



Alternative Delivery & Public-Private Partnerships

PFM-Client Industry Discussion

October 15, 2026

PFM Financial Advisors LLC

368 9th Avenue
6th Floor
New York, NY 10001

212.809.4212
pfm.com



A few things before we begin...

This session is being recorded

A copy of the recording will be available to you on the registration site.

You've joined muted

Please unmute to participate and re-mute when you're finished speaking.
The chat feature is also available for questions.

CPE credits can be earned during this session

- ✓ Attend the full session
- ✓ Respond to all poll questions
- ✓ Complete the post-session survey

CPE certificates estimated to be delivered on Monday, November 9th .

Technical, CPE, and registration questions? Contact *Ciara Simmons* directly.
Phone: 215-557-1287 | Email: simmons@pfm.com



Agenda

Topics

Overview of Alternative Delivery / P3 Projects

Credit Rating Treatment

P3 Delivery & Financing Methods

Case Studies

PFM Approach to Alternative Delivery Projects

Objectives

- 1 Understanding of the various types of Alternative Delivery / P3 projects
- 2 How to determine P3 appropriateness and feasibility
- 3 AD & P3s financing mechanics



Overview of Alternative Delivery / P3 Projects



What is a “P3”

- A “P3” is defined by the World Bank as *“a long-term contract between a private party and a government agency, for providing a public asset or service, in which the private party bears significant risk and management responsibility”*
- The term P3 is used to describe projects that vary widely in their financial and governance structures, investor base, technical complexity and impact to the host institutions
- Goal – simplify the project so the Client can evaluate it in a transparent manner and determine how best to engage the private sector to achieve your goals
 - Governance
 - Procurement and Delivery
 - Finance
 - Operation



Strategies to Leverage the Private Sector

- Municipal entities and nonprofits have leveraged the private sector to accomplish a variety of goals and objectives
 - Ownership and finance structures should be tailored to reflect the value proposition of the partnership
- **To the extent the goal is to develop or monetize an asset in order to improve balance sheet / credit capacity, the asset must:**
 - **Be a commercially viable project on a stand-alone basis**
 - **Not be a performing asset of the grantor**

Examples of Potential Goals and Objectives	
Governance	– Statutory limitations – Ability to manage procurement or existing labor requirements – Disposition on non-core assets
Design / Delivery	– Manage project delivery risk for on-time, on-budget project completion ○ Private sector expertise / efficiency for technically complicated development projects ○ Bundling of assets
Finance	– Manage balance sheet / credit impact of the development of non-core assets ○ Debt covenants, internal debt policies – Monetize non-core assets with commercial value – Transfer demand risk
Operations	– Transfer operating risks for noncore and/or technically complex assets – Alignment of interests with private partner for asset life cycle responsibility and risk – Private sector efficiency



P3 Overview

Potential Benefits

- Potential opportunity for innovation and risk transfer to private sector
- Whole-life costing (alignment of capital and operational costs)
- Greater cost certainty (private sector responsible for over-runs)
- Scope and change order control
- Turnkey management of complex construction and operations

Key Considerations

- New delivery method with less control and prescription
- More complicated procurement
- Potential higher cost of capital
- Long-term contract management
- Must provide value versus conventional delivery
- Labor considerations



Debt Finance Options

Public Delivery

- Public owner can pledge an **array of revenue sources** to issue debt
- Debt is often **tax-exempt**

Element	Public Structure
Borrower	Public owner
Security	Taxes, general obligation or project revenue
Issuer	Public owner or its authority
Debt	Often tax-exempt bonds

P3 Delivery

- Developer relies on **contract payments (project revenues or other forms)** financing
- Debt issued through a **public conduit issuer** as private activity bonds (PABs) or **developer sponsored special purpose entity**

Element	P3 Structure
Borrower	Developer
Security	Contract payments
Issuer	Public conduit issuer
Debt	Tax-exempt PABs (USDOT allocation); private debt



Examples of Alternative Delivery Capital Projects in Higher Education

		Example Assets	Description	Accounting / Credit	
Financing secured by credit strength of institution	Lease	- Academic buildings - Institution office space	Financing secured by fixed lease obligations made by institution	On balance sheet and on credit	GASB 87
	Availability Payments	- Utility concessions - Bundling of assets	- Payments made to private party <u>based on the underlying asset's availability for use</u> - Multiple components to payment	Financial consideration and/or new capital assets on balance sheet as long-term liability and total adjusted debt by rating agencies	
Financing secured by project revenue	Demand Risk P3s	- Student housing - Parking - Dining contracts	- Contract where an operator provides <u>public services</u> through the use and operation of an underlying asset - Private party is compensated by <u>third party fees</u>	- GASB: Deferred inflow of resources on balance sheet - Credit treatment varies, but generally total adjusted debt	GASB 94
	Market Development	- Commercial office / lab - Hotels - Market rate housing (workforce / graduate)	Arms-length market rate ground lease for private development	Potentially off-balance sheet and off credit	

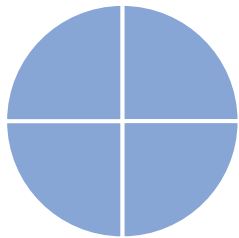
Target for capital projects where the institution's objective for leveraging private sector is to preserve credit capacity



Procurement for Development of New Capital Asset

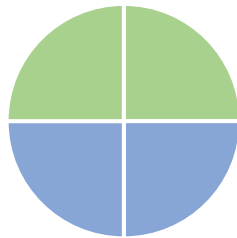


Self-Perform; Design Bid Build (DBB)



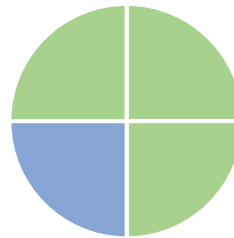
Public Entity retains all development risk, including design, construction, delivery, financing and O&M / life-cycle costs.

Design Build (DB)



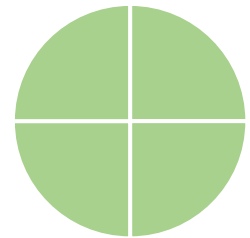
Public Entity transfers some development risk to Private Party and is delivered a turnkey project. Public Entity retains financing and O&M / life-cycle risks.

Design Build Finance (DBF)



Private Entity assumes the project financing risks in addition to development risks

Design Build Finance Operate Maintain (DBFOM)



Private Entity assumes O&M and Life-cycle risks including operating cost escalations and capital investment in addition to development risks.



Misconceptions about AD/P3s

- Despite increasing visibility in the U.S., many misconceptions remain about P3s

Misconception	Realities
• P3s can provide “free money” to close funding gaps for projects • Cost of borrowing is always most significant value driver • P3s give away government oversight and allow private sector free reign to raise rates • P3s are hostile to public-sector unions • Profit motives for the private sector make P3 delivery more expensive	• Private financing partners require some mechanism for repayment and return on investment • Cost of capital is one consideration in project’s total value, along with lifecycle costs, risk-sharing, value engineering opportunities, etc. • Detailed project agreements preserve government oversight or define limitations on rate increases • Successful P3s have been structured both with and without continuing union labor contracts • Private sector already profits through construction contracts. AD/P3s provide for design innovation to lower overall costs

Based on the general observations of the presenters.



Risk Allocation Illustration

- The more risk the public owner retains, the more upfront value it may receive from the developer.
- It is increasingly accepted that the developer should not bear, in full, risks it cannot control.
- The table below is an illustrative example of how risks may be shared in a toll road P3 project.

Risk	Owner	Developer	Contractors	How it is shared
Qualifying change in law	•			Owner bears; prompt notice, then agree on mitigation
Performance and payment bond		•		When Bonds cover only part of the DB price
Construction delay and Cost overruns		•	•	Delay and lane-closure LDs; cost overruns stay private
Toll system integration		•	•	Late integration delays revenue; owner's share unclear
Differing subsurface conditions	•	•		Tiered: developer first, then 50/50, then owner ¹
Hazmat and other site finds	•	•		Compensation events: hazmat, species, cultural, utilities
Utility delays	•	•		Capped schedule relief days
Right of way	•	•		Owner bears most; developer bears ROW its ATCs add
Injunctions, approval delays	•	•		Injunctions compensated; capped approval relief
Design exception withdrawal	•	•		Tiered: developer first, then 50/50, then owner
NEPA re-evaluation for ATCs	•	•		Developer recovers a fixed share; owner total capped
Termination payments	•	•		Owner-caused events on owner; partial debt repaid
Competing facility	•	•		Opening one triggers compensation to the developer
Pre-close rate changes	•	•		Benchmark rate: owner; spread mostly owner
Toll services noncompliance	•	•	•	Each party liable for its own noncompliance
Snow and ice damage	•	•	•	Owner shares losses above an indexed threshold



Ground Lease Transactions: General Considerations for Lessor

Governance

- Composition of governance board
- Term of ground lease
- Definition of Qualified Buyer / Operator
- Right of First Refusal / Right of First Offer
- Termination Provisions
- Approval rights for future alterations / CAPEX
- Approval rights for future operating budgets

Finance

- Balance sheet / credit impact to host
- Cost of capital for financing of core assets
- Annual ground rent participation
- Capital events / Refinancings
- Transfer of lease-up risk
- Financial strength of development partner
- Developer's equity interest in future financial performance of asset

Design / Delivery

- Design standards / approval process
- Project delivery risk
- Form of contract
- Construction security package
- Environmental / latent conditions
- Contingency requirements and ownership

Operations & Maintenance

- Facilities condition index
- Operating standards / KPIs
- Hand-back provisions
- Replacement reserve requirements
- Permitted / Prohibited uses of assets
- Approval rights of potential tenants
- Common area cost allocations



Poll Question



Poll Question

◆ Only projects that generate revenues such as tolls, fares or other user fees can utilize P3 structures.

◆ TRUE

◆ FALSE



Credit Rating Treatment



Rating Agency Treatment of Alternative Financings in Higher Education

Moody's	Fitch	S&P
Debt or equity of P3 projects included in leverage metrics if the following three conditions are met: • The project is primarily intended for use by university constituents; • The project is located on land owned by the university and falls under a long-term contract; and • Ownership of the project reverts to the university at the conclusion of the contractual agreement	P3 debt will be included to the university's leverage metrics if the University is • The primary source of revenue • Obligated to make payment of project-related debt in a termination or default event	Any partnership agreement is viewed to be on-credit • P3 debt is generally included as indirect debt, subject to transaction specifics • Projects supported by <i>contingent lease</i> obligations or deemed to be <i>essential</i> to an institution are included as debt of the institution in leverage metrics
• Concession Agreements – use deferred inflows as a proxy for debt • Termination Costs – used as a proxy for unconditional purchase obligations	P3 debt will be excluded from leverage metrics if the university • Does not bear material operating costs • Is not subject to demand risks of the project	Essentiality can be determined by: • Level of involvement of the affiliated university • Economic interest, • University control and connectivity to the project
For all alternative financing arrangements, the credit impact can vary over the life of the project	Nuanced treatment of P3 debt based on milestone payments or contingent payment to support the project • Probability of payment being required and • Significance of that payment in the project's credit profile	Indirect debt is excluded from S&P's leverage metrics but may be presented in rating opinions



Poll Question



Poll Question

- ◆ Which description best describes the treatment of alternative delivery / P3 financing?
 - A. Never on credit
 - B. Never on balance sheet
 - C. Always on credit or balance sheet
 - D. Dependent on specific deal terms



P3 Delivery & Financing Methods



Availability Payment Arrangements Overview

- Financing structure under which the public partner makes a present annual payment to the private partner for the use of the financed asset
 - Public partner is only required to make the full annual payment if the asset is maintained to certain negotiated operating standards

Potential Benefits

- Transfer of construction and delivery risk to private party
- Alignment of interests with private partner that has equity at risk for the future financial performance of the asset
- Time and cost efficiencies in project development
- More politically palatable vehicle for public sector to issue debt
- Manage statutory limitations for issuance of debt

Considerations

- Public sector retains demand risk for the future use of the asset
- Accounted for as a long-term liability, and treated as debt by the rating agencies
- Borrowing costs higher than senior lien credit of public party

Examples

General Municipal

- PG County, MD: K-12 Schools
- Long Beach County, CA: Courthouse

Transportation

- PennDOT Bridges
- LaGuardia Airport

Higher Education

- Purdue U: Student Housing
- U Idaho: Utility Concession
- UC Merced: Multi-Use Campus Development



Availability Payments vs. User Fees – Key Differences

	User Fee Model	Availability Payment (AP) Model
Project revenues owned by	Developer	Public owner
Developer's revenue	Project revenues (e.g., tolls)	Availability payments from the public sponsor
Developer's debt	Backed by non-recourse project revenues	Backed by availability payments
Required debt service coverage ratio	Higher	Lower
Availability payments	n.a.	Appropriated non-project revenues (i.e., tax revenues) Counted against the public owner's debt
Demand risk (downside)	Borne by the developer	Resides with the public sponsor
Demand windfall (upside)	Shared with the public owner through revenue sharing	Resides with the public sponsor
Required equity amount	Higher	Lower
Required equity return	Lower	Higher



Availability Payments Structure

- The availability payments are isolated from the project demand risk; it is primarily only subject to the developer's performance
- The maximum availability payments ("MAP") are defined upfront, which usually contains a capital investment component and an ongoing O&M cost component. Below is an example:

$$MAP_y = \underbrace{(MAP_{Base} \times 80\% \times (1 + 2.5\%)^n)}_{\text{Capital investment component}} + \underbrace{(MAP_{Base} \times 20\% \times CPI_y / CPI_{2012})}_{\text{Ongoing O\&M component}}$$

Capital investment component
 80% of base MAP, escalated 2.5% per year

Ongoing O&M component
 20% of base MAP, indexed to CPI

Deductions that can reduce the MAP

Deduction	Trigger	How it reduces the MAP
Unavailability adjustments	Unplanned closure outside Permitted Closures	% of annual MAP, scaled by location, day type, time, lanes and duration; quarterly payment floors at zero
Noncompliance adjustments	Missed O&M standards; late or inaccurate reports	\$5,000 per Noncompliance Point; payment withheld until reports are fixed; Milestone Payment cut up to \$10M
Other quarterly adjustments	Catch-all, positive or negative	Interest on overpayments, deferred compensation, shared savings (change requests, insurance), damage offsets
Refinancing gain sharing	Non-exempt refinancing	Contracting Authority's share of the gain, usually via lower future payments



P3 Project Sources and Uses – Toll Road Illustration

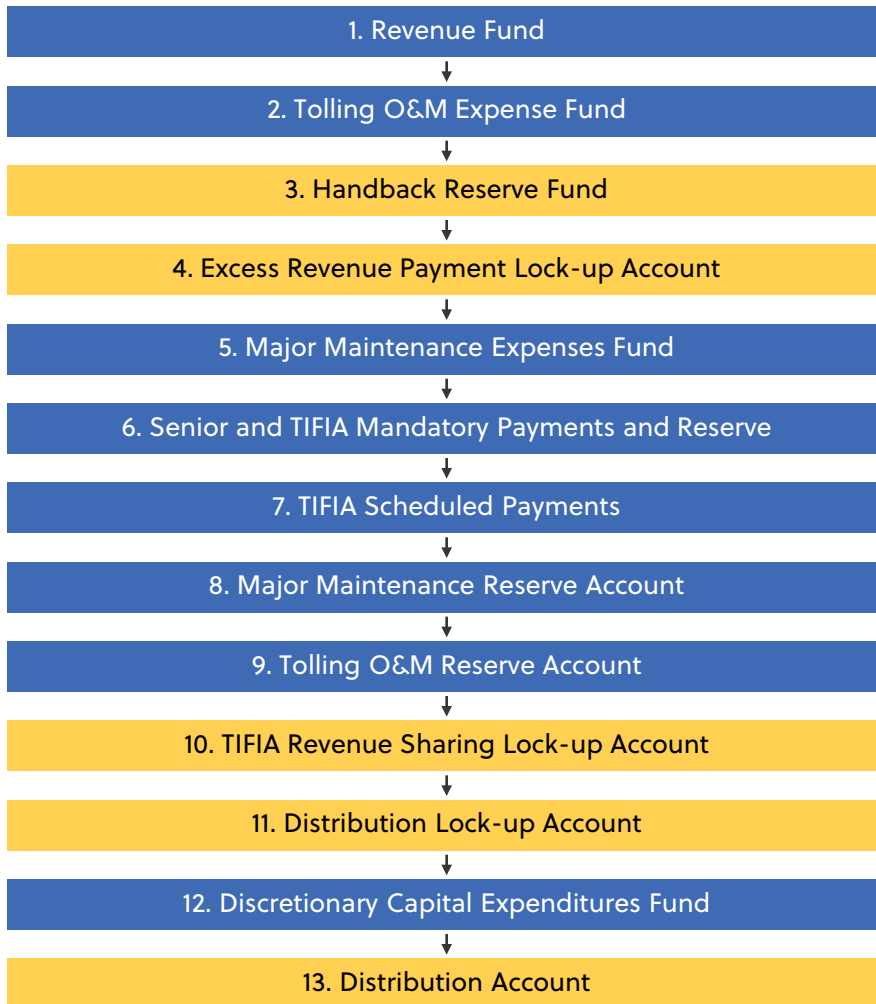
Sources	Amount (in 000s)
Series 2025 Bonds Proceeds	\$3,323,701
TIFIA Loan Proceeds	\$3,886,892
Equity Contributions	\$3,355,042
Future Transit Payments and Early Work Payments	\$195,000
Interest Earned During D&C Period	\$230,935
Total Sources of Funds	\$10,991,570
Uses	Amount (in 000s)
Construction Costs	\$4,718,924
Concession Fee to SRTA	\$3,799,312
FT Phase 2 Support Payment	\$26,000
SPV and Insurance Costs	\$80,973
Interest on the Series 2025 Bonds	\$1,141,810
Series 2025 Bonds Reserve	\$102,434
Other Reserve Accounts Funding	\$464,756
Other Costs Payable During D&C Period	\$657,360
Total Uses of Funds	\$10,991,570

- **Capital stack:** typically senior lien bonds, a junior lien TIFIA loan and equity contributions
- **Equity is the most expensive capital,** usually carrying a 12–14% IRR; rating agencies and the TIFIA lender still require a minimum contribution, with debt/equity around 70/30 or 65/35
- **Concession fee:** depending on the demand scenario, capital raised pays for upfront project costs and can also fund an upfront payment to the public sponsor, at financial close and/or during the O&M period
- **High issuance costs:** P3s require extensive evaluation and carry equity letter of credit fees

Source: Public Finance Authority, Senior Lien Toll Revenue Bonds, Series 2025 (Georgia SR 400 Express Lanes Project), Official Statement



P3 Flow of Funds – Toll Road Illustration



Key Differences vs. Public Financing

Bucket 3. Handback Reserve Fund

Developer is required to ensure the asset is maintained properly at the end of the concession, via a reserve fund at the “handback.”

Bucket 4. Excess Revenue Payment Lock-up Account

Developer is required to share “windfall” revenues with the public owner; revenue sharing typically occurs at the front of the waterfall.

Bucket 10–11. TIFIA Revenue Sharing and Distribution Lock-up Accounts

Residual revenues are locked to ensure TIFIA repayment (i.e., certain coverage ratios must be met before funds can be released); bucket 11 serves a similar function.

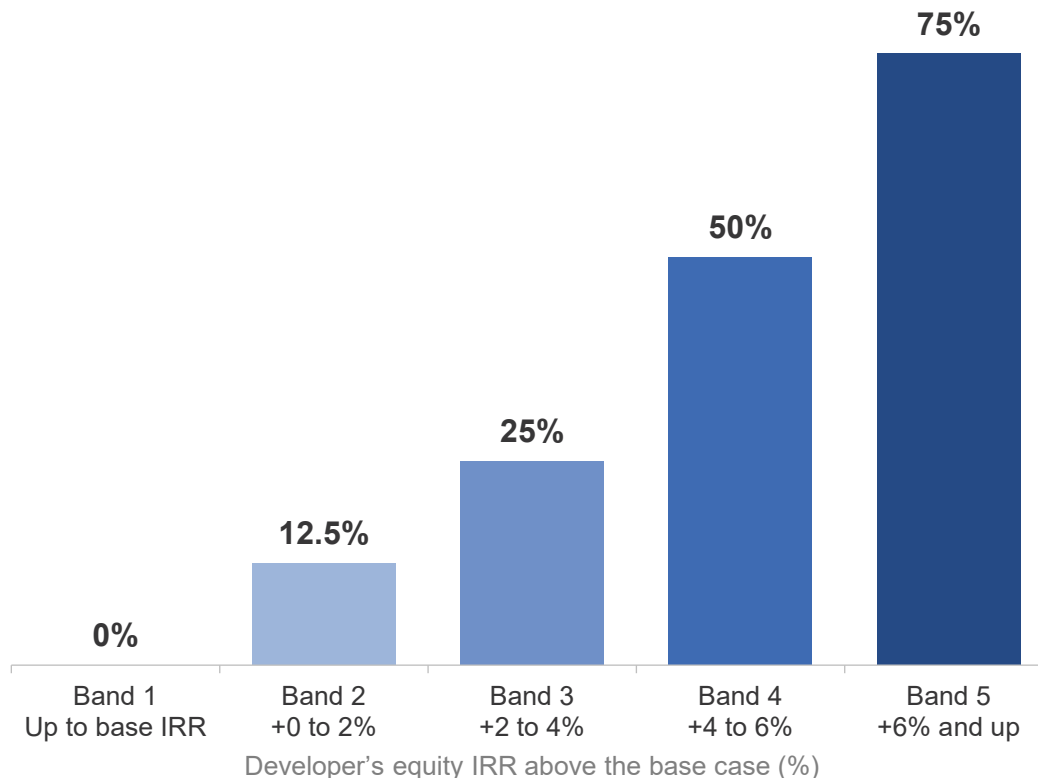
Bucket 13. Distribution Account

Equity distribution is at the end of the waterfall, after all requirements in each prior bucket are met.



Revenue Sharing Bands – Toll Road Illustration

Percentage of Revenue Shared with Public Sponsor Within Bands



- **Standard mechanism:** the bands prevent the developer from earning windfall profits
- **Set at financial close:** bands are expressed only as gross revenue figures, determined by IRR levels
- **Performance-triggered:** nothing is shared until revenue lets equity earn its base-case IRR
- **Marginal, like tax brackets:** each rate applies only to revenue inside its band; the top band takes 75%
- **Paid early:** the share sits near the top of the waterfall, ahead of debt service (see prior slide)
- **Real-world results vary:** Texas' three managed-lane projects have paid TxDOT \$87.6M to date¹

¹Source: TEXpress Lanes in North Texas: A 10-Year Retrospective – Reducing Congestion While Generating Billions in Economic Impact



Poll Question



Poll Question

- ◆ Which of these is NOT an example of a P3?
- A. Long-term concession agreement of an airport terminal
 - B. Management contract for operating a water supply system
 - C. Highway financed and operated by the private sector under a toll revenue concession
 - D. Courthouse financed using availability payments



Case Studies



The Ohio State University's CEMP – Accounting Treatment

1. **Cash and temporary investments:** increase includes upfront proceeds from the energy agreement held for future capital projects
2. **Long-term investment pool:** increase due to investment of \$820 million of the upfront proceeds from the energy agreement
3. **Advance from concessionaire:** upfront payment reported as noncurrent liability and is amortized as a reduction to operating expense on a straight-line basis over the term of the 50-year agreement

- Capital investments in the utility system will be recognized as capital assets and a related long-term payable to the concessionaire
- Utility Fees:
 - Fixed Fee: \$45mm annually growing at 1.5%
 - O&M Fee
 - Capped fee: controllable expenses
 - Uncapped fee: extraordinary direct costs, subject to University approval
 - Variable fee: future capital investments, to be funded by 50/50 debt/equity split
- *The University will continue to buy energy sources directly from providers*

	2018	2017
① Cash and temporary investments	\$ 3,023,554	\$ 2,230,809
Receivables, inventories, prepaids and other current assets	845,332	757,389
Total current assets	3,868,886	2,987,998
Restricted cash	584,656	686,032
Noncurrent notes and pledges receivable, net	112,019	108,073
② Long-term investment pool	5,211,434	4,253,459
Other long-term investments	183,946	143,638
Capital assets, net of accumulated depreciation	5,043,222	4,883,584
Total noncurrent assets	11,095,277	10,054,786
Total assets	14,964,163	13,042,784
Deferred outflows	737,903	1,012,937
Total assets and deferred outflows	\$ 15,702,066	\$ 14,055,721
Accounts payable and accrued expenses	\$ 579,363	\$ 524,754
Deposits and advance payments for goods and services	274,401	223,880
Current portion of bonds, notes and lease obligations	640,589	651,984
Other current liabilities	105,021	87,708
Total current liabilities	1,599,374	1,488,326
Noncurrent portion of bonds, notes and lease obligations	2,582,017	2,640,142
Net pension liability	2,548,009	3,565,362
Net other post-employment benefits liability	1,249,521	-
③ Advance from concessionaire	1,046,342	-
Other noncurrent liabilities	366,344	366,057
Total noncurrent liabilities	7,792,233	6,571,561
Total liabilities	9,391,607	8,059,887
Deferred inflows	972,224	484,007
Net investment in capital assets	2,376,795	2,259,207
Restricted:		
Nonexpendable	1,551,278	1,473,074
Expendable	1,328,793	1,190,162
Unrestricted	81,369	589,384
Total net position	5,338,235	5,511,827
Total liabilities, deferred inflows and net position	\$ 15,702,066	\$ 14,055,721

Source: The Ohio State University audited financial statements for FY18



George Mason University – Fuse at Mason Square



Project

- Located on land owned by University in Arlington, VA
- Ecosystem of faculty, students, and private sector and community partners that will accelerate innovation
 - Academic Space: Classroom, lab and office space utilized by the University
 - Commercial Space: Office, lab and retail space utilized by private entities aligned with the University's technology programming

Finance / Ownership Goals

- Mitigate impact to University balance sheet / credit capacity
- Transfer lease-up risk for Commercial Space to private partner
- Achieve efficient cost of capital for Academic Space
- Participate in financial considerations based on annual performance and upon capital event

Proposed Structure

- Long-term ground lease to private development partner
 - Developer responsibilities
 - Deliver the Project on-time and on-budget
 - Raise capital for the Commercial Space (approximately \$77 million)
 - At risk for lease-up and financial performance of Commercial Space
 - Operations and maintenance of entire Project to agreed upon standards
- University enters into sub-lease for Academic Space that is co-terminus with the ground lease
 - University responsibilities
 - Raise capital for development costs (approximately \$156 million split b/n University and Commonwealth)
 - Pay annual costs of operations

The case studies provided in this presentation are for informational purposes only and do not represent an endorsement or testimonial by clients of PFM's municipal advisory services. The results that PFM's municipal advisory business obtained for each client illustrated were dependent upon the client's circumstances and market conditions at the time of the transactions, and should not be viewed as a guarantee of future performance results. PFM Financial Advisors LLC commenced its operations on June 1, 2016. All municipal advisory engagements prior to that date were effected through former affiliate Public Financial Management, Inc.



PFM Approach to Alternative Delivery Projects



PFM Approach to Alternative Delivery Projects

- PFM's AD/P3 project teams combine industry best practices with local knowledge of our clients
- Goal – simplify the project so the client can evaluate the project in a transparent manner and determine how best to engage the private sector to achieve your goals
 - Governance
 - Design & Delivery
 - Operations
 - Finance
- Work with our clients to determine the most efficient project delivery method that accomplishes the institution's goals and objectives
 - We focus on the long-term best interest of our clients, not the development of an individual project
- We understand the nuanced details of these projects and have the ability to analyze their impact on the client's financials, credit, governance and mission as their trusted advisor





Keys to AD/P3 implementation

- Best practices for P3 create the conditions for successful outcomes (whether a transaction is executed or not)
- Understanding goals and objectives up front provides yardstick to measure value
 - Avoids “fishing expeditions” with ill-defined procurement instructions to private sector
- Maintaining a disciplined procurement schedule and competitive tension among potential bidders is critical to driving greatest value

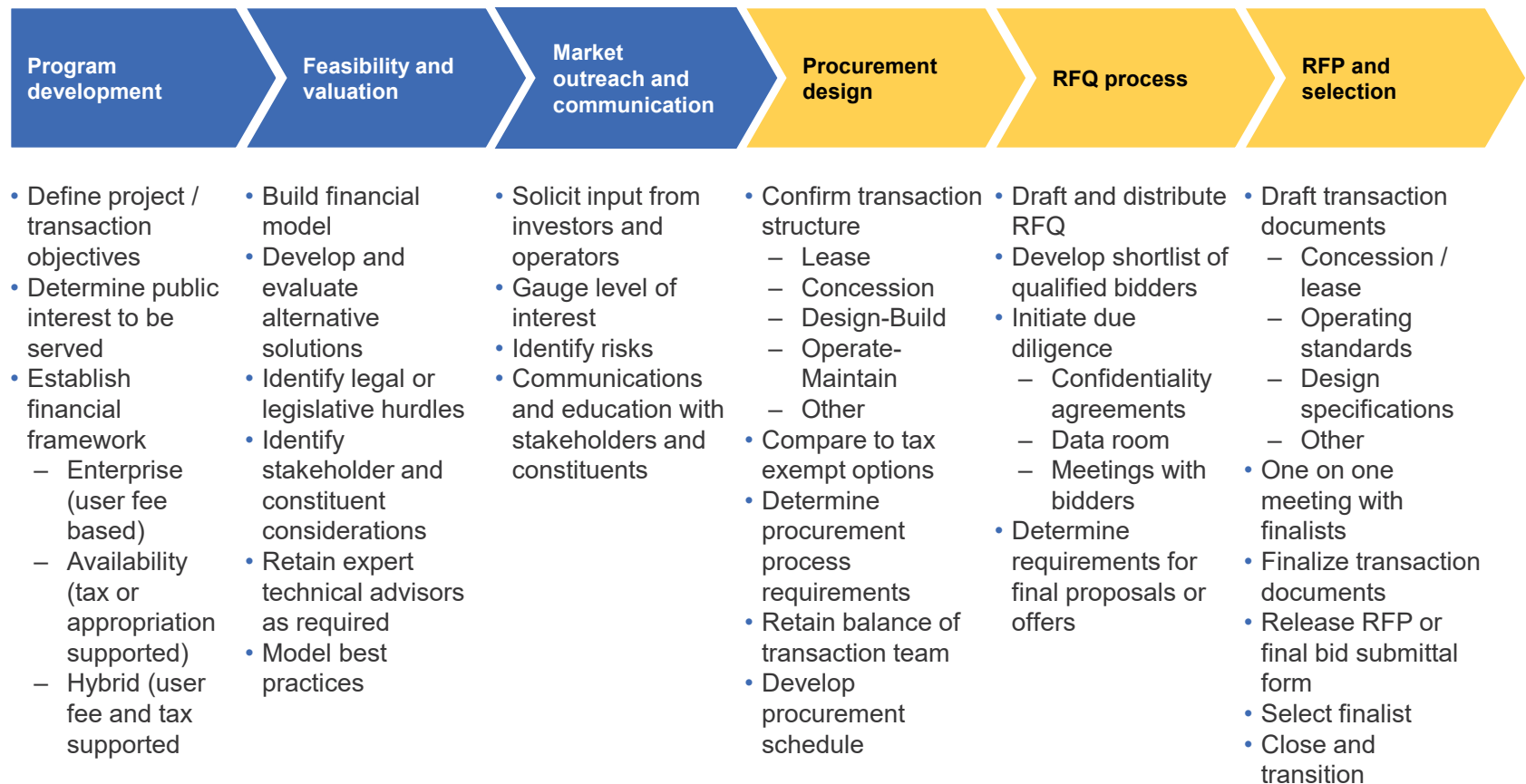




PFM's project management approach

Analysis and valuation

Transaction development and execution





Disclosures

ABOUT PFM

PFM is the marketing name for a group of affiliated companies providing a range of services. All services are provided through separate agreements with each company. This material is for general information purposes only and is not intended to provide specific advice or a specific recommendation. PFM does not provide tax, legal or accounting advice.

Financial advisory services are provided by PFM Financial Advisors LLC, a registered municipal advisor with the Securities and Exchange Commission (SEC) and the Municipal Securities Rulemaking Board (MSRB) under the Dodd-Frank Act of 2010.

Swap advisory services are provided by PFM Swap Advisors LLC which is registered as a municipal advisor with both the MSRB and SEC under the Dodd-Frank Act of 2010, and as a commodity trading advisor with the Commodity Futures Trading Commission. Additional applicable regulatory information is available upon request.

Consulting services are provided through PFM Group Consulting LLC. PFM's financial modeling platform for strategic forecasting is provided through PFM Solutions LLC, d/b/a Synario. Special district management services, including general management and administrative services, are provided through PFM Management Services LLC.

For more information regarding PFM's services or entities, please visit www.pfm.com.

Special disclaimer regarding the research and forecasts included in today's presentation: This research and any forecasts are based on current public information, as of the date of this presentation (or as of such date as may be specified in the presentation), that we consider reliable, but we do not represent it as accurate or complete, and it should not be relied on as such. The information, opinions, estimates and forecasts contained herein are also as of the date hereof and are subject to change without prior notification.

Case studies are provided for information purposes only and do not constitute specific advice or a recommendation. Opinions, results, and data presented are not indicative of future performance. Actual results may vary. Inclusion on this list does not represent endorsement of PFM's services.

Questions?





Thank You for Attending:

Alternative Project Delivery & Public-Private Partnerships

We'd love to hear your thoughts. Please take a few minutes to complete our post-session survey. Your feedback means a lot to us.

Survey Link: [Alternative Project Delivery & Public-Private Partnerships - Survey](#)

CPE Credit Reminder:

If you are seeking CPE credit for today's session, completing the survey is required.