

# Establishing A Public-Private Partnership Program: A Primer

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# 1 Introduction

Establishing a Public-Private Partnership (P3) program within a public agency involves issues from enabling legislation through identification, evaluation, negotiation and management of P3 projects. Public agencies will need:

- ▶ A legal framework to establish and enforce long term P3 agreements;
- ▶ Policies, processes, and tools to guide policy decisions;
- ▶ Technical skills to identify, develop and evaluate P3 projects and to negotiate agreements; and
- ▶ Skilled staff to manage and oversee projects over the long-term.

This primer explores key issues involved in establishing a P3 program at a public agency with a focus on P3s for new capacity for highway infrastructure.

Building the organizational capacity needed to develop P3s while protecting the public interest presents a major challenge to transportation agencies. Transportation agencies will need capabilities they have not traditionally possessed in order to identify and develop projects and negotiate and manage agreements with private partners. Agencies will need to acquire or develop new policy, legal, technical, financial and managerial skills and establish processes and structures, such as specialized P3 units, that allow them to apply those skills in a multidisciplinary way.

## **Cultural Perspectives**

To design partnerships that are both in the public interest and attractive to private investors, public agencies will need to gain a better understanding of private sector interests and perspectives and become comfortable transferring a greater degree of responsibility to the private sector – a cultural shift. With a P3, risks that are traditionally retained by the public sector are transferred to the private sector. Managing the organizational changes needed to develop, implement, and monitor P3s will require agencies to involve and educate agency staff and external project stakeholders and build committed leadership at multiple levels that can champion P3 policies and projects.

Because P3s are long term agreements, they require greater flexibility and trust than traditional contractual arrangements. The private sector brings equity to the table, creating opportunities that might not otherwise exist, from which both partners can share in the benefits and returns. Public organizations have different interests, values, cultures, competencies and processes than private sector organizations. Significant differences in the way the public and the private sector perceive project development are summarized in Table 1-1.

**Table 1-1. Public and Private Sector Cultural Perspectives**

Public Sector	Private Sector
<i>Projects</i> – Seeks to address transportation needs by developing “projects” to improve the infrastructure network.	<i>Deals</i> – Sees the process in terms of negotiated transactions.
<i>Stakeholders</i> – Seeks to address the concerns of various parties, including local residents, facility users, and political representatives.	<i>Stockholders</i> – Seeks to generate dividends for its stockholders.
<i>Process</i> – Applies and complies with prescriptive, standard operating procedures designed to provide uniformity, minimize risk and build consensus among stakeholders.	<i>Outcome</i> – Demands greater flexibility and expediency to arrive at final objective.
<i>Policy Goals</i> – Develops projects to achieve policy goals such as improvements to mobility and safety.	<i>Profits</i> – Interested in a competitive return on investment
<i>Transparency</i> – Seeks to share information with the public to ensure public participation and accountability.	<i>Confidentiality</i> – Protects intellectual property and the competitive advantages derived from innovations.

In effective P3 arrangements, these differences are leveraged to create value for both parties. However, these differences can also be barriers to negotiating agreements that create value. Differences between the two parties can create conflicting interests that can undermine perceptions of value and raise perceptions of risk. Surmounting issues that lead to distrust and implementing an effective P3 program requires commitment of leadership to develop new processes and capabilities within public agencies.

Just as the public agency wants a private partner that can meet its commitments and create public value, the private partner wants a public sector partner it can trust to see a deal through. Public agencies will need sufficient commercial knowledge and experience to understand the perspectives of the private sector, develop attractive P3s, and select and manage qualified advisors and concessionaires. Challenges that public agencies will face are discussed in Chapter 2 and strategies to overcome these challenges are discussed in Chapter 3.

### **P3 Program Needs**

To deliver P3 projects, a public agency will need to acquire or develop new knowledge, skills and abilities that vary by phase of project development, including policy, legal, technical, financial and managerial capabilities. These capabilities are needed in each project phase, including:

- ▶ Establishing a Statutory and Policy Framework;
- ▶ Identifying, Evaluating and Structuring Potential P3 Projects;
- ▶ Conducting Procurement; and
- ▶ Monitoring and Oversight.

### *Establishing a Statutory and Policy Framework*

A State's statutory framework typically determines the types of P3 arrangements that are allowed and may define project selection, funding, management and other policies. Beyond the enabling legislation, agencies may establish specific policies that guide P3 project development. Key issues are discussed in Chapter 4.

### *Identifying, Evaluating and Structuring Potential P3 Projects*

Identifying projects that have the potential to be delivered as P3s early in the planning process allows agencies to more carefully consider how P3s fit into their long-term performance objectives and fiscal constraints. Early identification can help to position P3 projects for success by ensuring that the P3 delivery model is considered in the scoping, preliminary design and environmental review of the project. To effectively identify projects with the potential for P3 delivery, agencies need to build the capacity of transportation planners, project engineers and financial analysts to evaluate proposed projects for their potential to be delivered as P3s and compare P3 delivery to other delivery methods. Evaluating the feasibility of a P3 project requires estimating the potential life cycle costs of the project, the value of long term revenue streams, and the value of transferring specific risks to the private sector. Similarly, tax expertise is needed to assess tax benefits and obligations that may accrue to the private partner in a long-term agreement. Public agencies can evaluate the potential feasibility and value of a P3 agreement through technical planning, financial and engineering studies. Chapter 5 discusses the decision-making processes that will need to be developed.

### *Conducting Procurement*

P3 procurement requires greater flexibility than traditional procurement to allow for innovation on the part of bidders and to provide for more room to negotiate with multiple stakeholders. Flexibility is needed in negotiating a final agreement to ensure that it is deemed creditworthy by commercial lenders and provides a return on investment that is adequate to attract private equity investors. During procurement, agencies need financial expertise to assess the financial quality of the bids and technical expertise to assess the qualifications of the bidder. A public agency may want to have experienced legal and technical advisors to help negotiate with the private partner. Key issues in conducting procurement are discussed in Chapter 6.

### *Monitoring and Oversight*

After the agreement is signed, the public agency must manage the contract to ensure that it achieves the performance standards established in the agreement. The performance monitoring and oversight phase will require building a strong set of skills within the public agency due to the need to maintain these oversight responsibilities in-house. This includes the need for contract management skills to monitor the established performance standards and manage accordingly. In addition, the capacity to monitor technical performance during construction and operations can be critical to ensuring efficient service delivery. Key issues in managing contract performance are discussed in Chapter 7.





## 2 Program Development Challenges

Transportation agencies seeking to explore and develop a P3 program face a number of organizational capacity challenges. The primary challenges are acquiring or developing new skills, managing organizational and cultural changes, coordination and education of stakeholders, and conserving institutional knowledge. These challenges are discussed below.

### **Acquiring or Developing New Skills**

In many P3 arrangements, the agency's responsibility for design and construction engineering is reduced, since these are done by the private partner. Instead, the agencies become responsible for contract management and oversight of the private partner. Agencies will need to learn how to establish performance standards rather than construction specifications.

This may involve a culture change for public agency engineers, who are used to, for example, specifying standards based on use of certain materials rather than performance. This change in roles may lead to a shift in the types of technical skills required within an agency as there may be less need for hands-on design, and more need for setting of broader performance standards and project management and oversight.

### **Managing Organizational and Cultural Changes**

Only a few State Departments of Transportation (DOTs) currently have an established P3 Program with a dedicated P3 staff. For example, Virginia DOT has established the Office of Transportation Public-Private Partnerships. States with existing design-build programs or toll facilities may be more likely to have at least some of the skills and structures in place to facilitate P3 project development than States without design-build programs or toll facilities.

A major institutional barrier to effective P3 project development is the traditional division of project development responsibilities among multiple offices or agencies. Financial, procurement and engineering expertise and authority generally are housed in different offices. This organizational structure may make sense for traditional project development process steps that are often sequential. Environmental, planning, engineering and financial experts may not have to coordinate closely in order to deliver a traditional project.

However, in developing a P3, many of these steps need to be carried out on a collaborative and iterative basis, requiring more frequent interactions and internal coordination. For example, a public agency may need to consider how the alignment selected for the project affects both the financial and environmental aspects prior to the RFP, and then reevaluate how any changes proposed to the alignment in the winning proposal may change the outcome of that evaluation. Developing projects iteratively, rather than sequentially, may require forming and managing



multidisciplinary teams that understand the interactions of various technical, financial and legal factors and can facilitate an iterative project development process. This was the approach used by Virginia DOT before it established its P3 unit.

To manage organizational and culture changes, champions at all levels are needed. In some cases, the champion may be the governor (e.g., Indiana's Gov. Mitch Daniels); in others it may be a legislator, agency director, or community or business leader. A P3 champion can communicate the business case and public good from P3s (both within public agencies and among stakeholders), gather support for the concept, facilitate the streamlining of processes and organizational change, set and manage expectations, and provide assurance to the private sector of the public sector's commitment to the P3 model.

### **Coordinating with and Educating Others**

P3s are generally large projects with significant impacts on local populations and economies. In addition, P3s have complex structures that involve a large number of public and private entities. As a result P3s have many diverse stakeholders, including public agencies, elected officials, private partners, interest groups and the general public. Their interests and capabilities need to be taken into account.

As with any major project with diverse stakeholders and significant impacts, P3s may generate controversy. Furthermore, certain features of P3s may make them more vulnerable to public controversy: they are often toll-financed; they may require allocations of public funds or tolls to private firms over long periods of time; and they involve private firms that are typically large and often foreign (which may arouse concerns about security). By accelerating project delivery, the P3 approach accelerates and condenses the political negotiation and consensus building process, which may lead to a more intense debate about the merits of the project, and thus the need for clear communication.

### **Conserving Institutional Knowledge**

To conduct oversight of long-term concessions, agencies will need to develop their internal capabilities with the understanding that staff may retire or leave and that the demand for specific capabilities may fluctuate over time. Building robust capabilities and documenting institutional knowledge, processes and guidelines is important for maintaining those capabilities over time. Currently, most States lack a steady flow of P3 projects, making it difficult to predict staffing and resource needs. But as projects are identified, developed, procured and implemented, staffing needs will need to be identified and filled.

### 3 Program Development Strategies

The public agency is responsible for protecting the public’s interest, setting policy goals and objectives, administering the procurement process, and overseeing the agreement. Other efforts can be outsourced or handled in-house, depending on the anticipated volume of work to be done. It may not be worthwhile for an agency to hire in-house experts or create a P3 unit for a single transaction.

Public agencies have acquired new capabilities through outsourcing, developing internal capacity or establishing new P3 units. While not mutually exclusive, each approach has its strengths and limitations as indicated in Table 3-1 and discussed further below.

**Table 3-1. Comparison of P3 Program Capacity Building Approaches**

Capacity Building Model	Strengths	Cautions/Constraints
Hire Consultant Advisors	<ul style="list-style-type: none"> <li>Can be quickly acquired as needed.</li> </ul>	<ul style="list-style-type: none"> <li>Need to select effective advisors.</li> <li>Services may be perceived as expensive.</li> <li>Risk of real or perceived conflicts of interest.</li> <li>Use of consultants is often regulated by statutes/rules outside the P3 statute.</li> </ul>
Train Internally and/or Hire New Staff	<ul style="list-style-type: none"> <li>Builds bottom-up capacity to identify P3 projects as well as capacity to manage external advisors.</li> </ul>	<ul style="list-style-type: none"> <li>Takes time and resources to train staff, so outside advisors still required to start.</li> <li>Staff may lack incentives or background to learn new material.</li> </ul>
Establish State P3 Unit	<ul style="list-style-type: none"> <li>Can address P3 needs programmatically.</li> <li>Enhances private sector confidence that the public sector will be a strong client/partner.</li> </ul>	<ul style="list-style-type: none"> <li>P3 opportunities may be sporadic and may not justify a dedicated unit.</li> <li>Even with a specialized unit, additional expertise may be needed from other government agencies or through consultants.</li> <li>May be politically complicated where public facility ownership or governance is fragmented.</li> </ul>

#### Potential Roles for Consultant Advisors

Especially when a public agency is just beginning a P3 program, the needed skills, knowledge and perspectives will not be easy to cultivate in-house, so the agency will likely bring on consultant advisors for legal, technical, and financial advice. While qualified consultant advisors in the P3 arena may be more costly on a per hour basis than public agency employees, they usually bring specialized skills that may not be cost-efficient for the agency to maintain in-house on a permanent basis. This is because opportunities to work on a P3 project may be sporadic, making it difficult for public agencies to develop and maintain the specialized skills necessary to develop and negotiate a



P3. Consultant advisors can bring expertise from other engagements and do not need to find continuing roles in the agency once their work is complete.

Agencies need to understand how to select competent advisors whom they can trust. There is no certification process for P3 consultants. Many consulting firms do not have expertise in implementing a full range of financial tools and arrangements; as a result, they may recommend only the approach they know best, ignoring potentially better opportunities. Furthermore, while many advisors in the P3 arena may have international experience, international firms may lack an understanding of the U.S. market and potential financial tools.

When hiring external advisors, it is important to consider which roles are appropriate for the consultants and which are more appropriate for a public agency to keep in-house, as shown in Table 3-2.

**Table 3-2. Typical Public Agency and Consultant Roles**

Role	Public Agency	Consultants
Program Direction	<ul style="list-style-type: none"> <li>Sets overall program direction and program and project goals.</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable.</li> </ul>
Project Selection	<ul style="list-style-type: none"> <li>Screens and selects projects.</li> </ul>	<ul style="list-style-type: none"> <li>Technically evaluates potential projects.</li> </ul>
Project Evaluation and Structuring	<ul style="list-style-type: none"> <li>Makes decisions regarding the structure of the agreement based on evaluation.</li> </ul>	<ul style="list-style-type: none"> <li>Prepares traffic and revenue studies.</li> <li>Conducts risk assessment, financial feasibility and value for money analyses and provides financial advice.</li> </ul>
Project Procurement	<ul style="list-style-type: none"> <li>Sets RFQ and RFP goals.</li> <li>Selects partners and bids.</li> <li>Leads final negotiations.</li> </ul>	<ul style="list-style-type: none"> <li>Develops language for RFQ and RFP.</li> <li>Advises on contract structure and risks.</li> <li>Assists final negotiation.</li> </ul>
Project Monitoring	<ul style="list-style-type: none"> <li>Monitors performance and administers contract.</li> </ul>	<ul style="list-style-type: none"> <li>Assists with inspections and performance monitoring.</li> </ul>

Some roles are inherently a public sector responsibility. A public agency should drive and manage the process, set the program's direction, identify potential projects, select bidders, and manage contracts. Private consulting expertise is more often used for well-defined tasks, such as developing a financial model, advising as to the optimal financial structure and contract provisions, and assisting with the negotiation of the final agreement. However, the public agency will still need sufficient expertise in-house to keep consultants on track and ensure that their advice is consistent with agency goals.

Public agencies also need to be aware of potential conflicts of interest with any outside advisors it hires. In order to ensure independent advice and analysis, public agencies need advisors who do not have any conflicts with advising private sector partners either engaged in or bidding on a potential P3 project. It is important to worry about both the substance and the optics of who an agency hires.

## Training or Hiring New Staff to Build Capacity

Whether or not public agencies use external advisors, they will need to train or hire internal staff to be capable of understanding and managing the project development process and managing the agreement once it is signed. Developing the skills to manage the P3 process can be done through training existing staff as well as hiring new staff. In some cases, external advisors hired to assist on a P3 project for their technical, legal or financial expertise can also be used to conduct training of internal staff.

As the P3 market matures in the United States, agencies can learn from reviewing case studies and from exchanging lessons learned with their peers.

## Specialized P3 Units

In the United States, the authority to develop transportation P3 agreements typically rests with the State DOT or with another department within the State with the power to issue debt – typically the Administration and Finance or the Treasury Department. The authority is sometimes extended to municipalities or regional authorities.

A model increasingly used by States and other countries to address P3 organizational capacity is the specialized P3 unit. A P3 unit can be any institution, office, or team set up to support the development, implementation and evaluation of P3s. P3 units are typically staffed with transportation sector-specific and other sector experts (as appropriate) as well as experts in economics and finance, regulation, procurement, communications and training. Many of the countries that are the most active users of P3s for project delivery have P3 units.

P3 units can facilitate a programmatic approach to project identification and assessment. Programmatic evaluation has the advantage of allowing P3 projects to be identified earlier in the planning and scoping process, allowing the public sector to better manage its limited resources. P3 units may raise private sector interest and confidence in P3 investments because potential partners may feel they have a more experienced and capable client team with whom to negotiate agreements.

P3 units can be housed within government departments, or run as privately or publicly owned corporations funded by fee-for-service. In the United States, P3 units are State-based and typically have a small dedicated staff with engineering, legal and financial specializations who report to a CEO or Executive Director. The P3 staff is generally supplemented by expert advisors (government employees or consultants) who may be relied on for specific technical, legal and financial tasks. The P3 unit typically reports to a board or committee charged with oversight responsibilities. Authority to sign P3 agreements may rest with the director of the P3 unit, the commissioner of the board, or the director of the agency where the P3 unit is housed.



The roles and responsibilities of a P3 unit may include:

- ▶ Providing technical assistance and training on P3 project development and procurement.
- ▶ Helping to identify a pipeline of potential P3 projects and to prioritize those opportunities.
- ▶ Providing regulatory oversight of P3 projects.
- ▶ Promoting the P3 program by soliciting projects, attracting potential partners and investors, and educating the public.

## 4 Legal and Statutory Issues

Before implementing a P3, States need to create a legal framework. P3 enabling legislation varies widely among States, but the basic goal is the same: to allow public entities to take advantage of the benefits of P3 project delivery while protecting the public interest. Some States provide broad authority for public entities to enter into and manage P3 agreements, while others strictly limit P3s to specific projects or project types and define the type of provisions that must or must not be included.

It is up to each State to determine the appropriate approach to legislation, starting with an understanding of the goals it is trying to achieve. Enabling legislation varies from State to State because policymakers consider the needs and goals of their constituencies and the unique political and institutional environment of their State. Policymakers often include language in legislation that reassures specific constituencies – such as tax-payers, road users, or road builders – that their interests are protected. There is a fine line, however, between prescribing processes or provisions intended to protect the public interest, and those that create inefficiencies or deter private sector interest.

Table 4-1 presents the factors that State policy makers may consider in creating a legal framework for P3s. It may be used to authorize or restrict who may enter into P3 agreements, how partners and proposals may be selected, and what types of agreements may be entered into. Other key issues that legislatures have attempted to address are:

- ▶ Labor union issues;
- ▶ Whether to approve a specific list of projects;
- ▶ Whether to require approval of every project by the legislature vs. programmatic approval;
- ▶ Whether to establish a pilot program vs. a permanent program;
- ▶ The trade off in “loss of control” of assets by the State DOTs vs. the benefits from risk transfer to the private sector or funds received for existing “brownfield” facilities. (Note, however, that a strong case can be made that P3s will actually increase public control over the facility since they typically include clear performance standards and can make those standards enforceable via credible penalties and rewards; under traditional delivery a state would effectively have to penalize itself for poor performance, which is not a credible deterrent.)

**Table 4-1. Legal Issues Commonly Addressed Through Statute, Policy or Contract**

Issue Type	Description
<p><i>Primarily Statutory Issues:</i> These issues are typically addressed through State legislation.</p>	<ul style="list-style-type: none"> <li>• Types of P3 agreements allowed</li> <li>• Authority to enter P3 agreements</li> <li>• Authority to approve or review P3 agreements</li> <li>• Types of facilities allowed.</li> </ul>
<p><i>Issues typically addressed through Policy and/or Statute:</i> These issues may be addressed in legislation, to authorize or clarify specific capabilities, as necessary, but the details are frequently addressed through program policy.</p>	<ul style="list-style-type: none"> <li>• Types of financing/subsidies allowed</li> <li>• Public uses of proceeds</li> <li>• Ability to hire external advisors</li> <li>• Types of procurement allowed</li> <li>• Whether unsolicited proposals are allowed</li> <li>• Whether bidder stipends are allowed</li> <li>• Whether administrative fees are allowed</li> <li>• Whether to require performance security</li> <li>• Criteria to evaluate potential P3 projects</li> <li>• Criteria to select bidder</li> </ul>
<p><i>Issues typically addressed through Contract and/or Statute:</i> These issues are typically addressed in contracts although the general parameters may be set by statute or policy.</p>	<ul style="list-style-type: none"> <li>• Length of contract term</li> <li>• Toll rates and toll rate setting mechanisms</li> <li>• Allocation of risks</li> <li>• Revenue sharing</li> <li>• Dispute resolution</li> <li>• Buy back provisions</li> <li>• Refinancing provisions</li> <li>• Ongoing performance audits or reports</li> </ul>

As States gain experience in P3s, there is a growing body of literature, cases, and models that can serve as references in developing appropriate legislation. Drawing from these resources, the Federal Highway Administration and the law firm Nossaman LLP have created model legislation to serve as a guide.<sup>1</sup> In addition, the National Conference of State Legislatures has developed a “Public-Private Partnerships Toolkit” that lays out a set of recommended principles for legislators to follow in making policy decisions.<sup>2</sup> A recent paper<sup>3</sup> finds that political sentiment, unionization rates, and traffic congestion are important predictors of both the passage of P3 legislation and of its favorability to private investment. It also finds evidence that fiscal stress leads states to adopt P3 enabling legislation.

<sup>1</sup> Federal Highway Administration. [www.fhwa.dot.gov/ipd/pdfs/legis\\_model\\_0610.pdf](http://www.fhwa.dot.gov/ipd/pdfs/legis_model_0610.pdf)

<sup>2</sup> National Conference of State Legislators. Public-Private Partnerships for Transportation: A Toolkit for Legislators. [www.ncsl.org/default.aspx?TabId=20321](http://www.ncsl.org/default.aspx?TabId=20321)

<sup>3</sup> R. Richard Geddes. Why do U.S. States Adopt Public-Private Partnership Enabling Legislation? <http://www.human.cornell.edu/pam/people/upload/Why-Do-States-Adopt-PPP-Leg-Dec-2010.pdf>



### **Federal Legislation: Special Experimental Project No. 15 (SEP-15)**

SEP-15 is a new experimental process to identify, for trial evaluation, new P3 approaches to project delivery. SEP-15 is designed to allow the FHWA to identify regulations that currently inhibit the creation of P3s and private investment in transportation improvements, and to develop procedures and approaches to address these impediments. SEP-15 addresses, but is not limited to, four major components of project delivery: innovative contracting, compliance with environmental requirements, right-of-way acquisition, and project finance.



## 5 Identifying, Evaluating and Structuring P3 Projects

Identifying projects that have the potential to be delivered as P3s early in the planning process allows agencies to more carefully consider how P3s fit into their long term performance objectives and fiscal constraints. Early identification can help to position P3 projects for success by ensuring that the P3 delivery model is considered in the scoping, preliminary design and environmental review of the project.

Public agencies have to make important and complicated decisions to develop effective P3 programs and projects, often under intense public scrutiny. Key issues that policymakers must consider, which are discussed further below, are: (1) Whether to set up a P3 program or develop P3 projects on a project-by-project basis, and whether a P3 program should be housed in the State DOT, be a separate entity or housed in some other agency; and (2) Criteria and a process for the selection of projects as potential P3s.

To evaluate and structure P3 projects, public agency staff will also need to be conversant with various evaluation tools, risk allocation considerations and financial considerations. These are also discussed in this section.

### **Program vs. Project-by-Project Approach**

Once P3 authorizing legislation is in place, public agencies can take different approaches to identifying and evaluating potential P3 projects, conducting procurements and managing contracts. An important initial decision is whether to pursue P3 opportunities on a project-by-project basis or to establish a P3 program.

If a steady stream of projects is expected, a permanent P3 program can improve identification of P3 opportunities, reduce transaction costs, and educate stakeholders. An established P3 program could potentially instill private sector confidence. If the private sector sees public agencies investing in a P3 program, potential bidders may have added confidence that the agency is serious about carrying P3s from inception to deal-close and beyond. This can improve the number, quality and competitiveness of interested bidders on a proposed project. In addition, a permanent P3 program may allow staff to accumulate institutional knowledge and proactively identify future opportunities where P3s may be beneficial. However, setting up a program office is a significant undertaking that may not be worthwhile unless there is an expectation of a significant pipeline of P3 deals to evaluate and manage.

If the decision is made to set up a P3 program, a related issue is whether a P3 program should be housed in the State DOT, be a separate entity or housed in some other agency such as the Treasury. The advantage of having a P3 program outside the State DOT is that both transportation and other social infrastructure projects can be handled by the P3 unit, ensuring a large enough “deal flow” to



make it viable to support full-time in-house experts in the various professional fields that are needed to successfully identify, evaluate, develop, negotiate, and oversee P3 projects.

### **Project Selection Process**

States with ongoing P3 programs typically establish goals, policies, and standard processes that guide and facilitate the development and implementation of P3 projects. Clear program goals can guide agencies in establishing policies and making decisions related to identifying projects, structuring agreements, and selecting partners. Specific program goals may include:

- ▶ Promote economic growth;
- ▶ Encourage competition and innovation;
- ▶ Realize long-term cost savings;
- ▶ Transfer cost and schedule risks;
- ▶ Accelerate major projects;
- ▶ Coordinate agency processes and build public capacity to undertake P3s; and
- ▶ Communicate the benefits and risks of P3s to stakeholders.

Not all projects are suited to P3 project delivery, so agencies need a way to identify which projects have the best potential to succeed as P3s. Agencies may identify projects with the help of the private sector through unsolicited proposals or a call for nominations, or projects may be selected through programmatic project screening.

### **Evaluation Tools**

Once public agencies have identified a project as having the potential to be a P3 through a qualitative screening process, they typically conduct a series of progressively more rigorous evaluations to determine the best approach to deliver the project. These evaluations help decisionmakers choose how best to structure and procure a potential P3 project. Several types of analytical studies may be commissioned by public agencies to conduct these evaluations:

- ▶ Traffic and revenue (T&R) studies;
- ▶ Preliminary design and cost estimates;
- ▶ Risk assessment;
- ▶ Financial feasibility assessment using cash flow and valuation models; and
- ▶ Value for Money (VfM) analyses.

### *Traffic and Revenue (T&R) Studies*

T&R studies are used to forecast traffic and revenue on toll roads under various toll rate structures and macroeconomic scenarios. Agencies typically hire consultants to prepare T&R studies, which help the agency determine how to structure toll rates, decide whether to transfer, retain or share revenue risk, and understand what to expect from private sector bids.

### *Risk Assessment*

Agencies use risk assessment<sup>4</sup> to identify project risks, risk mitigation strategies, and the appropriate allocation of risk (discussed further below). While many risk assessments include only qualitative information, agencies can take the risk assessment a step further by quantifying the probability of risks and assessing the potential consequences in monetary terms. Agencies can then use the risk assessment to assign an equivalent monetary value to each risk. A risk assessment can help a public agency decide which risks to transfer to the private sector, which to retain and which to share.

### *Financial Assessment*

Agencies use financial models<sup>5</sup> to understand potential project value and cash flow requirements under different agreement structures and macroeconomic scenarios. Financial models include assumptions about revenue, project costs, financing costs, tax and inflation rates, and discount rates to estimate potential concession fees and/or project subsidies and to estimate appropriate toll rates if the facility will be tolled. Public agencies can also use these models to better understand the private sector's perspectives and incentives.

### *Value for Money (VfM) Analysis*

A VfM analysis<sup>6</sup> compares the projected risk-adjusted life-cycle costs of a project delivered through a P3 to a public sector comparator (PSC). A PSC is an independent, objective assessment of project costs if delivered solely by the public sector, against which potential and actual private sector contract bids and evaluations may be judged.

VfM analysis is used to guide decisions regarding potential P3 projects, including which procurement approach to use, which risks to allocate to the private sector, and which private sector bid to accept. Agencies employ VfM to compare the costs of different project delivery options by assessing the value of transferring risks to the private sector, as well as the value of any efficiency gains that may be obtained through P3s. Due to the tax-exempt nature of public debt, financing

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<sup>4</sup> FHWA, *Risk Assessment for Public-Private Partnerships: A Primer*. Available at:

[http://www.fhwa.dot.gov/ipd/forum/risk\\_assessment/index.htm](http://www.fhwa.dot.gov/ipd/forum/risk_assessment/index.htm)

<sup>5</sup> FHWA, *Financial Structuring and Assessment for Public-Private Partnerships: A Primer*. Available at:

[http://www.fhwa.dot.gov/ipd/forum/financial\\_structuring\\_and\\_assessment/index.htm](http://www.fhwa.dot.gov/ipd/forum/financial_structuring_and_assessment/index.htm)

<sup>6</sup> FHWA, *Value for Money Analysis for Public-Private Partnerships: A Primer*. Available at:

[http://www.fhwa.dot.gov/ipd/forum/vfm\\_for\\_ppps/index.htm](http://www.fhwa.dot.gov/ipd/forum/vfm_for_ppps/index.htm)



costs may be lower for the PSC. However, some tax benefits available to private investors (e.g., interest deductions and accelerated depreciation) can help level the playing field. Additionally, finance tools such as Private Activity Bonds (which are tax exempt) and low-cost Transportation Infrastructure Finance and Innovation Act (TIFIA) loans may substantially reduce the difference in financing costs between the PSC and the P3 option.

Inaccurate or erroneous estimates of cost and/or risk may seriously affect the estimate of the PSC. Further, the PSC is estimated using numerous assumptions and projections into the future, adding a high degree of uncertainty<sup>7</sup>. There are highly contentious arguments over the discount rate to be used – should they be the same for both public and private options? A recent study for the Pennsylvania Turnpike monetization used different discount rates for each option – lower for the public option, based on the government’s borrowing rate, and higher for the private option, based on the private sector’s weighted average cost of capital<sup>8</sup>.

### Risk Allocation Considerations

Risks may be categorized in one of three ways:

- ▶ *Transferrable risks*, i.e., risks fully transferrable to the private sector.
- ▶ *Retained risks*, i.e., risks for which the government bears the costs, e.g., the risk of delay in gaining project approvals required from various Federal, State and local governmental agencies.
- ▶ *Shared risks*, i.e., risks that are shared due to the nature of the risk, e.g., earthquake risk. (If the facility were to be damaged by an earthquake, the private sector may be only partially responsible for repairing the asset, depending on the extent of damage.)

To determine the optimal allocation of risk, an agency compares the public sector’s ability and willingness to manage each risk to the ability and willingness of a potential private partner to do the same. Risks that the private sector is more capable of managing are transferred; risks that the public agency is more capable of managing are retained.

### Financial Structuring for P3s

P3 projects are partly financed by debt that leverages revenue streams dedicated to the project. Structuring effective partnerships requires an understanding of the advantages, disadvantages, interests and capabilities of various sources of financing such as public agency bond issuances,

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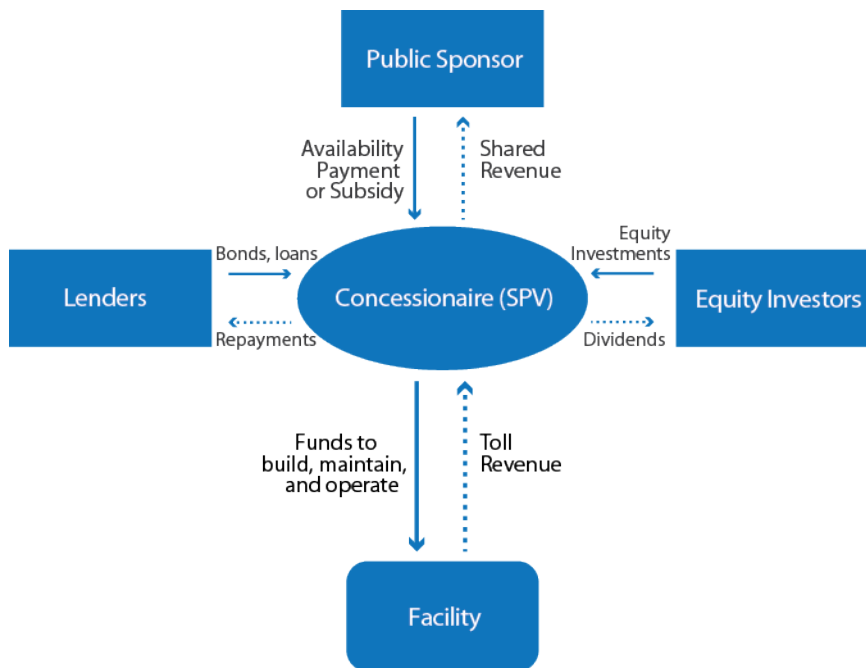
<sup>7</sup> U.S. Government Accountability Office. *Highway Public-Private Partnerships: More Rigorous Up-front Analysis Could Better Secure Potential Benefits and Protect the Public Interest*. GAO 08-44, U.S. GAO, Washington, DC, February 2008.

<sup>8</sup> Foote, J., G. J. Gray, and P. J. Cusatis. *For Whom the Road Tolls: Corporate Asset or Public Good; An Analysis of Financial Strategic Alternatives for the Pennsylvania Turnpike*. Commissioned by the Democratic Caucus of the Pennsylvania House of Representatives, February 2008.

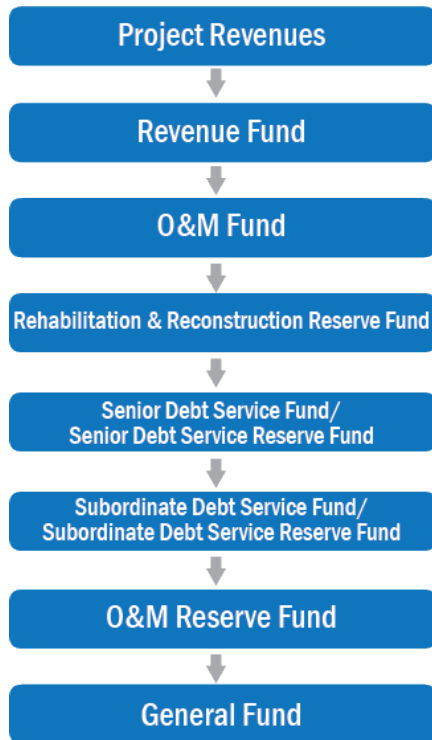
Private Activity Bonds (PABs), special governmental credit issuers (such as the Federal TIFIA Program), private equity investors, and commercial loans.

Figure 5-1 shows a typical P3 financing structure under a P3 arrangement. The critical private investor is the concessionaire, the partner who bids for the project and is responsible for delivering it. To facilitate financing, the concessionaire typically establishes a special purpose vehicle (SPV), a legal entity organized to limit the liability of investors while at the same time protecting the project from the outside liabilities of the private consortium. Typically, the SPV has no assets or liabilities other than those related to the project. Investors in an SPV are sheltered from claims on their revenues or assets outside of those directly related to the project.

**Figure 5-1. Simple P3 Financing Structure**



Revenue from the transportation project is channeled through the SPV. The cash flow is structured so that accounts for project costs and reserve funds, as well as accounts to repay lenders and investors are sequentially funded. This is commonly referred to as a cash flow waterfall (see Figure 5-2). The cash flow waterfall defines the order of priority for project cash flows as established under the loan and financing documents. In a typical cash flow waterfall, dedicated revenues are used to pay for project costs and debt repayments before surplus revenues are used to pay back investors or shared with the public sector.

**Figure 5-2. Typical Cash Flow Waterfall**

O&M = Operation and Maintenance

### Compensation Mechanisms

P3s are commonly classified by their compensation mechanism. The three most common compensation arrangements in P3 concessions are:

- ▶ *Toll concessions*, where concessionaire receives compensation by obtaining the right to collect the tolls on a facility;
- ▶ *Shadow toll concessions*, where the concessionaire receives a set payment from the public agency called a “shadow toll” for each vehicle that uses the facility; and
- ▶ *Availability payment concessions*, where the concessionaire receives a periodic “availability” payment from the public agency based on the availability of the facility at the specified performance level.

### Concession Term

The concession term (i.e., period of the agreement) may vary widely depending on the economics of the project and requirements of the contract. A typical length for a P3 contract is 35 to 40 years, but some contracts have terms of as long as 99 years. In the United States, private firms tend to prefer terms of 50 years or more because they can then capture the potential tax benefits of asset



depreciation in an accelerated manner over a period of 15 years instead of over the entire term of the contract<sup>9</sup>. This “benefit” will be reflected in the bid price.

Concessions of less than 50 years are more likely to correspond to the design-life of a transportation facility, the term of financial instruments, and the time over which an agency can reasonably assess risk. There are always provisions to modify the contract over time as needs change, but these modifications may come at a cost.

One study for the Organization for Economic Co-operation and Development (OECD) and European Commission<sup>10</sup> concluded that the optimal concession length is between 30 and 35 years, and a concession may be sub-optimal for taxpayers beyond that range. European countries have restricted the length of P3 contracts to 21 to 35 years<sup>11</sup>.

### Pricing Financial Risk

Whether revenues are derived from tolls or other sources, public agencies seek to structure a P3 agreement in a way that achieves public benefits and can attract private financial resources. Potential private project sponsors determine whether and how much to invest or lend to a project based on an evaluation of projected project cash flows and associated risks. Both equity investors and lenders assess the extent and likelihood of project risks and price those risks. To the extent that they perceive risks to projected net revenues, investors will demand a higher rate of return and lenders will demand a higher interest rate or reduce the amount they are willing to lend.

Investors will make a bid if they decide that there is a good chance that they can meet a defined internal rate of return (IRR) or “hurdle rate.” The IRR calculation is a measure of how well an investment pays off over time, and allows investors to compare different types of investments to decide where to invest their capital. Different investors have different hurdle rates.

Lenders are primarily concerned with the projected debt service coverage ratio or the amount of annual cash flow available to meet debt service payments in a given year, and the quality of the analysis that led to the project. Lenders generally expect a debt service coverage ratio of 1.2 or higher, depending on the source of revenue and other factors. Equity investors often anticipate refinancing a project on more favorable terms when the project has been fully operational for several years and the uncertainties associated with the project are significantly less.

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<sup>9</sup> Subcommittee on Highways and Transit, House Transportation and Infrastructure Committee. *Public-Private Partnerships: Financing and Protecting the Public Interest*. U.S. House of Representatives, February 13, 2007.

<sup>10</sup> Stambrook, D. *Final Report: Successful Examples of Public-Private Partnerships and Private Sector Involvement in Transport Infrastructure Development*. Produced by Virtuosity Consulting for OECD/EMT Transport Research Centre, Paris, France, May 28, 2005.

<sup>11</sup> Jeffers, J.P. et al. *Audit Stewardship and Oversight of Large and Innovatively Funded Projects in Europe*. FHWA-PL-07-001. Federal Highway Administration, Washington, DC, 2006.



### *Availability Payments – A Different Risk Transfer Approach*

Rather than ask the private sector to rely on tolls for project revenues, public agencies have offered fixed availability payments to the private partner based on performance of the facility to standards. In the availability payment structure, payments to the private partner are not dependent on tolls. The public partner commits an annual payment to the private partner for maintaining and operating the facility to a specified standard. If the project is a tolled facility, the public partner would retain the revenues from the tolls. To determine the amount of the availability payment, private sector bidders submit bids based on the annual payment they would require.

There are a number of reasons why a public agency may choose to use availability payments instead of toll-based payments. The availability payment structure may allow the public sector to attract more bids that are competitive. It may be used in cases where tolling is infeasible, or on a toll facility when the public sector wishes to retain traffic risk because the private sector demands too high of a risk premium. An agency may also choose to use availability payments for a managed lanes project to retain the ability to dynamically manage toll rates to optimize mobility along the entire corridor in both managed and general purpose lanes. Finally, tolling may be more palatable to the public when the public agency controls toll rates and collects and retains toll revenues.

### *Other Ways to Share Demand and Revenue Risks*

If the public agency is uncomfortable retaining all of the demand risk on a toll facility, there are alternative contract mechanisms that can allow it to transfer some portion of the demand risk. Innovative contract arrangements have been used to enable sharing between the public and private partner of the risks associated with uncertain future toll revenues. They include “dynamic concession terms” and “revenue bands.” With dynamic concession terms, the term of the concession ends when a specified net present value (NPV) of the toll revenue stream is reached. With the revenue band approach, upper and lower bounds of the expected toll revenue stream are set contractually. If toll revenue is below the lower bound, the public agency provides a subsidy to make up some of or the entire shortfall. Revenues in excess of the upper bound are shared with or turned over entirely to the public agency. Both approaches reduce the exposure of the concessionaire to revenue risk.

## 6 Conducting Procurement

Key issues that public agencies must consider in this phase are: (1) How to structure a commercially viable P3 agreement that achieves policy goals, optimally allocates project risks, and brings value to the investment; (2) How to conduct a fair and competitive procurement to select the best partner and negotiate a final agreement that is transparent and protects the public interest while addressing the private partner's concerns; and (3) How to ensure transparency throughout the procurement phase and over the life of the P3 agreement.

### **Structuring Project Agreements**

Once public agencies have identified a project as having the potential to be delivered as a P3, they can prepare a project for procurement. This typically involves scoping and preliminary engineering work for the project and specifying elements of the agreement.

Agencies typically develop the conceptual structure of an agreement before procurement. The optimal structure of an agreement depends on the characteristics of the project, the goals and capabilities of the public agency, and the incentives and capabilities of potential private partners. Key elements include allocation of responsibilities and risks, financial considerations including compensation mechanisms, and concession term (all discussed in the previous Chapter); and performance standards and performance management processes (discussed in the next Chapter).

### **Procurement**

Given the risks and complexity involved in using non-traditional methods of transportation project delivery, choosing the best partner(s) requires due diligence on the part of the public sector. Because of the size, complexity, and length of term of P3 agreements, special procurement processes are needed to ensure there is sufficient and qualified competition.

#### *Unsolicited Proposals*

Public agencies may use unsolicited proposals as a way of accessing private sector ideas about potential projects that could be commercially viable. Agencies that allow unsolicited proposals have developed various processes to introduce competitiveness and transparency into the procurement process.

#### *Industry Outreach*

A public agency may conduct industry outreach to gain a better understanding of private sector capabilities and interests with regard to a particular project. This process may occur prior to the procurement process or once an agency has selected a short list of qualified bidders. This can help an agency understand how to structure a commercially viable project that will generate competitive

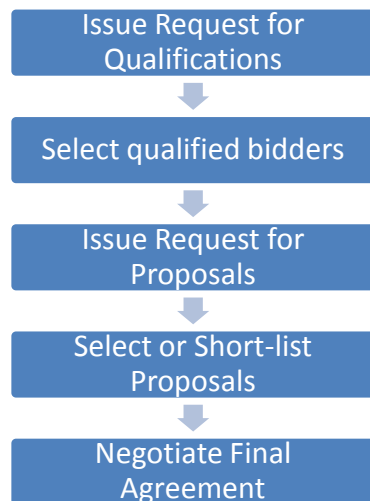


bids. Agencies may hold information-sharing meetings or workshops with industry representatives in order to describe the basic attributes of the project and of the potential agreement and to obtain participant feedback. Agencies may also issue a formal Request for Information (RFI) as a precursor to procurement.

#### *Multi-Phase Procurement Process*

To create a competitive and fair procurement environment, agencies often use a multi-stage, “best value” procurement process that includes a request for qualifications (RFQ), followed by a request for proposals (RFP) and then by negotiations with the preferred bidder. Figure 6-1 illustrates how this process could occur.

**Figure 6-1. Example of a Multi-Phase Procurement Process**



#### *Request for Qualifications (RFQ)*

The agency can use an initial procurement period to prequalify bidders by issuing a request for a letter of interest or a request for qualifications (RFQ) from prospective bidders. The RFQ typically asks prospective bidders to provide information demonstrating:

- ▶ Technical capacity to meet project performance specifications;
- ▶ Past performance on similar projects; and
- ▶ Financial capacity to complete the project.

In addition, the RFQ may ask for a conceptual project development plan and/or a conceptual project financial plan.

### *Request for Proposals (RFP)*

After selecting qualified bidders through the RFQ process, the agency invites those short-listed qualified bidders to submit a binding bid through a Request for Proposals (RFP). Bidders are typically required to submit a proposal that includes both technical plans for how the project will meet the design, construction, maintenance and operational requirements as well as a financial plan demonstrating the financial feasibility of the proposal.

Bid selection can be based on different criteria, such as the dollar value of the offer, the lowest subsidy or availability payment required, the lowest proposed length of the concession term, or the lowest net present value of gross revenues required. The selection of the preferred partner may be based on the bid price in conjunction with qualitative factors (“best value”).

A well-structured procurement should generate competition and allow the public agency to select the partner that will best help the agency meet the project goals. Bidding firms may spend more than one percent of the bid value to develop bids. They are more likely to place a bid if they have confidence that the procurement process will be fair and that it will be seen through to completion. In addition, most bidding processes are structured so that the public agency can use design ideas contained in one proposal while selecting a different bidder. To encourage competition, defray bidding costs, and compensate proposers for the value of ideas that might be used, some public agencies offer stipends to pre-qualified bidders. Bid stipends rarely, if ever, cover the entire cost of a proposal, and the value of an idea that is used in another proposal may be well in excess of the stipend amount.

### *Negotiation with the Preferred Bidder*

The basic elements of the concession are usually either established early in the procurement process, and are the same for all bidders, or bidders are allowed to use them to differentiate themselves in the bidding process. In the U.S., provisions that are left to negotiation generally relate to the implementation, oversight, and monitoring details of the concession. The negotiation stage generally does not include negotiations on key commercial issues or scope. These are identified during the bidding process, so that all bidders have the opportunity to provide a bid on similar terms.

Negotiations with the preferred bidder can allow both parties to establish a mutually-agreeable, project-specific solution to issues identified after the procurement process. This requires skilled legal counsel with expertise in developing long-term, enforceable agreements between the public and private sectors. The negotiation process can help to ensure mutual understanding of both parties regarding the details of an agreement and the smooth implementation and oversight of a project.

However, there are potential disadvantages to addressing items in negotiations with the preferred bidder. For one, the bargaining position of the public partner may be diminished at this point in the



process due to substantial sunk costs in procurement. Secondly, there may be a perception of unfairness if the items negotiated are basic elements of the concession that could have changed the outcome of the selection process. For example, if provisions regarding revenue share or concession length are left to negotiation after selection of a successful bidder, other bidders who might have been willing to offer higher levels of revenue sharing or shorter concession terms than the preferred bidder offered might feel that they were unable to offer their best value in the competition.

Details of agreement provisions that may be subject to negotiation with the preferred bidder include:

- ▶ *Compensation structure (payout schedule, revenue sharing provisions, and subsidies).* Issues that may be negotiated regarding the compensation structure include: when, how, and under what circumstances the concessionaire will receive payments; what portion of revenues will be shared at what revenue levels; and the degree to which the public sector will contribute to the project with grants, in-kind donations, tax breaks, or public financing.
- ▶ *Risk sharing and mitigation measures.* While the risk allocation is generally specified by the public agency in the procurement process, the precise performance measures and mitigation processes for specific risks may be subject to negotiation.
- ▶ *Toll rate setting mechanism.* Toll rate setting mechanisms may include defined toll rate schedules, maximum annual percentage increases (often tied to inflation or GDP increases), or regulatory review and approval of proposed rate increases.
- ▶ *Performance standards and measures.* P3 agreements typically set output- and outcome-based performance standards and management regimes for enforcing standards, as discussed in the next Chapter. These standards may be subject to negotiation.
- ▶ *Termination/buyback provisions.* The rights to terminate the contract and the conditions under which those rights may be invoked are typically negotiated in the final contract. In the event of early termination, mechanisms are usually described in the contract to ensure that the harmed party is compensated for any losses or for the residual value of the asset.
- ▶ *Refinancing provisions.* The concessionaires may refinance a project once the project is well established and uncertainty diminishes or operational efficiencies are established. Also, changing macroeconomic conditions such as declining interest rates can make refinancing attractive. Refinancing can result in greater returns to equity from interest rate reductions, extensions of debt maturity or increases in the amount of debt. Contract provisions related to refinancing may include a negotiated share between the public and private partner in the gains made from refinancing.

### Ensuring Transparency

There have been criticisms of P3 deals being rushed through without the public or their elected officials understanding the implications. Transparency should be ensured during the procurement

process as well as throughout the life of the P3 agreement. The Regional Plan Association<sup>12</sup> suggests full disclosure of:

- ▶ Current and proposed contract standards;
- ▶ Toll policy;
- ▶ Use of toll revenue for other investments;
- ▶ Non-compete clauses or other potential limitations in making infrastructure improvements; and
- ▶ Transaction costs incurred by the public sector.

The Virginia Department of Transportation (VDOT) has developed a process to review P3 submissions that incorporates transparency and public participation<sup>13</sup>. P3 proposals are reviewed by an independent review panel comprised of members from stakeholder groups, and affected jurisdictions receive the proposals and have a 60-day period to review them and submit comments.

Auditors can play an important role in the procurement of P3 projects. FHWA's report on audit stewardship recommends<sup>14</sup>:

- ▶ Use of a process auditor for each project;
- ▶ Conducting audits throughout the project life cycle;
- ▶ Involving internal audit staff and financial experts early in the tendering process to improve the quality of the RFP; and
- ▶ Specifying outcomes desired.

The report notes that States need to develop in-house capabilities to negotiate with and oversee private sector partners. Non-in-house auditors and consultants may potentially have clients on both sides of an agreement and therefore may have conflicts of interest. To develop in-house expertise, a public agency may task any consultants hired by them to assist with a P3 procurement to also train its in-house staff.

While public scrutiny of decision-making is important to accountability of government spending, it is also important to maintain confidentiality during the proposal process, in order to provide bidders with incentives to deliver innovative designs at the lowest possible cost and thus ensure a competitive tendering process. The public sector should be clear up-front about what type of

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<sup>12</sup> Regional Plan Association. *Proceed with Caution: Ground Rules for a Public-Private Partnership in New Jersey*. White paper, January 8, 2007.

<sup>13</sup> Buxbaum, Jeffrey N. and Iris N. Ortiz. *Public Sector Decision Making for Public-Private Partnerships: A Synthesis of Highway Practice*, NCHRP Synthesis 39. Transportation Research Board, 2009.  
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<sup>14</sup> Jeffers, J.P. et al. *Audit Stewardship and Oversight of Large and Innovatively Funded Projects in Europe*. FHWA-PL-07-001. Federal Highway Administration, Washington, DC, 2006.



information should remain confidential and provide an explanation as to why confidentiality is necessary during the proposal process. Temporary confidentiality could be balanced with full disclosure of selection criteria, scoring, and agreements.



## 7 Oversight and Monitoring

P3 agreements can create efficiencies through establishing long-term design-build-finance-operate-maintain (DBFOM) contracts that include outcome-based performance specifications. Outcome-based performance specifications focus on what a facility is intended to achieve rather than prescribing methods and materials for achieving facility goals. The goal of using outcome-based performance specifications is to make service delivery more efficient by allowing the concessionaire to decide how best to achieve the intended results.

This shifts the public agency's primary role in the project from oversight of design and construction to management of a performance-based contract. In this role, the challenge for the public agency is to find ways to monitor and manage contract performance without reclaiming transferred risks or impinging on the efficiencies gained from allowing the concessionaire to choose the best way to meet performance specifications.

Effective performance-based P3 contracts align the concessionaire's interest with those of the public sector throughout the duration of the agreement. Performance management is a way to maximize project efficiency while at the same time ensuring that the contractor not only meets performance standards at the time of construction, but manages the dynamic risks to performance over the period of the agreement.

This chapter describes the elements of effective P3 performance management. The first section discusses public sector performance management responsibilities and challenges. The second section identifies factors that contribute to effective performance management.

### **Performance Management Responsibilities**

Public sector responsibilities for managing the performance of P3 agreements begin prior to the close of the agreement and last for the duration of the agreement. These responsibilities include:

- ▶ Defining performance measures and setting performance standards;
- ▶ Monitoring performance;
- ▶ Assessing payments and penalties for performance;
- ▶ Designing and managing dispute resolution processes; and
- ▶ Managing handback of the facility.



### *Setting Performance Standards*

In setting performance standards for a P3, agencies need to consider:

- ▶ The types of performance standards that should be used. Are these standards critical to the performance of the project? Does the agency have the staff and resources to monitor the performance?
- ▶ The level at which the performance standards should be set. High standards are desirable, but standards that are set too high will raise the cost of a project and will result in a project that is at a higher standard than others in the State, or possibly a project with higher standards than are needed for user benefit. For example, requiring that roads be litter-free may lead to a better driving experience for road users, but requiring that litter be removed hourly may not produce enough benefit to offset the additional cost.

There are tradeoffs associated with committing to certain standards and consequent required levels of funding. In this regard, P3 agreements are less flexible than traditional methods of publicly maintaining and operating infrastructure, where the public agency retains year-to-year flexibility in the allowable performance standards. Public sector agencies sometimes relax these standards by delaying or reducing investments, or by lowering maintenance standards, in order to conform to financial realities.

Private sector input on performance standards may be sought at the onset of a procurement process by soliciting alternative technical concepts (ATCs) or changes to project scope, design, or construction criteria. However, in considering ATCs, the public agency must balance the benefits of private sector innovations with the benefits of maintaining a fair and competitive procurement process.

In setting performance standards, public agencies may look to benchmarks set in other P3 agreements or equivalent facilities. Public agencies that are already applying performance management to State-operated transportation facilities may set goals and measures for P3 projects that are consistent with or contribute to the goals and measures the agency has set for the rest of the system. Public agencies may also set policy goals for specific facilities and set performance standards based on those explicit policy goals, such as mobility, safety, environmental stewardship, or economic development.

Public agencies must also consider that desired performance standards are likely to change over time. As a public agency's own standards change due to changing conditions or policy goals, they will likely expect the concessionaire to conform to those changes. For example, future land development may necessitate changes in environmental standards.

To a certain degree, the concessionaire is typically willing to take on the risks associated with changes in law that do not specifically discriminate against the project or the concessionaire, and such an agreement can be written into the contract. However, the concessionaire will typically ask

for some assurance that the standards won't be changed so quickly or completely that it becomes financially onerous to meet new standards. As a result, some P3 contracts specify a limit to the number or percentage of changes to standards that can be made on an annual basis or include procedures for the private partner to be compensated for unexpected costs or lost revenues resulting from changes.

There is a natural tension between flexibility and accountability in performance management. If a standard is too flexible, the public sector risks not obtaining the highest possible level of performance from a concession. If a standard is inflexible, it may not adapt to changing technology needs. For example, in one agreement, the concessionaire's performance was based on the operations of its call center for its toll payment accounts. However, most users preferred to use a web interface to communicate with the concessionaire. The contract performance standard failed to anticipate technology changes or to use a more flexible measure of success, such as customer satisfaction.

*Monitoring Performance*

The public agency is responsible for monitoring the performance of the concessionaire. P3 contracts will typically establish roles and responsibilities (see Table 7-1) and monitoring procedures. Performance monitoring procedures can include self-reporting procedures, independent audits, regular meetings and reports, and the use of intelligent transportation systems that automate data collection and reporting processes.

**Table 7-1. Potential Performance Monitoring Responsibilities**

Party	Responsibility
Concessionaire	<ul style="list-style-type: none"> <li>• Develop management plans and procedures</li> <li>• Collect monitoring data</li> <li>• Develop status reports</li> <li>• Self-report violations</li> </ul>
Public Agency	<ul style="list-style-type: none"> <li>• Set performance standards</li> <li>• Review plans, procedures, and status reports</li> <li>• Perform audits and inspections</li> <li>• Assess penalties and awards</li> </ul>
3 <sup>rd</sup> Party	<ul style="list-style-type: none"> <li>• Perform independent audits and inspections</li> <li>• Data collection</li> <li>• Resolve disputes</li> </ul>
Shared	<ul style="list-style-type: none"> <li>• Daily communication and problem solving</li> <li>• Conduct regular face to face meetings</li> <li>• Complete annual performance reviews</li> </ul>



### *Assessing Payments and Penalties for Performance*

Most P3 agreements prescribe processes for penalizing noncompliance, but rewards for superior performance are rarely used. The public agency is responsible for tracking concessionaire performance and penalizing the concessionaire when contractual obligations are not met. Before penalties are assessed, P3 agreements typically prescribe a series of actions that must be taken to notify the concessionaire of the issue and a period of time to correct the noncompliance issue after it is detected.

Penalties typically consist of payment reductions or retentions and non-compliance or default points. Once noncompliance or default points reach a specified level, they can result in increased oversight, work by the owner at the contractor's expense, suspension of work, or termination of the contract.

Contractors may prefer default points to financial penalties because they may fear the public agency will abuse financial penalties to meet short-term financial objectives. Furthermore, if the cause of underperformance is lack of finances, fines may inhibit the concessionaire's ability to correct the problem. On the other hand, if financial penalties are set too low, the concessionaire may lack sufficient incentive to take corrective action or may perceive fines are simply part of the cost of doing business. Default points incentivize performance without money changing hands by raising the risk of default. This in turn may raise the concerns to private lenders, who may then pressure the concessionaire to correct the issue.

### *Resolving Disputes*

P3 contracts typically specify dispute resolution processes to reduce the risk of legal conflict over technical issues or differences in contract interpretation. Alternative dispute resolution processes may include mediation and third party arbitration following a period of time allowed for both parties to make good faith efforts to resolve the dispute themselves. Arbitration may be conducted by an agreed-upon expert or by a designated board with members selected by both the public agency and the concessionaire. In particularly large projects, a permanent, independent dispute resolution office may be established to quickly resolve any contract dispute.

P3 contracts typically specify alternative dispute resolution processes for various reasons including the time sensitivity of many P3 projects and the speed advantage of these extrajudicial processes. Professional arbitrators or mediators can be selected for their industry knowledge and will seek resolution through a collaborative non-adversarial process. Another consideration favoring alternative dispute resolution procedures on P3 contracts is that the public agency may not be sued even when in breach of the contract. This "sovereign immunity" can become an obstacle for the private sector to financing a project unless the agency waives this immunity in favor of contractually-defined alternative dispute resolution mechanisms.

Prior to mediation or arbitration, dispute resolution processes often define tiered systems of problem identification and resolution through negotiation to encourage problems to be resolved at the lowest levels. For example, the contract may specify a process whereby the parties to a dispute are given a set time period to seek ways to resolve their dispute before it is elevated to their respective managers. In elevating the dispute, the parties must write a memo to their supervisors, summarizing the nature of the dispute and the steps they attempted to take to resolve the issue. This can serve as an incentive for parties to seek a speedy resolution to disputes.

In the worst case scenario, underperformance can lead to contract failure. Contract failure occurs when one party is unable or refuses to comply with the contract or the parties to an agreement are unable to resolve disputes concerning the meaning of contract specifications. Contract failure can result in the need to amend or renegotiate a contract, resolve disputes in courts, replace parties to the agreement or terminate the agreement. These events may ultimately lead to higher costs for the public sector.

### *Managing Handback*

P3 contracts generally specify the required condition of the facility at the end of the contract term. The condition of a facility at handback depends on the maintenance and operation procedures employed throughout the lifecycle of the facility, so the concessionaire is typically required to develop a capital replacement or asset management plan for equipment, systems and assets. In addition, the concessionaire may be required to develop a plan that specifies the processes for turning over operation of the facility to another party at the conclusion of the contract.

Review of handback conditions may involve the use of a third party to assess remaining design life or the residual value of assets through inspections, materials testing, and a review of the history of maintenance and capital investments. If the facility is not in acceptable condition, the concessionaire may be required to make additional capital investments.

To manage the financial risks associated with handback, some P3 agreements require the concessionaire to establish a handback reserve account that begins to accrue toward the end of an agreement and may be used for unplanned repairs required prior to or shortly after handback of a facility to the public owner. This handback reserve (or replacement letter of credit) typically serves to alleviate uncertainties and unforeseen costs at the end of the concession.

### **Success Factors**

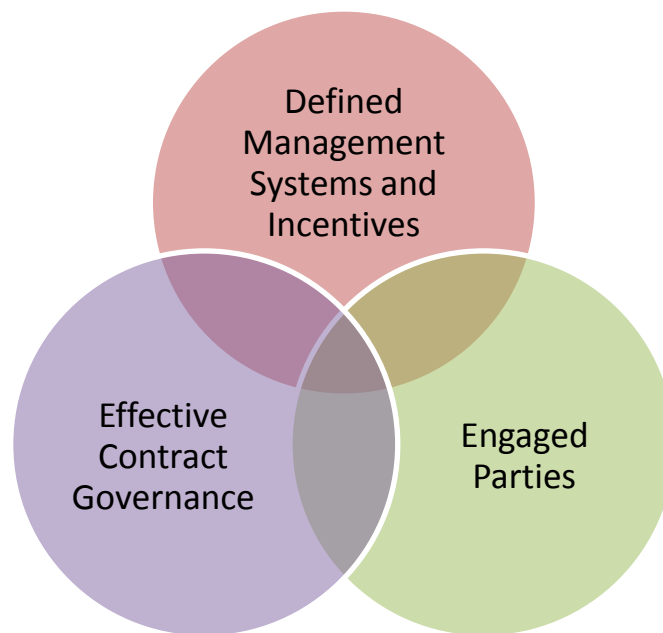
Performance management can address the risks of underperformance by:

- ▶ Designing a contract that aligns private sector incentives with public sector goals and clearly defines performance standards and performance management systems;
- ▶ Assigning a competent, long-term team to govern the contract; and
- ▶ Establishing communication processes that facilitate an engaged and adaptive relationship between the public and private parties.



These elements allow parties to a P3 agreement to effectively manage the risks that occur throughout the term of the contract, allowing the private party to find the best way to meet its contractual obligations while the public agency effectively safeguards the public interest (see Figure 7-1).

**Figure 7-1. Elements of Effective Performance Management**



#### *Defined Management Systems and Incentives*

A critical factor in successful performance management is an agreement that aligns the interests of the public agency and concessionaire over time by defining effective performance management systems and compensation structures. Flexible, outcome-based performance management systems are essential for P3 agreements because they allow the public agency to ensure that a facility continues to meet policy goals over time.

In designing and managing P3 contracts, however, policymakers must consider the tradeoffs associated with designing a performance-based contract. An effective performance-based contract is one that is sufficiently detailed to ensure that potential bidders understand what their responsibilities will be over the contract term and compete on their capability to meet those responsibilities efficiently, yet flexible enough to allow for changing conditions and needs over time.

Contracts can allow for flexibility by accounting for contingencies that can be anticipated, such as the need for expanded capacity when usage reaches a projected level. However, some changes may

be more difficult to predict, such as the emergence of new technologies. To account for such changes, P3 contracts typically define processes to adjust performance specifications, amend contracts and resolve disputes.

Compensating the concessionaire with revenues from highway user fees provides an incentive to concessionaires to retain and attract customers to the facility by maintaining customer satisfaction with levels of service, particularly when many actual and potential customers have viable travel alternatives. When contractor payments are not tied directly to facility usage, as in availability payments, the incentive to provide quality service may instead be tied to provisions in the agreement that allow the public agency to withhold payments or apply default points if performance standards are not met.

### *Effective Contract Governance*

The duration, size, and complexity of P3 agreements make them unlike most contracts public agencies must manage. Public agencies often establish contract management teams to manage P3 contracts. Contract management teams need to have the appropriate skills, experience and authority.

Public agencies can promote effective contract governance by facilitating knowledge sharing between the procurement team and the contract management team, planning for skill and knowledge retention over the period of the contract, and balancing the use of internal capacity and external advisors to ensure retention of that knowledge and skill.

Some public agencies have found that the best way for the contract management team to understand and manage contract provisions is for team members to have played a role in the development and negotiation of the contract. Public agencies can also improve the sustainability of effective contract governance practices by ensuring that decisions and processes are documented and that succession planning takes place.

### *Engaged Parties*

An adaptive contractual arrangement requires active cooperation between the government and the concessionaire throughout the agreement. The hallmarks of active cooperation are a mutual recognition of shared goals, clear lines of communication at both the strategic and the tactical level, and open information sharing. The relationship between the two parties can be expected to evolve over time and the learning curve may be steep for both parties. Mechanisms such as regularly scheduled face-to-face meetings can facilitate the development of an effective relationship. To maintain this relationship, enforcement mechanisms should be used consistently and proportionally.





## 8 Summary

Establishing a Public-Private Partnership (P3) program within a public agency involves issues from enabling legislation through identification, evaluation, negotiation and management of P3 projects. Public agencies have to make important and complicated decisions to develop effective P3 programs and projects – often under intense public scrutiny. P3s tend to be large and complex projects that present unique challenges to decisionmakers.

The public agency is responsible for protecting the public’s interest, setting policy goals and objectives, administering the procurement process, and overseeing the agreement. Some required capabilities can be outsourced, depending on the anticipated volume of work to be done.

Policymakers must consider whether to set up a P3 program or develop P3 projects on a project-by-project basis; develop a process for the selection of projects as potential P3s; structure commercially viable P3 agreements that achieve policy goals, optimally allocate project risks, and bring value to the investment; and conduct a fair and competitive procurement to select the best partner and negotiate a final agreement that is transparent and protects the public interest while addressing the private partner’s concerns.

In a P3 agreement, the public agency’s role shifts from that of facility operator and overseer to that of performance-based contract manager. Public agencies must be deliberative and judicious in managing this new role. The establishment of a well-defined performance management regime, a strong contract management team, and an open and engaged relationship with the concessionaire can be key to the long-term success of a P3 project. This can help to ensure contract performance while avoiding the potentially costly consequences of contract renegotiation or default.