

Public–Private Partnerships (P3s)

Transportation Finance Innovations

Quick Facts

- P3s include any arrangement in which the private sector takes on more risk than what is traditional.
- P3 goals may vary from raising funds from lease of an existing facility (asset monetization) to constructing a brand-new facility (greenfield).
- P3s do not necessarily involve toll facilities.

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PUBLIC–PRIVATE Partnerships (P3s) are contractual agreements between a public agency and a private entity that allow for greater private participation in the delivery of transportation projects. Typically, this participation involves the private sector taking on additional project risks, such as design, construction, finance, long-term operation, and traffic revenue. At present, there are more than 34 current or anticipated P3 projects in the U.S. portfolio. Generally, the value of each of these P3s ranges from a few hundred million dollars to a few billion dollars.

How Do They Work?

Under traditional procurement, private contractors construct projects based on a public design with public financing and turn them over to the public upon completion for operations and maintenance. Under P3 models, the private sector may also participate in design, finance, operations, and maintenance.

Alternative Payment Models for P3s

In addition to differing risk allocations, P3s also feature different compensation arrangements. In some cases, the private sector can receive compensation through obtaining the right to collect the tolls on a facility. In that case, the concessionaire is also accepting “traffic risk”—the risk that the facility’s traffic will not be sufficient to provide adequate revenue. Another model is availability payments, in which the concessionaire receives a payment based on the availability of a facility at the specified performance level. In this case, the concessionaire accepts operational and appropriation risks—the risks that (a) the concessionaire does not meet the contractual performance targets or (b) the public sector does not receive sufficient appropriation to make the required payment.

The chart on side 2 presents a sampling of payment models for P3s; States can create



I-595 corridor roadway improvements

other compensation structures that match incentives to their goals.

What Are the Benefits?

P3s can provide access to private capital, reduce costs borne by transportation agencies, accelerate project delivery, shift project risk, spur innovation, and provide for more efficient management.

Long-term concessions can be improved asset management—the same party that constructs the project is responsible for long-term operation. This creates incentives to build a higher quality facility that is easier to maintain.

How Is It Used?

P3s are undertaken for a variety of purposes. In some cases, the purpose is to use existing assets to generate funds (asset monetization), such as with the Chicago Skyway. In other cases, P3s are used to develop greenfield (i.e., new construction) projects (e.g., North Tarrant Express) or to rehabilitate and provide expansion to existing facilities (e.g., the Capital Beltway high-occupancy toll lanes).

Private Risk Under Sample Procurement Structures

P3 Structure	Design Risk	Const. Risk	Financial Risk	O&M Risk	Traffic Risk	Revenue Risk
Traditional Design-Bid-Build		×				
Design-Build	×	×				
Design, Build, Finance, Operate, and Maintain	×	×	×	×	Yes, if toll or traffic-based payment	Yes, if performance-based payment

Note. Const. = Construction; O&M = Operations and Maintenance.

Alternative Compensation Models for Public-Private Partnerships

Model	Description
Toll Concession	Private partner takes on project in exchange for receiving tolls. Public sector usually limits rate of toll increase in some way.
Shadow Toll Concession	Private partner receives payment for each vehicle that uses facility. Sometimes payment is adjusted based on safety, congestion, or pre-established floors and ceilings.
Availability Payment	Private partner receives payment based on availability of facility at a specified performance level.
Rate of Return	Private partner receives toll revenue until a predetermined rate of return is reached.
Net Present Value	Private partner receives tolls until a predetermined net present value of all payments is reached.

It is important to note that P3s are a procurement option, not a revenue source. Although P3s may increase financing capacity and reduce costs, the public sector still has to identify a source of revenue for the project.

Potential Advantages

- May accelerate delivery.
- May enable longer term view of asset management.
- May provide access to additional capital.
- May reduce public cost/debt requirements.

Potential Limitations

- Requires considerable administrative cost and time to develop, analyze, implement, and monitor.

- Although P3s can offer access to capital, they do not provide States with new revenue; in fact, P3s need a revenue stream to work.
- May not be the most cost-effective or appropriate procurement model for projects if the public sector can deliver better value without it.

Considerations

- Difficult to determine appropriate level of return on investment for the private sector and to ensure fair rates for users.
- Enabling State legislation may be required.
- Most countries with P3 programs require analysis of a “public sector comparator,” which shows the added value, if any, of delivering the project through a P3 procurement model. ■



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PROJECT FINANCE

IPD’s project finance program focuses on alternative financing, including State Infrastructure Banks (SIBs), Grant Anticipation Revenue Vehicles (GARVEEs), and Build America Bonds (BABs).

PUBLIC-PRIVATE PARTNERSHIPS

IPD’s P3 program covers alternative procurement options (e.g., toll concessions and availability payments), which can reduce cost, improve project quality, and provide additional financing options (e.g., Private Activity Bonds (PABS)).

REVENUE

IPD’s revenue program focuses on how governments can use innovation to generate revenue from transportation projects (e.g., value capture, developer mitigation fees, air rights, and road pricing).

TIFIA

The Transportation Infrastructure Finance and Innovation Act (TIFIA) program provides credit assistance for significant projects. Many surface transportation projects—highway, transit, railroad, intermodal freight, and port access—are eligible to apply for assistance.



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