# Value for Money Analysis for Public–Private Partnerships (P3s)



# **P3 TOOLKIT**

## **Quick Facts**

➤ Value for Money (VfM) analysis is a process used to compare the financial impacts of a P3 project against those for the traditional public delivery alternative.

The Public Sector Comparator estimates the hypothetical risk-adjusted cost if a project were to be financed, built, and operated by the public sector using its traditional procurement approach.

➤ With P3 procurement, the Government trades away significant risks in exchange for higher baseline costs and financing costs in the P3 scenario.

## For Further Information

See FHWA's Value for Money Analysis for Public–Private Partnerships: A Primer, available at

http://www.fhwa.dot.gov/ipd/ forum/vfm\_for\_ppps/index.htm.



U.S. Department of Transportation Federal Highway Administration nder a public-private partnership (P3) for highway projects, a private partner may participate in some combination of design, construction, financing, operations, and maintenance, including the collection of toll revenues. Value for Money (VfM) analysis is a process used to compare the financial impacts of a P3 project against those for the traditional public delivery alternative. The methodology for carrying out a VfM analysis involves:

- Creating a Public Sector Comparator (PSC), which estimates the whole-life cost of carrying out the project through a traditional approach.
- Estimating the whole-life cost of the P3 alternative (either as proposed by a private bidder or a hypothetical "shadow bid" at the pre-procurement stage).
- Completing an "apples-to-apples" comparison of the costs of the two approaches.

# The Public Sector Comparator

The PSC estimates the hypothetical risk-adjusted cost if a project were to be financed, built, and operated by the public sector by using its traditional procurement approach. It includes the baseline PSC cost, ancillary costs, financing costs, retained risk, transferable risk, and competitive neutrality.

The baseline PSC includes all capital and operating costs associated with building, owning, maintaining, and delivering the service over the pre-determined period of time. Ancillary costs include other costs, such as right–of–way and procurement costs. Financing costs are those associated with interest costs on public debt and issuance fees. Retained risk refers to the value of any risk that is not transferable to the bidder, and transferable risk refers to the value of any risk that is transferable to the bidder. Competitive neutrality adjustments remove any competitive advantages and disadvantages that accrue to a public agency by virtue of its public ownership, such as its freedom from taxes. The present value of forecasted toll





revenue is generally subtracted from total PSC costs to get net present cost.

# **The P3 Option**

The cost elements of a P3 option are:

- The present value of payments to be made to the private partner, which account for transferred risks and financing costs.
- The value of any risks retained by the public sector.
- Any ancillary costs borne by the public agency.

At the pre-procurement stage, a shadow bid is constructed to estimate what the private sector would bid in response to a P3 request for proposals.

## Comparing the Public Sector Comparator to the P3 Option

Generally, a P3 proposal must cost less than the PSC to be preferable to a traditional procurement approach; however, even if P3 costs are higher, qualitative factors not included in the quantitative analysis may still make the P3 approach preferable. When a P3 presents overall savings, it is said to provide "value for money." This value is usually expressed as the percent difference by which the



Figure 1. Comparison Between a Public Procurement and a P3 Shadow Bid. PSC = Public Sector Comparator, P3 = public-private partnership.

PSC cost exceeds the P3 cost. Small changes in the assumptions underlying the analysis can tip the balance; thus, it is important to undertake a sensitivity analysis to understand the critical assumptions.

## An Example: Comparing a Public Sector Comparator Against a P3 Shadow Bid

The example depicted in Figure 1 portrays a comparison between a public procurement with a baseline present cost of \$60 million and a P3 shadow bid for which the baseline present cost (net of financing costs) is \$65 million. Although the baseline P3 cost is \$5 million more and imposes an additional \$6 million in ancillary and financing costs, the \$13-million reduction in the cost of risk due to transfer of some risks to the private sector and \$8 million in competitive neutrality adjustments overcome these cost differences and result in a net savings to the Government of \$9

million overall, offering 8% in value for money. This example illustrates the central trade-offs that often characterize P3 procurement: The Government trades away significant risks in exchange for higher baseline costs and financing costs in the P3 scenario.



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IPD's project delivery team covers cost estimate reviews, financial planning, and project management and assists FHWA Divisions with statutory requirements for major projects (e.g., cost estimate reviews, financial plans, and project management plans).

## **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 and payment models (e.g., toll and availability payments), which can reduce cost, improve project quality, and provide additional financing options.

## 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.

