex system with multiple stakeholders
- Capability to implement ECMs to achieve University’s sustainability goals
- Reliability and customer service
- Safety and security

- Track record of managing discreet infrastructure businesses
  - Experienced, dedicated personnel
  - Potential to manage dynamic multi-party consortium
  - Willingness to take on long-term partnership

- Ability to fund the up-front capital investment
  - Capability to arrange necessary financing
  - Ability to finance ongoing capital investments
  - Ability to create and to maintain a sustainable and credit-worthy entity long-term
### Background
- Land Grant Institution, owning over 16,000 acres utilized by the Columbus campus and five regional campuses
- Over 35,000 employees; one of the largest employers in the State
- Enrolls over 64,000 students for all 6 campuses – over 56,000 for the Columbus Campus
- Academic Programs: 170 undergraduate majors, 143 masters programs, 106 doctoral programs; over 12,000 courses
- Academic Structure: 14 colleges, 11 schools, the Graduate School, and the Agricultural Technical Institute
- One of the largest alumni networks with over 465,000 alumni living around the world

### Energy Management
- **Vision**: Apply a comprehensive approach to University energy management
  - Determine feasibility a private partner’s management of University utility assets would support efforts to achieve sustainability and conservation goals
  - Enhance University’s ability to support core academic mission: teaching, learning and research
- **Project Scope**:
  - Lease current energy infrastructure to private partner
  - Partner responsible for funding and meeting operating and capital costs, including Energy Conservation Measures (ECM) campus-wide
  - Future capital improvements would include a combination of renovation and repair projects, conservation improvements and capacity expansion (distribution and generation)
  - Partner would use its industry expertise and Ohio State’s purchasing power to get the best deal on purchasing energy supply over the long-term
  - Affinity: Explore opportunities with the Partner (i) to fund scholarships and internships, as well as (ii) to fund research and collaboration with faculty and students

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### Current Status of the Ohio State University Process

**The Ohio State University is in the second phase of a three phase process**

**Request for Qualification Stage ("RFQ")**
- RFQ document describing the opportunity at a high-level was distributed to potential parties in February
- Received 44 RFQ responses in late April
- 40 parties were selected to move to the RFI phase

**Request for Indication Stage ("RFI")**
- RFI Phase kicked off in October with indicative bids due mid-December
- The following information was provided to potential bidders
  - Confidential Information Memorandum
  - Financial Model
  - Concession Agreement Outline
  - Technical Report
  - Draft performance standards
  - Bid instruction letter
- Expected to notify bidders of entry into final round in early 2016
- Due diligence
  - Management presentations
  - Site visits
  - Review of final, committed technical, and financial proposals

**Request for Proposal Stage ("RFP")**
- Select Preferred Proposer
- Finalize documentation
- Financial close

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Three stage process facilitates an organized transaction which maximizes competitive tension and price
Corix was selected by the University of Oklahoma to purchase a 50-year concession to invest in, design, build, operate and maintain six utility systems serving 30,000 students at its campus in Norman, Oklahoma.

The initial acquisition price was $118 million and the total 50-year capital investment is estimated at over $600 million.

$45 million of proceeds were used to pay off bonds on the utility plants, $43 million went to capital projects, and $30 million was set aside to cushion against the effects of upcoming budget cuts.

This multi-utility operation includes water and sewer systems, a central heat and power plant, district energy system, chilled water production and distribution system, and electrical and natural gas distribution systems.

The concession agreement is structured to mirror regulated utilities in Oklahoma using typical cost-of-service rate-setting principles.

The University appointed an employee to regulate the rates that Corix could charge.

The benefits to the University included monetization of non-core utility assets and reallocation of the funds to the core education and research missions.

The University’s incumbent employees were hired by Corix as part of the transition.
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Opportunities and Challenges of Public-Private Partnership Projects
Realities of Public-Private Partnership Projects

Internal and External Environment

Financial Considerations

Project Standards

Contributions to Project Success

Other Considerations
CSU FACILITIES MANAGEMENT INSTITUTE
Opportunities and Challenges of Public-Private Partnership Projects
Realities of Public-Private Partnership Projects

Internal and External Environment
- Campus expectations (risks, rewards, scope, cost, schedule, sticker shock associated with total cost of ownership)
- Communication with campus and external constituencies (perceptions; culture change)
- Clear link to university mission
- Champion for the project; impact from changes in leadership

Financial Considerations
- Higher cost of private capital (no “free money”)
- Understand what the university can afford (e.g., leaseback)
- Off-credit considerations
- Limitations which may affect use of property ( defeasance, private use restrictions)
- Continual assessment of viability of proposed uses
- Possessory use taxes
- Prevailing wage

Project Standards
- Total cost of ownership (capital renewal needs)
- Development types/standards
- Value of developer expertise
- Additional standards (energy)

Contributions to Project Success
- Early investigation to help shape type of public-private partnership and scope
- Clear and consistent scope
- Assemble right university team for project development (legal counsel; consultants; dedicated university person)
- Select the right partner
- Build trust with developer

Other Considerations
- Realities of project schedule (front end/planning phase)
- Limited control over development
- “Off-ramps” in deal structure to manage risk (dispute resolution process)