



Emerging Trends in Port Infrastructure: Using P3s to Maximize Value

Presented at
AAPA Planning for Shifting Trade Program
Tampa, FL
9:00 – 10:30 am, January 31, 2019

Brian G. Papernik, *Partner*
Infrastructure Practice Group

nossaman.com

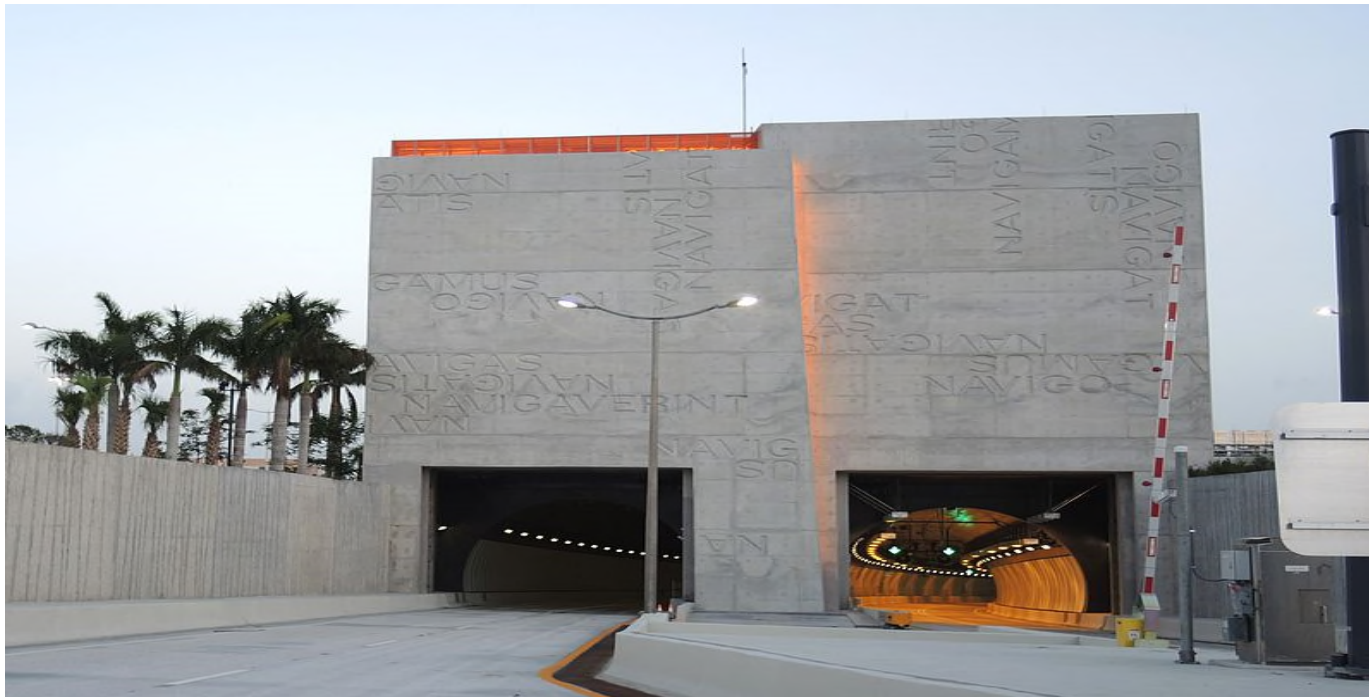
Session Overview

- 1. Types of Port Projects**
 - Port Access
 - Terminal Development
- 2. Delivery and Financing of Port Infrastructure**
 - Traditional delivery
 - Alternative methods
- 3. How P3s Can Maximize Value**
- 4. Key P3 Considerations**

1. Types of Port Projects

(1) Port Access

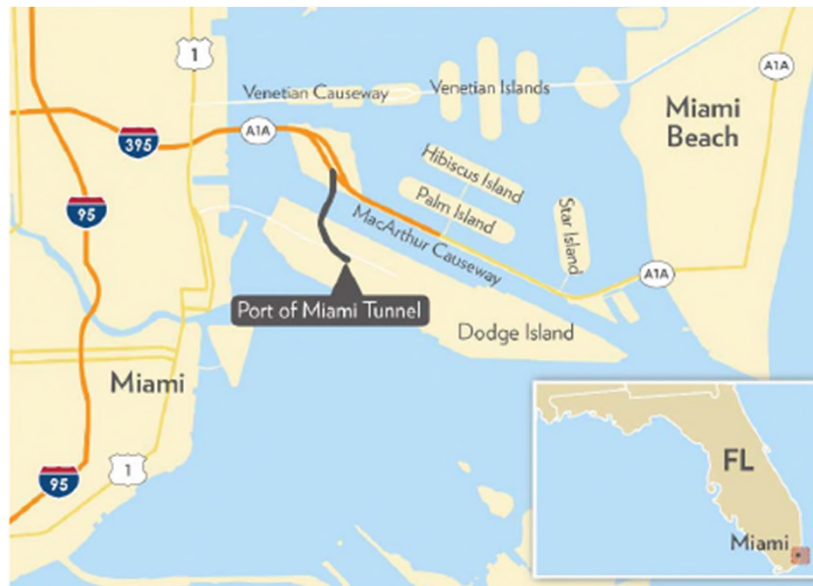
- Typically include rail, bridges, tunnels, roadways



MAKING IT HAPPEN.

Port of Miami Tunnel

- Improved access to and from the Port of Miami
- Two parallel tunnels (one in each direction) connecting the MacArthur Causeway on Watson Island with Port of Miami on Dodge Island
- Construction began in 2010 and the tunnel opened to traffic in August 2014

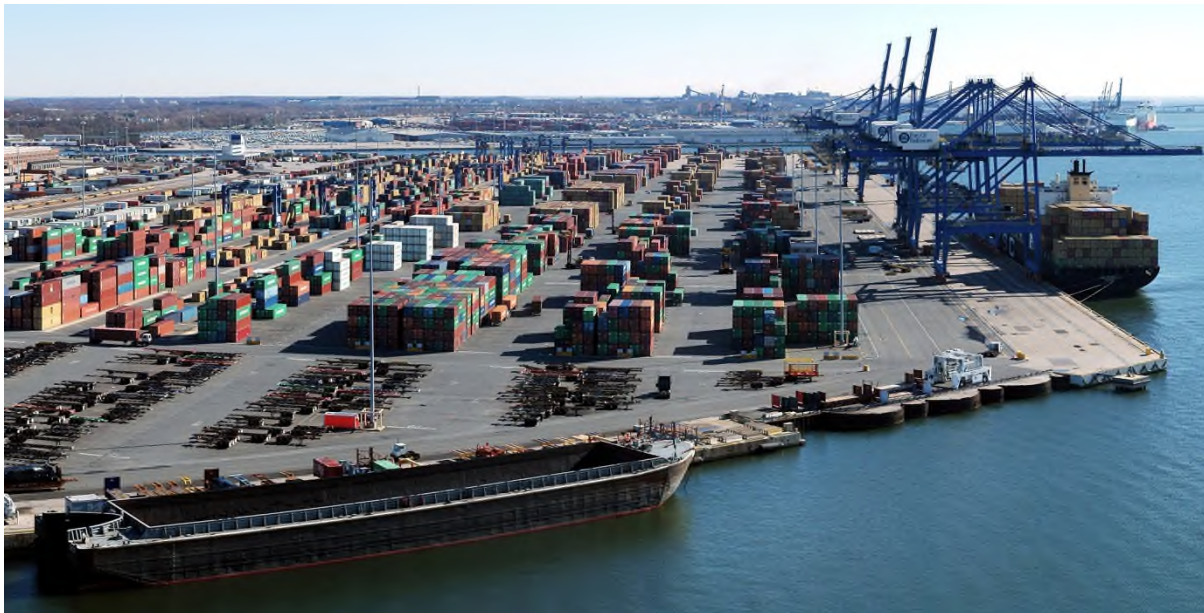


MAKING IT HAPPEN.

Types of Port Projects (cont.)

(2) Terminal Development

- Typically include harbor deepening, improvements to maximize the marine terminal capacity
- Recently to accommodate larger Panamax ships



MAKING IT HAPPEN.

Opening of New Panama Canal

- Opened in 2016, at the end of March 2018, the new canal marked the milestone passage of 3,000 New Panamax ships (weighing over 12,000 tons and about 400m long)
- Competition between ports to generate business from the new generation of super-large ships (particularly along the southern and eastern coastlines)



MAKING IT HAPPEN.

Port of Wilmington

- Full-service deep water port and marine terminal handling about 400 vessels annually with an annual import/export cargo tonnage of more than 6 million tons



MAKING IT HAPPEN.

Port of Wilmington (cont.)

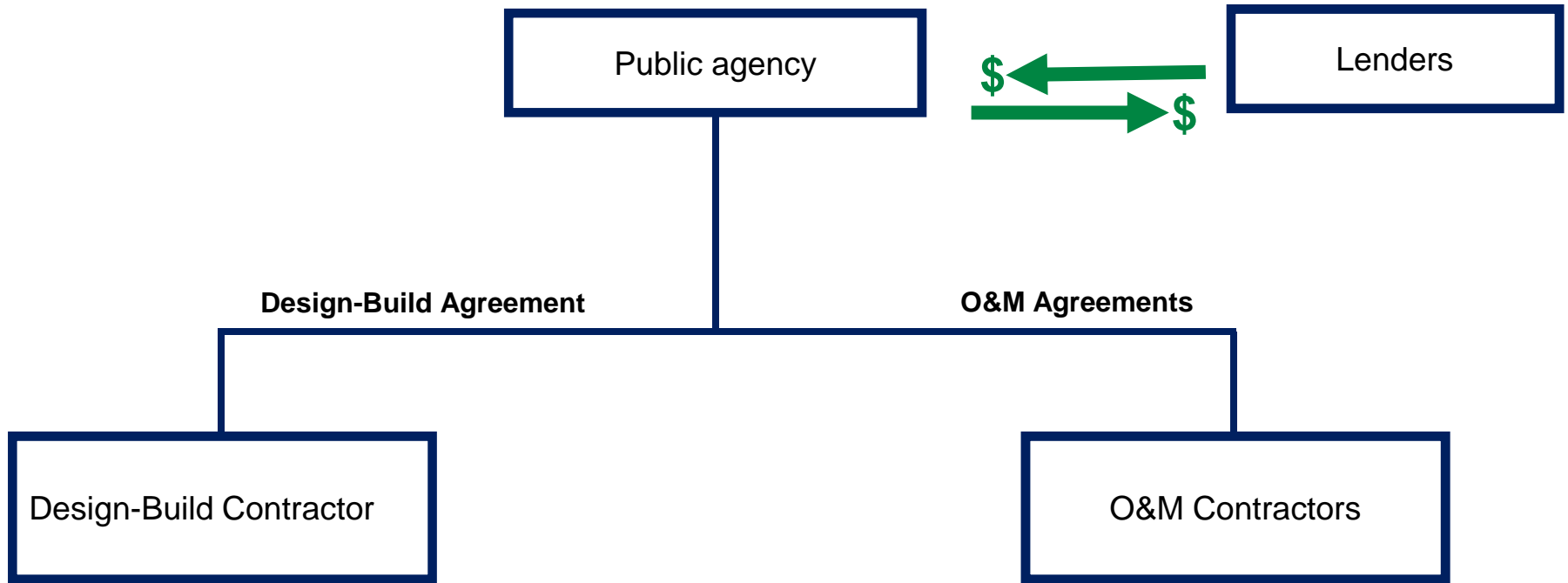
- Developer investment in civil work and equipment at current facility to increase container throughput
 - Development of an approximately \$410 million new container terminal at DuPont's former Edgemoor site
 - Development of a training facility for jobs in the ports and logistics industries
 - Modernization of port facilities

2. Delivery and Financing of Port Infrastructure

- Traditional Delivery
- Alternative Methods



Traditional DB Contractual Structure with Public Finance



Alternative Method: Public-Private Partnership (P3)

What is a Public-Private Partnership?

- Delivery and financing method for the development of public infrastructure that includes **private finance**
- Private entity has **long term maintenance and renewal**, and possibly **operating**, responsibility
- Private entity's **investment is at risk** to its performance

Classic P3 - DBFOM

- Contractual arrangement between a public agency and private developer for design, construction, financing and long-term operations and maintenance of infrastructure by Developer
 - Not a legal partnership
- Developer hands back asset at end of term in contractually specified condition
- Ownership of asset remains with public owner
- Payment Structures
 - (1) Availability Payment
 - (2) Concession/Revenue

(1) Availability Payment Model

- **Public owner makes Availability Payments to Developer once Project is “available” for its “intended use”**
 - Motivates on-time and on-budget completion so Developer recoups its investment and achieves its expected rate of return
 - Availability Payments are the revenue stream anchoring private financing

Typical AP Payment Terms

■ Private Financing

- Developer raises capital against AP stream promised in the P3 Agreement
- Project debt and equity raised to finance the project are paid back over time from the APs (the “cash flow” generated by the project in an AP delivery)

■ Payments at Risk to Performance

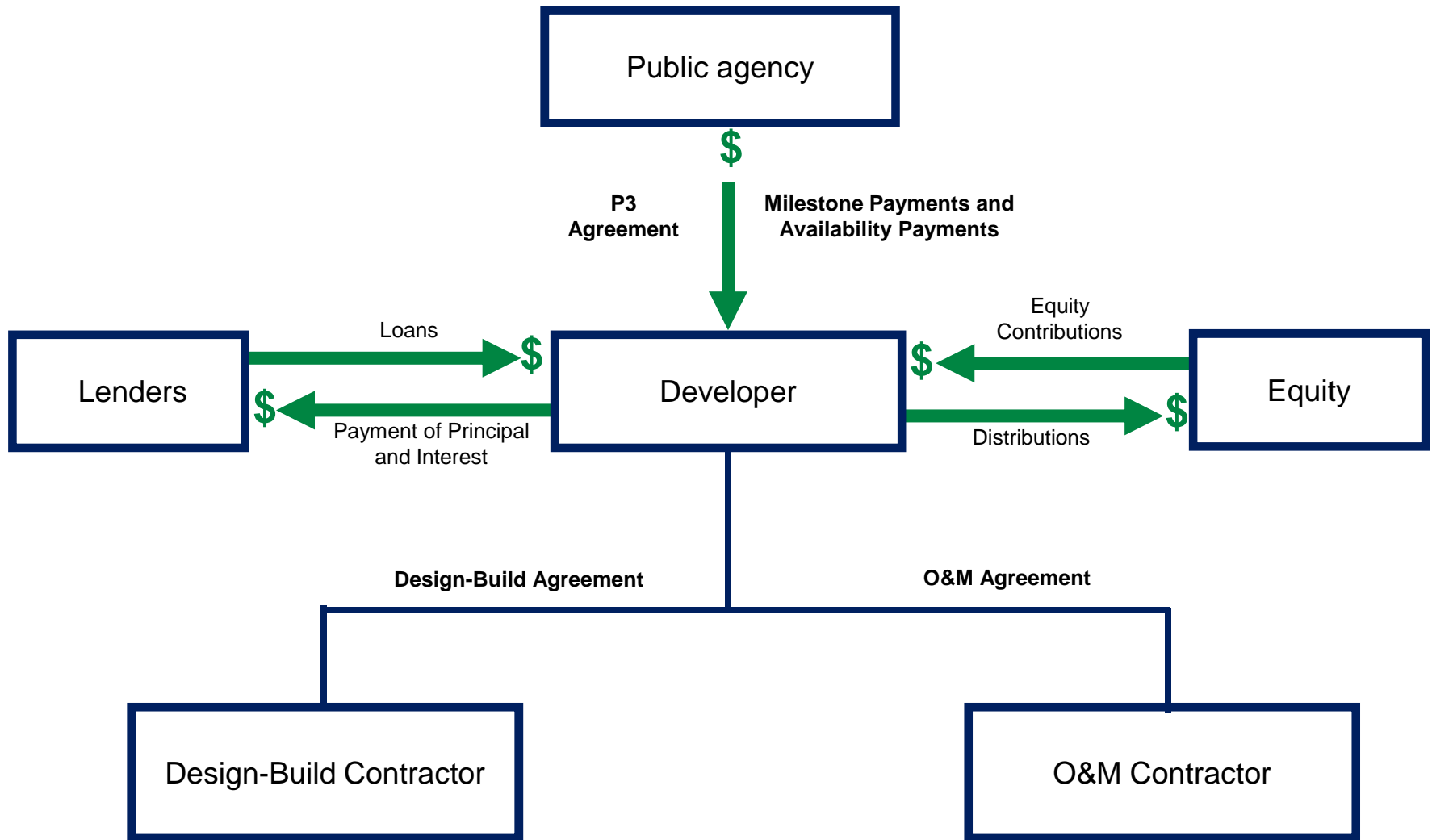
- Developer at risk until it achieves “availability”
- Availability payments may be adjusted downward based on Developer’s performance

Typical AP Payment Terms (cont.)

■ Availability Payment

- Unitary payment that encompasses Developer's capital expenditures, operating and maintenance expenditures and financing costs
- Capped at “maximum availability payment” bid by Developer
- Payment for performance and availability, irrespective of demand
- Public Owner retains project revenues if any and related risks

Typical AP Contractual Structure



MAKING IT HAPPEN.

When to Use Availability Payments

- **Availability payments can be appropriate for projects if:**
 - Project does not generate direct revenue
 - Public agency wishes to retain direct rate setting authority
 - Revenue or demand is difficult to predict or manage
 - Service quality is a more important or applicable goal than private sector revenue maximization

Port of Miami Tunnel

- 35 year availability payment concession agreement between the Florida Department of Transportation (FDOT) and MAT Concessionaire, LLC (MAT)
- MAT consortium is comprised of Meridiam Infrastructure Finance (90% equity partner), Bouygues Travaux Publics, and Canadian financing partners

Port of Miami Tunnel (cont.)

- FDOT provided MAT a total of \$100M in milestone payments during construction
- FDOT also made a \$350M final acceptance payment to MAT upon construction completion
- During the 30-year operational period, MAT will receive annual availability payments totaling \$32.5M (2009\$), with adjustments for inflation
- Deductions made from the total amount of availability payments if MAT's operation does not meet prescribed performance standards

(2) Concession / Revenue Model

- User charges/fees generated by project are primary revenue source
- Developer has right to collect revenues during concession period
- Developer expects revenues generated from project to be adequate to pay underlying loans and interest and make a reasonable profit
- To protect public sector interest in case of unexpectedly robust revenue generation, concession agreements typically include revenue-sharing provisions if revenues exceed specified thresholds

Concession / Revenue Model (cont.)

- **Public Owner**

- Contributes no or limited revenues to project costs
- May provide limited financial assistance (e.g., limited revenue guarantees)

- **Private Party**

- Bears risk that revenues may not meet expected forecasts
- Collects user fees/operations revenue, subject to revenue share

Concession / Revenue Model (cont.)

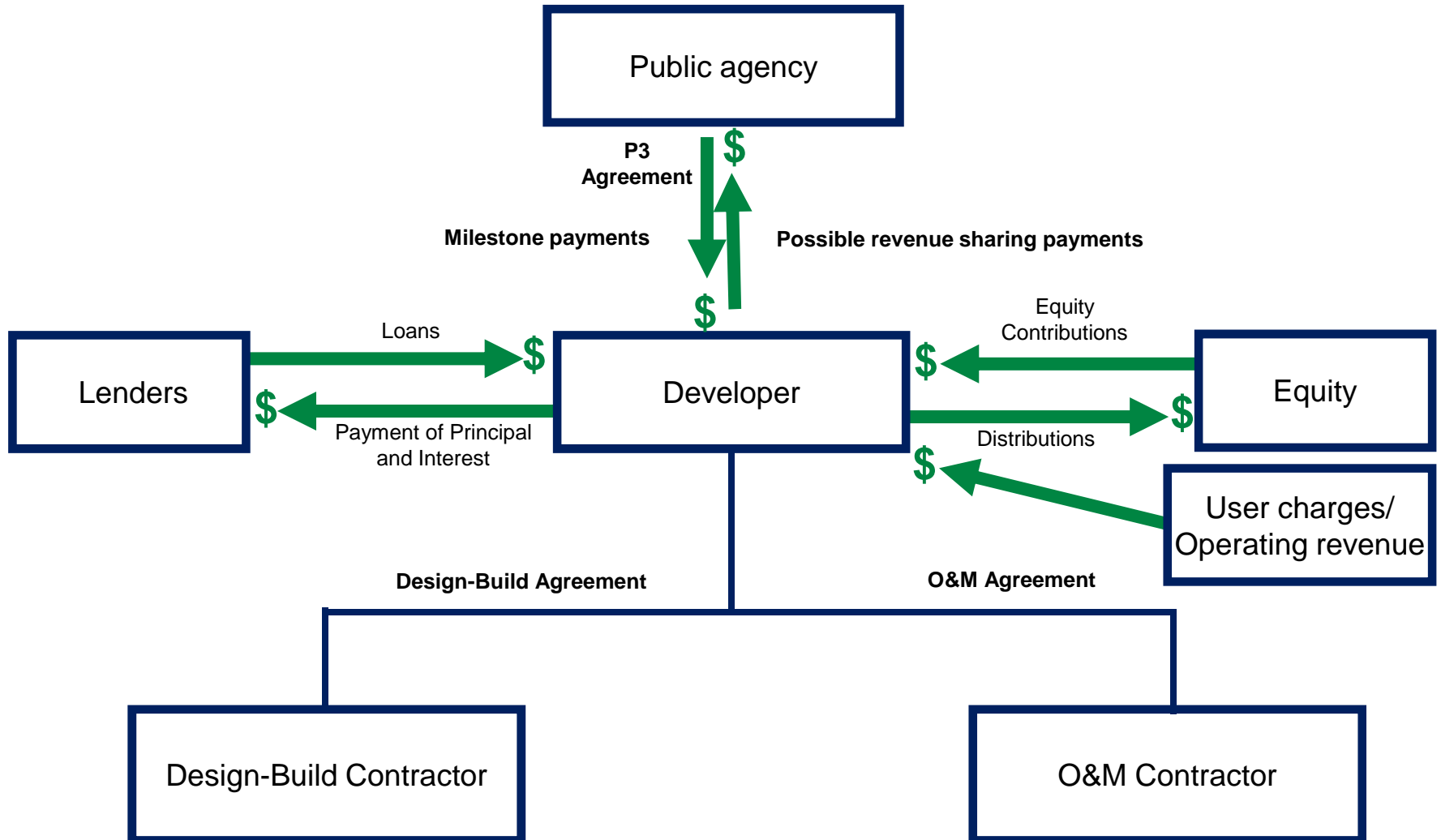
- **Considerations**

- Revenue risk
- Control of user charges and operations program
- Competing projects



MAKING IT HAPPEN.

Basic Concession / Revenue P3 Contractual Structure



MAKING IT HAPPEN.

Port of Wilmington

- **50-year Concession Agreement**
 - Between Diamond State Port Corporation (State of Delaware corporation) and GT USA Wilmington, LLC (Delaware special purpose vehicle of Gulftainer port management company)
- **GT USA's Schedule of Rates**
 - GT USA is permitted to charge and collect all fees in connection with permitted operations
 - GT USA is entitled to establish its own tariff/schedule

Port of Wilmington (cont.)

■ Annual Concession Fee

- GT USA obligated to pay quarterly concession fee based on cargo volume (with periodic adjustments for inflation)
- Annual payments expected to reach \$13M
- Guaranteed minimum annual concession fee of \$3M (with periodic adjustments for inflation)

Port of Wilmington (cont.)

■ Revenue Risk

- Wilmington P3 anticipates that terminal development will increase imports
- GT USA's investment at risk to cargo volume/ port revenue creates incentive for GT USA to optimize its investment in and operations and maintenance of the port facilities
- Expected investment by GT USA of up to \$600M

Port of Wilmington (cont.)

■ Commitments

- Investment Commitment: GT USA will invest specified amounts towards capital improvements
- Volume Commitment: GT USA will maintain a minimum annual cargo volume

■ Long-Term O&M

- GT USA at its own cost must maintain the port facilities in good working order and condition and perform repair/replacement work during the term

■ Handback Obligations

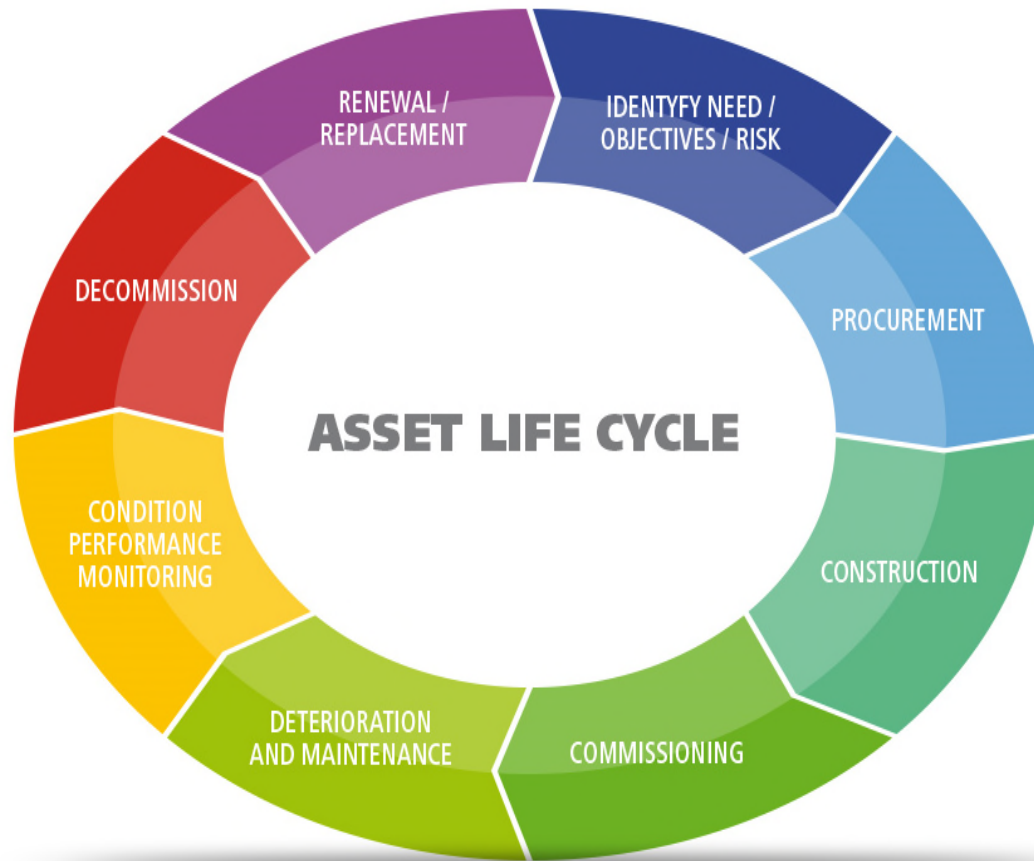
- At the end of the concession, GT USA is required to hand the port facilities back with the capacity to handle specified minimum service and tonnage volume

Port of Wilmington (cont.)

- **Emerging issue surrounding how to manage foreign investment in US infrastructure**
 - Foreign Investment Risk Review Modernization Act (enacted in 2018) expanded the powers of the Committee on Foreign Investment in the United States (CFIUS) to review, and potentially prohibit, foreign investment that poses a threat to US national security
 - GT USA based in United Arab Emirates, triggering formal review and eventual approval by CFIUS
 - Receipt of CFIUS Approval is included in the Concession Agreement as a GT USA “Commencement Condition”

3. How P3s Can Maximize Value

Ports are exploring alternative ways to deliver and finance infrastructure projects to better capture the value of their infrastructure



MAKING IT HAPPEN.

How P3s Can Maximize Value (cont.)

- **Incentivize on-time and on-budget project delivery**
 - Private financing of design and construction, with availability payments / revenue only flowing upon commencement of operations
- **Realize lifecycle cost efficiencies**
 - Developer incentivized to optimize investment in initial design and construction of asset
- **Efficient risk transfer**
 - Allocation to Developer of risks better managed by private sector
- **Close funding gaps**
 - Accessing the private equity market
- **Harness private sector expertise and innovation**
 - Performance/output specifications

4. Key P3 Considerations

- Enabling legislation with sufficient flexibility
- Strength of proposed revenue stream to anchor private financing
 - Public agency funding certainty
 - Forecasted operating revenue certainty
- Cost of private finance
- Deal complexity and front end project development

Thank You



NOSSAMAN LLP

MAKING IT HAPPEN.