Overview of Public Private Partnerships

Key Financial Characteristics and Drivers

January 28, 2013
What is a Public Private Partnership?

**An innovative method of funding and procurement for infrastructure projects:**

- Called a “P3” or “PPP.”
- P3s are used throughout the world for a variety of infrastructure asset classes.
- Increased value for money possible because of increased efficiency and risk transfer to the private partner.

**A contractual agreement between a public agency and a private partner to achieve all, one or a combination of the following:**

- Monetize an existing infrastructure asset.
- Design, construct, finance, and/or operate and maintain an infrastructure project.
- Transfer risks--such as revenue, operations, permitting, capital maintenance, construction—to the partner best able to retain and manage them.

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Examples of Revenue Generating Assets</th>
<th>Examples of Social Assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation</td>
<td>• Parking systems</td>
<td>• Schools</td>
</tr>
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<td></td>
<td>• Toll roads and bridges</td>
<td>• Courthouses</td>
</tr>
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<td></td>
<td>• Water and sewer systems</td>
<td>• Roads</td>
</tr>
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<td></td>
<td>• Airports</td>
<td>• Transit</td>
</tr>
<tr>
<td>Energy</td>
<td>• Ports</td>
<td>• Other public assets that do not generate sufficient revenues to be self-supporting</td>
</tr>
<tr>
<td>Public Facilities</td>
<td>• Solid waste</td>
<td></td>
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</table>
How Does a P3 Work?

- No two P3s are identical. P3s are tailored to meet the public agency’s financial, policy and operational goals.
- A P3 is *not* an outright sale of a public asset. The public agency maintains ownership of the asset and sets operational, maintenance and safety standards.

## Two Broad Categories

<table>
<thead>
<tr>
<th>Asset Monetization</th>
<th>Availability Payment</th>
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<tbody>
<tr>
<td>- The infrastructure asset’s revenues are monetized by the private partner.</td>
<td>- The public agency pays the private partner pre-established rent-like “availability payments” that are based upon the availability of the assets to the public.</td>
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<tr>
<td>- The public agency receives an upfront payment, annuities, and/or a revenue sharing arrangement.</td>
<td>- Creates budget certainty for the public agency over the life of the contract.</td>
</tr>
<tr>
<td>- The private partner operates and maintains the asset and assume most business, financial and capital risks.</td>
<td>- The private partner designs, builds (or rehabilitates), finances, operates and maintains the asset, based on strict delivery and performance requirements.</td>
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<tr>
<td>- Often structured as a long-term “revenue concession” and/or lease.</td>
<td>- The public agency’s payments may be reduced for underperformance or bonuses for exceptional performance.</td>
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Advantages and Benefits of P3s

**Benefits of the P3 Approach:**

- ✓ **Private Sector Financing:** equity, longer-term debt and wide array of financing tools
- ✓ **Design-Build Savings:** reduced construction costs and faster project delivery
- ✓ **Operations and Maintenance Savings:** reduced O&M costs
- ✓ **Long-term Risk Allocation and Transfers that allow** the public agency to better concentrate on its core functions
- ✓ **Access to the best operational expertise and innovative technology**
- ✓ **Long-term contract provides tax benefits to private partner that can flow through as savings to public agency**
Who are the Parties in a P3?

<table>
<thead>
<tr>
<th>Public Agency</th>
<th>Private Partner</th>
</tr>
</thead>
<tbody>
<tr>
<td>• A variety of public agencies have used P3s for the development or monetization of infrastructure assets.</td>
<td>• Depending on the nature of the P3 project, prospective private partners can be sole companies or a consortium of firms that each represents a specific expertise.</td>
</tr>
<tr>
<td>• The public agency is supported by a team of financial, legal and technical advisors.</td>
<td>• Prospective private partners will assemble teams of advisors, consultants, lenders and equity sources.</td>
</tr>
<tr>
<td></td>
<td>• Pursuit costs are significant.</td>
</tr>
</tbody>
</table>

Potential Private Partners Include

<table>
<thead>
<tr>
<th>Infrastructure Equity Investors and Lenders</th>
<th>Developers and Operators</th>
<th>Construction/Engineering Firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Attracted to the stable cash flows of a public infrastructure asset</td>
<td>• Experienced with similar asset class</td>
<td>• Attracted to the possibility of generating incremental value by optimizing construction/rehabilitation phases</td>
</tr>
<tr>
<td>• Can be a stand-alone fund, or part of a larger investing entity</td>
<td>• Critical in project delivery and ongoing operation</td>
<td>• Potential equity participation</td>
</tr>
<tr>
<td>• Provides capital</td>
<td>• Usually contribute equity</td>
<td></td>
</tr>
</tbody>
</table>
What is a “Public-Public” Partnership, aka a P2?

### Public Agency
- Current asset owner or user
- Needs new assets built or financed

### Partner
- Another governmental entity or 501(c)(3)

### Potential Partners Include
- Another governmental unit
- An economic development agency
- 501(c)(3) infrastructure company
- Existing 501(c)(3)

### Benefits
- Better public perception
- Tax-exempt financing possible
- Long-term (15 year) management agreements possible
An Availability Payment combines the design, construction, financing, maintenance and, potentially, operation of an asset into a single agreement and payment stream.

Payment from the public agency is contingent on the asset being “available” for use:

- An Availability Payment is a maximum payment, which is reduced if specific performance criteria are not met even when the asset is available.

Often utilized for “social infrastructure” or assets that generate no revenue.

Can be utilized for assets that produce revenue when the public agency does not want to give up revenue control of the asset.
Advantages and Benefits of ADMs

- ADMs offer an alternative approach to achieve efficient project delivery and transfer certain operational and construction risks to the private sector.

**Alternative Delivery Model**

- Public project delivery options with more than traditional levels of private sector participation, primarily involving transfer of scope and risk to the private participant.

**Benefits**

- Early project delivery
- Access to alternative capital
- Reduced whole life cycle costs
- Risk Transfer
- Off-balance sheet financing

- Design-Build Savings: Reduced construction costs and earlier delivery
- Operations and Maintenance Savings: Reduced O&M costs
- Private Sector Financing: Longer-term debt and wide array of financing tools
- Long-term Risk Allocation and Transfers: Allows the public agency to concentrate on other core functions
- Gain access to potential operational/innovative expertise
Challenges of Traditional Project Delivery Models

- Uncertain Operating and Labor Costs
- Uncertain and Deferred Repair and Maintenance Costs
- Asset Condition

- On-time Project Delivery
- Cost Overruns

Construction Period | Operating Period

Project Lifecycle
Solutions from P3 Alternative Delivery Models

On-time Project Delivery

Cost Overruns

Construction Period

Operating Period

Risk

On-time Project Delivery

Solution

Liquidated Damages

Uncertain Operating and Labor Costs

Uncertain and Deferred Repair and Maintenance Costs

Asset Condition

Project Lifecycle

Public Agency is compensated if Private Partner fails to deliver project on time
Solutions from P3 Alternative Delivery Models

On-time Project Delivery

Cost Overruns

Construction Period

Operating Period

Project Lifecycle

Risk

Cost Overruns

Solution

Guaranteed Maximum Price Contract

Uncertain Operating and Labor Costs

Uncertain and Deferred Repair and Maintenance Costs

Asset Condition

Private Partner assumes risk of cost overruns
Solutions from P3 Alternative Delivery Models

Risk

Uncertain Operating and Labor Costs

Solution

Fixed Maximum Payment

Uncertain Operating and Labor Costs

Uncertain and Deferred Repair and Maintenance Costs

Asset Condition

On-time Project Delivery

Cost Overruns

Construction Period

Operating Period

Project Lifecycle

Risk (and reward) of managing operating and labor costs are transferred to Private Partner
Solutions from P3 Alternative Delivery Models

- On-time Project Delivery
- Cost Overruns

Construction Period
- Uncertain Operating and Labor Costs
- Uncertain and Deferred Repair and Maintenance Costs
- Asset Condition
- Operating Period

Project Lifecycle

Risk
- Repair and Maintenance Costs

Solution
- Lifecycle Costing

Private Partner’s access to capital and focus on lifecycle costing reduces ongoing repair and maintenance costs
Solutions from P3 Alternative Delivery Models

- On-time Project Delivery
- Cost Overruns

Construction Period

Operating Period

- Uncertain Operating and Labor Costs
- Uncertain and Deferred Repair and Maintenance Costs
- Asset Condition

Risk
- Asset Condition

Solution
- Contractual Standards

The asset must be maintained at high standards and returned to the public agency in prime condition at contract conclusion.
A P3 Monetization Can Result in More Funds Today

- Municipal bond investors rely on historical revenues to determine bonding capacity
- Equity investors look for future returns based on projected growth
- Debt + Equity = Greater Proceeds

Municipal Bond Leverage

Revenue Concession P3
Cost Profiles of Traditional Public Capital Projects vs. Availability Payment Structure

Traditional Debt Financed Capital Project Cost Profile

- New infrastructure construction often experiences cost overruns and schedule delays.
- Ongoing capital maintenance tends to be deferred, increasing the life-cycle costs of the project.

P3 Financed Capital Project Cost Profile

- Requires predefined maintenance standards throughout the life of the project.
- Obligates the private party to meet or exceed the cost performance of a typical publicly financed project by mitigating life-cycle costs.

Note: Payments and costs are for descriptive purposes only and are not drawn to scale.
## Key P3 Considerations and Questions

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
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<tbody>
<tr>
<td>Does the public agency lose control?</td>
<td>Under the P3 Agreement, the public agency can control user fees, design and construction standards, operating, maintenance and safety standards and other key parameters.</td>
</tr>
<tr>
<td>What will happen to user fees?</td>
<td>The public agency can control user fee levels. The P3 Agreement may include revenue sharing or other arrangements to avoid financial windfalls to the private partner.</td>
</tr>
<tr>
<td>How does the public agency oversee operations, maintenance and capital improvements?</td>
<td>The P3 Agreement imposes detailed operating, maintenance and safety standards and capital improvement requirements. A P3 requires thorough management and oversight by the public agency.</td>
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<tr>
<td>What if the private partner does not perform?</td>
<td>After an opportunity to cure the problem, the public agency may reclaim the asset without any payment to the private partner.</td>
</tr>
<tr>
<td>Why is there demand for these assets now?</td>
<td>Pension and sovereign wealth funds and other institutional investors are making significant allocations for infrastructure. There is particularly strong demand for US infrastructure assets due to their stable and predictable cash flows.</td>
</tr>
<tr>
<td>What is the necessary term to create interest for prospective investors?</td>
<td>Typical term is likely 30 to 50 years to create sufficient return for investors commensurate with the risk undertaken.</td>
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</table>
## Lessons Learned

<table>
<thead>
<tr>
<th>Valuation</th>
<th>Execution</th>
<th>Use of Proceeds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal due diligence</td>
<td>Thorough internal and external due diligence</td>
<td>Long-Term Purposes:</td>
</tr>
<tr>
<td>Upfront analysis/modeling</td>
<td>Gradual increases in user fees</td>
<td>- Debt reduction</td>
</tr>
<tr>
<td>Understand value-drivers</td>
<td>Customer service impact</td>
<td>- Capital projects</td>
</tr>
<tr>
<td>Robust and transparent bidding process</td>
<td>Don't rush operational and technology transitions</td>
<td>- Pension funding</td>
</tr>
<tr>
<td>Manage bidder and stakeholder expectations</td>
<td></td>
<td>- Revenue Replacement</td>
</tr>
<tr>
<td>Value for Money (VFM)</td>
<td></td>
<td>Hybrids possible</td>
</tr>
<tr>
<td>Understand value of risk transfer</td>
<td></td>
<td>Avoid spending upfront proceeds for short term purposes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Create stakeholder value – perceived benefits from transaction</td>
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</table>
## Lessons Learned

<table>
<thead>
<tr>
<th>Knowledge is Power</th>
<th>Transparency, Terms and Timetable</th>
<th>Stakeholder Communications Strategy</th>
<th>Managing the Message and Expectations</th>
<th>Monetary Value + Favorable Market Conditions + Political Will = Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Upfront preparation is crucial</td>
<td>✓ Ensure investor confidence with clear, structured process; ambiguity or uncertainty viewed as risk by prospective bidders.</td>
<td>✓ Early engagement with political and community leaders to shape issue and concerns</td>
<td>✓ Clear communication of policy objectives to relevant organizations and the general public</td>
<td>✓ All successful transactions require each of these elements</td>
</tr>
<tr>
<td>✓ Selection of assets and projects must be driven by holistic policy goals</td>
<td>✓ Investor data room should have as much information as possible</td>
<td>✓ Political risk is a major bidder concern</td>
<td>✓ Seek to understand before being understood</td>
<td>✓ The best advisory team should have constant knowledge of each of these three variables</td>
</tr>
<tr>
<td>✓ Well-vetted P3 agreement; flexible methods of meeting criteria</td>
<td>✓ Fixed yet realistic timetable for transaction execution</td>
<td>✓ Key stakeholders need to own the issue, process, and solution</td>
<td>✓ Invite supporters and potential opponents to the table</td>
<td></td>
</tr>
<tr>
<td>✓ Fixed yet realistic timetable for transaction execution</td>
<td>✓ Identify and cultivate P3 champions, spokespeople, and supporters</td>
<td>✓ Public agency must be the steward of the public trust</td>
<td>✓ Leave no question unanswered</td>
<td></td>
</tr>
<tr>
<td>✓ Public agency must be the steward of the public trust</td>
<td>✓ Proactively educate the media</td>
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## Legislative and Regulatory Environment

- Private Activity Bonds
- Expanded TIFIA Program
- Expanded FAA Pilot Programs
- Federal legislative agenda/risks
- States
## States and Cities Leading the Way

<table>
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<tr>
<th>California</th>
<th>Indiana/Indianapolis</th>
<th>Florida</th>
<th>Puerto Rico</th>
<th>Texas</th>
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<tr>
<td>□ Presidio Parkway</td>
<td>□ Indiana Toll Road</td>
<td>□ Port of Miami Tunnel</td>
<td>□ San Juan Airport</td>
<td>□ TxDOT Projects</td>
</tr>
<tr>
<td>□ Long Beach Courthouse</td>
<td>□ Ohio River Bridge</td>
<td>□ Tollroads</td>
<td>□ San Juan Light Rail</td>
<td>□ Cotton Belt Rail</td>
</tr>
<tr>
<td>□ Older projects</td>
<td>□ Indianapolis parking, water and gas</td>
<td>□ I-595</td>
<td>□ Travis County Courthouse</td>
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</tbody>
</table>
# States and Cities Leading the Way

<table>
<thead>
<tr>
<th>Virginia</th>
<th>Other States</th>
<th>Chicago</th>
</tr>
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<tbody>
<tr>
<td>Mid Town Tunnel</td>
<td>Connecticut</td>
<td>Chicago Transit Authority Open Fare Payment System</td>
</tr>
<tr>
<td>Port of Virginia</td>
<td>Ohio</td>
<td>Chicago Skyway</td>
</tr>
<tr>
<td>Highway Projects</td>
<td>Pennsylvania</td>
<td>Parking Garages</td>
</tr>
<tr>
<td>Unsolicited Proposals</td>
<td></td>
<td>Parking Meters</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Midway Airport</td>
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</tbody>
</table>
Case Studies - Pennsylvania

- Pennsylvania Turnpike
- Pittsburgh Parking
- Harrisburg Parking
- Harrisburg Incinerator
- Allentown – Water and Wastewater
- Wilkes-Barre Parking
- Philadelphia Gas Works
Case Study – Chicago Transit Authority
Open Fare Payment Collection System

- The Chicago Transit Authority (“CTA”) operates the nation’s second largest public transportation system, offering mass transit services to 3.8 million residents within a 356 square mile area covering the City of Chicago and 40 surrounding suburbs. The CTA annually provides over a half a billion rides on its more than 4,000 buses and trains.

- In December 2011, the CTA entered into a 12-year agreement with Cubic Transportation Systems to design, install, finance, operate and maintain a first-of-its-kind Open Fare Collection System. The award was the culmination of a robust procurement process involving potential private sector partners from around the globe.

**Stated Operational Goals for the Project Included:**

- Shifting capital outlays to the private sector
- Providing the unbanked and under-banked with inexpensive access to payment products
- Achieving operational savings
- Shifting the risk of increases in payment industry fees
- Developing an Open Fare model that provides customer flexibility to payment options
- Providing flexibility for the future with regards to emerging technology and changing fare structures
- Divesting the CTA of the issuance and support of proprietary fare media
- Identifying new non fare-box revenues

<table>
<thead>
<tr>
<th>Private Partner</th>
<th>Term of Contract</th>
<th>Financial Advisor</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Cubic Consortium</td>
<td>✓ 12 years</td>
<td>✓ William Blair &amp; Company</td>
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Case Study – Chicago Midway Airport – Version One

Midway Transaction Highlights

- On September 29, 2008, MIDCo entered into a long-term lease for Chicago’s Midway Airport for a total upfront payment of $2.5 billion
  - Approximately 28x 2008E EBITDA
- Transaction failed to close in 2009, when Citi Infrastructure Investments was unable to raise sufficient debt or fund with equity
  - City of Chicago kept the $126 million deposit
- Midway maintains its large hub slot in the FAA pilot program, but must put forward a plan and issue an RFQ by December 31, 2012
- Key take-aways from Midway that were applied at San Juan include:
  - It’s critical to gain airline support as early as possible
  - Quality investors will line up for a credible process and an attractive asset
  - Defusing political risk with greater certainty of closing helps the process
  - Properly structured deal documentation helps maintain investor enthusiasm

Strong Investor Interest

Midway Process Timeline

- [Timeline Diagram]

William Blair
The Denver Regional Transportation District (RTD) achieved financial closing in August 2010 on the first transit project to use an availability payment structure in the United States.

The RTD explored a P3 structure for the Eagle section as a way to close a nearly $2 billion gap in the overall $6.5 billion FasTracks project.

The $1.64 billion Eagle project will create approximately 35.2 miles of electrified commuter rail connecting downtown Denver with both the western suburbs and Denver International Airport at a cost savings of 30%.

Monthly availability will be made to the project company over the course of 30 years. Payments will commence only upon satisfactory completion of the project.

Significant safeguards have been built into the contract, including the right to terminate the service contract if the project significantly falls behind schedule or if several non-performance contingencies are met.

**Funding sources include:**

- $1.139 billion in construction payments
- $396 million in private activity bonds
- $54 million private equity investment
- $44 million in service payments
The State of California has entered into a 30-year, $488 million contract with a team led jointly by Hochtief and Meridiam to design, build, operate and maintain the 1.6 mile Presidio Parkway connecting downtown with the Golden Gate Bridge.

The project will include building a new six-lane parkway and the installation of various electrical and mechanical technology. The winning team will service the Parkway for the duration of the contract.

Construction of the project began in October of 2011. As of March 2012, all legal challenges have been dismissed, and financial close of the transaction is expected in June of 2012.

**Funding sources include:**

- $309 million TIFIA loan
- $134 million in bonds
- $45 million private equity investment
- Unspecified senior bank loan
In June 2010, the Texas Department of Transportation achieved financial closing for the reconstruction and enhancement of I-635/I-35.

The 40-year-old freeway will be rehabilitated in order to provide traffic relief by adding six new express managed toll lanes on I-635 and four on I-35. All existing freeway lanes will also be rebuilt and retained.

The new combined toll and freeway system will enable drivers to select freeway lanes for short or non-urgent trip, and managed toll lanes for longer trips with a guaranteed 50 mph speed.

The LBJ Infrastructure Group is led by Cintra and Meridiam along with the Dallas Police and Fire Pension System.

Construction began in January 2011, and is scheduled for completion in early 2016.

The American Road and Transportation Builders Association named the LBJ Express project a recipient of the 2010 Project of the Year Award.

**Funding sources include:**

- $850 million TIFIA loan
- $665 million private equity investment
- $615 million private activity bonds
- $496 million TxDOT contribution
### Case Study – Interstate 595 (Florida)

- The I-595 Corridor Roadway Improvements project consists of 10.5 miles of reconstruction of the I-595 mainline and associated improvements.

- **The design and construction cost of the project is estimated between $1.2 - $1.8 billion.** In March 2009, The Florida Department of Transportation (FDOT) signed a public-private partnership (P3) agreement with I-595 Express, LLC (led by ACS Dragados), to serve as the concessionaire to design, build, finance, operate and maintain (D/B/F/O/M) the I-595 project for 35 years.

- **First U.S. application of availability payments to a transportation project:** I-595 Express, LLC will receive no compensation from FDOT until the facility is operational. Upon FDOT’s final acceptance of construction, I-595 Express, LLC will be eligible to receive a series of annual lump sum payments, including incentive bonuses for completing a series of interim milestones (related to major construction activities) within established deadlines.

- **Performance-based payments will be made monthly during project’s operating period.** An annual, maximum availability payment of $65.9 million (in 2009 dollars) begins in 2014 and escalates annually. If quality and performance requirements stipulated in the contract as well as availability of the roadways to traffic are not met, then the availability payments will be subject to downward adjustment.

### Funding sources include:

| ✔ $780 million bank loan                  | ✔ $678 million TIFIA loan                  | ✔ $208 million private equity investment |
Case Study – Port of Miami Tunnel (Florida)

- The State of Florida is working with a group of investors led by Meridiam Infrastructure to build a new tunnel connecting the Port of Miami to key downtown highways and alleviate congestion.
- Construction began in May 2010 with the private operator agreeing to design, build, finance, operate and maintain the tunnel for 35 years.
- In exchange, the State will provide milestone payments throughout the project’s construction and annual availability payments of up to approximately $32.5 million that will be determined by the condition of the road. All toll receipts will be retained by the State.
- The $903 million tunnel project is to be finished in 2014.

Funding sources include:

- $341.5 million senior bank debt
- $341 million TIFIA loan
- $100 million FDOT milestone payment
- $80.3 million private equity investment
- $40.1 million TIFIA construction interest