



Public-private partnerships

**Presentation to the 39th Annual
NABA National Convention**

June 18, 2009



Agenda

Infrastructure/PPP market overview

Structuring the PPP

Financing the PPP

PPP advisory process

Infrastructure¹ landscape

- Each country organizes infrastructure provision differently; a common template is a distribution across three spheres — the public sector, the private sector; and the public and private sectors acting in concert through partnership arrangements
- Globally, there is increasing movement towards increasing use of public/private models

U.S. Infrastructure ownership, delivery and operational models			
	Public (and “non-profit”)	Public/ private	Private
Surface transportation	most	some	
Ports		some	some
Aviation		all	
Freight rail			all
Power/Energy	some		most
Healthcare	most		some
“Social” (education/corrections)	all		
Telecoms/Cable			all
Water/Wastewater	most		some
Broadband	some		most

Unique U.S. characteristics

- State, Local and Public Authorities primarily responsible for infrastructure
- Robust market for sub-sovereign debt (municipal bonds)
- Diversity of legal/regulatory framework across jurisdictions

Public sector entities are increasingly partnering with the private sector for development of infrastructure assets and service delivery

Common themes that contributed to the rise of PPPs

- Substantial gap between new and deferred infrastructure maintenance/investment needs and current funding resources
 - Financial crisis has exacerbated the situation by reducing available public resources.
 - Stimulus activities were insufficient to “fill the gap”
 - Dissatisfaction with short-term budgetary thinking and the lack of accountability for long-term consequences
 - Desire to achieve lowest overall whole-life costing of infrastructure investment and operations
 - Desire to generate value through optimal risk allocation to the parties best suited to manage each risk
 - Desire to finance some assets and services away from the public sector balance sheet
 - Desire by private sector for an asset class that diversifies portfolio
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Common characteristics of PPP structures

There are many PPP structures, but most share the following characteristics:

- Long-term contractual arrangement with some regulatory element
- Not a full asset sale (although some may be deemed sales for tax purposes)
- Designed to secure value or control costs for the public sector
- Private sector contractor accepts risks and responsibility for (some or all of) design, construction, financing, maintenance and operations
- Public sector retains strategic control over service delivery, may retain certain risks that it is able to handle more efficiently than the private sector, and either cedes revenue generated from asset or makes payments for performance

PPP structures are arrayed across a spectrum of degrees of public sector control, and allocation of risks and rewards



Commonly cited benefits and concerns in PPP

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- Optimal allocation of risk
- Accelerated delivery
- Incentivized performance
- Whole-life costing efficiencies

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- Loss of public control
- Inflexibility
- Pricing/regulation
- Non-domestic capital
- Loss of public sector jobs

Participants in the public/private infrastructure market: U.S. model

Recently, there has been an expansion of participants in the U.S. infrastructure market as global operators and financiers have migrated to build on a wave of interest among public sector sponsors

Public sector

- State and Local Governments
- Transportation Agencies
- Water/Wastewater Districts
- Other Special — purpose Districts and Public Authorities
- Not-for-Profit organizations

Private sector

- Investor-Owned Utilities
- Infrastructure Developers/Operators
- Infrastructure Funds
- Financial Sponsors

Who is investing in infrastructure?

Strategic buyers/ Concessionaires

- Traditionally, operators, developers or contractors in the infrastructure sector
 - Often benefit from sector operational expertise, which can enhance the value of their bids
 - Increasingly becoming very aggressive bidders
 - Long-term investment strategy
- Abertis
 - ACS
 - Acciona
 - Aecom
 - Bombardier
 - Bouygues
 - Brisa
 - Cintra/Ferrovial
 - FCC
 - Global Via
 - Hochtief
 - Kiewitt
 - Laing
 - OHL
 - Sacyr
 - Siemens
 - Skanska
 - Transurban
 - Veolia
 - Vinci
 - Zachry

Infrastructure funds

- Private or listed equity funds focused on infrastructure investments
 - Strong liquidity awaiting for investment opportunities
 - Lower equity returns than for financial sponsors
 - Typically look to take part in a consortium
 - Medium-to long-term investment strategy
 - Fund sizes are smaller than for financial sponsors
- ABN-Amro
 - Alinda Capital
 - AMP Capital
 - Borealis
 - Carlyle
 - Challenger
 - CII
 - CPP Investment Board
 - Colonial
 - Commonwealth
 - EQT
 - GIP
 - Goldman Sachs
 - Hastings
 - Industry Funds Management
 - JP Morgan
 - KKR
 - Macquarie
 - Meridiam
 - Morgan Stanley
 - Ontario Teachers' Teachers'
 - Prudential
 - RREEF
 - UBS

Financial sponsors

- Private equity funds with shorter exit strategy
 - High equity returns (+20%) may limit ability to bid competitively but have been achievable in certain opportunities
 - Normally look for short term investments with a clear exit strategy
 - Typically look to take part in a consortium
 - Fund sizes range from \$6bn to \$16bn
- Apollo
 - Bain Capital
 - Blackstone
 - Clayton, Dubilier & Rice
 - KKR
 - MDP
 - Providence Equity
 - Thomas H. Lee
 - TPG
 - Warburg Pincus

Why does the private sector invest in infrastructure?

- 1 Predictable earnings and cash flows via regulation and/or long-term contracts
- 2 Monopoly characteristics
- 3 Attractive risk-adjusted returns over long time horizons
 - Projected equity returns in 10–20% range over 20+ years
- 4 Low volatility of cash flows
- 5 Low correlation of returns vs. other asset classes
 - Returns for some assets more correlated with inflation and overall economic activity
- 6 Experience/comfort managing financing and operational risk

Snapshot of recent market activity

- Significant activity in energy sector, mostly private-to-private by developer/operator companies, but increasing interest from infrastructure funds
- A modest but growing number of Public/Private transactions evenly split between monetization and new development, mostly in surface transportation, with a recent burst of activity in parking assets
- More than half the States have passed enabling legislation; Virginia, Florida, Illinois and Texas have been the leaders in executing transactions; California, New York, Michigan and Pennsylvania have efforts underway to increase PPPs
- Private sector operator/developer participants are largely non-domestic: Spanish and Australian firms have dominated transportation
- Debt is raised in the international project finance loan market (and then refinanced in the U.S. debt capital markets), augmented with tax-exempt private activity bonds and TIFIA loans
- Equity increasingly raised from dedicated infrastructure funds

Select completed transactions

- Public/private activity is shifting from monetizations of existing assets to brownfield improvement and greenfield transactions
- Private activity is focused on power and ports, which indicates they may be sectors of interest for P3s

Select Recent Closed or Broken U.S. PPP Transactions and Select Notable 2009 Energy Transactions

Project	Year	Capital amount (\$ mm)	Project nature	Asset type
Chicago Skyway	2005	1,800	Monetization	Highway
Pocahontas Parkway	2006	600	Monetization	Highway
Indiana Tollroad	2006	3,800	Monetization	Highway
Chicago Parking Garages	2006	563	Monetization	Parking
Northwest Parkway (CO)	2007	543	Monetization	Highway
SH-121 (TX)	2007 (broken)	5,000	Brownfield	Highway
MO Safe and Sound Bridge Improvement Program	2007 (broken)	500	Brownfield	Bridge/Tunnel
Florida I-595	2008	1,800	Greenfield	Highway
SH-130 (TX)	2008	1,300	Greenfield	Highway
Capital Beltway HOT Lanes	2008	1,800	Greenfield	Highway
Pennsylvania Turnpike	2008 (broken)	12,800	Brownfield	Highway
Port of Miami Tunnel	2009	1,000	Greenfield	Bridge/Tunnel
North Tarrant Tollroad	2009	2,000	Brownfield	Highway
Midway Airport	2009 (broken)	2,500	Monetization	Airport
Chicago Parking Meters	2009	1,150	Monetization	Parking
CT Highway Service Area Concession	2009	178	Brownfield	Services
Santa Paula Water	2009	47	Greenfield	Wastewater
Acquisition of Puget Energy (Macquarie)	2009	2,425	Brownfield	Power Generation
Astoria Energy Phase II	2009	1,371	Greenfield	Power Generation
Port of Portland	2010	70	Brownfield	Port
Ruby Pipeline Long-Term Financing (GIP)	2010	2,980	Greenfield	Power Gas Pipeline
SouthWest Water Acquisition (JPM/WAM)	2010	275	Brownfield	Water

Future Public/Private pipeline

Select Publicly-Announced U.S. PPP Transactions and Advisory Mandates

Project	Target year (Financial close)	Capital amount (\$ mm, est.)	Project nature	Asset type
Jacksonville First Coast Outer Beltway (FL)	TBD	2,000	Greenfield	Highway
Midway Airport	TBD	2,500	Monetization	Airport
Midtown Tunnel Corridor (VA)	Ongoing	1,300	Greenfield	Highway/Tunnel
I-95/395 (VA)	Delayed	1,000	Greenfield	Highway
Denver FasTracks (CO)	2010	2,300	Greenfield	Transit
Miami-Dade Expressway Authority (FL)	Ongoing	N/A	Strategic Advisory	Highway
LA Metro (CA)	Ongoing	N/A	Strategic Advisory	Highway/Transit
Luis Munoz Marin Airport (PR)	2010	TBD	Monetization	Airport
Puerto Rico Toll Roads (PR)	2010	TBD	Monetization/Greenfield	Highway
Pittsburgh Parking (PA)	2010	200	Monetization	Parking
Indianapolis Parking (IN)	2010	TBD	Monetization	Parking
Los Angeles Parking Garages	2010	250	Monetization	Parking
Presidio Parkway (CA)	2011	1,000	Brownfield/Greenfield	Highway
New Goethals Bridge (NY)	2011	1,000	Greenfield	Bridge
Philadelphia Southport Terminal (PA)	2011	TBD	Greenfield	Port
Detroit River International Crossing	TBD	4,700	Greenfield	Highway/Bridge
Tappan Zee Bridge (NY)	2012	16,000	Brownfield	Bridge

Agenda

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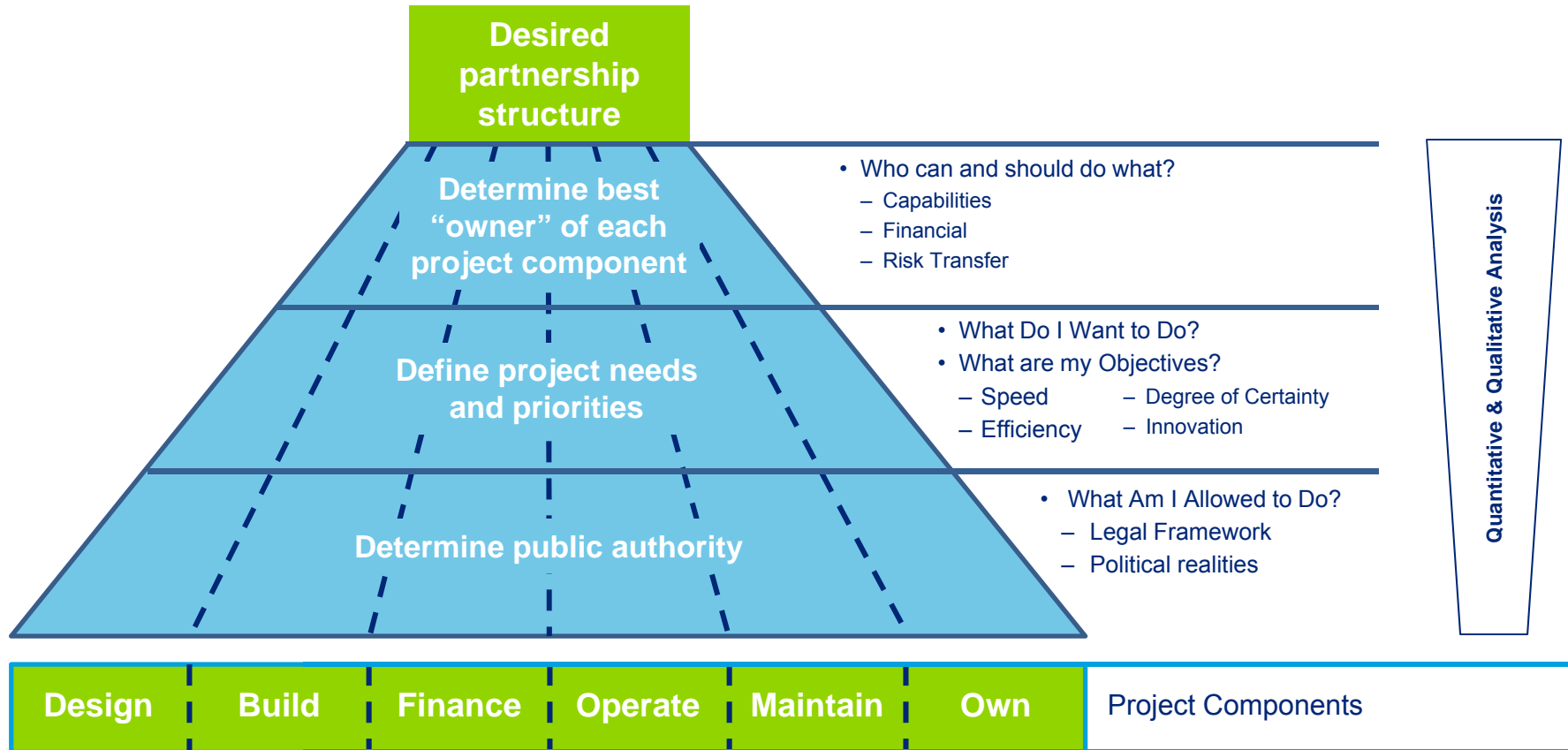
Structuring the PPP

Financing the PPP

PPP advisory process

Designing the structure

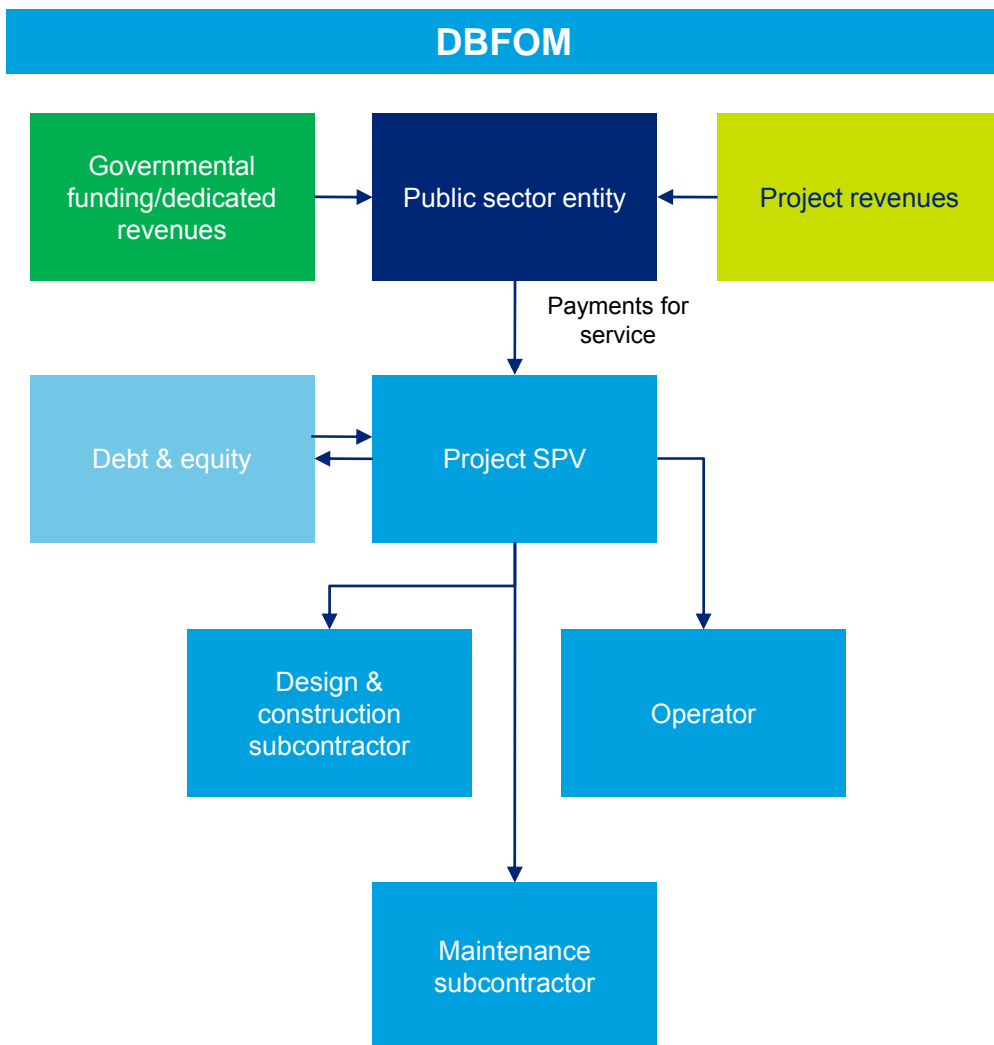
A systematic process assists in ensuring that the sources of value generation are addressed and maximized in structuring a partnership



Choosing a structure

- Disciplined analysis to discover optimum point on the public/private spectrum and to create a robust “case” for the particular structure
- Early decision on public subsidy — magnitude and style
- Recognizing the credit imperative
- Understanding risk capacity constraints
- Prioritizing the need for the future flexibility

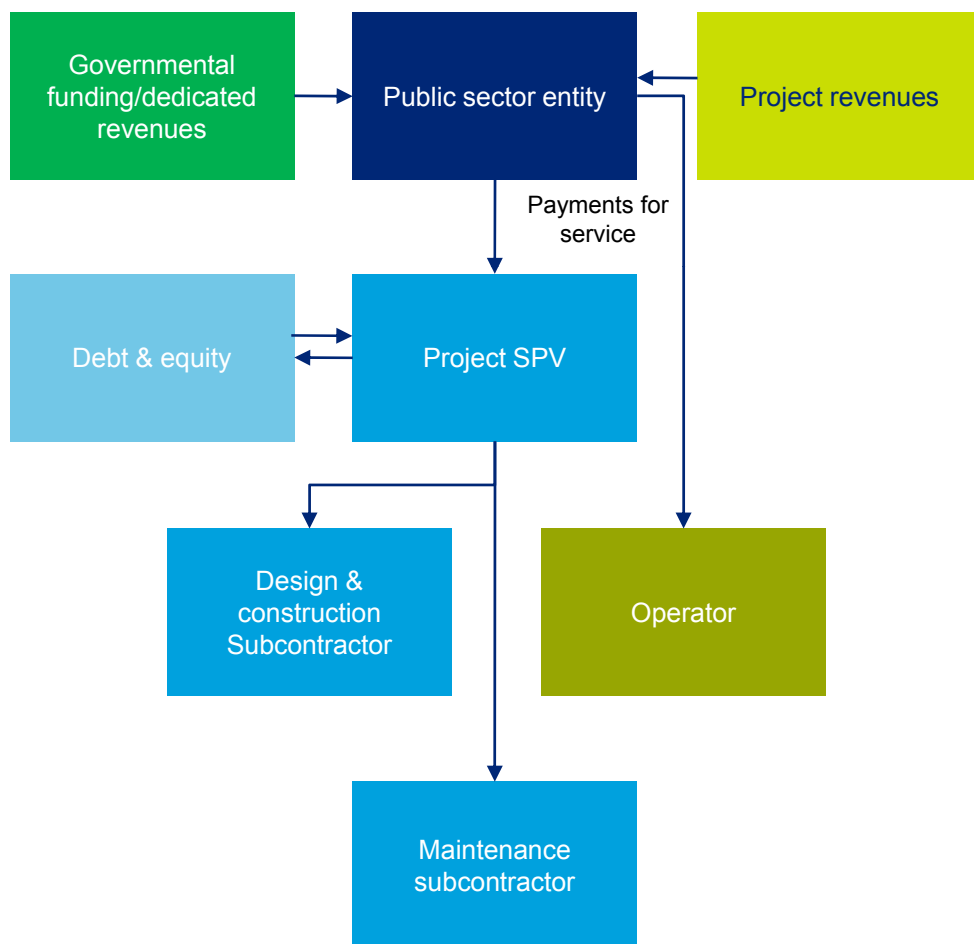
Illustrative PPP structure — DBFOM



- Risk transfer objectives easiest to achieve
- Innovation and whole-of-life efficiencies easiest to achieve
- Least flexible for evolving infrastructure or operating service needs

Illustrative PPP structure — DBFM/O

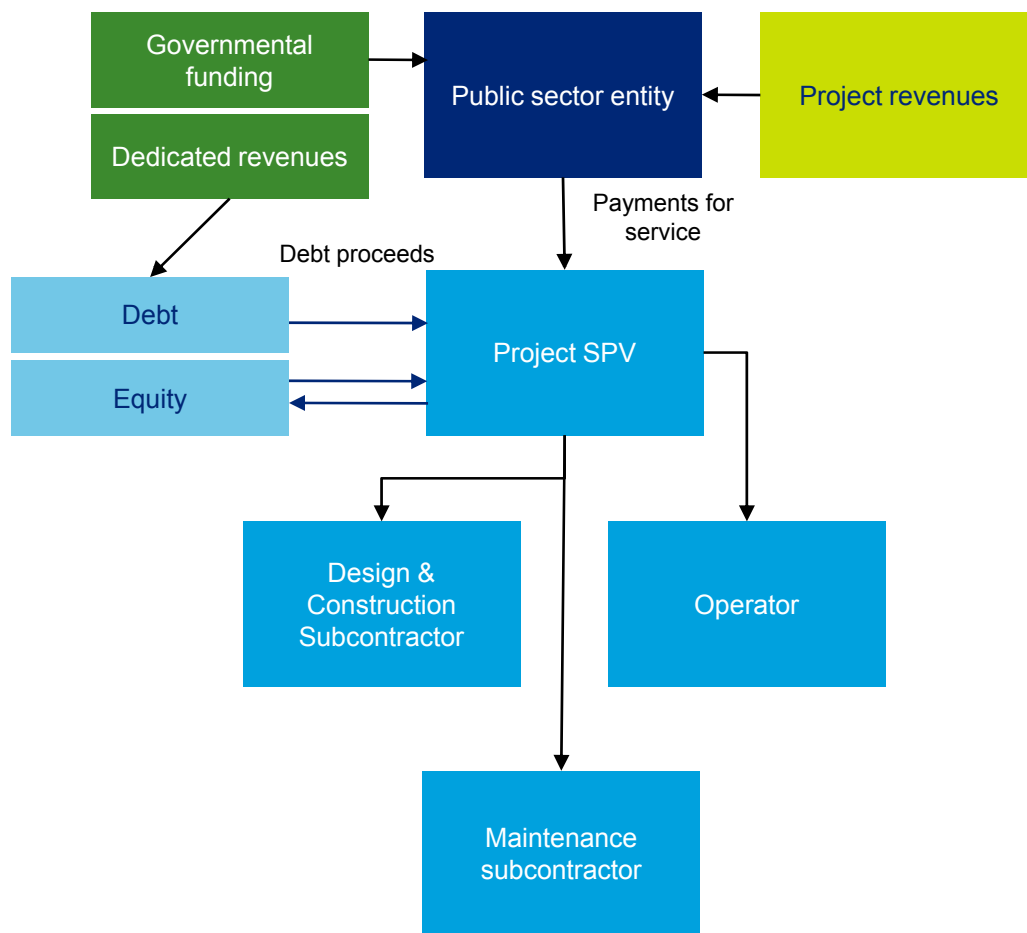
DBFM with operations contracted separately



- Risk transfer objectives harder to achieve
- “Wheel-rail interface” complications (in transit)
- More flexible for evolving infrastructure or operating service needs

Illustrative PPP Structure — DBOM/F

DBOM with finance raised separately

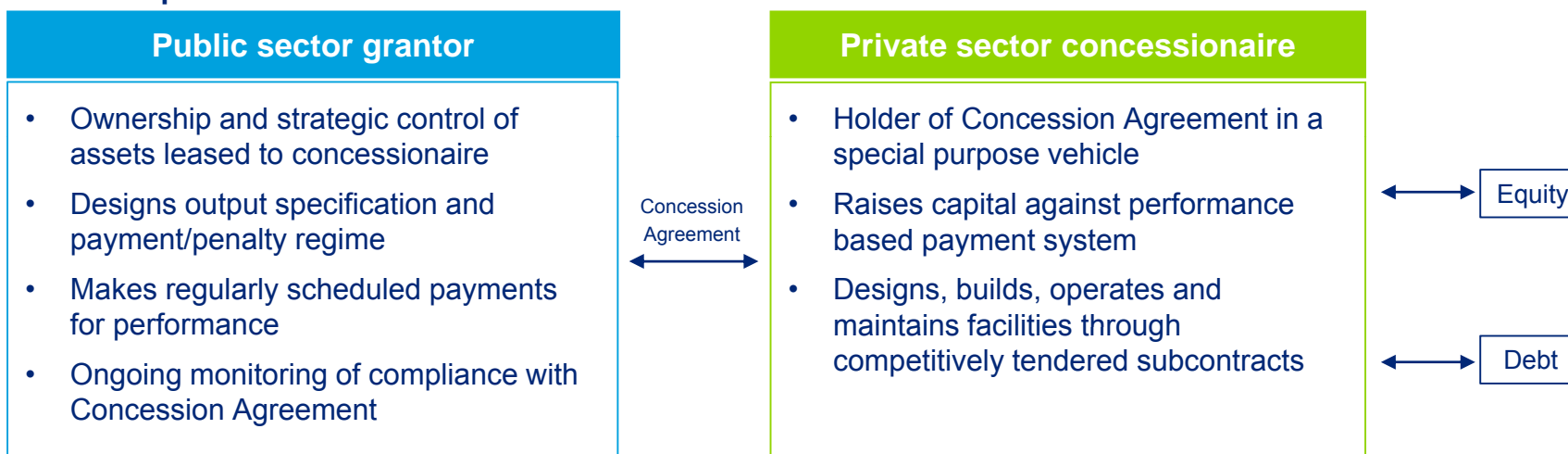


- Risk transfer objectives hardest to achieve
- Innovation and whole-of-life efficiencies achievable outside of the financing structure through contractual incentives
- No performance risk for finance, which lowers cost of capital
- Most flexible for evolving infrastructure or operating service needs

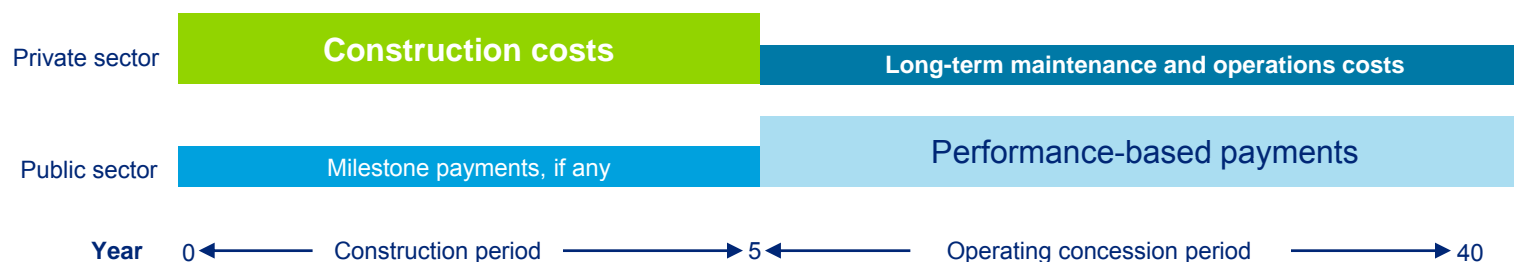
“Availability Payment” vs. Demand risk model

Availability Payment structures, in which the public sector assumes demand risk and retains control of pricing, while the private sector assumes performance risk, are adopted in some cases

Partnership structure



Partnership Cost distribution over time



Key success factors

- Careful early-stage analysis and structuring
- Efficient allocation of risk and reward
- Compelling estimated benefits and credible analytical support — “value for money”
- Robust framework for protecting the public interest
- Clear, regular communications with all stakeholders — “transparency”

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Funding/Finance: U.S. model



- Public entity's credit position is an opportunity and a constraint on all structures — Public and private
- Match funding sources and financing approaches to project characteristics
- Public/Private partnerships bring private sector equity capital into the financing structure for publicly-owned infrastructure

Key success factors — Comparison of recent transactions

- Flexibility and an understanding of available alternatives is key
- Robust process designed to result in competitive bids, but also allowing for reasonable private sector innovation
- “Partnership” approach begins before financial close

A comparison of U.S. Parking PPPs

Chicago parking garages

- **Description:** Monetization of 9,000 parking spaces in multiple garages around Chicago
- **PPP type:** FOM
- **Risk:** Demand risk
- **Public sector sponsor:** City of Chicago
- **Financial close:** 12/15/2006
- **Capital cost:** \$563 mm
- **Length of concession:** 99 years
- **Gearing ratio:** 70%/30%
 - Equity: \$161 mm
 - Debt: \$402 mm
- **Winning bidder:** Morgan Stanley

Chicago parking meters

- **Description:** Monetization of the City's 34,760 parking meters
- **PPP type:** FOM
- **Risk:** Demand Risk
- **Public sector sponsor:** City of Chicago
- **Financial close:** 02/23/2009
- **Capital cost:** \$1,150 mm
- **Length of concession:** 77 years
- **Gearing ratio:** 0%/100%
 - Equity: \$1,150
 - Debt: \$0
- **Winning bidder:** Morgan Stanley/LAZ
- **Notes:** \$700–800 mm bond deal expected in 2010

A comparison of U.S. Toll road PPPs

FL I-595

- **Description:** improvement of the I-595 mainline in central Broward County, FL and development of variable-rate toll express lanes
- **PPP type:** DBFOM
- **Risk:** Availability payment
- **Public sector sponsor:** Florida DOT
- **Financial close:** 2/3/2009
- **Capital cost:** \$1,668 mm
- **Length of concession:** 35 years
- **Gearing ratio:** 90%/10%
 - Equity: \$208 mm
 - Debt: \$1,460 mm
- **Winning bidder:** ACS/Macquarie
- **Notes:** Debt includes 12-bank club loan and U.S. TIFIA loan

North tarrant expressway

- **Description:** 22 mile improvement and develop of free and toll lanes
- **PPP type:** DBFOM
- **Risk:** Demand risk
- **Public sector sponsor:** Texas DOT
- **Financial close:** 12/17/2009
- **Capital cost:** \$2,050 mm
- **Length of concession:** 52 years
- **Gearing ratio:** 70%/30%
 - Equity: \$428 mm
 - Debt: \$1,050 mm
 - Grant: \$573 mm
- **Winning bidder:** Cintra/ Meridiam/ Dallas Police & Fire
- **Notes:** Debt includes U.S. TIFIA loan and municipal bond PABs. Gearing ratio does not include grants

Agenda

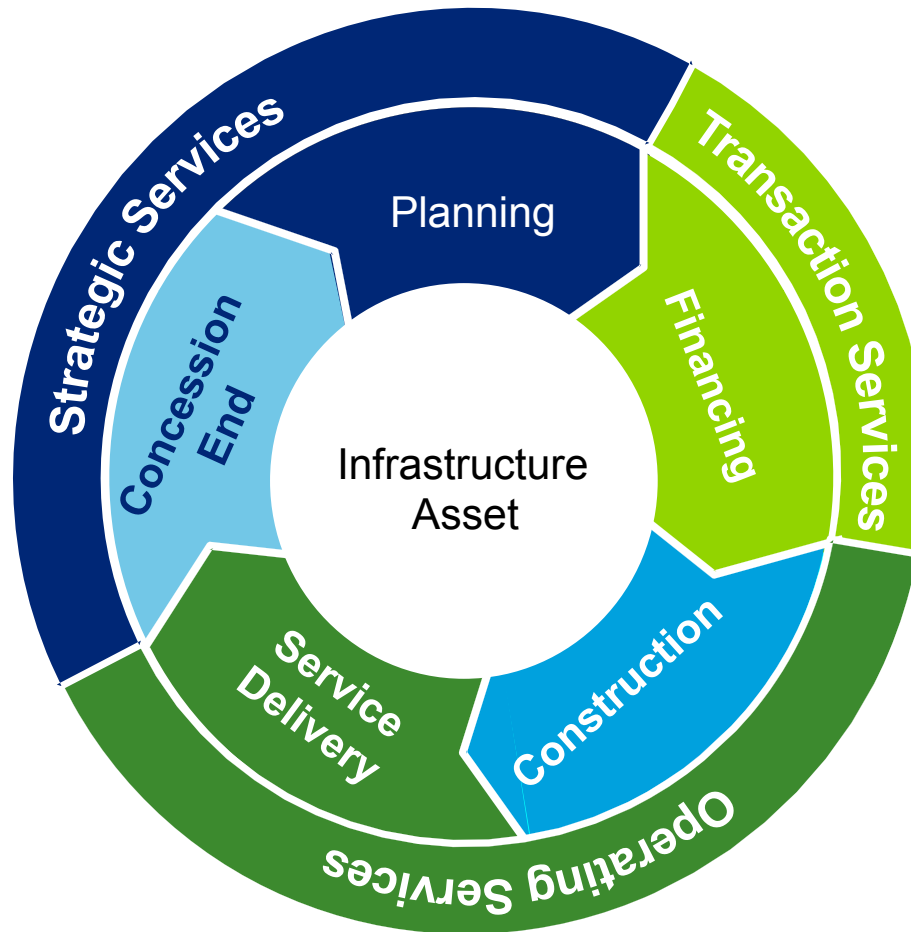
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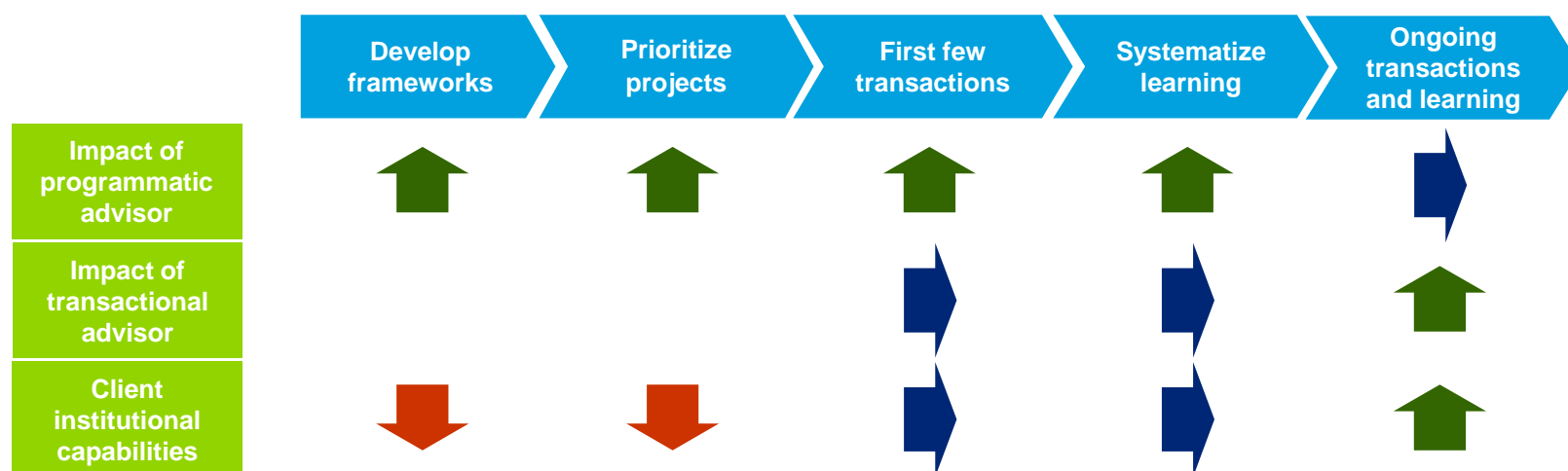
PPP Advisory process

Consulting services are needed in all phases of the infrastructure lifecycle



Approaches to leveraging advisors

- Currently, there seem to be a number of approaches being developed across the U.S. in the retention of advisors
 - Programmatic/Strategic vs. Transactional advisors
 - Pool of advisors vs one (or a small group of collaborative) advisors
 - European advisory “consortium” approach vs. “separate contracts” approach
- Recent Public Sector RFP activity has crossed the spectrum
 - LA Metro — One advisory consortium for programmatic and transactional services (and some operational)
 - Miami-Dade County — Pool of 12 transactional advisors
 - FDOT — Pool of 5 transactional advisors
 - MDX — 2 programmatic advisors (collaboration expected on strategy, separate transactional assignments.)
- Ideal advisory structure evolves along with client’s institutional capabilities



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