



#### **Who Should Read**

---

Chief Business Officers  
Senior Facilities Officers

# **Navigating Public-Private Partnerships**

Ten Imperatives for Evaluating, Planning, and Implementing P3s

Strategic Advisory Services

#### **Three Ways to Use this Resource**

- Learn how to better navigate the process of pursuing P3s
- Assess the viability of P3 arrangements at your institution
- Explore case studies from ten institutions that have implemented P3s

# Project Contributors

## Project Director

Molly Bell, MPP

## Contributing Consultants

Nandi Carson

Fadoua Nabih

Brigid Crowley

Gary Guadagnolo

Jon Barnhart

Michael Fischer

Paul-Anne Robb

## Executive Director

Ann Forman Lippens

### Legal Caveat

EAB Global, Inc. ("EAB") has made efforts to verify the accuracy of the information it provides to partners. This report relies on data obtained from many sources, however, and EAB cannot guarantee the accuracy of the information provided or any analysis based thereon. In addition, neither EAB nor any of its affiliates (each, an "EAB Organization") is in the business of giving legal, accounting, or other professional advice, and its reports should not be construed as professional advice. In particular, partners should not rely on any legal commentary in this report as a basis for action, or assume that any tactics described herein would be permitted by applicable law or appropriate for a given partner's situation. Partners are advised to consult with appropriate professionals concerning legal, tax, or accounting issues, before implementing any of these tactics. No EAB Organization or any of its respective officers, directors, employees, or agents shall be liable for any claims, liabilities, or expenses relating to (a) any errors or omissions in this report, whether caused by any EAB Organization, or any of their respective employees or agents, or sources or other third parties, (b) any recommendation by any EAB Organization, or (c) failure of partner and its employees and agents to abide by the terms set forth herein.

EAB is a registered trademark of EAB Global, Inc. in the United States and other countries. Partners are not permitted to use these trademarks, or any other trademark, product name, service name, trade name, and logo of any EAB Organization without prior written consent of EAB. Other trademarks, product names, service names, trade names, and logos used within these pages are the property of their respective holders. Use of other company trademarks, product names, service names, trade names, and logos or images of the same does not necessarily constitute (a) an endorsement by such company of an EAB Organization and its products and services, or (b) an endorsement of the company or its products or services by an EAB Organization. No EAB Organization is affiliated with any such company.

### IMPORTANT: Please read the following.

EAB has prepared this report for the exclusive use of its partners. Each partner acknowledges and agrees that this report and the information contained herein (collectively, the "Report") are confidential and proprietary to EAB. By accepting delivery of this Report, each partner agrees to abide by the terms as stated herein, including the following:

1. All right, title, and interest in and to this Report is owned by an EAB Organization. Except as stated herein, no right, license, permission, or interest of any kind in this Report is intended to be given, transferred to, or acquired by a partner. Each partner is authorized to use this Report only to the extent expressly authorized herein.
2. Each partner shall not sell, license, republish, distribute, or post online or otherwise this Report, in part or in whole. Each partner shall not disseminate or permit the use of, and shall take reasonable precautions to prevent such dissemination or use of, this Report by (a) any of its employees and agents (except as stated below), or (b) any third party.
3. Each partner may make this Report available solely to those of its employees and agents who (a) are registered for the workshop or program of which this Report is a part, (b) require access to this Report in order to learn from the information described herein, and (c) agree not to disclose this Report to other employees or agents or any third party. Each partner shall use, and shall ensure that its employees and agents use, this Report for its internal use only. Each partner may make a limited number of copies, solely as adequate for use by its employees and agents in accordance with the terms herein.
4. Each partner shall not remove from this Report any confidential markings, copyright notices, and/or other similar indicia herein.
5. Each partner is responsible for any breach of its obligations as stated herein by any of its employees or agents.
6. If a partner is unwilling to abide by any of the foregoing obligations, then such partner shall promptly return this Report and all copies thereof to EAB.

# Table of Contents

---

Executive Summary.. . . . .	4
Public-Private Partnerships in Higher Education. . . . .	5
Section 1: Ten Imperatives for Evaluating, Planning, and Implementing a P3 . . . . .	13
Imperative 1: Develop a Clear Project Vision. . . . .	15
Imperative 2: Assess the Viability of a P3. . . . .	16
Imperative 3: Compare Project Delivery Options. . . . .	17
Imperative 4: Build Institutional Capacity and Governance. . . . .	19
Imperative 5: Develop a Program of Requirements. . . . .	20
Imperative 6: Identify the Desired Deal Structure. . . . .	21
Imperative 7: Select the Right Partner. . . . .	23
Imperative 8: Negotiate the Agreement. . . . .	25
Imperative 9: Monitor Project Performance. . . . .	26
Imperative 10: Win Stakeholder Support . . . . .	27
P3 Viability Screening Worksheet. . . . .	29
Section 2: Case Studies of Public-Private Partnerships in Higher Education . . . . .	34
Louisiana State University. . . . .	35
University of Tennessee, Knoxville . . . . .	37
Howard University. . . . .	39
University of Nevada, Reno. . . . .	41
The Ohio State University . . . . .	43
University of California, Merced. . . . .	44
The College of New Jersey . . . . .	46
Drexel University. . . . .	48
The University of Kansas . . . . .	50
University of Kentucky. . . . .	52

# Executive Summary

---

## Funding and Infrastructure Challenges Driving Higher Education Interest in P3s

As higher education faces significant funding and maintenance challenges, institutions are increasingly leveraging public-private partnerships (P3s) to achieve their infrastructure goals. P3s refer to a variety of contracting arrangements between a public entity or non-profit and a private sector entity to finance, construct, renovate, manage, operate and/or maintain infrastructure. Effective P3s can provide numerous benefits, such as expedited project delivery, access to private sector financing and expertise, and facility lifecycle maintenance.

## Shifting Perspective of Value Altering the P3 Landscape in Higher Education

Historically, higher education leaders viewed P3s primarily as a means to secure additional funds for major capital projects. However, leaders increasingly view these arrangements as risk-mitigation tools, which has altered the landscape of P3s across higher education. Once limited to capital-constrained public institutions, a wide variety of institutions (public and private, resource-limited and resource-rich) now use P3s to transfer the long-term risks of ownership, management, and maintenance, as well as to reap the benefits of private sector expertise. Furthermore, while P3s initially gained traction to develop student housing or other revenue-generating auxiliaries, institutions now leverage P3s to develop mixed-use facilities, and increasingly incorporate non-auxiliary elements (e.g., academic space infrastructure) into large-scale deals to capture economies of scale.

## Lack of Adequate Evaluation, Planning, and Management of a P3 Has Major Consequences

Though the potential benefits of P3s are attractive, moving too quickly on a P3 deal can lead to major financial consequences. In many cases, problems arise when institutions initiate deals without sufficiently evaluating the need and feasibility of a P3. In other instances, institutions fail to secure buy-in from campus leaders, build adequate organizational expertise, or establish necessary governance processes before embarking on a P3.

## Guidance for Navigating Public-Private Partnerships

To help leaders navigate public-private partnerships, this publication offers high-level guidance for successfully implementing a P3. The first section details ten imperatives for executing a P3 organized into three broad categories: evaluation, planning, and implementation. The second and third sections provide ten detailed case studies of institutions that have successfully leveraged P3s to achieve infrastructure goals.

### Section 1

*Ten Imperatives for Evaluating, Planning, and Implementing a Public-Private Partnership*



#### Evaluation

Develop a clear project vision, assess the viability of a P3, and compare project delivery options



#### Planning

Build institutional capacity, establish a program of requirements, and identify the desired deal structure



#### Implementation

Select the right partner, negotiate the agreement, and monitor project performance

### Section 2

*Case Studies of Public-Private Partnerships in Higher Education*

- Louisiana State University
- University of Tennessee, Knoxville
- Howard University
- University of Nevada, Reno
- The Ohio State University
- University of California, Merced
- The College of New Jersey
- Drexel University
- University of Kansas
- University of Kentucky

Source: EAB interviews and analysis.



# **Public-Private Partnerships in Higher Education**

---

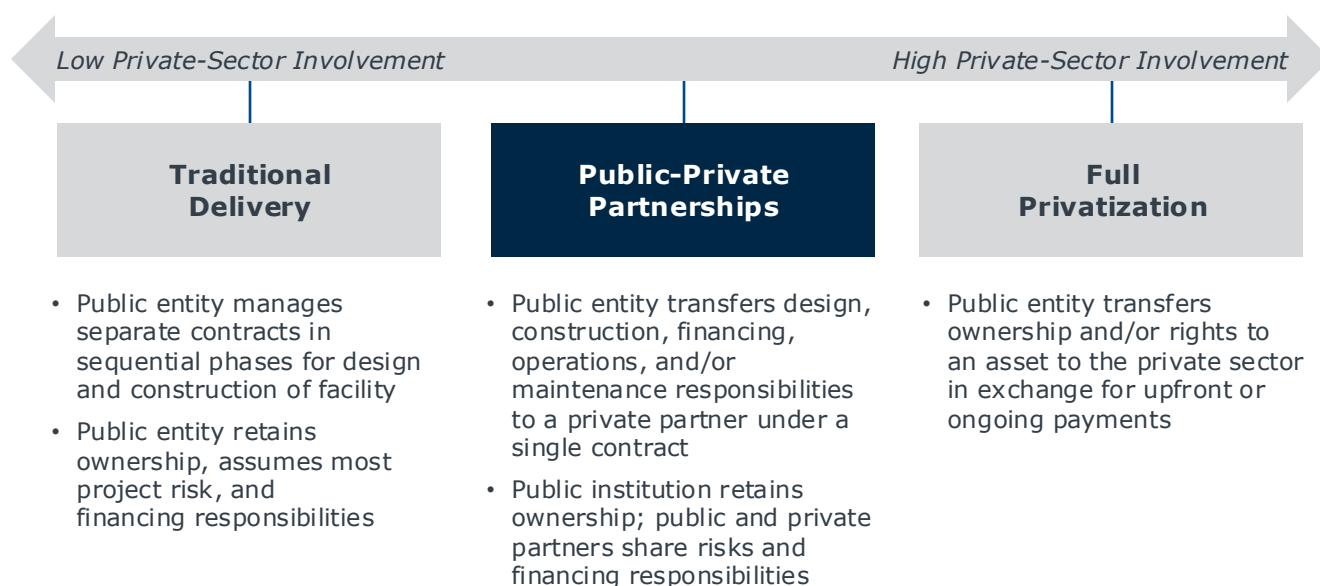
INTRODUCTION

# What Is a Public-Private Partnership?

## P3s Represent Middle Ground Between Traditional Delivery and Full Privatization

In recent decades, declining government funding for public infrastructure in the United States and Canada has left many institutions struggling to meet growing infrastructure and service delivery needs. In light of this funding gap, many institutions seeking to build, modernize, or expand facilities have turned to public-private partnerships (P3s). While the definition of a P3 has evolved over time and varies by industry, the term broadly refers to a variety of contracting arrangements between a public entity or non-profit and a private sector entity to finance, construct, renovate, manage, operate, and/or maintain infrastructure.

### Spectrum of Private-Sector Involvement in Public Sector Infrastructure Delivery



What makes P3s increasingly compelling for higher education is that they offer a middle ground between traditional project delivery methods and full privatization. Historically, higher education institutions used public funds to contract with private companies for the design and construction of new facilities, retaining significant control but assuming most project risk. On the other end of the spectrum, full privatization entails transferring all project risks, ownership, and control to a private sector company. By comparison, P3s offer a middle ground where the institution retains ownership and substantial control of a facility but transfers responsibilities of design, building, financing, operating, and/or maintenance to a private partner under a single contract.

# P3s in Higher Education

## Dispelling Common Myths

While specific P3 arrangements vary considerably, nearly all P3s in higher education share the following characteristics:

- Clear agreement of shared objectives between public and private sectors
- Medium- to long-term contract, typically between 25 and 50 years
- Transfer of major project risks from public to the private sector
- Single point of responsibility, meaning a single entity is accountable for design, construction, operation, and/or maintenance of facility

However, confusing terminology and the ever-growing variety of P3 structures have contributed to many misconceptions about these arrangements. The most common P3 myths and their realities in higher education are listed below.

### Common P3 Misconceptions

### Reality






- |   |   |   |
|---|---|---|
| <b>1</b> P3s are only used to develop student housing                     | → | To date, the majority of P3s in higher education involve student housing as the primary focus and may include complementary auxiliary assets such as parking, dining, retail. However, some P3s have begun to incorporate other facilities such as academic space (e.g., labs, classrooms), student unions, athletic facilities, and physical plant improvements. |
| <b>2</b> P3s are a form of privatization                                  | → | Unlike full privatization that involves the transfer of ownership of an asset or service to the private sector, P3 projects are publicly owned, publicly controlled, and publicly accountable.  |
| <b>3</b> P3s result in a loss of institutional control                    | → | While the level of control retained by an institution varies across P3 structures, P3s always involve shared governance and oversight between public and private partners.  |
| <b>4</b> All P3s involve private financing                                | → | While P3s often involve capital investments by a private sector company, some P3s have been entirely funded with public, tax-exempt dollars.  |
| <b>5</b> All P3 deals have the same structure                             | → | P3s take on a wide variety of structures that allow for different levels of control, risk, and responsibility allocation depending on unique project goals. No two agreements are identical.  |
| <b>6</b> P3s are only for public institutions                             | → | Private higher education institutions enter similar partnerships (still often referred to as a 'P3') with private companies as a way to transfer infrastructure project risks and secure alternative financing.   |
| <b>7</b> P3s can be leveraged to solve all campus infrastructure problems | → | Not every project is suitable for a P3. P3s represent just one of many possible tools to achieve campus infrastructure goals, and leaders must examine each project's P3 suitability on an individual basis.  |

Source: [National Council for Public-Private Partnerships](#); EAB interviews and analysis.

# More Than a Funding Mechanism

## Institutions Increasingly Leverage P3s to Transfer Long-Term Risks

Historically, higher education leaders viewed P3s primarily as a means to secure additional funds for major capital projects. However, institutions increasingly view P3s as a risk-mitigating mechanism. In fact, even institutions with sufficient funding options to execute capital projects independently still leverage P3s to transfer the long-term risks of ownership, management, and maintenance, as well as to reap the benefits of private-sector expertise. This shift in perspective has led many leaders to revisit the definition of value for P3s. In fact, it's becoming more common for institutions to enter net-negative financial arrangements in exchange for risk transfer. For instance, one institution that otherwise could have issued debt for new student housing and related auxiliaries instead opted for a P3 to transfer the responsibilities of long-term operation and maintenance to the private sector. Other emerging P3 trends in higher education are explored below.

Historical P3s	P3 Trends
 <i>Funding</i> Primarily viewed as a means to secure alternative capital for major infrastructure projects	P3s valued for the opportunity to transfer long-term operations, management, and maintenance risk and leverage private sector innovation
 <i>Industry Interest</i> Mostly sought out by capital-constrained, public institutions	Many types of institutions (public and private, resource-rich and capital-constrained) leveraging P3s to achieve infrastructure goals
 <i>Project Type</i> Mainly limited to student housing and other revenue-generating auxiliaries	Institutions seek P3s for mixed-use facilities, and increasingly incorporate non-auxiliary elements (e.g., academic spaces, infrastructure) into large-scale contracts to capture economies of scale
 <i>Revenue Generation</i> Most projects are self-supporting and/or create alternative revenue streams	Institutions willing to subsidize net-negative P3 projects to capture the benefits of long-term risk transfer
 <i>Project Focus</i> Primarily leveraged to construct new buildings	Some institutions pursuing creative strategies to extract value from existing assets and create additional revenue streams (e.g., long-term lease concession of an auxiliary function)

Source: EAB interviews and analysis.



# Higher Education Seeking Alternatives

## P3 Benefits Help Address Critical Funding and Infrastructure Challenges

Beyond alternative financing and long-term risk transfer, P3s offer many potential benefits that help institutions address critical funding and infrastructure challenges in higher education. The table below explores specific challenges in greater detail, as well as potential benefits that address these challenges.

### How P3s Help Higher Education Institutions Address Specific Challenges

	Higher Ed Challenges	Potential P3 Benefits
<b>Budget Constraints</b>	<b>Declining Revenue Streams</b> Declining tuition revenue and state support	<b>Monetize Assets</b> Extract value from current assets to leverage toward other priorities
	<b>Limited Debt Capacity</b> Decreasing ability to issue additional debt to fund capital projects	<b>Access Private Sector Capital</b> Fund capital projects with private sector capital while preserving debt capacity
	<b>Rising Operating Costs</b> Pressure to increase operational efficiency and reduce O&M <sup>1</sup> costs	<b>Achieve Operational Efficiencies and Cost Savings</b> Transfer O&M responsibilities to private sector to improve performance and realize savings
<b>Aging Infrastructure</b>	<b>Growing Maintenance Needs</b> Years of reactive maintenance contributing to increasing deferred maintenance backlogs	<b>Proactively Establish Maintenance Standards</b> Construct new facilities with concrete maintenance standards and 'wrap-up' conditions
<b>Accelerating Pace of Campus Transformation</b>	<b>Growing Pressure to Modernize</b> Demands for new campus infrastructure and amenities to attract students	<b>Accelerate Project Delivery</b> Avoid legislative and regulatory obstacles that slow project delivery
	<b>Lack of Infrastructure Expertise</b> Lack of infrastructure design, development, and technological expertise	<b>Tap Private Expertise and Innovation</b> Gain access to private sector expertise and maintain focus on main educational mission
	<b>Capital Project Risks</b> Potential for cost overruns, construction delays, and long-term asset maintenance	<b>Off-Load Major Project Risks to Partner</b> Transfer predevelopment costs, design, construction, operation, and/or maintenance risk to private sector

1) Operations and maintenance.

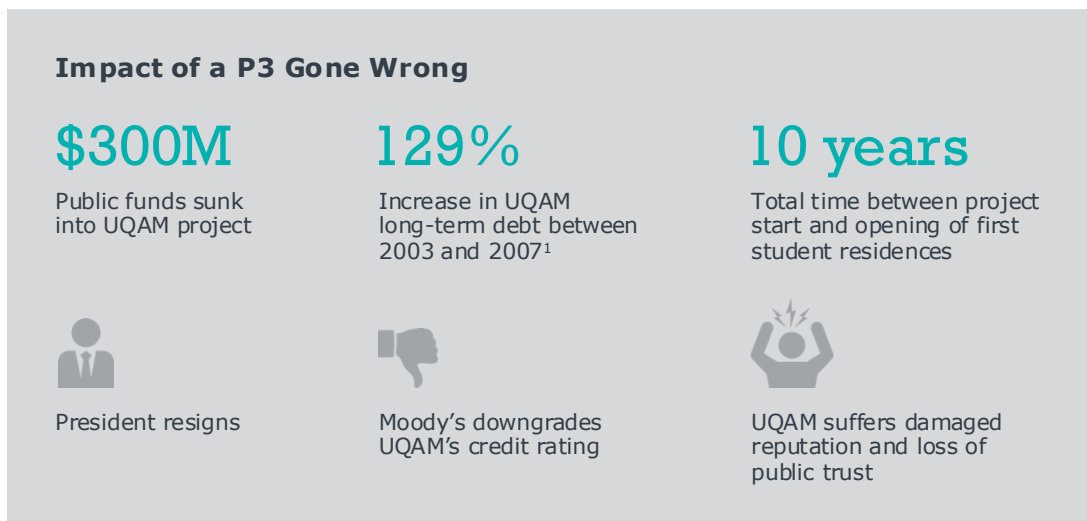
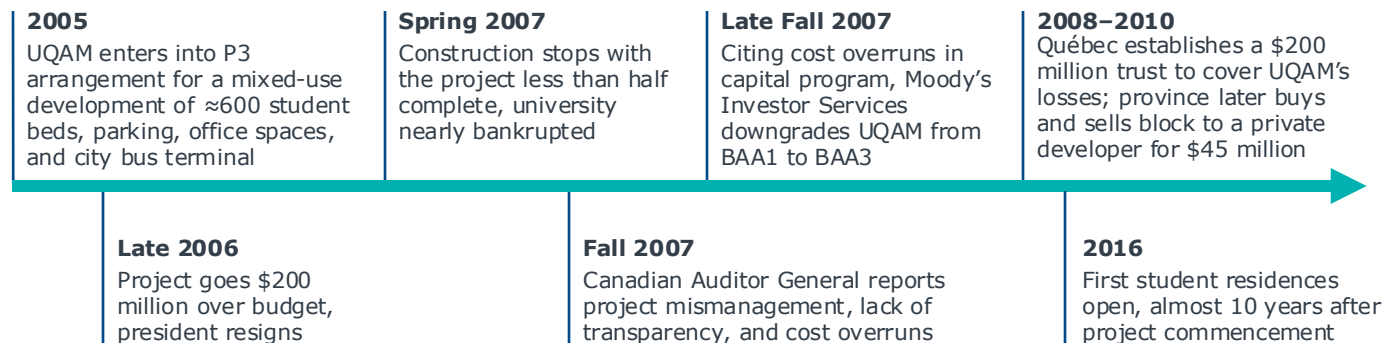
Source: EAB interviews and analysis.

# Success Far from Guaranteed

## Failed Higher Education P3s Have Serious Consequences

Though the potential benefits of P3s are attractive, failure to thoroughly evaluate, plan, and manage a P3 arrangement can lead to financial and political consequences. A notable example is the University of Quebec at Montreal (UQAM), where a poorly planned and managed P3 project nearly bankrupted the institution and led to the president's resignation. Other institutions have experienced poor P3 project outcomes due to vague contract provisions that lack adequate risk-sharing structures or performance incentives.

### P3 Project Mismanagement and Cost Overruns at UQAM Has Major Consequences



1) Debt increase due to both P3 project missteps and separate but concurrent capital project.

Source: Gaior, "Apartments Overpriced in the Îlot Voyageur," Le Journal de Montréal, March 9, 2016; Séguin, "Montreal University on the Edge of Bankruptcy," The Globe and Mail, November 2, 2007; EAB interviews and analysis.

# Avoiding Common Pitfalls

## Highly Complex Deals Require Thorough Evaluation, Planning, and Management

UQAM is one of many institutions that have turned to P3s to achieve infrastructure goals only to face challenges due to inadequate P3 evaluation, planning, and management. Common P3 challenges and pitfalls are listed below. In many cases, problems arise when institutions initiate deals without sufficiently evaluating the need and feasibility of a P3. In other instances, institutions fail to secure stakeholder buy-in, build organizational expertise, or establish necessary governance processes before initiating a P3 deal.

### Common P3 Challenges and Pitfalls



#### Underdeveloped Contracts

Failure to clearly define incentives, KPIs,<sup>1</sup> and performance standards in P3 contract may leave too much room for interpretation and result in dissatisfaction with project outcomes



#### Unpredictability of Future Needs and Conditions

Long-term nature of P3 arrangements depend on institutional ability to predict future needs, conditions, and risk



#### Stakeholder Opposition

Lack of early and frequent communication about P3 project objectives and benefits may result in pushback from legislators, faculty, staff, and students



#### Insufficient Organizational Expertise and Capacity

Difficult financial, legal, and technical issues require expertise in P3 planning, feasibility evaluation, procurement, contract negotiation, and performance monitoring



#### Lack of Governance and Approval Processes

Failure to identify decision-makers and establish clear approval processes results in project delays or conflicts



#### Higher P3 Costs May Result in Lower Value for Money

P3 arrangements may not attain better value for money compared to other project delivery methods due to higher financing, transaction, and/or risk transfer costs

1) Key Performance Indicators.

# Executive Framework

To help leaders better navigate public-private partnerships, this publication offers high-level guidance for successfully planning and executing a P3. The first section details ten imperatives to carry out a P3, organized into three broad categories: evaluation, planning, and implementation. The second section provides six detailed case studies of institutions that have successfully utilized P3s to achieve their infrastructure and service delivery goals.

As the bulk of senior leaders' interest lies in leveraging P3s for new infrastructure, this publication will focus primarily on evaluating and planning P3 deals for new facilities. For an example of a P3 used to monetize existing assets, please see The Ohio State University case study on page 39.

## Section I: Ten Imperatives for Evaluating, Planning, and Implementing a P3



## Section II: Case Studies of Public-Private Partnerships in Higher Education

- |                                      |                                    |
|--------------------------------------|------------------------------------|
| ▶ Louisiana State University         | ▶ University of California, Merced |
| ▶ University of Tennessee, Knoxville | ▶ The College of New Jersey        |
| ▶ Howard University                  | ▶ Drexel University                |
| ▶ University of Nevada, Reno         | ▶ University of Kansas             |
| ▶ The Ohio State University          | ▶ University of Kentucky           |

Source: EAB interviews and analysis.



# **Ten Imperatives for Evaluating, Planning, and Implementing a P3**

---

SECTION

1

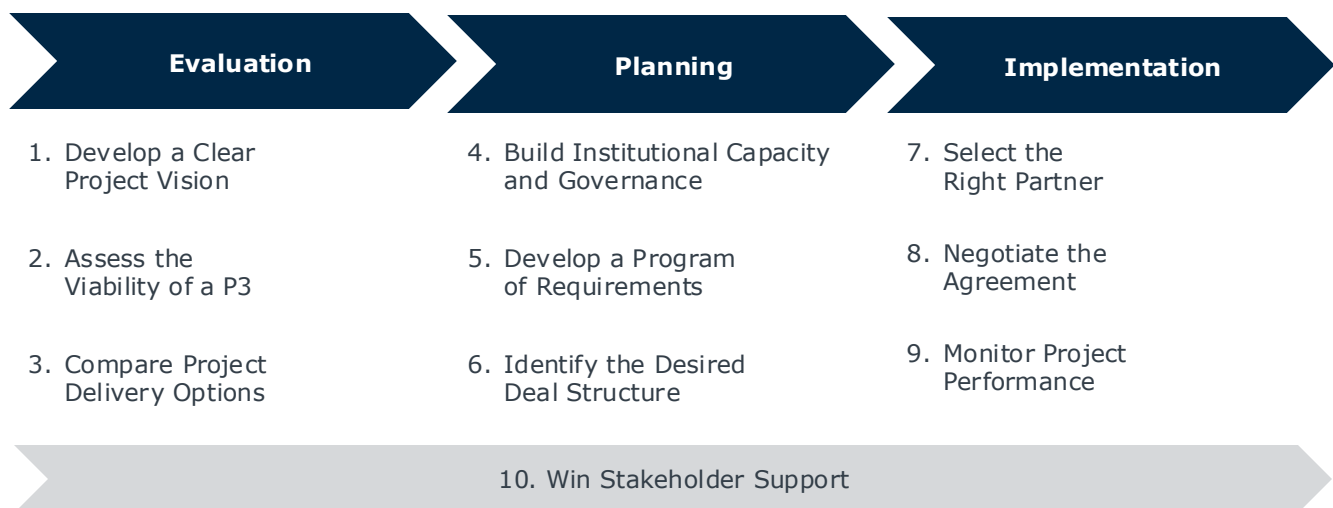
# Evaluating, Planning, and Implementing a P3

---

This section details ten imperatives to help senior leaders evaluate, plan, and implement a P3 to build new campus facilities and infrastructure. The first three imperatives focus on evaluating the viability of a P3 and selecting the delivery method that best aligns with project objectives. The next three imperatives focus on establishing a team and governance processes that optimize two crucial aspects of a P3 deal: risk allocation and financing. The following three imperatives explore how to successfully implement a P3, from choosing the right private partner, designing a performance-based contract, and monitoring the project for the duration of the agreement.

The final imperative, winning stakeholder support, should occur throughout the entire process to ensure smooth execution.

## Ten Imperatives for Evaluating, Planning, and Implementing a Public-Private Partnership



# 1. Develop a Clear Project Vision

## Leaders Assess Campus Needs to Establish Project Objectives and Requirements

The first step is for senior leaders to develop a clear vision for the infrastructure project. By articulating the goals and objectives of the project, leaders can select the most appropriate project delivery method. The table below outlines three steps to identifying infrastructure project opportunities and strategic objectives, along with examples and commonly used tools and exercises.

### Three Steps to Identify Infrastructure Opportunities and Goals

Step	Description	Representative Examples	Tools and Exercises
<b>1. Evaluate Current and Future Campus Needs</b>	Leaders identify current and future infrastructure needs by reviewing or updating the master plan	<ul style="list-style-type: none"> <li>Current student housing insufficient to accommodate long-term enrollment growth</li> <li>Utility plant unable to meet the needs of expanding campus</li> <li>Outdated research facility unable to meet increased demand for science classes and labs</li> </ul>	<ul style="list-style-type: none"> <li>Strategic plan and campus master plan</li> <li>Strategic value asset analysis</li> <li>Financial forecasts</li> <li>Enrollment projections</li> <li>External consultant analyses</li> </ul>
<b>2. Establish Project Objectives and Requirements</b>	Based on needs assessment, leaders define project objectives and requirements by reviewing precedent infrastructure projects and interviewing campus stakeholders	<ul style="list-style-type: none"> <li>Construct new science facility equipped with state-of-the-art technology and flexible research labs</li> <li>Develop mixed-used facilities with modern amenities that combine housing, parking, and student union/retail</li> <li>Avoid long-term deferred maintenance obligations of new facilities</li> <li>Expedite project delivery timeline</li> </ul>	<ul style="list-style-type: none"> <li>Feasibility studies</li> <li>Market demand studies</li> <li>Review of past institution and peer infrastructure projects</li> <li>Peer campus site visits</li> <li>Stakeholder interviews and focus groups</li> <li>External consultant analyses</li> </ul>
<b>3. Develop Preliminary Project Concept and Scope</b>	Leaders begin to develop the preliminary project concept and program of requirements through more in-depth analyses	<ul style="list-style-type: none"> <li>Project components, size, and location</li> <li>Preliminary schedule and timeline</li> <li>Desired design, architectural, and technical elements</li> <li>Preliminary cost, financing requirements, and project risks</li> </ul>	<ul style="list-style-type: none"> <li>Committee/working group sessions</li> <li>Project site selection/evaluation</li> <li>Detailed market demand analyses</li> <li>Financial models and analyses</li> <li>Cost studies</li> <li>External consultant analyses</li> </ul>

Source: "To P3 or Not to P3: Understanding the Question," Brailsford & Dunlavey, January 2012; EAB interviews and analysis.

## 2. Assess the Viability of a P3

### Employ High-Level Criteria to Determine Project Suitability as a P3

After defining a clear project vision, the next step is to evaluate whether a P3 is a suitable delivery method. While P3s are compelling, not every project is well-suited to the delivery format. To effectively evaluate the viability of a P3, the table below outlines high-level criteria for leaders to use as a preliminary screen to assess the viability of a P3.

For the full version of the P3 project screening worksheet, please see page 29 of this publication.

#### High-Level P3 Project Screening Criteria

Screening Criteria	Relevant Question
<b>Organizational Capacity</b>	Does the institution possess sufficient internal and external resources to manage all phases of a P3?
<b>Stakeholder Support</b>	Is there sufficient stakeholder support for a P3 project?
<b>Project Size</b>	Is the project's size and scope sufficient to justify P3 costs?
<b>Private Sector Expertise</b>	Are there a sufficient number (i.e., three or more) of viable private sector firms that can deliver and maintain this type of facility to ensure a competitive bid process?
<b>Contract Integration</b>	Is there potential to integrate a number of elements (i.e., design, build, finance, maintain, operate) into a single, long-term contract?
<b>Risk Allocation</b>	Is there potential to allocate risks to the private party most capable of managing those risks by delivering the project as a P3?
<b>Facility/Asset Life</b>	Is the anticipated useful life of the building and/or asset long enough to achieve efficiencies, innovations, and cost certainty?
<b>Project Complexity</b>	Is there the potential to combine the delivery of various project elements (e.g., research facility, student housing, infrastructure upgrades) into one contract?
<b>Quality</b>	Is there potential for higher quality product/service delivery with a P3?
<b>Construction Output and Performance Specifications</b>	What is the availability/accessibility of output specifications for the construction of the facility?
<b>O&amp;M Performance Specifications and KPIs</b>	What is the availability of operations- and maintenance-related performance specifications and indicators?
<b>Lifecycle Costs</b>	Can most of the full lifecycle costs be quantified upfront to facilitate accurate financial projections?
<b>Market Precedent</b>	Have investments with similar requirements and of similar size and scale been delivered through a P3 model at other institutions?
<b>Innovation</b>	Is there potential to achieve cost/schedule savings by delivering the project as a P3?
<b>Efficiency</b>	Is there potential to derive benefits from technological or other types of innovation through private sector delivery of the project?
<b>Nature of Development Site</b>	How much of this investment involves new construction on a previously undeveloped site?
<b>Revenue Generation</b>	Does the planned investment have the ability to generate revenue?

Source: "The Guide to the New Building Canada Fund P3 Screen-Suitability Assessment," PPP Canada, June 2010; "P3 Delivery Options Screening Checklist," FHWA, 2013; EAB interviews and analysis.



### 3. Compare Project Delivery Options

Once leaders have decided a P3 is a viable option, the next step is to evaluate alternative project delivery methods through comprehensive qualitative and quantitative analyses. The table below provides a high-level overview of delivery models. While a wide range of models could be used for any project, leaders should consider peer experiences with similar projects, market conditions, and stakeholder expectations to evaluate between two to five methods.

#### Common Infrastructure Project Delivery Methods<sup>1</sup>

Alternative Methods					
Traditional Method		P3 Methods			
	Design, Bid, Build	Design, Build	Construction Manager at Risk	Design, Build Lease/Leaseback	DBFOM <sup>2</sup> Concession
Brief Description	Institution contracts design and construction components separately; involves design phase, bid phase (when contractor is selected), and construction phase (when project is built by lowest-bid contractor)	Institution enters into a single contract with one entity known as the "design-builder" to provide both architectural/design services and construction	Construction manager at risk (CMR) responsible for delivering project within a defined schedule and price, either a fixed lump sum or a guaranteed maximum price; CMR provides construction input during design phase and becomes general contractor during construction phase	Institution ground-leases land to developer to design and build a new facility; full or partial revenue generated by facility remitted to the developer for set period of time, typically between 25 and 50 years, after which title is passed back to institution	Combines design and construction with performance-based O&M contracting and private financing for a fixed period of time, typically between 25 and 99 years; private partner may collect revenue from project and/or is compensated through a payment for services based on performance specifications
Risk <sup>3</sup>	<b>High</b> Institution retains design, construction, operations, and maintenance risk	<b>High</b> Institution retains design, construction, operations, and maintenance risk	<b>Medium</b> Institution retains risk for design and operations; developer retains cost and schedule risk for construction	<b>Medium-Low</b> Institution retains risk for design, construction, operations, and maintenance; developer retains costs and schedule risk; no payment until delivered	<b>Low</b> Developer retains risk for cost, schedule of design, construction, operations, and maintenance; payment deductions for non-performance
Innovation Potential <sup>3</sup>	<b>Low</b> Developer delivers exactly what institution specifies	<b>Medium</b> Opportunity for innovation and collaboration between design and builder	<b>Medium</b> Opportunity for innovation and collaboration between designer and builder	<b>High</b> Opportunity for innovation and collaboration between designer, builder, and operator	<b>High</b> Opportunity for innovation and collaboration between design, builder, and operator
Financial Impact <sup>3</sup>	<b>High</b> Financing impacts institution balance sheet and bonding capacity	<b>High</b> Financing impacts institution balance sheet and bonding capacity	<b>High</b> Financing impacts institution balance sheet and bonding capacity	<b>Medium-Low</b> Lease structure does not require debt issuance; can be off institution balance sheet	<b>Low</b> Financing can be structured many ways, but creates long-term financial obligation and private partner assumes most financial risk
Typical Use	Institution knows exactly what it wants, has funding capacity, and has resources to oversee all steps	Institution has general vision for project, some funding capacity, ability to oversee all steps, but speed is critical	Institution has general vision for project, some funding capacity, ability to oversee all steps, but wants to transfer cost and schedule risk and expedite delivery timeline	Institution knows generally what it wants, needs alternative financing, and wants to transfer cost and schedule risk	Institution wants to lower lifecycle costs, transfer cost, schedule, construction, and O&M risk; can also provide alternative financing

1) Adapted from Jones Lang LaSalle, Inc.

2) Design-Build-Finance-Operate-Maintain.

3) Each delivery method is evaluated on a four-point scale from Low, Medium-Low, Medium, to High.

Source: Houck et al., "Eight Crucial Factors Universities Should Consider Before Embarking on a Public-Private Partnership," JLL; EAB interviews and analysis.

# Determine the Best Value for Money

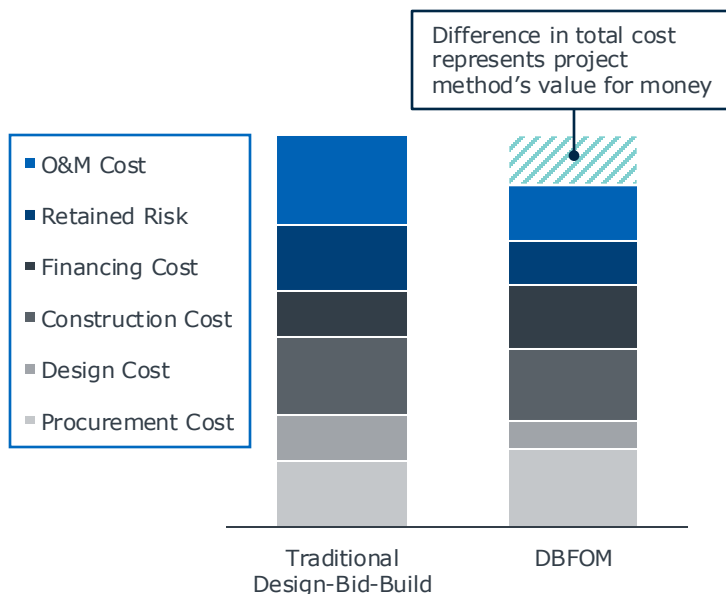
## Use Both Qualitative and Quantitative Analyses to Select Right Delivery Method

After creating a short-list of project delivery options, leaders should conduct a comprehensive business case analysis that compares each methods' potential to achieve project goals. While there are many ways to compare project delivery structures, most analyses contain the three elements below. The most important element is the value for money (VFM) analysis, which leverages both qualitative and quantitative information to project total cost of ownership, resulting in a risk-adjusted financial comparison of delivery options. While the specifics of the VFM analysis vary based on project-specific inputs and the methodology used, the output enables leaders to objectively compare various methods and select the one with greatest value for the institution.

### Elements of Project Delivery Comparison



### Sample Value for Money Analysis



#### Leveraging Consultants for Project Delivery Comparison

The project delivery evaluation process and the value for money analysis can be very complex and time-intensive, requiring input from various subject matter experts. For this reason (and to avoid bias), many institutions engage third parties to conduct delivery method comparisons and value for money analyses.

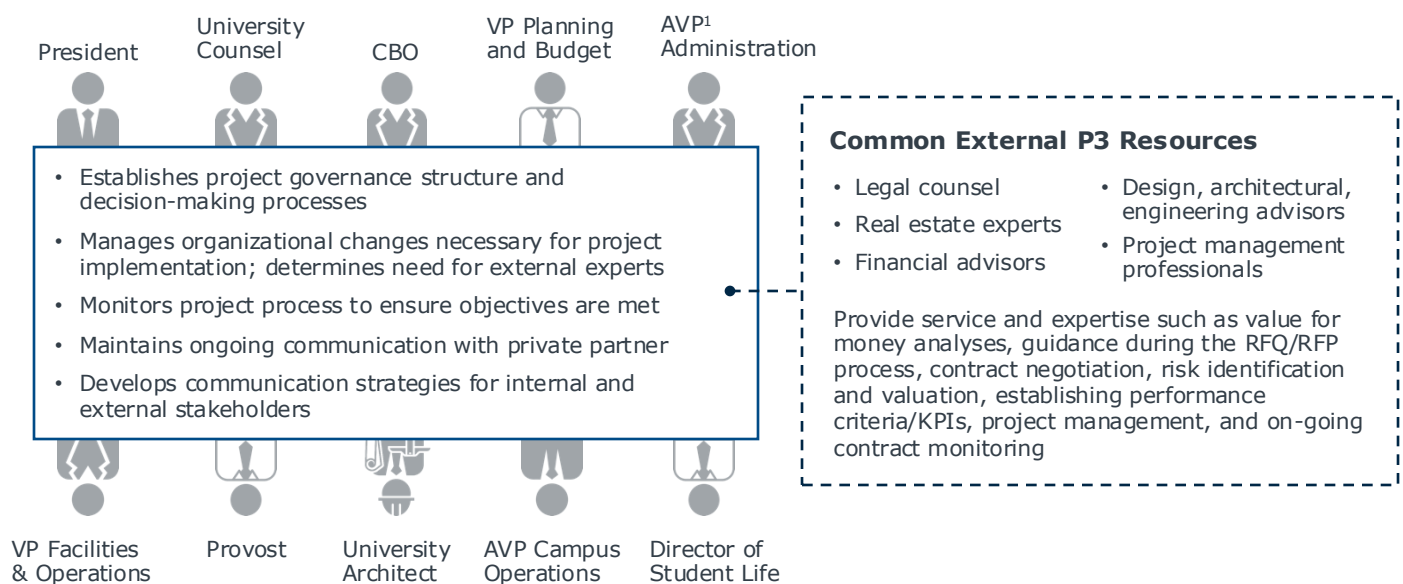
## 4. Build Institutional Capacity and Governance

### Senior Leaders Form Core Project Team and Leverage External Expertise

After an institution decides to pursue a P3, the first step to plan the project is to identify the key stakeholders and establish governance processes. Typically, institutions designate a single senior leader as the project owner or champion, serving as the primary advocate and driver of the project. Additionally, a team of senior leaders (e.g., president, university counsel, chief business officer, facilities leader) may envision and manage the project, while Facilities leaders (e.g., university architect, associate vice presidents) operationalize the P3. Depending on the project, institutions may include other academic or auxiliary leaders or form separate advisory committees to provide input on programmatic or academic aspects of the project.

Beyond managing the project, the team establishes a clear governance structure from the outset. This includes decision-making and approval processes, milestones, timelines, and communication strategies. Once a private partner is selected (see Imperative 7 on page 23), a select number of private partner representatives typically join the team to streamline communication.

#### Example P3 Project Participants



Given the often limited experience of internal staff with P3 deals, many institutions engage third-party consultants to provide expertise. These professionals provide one-time or ongoing services at various stages of the process, offering expertise on elements such as value for money analyses, risk identification and valuation, development of performance criteria, and project procurement. While the value-add of an extensive consultant team varies based on project complexity and internal staff expertise, EAB recommends that institutions at minimum consult legal counsel to assist with technical legal structures and terms.

1) Associate Vice President.

## 5. Develop a Program of Requirements

The next imperative is to establish a program of requirements and performance standards based on project goals. A program of requirements defines the desired quantitative and qualitative characteristics of the facilities and provides a clear roadmap for the private partner to achieve project goals. As P3s become increasingly complex, well-defined requirements and criteria are critical to solicit interest from the private sector and maximize efficiency in the procurement process.

Importantly, P3s require the development of measurable, output-based performance standards. Whereas traditional capital projects focus on inputs such as design and construction methods or materials, P3 contracts include outcome specifications that map to project goals. The institution provides a clear description of performance in each phase of the lifecycle and desired asset condition at the end of the agreement, which enables the private partner to explore innovative solutions to achieve the prescribed performance level.

Some P3 deals also include financial incentives for performance, such as penalties for poor outcomes or late delivery. During the planning stage, the project team should develop concrete performance standards such as space utilization requirements, facilities handback condition, and operating performance levels. Note that the process of establishing concrete, quantitative performance criteria can be very time-intensive and may require significant technical expertise. Experienced institutions recommend reviewing procurement documents and agreements from similar P3 deals to ensure performance standards are realistic.

### Example Program of Requirements for Student Residence Hall

Requirements	Description	Example
<b>General Scope of Services</b>	Types of facilities and infrastructure to be constructed, maintained, and/or operated, proposed location, and baseline project schedule/completion dates	<ul style="list-style-type: none"> <li>• Demolition of existing residence hall</li> <li>• Design, construction, maintenance, and operation of two new student apartments on previous resident hall location</li> <li>• Construction of additional parking, infrastructure, and amenities needed to support facilities</li> </ul>
<b>Facility Characteristics and Needs</b>	Description of facility needs and desired characteristics, including tentative size, types of spaces, amenities, and supporting infrastructure	<ul style="list-style-type: none"> <li>• Style of apartment, number of beds, desired common areas (e.g., recreation space, lounges, study rooms)</li> <li>• Amenities (e.g., leased retail space on ground floor, dining center, coffee shop)</li> <li>• Minimum parking requirements (e.g., number of spaces per bed)</li> <li>• Infrastructure requirements (e.g., standalone HVAC system)</li> </ul>
<b>Design and Construction</b>	Design, construction, and technical guidelines and standards, often detailed in a “basis of design” document	<ul style="list-style-type: none"> <li>• Facility aesthetics, room acoustic performance, interior and exterior amenities, active and passive open space, space utilization, adjacency requirements</li> <li>• Energy standards (e.g., minimum utility system standards and building performance)</li> <li>• Sustainability requirements (e.g., LEED certification)</li> </ul>
<b>Maintenance and Operations</b>	Required maintenance and operation services and minimum performance standards	<ul style="list-style-type: none"> <li>• Custodial, preventive and corrective maintenance, repair/replacement, and landscape services</li> <li>• Required level of staffing, supervision, and management to maintain quality service for students</li> <li>• Facilities handback condition (e.g., minimum FCI<sup>1</sup>)</li> </ul>

1) Facility Condition Index, measured as the amount of deferred maintenance divided by total asset value.

## 6. Identify the Desired Deal Structure: Risk Allocation

### Project Teams Establish Baseline Risk Transfer Requirements

The final planning imperative focuses on the two major aspects of a P3 deal structure that optimize value for money: effective risk allocation and financing. While institutions invite bidders to propose more precise risk transfer and financing provisions during project procurement, institutions should at minimum identify the baseline risk allocation and desired financial structure during the planning stage to ensure proposals fully account for project needs and objectives.

One of the primary benefits of a P3 compared to traditional project delivery is the ability to transfer major risks to a private partner, such as cost overruns, construction delays, and long-term asset maintenance. In general, project risks should be allocated to the party best able to manage them at the lowest cost. The graphic below describes major project risks and provides questions for leaders to consider to optimize risk allocation between the public and private partners.

#### P3 Project Risks



##### Design

Errors, omissions, and design coordination<sup>1</sup> that may have negative impact on construction or future operations



##### Construction

Cost overruns, building material defects, construction delays, planning regulations, structural integrity issues, technical deficiencies, health risks, and worksite accidents



##### Financing

Required funding for project will not be obtained, or will be obtained but at interest rates that prevent the project from achieving expected benefits



##### Operations and Maintenance

Post-construction risks once facility becomes operational, such as defective materials, deferred maintenance, service level and quality, repairs/replacements, and residual value



##### Demand

Possibility of discrepancy between initial expectations and the amount of service actually required or consumed by the facility users (e.g., low student housing occupancy)



##### Availability

Facility will not provide sufficient services due to management issues, failure to meet required quality or asset availability standards, etc.



#### Questions to Optimize Risk Allocation

- Which party is best able to control or manage the occurrence and impact of the risk?
- For a particular risk, which party has a greater incentive to develop risk mitigation strategies?
- Are there innovative opportunities to reduce lifecycle costs by allocating a risk to the private party?
- Which risk allocation would result in the lowest lifecycle costs?
- Which risk allocation incentivizes preventive as opposed to reactive risk management?

1) Risk that the facility is not built according to the design.

## 6. Identify the Desired Deal Structure: Financing

### Weigh Financing Options Against Project Objectives and Institutional Capabilities

Another decision point is determining the desired financing structure. P3 financial structures vary depending on project goals and institutional capabilities, and may include a combination of general obligation bonds, tax-exempt project-based bonds, taxable project-based debt, and developer equity. The table below compares the merits of the two P3 financial structures most prevalent in higher education.

#### Comparing Two Predominant P3 Financing Structures

	Tax-Exempt Debt	Private Equity
<b>Typical Structure</b>	Lease-Leaseback Model	Concession Agreement
<b>Description</b>	<ul style="list-style-type: none"> <li>▶ Institution negotiates long-term ground lease with affiliated non-profit 501(c)(3)</li> <li>▶ 501(c)(3) contracts with private partner to design, build, operate, and/or maintain an asset</li> <li>▶ 501(c)(3) issues tax-exempt debt to finance project</li> <li>▶ Once debt is retired (typically around 25-30 years), facility reverts back to university</li> <li>▶ 501(c)(3) is passive owner of asset during contract; collects all or most revenue generated and makes payments to developer</li> </ul>	<ul style="list-style-type: none"> <li>▶ Institution contracts with private partner to design, finance, construct, maintain, and/or operate asset for specified period</li> <li>▶ Private partner makes equity investment to finance construction and may raise additional funds from capital markets, banks, or other private funding</li> <li>▶ Deal structures deals vary; may involve long-term ground lease (between 25 and 99 years)</li> <li>▶ Private partner may collect revenue generated by asset during contract or institution makes availability payments to partner</li> </ul>
<b>Advantages</b>	<ul style="list-style-type: none"> <li>✓ Lower cost of capital; exempt from property taxes</li> <li>✓ Institution retains higher level of asset control and receives net cash flow</li> <li>✓ Non-recourse debt minimizes balance sheet impact</li> </ul>	<ul style="list-style-type: none"> <li>✓ Lowest impact to university balance sheet and credit capacity</li> <li>✓ University avoids lengthy bond-issuing process; expedites project timeline</li> <li>✓ Private equity at risk provides incentive to maximize innovation and efficiency</li> </ul>
<b>Disadvantages</b>	<ul style="list-style-type: none"> <li>✗ Higher impact on credit rating</li> <li>✗ Higher transaction execution risk</li> <li>✗ More difficult and costly to structure</li> </ul>	<ul style="list-style-type: none"> <li>✗ Higher cost of capital</li> <li>✗ Lower level of institution control over long-term contract</li> <li>✗ Sacrifice of potential revenue opportunity</li> </ul>



#### Questions to Evaluate P3 Financing Structure

- Does the institution require private capital?
- Are the assets revenue-producing?
- What is the impact on credit and debt capacity of various financing alternatives?
- Are there restrictions on various types of funding?
- Is there an opportunity for profit-sharing between the public and private partners?
- What are the financial implications of transferring various risks to the private sector?

Source: Houck et al., "Eight Crucial Factors Universities Should Consider Before Embarking on a Public-Private Partnership," JLL; "Public Private Partnerships for Development of Student Housing," OACUBO, 2010; EAB interviews and analysis.

# 7. Select the Right Partner

## Institutions Leverage Multistep Procurement to Select “Best Value” Proposal

Once an institution plans the desired P3 arrangement, the first step to implement the project is to select the right partner. Unlike traditional low-bid procurement, P3s typically involve a multi-step process for selecting a private partner based on the best value proposal. The first stage involves issuing Request for Qualifications (RFQ) to determine an eligible pool of candidates. Based on an initial review of the RFQs, the institution then invites a short list of candidates (no more than five) to submit a full Request For Proposal (RFP).

The University of Kansas (KU) employed an innovative RFP evaluation process to select the best-value proposal for their large-scale P3 project. After setting a \$300 million availability cap, KU leaders established project requirements for science facilities, housing, and parking, and sorted them into three tiers (the first representing minimum requirements). After ensuring that proposals met the minimum requirements, KU leaders ranked them based on their ability to provide tier 1 and 2 elements. Finally, KU awarded the project to the team whose proposal provided the best value.

### Examples from KU’s Integrated Science Building and Infrastructure Scope Ladder

<b>Minimum Scope</b> Basic project requirements and specifications, including: <ul style="list-style-type: none"><li>• Classrooms, teaching labs, research and administrative office space</li><li>• Student union and service space</li><li>• Building HVAC</li><li>• Power plant</li><li>• Traffic and pedestrian paths</li><li>• KU design/energy standards</li><li>• Maintenance and operations</li><li>• Utility infrastructure improvements (e.g., water system, electrical distribution, telecommunications)</li></ul>	<b>Tier One</b> <ul style="list-style-type: none"><li>• Clean room facilities</li><li>• Faculty offices</li><li>• Additional power plant capacity</li><li>• Recreation fields over storm detention</li><li>• KU design/energy standards +5%</li><li>• Additional research lab space</li></ul>	<b>Tier Two</b> <ul style="list-style-type: none"><li>• Increased research lab size</li><li>• 45-seat classroom in power plant</li><li>• Additional pathway for utilities</li><li>• KU design/energy standards +7%</li></ul>
--	---	--

# Choose a Partner, Not a Proposal

## Institutions Must Factor Qualitative Considerations Beyond Technical Proposals

When evaluating potential partners, institutions should consider factors beyond the proposal. For example, leaders at institutions that have been through multiple P3s highly recommend selecting a private partner with significant experience working on similar P3 deals. Other considerations include a company's financial position and an absence of litigation and controversy.

### Partner Evaluation Considerations Beyond Technical Proposals



#### Qualifications and Experience

Ensure significant experience with similar P3 deals and request documentation of technical knowledge



#### Absences of Litigation and Controversy

Request written statement to confirm no past or ongoing litigation/controversy



#### Financial Position

Review audited financial statements and viability of net working capital



#### Communication and Work Style

Determine compatibility of communication styles in high-touch, long-term partnership



#### Candidate References

Schedule phone interviews with previous public partners



#### Company Culture and Mission

Ensure private company values align with institutional brand and mission

Given the long-term nature of P3 arrangements, institutions have found that the most effective partnerships arise from a strong working relationship built on mutual trust. This is especially important for operation/management arrangements that entail third-party contact with students and other campus customers, such as private management of student housing. Institutions should contact candidate references and schedule face-to-face interviews to assess intangible qualities such as personality compatibility, communication and work styles, and company culture and values.



## 8. Negotiate the Agreement

---

The next imperative for implementing a P3 is negotiating the project agreement. While the majority of P3 elements are established during the procurement phase, specific oversight, implementation, and contract monitoring mechanisms are often established during negotiations with the preferred bidder. Contract negotiation also allows the public and private partners to establish mutually agreeable, project-specific solutions to any issues identified after the procurement process. To ensure a successful negotiation, institutions should rely on legal counsel with expertise in developing long-term, enforceable agreements. Typical elements of a well-constructed P3 contract are listed below.

### Typical Elements of a P3 Agreement

- ✓ **Allocation of Responsibilities**
  - Allocation of responsibility between public and private partners
- ✓ **Project Dates and Timelines**
  - Deadlines and milestones for design, construction, and completion
  - Length of agreement term
- ✓ **Rights and Obligations**
  - University oversight and approval rights, including step-in rights
  - Limitations on private partner ability to assign or transfer obligations
- ✓ **Key Procedures**
  - Dispute resolution procedure
  - Termination procedure and conditions
- ✓ **Risk Allocation**
  - Concrete risk sharing and mitigation measures
  - Procedures for force majeure events such as earthquakes and natural disasters
- ✓ **Financial Model/Compensation Structure**
  - Allocation of financial responsibility between university and private partner
  - Payout schedule and revenue sharing provisions
- ✓ **Technical Requirements**
  - Detailed design, construction, maintenance, and operation specifications
  - Professional and technical standards, codes, and specifications
- ✓ **Performance Standards**
  - Measureable and enforceable design and construction specifications
  - Facilities maintenance/renewal requirements and handback conditions
- ✓ **Monitoring and Reporting Mechanisms**
  - Performance assessment and reporting procedures
- ✓ **Penalties and Incentives**
  - Financial penalties for late delivery or poor performance

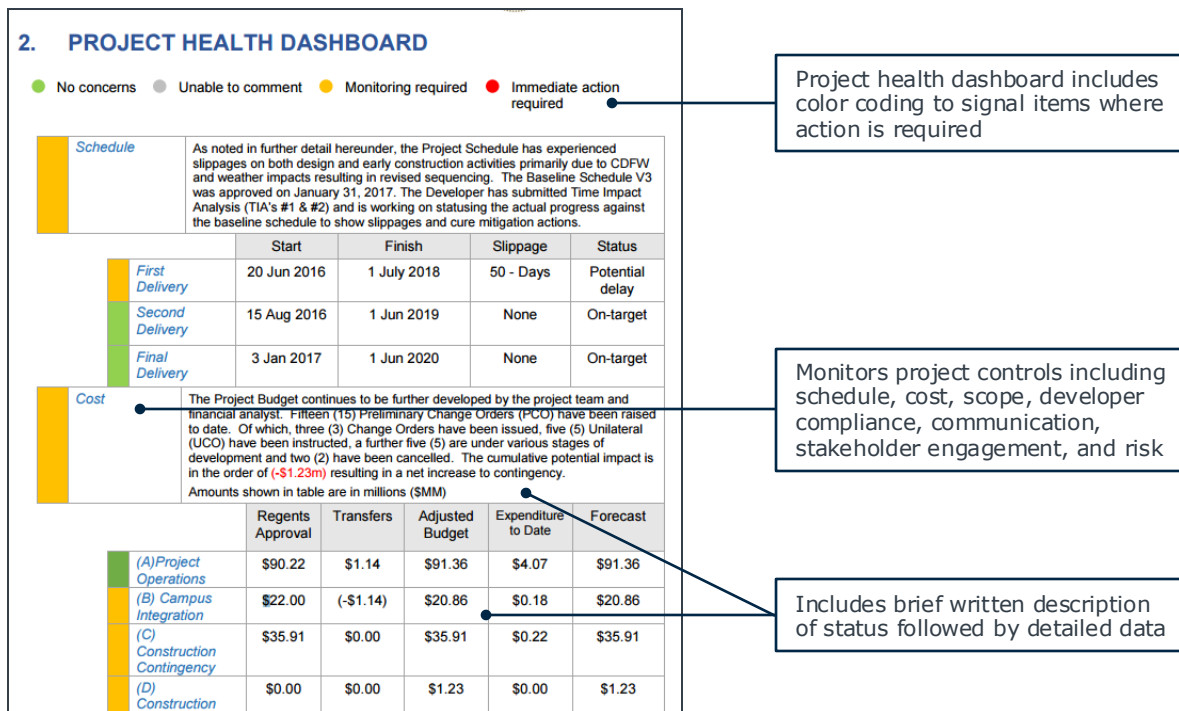
## 9. Monitor Project Performance

The final imperative of P3 implementation is to continuously monitor the project for the duration of the agreement. In many cases, performance specifications require an institution to perform periodic audits to assess penalties or awards during construction. Furthermore, deals that involve long-term O&M provisions require the institution to monitor the project even after construction is complete to ensure standards are met.

The University of California, Merced has developed an effective reporting system to monitor the progress of its large-scale campus expansion project, Merced 2020. Since groundbreaking in 2016, the UC Merced project delivery team has produced monthly progress reports that organize and summarize key performance data. The team, comprised of Physical Operations staff and private partner representatives, presents these reports to the Project Board for review and publishes them on the Merced 2020 website to ensure stakeholders stay current on project progress. In addition to an executive summary, the report includes a project health dashboard with detailed performance data, shown below.

Full versions of UC Merced's 2020 Project Performance Monthly Reports are available on the [Merced 2020 project website](#).

### Snapshot of UC Merced 2020 Project Monthly Performance Report



Source: [UC Merced 2020 Project Monthly Performance Reports](#); University of California, Merced, Merced, CA: EAB interviews and analysis.

## 10. Win Stakeholder Support

---

### Frequent and Transparent Communication Vital to Project Success

Finally, ensuring project success requires winning stakeholder support. In the early stages, this centers on securing buy-in from decision makers, as well as on-campus and off-campus stakeholders (including students, faculty, staff, community members, alumni, labor unions, and state legislators). This signals to potential partners and investors that the project will run smoothly.

As many stakeholders often hold misperceptions about P3s, project leaders should maintain transparent communication and proactively address potential concerns to minimize resistance. Six communication tips are provided below to help leaders secure buy-in for a P3.

#### P3 Communication Tips

##### 1 Seek Early Input from Key Stakeholders

Institutions gather feedback from students, faculty, staff, and community members through focus groups and interviews to secure buy-in early in the process and ensure the project meets user needs

##### 2 Emphasize Benefits of P3s

Institutions focus on the benefits of the P3 project, including modernized facilities, quick project delivery, preservation of debt capacity, improved community relations, additional revenue streams, and economic benefits to the region (e.g., jobs created, economic impact, hiring of local businesses)

##### 3 Proactively Address Common Concerns

Institutions proactively educate stakeholders on important P3 elements, such as rationale for using a P3, the ownership and management structure, risk transfer, financing structure, labor requirements, and revenue-generating mechanisms

##### 4 Leverage Multiple Channels

Institutions educate and update stakeholders through public town-hall meetings, presentations, social media, campus emails, door-to-door fliers, and dedicated project websites

##### 5 Communicate Openly and Frequently

Institutions maintain a high level of transparency and continuously update stakeholders on project goals, timelines, schedule changes, and potential impact of construction on campus operations

##### 6 Designate a Project Champion

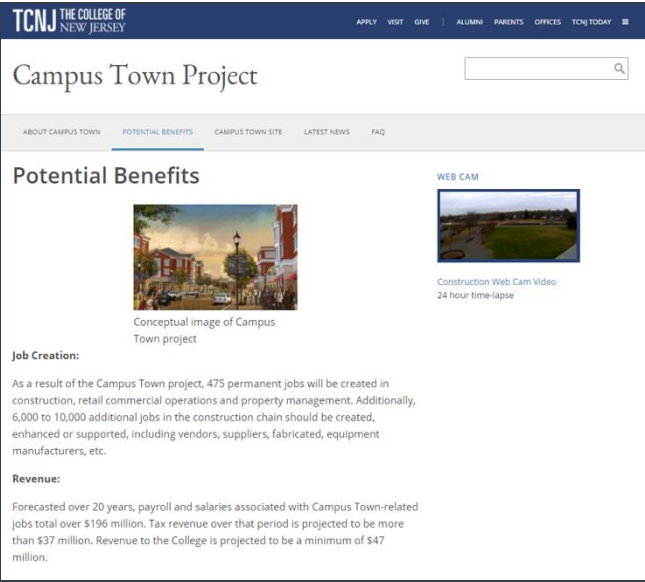
Institutions designate a senior leader or public figure to serve as the primary advocate for the project

# I'll See You on the Web









## Institutions Create P3 Project Websites for Easy and Constant Communication

One simple and effective strategy to communicate key P3 project information is through a dedicated website. As shown below, dedicated project websites enable institutions to share important background context, project details, and continuous updates in one spot. A snapshot of The College of New Jersey's Campus Town project website is shown below along with helpful website elements.

### Snapshot of The College of New Jersey's Campus Town Project Website



### Suggested P3 Project Website Elements

-  Components and goals
-  Timeline and progress updates
-  Project and P3 benefits
-  Project team members
-  Live-feeds and images
-  Frequently asked questions
-  Articles and presentations
-  Form to submit question

Source: "[Campus Town Project](#)," The College of New Jersey, Ewing, NJ; EAB interviews and analysis.



# **P3 Viability Screening Worksheet**

---

# P3 Viability Screening Worksheet

This tool guides senior leaders through the first step of a more comprehensive evaluation process to determine a project's P3 suitability. To use this tool effectively, leaders must possess a basic understanding of the scope, costs, risks, and revenue potential of the project under consideration.

To use the worksheet, score each of the 17 qualitative criteria based on the level of agreement with the statement, either zero (disagree), one (somewhat agree), or two (strongly agree). After scoring each criterion, record the answers on the scoring sheet on page 33 and follow the directions to calculate a total weighted score. The final score corresponds to the project's level of P3 viability.

Criteria	Statement	Agreement Score	Relevance to P3 Delivery
<b>Organizational Capacity</b>	The institution possesses sufficient resources—either internal experts or ability to hire partners—to manage all phases of a P3 (e.g., development, procurement, negotiation, long-term contract oversight).		Developing and managing a P3 requires significant staff resources and technical expertise. Institutions must ensure they have the necessary resources and expertise to procure and manage a project as a P3, or have the capability to hire external consultants.
<b>Stakeholder Support</b>	Sufficient stakeholder (e.g., legislators, staff, faculty, students) support exists for a P3 project.		Local support can enhance viability of P3 bidding by reducing uncertainty and providing assurance to the potential partners/investors that a project will run smoothly. Institutions should assess the potential to secure strong stakeholder support early in the process.
<b>Project Size</b>	The project's size and scope is sufficient to justify P3 costs (i.e., over \$100M).		Due to complexity of P3 agreements, the transaction costs associated with procuring and managing a P3 project are relatively higher. These additional costs may make it inefficient to pursue projects less than \$100 million in cost.
<b>Private Sector Expertise</b>	There are three or more viable private sector firms to deliver and maintain the facility and ensure a competitive bid process.		The availability of private sector expertise is critical to ensure a competitive bidding environment and to ensure that private sector capacity exists to perform the functions and manage the risks envisioned for the project.
<b>Contract Integration</b>	The project requires the integration of multiple elements (i.e., design, build, finance, maintain, operate) into a single, long-term contract.		P3s generate value through the integration of various elements (design, build, finance, operate/maintain) into one contract. The greater the potential for integration, the more likely a P3 will be viable.

Scoring Scale		
<b>Disagree = 0</b>	<b>Somewhat Agree = 1</b>	<b>Strongly Agree = 2</b>

Source: "The Guide to the New Building Canada Fund P3 Screen-Suitability Assessment," PPP Canada; "P3 Delivery Options Screening Checklist," FHWA; EAB interviews and analysis.

# P3 Viability Screening Worksheet (cont.)

Criteria	Statement	Agreement Score	Relevance to P3 Delivery
<b>Project Complexity</b>	The project involves complex construction and operations & maintenance requirements, and/or combines various types of facilities/infrastructure (e.g., academic facilities, student housing), that would achieve economies of scale under a single contract.		P3s often better lend themselves to more complex investments, which arise as a result of the nature of the facility, the site on which it will be constructed, or the number of distinct facility types involved in the investment.
<b>Risk Allocation</b>	The project involves risks that the institution would benefit from allocating to a private sector partner that is better positioned to manage those risks.		Institutions should assess whether a P3 would generate value through the allocation of project delivery risks that a private partner may be more capable of managing.
<b>Facility/Asset Life</b>	The anticipated useful life of the building and/or asset is long enough (i.e., over 20 years) to achieve efficiencies, innovations, and cost certainty.		The duration of a P3 contract typically corresponds to the useful life of the facility, and longer-lived facilities tend to be better suited to a P3. A lengthy contracting period allows the public partner to benefit from efficiencies, innovations, and cost certainty, while the private sector partner can rely on a secure, a long-term source of revenue.
<b>Quality</b>	A P3 project delivery would yield a higher quality product/service.		Institutions should assess whether a P3 would create incentives for the private sector to deliver a higher quality facility, and/or deliver higher levels of maintenance and service than a traditionally procured and managed facility.
<b>Output and Performance Specifications (Construction)</b>	Output specifications for the construction of similar facilities exist and are easily available.		P3s involve establishing desired outcomes in the form of measurable technical output/service/performance specifications. Institutions should consider whether they can rely on conventional or preexisting construction output specifications for similar facilities, or if they will need to develop them from scratch.
<b>Performance Specifications and KPIs (O&amp;M<sup>1</sup>)</b>	Performance outputs and KPIs for operations and maintenance of similar facilities are available.		Institutions must be able to articulate minimum O&M standards that they will monitor during the contract time frame. Institutions should consider whether they can rely on conventional or preexisting performance outputs and indicators for O&M activities, or if they will need to develop them from scratch.

Scoring Scale		
<b>Disagree = 0</b>	<b>Somewhat Agree = 1</b>	<b>Strongly Agree = 2</b>

1) Operations and maintenance.

Source: Source: "The Guide to the New Building Canada Fund P3 Screen-Suitability Assessment," PPP Canada; "P3 Delivery Options Screening Checklist," FHWA; EAB interviews and analysis.

## P3 Viability Screening Worksheet (cont.)

Criteria	Statement	Agreement Score	Relevance to P3 Delivery
<b>Lifecycle Costs</b>	The total facility lifecycle costs are well understood and the institution can develop accurate cost estimates.		To determine the appropriate length of term of a P3 contract and estimate its value for money, the institution must understand the anticipated lifecycle costs of the facilities.
<b>Market Precedent</b>	Investments of similar size and scope have been delivered as P3s in higher education.		The existence of P3s for similar projects/facilities is a good indicator of P3 viability.
<b>Efficiency</b>	Pursuing a P3 project delivery format has the potential to achieve cost/schedule savings.		Institutions should assess the potential for a P3 to expedite the project timeline and deliver the project at a lower cost than under conventional procurement.
<b>Innovation</b>	The institution would derive technological or other types of innovation through private sector delivery of the project.		P3s should give private partners an opportunity to use innovative methods to deliver and maintain the project more efficiently than a conventionally delivered project.
<b>Nature of Development Site</b>	The project involves new construction on an undeveloped site.		In general, investments involving all new construction on sites not previously developed (known as greenfield developments) lend themselves to maximizing risk transfer to the private sector.
<b>Revenue Generation</b>	The planned investment will generate revenue and the private sector may be willing to assume associated revenue risk.		While revenue generation is not a requirement for a successful P3, revenue-generating facilities are typically better suited to P3 delivery as institutions can compensate the private partner directly without taking on additional debt.

Scoring Scale		
<b>Disagree = 0</b>	<b>Somewhat Agree = 1</b>	<b>Strongly Agree = 2</b>

Source: Source: "The Guide to the New Building Canada Fund P3 Screen-Suitability Assessment," PPP Canada; "P3 Delivery Options Screening Checklist," FHWA; EAB interviews and analysis.



# P3 Viability Screening Scoring Sheet

After scoring each criterion, record the answers in the **Score** column below. Each criterion is weighted according to its importance in determining P3 viability. For each criterion, multiply the score by the criterion weight to calculate a weighted score. Finally, add the weighted scores in the last column of the table to calculate a total weighted score. The total weighted score corresponds to the level of P3 viability: high, medium, or low.

Criteria	Score	Weight	Weighted Score
Organizational Capacity		3	
Stakeholder Support		3	
Project Size		3	
Private Sector Expertise		3	
Contract Integration		3	
Project Complexity		3	
Risk Allocation		3	
Facility/Asset Life		2	
Quality		2	
Output and Performance Specifications (Construction)		2	
Performance Specifications and KPIs (O&M)		2	
Lifecycle Costs		2	
Market Precedent		2	
Efficiency		2	
Innovation		2	
Nature of Development Site		1	
Revenue Generation		1	
<b>Total Weighted Score</b>			

Total Weighted Score	P3 Viability
0 to 26 points	<b>Low</b>
26 to 52 points	<b>Medium</b>
48 to 78 points	<b>High</b>



# Case Studies of Public-Private Partnerships in Higher Education

---

## SECTION

# 2

- Louisiana State University
- University of Tennessee, Knoxville
- Howard University
- University of Nevada, Reno
- The Ohio State University
- University of California, Merced
- The College of New Jersey
- Drexel University
- University of Kansas
- University of Kentucky

# Louisiana State University

**Type of Institution:** Public, Land-Grant, R1 University

**Location:** Baton Rouge, Louisiana

**Enrollment:** 30,262 undergraduate, 4,475 graduate (Fall 2025)

**Operating Expenditures:** \$740 million (FY23)



## Project Background

In the 2010s, growing enrollment, particularly among out-of-state students, placed significant strain on Louisiana State University's (LSU) campus facilities, including residence halls and student support services. With a demand for 3,800 additional beds for upper-class and graduate students, LSU, Provident Resources Group (Provident), and RISE: A Real Estate Company entered a comprehensive, multi-phase public-private partnership (P3) aimed at transforming underutilized campus areas into vibrant student housing communities. This multi-phase P3 initiative meets student housing needs, supports increased enrollment and retention rates, and improves the on-campus living experience.

## Private Partners

Provident Resources Group and RISE: A Real Estate Company

## Key Participants

### Core Project Team

- President
- Assistant VP for Real Estate, Public-Private Partnerships and Compliance
- Assistant VP for LSU Residential Life
- LSU Property Foundation

### External Advisors

- Provident Resources Group/ Provident- Flagship (Developer)
- RISE: A Real Estate Company/ RISE Tigers, LLC (Developer)
- Lemoine Construction (General Contractor)
- Niles Bolton Associates (Architect, Interior Design & Landscape)
- RHH Architects (Design Consultant)
- RBC Capital Markets (Retail Broker/ Operator)
- Stirling Properties (Retail Broker/ Operator)
- Brailsford & Dunlavey (Program Manager)
- CSRS (Program Manager)

## High-Level P3 Deal Structure

The project used a Design-Build-Finance-Operate-Maintain (DBFOM) model with four components:

### Ground Leases:

- 40-year lease/lease-back agreement with the LSU Property Foundation, which subleased with Provident Resources Group for the development, financing, and operation of the project.
- LSU will repay these bonds with lease payments and proceeds loaned to Provident to cover development costs, fund capitalized interest and pay issuance expenses.

### Development:

- Development agreement with RISE (operating as RISE Tigers, LLC) to contract with various architects and engineers to design the project, and with Lemoine Company to construct the project.

### Financing:

- Provident issued \$235.3 million in tax-exempt and taxable lease revenue bonds through the Louisiana Public Facilities Authority, with RBC Capital Markets as the underwriter.
- No taxpayer dollars or state general fund appropriations were used

### Operations:

- Provident entered a Facilities Operations and Maintenance Agreement (FOMA) with RISE to maintain and operate the buildings and grounds. LSU's obligations were rent collection, IT operations and residential life programming.
- For the Nicholas Gateway Project (NGP) (Phase I), LSU subleased the retail areas back to NGP, who contracted with Stirling Properties to broker and manage the retail tenants.

Source: Mathewson, "LSU deterioration highlights impact of years of budget cuts", *Higher Ed Dive*, February 9, 2016; "LSU Transforms an Underdeveloped Tract of Property into a Vibrant Gateway District", *Brailsford & Dunlavey*, accessed June 2025; "LSU Nicholson Gateway", *Hinton Construction*, accessed June 2025; "LSU Nicholson Gateway Development Project", 2017; RISE Real Estate, "Louisiana State University P3", *Rise*, accessed June 2025; "LSU Greenhouse", *Mullin Landscape*, accessed June 2025; Louisiana State University, Baton Rouge, LA; EAB interviews and analysis.

## Project Cost and Financing

All projects were funded through Provident Resources Group (operating as Provident-Flagship):

### \$575M

Total development cost across all phases.

### \$235.3M

Tax-exempt and taxable lease revenue bonds secured by Provident-Flagship for Phase I.

### \$87.7M

40-year term bonds issued by the Louisiana Public Finance Authority for Phase II.

## Annual Revenue Streams from Project

- Revenue is generated primarily through student housing rents.
  - Phase I is projected at \$218 Million in new revenue generated for LSU housing and related purposes over 40 years.
  - In Phase I, the Nicholas Gateway project allocated \$2 million in annual rent payments to the LSU Foundation; subsequent payments in Phases II and III will go towards the University's budget.
- LSU receives all surplus revenues generated by this project.

## Project Timeline



## Project Outcomes

### Student Housing Capacity

- Phase I: 1,953 beds (Nicholson Gateway and Spruce Hall)
- Phase II: 682 beds (Cedar Hall and renovated Evangeline & Highland Halls)
- Phase III: 881 beds (Azalea and Camellia Halls)

### Retail and Wellness Space

- 50,000 square feet of new retail space
- 10,000-square-foot LSU Rec Wellness Center

### Parking Capacity

- 800-space parking deck added in Phase I

### Awards

- Received national awards for excellence in student housing development at the 10th annual Innovator Awards.



LOUISIANA STATE UNIVERSITY (LSU) - NICHOLSON GATEWAY AND CEDAR HALL

Source: Koh, "LSU Nicholson Gateway Development prepares to open for 2018-2019 school year", WAFB, August 2, 2018; "Comprehensive & Strategic Campus Master Plan", Louisiana State University, October 2017; "LSU board approves plan for 900 new student housing beds to meet demand", Citizen Portal, February 21, 2025; "LSU Transforms an Underdeveloped Tract of Property into a Vibrant Gateway District", Brailsford & Dunlavey, accessed June 2025; "LSU Nicholson Gateway", Hinton Construction, accessed June 2025; "LSU Nicholson Gateway Development Project", 2017; RISE Real Estate, "Louisiana State University P3", Rise, accessed June 2025; "LSU Greenhouse", Mullin Landscape, accessed June 2025; Louisiana State University, Baton Rouge, LA; EAB interviews and analysis.

# University of Tennessee, Knoxville

**Type of Institution:** Public, Land-Grant, R1 University

**Location:** Knoxville, Tennessee

**Enrollment:** 30,564 undergraduate, 8,164 graduate (Fall 2024)

**Operating Expenditures:** \$3.1 billion (FY24)



## Project Background

The University of Tennessee, Knoxville (UTK) has seen record enrollment growth of over 20% in recent years. This surge, driven by UTK's guaranteed admission for top 10% in-state students, has led to a shortage of on-campus housing and parking. As a part of its Housing Inventory Management Plan to address the housing crisis, UTK partnered with RISE: A Real Estate Company and Provident Resources Group to launch Tennessee's first Higher Education Housing P3. While the project faced challenges: (1) a volatile 2023 financing and construction market, and (2) state policy requiring full self-funding with no university or state financial support, the university overcame them to fast-track design, approvals, and financing.

## Private Partner

Provident Resources Group and RISE: A Real Estate Company

## Key Participants

### Core Project Team

- Chancellor
- Vice Chancellor for Student Life
- Assistant Vice President for Capital Projects

### External Advisors

- Provident Resources Group/ Provident- UTK Properties (Developer)
- RISE: A Real Estate Company (Developer)
- Lemoine Construction (General Contractor)
- Niles Bolton Associates (Architectural Partner)
- Cope Architecture (Architectural Partner)
- Choate Construction (General Contractor)
- Blaine Construction (Construction Partner)
- CEC (Civil Engineer)
- RBC Capital Markets (Investment Banker)

## High-Level P3 Deal Structure

This P3 uses a Design-Build-Finance-Operate-Maintain (DBFOM) model which includes four components:

### Ground Leases:

- 40-year ground lease agreement with Provident Resources Group (operating as Provident Group-UTK Properties), with the option to extend up to 50 years. During the lease period, UTK retains ownership of the land.
- Upon repayment of the project's debt, ownership of the student housing facilities will revert to the university.

### Development:

- Development agreement with RISE and its subsidiaries.
- RISE then contracted with architects, engineers, and builders to design and construct the student housing facilities.

### Financing:

- Provident issued \$220M in for Phase I and assumed 100% financial risk. These bonds were used to cover all development and construction costs associated with the new housing.
- Provident maintained ownership of the facilities throughout the financing period.

### Operations:

- RISE manages the facility and custodial operations of the new student housing facilities under the lease agreement.
- UTK University Housing retains responsibility for residential life and room assignments.

Source: Barker, "[New Deal for New Dorms](#)", *Compass*, October 16 2023; Hellemans, "[Navigating The Growing Pains — Effects UTK's 5 Year Streak of Record Enrollment is Having on Students](#)", *Medium*, December 7, 2023; "[The University of Tennessee, Knoxville P3](#)", *RISE*, accessed June 2025; "[University of Tennessee Knoxville - Student Housing Project - Phase 1](#)", *Provident Resources Group*, accessed June 2025; "[Quick Facts-UT at a glance](#)", *University of Tennessee Knoxville*, 2025; University of Tennessee Knoxville, Knoxville, TN; EAB interviews and analysis.

Project Cost and Financing

All projects funded entirely through Provident Resources Group (operating as Provident-UTK Properties):

\$240.4M

Total cost of project  
across all phases

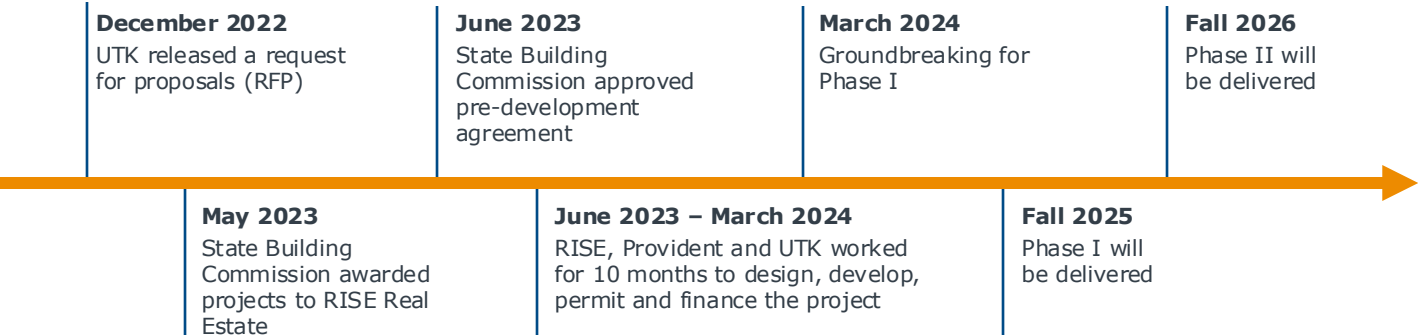
\$125.2K

Cost per bed

Annual Revenue Streams from Project

- UTK is expected to receive nearly \$5.1 million in 2025 and between \$278,000 and \$826,000 a year through 2034.
- As payment for the ground lease, UT will receive the surplus cash flow from the project — the revenue remaining after the payment of all expenses and debt service, and accounting for project reserves.

Project Timeline



Project Outcomes

- Increased Student Housing Capacity by 2,982 beds:**
- Three new residential communities added.
  - Phase I: 1,954 beds across 552 units of primarily semi-suite style housing for freshman and sophomore students.
  - Phase II: 1,028 beds across 295 units (in-progress).
  - The new communities feature centralized entrances, reception areas, staff offices, community kitchens, lounges, study and game rooms, multi-purpose spaces, and laundry centers.
- Historic P3 Collaboration:**
- The first higher education housing P3 in Tennessee, marking a significant achievement in the state's approach to university infrastructure development.



Source: Barker, "New Deal for New Dorms", Compass, October 16 2023; Leko, "Board of Trustees Approves New Residence Halls, Institute of Agriculture Leader" University of Tennessee, Knoxville, October 13, 2023; Leko, "UT Announces Public-Private Partnership for New Residence Halls, Master Lease", University of Tennessee, Knoxville, May 22, 2023 "The University of Tennessee, Knoxville P3", RISE, accessed June 2025; "University of Tennessee Knoxville - Student Housing Project - Phase I", Provident Resources Group, accessed June 2025; University of Tennessee Knoxville, Knoxville, TN; EAB interviews and analysis.

# Howard University

**Type of Institution:** Private, Historically Black, R1 University

**Location:** Washington, D.C.

**Enrollment:** 10,190 undergraduate, 3,226 graduate (Fall 2024)

**Operating Expenditures:** \$927 million (FY24)



**HOWARD**  
**UNIVERSITY**

## Project Background

Howard University embarked on a comprehensive public-private partnership (P3) initiative to modernize its campus infrastructure and ensure long-term financial sustainability. This initiative was designed to address deferred maintenance needs, generate new revenue streams, preserve the university’s historic buildings, and maintain affordability for students while minimizing institutional debt. Alvarez & Marsal (A&M) served as Howard’s strategic advisor throughout the process, providing expertise in structuring the initiative, developing financial models, selecting development partners, and supporting negotiations across multiple projects.

## Private Partner

Alvarez & Marsal (A&M)

## Key Participants

### Core Project Team

- President
- Treasurer
- Chief Financial Officer
- Facilities and Campus Planning Directors
- Studios Architecture
- Alvarez & Marsal

### Development Partners

- Urban Investment Partners
- Neighborhood Development Corporation
- Provident Group
- The Bond Partnership (Fivesquares Development, EDENS, The Menkiti Group)
- District of Columbia
- Corvias

## High-Level P3 Deal Structure

This project consisted of multiple P3s for buildings across the university campus.

- **Student Housing (Tubman Quad, Plaza Towers):** Concession model with long-term management contracts and upfront payments
- **Market-Rate Apartments (Meridian Hill, Carver & Slowe):** Ground lease and revenue-sharing with private developer
- **Mixed-Use Redevelopment (Bond Bread):** Leasehold P3 with historic preservation, city coordination, and tax incentive layers
- **Micro-Apartment Conversion (Axis at Howard):** Off-balance sheet real estate redevelopment via nonprofit structure
- **Innovation Hub (In3):** Three-way public-private deal: city-funded renovation, Howard lease, private operator
- **East Campus Redevelopment:** Master developer solicitation for large-scale ground lease/mixed-use development.

## Project Cost and Financing

**\$555M**

Approximate total project cost

**100%**

Private Strategic Partner Lead

Source: [“Delivered Projects”](#), Howard University, accessed June 2025; Howard University, Washington, DC; EAB interviews and analysis.

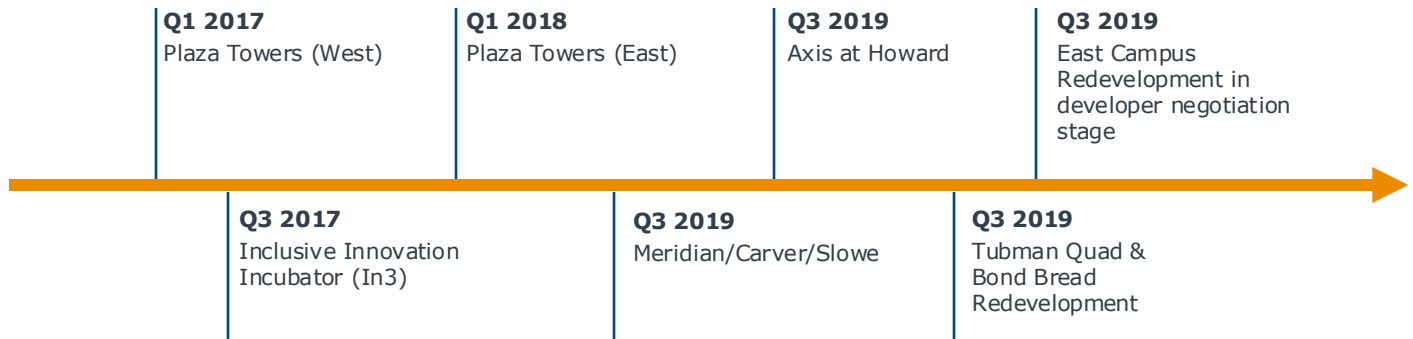


## Annual Revenue Streams from Project

Revenue generated via these initiatives through a combination of upfront payments, long-term management contracts, residual cash flow from leases and property revenues, and contributions from private developers and investors.

- **Plaza Towers Renovation:** \$3 million in additional annual revenue; \$5 million in annual deferred maintenance savings
- **Axis at Howard:** Ongoing residual cash flow to the university (amount not specified)

## Project Timeline



## Project Outcomes

### Improved Student Experience and Housing Availability

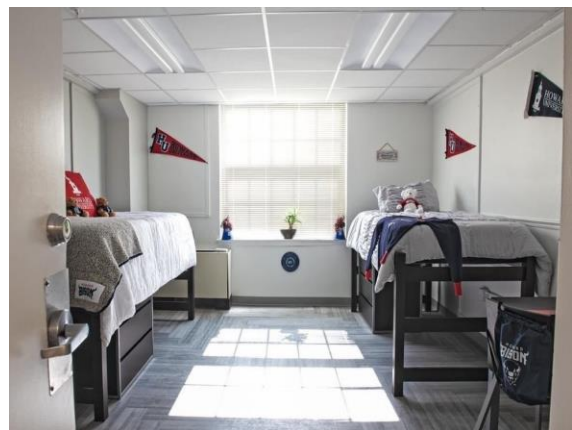
- Renovations and new housing developments increased bed capacity (e.g., Tubman Quad with 665 beds, Plaza Towers with 1753 beds, Axis at Howard with 176 micro-apartments).

### Eliminated Substantial Deferred Maintenance Costs

- Meridian Hill project alone eliminated \$47 million in deferred maintenance.
- Plaza Towers generated \$5 million annual deferred maintenance savings.

### Preserved and Revitalized Historic Campus Buildings

- Projects like Bond Bread Redevelopment and others incorporated historic preservation, maintaining the university's heritage while upgrading facilities.



## Project Website

[Howard University Delivered Projects](#)

Source: "Delivered Projects", Howard University, accessed June 2025; Howard University, Washington, DC; EAB interviews and analysis.



# University of Nevada, Reno

**Type of Institution:** Public R1 University

**Location:** Reno, Nevada

**Enrollment:** 17,965 undergraduate, 3,813 graduate (Fall 2024)

**Operating Expenditures:** \$383M (FY24)



University of Nevada, Reno

## Project Background

The John Tulloch Business Building is part of the larger Mathewson Gateway Project and stands as the most extensive and capital-intensive development in the history of the University of Nevada, Reno (UNR). Serving the College of Business, which is the university's largest and fastest-growing college, the building is intended to provide modern, collaborative, and experiential learning environments. It also supports UNR's broader objectives of enhancing its academic profile and contributing to regional economic diversification.

## Private Partners

- Edgemoor Infrastructure & Real Estate
- Clark Construction Group
- LMN Architects

## Key Participants

### Core Project Team

- President
- Vice President
- Board of Trustees
- Treasurer
- General Council
- Private developer staff
- Chief Financial Officer
- Facilities and Campus Planning Directors

### External Advisors

- Edgemoor Infrastructure and Real-estate (developer)
- Clark Construction Group (general contractor)
- LMN Architects (architect)
- More than 70% of the project value is contracted to 23 local Northern Nevada firms

## High-Level P3 Deal Structure

- **Structure:** lease-sublease agreement with Edgemoor covering financing, construction, and long-term lease-back.
- **Scale:** \$290 million- UNR's largest and most expensive capital project.
- **Commitment:** 30-year plan with long-term financial planning and risk sharing.
- **Private Sector Role:** Edgemoor is responsible for financing, construction, long-term structure-a hallmark of high-level P3s.

## Project Cost and Financing

**\$153M**

Total cost of construction

**\$290M**

Total long term payment commitment

**\$138.2M**

Cost of interest

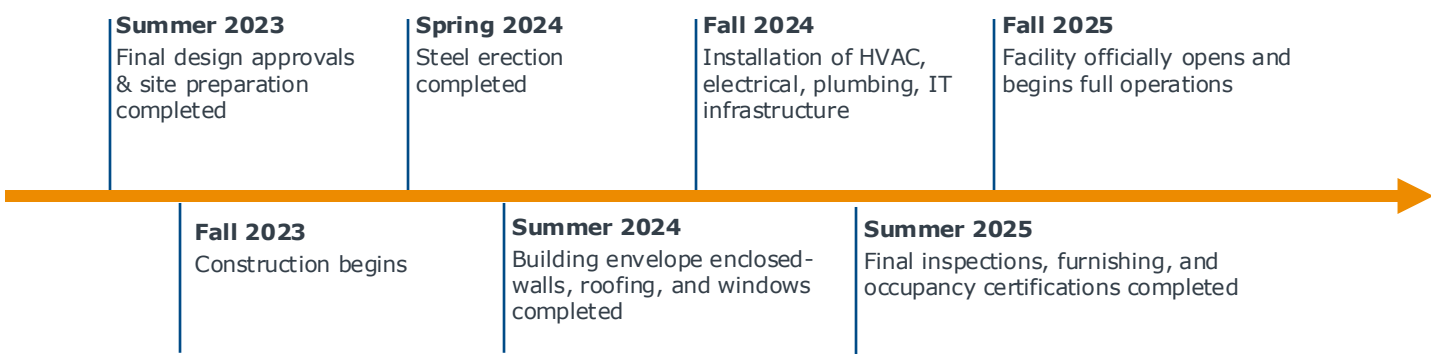
**\$9.7M**

Per year over 30 years

Annual Revenue Streams from Project

- Donation from John Tulloch**
  - \$20 million allocated to the building
  - \$5 million allocated to student
- Additional funding sources**
  - ~\$500,000 in projected annual revenue from the hotel and conference center
  - Up to \$4.7 million per year from student capital improvement fees.

Project Timeline



Project Outcomes

- Delivered a Modern Business Facility**
- New John Tulloch Building spans approximately 128,000 sq ft, replacing the outdated and overcrowded Ansari Building (built in 1982, only 30,000 sq ft).
- Supported Enrollment Growth**
- Provides needed space and resources for the College of Business, UNR’s largest and fastest-growing college.
- Enabled Modern, Collaborative, and Experiential Learning**
- Designed to support 21st-century pedagogy and student engagement through flexible, tech-enabled spaces.
- Engaged Local Economic Development**
- Over 70% of the project value was awarded to Northern Nevada subcontractors, with 23 local firms.
- Earned National Recognition**
- Named Best Education and Higher Education Project at the 2024 P3 Awards in New York City



UNIVERSITY OF NEVADA, RENO



UNIVERSITY OF NEVADA, RENO

Project Website

[The Future of Business | New Building for The College of Business | University of Nevada, Reno](#)

Source: “[Reno Mathewson Gateway Project](#)”, The University of Nevada, Reno, accessed June 2025; University of Nevada, Reno, Reno, NV; EAB interviews and analysis

# The Ohio State University

**Type of Institution:** Public Doctoral University: Highest Research Activity

**Location:** Columbus, Ohio

**Enrollment:** 45,489 undergraduate, 13,374 graduate (Fall 2015)

**Operating Expenditures:** \$5.5 billion (FY16)



## Project Background

In the face of dwindling state resources and increased pressure to reduce costs, leaders at The Ohio State University (OSU) sought strategies to generate additional revenue to support the university's strategic priorities. In 2012, OSU opted to monetize the university's parking assets—one of the largest parking systems in the United States—by entering into a long-term lease concession agreement with a private partner for an upfront payment. This deal allowed OSU to focus on its core academic mission and generate needed funds for critically important programs while allowing a private company with parking operations expertise to operate and maintain the parking system.

## Private Partner

QIC Global Infrastructure; created **CampusParc LP** to manage OSU parking operations

## Key Participants

- **University Transportation and Traffic Management Office:** Manages the oversight of the parking lease
- **Parking Advisory Committee (PAC):** Chaired by Senior Vice President of Administration and Planning and has representation from faculty, staff and students; duties include providing input to CampusParc on parking operations and receiving requests from CampusParc for changes in fees or in the designation of parking spaces

## High-Level P3 Deal Structure

- 50-year lease concession of parking assets (including 16 garages, 196 parking lots, and approximately 37,000 parking spaces) in exchange for \$483 million upfront payment
- For duration of lease, CampusParc receives profits from the sale of parking passes and hourly parking fees
- CampusParc is responsible for the operation of parking system (i.e., customer service, management of permit system, motorist assistance, special events parking management, parking enforcement), maintenance, renovations, equipment upgrades, and repairs
- University controls parking policies, number of parking spaces available on campus, and the kind of spaces available for each permit grade
- Parking rate increases included in agreement:
  - Years 1–10: Maximum annual increase of 5.5%
  - Years 11–50: Maximum annual increase of 4% or rolling 5-year average of inflation, whichever is greater

## Project Outcomes

### \$483M

Upfront payment placed into OSU's endowment for strategic initiatives (e.g., student scholarships, staff grants, tenure-track faculty lines)

### \$3.1B

Estimated investment earnings over 50-year lease that will increase OSU's investment pool by \$4.9 billion

### \$23.6M

Invested by CampusParc for parking lots and garage maintenance and upgrades over first five years

## Project Website

Parking Lease Website: <https://www.osu.edu/parkingproposal/>  
CampusParc website: <http://osu.campusparc.com/home>

Source: The Ohio State University, Columbus, OH; EAB interviews and analysis.

# University of California, Merced

**Type of Institution:** Public Doctoral University: Higher Research Activity

**Location:** Merced, California

**Enrollment:** 6,815 undergraduate, 448 graduate (Fall 2015)

**Operating Expenditures:** \$275 million (FY15)



## Project Background

After first opening its doors in 2005, the University of California, Merced set out a four-part long-range expansion plan with the ultimate goal of enrolling 25,000 students. When the state of California stopped issuing capital bonds in the wake of the recession, Merced was left with the need to expand physical capacity to accommodate 10,000 students by 2020, forcing leaders to consider alternative delivery options. After analyzing different development strategies, UC Merced opted for a DBFOM<sup>1</sup> availability-payment concession agreement for the development of academic buildings, research facilities, student housing, student life/athletic facilities, and new parking infrastructure. Beyond additional financing, this arrangement allowed for the bundling of different asset types into a single project (providing economies of scale and functionality in a short time frame) and transfer of long-term performance and financial risk over the lifecycle of the facilities.

## Private Partner

Plenary Properties Merced

## Key Participants

### Project Board

- Chancellor (Project Owner)
- Executive Vice President and CFO (Project Owner)
- Associate Chancellor and Chief of Staff
- Executive Vice Chancellor and Provost
- VC Student Affairs
- VC Business and Administrative Services
- VC Planning and Budget
- Senior Advisor to Chancellor
- AVC Physical Operations, Planning, and Development

### Project Delivery Team

- UC Merced Physical Operations, Planning, and Development department
- WT Partnership (Lead, Project and Contract Management):
  - AECOM (Engineering Advisor)
  - Woods Bagot (Design Advisor, Laboratory and Academic Space)
  - Crawford Architects (Design Advisor, Student Life and Housing)

## High-Level P3 Deal Structure

- DBFOM availability concession arrangement with Plenary Properties Merced, a consortium of design, engineering, construction, maintenance, operations, and financial partners
- During construction, university makes predetermined progress payments to developer
- Once buildings become available for use, the university makes performance-based availability payments that cover remaining capital costs and operations and maintenance of major building systems
- 39-year agreement; UC Merced maintains ownership throughout the agreement

## Project Cost and Financing

**\$1.3B**

Total project budget

**\$600M**

UC external financing

**\$590.35M**

Plenary Properties Merced

**\$148.13M**

UC Merced campus funds

1) Design, build, finance, operate, maintain.

## Project Timeline

<b>Fall 2012–Spring 2013</b> Urban Land Institute Advisory Services Panel interviews students, faculty, staff; issues report analyzing development options	<b>Fall 2014</b> UC Merced releases RFQs to potential development teams; three teams prequalified by winter	<b>Spring–Fall 2016</b> UC Merced selects Plenary Properties Merced; UC Board of Regents approves project budget; formal project groundbreaking	<b>Fall 2019</b> Second delivery of three new facilities
<b>Fall 2013</b> Project team analyzes project delivery methods, financial structures, costs, budget, and design strategies, and arranges campus focus groups with students, faculty, and staff	<b>Spring–Winter 2015</b> Campus staff develops initial program based on best practices and stakeholder input; issues RFP from prequalified teams	<b>Fall 2018</b> First delivery of four facilities	<b>Fall 2020</b> Project completion with the delivery of nine remaining facilities

## Project Outcomes

### New Facilities and Infrastructure

- **Academic Facilities:** three academic and research buildings with faculty offices, and wet, dry, and computational labs
- **Student housing:** 1,700 student beds with ground-floor classrooms
- **Student life, recreation, and athletics:** 600-seat dining facility, NCAA II-level competition swimming pool, NCAA II-level competition recreation field, wellness center, Early Childhood Education Center, conference center
- **Parking and mobility:** 1,500 parking spaces, new campus entrance, public transportation transit hub

### Innovative P3 Structure Benefits

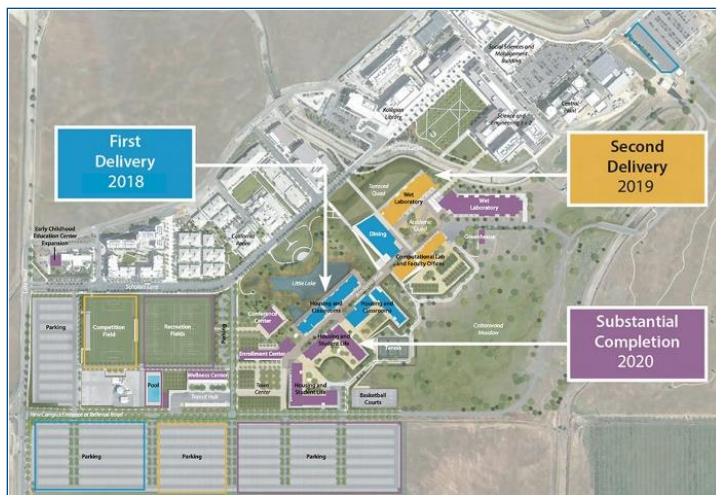
- Structure captures time and cost advantages while funding preventive maintenance and capital renewal program
- Agreement includes maintenance and renewal requirements for 35 years; penalties for late delivery or poor performance

### Enrollment Goals

- Doubled physical capacity of campus by 2020, allowing institution to grow to 10,000 students

### Economic Impact

- Total one-time economic impact estimated at approximately \$1.5 billion in Merced County and \$2.4 billion statewide



UNIVERSITY OF CALIFORNIA, MERCED



UNIVERSITY OF CALIFORNIA, MERCED

## Project Website

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



# The College of New Jersey



**Type of Institution:** Public Master's College & University: Larger Programs

**Location:** Ewing, New Jersey

**Enrollment:** 7,406 graduate, 6,758 undergraduate (Fall 2015)

**Operating Expenditures:** \$238 million (FY16)

## Project Background

In 2007, leaders at the College of New Jersey (TCNJ) began planning Campus Town, a development to address critical student housing needs, enhance the appeal of the college, and strengthen college-community relationships. In 2009, a study conducted by external consultants affirmed the project's feasibility and its ability to generate additional revenue for the college. However, TCNJ lacked the funds or debt capacity for such an extensive project. Later that year, the NJ Legislature passed the New Jersey Economic Stimulus Act of 2009, permitting state colleges to enter into public-private partnerships for on-campus construction projects. As a result, leaders at TCNJ began reaching out to developers to design, build, finance, operate, and maintain (DBFOM) new student residence halls and retail stores. TCNJ opted for a DBFOM agreement because it allowed them to quickly address critical student housing needs without utilizing any state or college funding or impacting debt capacity.

## Private Partner

The PRC Group

## Key Participants

### Core Project Team

- President
- Board of Trustees Chair
- Vice President for Administration
- Director of Administration
- Treasurer
- Private developer staff

### External Advisors

- PRC Group, LLC (Developer)
  - William Feinberg and Associates (Architect)
  - Turner Construction Company (Construction Manager)
- HR & A Advisors (Financial Advisor)

- Windels, Marx, Lane and Mittendorf, LLC (TCNJ counsel)
- Feasibility study team:
  - Jones, Lang, LaSalle LLC (lead consultant)
  - Elkus Manfredi (architects)

## High-Level P3 Deal Structure

- DBFOM ground-lease arrangement for the development of mixed-use facilities
- PRC Group handles property management with the support of residential and retail specialists
- 50-year land lease; TCNJ retains ownership of the land while PRC maintains ownership of the improvements
  - At the end of the 50-year term, ownership of the improvements reverts to TCNJ
- TCNJ leased back ground floor of one building for new fitness center
- Trenton State College Corporation (TCNJ's auxiliary real estate company) renting space for bookstore; commissions from the bookstore vendor covers rent
- Developer required to donate space for development of a police substation to be staffed by TCNJ Campus Police Services

## Project Cost and Financing

# \$120M

Approximate total project cost

# 100%

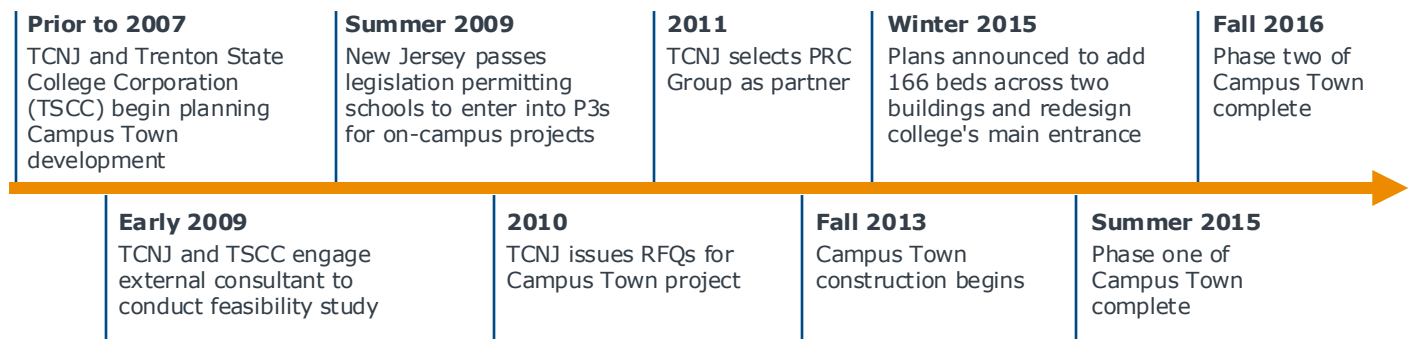
Private financing by PRC Group

Source: The College of New Jersey, Ewing, NJ; EAB interviews and analysis.

## Annual Revenue Streams from Project

- TCNJ receives annual ground lease payment of \$400,000 per year; increases by \$50,000 each year during the project term, generating an income stream totaling \$48M
- Annual ground-lease payment used to offset the operating cost of the fitness center
- Lease calls for profit-sharing bonus should retail sales from the businesses on the ground floor of the complex exceed predetermined levels

## Project Timeline



## Project Outcomes

### New Facilities and Revenue Generation

- 12 buildings
- **Upscale student housing complex:** 612 total beds across 11 buildings; one-, two-, and four-bedroom apartments
- **Amenities and retail:**
  - Barnes and Noble Booksellers
  - Fitness center
  - 53,178 square feet of other retail and restaurants
  - 215 retail parking spaces
- **Redesign of campus entrance**
- TCNJ expected to receive ~\$48M over the life of the lease

### Economic Impact

- Created 475 permanent jobs in construction, retail, and property management
- Tax revenue for state projected to be about \$37 million over 20 years

### Enrollment Management and Community Benefits

- Improved recruitment and retention by appealing to students who desired walkable amenities
- Revitalized deteriorating 1950's era suburban township
- Improved town/gown relations by removing student housing pressures from the community
- Created safe, controlled, and inviting meeting ground for the college and local community



THE COLLEGE OF NEW JERSEY

THE COLLEGE OF NEW JERSEY

## Project Website

<http://campustown.pages.tcnj.edu/>

Source: The College of New Jersey, Ewing, NJ; EAB interviews and analysis.

# Drexel University



**Type of Institution:** Private Doctoral Research University: Higher Research Activity

**Location:** Philadelphia, Pennsylvania

**Enrollment:** 15,499 undergraduate, 8,733 graduate (Fall 2016)

**Operating Expenditures:** \$1 billion (FY16)

## Project Background

Between 2007 and 2014, Drexel University experienced a 28% increase in enrollment, creating significant demand for additional instructional, research, housing, dining, and recreation space. Yet with academic-oriented projects receiving the top priority in the capital budget, the university lacked funding to expand and modernize facilities. In 2011, Drexel embarked on its first of three private-equity funded P3 arrangements with American Campus Communities for multiuse developments that include student housing, dining, and retail. Drexel ultimately chose this delivery method to accomplish four primary goals: modernize campus to meet student demand for high-quality amenities, leverage private funding in order to dedicate institutional capital to the construction and improvement of instructional and research facilities, keep new construction projects credit-rating neutral, and generate revenue in the form of ground rent payments.

## Private Partner

American Campus Communities (ACC)

## Key Players

- |   |                             |   |
|---|-----------------------------|---|
| • President   | • AVP Real Estate           | • Dedicated P3 team responsible for project planning, including procurement, proposal evaluation, transaction negotiation, and project conceptual development |
| • Executive Vice President, Treasurer & Chief Operating Officer | • General Counsel's Office  | • After facilities become operational, separate management committee responsible for monitoring the contract  |
| • Senior Vice President, Student Life & Administrative Services | • Campus Architect's Office |   |

## High-Level P3 Deal Structure

- Chestnut Square (new construction of student housing and retail)**
  - Design-build-finance-operate-maintain ground-lease arrangement
  - ACC develops, owns, and manages project through 70-year ground-lease, after which ownership reverts back to Drexel
- The Summit at University City (new construction of student housing, dining, and retail)**
  - Design-build-finance-operate-maintain ground-lease arrangement (70-year term) with reversion to Drexel at term
  - University also entered into a \$9.3 million prepaid lease for the dining facility, funded with capital negotiated as part of the university's campus dining contract
- University Crossings (conveyance and lease-back of student housing)**
  - ACC conveyed land, air, and subsurface rights to existing 1,016-bed University Crossings property (which ACC acquired in 2008) with the option to transfer the building to Drexel's ownership at any time of university's choosing
  - ACC leases back the community for a period of 70 years and agrees to invest \$30 million in improvements to historic building, which houses student apartments and university office space

## Project Cost and Financing

All projects funded entirely through American Campus Equity (ACE®):

**\$100.7M**

Total cost of Chestnut Square

**\$155.6M**

Total cost of The Summit at University City

**\$30M**

Cost of improvements at University Crossings

**\$68.5M**

Total estimated building value of University Crossings at transaction

Source: Campbell, J., Tucker, J.R., Lin, I.T. "Power Partnerships." *Business Officer Magazine*, June 2015; Drexel University, Philadelphia, PA; EAB interviews and analysis.



## Annual Revenue Streams from Project

University receives annual ground rent based upon a set percentage of the project's gross revenues, which incentivizes both partners to maintain maximum occupancy and affordability

## Project Timeline



## Project Outcomes

### Chestnut Square

- 861 bed, 19-story high-rise with apartments and two eight-story buildings of stacked townhomes above street-level retail
- \$1.25M campus bookstore renovation (funded by Barnes & Noble)
- Strengthened Drexel's connection to the University City neighborhood

### The Summit at University City

- 1,315 beds (apartments and suites) in 24-story high-rise
- 17,000 sq. ft. dining facility; 19,000 sq. ft. of street-level retail across 11 locations

### University Crossings

- 1,016-bed student apartments in historic building
- ACC invested \$30M in renovations in 2015
- University secured rights to install large, backlit "Drexel University" signage with 16-foot-tall letters, a valuable branding opportunity on one of the tallest buildings on campus

### Overall Outcomes

- Over 1.4 million square feet of development through total investment of ~\$345 million
- Added ~3,200 residential beds and more than 60,000 square feet of attractive urban retail space
- Maintenance of university balance sheet and minimal credit impact



DREXEL UNIVERSITY



DREXEL UNIVERSITY

## Project Website

Projects profiled on ACC website: <https://www.americancampus.com/for-universities/case-studies/drexel-university>

Source: Campbell, J., Tucker, J.R., Lin, I.T. "Power Partnerships." *Business Officer Magazine*, June 2015; Drexel University, Philadelphia, PA; EAB interviews and analysis.

# The University of Kansas

**Type of Institution:** Public Doctoral University: Highest Research Activity

**Location:** Lawrence, Kansas

**Enrollment:** 8,014 undergraduate/other, 19,245 graduate (Spring 2017)

**Operating Expenditures:** \$1.2 billion (FY16)



## Project Background

In 2014, the University of Kansas (KU) launched a new campus master plan to advance its mission as a flagship research university. A key component of the plan was the redevelopment of KU's Central District into a new hub of education and research that would address urgent campus needs, including outdated science facilities, a shortage of student housing, and an insufficient utility plant. To expedite the project timeline, secure additional means of financing, and avoid long-term deferred maintenance obligations for new facilities, KU entered into a three-way design-build-operate-maintain (DBOM) lease/leaseback arrangement with Edgemoor Infrastructure & Real Estate LLC and KU Campus Development Corporation (KUCDC), a KU-affiliated non-profit. This structure allowed KU to reap the benefits of lower-cost university financing (rather than private financing), as KUCDC secured tax-exempt bonds for the project.

## Private Partner

Edgemoor Infrastructure & Real Estate, LLC

## Key Participants

- Vice Chancellor for Public Affairs
- Vice Provost for Finance and Administration
- Campus Operations Principal
- Campus Operations Department
- KU General Counsel Office
- University Architect/Design and Construction Management
- Real Estate Trust Specialist

## High-Level P3 Deal Structure

- Design-build-operate-maintain (DBOM) arrangement with Edgemoor Infrastructure & Real Estate LLC for development of integrated science building, residence hall and dining facility, apartment-style student housing, student union, parking garage, and central utility plant
- KU entered into a 30-year ground lease/leaseback agreement with KU-controlled affiliated non-profit corporation, KU Campus Development Corporation (KUCDC)
- KUCDC will sublease new facilities back to KU upon completion; KU will pay annual sublease payment of approximately \$22 million to KUCDC
- KU maintains ownership of ground and facilities throughout the lease term

## Project Cost and Financing

### \$350M

Total cost of project (plus \$30.8 million in interest and \$2.1 million for bond issuance)

### \$326.9M

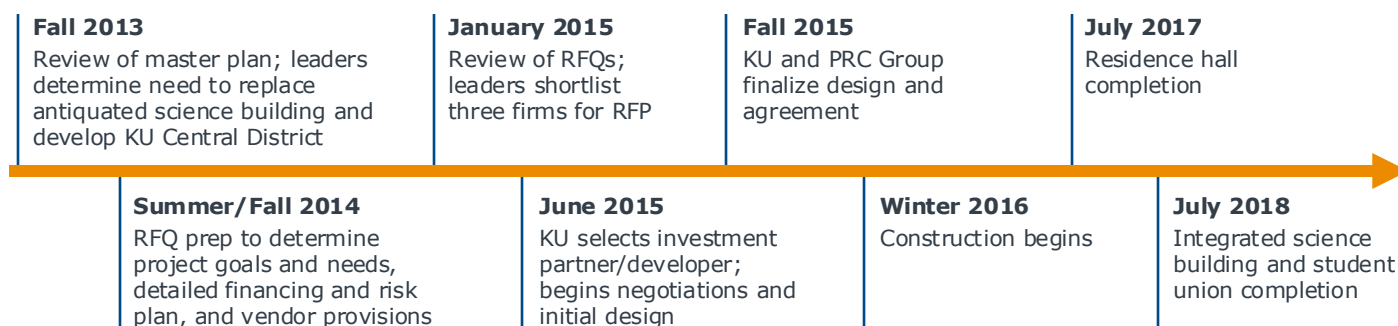
Borrowed by KUCDC from the Wisconsin Public Finance Authority (plus \$56 million in issue premiums)

Source: "Public Private Partnership: Kansas' \$350M Case Study," NACAS; University of Kansas, Lawrence, KS; EAB interviews and analysis.

## Annual Revenue Streams from Project

- \$8.3 million from housing occupant fees
- \$5.6 million from tuition dollars generated by growth in international and out-of-state students
- \$6.1 million in funds from "Changing for Excellence" efficiency savings/initiative
- \$1.4 million from new parking garage proceeds
- \$800,000 in student fees for student union

## Project Timeline



## Project Outcomes

### New Facilities and Infrastructure

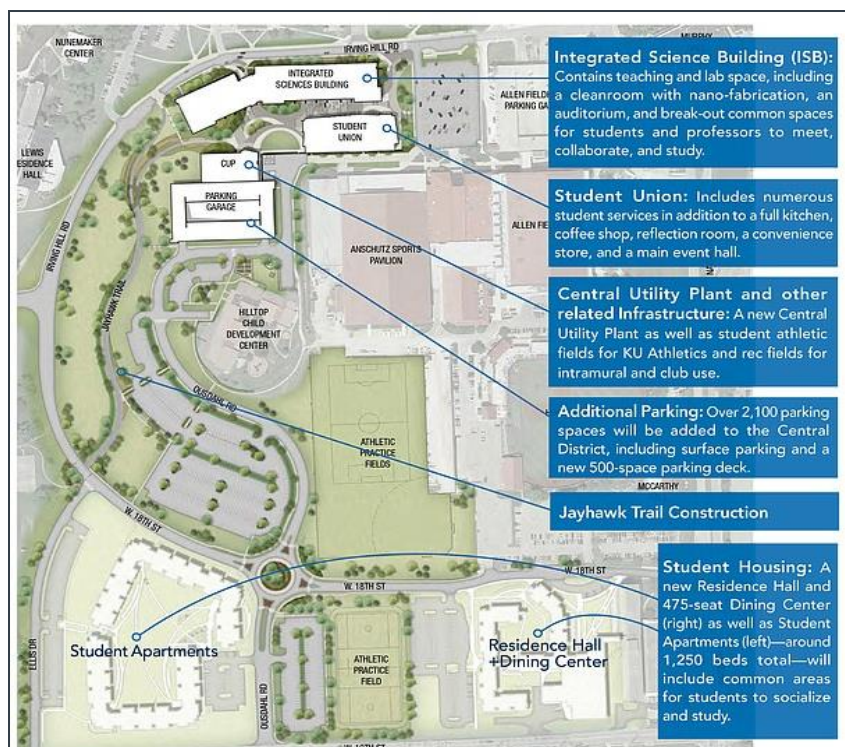
- **Integrated science building:** 280,000 gross square feet of academic and research science space, including laboratories, classrooms, offices and meeting space
- **Student housing:** 545-bed residence hall and dining facility, 708-bed apartment-style student housing
- **Student union:** 30,000-square foot facility
- **Central utility plant:** includes repair and renovation of the North District Utility Plant
- **New parking garage**

### Long-Term Operations and Maintenance

- Guaranteed fixed pricing for contract term
- Guaranteed operating performance, including deductions for substandard performance based on a set of KPIs
- Guaranteed FCI<sup>1</sup> of .70 at conclusion of term

### Cost Savings

- P3 saved over 20% of estimated cost compared to traditional project delivery; savings projected to be in excess of \$70M



THE UNIVERSITY OF KANSAS

## Project Website

<https://centraldistrict.ku.edu/>

1) Facility Condition Index, measured as the amount of deferred maintenance divided by total asset value.

Source: "Public Private Partnership- Kansas' \$350M Case Study," NACAS; University of Kansas, Lawrence, KS; EAB interviews and analysis.

# University of Kentucky

**Type of Institution:** Public Doctoral University: Highest Research Activity

**Location:** Lexington, Kentucky

**Enrollment:** 22,674 undergraduate, 7,160 graduate (Fall 2016)

**Operating Expenditures:** \$1.2 billion (FY16)



## Project Background

In late 2011, the University of Kentucky (UK) leaders and the Board of Trustees recognized a vital need to modernize, renovate, and expand residence halls on campus. With the average undergraduate housing age of 47 years, infrastructure systems were beginning to fail and only 25% of undergraduate students lived on campus. In addition, UK's leaders recognized campus housing revitalization as an opportunity to improve student success by enhancing the undergraduate experience with new living-learning communities. UK engaged external master planning experts to help plan and create a vision for residential facilities that included the demolition of outdated residence halls and the creation of active living and learning communities. After considering the traditional project delivery option, UK opted for a DBFOM<sup>1</sup> ground-lease arrangement to meet their goals of preserving financial capacity and expediting the project delivery timeline with minimal disruption to the rest of campus.

## Private Partner

REIT Education Reality Trust (EdR)

## Key Participants

### Project Implementation Team

- 21 members from the following departments: Executive Vice President Finance and Administration, Student Affairs, Residence Life, Facilities, Budget, Purchasing
- Determined building design, unit types, site locations, ground leases, and pro formas

### Provost Oversight Committee

Reviews living-learning community recommendations and approves size and facility placement

### Learning Living Program Task Force

Residence Life, academic partners, and EVPFA staff make recommendations on transition, growth, and placement of new communities

### Housing Academic Advisory Committee

Makes programmatic recommendations on all non-revenue generating space in new residence halls

## High-Level P3 Deal Structure

- DBFOM<sup>1</sup> ground-lease arrangement
- Multi-phase project with the goal of providing modern on-campus housing for up to 9,000 students:
  - Phase I: two living-learning community buildings with classrooms, study rooms, multipurpose rooms, and 601 beds
  - Phase II: systematic demolition and replacement of the majority of current housing; delivery of 10 buildings with 5,132 beds (plus 55 living-learning spaces with classrooms, multi-purpose rooms, and study lounges)
  - Phase III: two buildings with 1,117 total beds specifically for upperclass, graduate, professional, and post-doctoral students, and visiting scholars
- 75-year lease; EdR owns the Phase I facilities for the duration of the lease while UK owns the Phase II and Phase III facilities for the duration of the lease
- UK provides residential life services for all buildings

## Project Cost and Financing

**\$449.3M**

Approximate project cost

**100%**

Equity funded by EdR

1) Design, build, finance, operate, maintain.

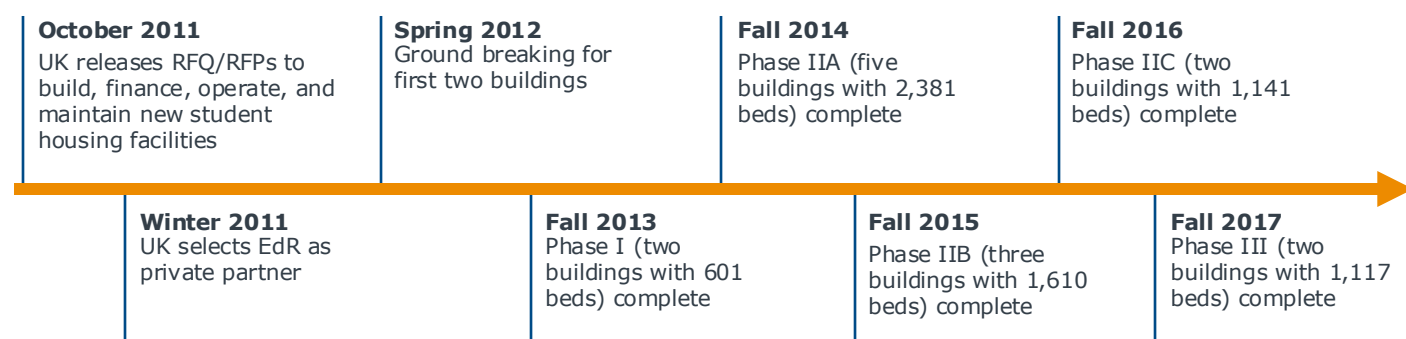
Source: "Transformation of Campus Housing through P3," NACAS, 2013; University of Kentucky, Lexington, KY; EAB interviews and analysis.



## Annual Revenue Streams from Project

- University receives annual ground-lease payment based on gross revenue and pro forma from each phase
- Average ground lease return (over all phases) is 11.5%

## Project Timeline



## Project Outcomes

### Revitalized Student Housing

- Delivery of 6,850 beds brings UK's total on-campus housing to approximately 8,300 beds by Fall 2017
- Demolition of outdated residence halls
- Living-learning communities include classrooms, multipurpose rooms, study lounges, kitchens, and laundry rooms
- Common space with a coffee shop

### Student Success and Competitive Advantage

- University modernizes student housing, which contributes to increased enrollments and retention rates
- In 2013, students in living-learning communities had 3.26 GPA and 88.4% retention rate (compared to 2.86 GPA, 82.8% retention rate for regular on-campus students)
- Growth in number of living-learning programs from 12 to 17

### Economic Impact

- Estimated \$289 million economic impact on the Commonwealth of Kentucky, affecting some 12,100 direct and indirect jobs
- Housing projects fueled \$13.3 million in state/local tax revenue
- LEED certification to support sustainability efforts



UNIVERSITY OF KENTUCKY



UNIVERSITY OF KENTUCKY

## Project Website

Projects profiled on EdR website: <http://www.edrtrust.com/>

Source: "Transformation of Campus Housing through P3," NACAS, 2013; University of Kentucky, Lexington, KY; EAB interviews and analysis.