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Prince George's County Public Schools Alternative Construction Financing Overview

April 3, 2019

Alternative Construction Financing (ACF)

- ACF refers to long-term forms of cooperation between public authorities and private entities to ensure the design, construction, renovation, financing, operation and/or maintenance of an infrastructure facility.
- ACF allows for private or blended financing of publicly owned infrastructure.
- ACF typically involves long-term contracts for the provision of bundled services, including some form of life-cycle asset management.
- Life-cycle focus (not just construction) to ensure long-term facility performance.
- ACF is output and performance based, allowing for private innovation in meeting performance targets.
- ACF is not "free money", it is a procurement/delivery method and private investments still need to be compensated
- ACF refers to a broad spectrum of contracting structures:

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ACF and P3 are not new to Maryland or PGC

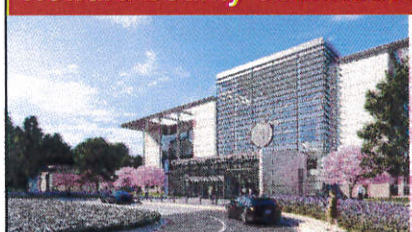
Purple line DBFOM Project

- *16 mile light rail transit*
- *35-year DBFOM*
- *$2.65 billion*
- *Financing Structure: Blended, with a 90%/10% debt-equity structure on private finance.*
- *Payment Mechanism: Availability Payments with milestones*

Prince George's County Clean Water Partnership

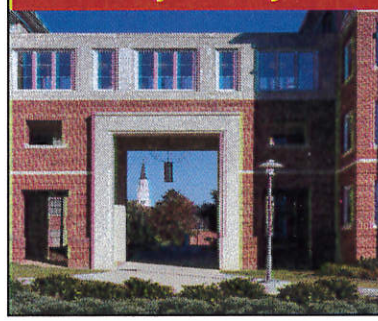
- *30 Year DBFM for urban storm water green infrastructure*
- *Plan, design and construct infrastructure retrofits across 4,000 acres of impervious surfaces*
- *Blended financing with performance-based payments*
- *Life-cycle asset management*

Howard County Courthouse DBFOM



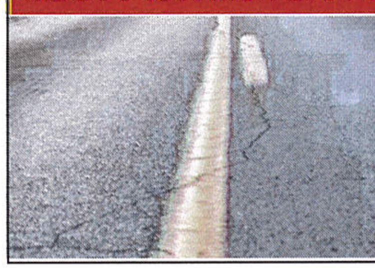
- *32.5 year DBFOM for new 238,000sf circuit courthouse in Howard County, MD*
- *Financing: $178 million financed with equity, a bank loan, and bonds.*
- *Compensation : $78 million milestone payment upon completion, with balance of capital costs, as well as ongoing O&M costs, paid via annual AP during the 30-*

University of Maryland South Campus Commons



- South Campus Commons residential community in College Park developed through P3 between Capstone Development and the University of Maryland.
- $182M, 483,000 sf consists of one mid-rise and six low-rise residential buildings, houses 2,200 students in more than 500 apartments, and includes seminar and conference rooms, faculty offices, student lounges and computer centers.

MDOT I-495 AND I-270 P3 Program Phase 1



- 70 miles of I-495 and I-270 in Maryland.
- MDOT is currently considering delivering the P3 Program as a series of long-term design-build-finance-operate-maintain DBFOM revenue risk concessions

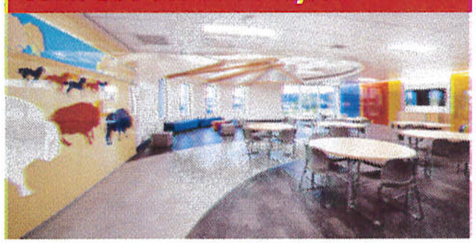
DBFM in Education and Social Infrastructure

- Many public school districts are finding DBFM to be an attractive option for educational facilities. With a private partner paying costs up front, districts don't have to wait for funding to begin construction. Projects are generally completed on time and on budget, often saving the public entity millions of dollars.
- ACF for education facilities is extremely common on global level, with DBFM having served as one of the most common delivery methods in the UK, Scotland, Canada and throughout Europe for the past two decades.

Alberta Schools

Alberta Schools Alternative Procurement
- *30 Year DBFM*
- *40 new Alberta schools*
- *Performance-based availability payments*

Joint-Use Schools Project



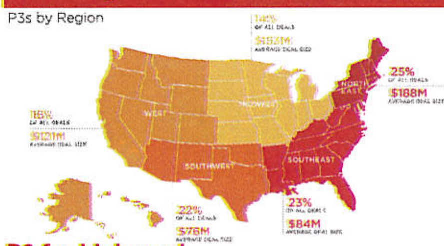
Saskatchewan Joint-Use Schools
- *35 year DBFM , AP structure*
- *New construction of 18 elementary schools on 9 joint-use sites*

U.C. Merced 2020

University of California Merced
- 35 year DBfOM
- $1.3 Billion project adds 1.2 million sf of campus
- Blended finance and milestones, with performance-based AP

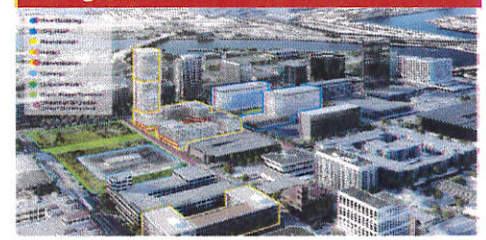
U.S. Higher Education

P3s by Region



P3 for higher ed
- *DBFM/ DBFOM models with AP structure have become standardized*
- *Over 40 $100 million+ transactions per year, with majority*

Long Beach Civic Center



Long Beach Civic Center
- DBFOM, 40 year term, availability payment (AP)
- $531 million for 270,000-sf City Hall, 93,500-sf Main Library, 232,000-sf Port Headquarters, and mixed-use..

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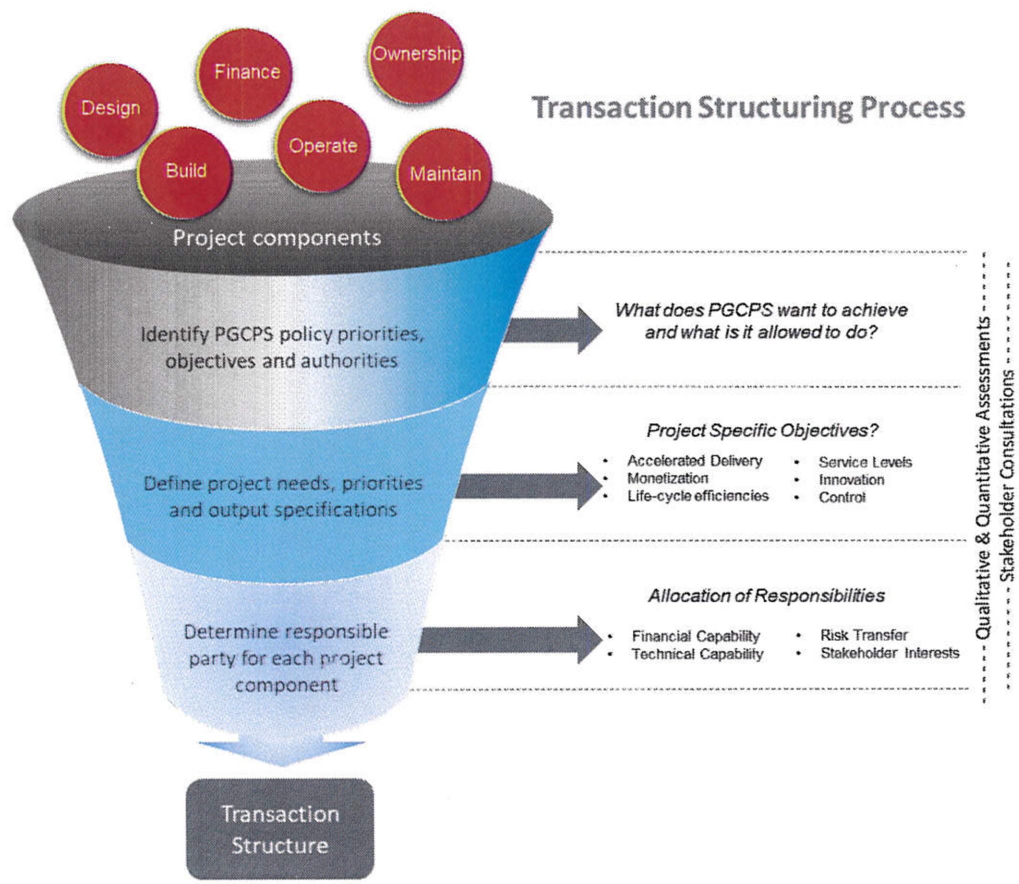
Delivery Model Assessment

Delivery Model Options Analysis

- *Multi-criteria analysis was undertaken to qualitatively assess a wide spectrum of potential finance and delivery options for their alignment with project goals, objectives, risks and current status.*
- *PGCPS defined its key goals and objectives for the Project to provide a high-level framework for evaluating the suitability of the range of delivery models.*
- *Given PGCPS objectives, including the desire to retain Facility Management / Operations and Maintenance, two delivery options were identified for further and comparison review:*
    - **Design-Bid-Build (DBB)**, reflecting PGCPS current delivery method.
    - **Design-Build-Finance-Maintain (DBFM)**, reflecting PGCPS desire to explore alternative finance and delivery, while still retaining responsibility for daily facilities management and operations.
- *Subsequently, a qualitative and quantitative assessment was undertaken to review which of these structures would provide better value for money (VFM) or other benefits for the public.*
- *VFM assessment process included a risk analysis to identify and quantify value of risk transfer under P3 scenarios.*



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DBFM Delivery Model

DBFM Description

With design-build-finance-maintain (DBFM), responsibilities for designing, building, financing, and undertaking major maintenance and repairs for a package of schools are bundled together and transferred to a private partner.

Private partner would be compensated via ***availability payments***. With an availability payment, project funding risk is retained by the public sector sponsor. PGCPS pledges availability payments to compensate the private partner for a set time period during which it receives a predictable, fixed income stream (subject to deductions for performance deficiencies).

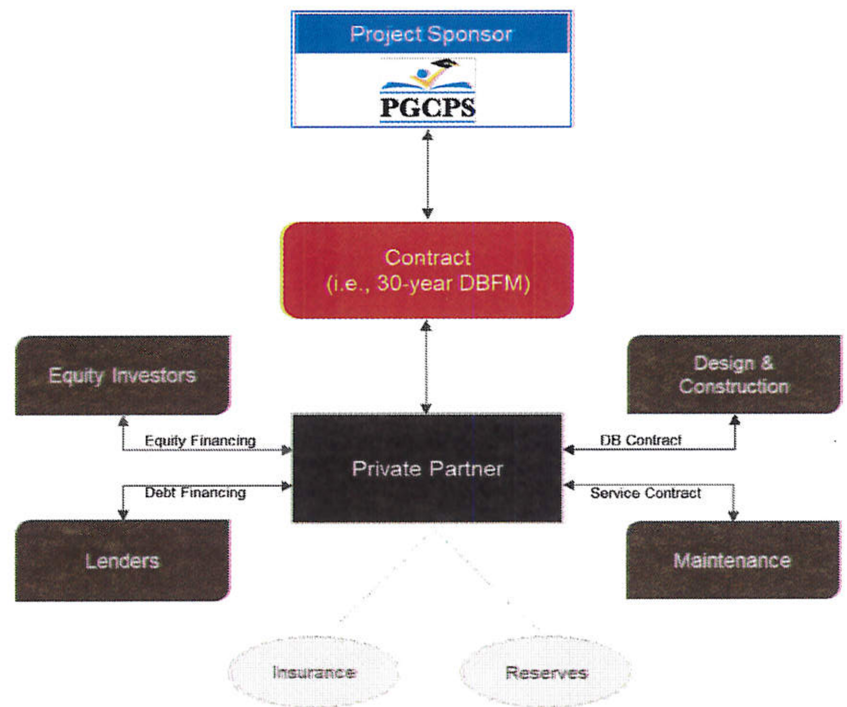
DBFM structures often extend for a period of 30+ years and are awarded under competitive bidding.

Benefits of DBFM

- *Additivity* (deliver more schools in near term)
- Significant Risk Transfer
- At-risk private capital creates strong performance incentive
- Possibility to defer payments until after completion
- Accelerated delivery of infrastructure
- Life-cycle budget predictability
- Life-cycle asset management
- Design and construction integration with lifecycle maintenance
- Innovation and life-cycle savings

Disadvantages of DBFM

- Higher cost of private financing versus public finance
- Not full risk transfer
- Not full life-cycle benefits due to PGCPS retention of FM/O&M



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Qualitative Comparison

Indicative Risk- Responsibility Comparison

Indicative Allocation ○ Public ● Private ◔ ◑ ◕ Shared

Risk Category	DBB	DBFM
	INDICATIVE RISK RESPONSIBILITY ALLOCATION	
A. Design / Construction		
1. Functionality of Design	○	●
2. Design-construction interface risk	○	●
3. Construction Schedule	◑	◕
4. Cost Overruns (errors/omissions)	◑	●
5. Environmental & Permits	◔	◕
6. Commissioning	◔	●
B. Operations & Maintenance		
1. O&M Costs	○	○
2. Asset Performance / Availability	◔	◕
3. Life-cycle asset maintenance / MR&R	○	●
C. Financing		
1. Project-related debt payments	○	●

Under a DBFM delivery structure, responsibilities for designing, building, financing, and undertaking major maintenance and repairs are bundled together and transferred to a competitively procured private partner. This helps to ensure budget and schedule certainty, as well as life-cycle asset maintenance at prescribed performance levels, thereby avoiding deferred maintenance. Moreover, this structure leverages private capital.

Key Comparisons	
Design-Bid-Build	**Design-Build-Finance-Maintain**
— Delivers schools as funding becomes available (estimated delivery in 7 yrs)	— Accelerates delivery of multiple schools under one package (estimated delivery in 3 yrs)
— Limited efficiencies due to delivering schools sequentially	— Cost savings through economies of scale and bundling
— PGCPS assumes all operations/maintenance risk	— PGCPS retains all operations/maintenance risk
— Limited cost certainty	— Cost certainty for construction and operations
— Probable deferred maintenance	— Long-term warranty through transfer of major maintenance
— Pay-Go funding requires significant upfront liquidity	— Availability payments begin upon delivery of facilities

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Delivery Model Assessment Conclusions

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After a multiple criteria analysis, including a value-for-money assessment, it was determined that a ***Design-Build-Finance-Maintain structure appears to be superior to other models in delivering a schools package****. Potential benefits include:*

- *Accelerated delivery of infrastructure versus traditional delivery, thereby expediting public benefits and reducing delivery costs*
- *Possibility to defer payments until after completion (aligning cash flows with public benefits)*
- *Life-cycle budget predictability*
- *Enforceable performance standards (availability payments are subject to deductions in the case that performance standards are not met)*
- *Greater security around cost and schedule risk as a result of the at-risk private finance.*
- *Life-cycle asset management (better stewardship of public assets)*
- *Design and construction integration with lifecycle maintenance*
- *Innovation and life-cycle saving*
- *PGCPS retains control of critical matters (such as O&M, output standards, MBE requirements, Labor treatment, etc.)*
- *Robust market interest will create competitive pricing pressure*

Although private financing comes at a higher cost than public finance, funding certainty, incentives due to at-risk-capital and other factors off-set that higher cost, as demonstrated in the Value-for-Money assessment.

Value-for-Money analysis of indicative schools bundles suggests that DBFM delivery could potentially generate **some $100 million** of savings over the life of the Project on an NPV basis, as compared to the traditional DBB delivery model.

Key Project and Value Considerations:

- *Constructability and individual project risks*
- *Swing space availability and plan*
- *Selection of individual schools*
- *Budget capacity for the Availability Payment*
- *Specific deal terms*

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